



Office of Water Quality Total Maximum Daily Load Program

Total Maximum Daily Load for *Escherichia coli* (*E. coli*) in the Upper White River Headwaters Watershed in Randolph, Delaware, and Henry Counties

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**Indiana Department of Environmental Management
Total Maximum Daily Load Program
August 31, 2011**

**Total Maximum Daily Load (TMDL) for *Escherichia coli* (*E. coli*) in Upper White River
Headwaters watershed, Randolph, Delaware, and Henry Counties, Indiana**

Introduction

Section 303(d) of the Federal Clean Water Act and the United States Environmental Protection Agency's (USEPA's) Water Quality Planning and Management Regulations (Title 40 of the Code of Federal Regulations (CFR), Part 130) require states to develop Total Maximum Daily Loads (TMDLs) for waterbodies that are not meeting Water Quality Standards (WQS). TMDLs provide states a basis for determining the pollutant reductions necessary from both point and nonpoint sources to restore and maintain the quality of their water resources. The purpose of these TMDLs are to identify the sources and determine the allowable levels of *Escherichia coli* (*E. coli*) bacteria that will result in the attainment of the applicable WQS for *E. coli* in the Upper White River Headwaters watershed in Randolph, Delaware, and Henry Counties in Indiana.

Background

In 2002, the mainstem of the Upper White River Headwaters watershed (Figure 2) flowing through this entire 10-digit watershed (HUC-10 #0512020101) was listed on Indiana's 303(d) list as impaired by bacteria (*E. coli*). A reassessment of the reaches within the Upper White River Headwaters watershed, using data collected during the 2001 and 2006 sampling seasons, was completed by IDEM during the development of the Upper White River Headwaters TMDLs. This reassessment indicated that additional assessment units of the Upper White River Headwaters watershed were impaired for *E. coli*.

Several TMDLs have been approved in the larger 8-digit Upper White River watershed (HUC-8 #05120201). The West Fork White River Marion County to Waverly *E. coli* TMDL, the Fall Creek *E. coli* TMDL, and the Pleasant Run *E. coli* TMDL were approved by EPA March 31, 2004. The West Fork White River Muncie to Hamilton-Marion County Line *E. coli* TMDL was approved by EPA April 9, 2004. The Indian Creek *E. coli* TMDL was approved by EPA July 19, 2005. The Middle West Fork White River *E. coli* TMDL was approved by EPA July 21, 2005. The Lambs Creek *E. coli* TMDL was approved by EPA March 1, 2006. The Duck, Pipe, Killbuck, Stony Creek *E. coli* TMDL was approved by EPA April 23, 2008.

Recently IDEM began using the high resolution National Hydrography Dataset (NHD) created by USGS. Previously IDEM could only view streams at medium resolution (1:100,000 scale). The high-resolution streams are at the 1:24,000 scale, which allows for a more detailed view of the watershed. These high-resolution waters have always been present; however, they have not been visible in electronic maps until now. The reassessment of the Upper White River Headwaters watershed was completed with regard to both medium and high resolution streams.

Previously, each stream network within a 14-digit HUC was identified as one assessment unit. This convention did not accurately represent the stream impairments; therefore, IDEM employed the process of segmenting these assessment units into smaller and more representative reaches. Segmentation is based upon a number of factors that are likely to have similar impacts to water quality. IDEM examines several factors such as hydrology, land use, NPDES facility and outfall

locations, confined feeding operation locations (CFOs), concentrated animal feeding operation locations (CAFOs), aerial photography, and topographic maps for the process of segmenting each stream reach or stream network within a watershed. The smaller stream reaches or stream networks resulting from segmentation allow for better characterization of the impairments within the watershed as well as allowing for better overall characterization of the watershed as those reaches or networks with potentially differing impacts are assigned separate assessment unit IDs (AUID).

IDEM switched from using 14-digit HUCs to using the 12-digit HUCs developed by USGS. This switch called for renaming AUIDs as the AUID is based off of the numeric hydrologic unit code itself. In 2009, IDEM undertook three simultaneous processes: adding high resolution streams, segmentation for better representation, and reassigning AUIDs based on the 12-digit HUC. Therefore, in Table 1, there will be an AUID based on the 2008 AUID naming convention and an AUID associated with the new 2012 naming convention, which will be employed from this point forward. See Attachment H for additional details on IDEM's segmentation process.

This TMDL will address approximately three-hundred ten (310) stream miles, of which approximately sixty-nine (69) stream miles are impaired in the Upper White River Headwaters watershed in Randolph, Delaware, and Henry Counties where recreational uses are impaired by elevated levels of *E. coli* during the recreational season. The Upper White River Headwaters watershed is part of the larger Upper White River basin with the 8-digit Hydrologic Unit Code (HUC-8) #05120201. The Upper White River Headwaters watershed is in eastern Indiana (Figure 1). Figure 2 depicts all the waters in the watershed. The red segments are impaired and the blue segments are the remaining unimpaired or non-assessed portion of the watershed. The impaired portion of the Upper White River Headwaters listed in Table 1 will be placed into Category 4A on the Indiana's 303(d) List of Impaired Waters in 2012. The impaired assessment units (Table 1) for this TMDL are located in the Upper White River Headwaters basin hydrologic unit code (HUC-10) #0512020101. Individual loads were calculated for the twenty-two (22) segments in the 2012 AUID column (Attachment F) and includes individual loads for the segments in the 2008 AUID column.

Table 1: Impaired Assessment Units in the Upper White River Headwaters Watershed

Assessment Unit Name	2008 AUID*	2012 AUID*	Impairment	Miles	12-Digit HUC	Sample Site
West Fork White River	INW0111_T1001	INW0111_01	<i>E. coli</i>	23.45	051202010101	1, 2, 3, 4, 5, 6
	INW0111_T1222					
Owl Creek	INW0111_T1221	INW0111_02	<i>E. coli</i>	6.48		7, 8
Unnamed Tributary	INW0112_00	INW0112_T1003	<i>E. coli</i>	3.28	051202010102	12
Peach Creek		INW0112_T1004	<i>E. coli</i>	7.37		13
West Fork White River	INW0112_T1002	INW0112_01	<i>E. coli</i>	11.95		9, 10, 11, 14, 15
Salt Creek	INW0113_00	INW0112_T1005	<i>E. coli</i>	13.74		16, 17, 18
Sugar		INW0112_T1006	<i>E. coli</i>	7.72		19, 20

Creek						
West Fork White River	INW0114_T1004	INW0113_01	<i>E. coli</i>	12.36	051202010103	21, 22
Eightmile Creek	INW0114_00	INW0113_T1004	<i>E. coli</i>	4.92		23
Cabin Creek	INW0116_00	INW0114_01	<i>E. coli</i>	33.01	051202010104	29, 30, 31
West Fork White River	INW0115_T1005	INW0115_01	<i>E. coli</i>	8.01	051202010105	24, 27, 28
West Fork White River	INW0115_00	INW0115_T1006	<i>E. coli</i>	7.16		25, 26
Little White River	INW0118_00	INW0116_01	<i>E. coli</i>	36.13	051202010106	33, 35
Poplar Run		INW0116_T1001	<i>E. coli</i>	6.54		34
Stoney Creek	INW0117_00	INW0117_01	<i>E. coli</i>	32.50	051202010107	36, 39, 40
Little Stoney Creek		INW0117_T1001	<i>E. coli</i>	9.77		37, 38, 42, 43
West Fork White River	INW0119_T1006	INW0119_01	<i>E. coli</i>	19.15	051202010109	32, 41, 44, 45, 46
Mud Creek	INW011A_00	INW0119_T1008	<i>E. coli</i>	5.17		47
West Fork White River	INW011C_T1008	INW011A_01	<i>E. coli</i>	12.46	051202010110	51, 52
Medford Drain	INW011C_00	INW011A_T1008	<i>E. coli</i>	3.67		50
West Fork White River	INW011D_T1009	INW011B_01	<i>E. coli</i>	3.28		53, 54
Muncie Creek	INW011D_00	INW011B_T1001	<i>E. coli</i>	7.03	051202010111	55, 56

*AUID: Assessment Unit ID

IDEM conducted a sampling survey of the Upper White River Headwaters watershed for *E. coli* in 2001 and 2006. Sites sampled in 2001 were sampled April 23, 2001 through May 21, 2001 and June 5, 2001 through July 3, 2001 for TMDL development purposes. Some additional sites were sampled in this watershed in 2006 with the goal of developing a TMDL. Sites were sampled April 10, 2006 through May 8, 2006 and July 17, 2006 through August 18, 2006 (Figure 3; Attachments A & B). All sites were sampled five (5) times, spaced over a thirty (30) day period to determine a geometric mean.

Water quality data collected in the Upper White River Headwaters watershed during the 2001 and 2006 sampling period were reassessed by IDEM's 303(d)/305(b) Coordinator in June 2011 (Attachment C). Of the forty-six (46) sites sampled in 2006, five (5) sites (sites 10, 17, 24, 48, and 49), did not violate the geometric mean for *E. coli*. All other sites sampled violated the *E. coli* geometric mean of 125 MPN (Most Probable Number)/100 mL. Of the forty-six (46) sites

sampled in 2006, four (4) sites, (sites 10, 17, 24, and 48) did not violate the single sample maximum. At these forty-two (42) sites, the single sample maximum of 235 MPN/ 100 mL is violated 62.55% of the time. Thirteen (13) sites were sampled in 2001. Sites were sampled April 23, 2001 through May 21, 2001 and June 5, 2001 through July 3, 2001. These sites were sampled as part of the 2001 *E. coli* Upper West Fork White River project. All thirteen (13) sites violate the geometric mean. All sites have violations of the single sample maximum, which is violated 82.43% of the time in 2001.

Two sites were also sampled as part of the IDEM Fixed Station Program. Site 15 was sampled monthly January 8, 1991 through February 3, 1999. The single sample maximum was violated 67.82% of the time during this time period. Site 52 was sampled monthly January 8, 1991 through November 16, 2010. The single sample maximum was violated 36.04% of the time during this time period (Attachment B).

The Prairie Creek (HUC 051202010108) watershed shows no impairment, but the sample sites were located directly above and below the reservoir. The low *E. coli* numbers could be due to natural attrition; therefore, additional monitoring in the watershed beyond the lake is recommended and the other streams in the watershed are considered unassessed. No reductions at the sample locations were needed, but the information on the watershed is provided (Table 9) to assist in watershed planning efforts in the area that may show needed reductions beyond the reservoir.

The TMDL development schedule corresponds with IDEM's basin-rotation water quality monitoring schedule. To take advantage of all available resources for TMDL development, impaired waters are scheduled according to the basin-rotation schedule unless there is a significant reason to deviate from this schedule. Waterbodies can be scheduled based on the following:

- 1) Waterbodies may be given a high or low priority for TMDL development depending on the specific designated uses that are not being met, or in relation to the magnitude of the impairment.
- 2) TMDL development of waterbodies where other interested parties, such as local watershed groups, are working on alleviating the water quality problem may be delayed to give these other actions time to have a positive impact on the waterbody. If water quality standards still are not met, then the TMDL process will be initiated.
- 3) TMDLs that are required due to water quality violations relating to pollutant parameters where no EPA guidance is available, may be delayed to give EPA time to develop guidance.

This TMDL was scheduled based on the data available from the basin-rotation schedule, which represents the most accurate and current information available on water quality within waterbodies covered by this TMDL.

Water Quality Standards and Numeric Targets

The impaired designated use for the waterbodies in the Upper White River Headwaters watershed is for total body contact recreational use during the recreational season, April 1 through October 31. The WQS for *E. coli* is 125 per one hundred milliliters as a 30-day geometric mean based on not less than five samples equally spaced over a thirty-day period. High concentrations of *E. coli*

may limit the use of the water body for recreation; *E. coli* is an indicator species of fecal contamination, which may contain other microorganisms that are harmful to human health.

327 IAC 2-1-6(d) (3) establishes the full body contact recreational use *E. coli* WQS for all waters in the non-Great Lakes system as follows:

(3) For full body contact recreational uses, *E. coli* bacteria shall not exceed the following:

(A) One hundred twenty-five (125) per one hundred (100) milliliters as a geometric mean based on not less than five (5) samples equally spaced over a thirty (30) day period.

(B) Two hundred thirty-five (235) per one hundred (100) milliliters in any one (1) sample in a thirty (30) day period, except that in cases where there are at least ten (10) samples at a given site, up to ten percent (10%) of the samples may exceed two hundred thirty-five (235) cfu or MPN per one hundred (100) milliliters where the:

(i) *E. coli* exceedances are incidental and attributable solely to *E. coli* resulting from the discharge of treated wastewater from a wastewater treatment plant as defined at IC 13-11-2-258; and

(ii) criterion in clause (A) is met. However, a single sample shall be used for making beach notification and closure decisions. If a geometric mean cannot be calculated because five (5) equally spaced samples are not available, then the criterion stated in clause (B) must be met.

The sanitary wastewater *E. coli* effluent limits from point sources in the non-Great Lakes system during the recreational season, April 1 through October 31, are also covered under 327 IAC 2-1-6(d)(4) and 327 IAC 2-1-6(d)(5).

(4) For demonstrating compliance with wastewater treatment requirements, sanitary wastewater dischargers shall ensure the following:

(A) The concentration of *E. coli* in the undiluted discharge does not exceed one hundred twenty-five (125) cfu or MPN per one hundred (100) milliliters as a geometric mean of the effluent samples taken in a calendar month.

(B) Not more than ten percent (10%) of all samples when not less than ten (10) samples are taken and analyzed for *E. coli* in a calendar month exceed two hundred thirty-five (235) cfu or MPN per one hundred (100) milliliters as a daily maximum. Under this clause, the calculation of ten percent (10%) of the samples taken shall be limited to the lowest whole number result.

(5) Effluent limits to implement the criteria in subdivision (3) during the recreational season shall be established in NPDES permits by incorporating the following that are to be applied to the undiluted discharge:

(A) The concentration of *E. coli* in the undiluted discharge shall not exceed one hundred twenty-five (125) cfu or MPN per one hundred (100) milliliters as a geometric mean of the effluent samples taken in a calendar month.

(B) Not more than ten percent (10%) of all samples in a calendar month exceed two hundred thirty-five (235) cfu or MPN per one hundred (100) milliliters as a daily maximum. Under this clause, the calculation of ten percent (10%) of the samples taken shall be limited to the lowest whole number result.

Source Assessment

Watershed Characterization

Waters in the Upper White River Headwaters watershed flow through three (3) Indiana Counties. The majority of the watershed is located in Randolph County (65.47%); 30.16% of the watershed is in Delaware County and 4.37% of the watershed is in Henry County (Figure 1). The White River is also a known source of drinking water.

Land Use

Land use information was assembled in 1992 using the Gap Analysis Program (GAP). In 1992, approximately 89.56% of the land use in the Upper White River Headwaters watershed was Agriculture. The remaining land use for the Upper White River Headwaters watershed consisted of approximately 5.74% Forest, 1.95% Wetland, 1.66% Urban, and 1.09% Water (Figure 4). Recent site visits conducted by IDEM staff confirm that this watershed is still primarily agricultural.

Infrared Imagery

Infrared imagery from 2010 is currently available for this area. Inspection of the infrared imagery for this area confirms this watershed is primarily agricultural (Figure 7). This watershed contains a lot of healthy vegetation, primarily in the form of crops. Infrared inspection reveals that many crop fields contain exposed soils and drainage patterns, which suggest that runoff from the fields occurs and enters the streams. Many of the streams in this watershed have very thin to no buffers separating them from crop fields or from manicured lawns. Several portions of the White River and many ponds within the watershed appear to have a high amount of suspended sediments, further indicating runoff to streams as well as erosion.

Future Growth

According to the 2010 Census data (U.S. Census, 2010), the populations of Randolph and Delaware Counties have decreased. The Randolph County population decreased 4.49% from 27,401 in 2000 to 26,171 in 2010. The Delaware County population decreased 0.92% from 118,769 in 2000 to 117,671 in 2010. The Henry County population increased 1.93% from 48,508 in 2000 to 49,462 in 2010.

IDEM acknowledges that the U.S. Census data is county-wide and may not accurately reflect the growth rate/potential within the Upper White River Headwaters watershed, but does include the data as recognition that there is potential for future growth.

Source Discussion

Point Sources

National Pollutant Discharge Elimination System (NPDES) Permitted Dischargers

There are five (5) NPDES permitted facilities in the Upper White River Headwaters watershed (Figure 5, Table 13). Of the five (5) NPDES facilities, three (3) dischargers, Union Elementary & High School (Town of Modoc WWTP), Parker City Municipal WWTP, and the Winchester

WWTP, have *E. coli* limits in their permits. One facility, Farmland Municipal Sewage Treatment Plant (STP), has *E. coli* monitoring in the permit. The remaining facility, IMI Irving Bros Stone & Gravel, does not have a sanitary component to the discharge; therefore it does not have an *E. coli* limit

- Farmland Municipal STP has a waste stabilization lagoon with a 90-day detention time. *E. coli* monitoring has been required in this permit since 2006 to ensure the lagoon is functioning as designed. In 2008, Farmland Municipal had an Agreed Order for exceedances of total suspended solids (TSS), Biochemical Oxygen Demand (BOD) and pH. The cause of the violations has since been resolved (Attachment D).
- Parker City Municipal Wastewater Treatment Plant (WWTP) had *E. coli* violations which occurred April through August of 2006, which encompasses the 2006 sampling event (Attachment D). Parker City Municipal WWTP was under an Agreed Order due to these violations in 2008. The cause of the violations has since been resolved (Attachment D).
- Union Elementary & High School (Town of Modoc WWTP) had only begun to monitor for *E. coli* in April 2006. There were several *E. coli* exceedances during the sampling event in 2006 (Attachment D).
- Winchester WWTP did not have any *E. coli* violations during the 2006 sampling event (Attachment D).

Municipal Separate Storm Sewer Systems (MS4): Storm Water General Permit Rule 13

There is one (1) municipal separate storm sewer system (MS4) community, Delaware County/City of Muncie (INR040056) in the Upper White River Headwaters watershed. Guidelines for MS4 permits and timelines are outlined in Indiana's Municipal Separate Storm Sewer System (MS4) Rule 13 (327 IAC 15-13-10 and 327 IAC 15-13-11).

Sec. 10. If a total maximum daily load (TMDL) is approved for any water body into which an MS4 conveyance discharges, the MS4 operator must review and appropriately modify Parts B and C of their Storm Water Quality Management Plan (SWQMP) if the TMDL includes requirements for control of storm water discharges under the jurisdiction of the MS4 operator.

IDEM recognizes that these MS4 communities can be sources of *E. coli* and more information needs to be collected. As part of the permit process these systems will be better defined and will continuously work towards meeting the water quality standard, which is the limit and goal of this TMDL. This process will take several permitting cycles and it is anticipated that in the future, MS4 permits will meet the water quality standards.

Combined Sewer Overflows (CSO) and Sanitary Sewer Overflows (SSO)

There are four (4) CSO outfalls within the Upper White River Headwaters Watershed; all four (4) CSO outfalls are associated with the Muncie Sanitary District (IN0025631).

The Muncie Sanitary District Long Term Control Plan (LTCP) identifies the goal of separating the combined areas of the city through the construction of new sanitary and storm sewers (Personal Communication: T. Trinkle, IDEM-OWQ, 2011). Several projects have already been completed to correct flooding issues. During these projects, the sewers are separated (Personal Communication: Shareen Wagley, 2011).

Concentrated Animal Feeding Operations (CAFOs)

There are ten (10) concentrated animal feeding operations (Figure 6; Table 14) within the Upper White River Headwaters watershed. All of the CAFOs are located in Randolph County.

The removal and disposal of the manure, litter, or processed wastewater that is generated as the result of confined feeding operations falls under the regulations for confined feeding operations CFOs and concentrated animal feeding operations CAFOs. The CFO and CAFO regulations (327 IAC 16, 327 IAC 15) require that operations “not cause or contribute to an impairment of surface waters of the state”. IDEM regulates these confined feeding operations under IC 13-18-10, the Confined Feeding Control Law. The rules at 327 IAC 16, which implement the statute regulating confined feeding operations, were effective on March 10, 2002. The rule at 327 IAC 15-15, which regulates concentrated animal feeding operations and complies with most federal CAFO regulations, became effective on March 24, 2004, with two exceptions. 327 IAC 15-15-11 and 327 IAC 15-15-12 became effective on December 28, 2006. Point Source rules can be found at 327 IAC 5-4-3 (effective 12/28/06) and 327 IAC 5-4-3.1 (effective 3/24/04). CAFOs fall under WLA; however, under permit conditions, CAFOs are prohibited from discharging; therefore, they are not designated a portion of the WLA.

Due to size, some confined feeding operations are defined as CAFOs. For purposes of discussion, it is important to remember that all CAFOs are confined feeding operations. The CAFO regulation, however, contains more stringent operational requirements and slightly different application requirements. All facilities that are identified as CFO’s will be addressed in the nonpoint sources. There are ten (10) CAFO’s in the Upper White River Headwaters watershed. One of these CAFOs, Union Go Dairy, had Agreed Orders in 2007 and 2008. The 2007 Agreed Order was due to water quality standards violation and has been resolved. The 2008 Agreed Order was due to a spill, which has also been resolved. All other CAFO facilities have been in compliance with their permits and do not have any enforcement actions. See Attachment I for the Emergency Response Incident Reports for CFOs and CAFOs in this watershed.

Nonpoint Sources

Wildlife

Wildlife is a known source of *E. coli* in waterbodies. Many animals spend time in or around waterbodies. Deer, geese, ducks, raccoons, turkeys, and other warm-blooded animals all create potential sources of *E. coli*. Wildlife contributes to the potential impact of contaminated runoff from animal habitats, such as urban park areas, forest, and rural areas.

Septic Systems

Failing septic tanks are known sources of *E. coli* and can impair waterbodies. All the counties in the watershed follow the state IAC 16-1-4-9 and IAC 36-1-6-2 rules regarding septic systems. Failures are typically identified through complaints and through the sale of older properties that have not passed inspection. Effluents from failing septic tanks can leach into groundwater or pond at the surface where they can be washed into surface waters via stormwater runoff events.

Delaware County follows the IAC in terms of septic systems.

Randolph County follows the IAC in terms of septic systems. Permits are required and inspections are completed on installed systems (Personal Communication Bradford Koss).

Confined Feeding Operations (CFOs)

There are five (5) CFOs (Figure 6, Table 14) in the Upper White River Headwaters watershed.

The removal and disposal of the manure, litter, or processed wastewater that is generated as the result of confined feeding operations falls under the regulations for confined feeding operations CFOs and concentrated animal feeding operations CAFOs. The CFO and CAFO regulations (327 IAC 16, 327 IAC 15) require that operations “not cause or contribute to an impairment of surface waters of the state”. IDEM regulates these confined feeding operations under IC 13-18-10, the Confined Feeding Control Law. The rules at 327 IAC 16, which implement the statute regulating confined feeding operations, were effective on March 10, 2002. The difference between the two types of feeding operations is that concentrated animal feeding operations fall under Federal regulation and confined feeding operations fall under State regulations. Due to this difference CAFO loads fall under WLA and CFO loads fall under LA.

The animals raised in confined feeding operations produce manure that is stored in pits, lagoons, tanks and other storage devices. The manure is then applied to area fields as fertilizer. When stored and applied properly, this beneficial re-use of manure provides a natural source for crop nutrition. It also lessens the need for fuel and other natural resources that are used in the production of fertilizer. Confined feeding operations, however, can also pose environmental concerns, including the following:

- Manure can leak or spill from storage pits, lagoons, tanks, etc.
- Improper application of manure can contaminate surface or ground water.
- Manure over-application can adversely impact soil productivity.

The locations of confined feeding operations in the Upper White River Headwaters watershed are shown in Figure 6.

It was noted during the watershed tour that there are many smaller livestock operations in the watershed. These operations, due to their small size, are not regulated under the CFO or CAFO regulations. These operations may still add *E. coli* to surface waters via wastewater from the facilities, near-stream pastures, manure spreading onto fields, and livestock with access to stream environments. Runoff from pastures and livestock operations can also be potential agriculture sources of bacteria. For example, animals grazing in pasturelands deposit manure directly upon the land surface and, even though a pasture may be relatively large and animal densities low, the manure will often be concentrated near the feeding and watering areas in the field. These areas can quickly become barren of land cover, increasing the possibility of erosion and contaminated runoff during a storm event. Due to the small size of these operations, alternative management practices need to be in place to reduce their impact on water quality. Some of the management alternatives are outlined in the reasonable assurance activities section to follow.

Stormwater Runoff from Agricultural Land Use Practices

Runoff from agricultural lands (feedlots, pastures and fields) can contain significant amounts of bacteria. Manure spread onto fields is often a source of *E. coli*, which can be exacerbated by field-tile drainage lines, which channelize the stormwater flows and reduce the time available for bacteria to die off. Land applied manure may also reach surface waters via overland runoff and via macropore/preferential flow pathways. Stormwater runoff related to manure stockpiles and manure storage facilities can also contribute *E. coli* to stream environments in the Upper White

River Headwaters watershed. Infrared inspection revealed that many crop fields in this watershed contain exposed soils and drainage patterns, which suggest that runoff from the fields occurs. Additionally, many of the streams in this watershed have very thin to no buffers that can slow down or mitigate influences from runoff.

Unrestricted livestock access to streams

Livestock with access to stream environments may add bacteria directly to the surface waters or resuspend particles that had settled on the stream bottom. Direct deposition of animal wastes can result in very high localized bacteria counts and can also contribute to downstream impairments. Smaller animal operations may add bacteria to surface waters via stormwater runoff from near-stream pastures. During a recent site visit to the Upper White River Headwaters watershed by IDEM staff, the staff noted several instances where livestock animals had unrestricted access to the streams in this watershed.

Urban Runoff

Runoff from urban areas (urban, residential, commercial or industrial land uses) can carry *E. coli* to surface waters. Stormwater from urban areas, which drain impervious surfaces, may introduce bacteria to surface waters. Urban bacteria sources can include wildlife or pet wastes. Several portions of the White River and many ponds within the watershed appear to have a high amount of suspended sediments indicating runoff, which carries *E. coli* to surface waters.

Linkage Analysis and *E. coli* Load Duration Curves

The linkage between the *E. coli* concentrations in the Upper White River Headwaters watershed and the potential sources provides the basis for the development of this TMDL. The linkage is defined as the cause and effect relationship between the selected indicators and the sources. Analysis of this relationship allows for estimating the total assimilative capacity of the stream and any needed load reductions. Analysis of the data for the Upper White River Headwaters watershed indicates that a significant amount of the *E. coli* load enters the Upper White River Headwaters watershed through both wet (nonpoint) and dry (point) weather sources.

To investigate further the potential sources mentioned above, an *E. coli* load duration curve analysis, as outlined in an unpublished paper by Cleland (2002), was developed for each of the fifty-six (56) sampling sites in the Upper White River Headwaters watershed (Attachment E). The method considers how stream flow conditions relate to a variety of pollutant loadings and their sources (point and nonpoint).

In order to develop a load duration curve, continuous flow data is required. The USGS gage for the White River at Muncie, Indiana (03347000), located downstream on the White River was used for the development of the *E. coli* load duration curve analysis for the Upper White River Headwaters watershed TMDL. This gage is ideally positioned at the most downstream portion of the Upper White River Headwaters watershed and the data collected at this gage apply to the entire watershed of interest.

The flow data is used to create flow duration curves, which display the cumulative frequency of distribution of the daily flow for the period of record. The flow duration curve relates flow values measured at the gage station to the percent of time that those values are met or exceeded. Flows are ranked from extremely low flows, which are exceeded nearly 100 percent of the time, to extremely high flows, which are rarely exceeded. Flow duration curves are then transformed into

load duration curves by multiplying the flow values along the curve by applicable water quality criteria values for *E. coli* and appropriate conversion factors. The load duration curves are conceptually similar to the flow duration curves in that the x-axis represents the flow recurrence interval and the y-axis represents the allowable load of the water quality parameter. The curve representing the allowable load of *E. coli* was calculated using the single sample standard of 235 *E. coli* MPN per 100 ml. The final step in the development of a load duration curve is to add the water quality pollutant data to the curves. Pollutant loads are estimated from the data as the product of the pollutant concentrations, instantaneous flows measured at the time of sample collection, and appropriate conversion factors. In order to identify the plotting position of each calculated load, the recurrence interval of each instantaneous flow measurement was defined. Water quality pollutant monitoring data are plotted on the same graph as the load duration curve so as to provide a graphical display of the water quality conditions in the waterbody. The pollutant monitoring data points that are above the target line exceed the water quality standards; those that fall below the target line meet the WQS (Cleland, 2002 and Mississippi DEQ, 2002).

Flow regimes in the load duration curve are broken down into five categories:

Very High Flows: Flows in this represent flooding or near flooding stages of a stream. These flows are exceeded 0 – 10 % of the time.

Moist Zone: Flows in this range are related to wet weather conditions. These flows are exceeded 10 – 40 % of the time.

Mid-Range Zone: Flows in this range represent median stream flow conditions. These flows are exceeded 40 – 60% of the time.

Dry Zone: Flows in this range are related to dry weather flows. These flows are exceeded 60 -90 % of the time.

Very Low Flows: Flows in this range are seen in drought-like conditions. These flows are exceeded 90 -100 % of the time.

Load duration curves were created for all the sampling sites in the Upper White River Headwaters watershed (Figure 3, Attachment A, B, & E). These sampling sites were sampled for *E. coli* April 10, 2006 through May 8, 2006 and July 17, 2006 through August 18, 2006. The data indicate that exceedances of the *E. coli* WQS are prevalent during both wet and dry weather events (Attachment E).

Segment Summary

Impaired segments are listed in the Tables 2 - 12 and include the following information: impaired segment AUID, drainage area, sampling sites, listed segments, land use, NPDES facilities, MS4 community, CSO communities, CFOs, CAFOs, Load Allocations, Wasteload Allocations, and Margin of Safety values for *E. coli*. Locations of these subwatersheds within the Upper White River Headwaters watershed are depicted in Figure 8.

Table 2: Owl Creek – White River (HUC 051202010101)

Upstream Characteristics					
Drainage Area	21.03 square miles				
TMDL Sample Site	1, 2, 3, 4, 5, 6, 7, 8, 9				
Listed Segments	INW0111_01, INW0111_02				
Land Use	Agriculture:	Forest:	Urban:	Water:	Wetland:
	94.34%	4.09%	0.00%	0.00%	1.57%
NPDES Facilities	None in subwatershed (SW)				
MS4 Communities	None in SW				
CSO Communities	None in SW				
CAFOs	None in SW				
CFOs	Thornburg				
TMDL Allocations (billion MPN/day)					
Allocation Category	Very High Flows	Higher Flow Conditions	“Normal” Flows	Lower Flow Conditions	Low Flows
LA	4750.23	1091.83	413.96	150.07	39.33
WLA	NA	NA	NA	NA	NA
MOS (10%)	527.80	121.31	46.00	16.67	4.37
TMDL = LA+WLA+MOS	5278.03	1213.14	459.96	166.74	43.70

Table 3: Peach Creek – White River (HUC 051202010102)

Upstream Characteristics					
Drainage Area	29.69 square miles				
TMDL Sample Site	10, 11, 12, 1, 14, 15, 16, 17, 18, 19, 20				
Listed Segments	INW0112_01, INW0112_T1003, INW0112_T1004, INW0112_T1005, INW0112_T1006				
Land Use	Agriculture:	Forest:	Urban:	Water:	Wetland:
	90.15%	3.70%	3.51%	0.32%	2.32%
NPDES Facilities	Winchester Municipal WWTP				
MS4 Communities	None in SW				
CSO Communities	Winchester Municipal WWTP				
CAFOs	None in SW				
CFOs	Peacock				
TMDL Allocations (billion MPN/day)					
Allocation Category	Very High Flows	Higher Flow Conditions	“Normal” Flows	Lower Flow Conditions	Low Flows
LA	4739.86	1081.46	403.60	139.70	28.96
WLA	10.37	10.36	10.36	10.36	10.36
MOS (10%)	527.80	121.31	45.99	16.67	4.37
TMDL = LA+WLA+MOS	5278.03	1213.14	459.96	166.74	43.70

Table 4: Eightmile Creek – White River (HUC 051202010103)

Upstream Characteristics					
Drainage Area	20.49 square miles				
TMDL Sample Site	21, 22, 23				
Listed Segments	INW0113_01, INW0113_T1004				
Land Use	Agriculture:	Forest:	Urban:	Water:	Wetland:
	92.99%	5.01%	0.02%	0.36%	1.62%
NPDES Facilities	None in SW				
MS4 Communities	None in SW				
CSO Communities	None in SW				
CAFOs	None in SW				
CFOs	Lick Skillet, TK Hog Farm, LLC				
TMDL Allocations (billion MPN/day)					
Allocation Category	Very High Flows	Higher Flow Conditions	“Normal” Flows	Lower Flow Conditions	Low Flows
LA	4750.23	1091.83	413.96	150.06	39.33
WLA	NA	NA	NA	NA	NA
MOS (10%)	527.80	121.31	46.00	16.67	4.37
TMDL = LA+WLA+MOS	5278.03	1213.14	459.96	166.74	43.70

Table 5: Cabin Creek (HUC 051202010104)

Upstream Characteristics					
Drainage Area	25.89 square miles				
TMDL Sample Site	29, 30, 31, 32				
Listed Segments	INW0114_01				
Land Use	Agriculture:	Forest:	Urban:	Water:	Wetland:
	90.68%	6.27%	0.00%	0.35%	2.70%
NPDES Facilities	None in SW				
MS4 Communities	None in SW				
CSO Communities	None in SW				
CAFOs	None in SW				
CFOs	Indiana Trail Nurseries, Stoney Creek				
TMDL Allocations (billion MPN/day)					
Allocation Category	Very High Flows	Higher Flow Conditions	“Normal” Flows	Lower Flow Conditions	Low Flows
LA	4750.23	1091.83	413.96	150.06	39.33
WLA	NA	NA	NA	NA	NA
MOS (10%)	527.80	121.31	46.00	16.67	4.37
TMDL = LA+WLA+MOS	5278.03	1213.14	459.96	166.74	43.70

Table 6: Sparrow Creek – White River (HUC 051202010105)

Upstream Characteristics					
Drainage Area	17.79 square miles				
TMDL Sample Site	24, 25, 26, 27, 28, 32				
Listed Segments	INW0115_01, INW0115_T1006				
Land Use	Agriculture:	Forest:	Urban:	Water:	Wetland:
	92.99%	3.78%	0.92%	0.07%	2.24%
NPDES Facilities	Farmland Municipal STP				
MS4 Communities	None in SW				
CSO Communities	None in SW				
CAFOs	None in SW				
CFOs	Union-Go Dairy LLC				
TMDL Allocations (billion MPN/day)					
Allocation Category	Very High Flows	Higher Flow Conditions	“Normal” Flows	Lower Flow Conditions	Low Flows
LA	4749.45	1091.05	413.18	149.28	38.55
WLA	0.78	0.78	0.78	0.78	0.78
MOS (10%)	527.80	121.31	46.00	16.67	4.37
TMDL = LA+WLA+MOS	5278.03	1213.14	459.96	166.74	43.70

Table 7: Little White River (HUC 051202010106)

Upstream Characteristics					
Drainage Area	22.82 square miles				
TMDL Sample Site	33, 34, 35				
Listed Segments	INW0116_01, INW0116_T1001				
Land Use	Agriculture:	Forest:	Urban:	Water:	Wetland:
	92.73%	5.27%	0.10%	0.00%	1.90%
NPDES Facilities	Union Elementary & High School (Town of Modoc WWTP)				
MS4 Communities	None in SW				
CSO Communities	None in SW				
CAFOs	None in SW				
CFOs	Chamberlain Swine, LLC, Harris				
TMDL Allocations (billion MPN/day)					
Allocation Category	Very High Flows	Higher Flow Conditions	“Normal” Flows	Lower Flow Conditions	Low Flows
LA	4750.14	1091.74	413.87	149.98	39.24
WLA	0.09	0.09	0.09	0.09	0.09
MOS (10%)	527.80	121.31	46.00	16.67	4.37
TMDL = LA+WLA+MOS	5278.03	1213.14	459.96	166.74	43.70

Table 8: Little Stoney Creek – Stoney Creek (HUC 051202010107)

Upstream Characteristics					
Drainage Area	29.32 square miles				
TMDL Sample Site	36, 37, 38, 39, 40, 42, 43				
Listed Segments	INW0117_01, INW0117_T1001				
Land Use	Agriculture:	Forest:	Urban:	Water:	Wetland:
	93.00%	5.03%	0.12%	0.03%	1.82%
NPDES Facilities	None in SW				
MS4 Communities	Delaware County/City of Muncie (INR040056)				
CSO Communities	None in SW				
CAFOs	None in SW				
CFOs	Stoney Creek, Stoney Creek Farms				
TMDL Allocations (billion MPN/day)					
Allocation Category	Very High Flows	Higher Flow Conditions	“Normal” Flows	Lower Flow Conditions	Low Flows
LA	4750.20	1091.83	413.96	150.06	39.33
WLA	0.03	NA	NA	NA	NA
MOS (10%)	527.80	121.31	46.00	16.67	4.37
TMDL = LA+WLA+MOS	5278.03	1213.14	459.96	166.74	43.70

Table 9: Prairie Creek Reservoir – Prairie Creek (HUC 051202010108)

Upstream Characteristics					
Drainage Area	16.95 square miles				
TMDL Sample Site	48, 49				
Listed Segments	None in SW				
Land Use	Agriculture:	Forest:	Urban:	Water:	Wetland:
	79.13%	8.28%	0.04%	11.84%	0.71%
NPDES Facilities	None in SW				
MS4 Communities	Delaware County/City of Muncie (INR040056)				
CSO Communities	None in SW				
CAFOs	None in SW				
CFOs	Farm #1, Reeder Brothers Cattle Farm, Farm #2, Keesling				
TMDL Allocations (billion MPN/day)*					
Allocation Category	Very High Flows	Higher Flow Conditions	“Normal” Flows	Lower Flow Conditions	Low Flows
LA	NA	NA	NA	NA	NA
WLA	NA	NA	NA	NA	NA
MOS (10%)	NA	NA	NA	NA	NA
TMDL = LA+WLA+MOS	NA	NA	NA	NA	NA

*The Prairie Creek (HUC 051202010108) watershed shows no impairment, but the sample sites were located directly above and below the reservoir. The low *E. coli* numbers could be due to natural attrition; therefore, additional monitoring in the watershed beyond the lake is recommended and the other streams in the watershed are considered unassessed. No reductions at the sample locations were needed, but the information on the watershed is provided to assist in watershed planning efforts in the area that may show needed reductions beyond the reservoir.

Table 10: Mud Creek – White River (HUC 051202010109)

Upstream Characteristics					
Drainage Area	24.60 square miles				
TMDL Sample Site	41, 44, 45, 46, 47				
Listed Segments	INW0119_01, INW0119_T1008				
Land Use	Agriculture:	Forest:	Urban:	Water:	Wetland:
	88.17%	7.51%	1.19%	0.24%	2.89%
NPDES Facilities	Parker City Municipal WWTP				
MS4 Communities	Delaware County/City of Muncie (INR040056)				
CSO Communities	None in SW				
CAFOs	None in SW				
CFOs	Jacobi				
TMDL Allocations (billion MPN/day)					
Allocation Category	Very High Flows	Higher Flow Conditions	“Normal” Flows	Lower Flow Conditions	Low Flows
LA	4741.94	1090.93	413.06	149.16	38.43
WLA	8.29	0.90	0.90	0.90	0.90
MOS (10%)	527.80	121.31	46.00	16.67	4.37
TMDL = LA+WLA+MOS	5278.03	1213.14	459.96	166.74	43.70

Table 11: Truitt Ditch – White River (HUC 051202010110)

Upstream Characteristics					
Drainage Area	18.40 square miles				
TMDL Sample Site	50, 51, 52				
Listed Segments	INW011A_01, INW011A_T1008				
Land Use	Agriculture:	Forest:	Urban:	Water:	Wetland:
	82.94%	10.26%	4.43%	0.84%	1.53%
NPDES Facilities	None in SW				
MS4 Communities	Delaware County/City of Muncie (INR040056)				
CSO Communities	None in SW				
CAFOs	None in SW				
CFOs	Keesling & Sons INC, Guthrie, Keesling Leroy				
TMDL Allocations (billion MPN/day)					
Allocation Category	Very High Flows	Higher Flow Conditions	“Normal” Flows	Lower Flow Conditions	Low Flows
LA	4693.92	1091.83	413.96	150.06	39.33
WLA	56.31	NA	NA	NA	NA
MOS (10%)	527.80	121.31	46.00	16.67	4.37
TMDL = LA+WLA+MOS	5278.03	1213.14	459.96	166.74	43.70

Table 12: Hamilton Ditch – Muncie Creek (HUC 051202010111)

Upstream Characteristics					
Drainage Area	13.44 square miles				
TMDL Sample Site	53, 54, 55, 56				
Listed Segments	INW011B_01, INW011B_T1001				
Land Use	Agriculture:	Forest:	Urban:	Water:	Wetland:
	80.74%	5.16%	12.14%	0.81%	1.15%
NPDES Facilities	None in SW				
MS4 Communities	Delaware County/City of Muncie (INR040056)				
CSO Communities	Muncie Sanitary District				
CAFOs	None in SW				
CFOs	Keesling & Sons INC, Guthrie, Keesling Leroy				
TMDL Allocations (billion MPN/day)					
Allocation Category	Very High Flows	Higher Flow Conditions	“Normal” Flows	Lower Flow Conditions	Low Flows
LA	4598.38	1091.83	413.96	150.06	39.33
WLA	151.85	NA	NA	NA	NA
MOS (10%)	527.80	121.31	46.00	16.67	4.37
TMDL = LA+WLA+MOS	5278.03	1213.14	459.96	166.74	43.70

The above tables have listed current NPDES facilities in individual subwatersheds. A “NA” under WLA (Wasteload Allocation) indicates that there are currently no NPDES permitted facilities which could have received a portion of the WLA within that particular subwatershed; therefore, a WLA was not calculated for that subwatershed. Should a NPDES permit be granted to a new facility within any of these subwatersheds, the WLA for that subwatershed will be calculated to account for the new facility.

To further investigate sources of *E. coli*, counts in Most Probable Number (MPN)/100 mL have been plotted on precipitation graphs (Attachment E). Elevated levels of *E. coli* during and soon after rain events indicate *E. coli* contribution due to runoff. The precipitation data was collected by several weather stations managed by the Indiana State Climate Office at Purdue University. Precipitation data for sites 1 through 23 were collected at the Winchester station. Precipitation data for sites 24 through 43 were collected at the Farmland station. Precipitation for site 41 and sites 46 through 56 were collected at the Muncie station.

While there are point source contributions, compliance with the numeric *E. coli* WQS in the Upper White River Headwaters watershed most critically depends on controlling nonpoint

sources using best management practices (BMPs). If the *E. coli* inputs can be controlled, then total body contact recreational use in Upper White River Headwaters watershed will be protected.

TMDL Development

The TMDL represents the maximum loading that can be assimilated by the waterbody while still achieving the Waters Quality Standard. As indicated in the Water Quality Standards and Numeric Targets section of this document, the water quality standard for this *E. coli* TMDL is 125 MPN per one hundred milliliters as a geometric mean based on not less than five samples equally spaced over a thirty-day period from April 1 through October 31. Concurrent with the selection of a numeric concentration endpoint, TMDL development also defines the critical conditions that will be used when defining allowable levels.

Many TMDLs are designed as the set of environmental conditions that, when addressed by appropriate controls, will ensure attainment of WQS for the pollutant. For example, the critical conditions for the control of point sources in Indiana are given in 327 IAC 5-2-11.1(b). In general, the 7-day average low flow in 10 years (Q7, 10) for a stream is used as the design condition for point source dischargers. However, *E. coli* sources to the Upper White River Headwaters watershed arise from a mixture of dry and wet weather-driven conditions, and there is no single critical condition that would achieve the *E. coli* WQS. For this reason, TMDLs were calculated over all of the flow conditions (very high flows to low flows) within the Upper White River Headwaters watershed. For the Upper White River Headwaters watershed and the contributing sources, there are a number of different allowable loads that will ensure compliance, as long as they are distributed properly throughout the watershed.

For most pollutants, TMDLs are expressed on a mass loading basis (e.g. pounds per day). For *E. coli* indicators, however, mass is not an appropriate measure because *E. coli* is expressed in terms of organism counts (or resulting concentration) (USEPA, 2001). The geometric mean *E. coli* WQS allows for the best characterization of the watershed. Therefore, this *E. coli* TMDL is concentration-based consistent with 327 IAC 5-2-11.1(b) and 40 CFR, Section 130.2 (i) and the TMDL is equal to the geometric mean *E. coli* WQS for each month of the recreational season (April 1 through October 31).

Allocations

TMDLs are comprised of the sum of individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background levels. In addition, the TMDL must include a Margin of Safety (MOS), either implicitly or explicitly, that accounts for uncertainty in the relationship between pollutant loads and the quality of the receiving waterbody. Conceptually, this definition is denoted by the equation:

$$\text{TMDL} = \sum \text{WLAs} + \sum \text{LAs} + \text{MOS}$$

The overall loading capacity is subsequently allocated into the TMDL components of WLAs for point sources, LAs for nonpoint sources, and the MOS. This *E. coli* TMDL is concentration-based consistent with USEPA regulations at 40 CFR, Section 130.2(i).

Wasteload Allocations

As previously mentioned, there are five (5) NPDES permitted facilities in the Upper White River Headwaters watershed (Figure 5, Table 13). Four (4) dischargers have a sanitary component to

their discharge. One (1) discharger has a waste stabilization lagoon with a 90-day detention time; therefore, only bacteriological monitoring for *E. coli* is incorporated into the permit to ensure the lagoon is functioning properly. Three (3) of the four (4) permitted dischargers with a sanitary component have *E. coli* limits in their permits. The WLA is set at the WQS of 125 per one hundred milliliters as a geometric mean based on not less than five samples equally spaced over a thirty-day period from April 1 through October 31.

There are ten (10) CAFOs in the Upper White River Headwaters watershed. CAFOs fall under Federal NPDES regulation and are prohibited from discharging therefore the WLA is 0.

Guidelines for MS4 permits and timelines are outlined in Indiana's Municipal Separate Storm Sewer System (MS4) Rule 13 (327 IAC 15-13-10 and 327 IAC 15-13-11). There is one (1) MS4 community, Delaware County/City of Muncie (INR040056) in the Upper White River Headwaters watershed.

The Delaware County/City of Muncie (INR040056) was assigned a WLA of 125 per one hundred milliliters as a geometric mean based on not less than five samples equally spaced over a thirty-day period from April 1 through October 31. The Delaware County/City of Muncie's MS4 wasteload allocation was set at the Water Quality Standard for *E. coli* in each of the watersheds the MS4 is located. IDEM does not require a GIS shapefile for MS4s. According to Shareen Wagley (Personal Communication, 2011), the percent area of urbanized landuse in each watershed is a good approximation for the MS4. As such, the percent area of urbanization within each watershed was calculated and used to determine the MS4 WLA. Wasteload allocations were only calculated at high flows as storm waters are more likely to runoff in urbanized areas during storm events.

Until such time that more accurate spatial GIS shapefiles are provided, the TMDL is limited to estimates like incorporated areas.

In the event that designated uses and associated water quality criteria applicable to the Upper White River Headwaters are revised in accordance with applicable requirements of state and federal law, this TMDL may be revised to be consistent with such revisions. IDEM recognizes that these MS4 communities can be sources of *E. coli* and more information needs to be collected. As part of the permit process these systems will be better defined and will continuously work towards meeting the water quality standard, which is the limit and goal of this TMDL. This process will take several permitting cycles and it is anticipated that in the future, MS4 permits will meet the water quality standards.

There is one (1) CSO community in the Upper White River Headwaters Watershed, Muncie (IN0025631). This outfall discharges to the White River. The WLA is set at the WQS of 125 per one hundred milliliters as a geometric mean based on not less than five samples equally spaced over a thirty-day period from April 1 through October 31.

Load Allocations

The LA for *E. coli* nonpoint sources is equal to the WQS of 125 per one hundred milliliters as a geometric mean based on not less than five samples equally spaced over a thirty-day period from April 1 through October 31. Load allocations were calculated by subtracting the WLA and MOS from the TMDL (Attachment F). Individual LA were not assigned to individual potential nonpoint sources (ex. wildlife, septs, livestock in stream environments, etc.). The LA were combined into a singular LA for each AUID.

There are five (5) CFOs in the Upper White River Headwaters watershed. CFOs fall under state regulation and have no discharge permits; therefore, CFOs fall under LA and have a LA of 0.

Load allocations may be affected by subsequent work in the watershed. It is anticipated that future watershed projects will be useful in continuing to define and address the nonpoint sources of the *E. coli* in the Upper White River Headwaters watershed.

Margin of Safety

A Margin of Safety was incorporated into this TMDL analysis. The MOS accounts for any uncertainty or lack of knowledge concerning the relationship between pollutant loading and water quality. The MOS can be either implicit (i.e., incorporated into TMDL analysis through conservative assumptions) or explicit (i.e., expressed in the TMDL as a portion of the loadings). This TMDL uses both implicit and explicit MOS. An implicit MOS was used by applying a couple of conservative assumptions. A moderate explicit MOS has been applied by reserving ten percent of the allowable load. Ten percent was considered an appropriate MOS based on the following considerations:

- The use of the load duration curve approach minimizes a great deal of uncertainty associated with the development of TMDLs because the calculation of the loading capacity is simply a function of flow multiplied by the target value. Most of the uncertainty is therefore associated with the estimated flows in each assessed segment which were based on extrapolating flows from the nearest downstream USGS gage.
- The *E. coli* TMDLs include an implicit MOS in that they were based on the geometric mean component of the standard rather than the not-to-exceed standard. Using the not-to-exceed standard would have resulted in larger loading capacities. The ten percent MOS helps to ensure that allocations will not exceed the load associated with the minimum flow in each zone.
- An additional implicit MOS for *E. coli* is included because the load duration analysis does not address die-off of pathogens

Seasonality

Seasonality in the TMDL is addressed by expressing the TMDL in terms of the *E. coli* WQS for total body contact during the recreational season (April 1 through October 31) as defined by 327 IAC 2-1.5-8(e)(2). There is no applicable total body contact *E. coli* WQS during the remainder of the year in Indiana. Because this is a concentration-based TMDL, *E. coli* WQS will be met regardless of flow conditions in the applicable season.

Monitoring

Future *E. coli* monitoring of the Upper White River Headwaters watershed will take place during IDEM's nine-year rotating basin schedule and/or once TMDL implementation methods are in place. Monitoring will be adjusted as needed to assist in continued source identification and elimination. IDEM will monitor at an appropriate frequency to determine whether Indiana's 30-day geometric mean value of 125 *E. coli* per one hundred milliliters is being met. When results indicate that the waterbody is meeting the *E. coli* WQS, the waterbody will then be removed from Indiana's List of Impaired Waters.

Reasonable Assurance Activities

Reasonable assurance activities are programs that are in place or will be in place to assist in meeting the Upper White River Headwaters watershed TMDL allocations and the *E. coli* Water Quality Standard.

Watershed Projects

The White River Project (WRWP) in Delaware County is funded through a 319 grant. The WRWP provides funding for projects that include stream bank restoration, constructed wetlands, best management practice tours, green roof installations, and assisting with providing erosion control solutions to local landowners, as well as hosting educational workshops. Workshop topics include rain garden workshops, pasture walks for owners of grazed livestock, drainage, soil fertility, and an energy efficiency to reduce energy consumption on the farms.

These projects and workshops are designed to reduce runoff, overland flows, and stormwater flows. Reduction in flows can reduce the *E. coli* contribution from sources such as waste from urban pet populations, wildlife and livestock.

In addition, the Delaware County Soil and Water Conservation District (SWCD) was awarded the District Showcase Award from the Indiana Association of SWCDs for their work with the John M. Craddock Wetland Nature Preserve. This 27-acre reclaimed natural area is located in Muncie's industrial district and is linked to the White River and the Cardinal Greenway. This project is slated to be completed in 2013.

Delaware County has received the following funding to improve water quality in 2010:

- Local: \$43,628
- Clean Water Indiana: \$65,730
- Game Bird Habitat Development Program: \$1,107
- Conservation Reserve Program: \$350,668
- Wetland Reserve Program: \$1,380
- Total: \$462,513

The Randolph County SWCD received a Clean Water Indiana grant in 2010 to distribute rain barrels to Randolph County Residents. In holding three (3) workshops, the SWCD distributed 56 rain barrels.

Rain barrels typically capture runoff from the roof of a structure. Rain barrels prevent water from running directly off of the roof onto the ground where it contributes to overland flow and carries pollutants to nearby streams. Reduction in flows can reduce the *E. coli* contribution from sources such as waste from urban pet populations, wildlife, and livestock.

Randolph County has received the following funding to improve water quality in 2010:

- Local: \$38,720
- Clean Water Indiana: \$20,975
- Conservation Reserve Program: \$424,047
- Conservation Stewardship Program: \$10,410
- Environmental Quality Incentives Program: \$87,356
- Total: \$581,508

Additional 319 Watershed Projects

The Delaware County SWCD has received a grant that will end in December of 2011. This grant is being used to promote the installation of best management practices in areas defined as critical within the watershed. Best management practices include vegetative buffers and grassed waterways for agricultural lands as well as rain barrels and rain gardens in urban areas. BMP demonstration projects include a green roof and a system that captures runoff from gutters into a rain barrel, the rain water then flows into a rain garden. Water quality monitoring is continuing. This group is looking to reduce sediment, nutrients, and *E. coli* from nonpoint sources. Additional outreach and education includes rain barrel workshops, the benefits of urban BMPs, stream walks, as well as articles and press releases.

Since 1999, students taking biology classes at Anderson University have followed Hoosier Riverwatch protocols to assess macroinvertebrate assemblages and collect chemistry data from the White River, typically once or twice per year (Attachment G). Chemistry data collected include dissolved oxygen, pH, ammonia, nitrates, and phosphates. Other measurements taken include flow, turbidity, and temperature. Fecal coliform and *E. coli* counts were also collected.

IDEM Watershed Specialists will be available to assist stakeholders with starting a watershed group, facilitating planning activities, and serving as a liaison between watershed planning and TMDL activities in the Upper White River Headwaters watershed.

National Pollutant Discharge Elimination System (NPDES) Permitted Dischargers

All permitted dischargers with a sanitary component already have *E. coli* limits and monitoring as part of their current permits. By following the guidelines of their permits, the permitted dischargers will attain WQS and reduction of *E. coli* to the surface waters of the Upper White River Headwaters watershed.

Storm Water General Permit Rule 13

There is one (1) municipal separate storm sewer system (MS4) community in the Upper White River Headwaters watershed: Delaware County/City of Muncie (INR040056).

Guidelines for MS4 permits and timelines are outlined in Indiana's Municipal Separate Storm Sewer System (MS4) Rule 13 (327 IAC 15-13-10 and 327 IAC 15-13-11). It is difficult to determine the magnitude of the contributions of these MS4 communities as a source of *E. coli* in the Upper White River Headwaters watershed. The TMDL recognizes that these MS4 communities can be sources of *E. coli* and more information needs to be collected. As part of the permit process these systems will be better defined and will continuously work towards meeting the water quality standard, which is the limit of this TMDL. This process will take several permitting cycles and it is anticipated that in the future, MS4 permits will meet the water quality standards. With each permitting cycle, it is projected that progress will be made towards meeting the water quality standard.

The Delaware County/City of Muncie (INR040056) MS4 is a finalist to receive the Governor's Environmental Award (Wagley, Personal Communication, 2011). This award recognizes entities who have implemented outstanding environmental practices into their operations in an effort to improve Indiana's environmental protection and benefit the health and welfare of Indiana citizens.

Confined Feeding Operations and Concentrated Animal Feeding Operations

CFOs and CAFOs are required to manage manure, litter, and process wastewater pollutants in a manner that does not cause or contribute to the impairment of *E. coli* WQS. IDEM is promulgating a new CFO rule that will further protect water quality by including the more stringent guidelines (i.e. phosphorus monitoring, limiting application seasons) that are currently incorporated under CAFO regulations for operations that are currently considered CFOs. This new rule is proposed to go into effect next spring 2012.

Potential Future Activities

Nonpoint source pollution can be reduced by the implementation of Best Management Practices. BMPs are practices used in agriculture, forestry, urban land development, and industry to reduce the potential for damage to natural resources from human activities. A BMP may be structural, that is, something that is built or involves changes in landforms or equipment, or it may be managerial, that is, a specific way of using or handling infrastructure or resources. BMPs should be selected based on the goals of a watershed management plan. Livestock owners, farmers, and urban planners can implement BMPs outside of a watershed management plan, but the success of BMPs would be enhanced if coordinated as part of a watershed management plan. Following are examples of BMPs that may be used to reduce *E. coli* runoff:

Riparian Area Management - Management of riparian areas protects stream banks and river banks with a buffer zone of vegetation consisting of grasses, legumes, or trees.

Manure Collection and Storage - Collecting, storing, and handling manure in such a way that nutrients or bacteria do not run off into surface waters or leach down into ground water.

Contour Row Crops - Farming with row patterns and field operations aligned at or nearly perpendicular to the slope of the land.

No-Till Farming - No-till is a year-round conservation farming system. In its pure form, no-till does not include any tillage operations either before or after planting. The practice reduces wind and water erosion, catches snow, conserves soil and water, protects water quality, and provides wildlife habitat. No-till helps control soil erosion and improve water quality by maintaining maximum residue plant levels on the soil surface. These plant residues: 1) protect soil particles and applied nutrients and pesticides from detachment by wind and water; 2) increase infiltration; and 3) reduce the speed at which wind and water move over the soil surface.

Manure Nutrient-Testing - If manure application is desired, sampling and chemical analysis of manure should be performed to determine nutrient content for establishing the proper manure application rate in order to avoid over-application and run-off.

Drift Fences - Drift fences (short fences or barriers) can be installed to direct livestock movement. Identifying small operations where animals have direct access to streams and installing a drift fence parallel to the stream will keep animals out of the stream and prevent direct input of *E. coli* to the stream.

Pet Clean-up / Education - Education programs for pet owners can improve water quality of runoff from urban areas.

Septic System Management/Public Education - Programs for management of septic systems can provide a systematic approach to reducing septic system pollution. Education on proper maintenance of septic systems as well as the need to remove illicit discharges could alleviate some anthropogenic sources of *E. coli*.

Cover crop - Grasses, legumes, forbs, or other herbaceous plants established for seasonal cover and other conservation purposes to help reduce erosion from wind and water, increase soil organic matter, capture and recycle nutrients in the soil profile, and minimize and reduce soil compaction.

Alternative Watering Systems - A process to collect water from spring or seeps to provide water for livestock, wildlife or other agriculture uses.

Low Impact Development - An innovative storm water management approach with a basic principle that is modeled after nature: manage rainfall where it falls, using uniformly distributed decentralized micro-scale controls. The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.

Bioretention System - The bioretention system is an alternative to conventional BMP structures. It is highly applicable to residential uses in community open space or private lots. The bioretention system is very appropriate for treatment of parking lot runoff, roadways where sufficient space accommodates off-line implementation, and pervious areas such as golf courses.

Public Participation

Public Kickoff Meetings were held on May 26, 2011, at the Farm Bureau Insurance Building in Muncie and at the Randolph County 4-H Fairgrounds in Winchester where the public was invited to submit any additional bacteria data and information was provided on the TMDL process.

Public Draft TMDL Meetings were held on July 27, 2011 at the Kennedy Library in Muncie and at the Randolph County 4-H Fairgrounds in Winchester. The public was invited to submit formal comments on the draft document and informed of the findings of the document.

The public comment period occurred from July 26, 2011 to August 26, 2011.

Conclusion

The sources of *E. coli* to the Upper White River Headwaters watershed include both point and nonpoint sources. In order for the Upper White River Headwaters watershed to achieve Indiana's *E. coli* WQS, the wasteload and load allocations for the Upper White River Headwaters watershed in Indiana have been set to the *E. coli* WQS of 125 per one hundred milliliters as a geometric mean based on not less than five samples equally spaced over a thirty day from April 1 through October 31. Achieving the wasteload and load allocations for the Upper White River Headwaters watershed depends on:

- 1) Nonpoint sources of *E. coli* being controlled by implementing best management practices in the watershed.
- 2) Continuing efforts to protect this watershed.

The next phase of this TMDL is to identify and support the implementation of activities that will bring the Upper White River Headwaters watershed in compliance with the *E. coli*. IDEM will continue to work with its existing programs on implementation. In the event that designated uses and associated water quality criteria applicable to the Upper White River Headwaters watershed are revised in accordance with applicable requirements of state and federal law, the TMDL implementation activities may be revised to be consistent with such revisions. Additionally, IDEM will work with local stakeholder groups to pursue best management practices that will result in improvement of the water quality in the Upper White River Headwaters watershed.

References

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- Indiana State Climate Office. <http://www.agry.purdue.edu/climate/>. Accessed 2011.
- Koss, Bradford. 2011. Randolph County Health Department. Personal Communication.
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- U.S. Census, 2010, County Population data, <http://www.census.gov/>
- USEPA. 2001. Protocol for Developing Pathogen TMDLs. United States Environmental Protection Agency, 841-R-00-002.
- Trinkle, Todd. 2011. Indiana Department of Environmental Management. Personal Communication.
- Wagley, Shareen. 2011. Muncie Sanitary District. MS4 Coordinator. Personal Communication.

Table 13: NPDES Permits in the Upper White River Headwaters Watershed

Facilities with Sanitary Discharge (*E. coli* Limits)

<u>Permit No.</u>	<u>Facility Name</u>	<u>Receiving Waters</u>
IN0021512	Farmland Municipal STP	West Fork of White River
IN0020729	Parker City Municipal WWTP	West Fork of White River
IN0031135	Union Elementary & High School (Town of Modoc)	Unnamed ditch to Little White River
IN0021024	Winchester WWTP	West Fork of White River

Facilities with Non-Sanitary Discharge

<u>Permit No.</u>	<u>Facility Name</u>	<u>Receiving Waters</u>
ING490028	IMI Irving Bros Stone & Gravel	Muncie Creek

Table 14: CFOs and CAFOs in the Upper White River Headwaters Watershed

CFO #	Operation Name	County	Program	Nursery Pigs	Finishers	Sows	Dairy Cattle
1385	SELDOM REST FARMS INCORPORATED FARM 2	DELAWARE	CFO	0	2,000	100	0
3714	SELDOM REST FARMS INCORPORATED FARM 1	DELAWARE	CFO	2,125	0	708	0
3863	CHRISTOPHER PEACOCK	RANDOLPH	CFO	800	1,110	158	0
4646	STEPHEN HAMILTON	RANDOLPH	CFO	480	1,020	210	0
4894	SCF 1 LLC	RANDOLPH	CAFO	0	4,000	0	0
5011	TK HOG FARM LLC	RANDOLPH	CAFO	0	6,000	0	0
6232	CHARLES JACOBI	DELAWARE	CFO	720	600	250	0
6313	UNION GO DAIRY LLC	RANDOLPH	CAFO	0	0	0	1,972
6333	TED HENDRICKSON	RANDOLPH	CAFO	1,800	3,600	0	0
6438	INDIAN TRAIL NURSERIES	RANDOLPH	CAFO	19,200	0	0	0
6439	UNIONPORT NURSERIES	RANDOLPH	CAFO	19,200	0	0	0
6442	LICK SKILLET NURSERIES	RANDOLPH	CAFO	19,200	0	0	0
6443	BUENA VISTA SOW FARM	RANDOLPH	CAFO	430	1,470	5,842	0
6501	SCF 2 LLC	RANDOLPH	CAFO	0	8,000	0	0
6590	CHAMBERLAIN SWINE LLC	RANDOLPH	CAFO	0	8,000	0	0
			Total:	63,955	35,800	7,268	1,972

Figure 1: Upper White River Headwaters Watershed

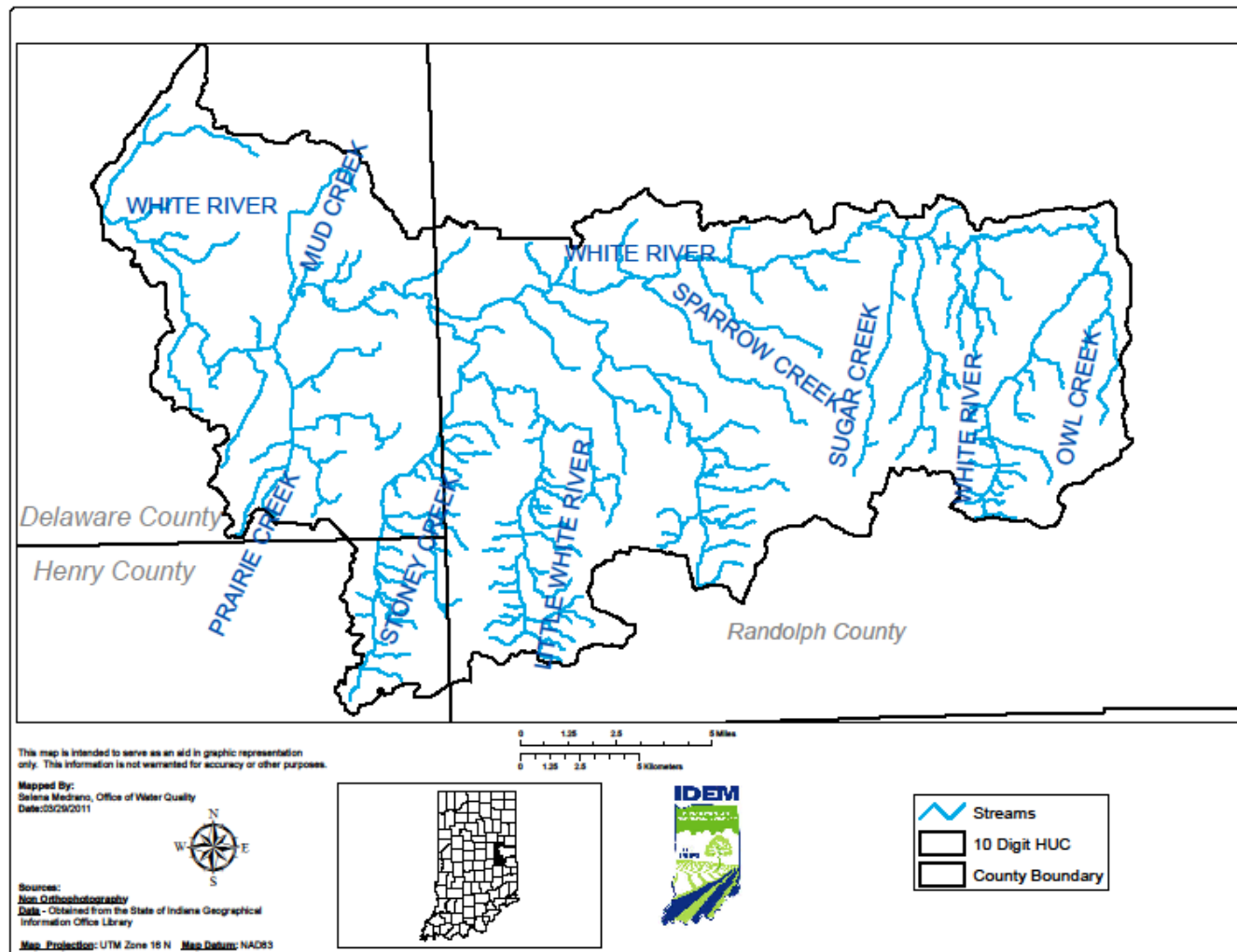


Figure 2: Streams in the Upper White River Headwaters Watershed

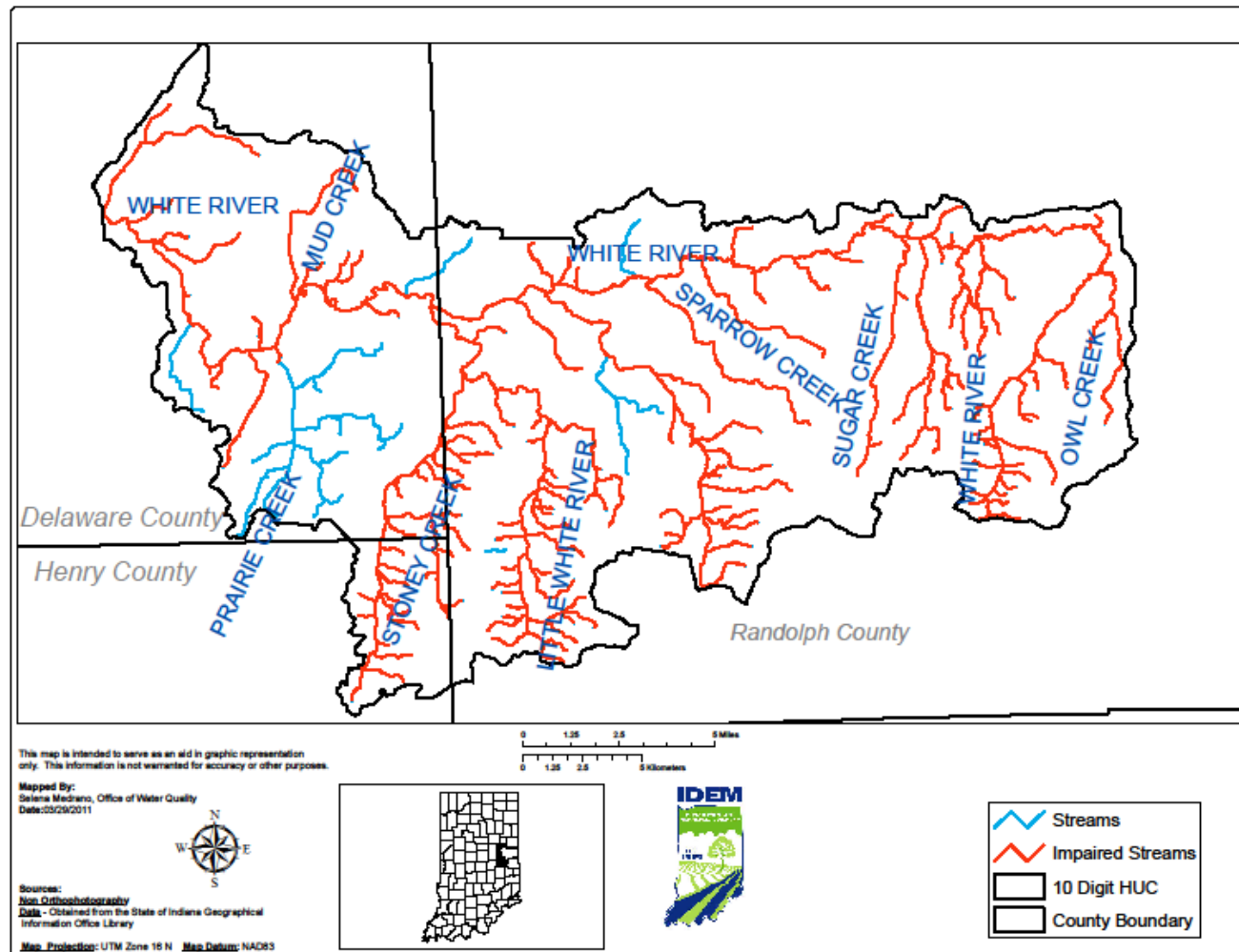


Figure 3: Sample Sites in the Upper White River Headwaters Watershed

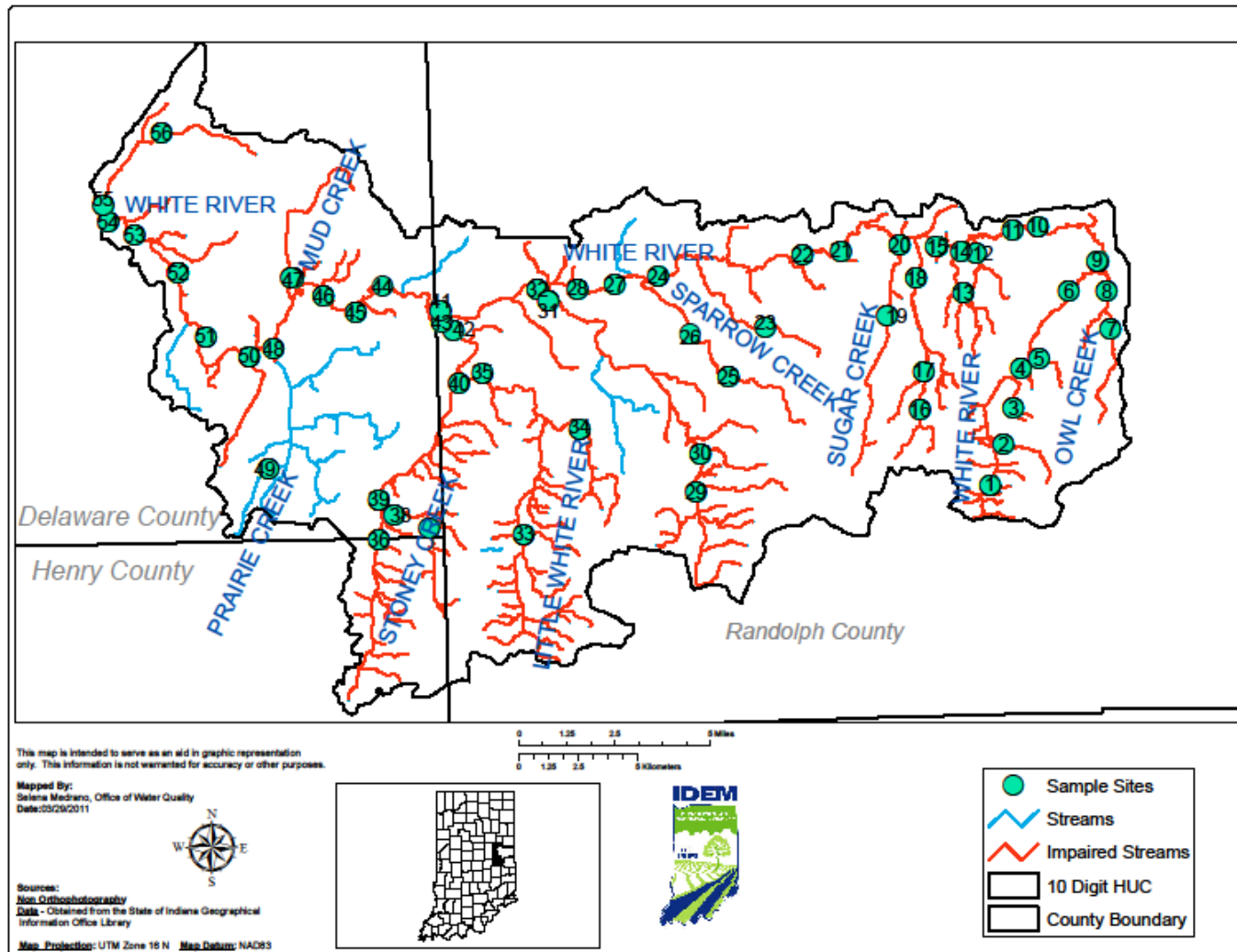


Figure 4: Land use in the Upper White River Headwaters Watershed

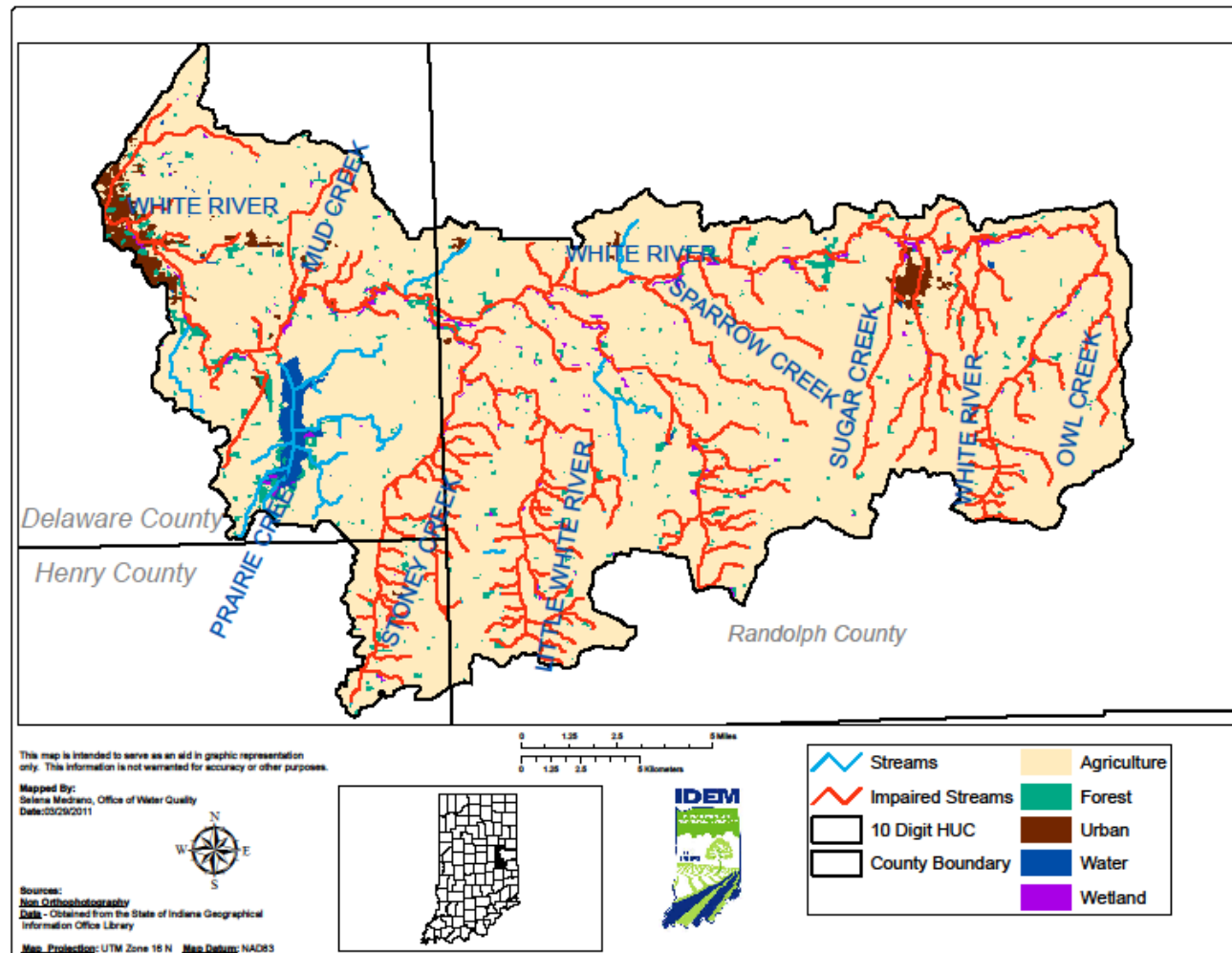


Figure 5: NPDES Permitted Facilities in the Upper White River Headwaters Watershed

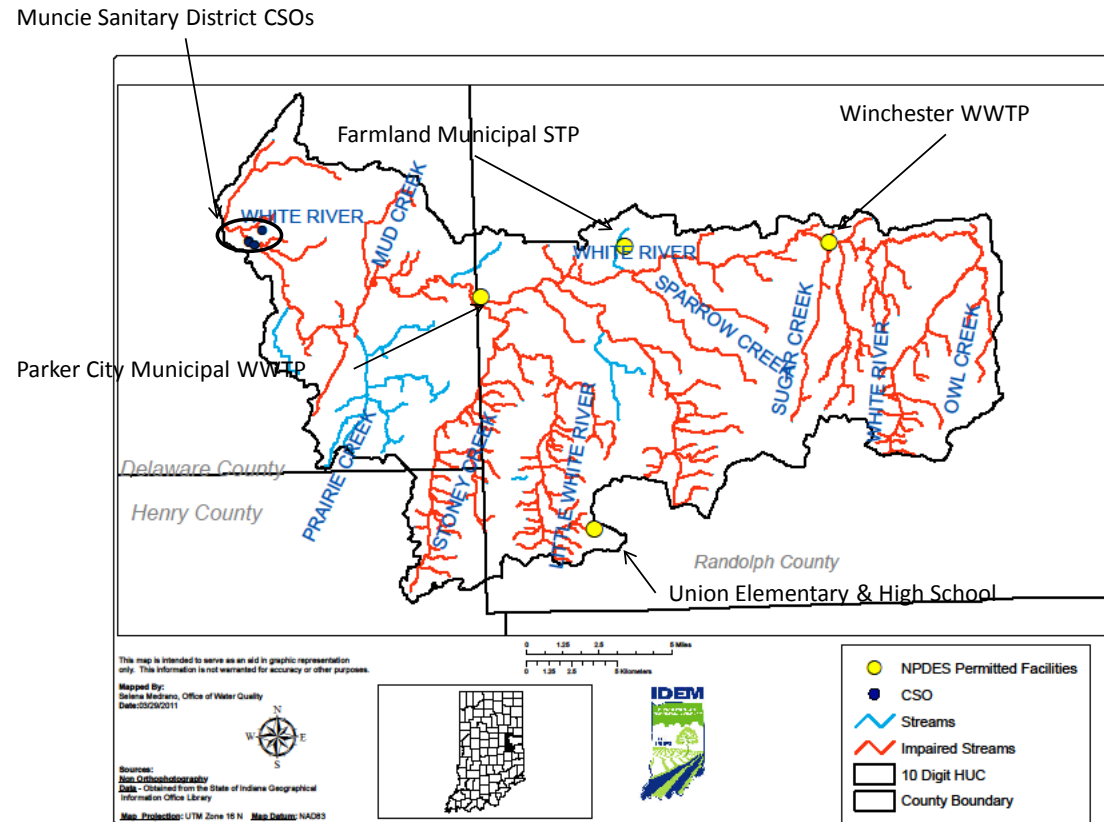


Figure 6: Confined Feeding Operations in the Upper White River Headwaters Watershed

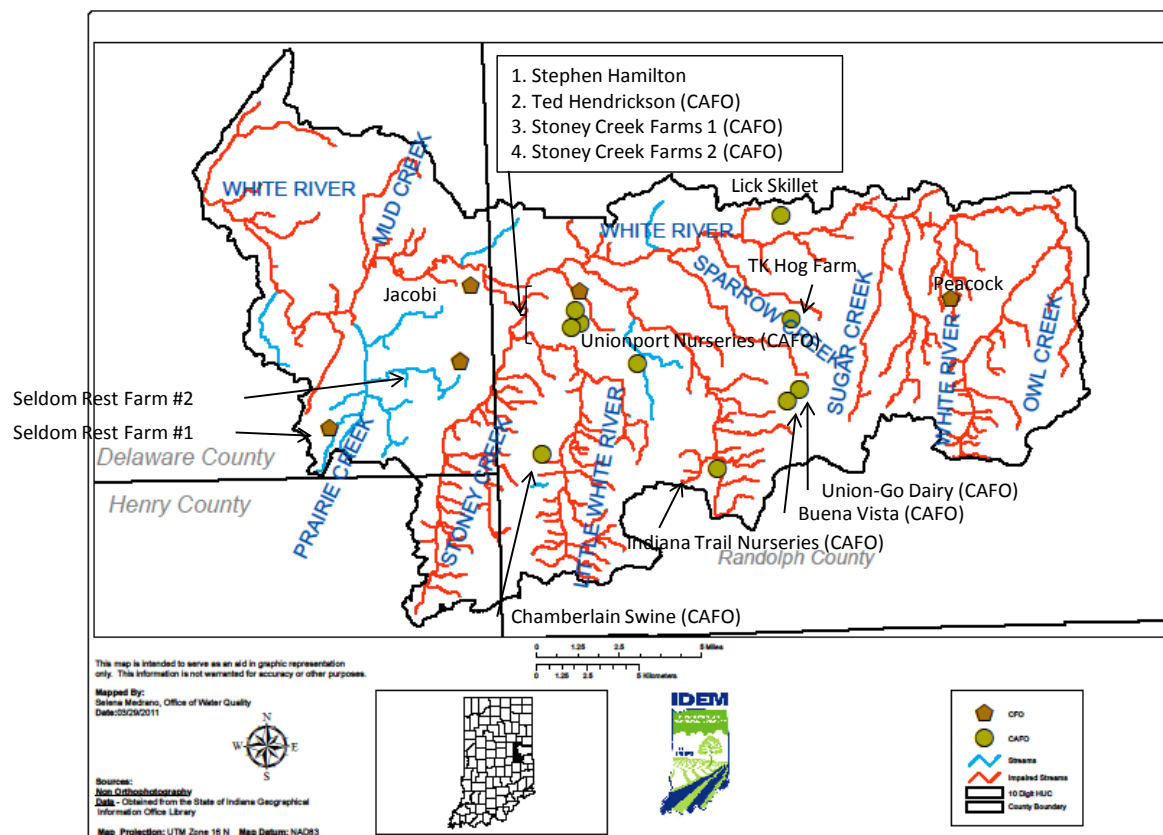


Figure 7: Infrared Imagery of the Upper White River Headwaters Watershed

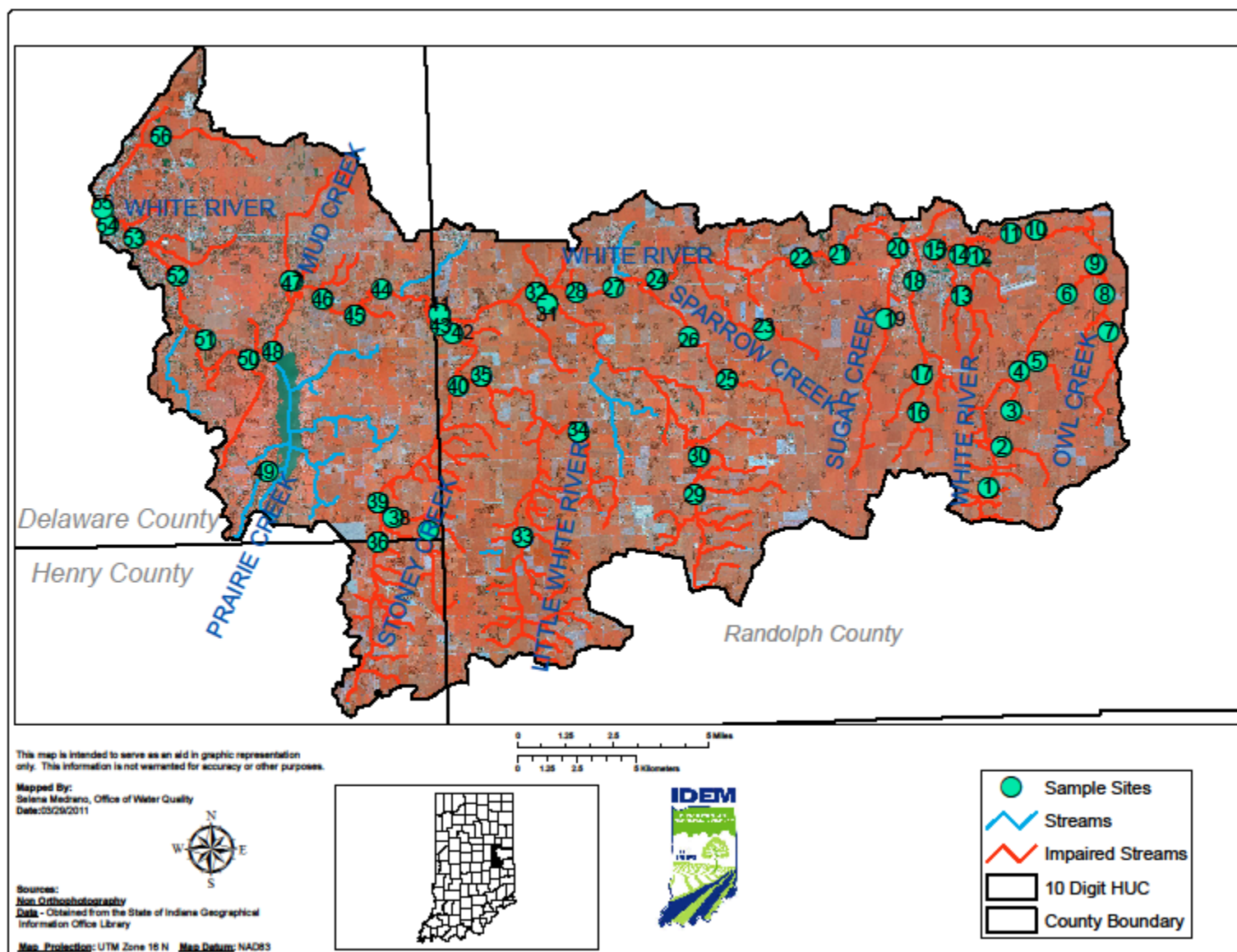
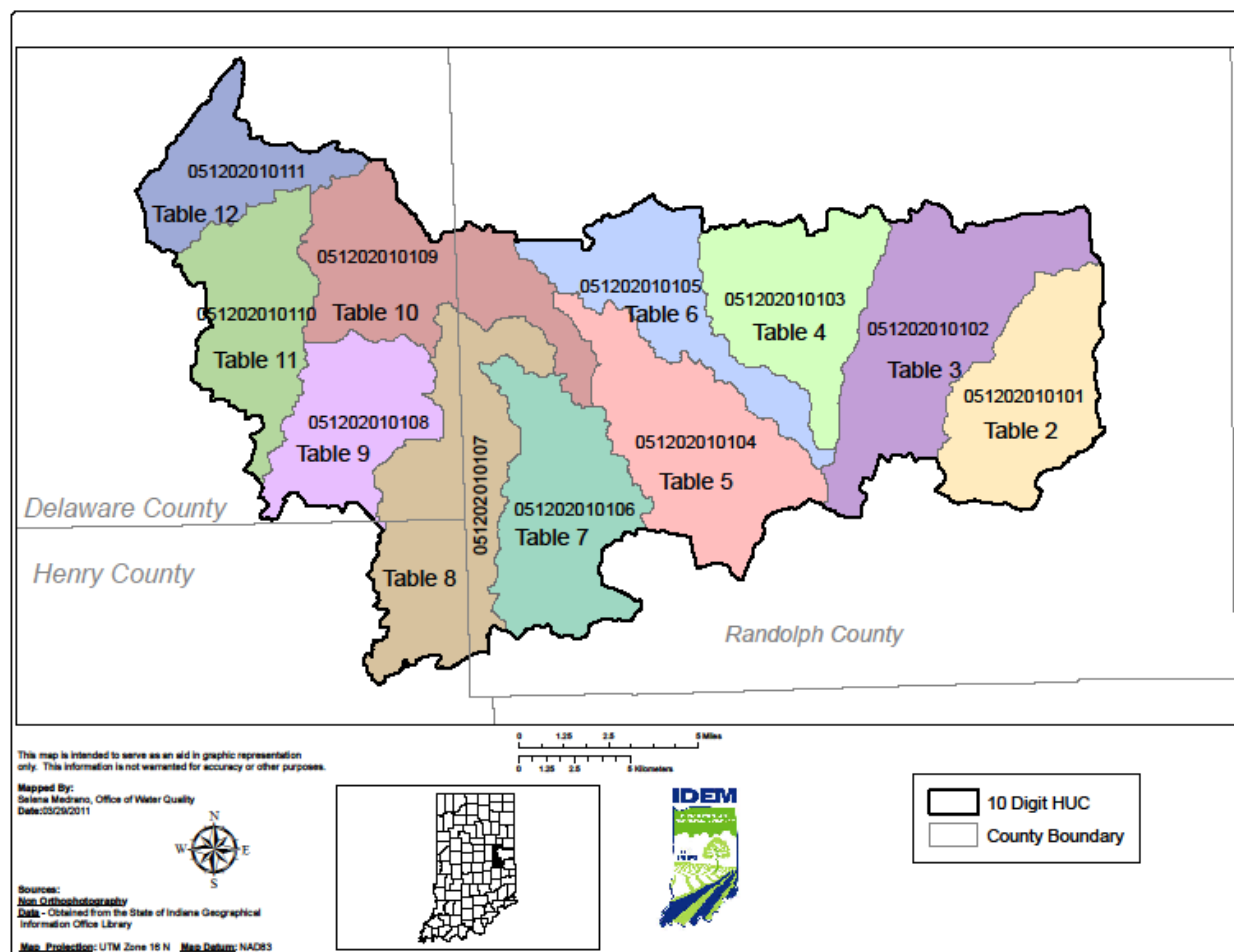


Figure 8: 12-Digit HUCs in the Upper White River Headwaters Watershed



Site Number	PROJECT_NAME	WATERBODY NAME	Site Description	STATION NAME	SAMPLE DATE	E. coli Result	RESULT_UNIT	GEOMETRIC MEAN	LAB REPORT LIMIT	REPORT UNIT	LOOKUP RESULT RID	LAB DILUTION MULTIPLIER	QA FLAGS	LAB QA FLAGS	2010 AUID	2008 AUID	NOTES	E. coli	Infrared Notes
1	2006 TMDL West Fork White River	West Fork White River	CR 500 S	WWU010-0082	7/17/2006 9:20	360.9	MPN/100mL	693.77	1	MPN/100mL		1			INW0111_01	INW0111_T1001	Sites 1-6 are on the same AUID, INW0111_01. This AUID is impaired for <i>E. coli</i> , likely due to no buffer, agricultural and septic influences	NS	Primarily healthy crops with patches of bare fields, perhaps a bare field unable to be planted due to high moisture content in the soils located upstream
					7/25/2006 10:35	547.5	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 9:30	920.8	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 9:00	866.4	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 9:30	816.4	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 9:30	866.4	MPN/100mL		1	MPN/100mL		1							
2	2006 TMDL West Fork White River	Colvin Ditch	CR 200E	WWU010-0081	7/17/2006 9:35	2419.2	MPN/100mL	399.49	1	MPN/100mL		1			INW0111_01	INW0111_T1001	Sites 1-6 are on the same AUID, INW0111_01. This AUID is impaired for <i>E. coli</i> , likely due to no buffer, agricultural and septic influences	NS	Extremely healthy crops located adjacent to site. Patchy fields upstream likely due to high moisture content in the soils. Fields upstream appear to be completely bare, possibly recently planted based on small reflections of infrared in the image
					7/25/2006 10:45	1	MPN/100mL		2420	MPN/100mL		1		>					
					7/31/2006 9:45	4352	MPN/100mL		10	MPN/100mL		10							
					8/14/2006 9:40	2419.2	MPN/100mL		1	MPN/100mL		1							
3	2006 TMDL West Fork White River	Unnamed Tributary of West Fork White River	CR 300 S	WWU010-0080	7/17/2006 10:20	2420		389.06	2420	MPN/100mL		1		>	INW0111_01	INW0111_T1001	Sites 1-6 are on the same AUID, INW0111_01. This AUID is impaired for <i>E. coli</i> , likely due to no buffer, agricultural and septic influences	NS	Healthy crops located adjacent to site. Sparse vegetation in a yard near the site. Patchy fields upstream likely due to high moisture content in the soils. Fields upstream appear to be completely bare, possibly recently planted based on small reflections of infrared in the image
					7/25/2006 11:10	1553.1	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 10:15	2419.2	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 9:40	980.4	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 10:10	1			2420	MPN/100mL		1		>					
4	2006 TMDL West Fork White River	West Fork White River	CR 200 S	WWU010-0079	7/17/2006 10:45	2419.2	MPN/100mL	1067.55	1	MPN/100mL		1			INW0111_01	INW0111_T1001	Sites 1-6 are on the same AUID, INW0111_01. This AUID is impaired for <i>E. coli</i> , likely due to no buffer, agricultural and septic influences	NS	Healthy crops located adjacent to site. Sparse vegetation in a yard near the site. Patchy fields upstream likely due to high moisture content in the soils. Drainage issues in surrounding fields.
					7/25/2006 11:20	866.4	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 10:20	1046.2	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 9:50	920.8	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 10:20	686.7	MPN/100mL		1	MPN/100mL		1							
5	2006 TMDL West Fork White River	Unnamed Tributary of West Fork White River	CR 300 E	WWU010-0078	7/17/2006 10:55	103.9	MPN/100mL	373.26	1	MPN/100mL		1			INW0111_01	INW0111_T1001	While there are not 5 samples collected at this site, sites 1-6 are on the same AUID, INW0111_01 (2008 AUID: INW0111_T1001). This AUID is impaired for <i>E. coli</i> likely due to no buffer, agricultural and septic influences	NS	Healthy vegetation (mature trees) located downstream of site, sparse yard located adjacent to site. Stream flows through small pond with exposed sediment and suspended sediment just upstream of the sample site. Corridor buffering stream is sparsely vegetated.
					7/25/2006 11:30	816.4	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 10:25	613.1	MPN/100mL		1	MPN/100mL		1							
6	2006 TMDL West Fork White River	West Fork White River	East Base Road	WWU010-0076	7/17/2006 11:40	116.9	MPN/100mL	315.66	1	MPN/100mL		1			INW0111_01	INW0111_T1001	Sites 1-6 are on the same AUID, INW0111_01. This AUID is impaired for <i>E. coli</i> , likely due to no buffer, agricultural and septic influences	NS	Healthy vegetation (mature trees) adjacent to site. Sparsely vegetated areas located upstream, including several soil-exposed areas adjacent to stream. Healthy crops located on either side of tree buffer. Several fields look as though growth recently started.
					7/25/2006 11:50	298.7	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 10:50	290.9	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 10:15	1119.9	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 10:45	275.5	MPN/100mL		1	MPN/100mL		1							
7	2006 TMDL West Fork White River	Owl Creek	CR 100 S	WWU010-0077	7/17/2006 11:15	1	MPN/100mL	318.73	2420	MPN/100mL		1		>	INW0111_02	INW0111_T1221	Sites 7 & 8 are on the same AUID, INW0111_02. This AUID is impaired for <i>E. coli</i>	NS	Very thin buffer, healthy crops surround stream. Site is adjacent to two fields that were recently planted, growth just beginning to occur.
					7/25/2006 11:35	1299.7	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 10:35	1986.3	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 10:00	980.4	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 10:30	1299.7	MPN/100mL		1	MPN/100mL		1							
8	2006 TMDL West Fork White River	Owl Creek	East Base Road	WWU010-0075	7/17/2006 11:35	1119.9	MPN/100mL	352.45	1	MPN/100mL		1			INW0111_02	INW0111_T1221	Sites 7 & 8 are on the same AUID, INW0111_02. This AUID is impaired for <i>E. coli</i>	NS	Wide buffer between crops and stream; however, buffer is sparsely vegetated. Crops are healthy, some fields recently planted.
					7/25/2006 11:45	920.8	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 10:40	920.8	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 10:05	1299.7	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 10:05	1553.1	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 10:40	1	MPN/100mL		2420	MPN/100mL		1		>					
9	2006 TMDL West Fork White River	West Fork White River	SR 32	WWU010-0074	7/17/2006 11:50	344.1	MPN/100mL	458.71	1	MPN/100mL		1			INW0112_01	INW0112_T1002	Sites 9, 10, 11, 14 and 15 are located on INW0112_01 and are impaired for <i>E. coli</i> . This AUID will be considered impaired based on sample Sites 16 and 18, this is more protective of the waters. Impairment is likely due to agricultural influences.	NS	Thin healthy mature tree buffer, surrounded by healthy crops. Some field area wet and bare of crops/vegetation.
					7/25/2006 12:00	686.7	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 10:55	517.2	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 10:25	866.4	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 10:55	191.8	MPN/100mL		1	MPN/100mL		1							
					7/17/2006 12:00	82	MPN/100mL		1	MPN/100mL		1							
10	2006 TMDL West Fork White River	West Fork White River	CR 300 E	WWU010-0073	7/25/2006 12:10	19.5	MPN/100mL	42.32	1	MPN/100mL		1			INW0112_01	INW0112_T1002	Sites 9, 10, 11, 14 and 15 are located on INW0112_01 and are impaired for <i>E. coli</i> . This AUID will be considered impaired based on sample Sites 16 and 18, this is more protective of the waters. Impairment is likely due to agricultural influences.	NS	Thin healthy mature tree buffer, surrounded primarily by healthy crops, one field has sparse vegetation and drainage patterns, likely high moisture content in the soils.
					7/31/2006 11:05	109.5	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 10:30	21.6	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 11:00	35.9	MPN/100mL		1	MPN/100mL		1							
					4/10/2006 11:30	62	MPN/100mL		1	MPN/100mL		1							
11	2006 Corvallis E. coli	West Fork White River	CR 200 E	WWU010-0039	4/10/2006 11:30	65.1	MPN/100mL	229.33	1	MPN/100mL		1			INW0112_01	INW0112_T1002	Sites 9, 10, 11, 14 and 15 are located on INW0112_01 and are impaired for <i>E. coli</i> . This AUID will be considered impaired based on sample Sites 16 and 18, this is more protective of the waters. Impairment is likely due to agricultural influences.	NS	healthy mature tree buffer surrounded by crops with drainage patterns, sparsly vegetated spots, likely due to high moisture content in soils.
					4/17/2006 11:20	1986.3	MPN/100mL		1	MPN/100mL		1							
					4/24/2006 12:00	156.5	MPN/100mL		1	MPN/100mL		1							
					5/1/2006 11:35	920.8	MPN/100mL		1	MPN/100mL		1							
					5/8/2006 11:40	125.9	MPN/100mL		1	MPN/100mL		1							
					7/17/2006 12:15	1986.3	MPN/100mL		1	MPN/100mL		1							

17	2006 TMDL West Fork White River	Unnamed Tributary to Salt Creek	Base	WWU010-0064	7/17/2006 10:10	108.1	MPN/100mL	36.65	1	MPN/100mL		1			INW0112_T1005	INW0113_00	Sites 16, 17, and 18 are located on AUID INW0112_T1005. This AUID will be considered impaired based on sample Sites 16 and 18, this is more protective of the waters.	NS	Site located in near rural homes. Upstream has unvegetated buffer to healthy crops.
					7/25/2006 10:55	13.1	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 9:55	30.9	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 9:20	115.3	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 9:50	13.1	MPN/100mL		1	MPN/100mL		1							
18	2006 TMDL West Fork White River	Salt Creek	South Street	WWU010-0067	7/17/2006 13:40	1	MPN/100mL	270.60	2420	MPN/100mL		1		>	INW0112_T1005	INW0113_00	Sites 16, 17, and 18 are located on AUID INW0112_T1005 and this AUID is impaired for <i>E. coli</i> , likely due to no buffer present, agricultural and septic influences. This AUID will be considered impaired based on sample Sites 16 and 18, this is more protective of the waters.	NS	Located in urban area, sparse vegetation, no buffer.
					7/25/2006 13:40	461.1	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 12:35	727	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 11:50	435.2	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 12:05	1732.9	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 12:05	1553.1	MPN/100mL		1	MPN/100mL		1							
19	2006 TMDL West Fork White River	Sugar Creek	CR 50 S	WWU010-0062	7/17/2006 13:50	1732.9	MPN/100mL	869.31	1	MPN/100mL		1			INW0112_T1006	INW0113_00	Site 19 & 20 are located on AUID INW0112_T1006 and is impaired for <i>E. coli</i> , likely due to no buffer, agricultural and septic influences	NS	Thin mature tree buffer immediately upstream of site, but further upstream has no buffer between stream and crops. Sparsly vegetated areas in fields upstream, possibly due to high moisture content in soils, drainage patterns also evident in fields.
					7/25/2006 13:50	1732.9	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 12:40	980.4	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 11:55	172	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 12:15	980.4	MPN/100mL		1	MPN/100mL		1							
20	2006 TMDL West Fork White River	Sugar Creek	Martin Street	WWU010-0061	7/17/2006 13:30	980.4	MPN/100mL	748.01	1	MPN/100mL		1			INW0112_T1006	INW0113_00	Site 19 & 20 are located on AUID INW0112_T1006 and is impaired for <i>E. coli</i> , likely due to no buffer and urban influences	NS	Site located in urban area, some mature tree vegetation upstream of site. Site experiences urban and agricultural influences. Several ponds in upstream area with suspended sediments.
					7/25/2006 13:30	547.5	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 12:20	547.5	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 11:40	613.1	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 11:55	1299.7	MPN/100mL		1	MPN/100mL		1							
22	2006 TMDL West Fork White River	West Fork White River	CR 300 W	WWU010-0060	7/17/2006 14:10	307.6	MPN/100mL	1069.91	1	MPN/100mL		1			INW0113_01	INW0114_T1004	Site 21 & 22 are located on AUID INW0113_01, which is impaired for <i>E. coli</i> , likely due to no buffer, agricultural influences, and several CFOs being within 5 miles of sites.	NS	The thin mature tree buffer thickens to a wide mature tree buffer just upstream of the site. Crops on either side of the buffer, some fields look as if recently planted. A few bare fields with expose soils in the area.
					7/25/2006 14:15	43.9	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 13:05	185.2	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 13:05	202.9	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 12:20	203.5	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 12:30	86.2	MPN/100mL		1	MPN/100mL		1							
23	2006 TMDL West Fork White River	Eightmile Creek	CR 400 W	WWU010-0059	7/17/2006 14:00	1119.9	MPN/100mL	1179.84	1	MPN/100mL		1			INW0113_T1004	INW0114_00	Site 23 is on AUID INW0113_T1004 and is impaired for <i>E. coli</i> , likely due to no buffer, agricultural influences, and several CFOs being within 5 miles of sites.	NS	Thin mature tree buffer, then crops on either side of buffer. Drainage patterns in fields suggesting erosion inputs. Some fields have sparse vegetation in spots, potentially due to high moisture content in the soils.
					7/25/2006 14:00	1203.3	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 12:50	816.4	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 12:10	1046.2	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 12:20	1986.3	MPN/100mL		1	MPN/100mL		1							
24	2006 TMDL West Fork White River	West Fork White River	CR 675 W	WWU010-0057	7/17/2006 14:30	18.7	MPN/100mL	38.67	1	MPN/100mL		1			INW0115_01	INW0115_T1005	Sites 24, 27, and 28 are located on AUID INW0115_01. Site 24 is not impaired for <i>E. coli</i> , likely due to thick buffers. This AUID will be considered impaired based on sample Site 28, this is more protective of the waters.	NS	Thick mature tree buffer narrowing into a thinner buffer. Lawns are on the other side of the thin buffer. Stream has suspended sediments. Bare field with exposed soils located near stream, other fields in the area look as though plants are just starting to emerge.
					7/25/2006 14:25	37.3	MPN/100mL		1	MPN/100mL		1							
					7/31/2006 13:20	72.8	MPN/100mL		1	MPN/100mL		1							
					8/7/2006 12:30	68.9	MPN/100mL		1	MPN/100mL		1							
					8/14/2006 12:45	24.7	MPN/100mL		1	MPN/100mL		1							
25	2006 TMDL West Fork White River	Sparrow Creek	CR 200 S	WWU010-0058	7/18/2006 12:10	686.7	MPN/100mL	302.50	1	MPN/100mL		1			INW0115_T1006	INW0115_00	Site 25 is on AUID INW0115_T1006 and is impaired for <i>E. coli</i> , likely due to no buffers, agricultural and septic influences	NS	Sparse buffer, crops present and manicured lawns. Several recently planted fields near the stream. Lots of healthy crops in surrounding area.
					7/26/2006 11:15	285.1	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 12:10	166.4	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 12:10	159.7	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 11:45	387.3	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 11:45	517.2	MPN/100mL		1	MPN/100mL		1							
28	2006 TMDL West Fork White River	West Fork White River	CR 900 W	WWU010-0048	8/15/2006 10:20	222.4	MPN/100mL	179.34	1	MPN/100mL		1			INW0115_01	INW0115_T1005	Sites 24, 27, and 28 are located on AUID INW0115_01, which is impaired for <i>E. coli</i> , likely due to thin buffers, agricultural, septic, and urban influences. This AUID will be considered impaired based on sample Site 28, this is more protective of the waters.	NS	Thick mature tree buffer on the north side of the stream, thin to no buffer on the south side of the stream, next to crops. Possible silviculture farm near stream. Some fields with plants just beginning to emerge. Drainage patterns in fields suggest erosion a possibility.
					7/18/2006 11:40	184.2	MPN/100mL		1	MPN/100mL		1							
					7/26/2006 10:55	145	MPN/100mL		1	MPN/100mL		1							
					7/26/2006 10:55	166.4	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 11:55	233.3	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 11:30	104.3	MPN/100mL		1	MPN/100mL		1							
29	2006 TMDL West Fork White River	Cabin Creek	CR 500 S	WWU010-0065	8/15/2006 10:10	307.6	MPN/100mL	310.24	1	MPN/100mL		1			INW0114_01	INW0116_00	Sites 29, 30, and 31 are located on AUID INW0114_01. This AUID is impaired for <i>E. coli</i> , likely due to little to no buffer, several CFOs being located within 5 miles of the sample sites with row crop ag landuse, and septic influences.	NS	no buffer between stream and crops. Fields recently planted, plants just starting to emerge, drainage patterns in field suggest potential for erosion.
					7/18/2006 12:50	920.8	MPN/100mL		1	MPN/100mL		1							
					7/26/2006 11:30	344.1	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 12:50	93.3	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 12:10	325.5	MPN/100mL		1	MPN/100mL		1							
					8/15/2006 10:50	298.7	MPN/100mL		1	MPN/100mL		1							
30	2006 TMDL West Fork White River	Cabin Creek	CR 400 S	WWU010-0056	7/18/2006 12:40	488.4	MPN/100mL	356.69	1	MPN/100mL		1			INW0114_01	INW0116_00	Sites 29, 30, and 31 are located on AUID INW0114_01. This AUID is impaired for <i>E. coli</i> , likely due to little to no buffer, several CFOs being located within 5 miles of the sample sites with row crop ag landuse, and septic influences.	NS	Thick mature tree buffer between crops and stream. Sparse areas in fields suggest high moisture content in soils. Drainage patterns in fields suggest erosion.
					7/26/2006 11:25	344.8	MPN/100mL		1										

38	2006 TMDL West Fork White River	Little Stoney Creek	CR 775 E	WWU010-0052	7/18/2006 9:50	980.4	MPN/100mL	732.69	1	MPN/100mL		1			INW0117_T1001	INW0117_00	Sites 37 and 38 are located on AUID INW0117_T1001. This AUID is impaired for <i>E. coli</i> , likely due to thin buffers, CFOs being located within 5 miles of the sample sites with row crop ag landuse, and septic influences.	NS	Thin Mature tree buffer around site. Crops on either side. Several fields upstream are bare with exposed soil. Sparse vegetation in fields suggests high moisture content in soils. Drainage patterns in fields suggest erosion
					7/26/2006 9:40	579.4	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 10:35	435.2	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 10:10	1046.2	MPN/100mL		1	MPN/100mL		1							
					8/15/2006 8:45	816.4	MPN/100mL		1	MPN/100mL		1							
39	2006 TMDL West Fork White River	Stoney Creek	CR 700 S	WWU010-0051	7/18/2006 9:40	1732.9	MPN/100mL	525.91	1	MPN/100mL		1			INW0117_01	INW0117_00	Sites 36, 39, 40, 42, and 43 are located on AUID INW0117_01. This AUID is impaired for <i>E. coli</i> , likely due to thin buffers, CFOs being located within 5 miles of the sample sites with row crop ag landuse, and septic influences.	NS	Thin Mature tree buffer around site. Crops on either side. Several fields upstream are bare with exposed soil. Sparse vegetation in fields suggests high moisture content in soils. Drainage patterns in fields suggest erosion
					7/26/2006 9:30	488.4	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 11:15	613.1	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 10:05	325.5	MPN/100mL		1	MPN/100mL		1							
					8/15/2006 8:40	238.2	MPN/100mL		1	MPN/100mL		1							
40	2006 TMDL West Fork White River	Stoney Creek	CR 200 S	WWU010-0049	7/18/2006 10:55	686.7	MPN/100mL	216.62	1	MPN/100mL		1			INW0117_01	INW0117_00	Sites 36, 39, 40, 42, and 43 are located on AUID INW0117_01. This AUID is impaired for <i>E. coli</i> , likely due to thin buffers, CFOs being located within 5 miles of the sample sites with row crop ag landuse, and septic influences.	NS	No buffer at site. Upstream has mature tree buffer. Sparse vegetation in fields suggest high moisture content in soils. Drainage patterns in fields suggest erosion. Cemetery nearby.
					7/26/2006 10:20	435.2	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 11:15	25.6	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 10:50	218.7	MPN/100mL		1	MPN/100mL		1							
					8/15/2006 9:35	285.1	MPN/100mL		1	MPN/100mL		1							
41	2006 TMDL West Fork White River	West Fork White River	CR 1250 E	WWU010-0047	7/18/2006 11:15	272.3	MPN/100mL	283.59	1	MPN/100mL		1			INW0119_01	INW0119_T1006	Sites 32, 41, 44, 45, and 46 are located on AUID INW0119_01. This AUID is impaired for <i>E. coli</i> , likely due to thin buffers, CFOs being located within 5 miles of the sample sites with row crop ag landuse, and septic influences.	NS	Thick mature tree buffer. Crops on either side of buffer. Sparse vegetation in fields suggest high moisture content in soils. Drainage patterns suggest soil erosion. Stream looks as though it has suspended sediments.
					7/26/2006 10:35	307.6	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 11:35	325.5	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 11:10	307.6	MPN/100mL		1	MPN/100mL		1							
					8/15/2006 9:50	218.7	MPN/100mL		1	MPN/100mL		1							
43	2006 TMDL West Fork White River	Stoney Creek	CR 1250 W	WWU010-0005	7/18/2006 11:10	435.2	MPN/100mL	693.79	1	MPN/100mL		1			INW0117_01	INW0117_00	Sites 36, 39, 40, 42, and 43 are located on AUID INW0117_01. This AUID is impaired for <i>E. coli</i> , likely due to thin buffers, CFOs being located within 5 miles of the sample sites with row crop ag landuse, and septic influences.	NS	Mature tree buffer upstream and downstream of site. Manicured lawns next to site. Drainage patterns in fields suggest erosion.
					7/18/2006 11:10	686.7	MPN/100mL		1	MPN/100mL		1							
					7/26/2006 10:30	980.4	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 11:30	727	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 11:05	770.1	MPN/100mL		1	MPN/100mL		1							
46	2006 TMDL West Fork White River	West Fork White River	CR 172 S	WWU010-0045	7/18/2006 9:15	209.8	MPN/100mL	170.12	1	MPN/100mL		1			INW0119_01	INW0119_T1006	Sites 32, 41, 44, 45, and 46 are located on AUID INW0119_01. This AUID is impaired for <i>E. coli</i> , likely due to thin buffers, CFOs being located within 5 miles of the sample sites with row crop ag landuse, and septic influences.	NS	Mature tree buffer upstream and downstream of site.
					7/26/2006 9:00	148.3	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 9:45	122.3	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 9:30	146.7	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 9:30	260.2	MPN/100mL		1	MPN/100mL		1							
47	2006 TMDL West Fork White River	Mud Creek	Smithfield	WWU010-0044	7/18/2006 9:05	201.4	MPN/100mL	125.52	1	MPN/100mL		1			INW0119_T1008	INW011A_00	Site 47 is located in AUID INW0119_T1008. This AUID is impaired for <i>E. coli</i> , likely due to no buffer, suburban and agricultural influences.	NS	Little to no buffer around stream. Surrounded by healthy crops. Sparse vegetation in fields suggested high moisture content in soils. Drainage patterns in fields suggest potential erosion.
					7/26/2006 8:50	224.7	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 9:35	115.3	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 9:20	111.2	MPN/100mL		1	MPN/100mL		1							
					8/15/2006 7:55	53.7	MPN/100mL		1	MPN/100mL		1							
48	2001 <i>E. coli</i> -Upper WFWR	Prairie Creek Reservoir Outlet	Windsor	WWU010-0022	6/6/2001 10:30	86	MPN/100mL	26.20	1	MPN/100mL		1			INW0118_01	NEW	Site 48 is located on AUID INW0118_01. This site is the Prairie Creek Reservoir outlet. It is not impaired for <i>E. coli</i> .	FS	Mature tree buffer. Outlet from the reservoir
					6/12/2001 11:10	8.5	MPN/100mL		1	MPN/100mL		1							
					6/19/2001 11:00	24.6	MPN/100mL		1	MPN/100mL		1							
					6/26/2001 12:00	34.5	MPN/100mL		1	MPN/100mL		1							
					7/3/2001 11:20	19.9	MPN/100mL		1	MPN/100mL		1							
49	2006 TMDL West Fork White River	Prairie Creek	CR 461 E	WWU010-0046	7/18/2006 9:25	142.1	MPN/100mL	51.31	1	MPN/100mL		1			INW0118_P1001	INW0118_00	Site 49 is located on AUID INW0118_P1001. This site is part of the Prairie Creek Reservoir. It is not impaired for <i>E. coli</i> .	FS	Sample in lake
					7/26/2006 9:20	27.2	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 10:05	344.8	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 9:50	10.8	MPN/100mL		1	MPN/100mL		1							
					8/15/2006 8:25	24.7	MPN/100mL		1	MPN/100mL		1							
50	2006 TMDL West Fork White River	Medford Drain	Windsor	WWU010-0043	7/18/2006 8:50	488.4	MPN/100mL	127.76	1	MPN/100mL		1			INW011A_T1008	INW011C_00	Site 50 is located on AUID INW011A_T1008. This AUID is impaired for <i>E. coli</i> , likely due to no buffer, septic and agricultural influences.	NS	No buffer. Stream flows through pond with suspended sediments. Crops to stream. Sparse vegetation suggests high moisture content in soils. Drainage patterns in fields suggest erosion.
					7/26/2006 9:10	117.8	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 9:55	88.4	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 9:40	90.7	MPN/100mL		1	MPN/100mL		1							
					8/15/2006 8:10	73.8	MPN/100mL		1	MPN/100mL		1							
53	2006 TMDL West Fork White River	West Fork White River	SR 32	WWU010-0042	7/18/2006 8:30	161.6	MPN/100mL	175.57	1	MPN/100mL		1			INW011B_01	INW011D_T1009	Sites 53 and 54 are located on AUID INW011B_01. This AUID is impaired for <i>E. coli</i> , likely due to no buffer, urban and agricultural influences.	NS	Thin woody buffers in this area. Urban influences. Manicured areas right to stream
					7/26/2006 8:40	185	MPN/100mL		1	MPN/100mL		1							
					8/1/2006 9:25	162.4	MPN/100mL		1	MPN/100mL		1							
					8/8/2006 9:10	152.9	MPN/100mL		1	MPN/100mL		1							
					8/15/2006 7:40	224.7	MPN/100mL		1	MPN/100mL		1							
55	2006 TMDL West Fork White River	Muncie Creek	Highland	WWU010-0020	7/18/2006 8:20	1732.9	MPN/100mL	1337.32	1	MPN/100mL		1			INW011B_T1001	INW011D_00	Sites 55 and 56 are located on AUID INW011B_T1001. This AUID is impaired for <i>E. coli</i> , likely due to no buffer, urban and agricultural influences.	NS	No buffers in this area. Urban influences. Manicured areas right to stream
					7/26/2006 8:30	1413.6	MPN/100mL		1	MPN/100mL		1							

Site Number	PROJECT_NAME	WATERBODY_NAME	Site Description	STATION_NAME	SAMPLE DATE	E. coli Result	RESULT_UNIT	GEOMETRIC MEAN	LAB REPORT LIMIT	REPORT UNIT	LOOKUP RESULT RID	LAB DILUTION MULTIPLIER	QA FLAGS	LAB QA FLAGS	2010 AUID	2008 AUID	NOTES	E. coli	Infrared Notes			
9	2001 E. coli-Upper WFWR	West Fork White River	SR 32	WWU010-0021	6/5/2001 9:15	1986.28	MPN/100mL	1176.38	1	MPN/100mL		1			INW0112_01	INW0112_T1002	Sites 9, 10, 11, 14 and 15 are located on INW0112_01 and are impaired for E. coli. This AUID will be considered impaired based on sample Sites 16 and 18, this is more protective of the waters. Impairment is likely due to agricultural influences.	NS	Thin healthy mature tree buffer, surrounded by healthy crops. Some field area wet and bare of crops/vegetation.			
					6/5/2001 9:15	1986.28	MPN/100mL		1	MPN/100mL		1										
					6/12/2001 8:40	1553.07	MPN/100mL		1	MPN/100mL		1										
					6/19/2001 8:45	727	MPN/100mL		1	MPN/100mL		1										
					6/26/2001 9:15	866.4	MPN/100mL		1	MPN/100mL		1										
					7/3/2001 8:40	686.7	MPN/100mL		1	MPN/100mL		1										
15	1991 Fixed Station	West Fork White River		WWU010-0006	1/8/1991 10:30	330	CFU/100mL			CFU/100mL					INW0112_01	INW0112_T1002		NS	Wooded buffer upstream, no buffer downstream. Healthy crops on downstream side of sample. Sample off highway.			
					2/6/1991 12:00	660	CFU/100mL			CFU/100mL												
					3/11/1991 14:25	1	CFU/100mL		10	CFU/100mL				<								
					4/2/1991 14:50	260	CFU/100mL			CFU/100mL												
					5/30/1991 13:00	290	CFU/100mL			CFU/100mL												
					6/19/1991 11:30	270	CFU/100mL			CFU/100mL												
	1992 Fixed Station				7/17/1991 15:30	350	CFU/100mL			CFU/100mL												
					8/22/1991 9:00	80	CFU/100mL			CFU/100mL												
					9/17/1991 15:30	1200	CFU/100mL			CFU/100mL												
					10/8/1991 15:40	150	CFU/100mL			CFU/100mL												
					11/14/1991 11:00	130	CFU/100mL			CFU/100mL												
					12/10/1991 11:30	80	CFU/100mL			CFU/100mL												
	1993 Fixed Station				2/6/1992 11:45	290	CFU/100mL			CFU/100mL												
					3/18/1992 12:50	780	CFU/100mL			CFU/100mL												
					5/12/1992 15:35	20	CFU/100mL			CFU/100mL												
					6/8/1992 16:45	250	CFU/100mL			CFU/100mL												
					7/21/1992 18:30	4700	CFU/100mL			CFU/100mL												
					8/18/1992 14:15	190	CFU/100mL			CFU/100mL												
	1994 Fixed Station				9/15/1992 10:30	660	CFU/100mL			CFU/100mL												
					10/15/1992 16:00	2300	CFU/100mL			CFU/100mL												
					12/7/1992 12:35	80	CFU/100mL			CFU/100mL												
					1/26/1993 10:15	500	CFU/100mL			CFU/100mL												
					3/3/1993 9:00	750	CFU/100mL			CFU/100mL												
					3/22/1993 13:30	1	CFU/100mL		10	CFU/100mL				<								
	1995 Fixed Station				4/6/1993 14:30	20	CFU/100mL			CFU/100mL												
					5/6/1993 9:30	1	CFU/100mL		10	CFU/100mL				<								
					6/17/1993 17:35	430	CFU/100mL			CFU/100mL												
					7/13/1993 10:45	740	CFU/100mL			CFU/100mL												
					8/10/1993 10:55	1100	CFU/100mL			CFU/100mL												
					9/15/1993 15:05	2300	CFU/100mL			CFU/100mL												
	1996 Fixed Station				11/9/1993 10:25	70	CFU/100mL			CFU/100mL												
					12/17/1993 13:30	620	CFU/100mL			CFU/100mL												
					2/25/1994 7:00	2100	CFU/100mL			CFU/100mL												
					3/24/1994 8:30	330	CFU/100mL			CFU/100mL												
					4/13/1994 8:00	970	CFU/100mL			CFU/100mL												
					5/11/1994 14:00	150	CFU/100mL			CFU/100mL												
	1997 Fixed Station				6/16/1994 12:00	990	CFU/100mL			CFU/100mL												
					7/21/1994 19:00	11000	CFU/100mL			CFU/100mL												
					8/17/1994 17:55	1000	CFU/100mL			CFU/100mL												
					9/21/1994 13:00	40	CFU/100mL			CFU/100mL												
					10/18/1994 16:30	280	CFU/100mL			CFU/100mL												
					11/29/1994 9:00	4400	CFU/100mL			CFU/100mL												
	1996 Synoptic				1/23/1995 13:40	30	CFU/100mL			CFU/100mL												
					2/21/1995 8:30	490	CFU/100mL			CFU/100mL												
					5/4/1995 11:05	570	CFU/100mL			CFU/100mL												
					6/1/1995 13:30	440	CFU/100mL			CFU/100mL												
					6/29/1995 11:15	17600	CFU/100mL			CFU/100mL												
					7/20/1995 13:50	570	CFU/100mL			CFU/100mL												
	1996 Fixed Station				8/24/1995 12:50	290	CFU/100mL			CFU/100mL												
					9/21/1995 9:00	900	CFU/100mL			CFU/100mL												
					10/19/1995 17:45	100	CFU/100mL			CFU/100mL												
					11/28/1995 16:00	1300	CFU/100mL			CFU/100mL												
					12/14/1995 13:50	390	CFU/100mL			CFU/100mL												
	1997 Fixed Station				1/29/1996 15:10	1300	CFU/100mL			CFU/100mL												
					2/21/1996 13:15	360	CFU/100mL			CFU/100mL			JH									
					2/22/1996 17:00	480	CFU/100mL			CFU/100mL												
					4/3/1996 15:45	1200	CFU/100mL			CFU/100mL												
					5/2/1996 16:15	660	CFU/100mL			CFU/100mL												
					5/30/1996 16:20	2700	CFU/100mL			CFU/100mL												
	1997 Fixed Station				6/24/1996 15:30	1400	CFU/100mL			CFU/100mL												
					7/22/1996 12:30					4100	CFU/100mL			CFU/100mL								
					8/26/1996 18:20					50	CFU/100mL			CFU/100mL								
					9/23/1996 16:00					180	CFU/100mL			CFU/100mL								
					10/15/1996 13:10					1	CFU/100mL		10	CFU/100mL				<				
	1997 Fixed Station				11/6/1996 14:00	130	CFU/100mL			CFU/100mL												
					12/2/1996 13:40	2300	CFU/100mL															

	1998 Fixed Station				1/27/1998 13:55	270	CFU/100mL			CFU/100mL			H							
	2/24/1998 14:20				100	CFU/100mL			CFU/100mL			H								
	3/23/1998 14:50				410	CFU/100mL			CFU/100mL			H								
	4/23/1998 8:50				740	CFU/100mL			CFU/100mL											
	5/20/1998 9:10				350	CFU/100mL			CFU/100mL											
	9/15/1998 9:40				190	CFU/100mL			CFU/100mL											
	10/20/1998 9:30				240	CFU/100mL			CFU/100mL											
	1999 Fixed Station				2/3/1999 9:45	450	CFU/100mL			CFU/100mL										
	2001 E. coli-Upper WFWR				6/5/2001 9:45	1046.24	MPN/100mL	667.60	1	MPN/100mL		1								
					6/12/2001 9:10	727	MPN/100mL		1	MPN/100mL		1								
					6/19/2001 9:00	365.4	MPN/100mL		1	MPN/100mL		1								
					6/26/2001 10:05	488.4	MPN/100mL		1	MPN/100mL		1								
					6/26/2001 10:05	461.4	MPN/100mL		1	MPN/100mL		1								
					7/3/2001 9:10	1413.6	MPN/100mL		1	MPN/100mL		1								
					6/5/2001 10:05	1413.6	MPN/100mL		1	MPN/100mL		1								
					6/12/2001 9:30	2420			2419.2	MPN/100mL		1	>	>						
21	2001 E. coli-Upper WFWR	West Fork White River	CR 200 W	WWU010-0027	6/19/2001 9:15	579.4	MPN/100mL	1069.91	1	MPN/100mL		1			INW0113_01	INW0114_T1004	Site 21 & 22 are located on AUID INW0113_01, which is impaired for <i>E. coli</i> , likely due to no buffer, agricultural influences, and several CFOs being within 5 miles of sites.			
					6/26/2001 10:25	866.4	MPN/100mL		1	MPN/100mL		1								
					7/3/2001 9:25	816.4	MPN/100mL		1	MPN/100mL		1								
					8/6/1996 15:45	5200	CFU/100mL			CFU/100mL			JH							
26	1996 Watershed	Sparrow Creek	CR 100 S	WWU010-0007	6/12/2001 9:50	1986.28	MPN/100mL	799.04	1	MPN/100mL		1			INW0115_01	INW0115_T1005	Sites 24, 27, and 28 are located on AUID INW0115_01, which is impaired for <i>E. coli</i> , likely due to thin buffers, agricultural, septic, and urban influences. This AUID will be considered impaired based on sample Site 28,			
					6/19/2001 9:30	435.2	MPN/100mL		1	MPN/100mL		1								
					6/26/2001 10:45	686.7	MPN/100mL		1	MPN/100mL		1								
					7/3/2001 9:45	686.7	MPN/100mL		1	MPN/100mL		1								
	1996 Synoptic	Cabin Creek	Windsor	WWU010-0003	2/21/1996 12:40	40	CFU/100mL	429.39		CFU/100mL			JH		INW0114_01	INW0116_00	Sites 29, 30, and 31 are located on AUID INW0114_01. This AUID is impaired for <i>E. coli</i> , likely due to little to no buffer, several CFOs being located within 5 miles of the sample sites with row crop ag landuse, and spetic influences.			
					6/5/2001 10:40	435.2	MPN/100mL		1	MPN/100mL		1								
					6/12/2001 10:05	360.9	MPN/100mL		1	MPN/100mL		1								
					6/12/2001 10:05	344.1	MPN/100mL		1	MPN/100mL		1								
					6/19/2001 9:40	275.5	MPN/100mL		1	MPN/100mL		1								
					6/26/2001 10:55	648.8	MPN/100mL		1	MPN/100mL		1								
					7/3/2001 9:50	648.8	MPN/100mL		1	MPN/100mL		1								
		West Fork White River	CR 1000 W	WWU010-0026	6/5/2001 10:50	980.4	MPN/100mL	575.87	1	MPN/100mL		1			INW0119_01	INW0119_T1006	Sites 32, 41, 44, 45, and 46 are located on AUID INW0119_01. This AUID is impaired for <i>E. coli</i> , likely due to thin buffers, CFOs being located within 5 miles of the sample sites with row crop ag landuse, and septic influences.			
					6/12/2001 10:15	980.4	MPN/100mL		1	MPN/100mL		1								
					6/19/2001 9:55	365.4	MPN/100mL		1	MPN/100mL		1								
					6/19/2001 9:55	307.6	MPN/100mL		1	MPN/100mL		1								
					6/26/2001 11:05	613.1	MPN/100mL		1	MPN/100mL		1								
					7/3/2001 10:05	613.1	MPN/100mL		1	MPN/100mL		1								
					7/3/2001 10:05	517.2	MPN/100mL		1	MPN/100mL		1								
41	1996 Synoptic	West Fork White River		WWU010-0004	2/21/1996 11:50	160	CFU/100mL			CFU/100mL			JH							
		Little White River	Windsor	WWU010-0025	6/5/2001 11:35	816.4	MPN/100mL	718.13	1	MPN/100mL		1			INW0117_01	INW0117_00	Sites 36, 39, 40, 42, and 43 are located on AUID INW0117_01. This AUID is impaired for <i>E. coli</i> , likely due to thin buffers, CFOs being located within 5 miles of the sample sites with row crop ag landuse, and septic influences.			
					6/12/2001 10:30	547.5	MPN/100mL		1	MPN/100mL		1								
					6/19/2001 10:15	461.1	MPN/100mL		1	MPN/100mL		1								
					6/26/2001 11:15	770.1	MPN/100mL		1	MPN/100mL		1								
					7/3/2001 10:35	1203.31	MPN/100mL		1	MPN/100mL		1								
43	1996 Synoptic	Stoney Creek	CR 1250 W	WWU010-0005	2/21/1996 12:15	90	CFU/100mL			CFU/100mL			JH		INW0117_01	INW0117_00	Sites 36, 39, 40, 42, and 43 are located on AUID INW0117_01. This AUID is impaired for <i>E. coli</i> , likely due to thin buffers, CFOs being located within 5 miles of the sample sites with row crop ag landuse, and septic influences.			
44	1996 Watershed	West Fork White River		WWU010-0032	8/5/1996 16:30	90	CFU/100mL			CFU/100mL			JH							
		West Fork White River	CR 700 E	WWU010-0023	6/5/2001 14:15	488.4	MPN/100mL	298.58	1	MPN/100mL		1			INW0119_01	INW0119_T1006	Sites 32, 41, 44, 45, and 46 are located on AUID INW0119_01. This AUID is impaired for <i>E. coli</i> , likely due to thin buffers, CFOs being located within 5 miles of the sample sites with row crop ag landuse, and septic influences.			
					6/12/2001 10:40	193.5	MPN/100mL		1	MPN/100mL		1								
					6/19/2001 10:30	261.3	MPN/100mL		1	MPN/100mL		1								
					6/26/2001 11:25	248.1	MPN/100mL		1	MPN/100mL		1								
					7/3/2001 10:55	387.3	MPN/100mL		1	MPN/100mL		1								
		Mud Creek	Smithfield	WWU010-0028	6/5/2001 14:30	579.4	MPN/100mL	655.87	1	MPN/100mL		1			INW0119_T1008	INW011A_00	Site 47 is located in AUID INW0119_T1008. This AUID is impaired for <i>E. coli</i> , likely due to no buffer, suburban and agricultural influences.			
					6/12/2001 10:55	461.1	MPN/100mL		1	MPN/100mL		1								
					6/19/2001 10:45	579.4	MPN/100mL		1	MPN/100mL		1								
					6/26/2001 11:50	866.4	MPN/100mL		1	MPN/100mL		1								
					6/26/2001 11:50	816.4	MPN/100mL		1	MPN/100mL		1								
					7/3/2001 11:05	727	MPN/100mL		1	MPN/100mL		1								
		West Fork White River	Inlow Springs	WWU010-0024	6/6/2001 9:55	579.4	MPN/100mL	229.43	1	MPN/100mL		1			INW011A_01	INW011C_T1008	Sites 51 and 52 are located on AUID INW011A_01. This AUID is impaired for <i>E. coli</i> , likely due to no buffer, suburban and agricultural influences.			
					6/12/2001 11:40	272.3	MPN/100mL		1	MPN/100mL		1								
					6/19/2001 11:50	149.7	MPN/100mL		1	MPN/100mL		1								
					6/26/2001 12:15	86	MPN/100mL		1	MPN/100mL		1								
					7/3/2001 11:35	313	MPN/100mL		1	MPN/100mL		1								

1991 Fixed Station	1/8/1991 10:00	450	CFU/100mL			CFU/100mL			
	3/19/1991 10:30	3500	CFU/100mL			CFU/100mL			
	4/4/1991 12:00	40	CFU/100mL			CFU/100mL			
	5/28/1991 13:00	270	CFU/100mL			CFU/100mL			
	6/19/1991 11:00	90	CFU/100mL			CFU/100mL			
	7/18/1991 14:30	80	CFU/100mL			CFU/100mL			
	8/22/1991 9:30	0	CFU/100mL		10	CFU/100mL			<
	9/19/1991 11:30	370	CFU/100mL			CFU/100mL			
	10/10/1991 10:00	200	CFU/100mL			CFU/100mL			
	11/13/1991 12:00	90	CFU/100mL			CFU/100mL			
1992 Fixed Station	12/9/1991 15:25	90	CFU/100mL			CFU/100mL			
	2/6/1992 12:30	20	CFU/100mL			CFU/100mL			
	3/23/1992 13:00	30	CFU/100mL			CFU/100mL			
	4/29/1992 9:45	50	CFU/100mL			CFU/100mL			
	5/12/1992 16:15	210	CFU/100mL			CFU/100mL			
	6/8/1992 14:00	130	CFU/100mL			CFU/100mL			
	7/13/1992 13:30	12000	CFU/100mL			CFU/100mL			
	8/20/1992 12:30	10	CFU/100mL			CFU/100mL			
	9/16/1992 18:00	60	CFU/100mL			CFU/100mL			
	10/14/1992 10:30	20	CFU/100mL			CFU/100mL			
1993 Fixed Station	11/23/1992 16:00	400	CFU/100mL			CFU/100mL			
	12/7/1992 11:25	90	CFU/100mL			CFU/100mL			
	1/25/1993 9:40	470	CFU/100mL			CFU/100mL			
	3/3/1993 11:00	900	CFU/100mL			CFU/100mL			
	3/25/1993 11:00	780	CFU/100mL			CFU/100mL			
	4/6/1993 13:40	1	CFU/100mL		10	CFU/100mL			<
	5/6/1993 9:00	40	CFU/100mL			CFU/100mL			
	6/15/1993 12:35	15000	CFU/100mL			CFU/100mL			
	8/10/1993 10:00	1200	CFU/100mL			CFU/100mL			
	9/15/1993 14:35	900	CFU/100mL			CFU/100mL			
1994 Fixed Station	10/13/1993 9:45	140	CFU/100mL			CFU/100mL			
	11/9/1993 10:00	6700	CFU/100mL			CFU/100mL			
	12/16/1993 14:00	2500	CFU/100mL			CFU/100mL			
	2/24/1994 15:15	6200	CFU/100mL			CFU/100mL			
	3/22/1994 15:00	20	CFU/100mL			CFU/100mL			
	4/14/1994 8:00	1600	CFU/100mL			CFU/100mL			
	5/11/1994 13:30	30	CFU/100mL			CFU/100mL			
	6/14/1994 14:30	170	CFU/100mL			CFU/100mL			
	7/21/1994 19:20	1700	CFU/100mL			CFU/100mL			
	8/17/1994 11:10	360	CFU/100mL			CFU/100mL			
1995 Fixed Station	9/21/1994 15:30	530	CFU/100mL			CFU/100mL			
	10/18/1994 9:30	100	CFU/100mL			CFU/100mL			
	11/29/1994 8:30	10000	CFU/100mL			CFU/100mL			
	1/23/1995 14:35	110	CFU/100mL			CFU/100mL			
	2/21/1995 8:00	210	CFU/100mL			CFU/100mL			
	5/15/1995 14:30	1200	CFU/100mL			CFU/100mL			
	6/1/1995 14:30	300	CFU/100mL			CFU/100mL			
	6/29/1995 11:50	420	CFU/100mL			CFU/100mL			
	7/20/1995 14:40	100	CFU/100mL			CFU/100mL			
	8/24/1995 12:10	190	CFU/100mL			CFU/100mL			
1996 Fixed Station	9/21/1995 9:30	110	CFU/100mL			CFU/100mL			
	10/19/1995 15:35	40	CFU/100mL			CFU/100mL			
	11/28/1995 14:25	170	CFU/100mL			CFU/100mL			
	12/14/1995 13:10	730	CFU/100mL			CFU/100mL			
	1/29/1996 13:10	570	CFU/100mL			CFU/100mL			
	2/21/1996 10:35	90	CFU/100mL			CFU/100mL		JH	
	2/22/1996 13:30	40	CFU/100mL			CFU/100mL			
	4/3/1996 13:10	80	CFU/100mL			CFU/100mL			
	5/2/1996 14:00	320	CFU/100mL			CFU/100mL			
	5/30/1996 14:30	4000	CFU/100mL			CFU/100mL			
1996 Fixed Station	6/24/1996 14:30	300	CFU/100mL			CFU/100mL			
	7/22/1996 14:30	5500	CFU/100mL			CFU/100mL			
	8/26/1996 13:45	230	CFU/100mL			CFU/100mL			
	9/23/1996 12:45	200	CFU/100mL			CFU/100mL			
	10/15/1996 12:30	70	CFU/100mL			CFU/100mL			
	11/6/1996 13:20	60	CFU/100mL			CFU/100mL			
	12/2/1996 12:50	1800	CFU/100mL			CFU/100mL			
	1/23/1997 12:50	3100	CFU/100mL			CFU/100mL			
	2/17/1997 12:50	1	CFU/100mL		10	CFU/100mL			<
	3/18/1997 12:10	200	CFU/100mL			CFU/100mL			
1997 Fixed Station	4/17/1997 12:00	100	CFU/100mL			CFU/100mL			
	5/19/1997 13:15	700	CFU/100mL			CFU/100mL			
	6/23/1997 13:25	830	CFU/100mL			CFU/100mL			
	7/14/1997 13:15	310	CFU/100mL			CFU/100mL			
	8/11/1997 12:45	110	CFU/100mL			CFU/100mL			
	9/16/1997 13:25	300	CFU/100mL			CFU/100mL			
	10/14/1997 13:10	320	CFU/100mL			CFU/100mL			
	11/13/1997 13:25	30	CFU/100mL			CFU/100mL			
	12/22/1997 13:20	80	CFU/100mL			CFU/100mL			
	1/27/1998 13:10	30	CFU/100mL			CFU/100mL		H	
1998 Fixed Station	2/24/1998 13:40	50	CFU/100mL			CFU/100mL		H	
	3/23/1998 13:00	310	CFU/100mL			CFU/100mL		H	
	4/23/1998 9:35	80	CFU/100mL			CFU/100mL			
	5/20/1998 10:00	80	CFU/100mL			CFU/100mL			
	9/15/1998 10:30	230	CFU/100mL			CFU/100mL			
	10/20/1998 10:20	160	CFU/100mL			CFU/100mL			
	11/11/1998 10:00	350	CFU/100mL			CFU/100mL			
	12/11/1998 10:00	100	CFU/100mL			CFU/100mL			

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1999 Fixed Station
2000 Fixed Station
2001 Fixed Station
2001 W F White R Muncie to Madison Co Assessment
2001 Fixed Station
2001 W F White R Muncie to Madison Co Assessment
2001 Fixed Station
2002 Fixed Station
2003 Fixed Station
2004 Fixed Station
2005 Fixed Station

West Fork White River

Memorial

WWU010-0001

2/3/1999 10:20	1200	CFU/100mL			CFU/100mL				
3/19/1999 9:45	140	CFU/100mL			CFU/100mL				
5/27/1999 8:15	89	CFU/100mL			CFU/100mL				
6/23/1999 8:15	188	CFU/100mL			CFU/100mL				
7/21/1999 8:30	220	CFU/100mL			CFU/100mL				
8/26/1999 8:30	340	CFU/100mL			CFU/100mL				
9/21/1999 8:30	520	CFU/100mL			CFU/100mL				
10/21/1999 8:45	120	CFU/100mL			CFU/100mL				
11/23/1999 8:55	100	CFU/100mL			CFU/100mL				
1/20/2000 8:50	365	MPN/100mL		1	MPN/100mL		1		
2/25/2000 8:30	310	MPN/100mL		1	MPN/100mL		1		
3/30/2000 8:45	30	MPN/100mL		1	MPN/100mL		1	QBJ	
4/20/2000 8:45	150	MPN/100mL		1	MPN/100mL		1	HJ	
5/25/2000 8:45	240	MPN/100mL		1	MPN/100mL		1	HJ	
6/21/2000 8:50	920	MPN/100mL		1	MPN/100mL		1	HJ	
7/20/2000 8:40	160	MPN/100mL		1	MPN/100mL		1	HJ	
8/30/2000 9:05	120	MPN/100mL		1	MPN/100mL		1	QJ	
9/20/2000 8:50	440	MPN/100mL		1	MPN/100mL		1		
11/21/2000 8:55	190	MPN/100mL		1	MPN/100mL		1	HJ	
12/22/2000 8:50	275	MPN/100mL		1	MPN/100mL		1		
1/23/2001 8:50	91	MPN/100mL		1	MPN/100mL		1		
2/23/2001 8:55	73	MPN/100mL		1	MPN/100mL		1		
3/28/2001 9:15	65	MPN/100mL		1	MPN/100mL		1		
4/23/2001 9:25	130	MPN/100mL	153.78	1	MPN/100mL		1		
4/26/2001 8:55	37	MPN/100mL		1	MPN/100mL		1		
4/30/2001 9:15	250	MPN/100mL		1	MPN/100mL		1		
5/7/2001 9:20	100	MPN/100mL		1	MPN/100mL		1		
5/14/2001 9:10	110	MPN/100mL		1	MPN/100mL		1		
5/21/2001 8:45	1000	MPN/100mL		1	MPN/100mL		1		
6/20/2001 9:00	210	MPN/100mL		1	MPN/100mL		1		
7/19/2001 8:50	1200	MPN/100mL		1	MPN/100mL		1		
8/29/2001 8:50	410	MPN/100mL		1	MPN/100mL		1		
9/21/2001 8:55	1300	MPN/100mL		1	MPN/100mL		1		
10/26/2001 8:55	2400	MPN/100mL		1	MPN/100mL		1		
11/21/2001 9:15	75	MPN/100mL		1	MPN/100mL		1		
12/21/2001 8:55	410	MPN/100mL		1	MPN/100mL		1		
1/25/2002 8:45	140	MPN/100mL		1	MPN/100mL		1		
2/22/2002 9:15	260	MPN/100mL		1	MPN/100mL		1		
3/22/2002 8:30	80	MPN/100mL		1	MPN/100mL		1		
4/19/2002 8:30	310	MPN/100mL		1	MPN/100mL		1		
5/23/2002 8:30	68	MPN/100mL		1	MPN/100mL		1		
6/20/2002 8:30	160	MPN/100mL		1	MPN/100mL		1		
7/25/2002 8:30	80	MPN/100mL		1	MPN/100mL		1		
8/29/2002 8:30	54	MPN/100mL		1	MPN/100mL		1		
9/25/2002 8:45	160	MPN/100mL		1	MPN/100mL		1		
10/17/2002 9:15	280	MPN/100mL		1	MPN/100mL		1		
11/26/2002 9:30	70	MPN/100mL		1	MPN/100mL		1		
3/27/2003 8:45	250	MPN/100mL		1	MPN/100mL		1		
4/23/2003 8:45	46	MPN/100mL		1	MPN/100mL		1		
5/29/2003 8:35	120	MPN/100mL		1	MPN/100mL		1		
6/25/2003 8:20	150	MPN/100mL		1	MPN/100mL		1	fDJ	
8/27/2003 8:36	160	MPN/100mL		1	MPN/100mL		1		
9/24/2003 12:10	690	MPN/100mL		1	MPN/100mL		1		
10/30/2003 8:30	65	MPN/100mL		1	MPN/100mL		1		
11/25/2003 11:20	1600	MPN/100mL		1	MPN/100mL		1		
12/23/2003 12:30	1700	MPN/100mL		1	MPN/100mL		1		
1/23/2004 11:55	68	MPN/100mL		1	MPN/100mL		1		
2/19/2004 10:50	690	MPN/100mL		1	MPN/100mL		1		
3/16/2004 10:40	1	MPN/100mL		1	MPN/100mL		1		<
4/29/2004 11:30	35	MPN/100mL		1	MPN/100mL		1		
5/27/2004 11:00	110	MPN/100mL		1	MPN/100mL		1		
6/24/2004 11:00	200	MPN/100mL		1	MPN/100mL		1		
7/28/2004 11:15	120	MPN/100mL		1	MPN/100mL		1		
8/20/2004 10:50	650	MPN/100mL		1	MPN/100mL		1		
9/22/2004 11:35	120	MPN/100mL		1	MPN/100mL		1		
10/21/2004 11:20	82	MPN/100mL		1	MPN/100mL		1		
11/19/2004 11:25	100	MPN/100mL		1	MPN/100mL		1		
12/16/2004 10:55	190	MPN/100mL		1	MPN/100mL		1		
1/26/2005 11:05	650	MPN/100mL		1	MPN/100mL		1		
2/18/2005 11:05	35	MPN/100mL		1	MPN/100mL		1	fDJ	
3/30/2005 10:35	200	MPN/100mL		1	MPN/100mL		1		
4/19/2005 10:45	150	MPN/100mL		1	MPN/100mL		1		
5/26/2005 10:30	96	MPN/100mL		1	MPN/100mL		1		
6/29/2005 10:35	2400	MPN/100mL		1	MPN/100mL		1		>
7/27/2005 11:15	30	MPN/100mL		1	MPN/100mL		1		
8/24/2005 12:00	74	MPN/100mL		1	MPN/100mL		1		
9/21/2005 10:45	370	MPN/100mL		1	MPN/100mL		1		
10/19/2005 11:10	120	MPN/100mL		1	MPN/100mL		1		
11/22/2005 10:45	290	MPN/100mL		1	MPN/100mL		1		
12/22/2005 10:35	60	MPN/100mL		1	MPN/100mL		1		

INW011A_01

INW011C_T1008

Sites 51 and 52 are located on AUID INW011A_01. This AUID is impaired for E. coli, likely due to no buffer, suburban and agricultural influences.

NS

Thin woody buffers in this area. Urban influences. Manicured areas right to stream

	2006 Fixed Station				1/20/2006 10:55	170	MPN/100mL		1	MPN/100mL	1	1					
					2/15/2006 10:35	170	MPN/100mL		1	MPN/100mL	1	1					
					3/30/2006 10:35	28	MPN/100mL		1	MPN/100mL	1	1					
					4/20/2006 10:30	180	MPN/100mL		1	MPN/100mL	1	1					
					5/24/2006 10:45	93	MPN/100mL		1	MPN/100mL	1	1					
					6/28/2006 10:45	290	MPN/100mL		1	MPN/100mL	1	1					
					7/26/2006 10:25	84	MPN/100mL		1	MPN/100mL	1	1					
					8/23/2006 10:35	140	MPN/100mL		1	MPN/100mL	1	1					
					9/21/2006 10:20	120	MPN/100mL		1	MPN/100mL	1	1					
					10/25/2006 10:55	150	MPN/100mL		1	MPN/100mL	1	1					
					11/29/2006 10:45	65	MPN/100mL		1	MPN/100mL	1	1					
					12/21/2006 10:20	170	MPN/100mL		1	MPN/100mL	1	1					
	2007 Fixed Station Monitoring				1/24/2007 10:25	140	MPN/100mL		1	MPN/100mL	1	1					
					3/28/2007 11:05	130	MPN/100mL		1	MPN/100mL	1	1					
					5/22/2007 10:41	130	MPN/100mL		1	MPN/100mL	1	1					
					6/20/2007 10:15	140	MPN/100mL		1	MPN/100mL	1	1					
					7/18/2007 10:30	56	MPN/100mL		1	MPN/100mL	1	1					
					8/23/2007 10:40	170	MPN/100mL		1	MPN/100mL	1	1					
					9/28/2007 11:15	100	MPN/100mL		1	MPN/100mL	1	1					
					10/25/2007 11:15	130	MPN/100mL		1	MPN/100mL	1	1					
					11/20/2007 11:05	62	MPN/100mL		1	MPN/100mL	1	1					
					12/20/2007 10:45	490	MPN/100mL		1	MPN/100mL	1	1					
					2/20/2008 10:45	820	MPN/100mL		1	MPN/100mL	1	1					
					3/26/2008 10:55	340	MPN/100mL		1	MPN/100mL	1	1					
	2008 Fixed Station Monitoring				4/23/2008 11:05	99	MPN/100mL		1	MPN/100mL	1	1					
					5/22/2008 10:10	91	MPN/100mL		1	MPN/100mL	1	1					
					6/25/2008 10:20	6	MPN/100mL		1	MPN/100mL	1	1					
					7/24/2008 10:50	210	MPN/100mL		1	MPN/100mL	1	1					
					8/19/2008 10:50	290	MPN/100mL		1	MPN/100mL	1	1					
					9/24/2008 11:10	580	MPN/100mL		1	MPN/100mL	1	1					
					10/22/2008 11:15	180	MPN/100mL		1	MPN/100mL	1	1					
					11/20/2008 11:13	200	MPN/100mL		1	MPN/100mL	1	1					
					2/25/2009 10:50	47	MPN/100mL		1	MPN/100mL	1	1					
					3/18/2009 11:10	45	MPN/100mL		1	MPN/100mL	1	1					
					4/24/2009 10:45	68	MPN/100mL		1	MPN/100mL	1	1					
					5/20/2009 11:10	120	MPN/100mL		1	MPN/100mL	1	1					
					6/30/2009 10:45	190	MPN/100mL		1	MPN/100mL	1	1					
					7/14/2009 11:10	110	MPN/100mL		1	MPN/100mL	1	1					
					8/19/2009 10:00	230	MPN/100mL		1	MPN/100mL	1	1					
					9/30/2009 10:45	160	MPN/100mL		1	MPN/100mL	1	1					
					10/14/2009 10:55	110	MPN/100mL		1	MPN/100mL	1	1					
					11/24/2009 10:50	24	MPN/100mL		1	MPN/100mL	1	1					
					12/16/2009 11:10	1100	MPN/100mL		1	MPN/100mL							
					1/27/2010 11:15	580	MPN/100mL		1	MPN/100mL							
					2/18/2010 10:50	23	MPN/100mL		1	MPN/100mL							
					3/24/2010 11:00	410	MPN/100mL		1	MPN/100mL							
					4/21/2010 9:55	64	MPN/100mL		1	MPN/100mL							
					5/12/2010 10:20	1300	MPN/100mL		1	MPN/100mL							
					6/16/2010 10:15	4300	MPN/100mL		1	MPN/100mL							
					7/14/2010 10:20	330	MPN/100mL		1	MPN/100mL							
					8/18/2010 9:55	210	MPN/100mL		1	MPN/100mL							
					9/22/2010 9:45	550	MPN/100mL		1	MPN/100mL							
					10/19/2010 10:30	200	MPN/100mL		1	MPN/100mL							
					11/16/2010 10:30	160	MPN/100mL		1	MPN/100mL							
					4/23/2001 9:45	200	MPN/100mL	219.15	1	MPN/100mL		1					
					4/23/2001 9:45	130	MPN/100mL		1	MPN/100mL		1					
4/30/2001 9:37	110	MPN/100mL	1	MPN/100mL		1											
5/7/2001 9:45	290	MPN/100mL	1	MPN/100mL		1											
					5/7/2001 9:45	210	MPN/100mL		1	MPN/100mL		1					
					5/14/2001 9:35	170	MPN/100mL		1	MPN/100mL		1					
					5/21/2001 9:25	820	MPN/100mL		1	MPN/100mL		1					
					4/23/2001 9:52	2000	MPN/100mL		1	MPN/100mL		1					
					4/30/2001 9:45	820	MPN/100mL	1357.14	1	MPN/100mL		1					
					5/7/2001 9:55	2000	MPN/100mL			1	MPN/100mL		1				
					5/14/2001 9:45	2420	MPN/100mL		2400	MPN/100mL		1		>			
					5/21/2001 9:30	580	MPN/100mL			1	MPN/100mL		1				
54	2001 W F White R Muncie to Madison Co Assessment	West Fork White River	Broadway	WWU010-0019									INW011B_01	INW011D_T1009	Sites 53 and 54 are located on AUID INW011B_01. This AUID is impaired for E. coli, likely due to no buffer, urban and agricultural influences.	NS	No buffers in this area. Urban influences. Manicured areas right to stream
55	2001 W F White R Muncie to Madison Co Assessment	Muncie Creek	Highland	WWU010-0020									INW011B_T1001	INW011D_00	Sites 55 and 56 are located on AUID INW011B_T1001. This AUID is impaired for E. coli, likely due to no buffer, urban and agricultural influences.	NS	No buffers in this area. Urban influences. Manicured areas right to stream

Site Number	PROJECT_NAME	WATERBODY_NAME	STATION_NAME	SAMPLE DATE	E. coli Result	RESULT_UNIT	GEOMETRIC MEAN	2010 AUID	2008 AUID	NOTES	E. coli				
1	2006 TMDL West Fork White River	West Fork White River	WWU010-0082	7/17/2006 9:20	360.9	MPN/100mL	693.77	INW0111_01	INW0111_T1001; INW0111_T1222	Sites 1-6 are located on the same AUID, INW0111_01. Results indicate moderate to high impairment for <i>E. coli</i> , likely due to septic influences and agricultural runoff combined with no buffer along the streams that comprise this AUID.	NS				
				7/25/2006 10:35	547.5	MPN/100mL									
				7/31/2006 9:30	920.8	MPN/100mL									
				8/7/2006 9:00	866.4	MPN/100mL									
				8/14/2006 9:30	816.4	MPN/100mL									
2	2006 TMDL West Fork White River	Colvin Ditch	WWU010-0081	8/14/2006 9:30	866.4	MPN/100mL	399.49	INW0111_01	INW0111_T1001; INW0111_T1222	Results from this site are insufficient for assessment purposes (only four results). However, results from this site support the assessment of impairment based on results from sites 1, 3, 4 and 6, which are located on the same AUID, INW0111_01 (2010 AUID: INW0111_T1001). This AUID is impaired for E. coli likely due to no buffer, agricultural and	NS				
				7/17/2006 9:35	2419.2	MPN/100mL									
				7/25/2006 10:45	1	MPN/100mL									
				7/31/2006 9:45	4352	MPN/100mL									
				8/14/2006 9:40	2419.2	MPN/100mL									
3	2006 TMDL West Fork White River	Unnamed Tributary of West Fork White River	WWU010-0080	7/17/2006 10:20	1	MPN/100mL	81.89	INW0111_01	INW0111_T1001; INW0111_T1222	Sites 1-6 are located on the same AUID, INW0111_01. Results indicate moderate to high impairment for <i>E. coli</i> , likely due to septic influences and agricultural runoff combined with no buffer along the streams that comprise this AUID.	NS				
				7/25/2006 11:10	1553.1	MPN/100mL									
				7/31/2006 10:15	2419.2	MPN/100mL									
				8/7/2006 9:40	980.4	MPN/100mL									
				8/14/2006 10:10	1	MPN/100mL									
4	2006 TMDL West Fork White River	West Fork White River	WWU010-0079	7/17/2006 10:45	2419.2	MPN/100mL	1067.55	INW0111_01	INW0111_T1001; INW0111_T1222	Sites 1-6 are located on the same AUID, INW0111_01. Results indicate moderate to high impairment for <i>E. coli</i> , likely due to septic influences and agricultural runoff combined with no buffer along the streams that comprise this AUID.	NS				
				7/25/2006 11:20	866.4	MPN/100mL									
				7/31/2006 10:20	1046.2	MPN/100mL									
				8/7/2006 9:50	920.8	MPN/100mL									
				8/14/2006 10:20	686.7	MPN/100mL									
5	2006 TMDL West Fork White River	Unnamed Tributary of West Fork White River	WWU010-0078	7/17/2006 10:55	103.9	MPN/100mL	373.26	INW0111_01	INW0111_T1001; INW0111_T1222	Results from this site are insufficient for assessment purposes (only three results). However, results from this site support the assessment of impairment based on results from sites 1, 3, 4 and 6, which are located on the same AUID, INW0111_01 (2010 AUID: INW0111_T1001). This AUID is impaired for E. coli likely due to no buffer, agricultural and septic influences	NS				
				7/25/2006 11:30	816.4	MPN/100mL									
				7/31/2006 10:25	613.1	MPN/100mL									
6	2006 TMDL West Fork White River	West Fork White River	WWU010-0076	7/17/2006 11:40	116.9	MPN/100mL	315.66	INW0111_01	INW0111_T1001; INW0111_T1222	Sites 1-6 are located on the same AUID, INW0111_01. Results indicate moderate to high impairment for <i>E. coli</i> , likely due to septic influences and agricultural runoff combined with no buffer along the streams that comprise this AUID.	NS				
				7/25/2006 11:50	298.7	MPN/100mL									
				7/31/2006 10:50	290.9	MPN/100mL									
				8/7/2006 10:15	1119.9	MPN/100mL									
				8/14/2006 10:45	275.5	MPN/100mL									
7	2006 TMDL West Fork White River	Owl Creek	WWU010-0077	7/17/2006 11:15	2419.2	MPN/100mL	1514.12	INW0111_02	INW0111_T1221	Sites 7 and 8 are located on the same AUID, INW0111_02. Results from both sites indicate this AUID is moderately impaired for E. coli, likely due to septic influences and agricultural runoff combined with no buffer along the streams that comprise this AUID.	NS				
				7/25/2006 11:35	1299.7	MPN/100mL									
				7/31/2006 10:35	1986.3	MPN/100mL									
				8/7/2006 10:00	980.4	MPN/100mL									
				8/14/2006 10:30	1299.7	MPN/100mL									
8	2006 TMDL West Fork White River	Owl Creek	WWU010-0075	7/17/2006 11:35	1119.9	MPN/100mL	1291.33	INW0111_02	INW0111_T1221	Sites 7 and 8 are located on the same AUID, INW0111_02. Results from both sites indicate this AUID is moderately impaired for E. coli likely due to septic influences and agricultural runoff combined with no buffer along the streams that comprise this AUID.	NS				
				7/25/2006 11:45	920.8	MPN/100mL									
				7/31/2006 10:40	920.8	MPN/100mL									
				8/7/2006 10:05	1299.7	MPN/100mL									
				8/7/2006 10:05	1553.1	MPN/100mL									
9	2006 TMDL West Fork White River	West Fork White River	WWU010-0074	8/14/2006 10:40	2419.2	MPN/100mL	458.71	INW0112_01	INW0112_01; INW0112_T1002	Sites 9, 10, 11, 14 and 15 are located on INW0112_01. Results from all sites except site 10 indicate moderate to high impairment for E. coli. Site 10 is bounded by sites 9 and 11, both of which indicate impairment, suggesting highly localized influence may be mitigating impairment at site 10. Sites 9, 11, 14 and 15 are considered more representative of conditions in this watershed. Impairment is likely due to agricultural influences.	NS				
				7/17/2006 11:50	344.1	MPN/100mL									
				7/25/2006 12:00	686.7	MPN/100mL									
				7/31/2006 10:55	517.2	MPN/100mL									
				8/7/2006 10:25	866.4	MPN/100mL									
	2001 E. coli-Upper WFWR		WWU010-0021	8/14/2006 10:55	191.8	MPN/100mL	1176.38								
				6/5/2001 9:15	1986.28	MPN/100mL									
				6/5/2001 9:15	1986.28	MPN/100mL									
				6/12/2001 8:40	1553.07	MPN/100mL									
				6/19/2001 8:45	727	MPN/100mL									
10	2006 TMDL West Fork White River		WWU010-0073	6/26/2001 9:15	866.4	MPN/100mL	42.32			Sites 9, 10, 11, 14 and 15 are located on INW0112_01. Results from all sites except site 10 indicate moderate to high impairment for E. coli. Site 10 is bounded by sites 9 and 11, both of which indicate impairment, suggesting highly localized influence may be mitigating impairment at site 10. Sites 9, 11, 14 and 15 are considered more representative of conditions in this watershed. Impairment is likely due to agricultural	NS				
				7/3/2001 8:40	686.7	MPN/100mL									
				7/17/2006 12:00	82	MPN/100mL	INW0112_01	INW0112_01; INW0112_T1002							
				7/25/2006 12:10	19.5	MPN/100mL									
				7/31/2006 11:05	109.5	MPN/100mL									
8/7/2006 10:30	21.6		MPN/100mL												
11	2006 Corvallis E. coli		WWU010-0039	8/14/2006 11:00	35.9	MPN/100mL	229.33			Sites 9, 10, 11, 14 and 15 are located on INW0112_01. Results from all sites except site 10 indicate moderate to high impairment for E. coli. Site 10 is bounded by sites 9 and 11, both of which indicate impairment, suggesting highly localized influence may be mitigating impairment at site 10. Sites 9, 11, 14 and 15 are considered more representative of conditions in this watershed. Impairment is likely due to agricultural influences.	NS				
				4/10/2006 11:30	62	MPN/100mL									
				4/10/2006 11:30	65.1	MPN/100mL									
				4/17/2006 11:20	1986.3	MPN/100mL									
				4/24/2006 12:00	156.5	MPN/100mL									
12	2006 TMDL West Fork White River		WWU010-0072	5/1/2006 11:35	920.8	MPN/100mL	971.19	INW0112_01	INW0112_T1002	Site 12 is located on AUID INW0112_T1003. Results indicate this AUID is impaired for <i>E. coli</i> . Impairment is likely due to agricultural influences.	NS				
				5/8/2006 11:40	125.9	MPN/100mL									
				7/17/2006 12:15	1986.3	MPN/100mL						INW0112_T1003	INW0112_00		
				7/25/2006 12:15	866.4	MPN/100mL									
				7/31/2006 11:10	1413.6	MPN/100mL									

13	2006 TMDL West Fork White River	Peach Creek	WWU010-0070	7/17/2006 12:40	2419.2	MPN/100mL	2265.26	INW0112_T1004	INW0112_00	Site 13 is located on AUID INW0112_T1004. Results indicate this reach is highly impaired for <i>E. coli</i> , likely due to septic influences and agricultural runoff combined with little/no buffer along the streams that comprise this AUID.	NS
				7/17/2006 12:40	1986.3	MPN/100mL					
				7/25/2006 12:30	2419.2	MPN/100mL					
				7/31/2006 11:25	2419	MPN/100mL					
				8/7/2006 10:55	1986.3	MPN/100mL					
				8/14/2006 11:20	2419	MPN/100mL					
14	2006 TMDL West Fork White River	West Fork White River	WWU010-0071	7/17/2006 12:25	228.2	MPN/100mL	131.15	INW0112_01	INW0112_01; INW0112_T1002	Sites 9, 10, 11, 14 and 15 are located on INW0112_01. Results from all sites except site 10 indicate moderate to high impairment for <i>E. coli</i> . Site 10 is bounded by sites 9 and 11, both of which indicate impairment, suggesting highly localized influence may be mitigating impairment at site 10. Sites 9, 11, 14 and 15 are considered more representative of conditions in this watershed. Impairment is likely due to agricultural	NS
				7/25/2006 12:25	122.2	MPN/100mL					
				7/31/2006 11:15	103.9	MPN/100mL					
				8/7/2006 10:50	101.7	MPN/100mL					
				8/14/2006 11:15	131.7	MPN/100mL					
15	1991 Fixed Station	West Fork White River	WWU010-0006	1/8/1991 10:30	330	CFU/100mL	17% of grab sample results >576 cfu/100 mL	INW0112_01	INW0112_01; INW0112_T1002	Sites 9, 10, 11, 14 and 15 are located on INW0112_01. Historical results indicate persistent impairment. Recent results from all sites except site 10 indicate moderate to high impairment for <i>E. coli</i> . Site 10 is bounded by sites 9 and 11, both of which indicate impairment, suggesting highly localized influence may be mitigating impairment at site 10. Sites 9, 11, 14 and 15 are considered more representative of conditions in this watershed. Impairment is likely due to agricultural influences.	NS
				2/6/1991 12:00	660	CFU/100mL					
				3/11/1991 14:25	1	CFU/100mL					
				4/2/1991 14:50	260	CFU/100mL					
				5/30/1991 13:00	290	CFU/100mL					
				6/19/1991 11:30	270	CFU/100mL					
				7/17/1991 15:30	350	CFU/100mL					
				8/22/1991 9:00	80	CFU/100mL					
				9/17/1991 15:30	1200	CFU/100mL					
				10/8/1991 15:40	150	CFU/100mL					
				11/14/1991 11:00	130	CFU/100mL					
				12/10/1991 11:30	80	CFU/100mL					
	1992 Fixed Station			2/6/1992 11:45	290	CFU/100mL					
				3/18/1992 12:50	780	CFU/100mL					
				5/12/1992 15:35	20	CFU/100mL					
				6/8/1992 16:45	250	CFU/100mL					
				7/21/1992 18:30	4700	CFU/100mL					
				8/18/1992 14:15	190	CFU/100mL					
				9/15/1992 10:30	660	CFU/100mL					
				10/15/1992 16:00	2300	CFU/100mL					
				12/7/1992 12:35	80	CFU/100mL					
				1/26/1993 10:15	500	CFU/100mL	45% of grab sample results >576 cfu/100 mL				
	3/3/1993 9:00			750	CFU/100mL						
	3/22/1993 13:30			1	CFU/100mL						
	4/6/1993 14:30			20	CFU/100mL						
	5/6/1993 9:30			1	CFU/100mL						
	6/17/1993 17:35			430	CFU/100mL						
	7/13/1993 10:45			740	CFU/100mL						
	8/10/1993 10:55			1100	CFU/100mL						
	9/15/1993 15:05			2300	CFU/100mL						
	11/9/1993 10:25			70	CFU/100mL						
	12/17/1993 13:30			620	CFU/100mL						
	1994 Fixed Station			2/25/1994 7:00	2100	CFU/100mL	50% of grab sample results >576 cfu/100 mL; Two results >2400 cfu/100 mL				
				3/24/1994 8:30	330	CFU/100mL					
				4/13/1994 8:00	970	CFU/100mL					
				5/11/1994 14:00	150	CFU/100mL					
				6/16/1994 12:00	990	CFU/100mL					
				7/21/1994 19:00	11000	CFU/100mL					
				8/17/1994 17:55	1000	CFU/100mL					
				9/21/1994 13:00	40	CFU/100mL					
				10/18/1994 16:30	280	CFU/100mL					
				11/29/1994 9:00	4400	CFU/100mL					
	1995 Fixed Station			1/23/1995 13:40	30	CFU/100mL	33% of grab sample results >576 cfu/100 mL				
				2/21/1995 8:30	490	CFU/100mL					
				5/4/1995 11:05	570	CFU/100mL					
				6/1/1995 13:30	440	CFU/100mL					
				6/29/1995 11:15	17600	CFU/100mL					
				7/20/1995 13:50	570	CFU/100mL					
				8/24/1995 12:50	290	CFU/100mL					
				9/21/1995 9:00	900	CFU/100mL					
				10/19/1995 17:45	100	CFU/100mL					
				11/28/1995 16:00	1300	CFU/100mL					
				12/14/1995 13:50	390	CFU/100mL					
				1996 Fixed Station	1/29/1996 15:10	1300						CFU/100mL	54% of grab sample results >576 cfu/100 mL; Two results >2400 cfu/100 mL
	1996 Synoptic			2/21/1996 13:15	360	CFU/100mL					
	1996 Fixed Station			2/22/1996 17:00	480	CFU/100mL					
				4/3/1996 15:45	1200	CFU/100mL					
				5/2/1996 16:15	660	CFU/100mL					
				5/30/1996 16:20	2700	CFU/100mL					
				6/24/1996 15:30	1400	CFU/100mL					
				7/22/1996 12:30		4100	CFU/100mL				
				8/26/1996 18:20		50	CFU/100mL				
				9/23/1996 16:00		180	CFU/100mL				
				10/15/1996 13:10		1	CFU/100mL				
				11/6/1996 14:00		130	CFU/100mL				
				12/2/1996 13:40		2300	CFU/100mL				

	1997 Fixed Station			1/23/1997 13:40	1000	CFU/100mL	33% of grab sample results >576 cfu/100 mL					
				2/17/1997 13:50	150	CFU/100mL						
				3/18/1997 12:50	640	CFU/100mL						
				4/17/1997 12:50	240	CFU/100mL						
				5/19/1997 14:15	4600	CFU/100mL						
				6/23/1997 14:20	390	CFU/100mL						
				7/14/1997 14:00	350	CFU/100mL						
				8/11/1997 13:35	130	CFU/100mL						
				9/16/1997 14:25	200	CFU/100mL						
				10/14/1997 14:00	200	CFU/100mL						
				11/13/1997 14:10	10	CFU/100mL						
				12/22/1997 14:00	790	CFU/100mL						
	1998 Fixed Station			1/27/1998 13:55	270	CFU/100mL						
				2/24/1998 14:20	100	CFU/100mL						
				3/23/1998 14:50	410	CFU/100mL						
				4/23/1998 8:50	740	CFU/100mL						
				5/20/1998 9:10	350	CFU/100mL						
				9/15/1998 9:40	190	CFU/100mL						
				10/20/1998 9:30	240	CFU/100mL						
				2/3/1999 9:45	450	CFU/100mL						
	1999 Fixed Station											
	2001 E. coli-Upper WFWR			6/5/2001 9:45	1046.24	MPN/100mL	667.60					
6/12/2001 9:10				727	MPN/100mL							
6/19/2001 9:00				365.4	MPN/100mL							
6/26/2001 10:05				488.4	MPN/100mL							
6/26/2001 10:05				461.4	MPN/100mL							
7/3/2001 9:10				1413.6	MPN/100mL							
2006 TMDL West Fork White River	West Fork White River	WWU010-0066	7/17/2006 13:20	304.4	MPN/100mL	188.85						
			7/25/2006 13:25	112.4	MPN/100mL							
			7/31/2006 12:15	98.8	MPN/100mL							
			8/7/2006 11:25	307.6	MPN/100mL							
			8/14/2006 11:40	231	MPN/100mL							
			7/17/2006 10:00	2419.2	MPN/100mL		511.09					
			7/25/2006 11:00	127.4	MPN/100mL							
			7/25/2006 11:00	133.4	MPN/100mL							
7/31/2006 10:00	1203.3	MPN/100mL										
7/31/2006 10:00	1299.7	MPN/100mL										
8/7/2006 9:30	325.5	MPN/100mL										
8/14/2006 10:00	435.2	MPN/100mL										
16	2006 TMDL West Fork White River	Salt Creek	WWU010-0063	7/17/2006 10:10	108.1	MPN/100mL	36.65	INW0112_T1005	INW0113_00	Sites 16, 17, and 18 are located on AUID INW0112_T1005. Sites 16 and 18 indicate slight impairment for E. coli. Site 17 indicates full support on a small tributary which is a part of this assessment unit. This AUID is assessed as impaired based on results from sites 16 and 18, which is more protective of the waters. The E. coli results at these sites are considered more representative of conditions throughout the watershed. Most likely sources of impairment are agricultural and septic influences combined with lack of riparian buffer.	NS	
				7/25/2006 10:55	13.1	MPN/100mL						
				7/31/2006 9:55	30.9	MPN/100mL						
				8/7/2006 9:20	115.3	MPN/100mL						
				8/14/2006 9:50	13.1	MPN/100mL						
				7/17/2006 13:40	2419.2	MPN/100mL						991.46
				7/25/2006 13:40	461.1	MPN/100mL						
				7/31/2006 12:35	727	MPN/100mL						
8/7/2006 11:50	435.2	MPN/100mL										
8/14/2006 12:05	1732.9	MPN/100mL										
8/14/2006 12:05	1553.1	MPN/100mL										
17	2006 TMDL West Fork White River	Unnamed Tributary to Salt Creek	WWU010-0064	7/17/2006 13:50	1732.9	MPN/100mL	869.31	INW0112_T1006	INW0113_00	Sites 19 and 20 are located on AUID INW0112_T1006. Results indicate this reach is moderately impaired for E. coli, likely due to septic influences and agricultural runoff combined with little/no buffer along the streams that comprise this AUID.	NS	
				7/25/2006 13:50	1732.9	MPN/100mL						
				7/31/2006 12:40	980.4	MPN/100mL						
				8/7/2006 11:55	172	MPN/100mL						
				8/14/2006 12:15	980.4	MPN/100mL						
				7/17/2006 13:30	980.4	MPN/100mL						748.01
				7/25/2006 13:30	547.5	MPN/100mL						
				7/31/2006 12:20	547.5	MPN/100mL						
8/7/2006 11:40	613.1	MPN/100mL										
8/14/2006 11:55	1299.7	MPN/100mL										
18	2006 TMDL West Fork White River	Salt Creek	WWU010-0067	6/5/2001 10:05	1413.6	MPN/100mL	1069.84	INW0113_01	INW0114_00; INW0114_T1004	Sites 21 and 22 are located on AUID INW0113_01. Results indicate slight E. coli impairment, likely due to a combination of the lack of buffer along the streams that comprise this AUID and agricultural influences, including land application of animal waste (there are several CFOs located within 5 miles of these sites).	NS	
				6/12/2001 9:30	2419.2	MPN/100mL						
				6/19/2001 9:15	579.4	MPN/100mL						
				6/26/2001 10:25	866.4	MPN/100mL						
				7/3/2001 9:25	816.4	MPN/100mL						
				7/17/2006 14:10	307.6	MPN/100mL						1069.84
7/25/2006 14:15	43.9	MPN/100mL										
7/31/2006 13:05	185.2	MPN/100mL										
7/31/2006 13:05	202.9	MPN/100mL										
8/7/2006 12:20	203.5	MPN/100mL										
22	2006 TMDL West Fork White River	West Fork White River	WWU010-0060	8/14/2006 12:30	86.2	MPN/100mL	1179.84	INW0113_T1004	INW0114_00	Site 23 is located on AUID INW0113_T1004. Results from this site indicate this reach is highly impaired for E. coli, likely due to a combination of the lack of buffer along the streams that comprise this AUID and agricultural influences, including land application of animal waste (there are several CFOs located within 5 miles of these sites).	NS	
				7/17/2006 14:00	1119.9	MPN/100mL						
				7/25/2006 14:00	1203.3	MPN/100mL						
				7/31/2006 12:50	816.4	MPN/100mL						
				8/7/2006 12:10	1046.2	MPN/100mL						
				8/14/2006 12:20	1986.3	MPN/100mL						

24	2006 TMDL West Fork White River	West Fork White River	WWU010-0057	7/17/2006 14:30	18.7	MPN/100mL	38.67	INW0115_01	INW0115_T1005; INW0119_T1006	Sites 24, 27, and 28 are located on AUID INW0115_01. Sites 27 and 28 indicate slight to moderate impairment for E. coli. Site 24 indicates full support, likely the result of good riparian buffer at the sampling site. Sites 27 and 28 are located further downstream where buffers are lacking. Results from these sites are considered more representativie of conditions along the reach as a whole. Based on results from sites 27 and 28, this AUID is	NS						
				7/25/2006 14:25	37.3	MPN/100mL											
				7/31/2006 13:20	72.8	MPN/100mL											
				8/7/2006 12:30	68.9	MPN/100mL											
				8/14/2006 12:45	24.7	MPN/100mL											
25	2006 TMDL West Fork White River	Sparrow Creek	WWU010-0058	7/18/2006 12:10	686.7	MPN/100mL	302.50	INW0115_T1006	INW0115_00	Sites 25 and 26 are located on AUID INW0115_T1006. Results from site 25 indicate this stream is moderately impaired for E. coli. Results from site 26 are insufficient for assessment but support the assessment of impairment at site 26. Likely sources of impairment include septic influenices and agricultural runoff combined with a lack of riparian buffer.	NS						
				7/26/2006 11:15	285.1	MPN/100mL											
				8/1/2006 12:10	166.4	MPN/100mL											
				8/1/2006 12:10	159.7	MPN/100mL											
				8/8/2006 11:45	387.3	MPN/100mL											
				8/8/2006 11:45	517.2	MPN/100mL											
8/15/2006 10:20	222.4	MPN/100mL															
26	1996 Watershed	Sparrow Creek	WWU010-0007	8/6/1996 15:45	5200	CFU/100mL		INW0115_T1006	INW0115_00	Site 26 is located on AUID INW0115_T1006. Early results from this site are insufficient for assessment (only one result). Assessment of this reach is based on more recent data which verify the impairment suggested by previous sampling.	NA						
27	2001 E. coli-Upper WFWR	West Fork White River	WWU010-0031	6/12/2001 9:50	1986.28	MPN/100mL	799.04	INW0115_01	INW0115_T1005; INW0119_T1006	Sites 24, 27, and 28 are located on AUID INW0115_01. Only four results from site 27. However, even with a fifth result of 1, the geometric mean would exceed. Therefore, these results are considered representative for the purposes of assessment. The geomteric mean shown for this site was calculated with four results. Sites 27 and 28 indicate slight to moderate impairment for E. coli. Site 24 indicates full support, likely the result of good riparian buffer at the sampling site. Sites 27 and 28 are located further downstream where buffers are lacking. Results from these sites are considered more representativie of conditions along the reach as a whole. Based on results from sites 27 and 28, this AUID is assessed as impaired. Most likely sources of impairment include septic influenices and both urban and agricultural runoff combined with a lack of riparian buffer.	NS						
				6/19/2001 9:30	435.2	MPN/100mL											
				6/26/2001 10:45	686.7	MPN/100mL											
				7/3/2001 9:45	686.7	MPN/100mL											
28	2006 TMDL West Fork White River	West Fork White River	WWU010-0048	7/18/2006 11:40	184.2	MPN/100mL	179.34	INW0115_01	INW0115_T1005; INW0119_T1006	Sites 24, 27, and 28 are located on AUID INW0115_01. Sites 27 and 28 indicate slight to moderate impairment for E. coli. Site 24 indicates full support, likely the result of good riparian buffer at the sampling site. Sites 27 and 28 are located further downstream where buffers are lacking. Results from these sites are considered more representativie of conditions along the reach as a whole. Based on results from sites 27 and 28, this AUID is assessed as impaired. Most likely sources of impairment include septic influenices and	NS						
				7/26/2006 10:55	145	MPN/100mL											
				7/26/2006 10:55	166.4	MPN/100mL											
				8/1/2006 11:55	233.3	MPN/100mL											
				8/8/2006 11:30	104.3	MPN/100mL											
				8/15/2006 10:10	307.6	MPN/100mL											
29	2006 TMDL West Fork White River	Cabin Creek	WWU010-0065	7/18/2006 12:50	920.8	MPN/100mL	310.24	INW0114_01	INW0116_00	Sites 29, 30, and 31 are located on AUID INW0114_01. Early grab sample result from site 31 did not indicate impairment. However, recent results from all of these sites indicate moderate impairment for E. coli. This impairment is likely driven by septic influenices and a combination of the lack of buffer along the streams that comprise this AUID and agricultural influenices, including land application of animal waste (there are several CFOs	NS						
				7/26/2006 11:30	344.1	MPN/100mL											
				8/1/2006 12:50	93.3	MPN/100mL											
				8/8/2006 12:10	325.5	MPN/100mL											
				8/15/2006 10:50	298.7	MPN/100mL											
30	2006 TMDL West Fork White River	Cabin Creek	WWU010-0056	7/18/2006 12:40	488.4	MPN/100mL	356.69	INW0114_01	INW0116_00	Sites 29, 30, and 31 are located on AUID INW0114_01. Early grab sample result from site 31 did not indicate impairment. However, recent results from all of these sites indicate moderate impairment for E. coli. This impairment is likely driven by septic influenices and a combination of the lack of buffer along the streams that comprise this AUID and agricultural influenices, including land application of animal waste (there are several CFOs located within 5 miles of these sites).	NS						
				7/26/2006 11:25	344.8	MPN/100mL											
				7/26/2006 11:25	365.4	MPN/100mL											
				8/1/2006 12:40	410.6	MPN/100mL											
				8/8/2006 12:00	488.4	MPN/100mL											
				8/15/2006 10:40	166.9	MPN/100mL											
31	1996 Synoptic	Cabin Creek	WWU010-0003	2/21/1996 12:40	40	CFU/100mL	952.40	INW0114_01	INW0116_00	Sites 29, 30, and 31 are located on AUID INW0114_01. Early grab sample result from site 31 did not indicate impairment. However, recent results from all of these sites indicate moderate impairment for E. coli. This impairment is likely driven by septic influenices and a combination of the lack of buffer along the streams that comprise this AUID and agricultural influenices, including land application of animal waste (there are several CFOs located within 5 miles of these sites).	NS						
	2001 E. coli-Upper WFWR			6/5/2001 10:40	435.2	MPN/100mL											
				6/12/2001 10:05	360.9	MPN/100mL											
				6/12/2001 10:05	344.1	MPN/100mL											
				6/19/2001 9:40	275.5	MPN/100mL											
				6/26/2001 10:55	648.8	MPN/100mL											
				7/3/2001 9:50	648.8	MPN/100mL											
	2006 TMDL West Fork White River			7/18/2006 11:30	410.6	MPN/100mL	299.30										
				7/26/2006 10:50	387.3	MPN/100mL											
				8/1/2006 11:50	275.5	MPN/100mL											
				8/8/2006 11:20	461.1	MPN/100mL											
8/15/2006 10:00	118.9	MPN/100mL															
32	2001 E. coli-Upper WFWR	West Fork White River	WWU010-0026	6/5/2001 10:50	980.4	MPN/100mL	575.87	INW0119_01	INW0119_T1006; INW011A_T1007	Sites 32, 41, 44, and 45 are located on AUID INW0119_01. Results from these sites indicate moderate impairment for E. coli at the upstream end of this AUID, decreasing in magnitude to slight impairment of downstream reaches. Impairment along the downstream reaches likely sustained by loadings from the tributary system which is also impaired and flows into this reach between sites 41 and 44. This impairment is likely driven by septic influenices and a combination of the lack of buffer along the streams that comprise this AUID and agricultural influenices, including land application of animal waste	NS						
				6/12/2001 10:15	980.4	MPN/100mL											
				6/19/2001 9:55	365.4	MPN/100mL											
				6/19/2001 9:55	307.6	MPN/100mL											
				6/26/2001 11:05	613.1	MPN/100mL											
				7/3/2001 10:05	613.1	MPN/100mL											
				7/3/2001 10:05	517.2	MPN/100mL											
33	2006 TMDL West Fork White River	Little White River	WWU010-0055	7/18/2006 10:15	547.5	MPN/100mL	386.58	INW0116_01	INW0118_00	Sites 33 and 35 are located on AUID INW0116_01. Results indicate this AUID is moderately impaired for E. coli. This impairment is likely driven by septic influenices and a combination of the lack of buffer along the streams that comprise this AUID and agricultural influenices, including land application of animal waste (there are CFOs located within 5 miles of these sites).	NS						
				7/18/2006 10:15	517.2	MPN/100mL											
				7/26/2006 9:55	209.8	MPN/100mL											
				8/1/2006 10:50	135.4	MPN/100mL											
				8/8/2006 10:30	1203.3	MPN/100mL											
				8/15/2006 9:05	344.8	MPN/100mL											
34	2006 TMDL West Fork White River	Poplar Run	WWU010-0054	7/18/2006 10:30	816.4	MPN/100mL	263.38	INW0116_T1001	INW0118_00	Site 34 is located on AUID INW0116_T1001. Results indicate this AUID is slightly impaired for E. coli. This impairment is likely driven by septic influenices and a combination of the lack of buffer along the streams that comprise this AUID and agricultural influenices, including land application of animal waste (CFOs located within 5 miles of these sites).	NS						
				7/26/2006 10:05	290.9	MPN/100mL											
				8/1/2006 11:05	261.3	MPN/100mL											
				8/8/2006 10:40	129.6	MPN/100mL											
				8/15/2006 9:20	157.6	MPN/100mL											
35	2006 TMDL West Fork White River	Little White River	WWU010-0050	7/18/2006 10:50	770.1	MPN/100mL	498.34	INW0116_01	INW0118_00	Sites 33 and 35 are located on AUID INW0116_01. Results indicate this AUID is moderately impaired for E. coli. This impairment is likely driven by septic influenices and a combination of the lack of buffer along the streams that comprise this AUID and	NS						
				7/26/2006 10:15	488.4	MPN/100mL											
				8/1/2006 11:20	307.6	MPN/100mL											

				8/8/2006 11:00	365.4	MPN/100mL				agricultural influences, including land application of animal waste (CFOs located within 5 miles of these sites).	
				8/15/2006 9:30	727	MPN/100mL					
36	2006 TMDL West Fork White River	Stoney Creek	WWU010-0053	7/18/2006 10:00	307.6	MPN/100mL					
				7/26/2006 9:45	248.1	MPN/100mL					
				8/1/2006 10:45	435.2	MPN/100mL					
				8/8/2006 10:15	1203.3	MPN/100mL					
				8/15/2006 8:50	325.5	MPN/100mL					
37	2006 Corvallis E. coli	Little Stoney Creek	WWU010-0037	4/10/2006 13:20	33.6	MPN/100mL					
				4/17/2006 13:30	1986.3	MPN/100mL					
				4/24/2006 13:30	45.9	MPN/100mL					
				5/1/2006 13:20	1046.2	MPN/100mL					
				5/8/2006 13:30	45.7	MPN/100mL					
38	2006 TMDL West Fork White River	Little Stoney Creek	WWU010-0052	7/18/2006 9:50	980.4	MPN/100mL					
				7/26/2006 9:40	579.4	MPN/100mL					
				8/1/2006 10:35	435.2	MPN/100mL					
				8/8/2006 10:10	1046.2	MPN/100mL					
				8/15/2006 8:45	816.4	MPN/100mL					
39	2006 TMDL West Fork White River	Stoney Creek	WWU010-0051	7/18/2006 9:40	1732.9	MPN/100mL					
				7/26/2006 9:30	488.4	MPN/100mL					
				8/1/2006 10:15	613.1	MPN/100mL					
				8/8/2006 10:05	325.5	MPN/100mL					
				8/15/2006 8:40	238.2	MPN/100mL					
40	2006 TMDL West Fork White River	Stoney Creek	WWU010-0049	7/18/2006 10:55	686.7	MPN/100mL					
				7/26/2006 10:20	435.2	MPN/100mL					
				8/1/2006 11:15	25.6	MPN/100mL					
				8/8/2006 10:50	218.7	MPN/100mL					
				8/15/2006 9:35	285.1	MPN/100mL					
41	2006 TMDL West Fork White River	West Fork White River	WWU010-0047	7/18/2006 11:15	272.3	MPN/100mL					
				7/26/2006 10:35	307.6	MPN/100mL					
				8/1/2006 11:35	325.5	MPN/100mL					
				8/8/2006 11:10	307.6	MPN/100mL					
				8/15/2006 9:50	218.7	MPN/100mL					
41	1996 Synoptic	West Fork White River	WWU010-0004	2/21/1996 11:50	160	CFU/100mL					
42	2001 E. coli-Upper WFWR	Little White River	WWU010-0025	6/5/2001 11:35	816.4	MPN/100mL					
				6/12/2001 10:30	547.5	MPN/100mL					
				6/19/2001 10:15	461.1	MPN/100mL					
				6/26/2001 11:15	770.1	MPN/100mL					
				7/3/2001 10:35	1203.31	MPN/100mL					
43	1996 Synoptic			2/21/1996 12:15	90	CFU/100mL					
	2006 TMDL West Fork White River	Stoney Creek	WWU010-0005	7/18/2006 11:10	435.2	MPN/100mL					
				7/18/2006 11:10	686.7	MPN/100mL					
				7/26/2006 10:30	980.4	MPN/100mL					
				8/1/2006 11:30	727	MPN/100mL					
				8/8/2006 11:05	770.1	MPN/100mL					
				8/15/2006 9:45	727	MPN/100mL					
				8/15/2006 9:45	648.8	MPN/100mL					
44	1996 Watershed	West Fork White River	WWU010-0032	8/5/1996 16:30	90	CFU/100mL					
45	2001 E. coli-Upper WFWR	West Fork White River	WWU010-0023	6/5/2001 14:15	488.4	MPN/100mL					
				6/12/2001 10:40	193.5	MPN/100mL					
				6/19/2001 10:30	261.3	MPN/100mL					
				6/26/2001 11:25	248.1	MPN/100mL					
				7/3/2001 10:55	387.3	MPN/100mL					
46	2006 TMDL West Fork White River	West Fork White River	WWU010-0045	7/18/2006 9:15	209.8	MPN/100mL					
				7/26/2006 9:00	148.3	MPN/100mL					
				8/1/2006 9:45	122.3	MPN/100mL					
				8/8/2006 9:30	146.7	MPN/100mL					
				8/8/2006 9:30	260.2	MPN/100mL					
				8/15/2006 8:00	166.9	MPN/100mL					
47	2006 TMDL West Fork White River	Mud Creek	WWU010-0044	7/18/2006 9:05	201.4	MPN/100mL					
				7/26/2006 8:50	224.7	MPN/100mL					
				8/1/2006 9:35	115.3	MPN/100mL					
				8/8/2006 9:20	111.2	MPN/100mL					
				8/15/2006 7:55	53.7	MPN/100mL					
	2001 E. coli-Upper WFWR	Mud Creek	WWU010-0028	6/5/2001 14:30	579.4	MPN/100mL					
				6/12/2001 10:55	461.1	MPN/100mL					
				6/19/2001 10:45	579.4	MPN/100mL					
				6/26/2001 11:50	866.4	MPN/100mL					
				6/26/2001 11:50	816.4	MPN/100mL					
				7/3/2001 11:05	727	MPN/100mL					
48	2001 E. coli-Upper WFWR	Prairie Creek Reservoir Outlet	WWU010-0022	6/6/2001 10:30	86	MPN/100mL					
				6/12/2001 11:10	8.5	MPN/100mL					
				6/19/2001 11:00	24.6	MPN/100mL					

[illegible]

49	2006 TMDL West Fork White River	Prairie Creek	WWU010-0046	7/18/2006 9:25	142.1	MPN/100mL	51.31	INW01P1173_00	INW011B_00	Site 49 is located on a small connector stream between two sections of Prairie Creek Reservoir (INW01P1173_00). This waterbody is considered part of the reservoir as opposed to a stream for the purposes of assessment. Results indicate full support of recreational use in this area of the reservoir. However, site is located in the uppermost end of the reservoir. More information is needed to determine use support for the	NA	
				7/26/2006 9:20	27.2	MPN/100mL						
				8/1/2006 10:05	344.8	MPN/100mL						
				8/8/2006 9:50	10.8	MPN/100mL						
				8/15/2006 8:25	24.7	MPN/100mL						
50	2006 TMDL West Fork White River	Medford Drain	WWU010-0043	7/18/2006 8:50	488.4	MPN/100mL	127.76	INW011A_T1008	INW011C_00	Site 50 is located on AUID INW011A_T1008. This AUID is slightly impaired for <i>E. coli</i> , likely due to septic influences and agricultural runoff combined with a lack of riparian buffer.	NS	
				7/26/2006 9:10	117.8	MPN/100mL						
				8/1/2006 9:55	88.4	MPN/100mL						
				8/8/2006 9:40	90.7	MPN/100mL						
				8/15/2006 8:10	73.8	MPN/100mL						
51	2001 E. coli-Upper WFWR	West Fork White River	WWU010-0024	6/6/2001 9:55	579.4	MPN/100mL	229.43	INW011A_01	INW011C_T1008	Sites 51 and 52 are located on AUID INW011A_01. Historical results at site 52 indicate flucuating degrees of E. coli impairment from year to year. Most recent results from site 52 and results from site 51 indicate E. coli impairment persists, likely due to suburban and agricultural influences combined with a lack of riparian buffer.	NS	
				6/12/2001 11:40	272.3	MPN/100mL						
				6/19/2001 11:50	149.7	MPN/100mL						
				6/26/2001 12:15	86	MPN/100mL						
				7/3/2001 11:35	313	MPN/100mL						
	1991 Fixed Station			1/8/1991 10:00	450	CFU/100mL	<10% of grab sample results >576 cfu/100 mL					
				3/19/1991 10:30	3500	CFU/100mL						
				4/4/1991 12:00	40	CFU/100mL						
				5/28/1991 13:00	270	CFU/100mL						
				6/19/1991 11:00	90	CFU/100mL						
				7/18/1991 14:30	80	CFU/100mL						
				8/22/1991 9:30	0	CFU/100mL						
				9/19/1991 11:30	370	CFU/100mL						
				10/10/1991 10:00	200	CFU/100mL						
				11/13/1991 12:00	90	CFU/100mL						
				12/9/1991 15:25	90	CFU/100mL						
	1992 Fixed Station			2/6/1992 12:30	20	CFU/100mL	<10% of grab sample results >576 cfu/100 mL					
				3/23/1992 13:00	30	CFU/100mL						
				4/29/1992 9:45	50	CFU/100mL						
				5/12/1992 16:15	210	CFU/100mL						
				6/8/1992 14:00	130	CFU/100mL						
				7/13/1992 13:30	12000	CFU/100mL						
				8/20/1992 12:30	10	CFU/100mL						
				9/16/1992 18:00	60	CFU/100mL						
				10/14/1992 10:30	20	CFU/100mL						
				11/23/1992 16:00	400	CFU/100mL						
				12/7/1992 11:25	90	CFU/100mL						
	1993 Fixed Station			1/25/1993 9:40	470	CFU/100mL	64% of grab sample results >576 cfu/100 mL; Three results >2400 cfu/100 mL.					
				3/3/1993 11:00	900	CFU/100mL						
				3/25/1993 11:00	780	CFU/100mL						
				4/6/1993 13:40	1	CFU/100mL						
				5/6/1993 9:00	40	CFU/100mL						
				6/15/1993 12:35	15000	CFU/100mL						
				8/10/1993 10:00	1200	CFU/100mL						
				9/15/1993 14:35	900	CFU/100mL						
				10/13/1993 9:45	140	CFU/100mL						
				11/9/1993 10:00	6700	CFU/100mL						
				12/16/1993 14:00	2500	CFU/100mL						
	1994 Fixed Station			2/24/1994 15:15	6200	CFU/100mL	30% of grab sample results >576 cfu/100 mL; Two results >2400 cfu/100 mL.					
				3/22/1994 15:00	20	CFU/100mL						
				4/14/1994 8:00	1600	CFU/100mL						
				5/11/1994 13:30	30	CFU/100mL						
				6/14/1994 14:30	170	CFU/100mL						
				7/21/1994 19:20	1700	CFU/100mL						
				8/17/1994 11:10	360	CFU/100mL						
				9/21/1994 15:30	530	CFU/100mL						
				10/18/1994 9:30	100	CFU/100mL						
				11/29/1994 8:30	10000	CFU/100mL						
				1995 Fixed Station	1/23/1995 14:35	110						CFU/100mL	18% of grab sample results >576 cfu/100 mL
	2/21/1995 8:00				210	CFU/100mL						
	5/15/1995 14:30				1200	CFU/100mL						
	6/1/1995 14:30				300	CFU/100mL						
	6/29/1995 11:50				420	CFU/100mL						
	7/20/1995 14:40				100	CFU/100mL						
	8/24/1995 12:10				190	CFU/100mL						
	9/21/1995 9:30				110	CFU/100mL						
	10/19/1995 15:35				40	CFU/100mL						
	11/28/1995 14:25				170	CFU/100mL						
	12/14/1995 13:10				730	CFU/100mL						
	1/29/1996 13:10				570	CFU/100mL						
	2/21/1996 10:35				90	CFU/100mL						
1996 Fixed Station												
1996 Synoptic												

1996 Fixed Station
1997 Fixed Station
1998 Fixed Station
1999 Fixed Station
2000 Fixed Station
2001 W F White R Muncie to Madison Co Assessment
2001 Fixed Station
2001 W F White R Muncie to Madison Co Assessment
2001 Fixed Station
2001 Fixed Station

West Fork White River

WWU010-0001

2/22/1996 13:30	40	CFU/100mL	31% of grab sample results >576 cfu/100 mL; Two results >2400 cfu/100 mL.
4/3/1996 13:10	80	CFU/100mL	
5/2/1996 14:00	320	CFU/100mL	
5/30/1996 14:30	4000	CFU/100mL	
6/24/1996 14:30	300	CFU/100mL	
7/22/1996 14:30	5500	CFU/100mL	
8/26/1996 13:45	230	CFU/100mL	
9/23/1996 12:45	200	CFU/100mL	
10/15/1996 12:30	70	CFU/100mL	
11/6/1996 13:20	60	CFU/100mL	
12/2/1996 12:50	1800	CFU/100mL	
1/23/1997 12:50	3100	CFU/100mL	25% of grab sample results >576 cfu/100 mL
2/17/1997 12:50	1	CFU/100mL	
3/18/1997 12:10	200	CFU/100mL	
4/17/1997 12:00	100	CFU/100mL	
5/19/1997 13:15	700	CFU/100mL	
6/23/1997 13:25	830	CFU/100mL	
7/14/1997 13:15	310	CFU/100mL	
8/11/1997 12:45	110	CFU/100mL	
9/16/1997 13:25	300	CFU/100mL	
10/14/1997 13:10	320	CFU/100mL	
11/13/1997 13:25	30	CFU/100mL	
12/22/1997 13:20	80	CFU/100mL	
1/27/1998 13:10	30	CFU/100mL	
2/24/1998 13:40	50	CFU/100mL	
3/23/1998 13:00	310	CFU/100mL	
4/23/1998 9:35	80	CFU/100mL	
5/20/1998 10:00	80	CFU/100mL	
9/15/1998 10:30	230	CFU/100mL	
10/20/1998 10:20	160	CFU/100mL	
11/11/1998 10:00	350	CFU/100mL	
12/11/1998 10:00	100	CFU/100mL	
2/3/1999 10:20	1200	CFU/100mL	
3/19/1999 9:45	140	CFU/100mL	
5/27/1999 8:15	89	CFU/100mL	
6/23/1999 8:15	188	CFU/100mL	
7/21/1999 8:30	220	CFU/100mL	
8/26/1999 8:30	340	CFU/100mL	
9/21/1999 8:30	520	CFU/100mL	
10/21/1999 8:45	120	CFU/100mL	
11/23/1999 8:55	100	CFU/100mL	
1/20/2000 8:50	365	MPN/100mL	<10% of grab sample results >576 cfu/100 mL
2/25/2000 8:30	310	MPN/100mL	
3/30/2000 8:45	30	MPN/100mL	
4/20/2000 8:45	150	MPN/100mL	
5/25/2000 8:45	240	MPN/100mL	
6/21/2000 8:50	920	MPN/100mL	
7/20/2000 8:40	160	MPN/100mL	
8/30/2000 9:05	120	MPN/100mL	
9/20/2000 8:50	440	MPN/100mL	
11/21/2000 8:55	190	MPN/100mL	
12/22/2000 8:50	275	MPN/100mL	
4/23/2001 9:25	130	MPN/100mL	153.78
4/26/2001 8:55	37	MPN/100mL	
4/30/2001 9:15	250	MPN/100mL	
5/7/2001 9:20	100	MPN/100mL	
5/14/2001 9:10	110	MPN/100mL	
5/21/2001 8:45	1000	MPN/100mL	
1/23/2001 8:50	91	MPN/100mL	30% of grab sample results >576 cfu/100 mL
2/23/2001 8:55	73	MPN/100mL	
3/28/2001 9:15	65	MPN/100mL	
6/20/2001 9:00	210	MPN/100mL	
7/19/2001 8:50	1200	MPN/100mL	
8/29/2001 8:50	410	MPN/100mL	
9/21/2001 8:55	1300	MPN/100mL	
10/26/2001 8:55	2400	MPN/100mL	
11/21/2001 9:15	75	MPN/100mL	
12/21/2001 8:55	410	MPN/100mL	

INW011A_01

INW011C_T1008

Sites 51 and 52 are located on AUID INW011A_01. Historical results at site 52 indicate flucuating degrees of E. coli impairment from year to year. Most recent results from site 52 and results from site 51 indicate E. coli impairment persists, likely due to suburban and agricultural influences combined with a lack of riparian buffer.

2002 Fixed Station
2003 Fixed Station
2004 Fixed Station
2005 Fixed Station
2006 Fixed Station
2007 Fixed Station Monitoring
2008 Fixed Station Monitoring

1/25/2002 8:45	140	MPN/100mL	No grab sample results >576 cfu/100 mL
2/22/2002 9:15	260	MPN/100mL	
3/22/2002 8:30	80	MPN/100mL	
4/19/2002 8:30	310	MPN/100mL	
5/23/2002 8:30	68	MPN/100mL	
6/20/2002 8:30	160	MPN/100mL	
7/25/2002 8:30	80	MPN/100mL	
8/29/2002 8:30	54	MPN/100mL	
9/25/2002 8:45	160	MPN/100mL	
10/17/2002 9:15	280	MPN/100mL	
11/26/2002 9:30	70	MPN/100mL	
3/27/2003 8:45	250	MPN/100mL	
4/23/2003 8:45	46	MPN/100mL	
5/29/2003 8:35	120	MPN/100mL	
6/25/2003 8:20	150	MPN/100mL	
8/27/2003 8:36	160	MPN/100mL	
9/24/2003 12:10	690	MPN/100mL	
10/30/2003 8:30	65	MPN/100mL	
11/25/2003 11:20	1600	MPN/100mL	
12/23/2003 12:30	1700	MPN/100mL	
1/23/2004 11:55	68	MPN/100mL	17% of grab sample results >576 cfu/100 mL
2/19/2004 10:50	690	MPN/100mL	
3/16/2004 10:40	2419.2	MPN/100mL	
4/29/2004 11:30	35	MPN/100mL	
5/27/2004 11:00	110	MPN/100mL	
6/24/2004 11:00	200	MPN/100mL	
7/28/2004 11:15	120	MPN/100mL	
8/20/2004 10:50	650	MPN/100mL	
9/22/2004 11:35	120	MPN/100mL	
10/21/2004 11:20	82	MPN/100mL	
11/19/2004 11:25	100	MPN/100mL	
12/16/2004 10:55	190	MPN/100mL	
1/26/2005 11:05	650	MPN/100mL	17% of grab sample results >576 cfu/100 mL
2/18/2005 11:05	35	MPN/100mL	
3/30/2005 10:35	200	MPN/100mL	
4/19/2005 10:45	150	MPN/100mL	
5/26/2005 10:30	96	MPN/100mL	
6/29/2005 10:35	2400	MPN/100mL	
7/27/2005 11:15	30	MPN/100mL	
8/24/2005 12:00	74	MPN/100mL	
9/21/2005 10:45	370	MPN/100mL	
10/19/2005 11:10	120	MPN/100mL	
11/22/2005 10:45	290	MPN/100mL	
12/22/2005 10:35	60	MPN/100mL	
1/20/2006 10:55	170	MPN/100mL	No grab sample results >576 cfu/100 mL
2/15/2006 10:35	170	MPN/100mL	
3/30/2006 10:35	28	MPN/100mL	
4/20/2006 10:30	180	MPN/100mL	
5/24/2006 10:45	93	MPN/100mL	
6/28/2006 10:45	290	MPN/100mL	
7/26/2006 10:25	84	MPN/100mL	
8/23/2006 10:35	140	MPN/100mL	
9/21/2006 10:20	120	MPN/100mL	
10/25/2006 10:55	150	MPN/100mL	
11/29/2006 10:45	65	MPN/100mL	
12/21/2006 10:20	170	MPN/100mL	
1/24/2007 10:25	140	MPN/100mL	No grab sample results >576 cfu/100 mL
3/28/2007 11:05	130	MPN/100mL	
5/22/2007 10:41	130	MPN/100mL	
6/20/2007 10:15	140	MPN/100mL	
7/18/2007 10:30	56	MPN/100mL	
8/23/2007 10:40	170	MPN/100mL	
9/28/2007 11:15	100	MPN/100mL	
10/25/2007 11:15	130	MPN/100mL	
11/20/2007 11:05	62	MPN/100mL	
12/20/2007 10:45	490	MPN/100mL	
2/20/2008 10:45	820	MPN/100mL	20% of grab sample results >576 cfu/100 mL
3/26/2008 10:55	340	MPN/100mL	
4/23/2008 11:05	99	MPN/100mL	
5/22/2008 10:10	91	MPN/100mL	
6/25/2008 10:20	6	MPN/100mL	
7/24/2008 10:50	210	MPN/100mL	
8/19/2008 10:50	290	MPN/100mL	
9/24/2008 11:10	580	MPN/100mL	
10/22/2008 11:15	180	MPN/100mL	
11/20/2008 11:13	200	MPN/100mL	

	2009 Fixed Station Monitoring			2/25/2009 10:50	47	MPN/100mL	<10% of grab sample results >576 cfu/100 mL				
	3/18/2009 11:10			45	MPN/100mL						
4/24/2009 10:45	68	MPN/100mL									
5/20/2009 11:10	120	MPN/100mL									
6/30/2009 10:45	190	MPN/100mL									
7/14/2009 11:10	110	MPN/100mL									
8/19/2009 10:00	230	MPN/100mL									
9/30/2009 10:45	160	MPN/100mL									
10/14/2009 10:55	110	MPN/100mL									
11/24/2009 10:50	24	MPN/100mL									
12/16/2009 11:10	1100	MPN/100mL									
2010 Fixed Station Monitoring	1/27/2010 11:15	580	MPN/100mL	27% of grab sample results >576 cfu/100 mL							
	2/18/2010 10:50	23	MPN/100mL								
	3/24/2010 11:00	410	MPN/100mL								
	4/21/2010 9:55	64	MPN/100mL								
	5/12/2010 10:20	1300	MPN/100mL								
	6/16/2010 10:15	4300	MPN/100mL								
	7/14/2010 10:20	330	MPN/100mL								
	8/18/2010 9:55	210	MPN/100mL								
	9/22/2010 9:45	550	MPN/100mL								
	10/19/2010 10:30	200	MPN/100mL								
	11/16/2010 10:30	160	MPN/100mL								
53	2006 TMDL West Fork White River	West Fork White River	WWU010-0042	7/18/2006 8:30	161.6	MPN/100mL	175.57	INW011B_01	INW011D_T1009	Sites 53 and 54 are located on AUID INW011B_01. This AUID is slightly impaired for <i>E. coli</i> , likely due to suburban and agricultural influences combined with a lack of riparian buffer.	NS
				7/26/2006 8:40	185	MPN/100mL					
				8/1/2006 9:25	162.4	MPN/100mL					
				8/8/2006 9:10	152.9	MPN/100mL					
				8/15/2006 7:40	224.7	MPN/100mL					
54	2001 W F White R Muncie to Madison Co Assessment	West Fork White River	WWU010-0019	4/23/2001 9:45	200	MPN/100mL	219.15	INW011B_01	INW011D_T1009	Sites 53 and 54 are located on AUID INW011B_01. This AUID is slightly impaired for <i>E. coli</i> , likely due to suburban and agricultural influences combined with a lack of riparian buffer.	NS
				4/23/2001 9:45	130	MPN/100mL					
				4/30/2001 9:37	110	MPN/100mL					
				5/7/2001 9:45	290	MPN/100mL					
				5/7/2001 9:45	210	MPN/100mL					
				5/14/2001 9:35	170	MPN/100mL					
55	2001 W F White R Muncie to Madison Co Assessment	Muncie Creek	WWU010-0020	5/21/2001 9:25	820	MPN/100mL	1357.05	INW011B_T1001	INW011D_00	Sites 55 and 56 are located on AUID INW011B_T1001. Results indicate moderate to high impairment for <i>E. coli</i> , likely due to suburban and agricultural influences combined with a lack of riparian buffer.	NS
				4/23/2001 9:52	2000	MPN/100mL					
				4/30/2001 9:45	820	MPN/100mL					
				5/7/2001 9:55	2000	MPN/100mL					
				5/14/2001 9:45	2419.2	MPN/100mL					
	2006 TMDL West Fork White River			5/21/2001 9:30	580	MPN/100mL	1337.32				
				7/18/2006 8:20	1732.9	MPN/100mL					
				7/26/2006 8:30	1413.6	MPN/100mL					
				8/1/2006 9:15	1732.9	MPN/100mL					
				8/8/2006 9:00	648.8	MPN/100mL					
56	2006 TMDL West Fork White River	Muncie Creek	WWU010-0041	8/15/2006 7:35	1553.1	MPN/100mL	303.62	INW011B_T1001	INW011D_00	Sites 55 and 56 are located on AUID INW011B_T1001. Results indicate moderate to high impairment for <i>E. coli</i> , likely due to suburban and agricultural influences combined with a lack of riparian buffer.	NS
				7/18/2006 8:00	1203.3	MPN/100mL					
				7/26/2006 8:15	488.4	MPN/100mL					
				8/1/2006 9:00	231	MPN/100mL					
				8/8/2006 8:45	76.6	MPN/100mL					
				8/15/2006 7:20	248.1	MPN/100mL					

Attachment D

NPDES Information for Facilities in the White River Headwaters Watershed

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PERMITTEE NAME/ADDRESS

NAME **FARMLAND MUNICIPAL STP**
 ADDRESS **FARMLAND TOWN HALL**
PO BOX 336
FARMLAND IN 47340

FACILITY **FARMLAND STP**
 LOCATION **FARMLAND**
 ATTN. **MR DUANE L COX**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)**

 Revised ☐

IN0021512			001 A		
PERMIT NUMBER			PERMITTED FEATURE		
MONITORING PERIOD					
MO	DAY	YEAR	MO	DAY	YEAR
FROM 01/01/08			TO 01/31/08		

Form Approved
 OMB No 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

 *** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.0	*****	8.7	SU		1/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	61.1	197	lb/d	*****	23.4	41	mg/L	1	1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	6.24	16.3	lb/d	*****	3.62	5.2	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	245	674	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	26.3	57.6	lb/d	*****	13.0	16	mg/L	1	1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		79%	*****	*****	%	1	1/7	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						
Flow, total	SAMPLE MEASUREMENT	*****	7.63	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

**NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
 AUTHORIZED AGENT**

TELEPHONE

DATE

Bill Necessary
 TYPED OR PRINTED

Bill Necessary
 SIGNATURE

765 468-6701
 AREA CODE AND NO

02 08 08
 MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to
 Indiana Department of Environmental Management
 Office of Water Quality, Mail Code 65-42
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W W T P		Permit Number IN0021512	
Certified Operator Name Kenny Marquis		Class 1-sp	Expiration Date 6/30/2009
Month # 1	January	Year 2008	E-mail address

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge					
Day of the Month	Day of the Week	Precip - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D O (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)		
1	Tue							0.188						0.086															
2	Wed	2	6'4"					0.189	7.9	82	66		15	0.081	8.7	14	23		4.4	10.0							6'4"		
3	Thu							0.149						0.103															
4	Fri							0.149						0.122															
5	Sat							0.141						0.138															
6	Sun							0.28						0.144															
7	Mon	0.1						0.227						0.129															
8	Tue	1.9						0.225						0.177															
9	Wed		6'4"					0.842	7.7	9	47		2.8	0.317	8.5	16	25		1.1	10.3							6'4"		
10	Thu							1.056						0.465															
11	Fri							0.068						0.624															
12	Sat							0.245						0.584															
13	Sun							0.254						0.674															
14	Mon							0.238						0.588															
15	Tue							0.196						0.6															
16	Wed		6'4"					0.159	7.9	9	23		15	0.576	8.5	12	41		3.4	12.6							6'4"		
17	Thu							0.162						0.649															
18	Fri							0.104						0.324															
19	Sat							0.134						0.068															
20	Sun							0.135						0.081															
21	Mon							0.085						0.068															
22	Tue	1						0.098						0.08															
23	Wed		6'0"					0.114	7.8	140	73		28	0.105	8.5	11	14		4	14.3							6'0"		
24	Thu							0.104						0.087															
25	Fri							0.088						0.093															
26	Sat							0.11						0.109															
27	Sun							0.117						0.103															
28	Mon							0.1						0.11															
29	Tue							0.243						0.118															
30	Wed		5'8"					0.212	7.8	75	40		19	0.127	8.0	12	14		5.2	11.7							5'8"		
31	Thu							0.181						0.135															
Average		1.25						0.212677		63	50		16.0	0.245903		13.0	23.4		3.62	11.8									
Maximum		2						1.056	7.9	140	73		28	0.674	8.7	16	41		5.2	14.3									
Minimum								0.068	7.7	9	23		2.8	0.066	8.0	11	14		1.1	10									
Totals		5		0	0	0	0	6.593																					
Certify under penalty of law that this document and all attachments were prepared under																													

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis
 Signature of Certified Operator
 Phone Number **765-468-6701**

Date

Bob Murray
 Signature of Officer, Principal Executive or Authorized Agent

Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of	Year
Farmland W W T P	IN0021512	January	2008

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									New magnetic influent meter installed by B L Anderson to get better and more consistent influent readings Considerable amount of algae in ponds
2	129 33	104 10		23 66	9 46323	15 5487		2 97418	
3									
4									
5									
6									
7									
8									
9	63 24	330 25		19 67	42 3258	66 1341		2 9099	
10									
11									
12									
13									
14									
15									
16	11 94	30 52		19 90	57 6806	197 076		16 3428	
17									
18									
19									
20									
21									
22									
23	133 19	69 45		26 64	9 63848	12 2672		3 5049	
24									
25									
26									
27									
28									
29									
30	132 69	70 77		33 61	12 7178	14 8374		5 51104	
31									
Avg	94 08	121 01		24 70	26 3652	61 1722		6 24857	
Max	133 19	330 25		33 61	57 6806	197 076		16 3428	
Min	11 94	30 52		19 67	9 46323	12 2672		2 9099	
Removal Rates:									Monthly Totals:
Overall BOD removal 79%									Influent flow (mg) 6 593
Overall TSS removal 53%									Effluent flow (mg) 7 623

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

ATTN: MR DUANE L COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Form Approved

OMB No 2040-004

Approval Expires 05-31-98

Revised



IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 02/01/08		TO 02/29/08	



For any questions call Dan Knowles at 317-232-0019

 *** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.0	*****	8.3	SU		1/7	Grab
00400 1 0 0 Effluent Gross	PERMIT REQUIREMENT				6 DAILY MN		9 DAILY MX			Weekly	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	59.6	114.5	lb/d	*****	23	29	mg/L		1/7	Grab
00530 1 0 0 Effluent Gross	PERMIT REQUIREMENT	96.4 MO AVG	144.6 MX WK AV			70 MO AVG	105 MX WK AV			Weekly	GRAB
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	13.6	26.0	lb/d	*****	5.1	5.3	mg/L		1/7	Grab
00610 1 0 0 Effluent Gross	PERMIT REQUIREMENT	Report MO AVG	Report MX WK AV			Report MO AVG	Report MX WK AV			Weekly	GRAB
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	368	777	Mgal/d	*****	*****	*****				
50050 1 0 0 Effluent Gross	PERMIT REQUIREMENT	Report MO AVG	Report MX WK AV							Five Per Week	TOTALZ
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	422	67.6	lb/d	*****	16.8	20	mg/L	2	1/7	Grab
80082 1 0 0 Effluent Gross	PERMIT REQUIREMENT	34.4 MO AVG	55.1 MX WK AV			25 MO AVG	40 MX WK AV			Weekly	GRAB
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		71%	*****	*****	%	1	1/7	Grab
80091 K 0 0 Percent Removal	PERMIT REQUIREMENT				85 MO AV MN					Weekly	GRAB
Flow, total	SAMPLE MEASUREMENT	*****	10.6	Mgal/mo	*****	*****	*****				
82220 1 0 0 Effluent Gross	PERMIT REQUIREMENT		Report MO TOTAL							Monthly	RCOTOT

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
TELEPHONE
DATE

 Bill Necessary
TYPED OR PRINTED

 Bill Necessary
SIGNATURE

 765 488-6701
AREA CODE AND NO

 103 03 08
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to
 Indiana Department of Environmental Management
 Office of Water Quality, Mail Code 65-42
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W W T P		Permit Number IN0021512	
Certified Operator Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month # 2	February	Year 2008	E-mail address

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge					
Day of the Month	Day of the Week	Precip - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D O (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)		
1	Fri							0.138						0.138															
2	Sat							0.192						0.173															
3	Sun	0.3						0.204						0.152															
4	Mon	0.6						0.388						0.185															
5	Tue	1.8						0.619						0.251															
6	Wed	1.5	6'6"					0.602	7.7	17	14		0.68	0.468	8.3	15	19		4.2	11.5							6'6"		
7	Thu							0.89						0.644											1.8				
8	Fri							0.756						0.665															
9	Sat							0.385						0.624											2.5				
10	Sun							0.316						0.648															
11	Mon							0.236						0.257															
12	Tue							0.204						0.572															
13	Wed		6'6"					0.16	7.8	106	34		18	0.624	8.0	13	22		5	12.2							6'6"		
14	Thu							0.169						0.777															
15	Fri							0.113						0.575															
16	Sat	0.1						0.113						0.558															
17	Sun	0.3						0.425						0.695															
18	Mon	0.4						0.42						0.507															
19	Tue							0.465						0.621															
20	Wed	3.5	6'6"					0.162	7.8	58	48		13	0.047	8.1	19	29		5.7	12.7							6'6"		
21	Thu							0.176						0.08															
22	Fri	1						0.174						0.13															
23	Sat	4						0.157						0.158															
24	Sun							0.157						0.144															
25	Mon	1						0.167						0.161															
26	Tue	1						0.256						0.178															
27	Wed	1	6'6"					0.408	7.9	54	21		8	0.212	8.0	20	22		5.8	13.0							6'6"		
28	Thu							0.314						0.254															
29	Fri	1						0.194						0.201															
Average		1.25						0.30931		59	29		9.9	0.368862		16.8	23.0		5.125	12.4									
Maximum		4						0.89	7.9	106	48		18	0.777	8.3	20	29		5.7	13									
Minimum								0.113	7.7	17	14		0.68	0.047	8.0	13	19		4.2	11.5									
Totals		17.5		0	0	0	0	8.97																					
I certify under penalty of law that this document and all attachments were prepared under																													

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 3-3-08
 Signature of Certified Operator Date
 Phone Number 765-468-6701

Bill Neumann 3-3-08
 Signature of Officer, Principal Executive, or Authorized Agent Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of	Year
Farmland W W T P	IN0021512	February	2008

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below	
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)		
1									large amounts of snow allowing dilution	
2										
3										
4										
5										
6	85 40	70 33		3 42	58 3316	73 8866		16 3328		
7										
8										
9										
10										
11										
12										
13	141 53	45 40		24 03	67 6946	114 56		26 0364		
14										
15										
16										
17										
18										
19										
20	78 41	64 89		17 57	7 45209	11 3742		2 23563		
21										
22										
23										
24										
25										
26										
27	183 86	71 50		27 24	35 3828	38 9211		9 90718		
28										
29										
Avg	122 30	63 03		18 07	42 2153	59 6855		13 628		
Max	183 86	71 50		27 24	67 6946	114 56		26 0364		
Min	78 41	45 40		3 42	7 45209	11 3742		2 23563		
Removal Rates:									Overall BOD removal 71%	Monthly Totals:
									Overall TSS removal 21%	Influent flow (mg) 8 97
										Effluent flow (mg) 10 697

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

[Signature]
 (SIGNATURE OF CERTIFIED OPERATOR)

3-3-08
 (DATE)

[Signature]

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

3-8-08
 (DATE)

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

ATTN: MR DUANE L COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

 Revised ☐

IN0021512			001 A		
PERMIT NUMBER			PERMITTED FEATURE		
MONITORING PERIOD					
MO	DAY	YEAR	MO	DAY	YEAR
FROM 03/01/08			TO 03/31/08		

 Form Approved
OMB No 2040-004
Approval Expires 05-31-98


For any questions call Dan Knowles at 317-232-0019

 *** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.3	*****	8.9	SU	0	5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	214.6	286.8	lb/d	*****	39.3	52	mg/L	5	1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	21.5	25.4	lb/d	*****	4.0	4.8	mg/L	0	1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	614	715	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	102.5	115.8	lb/d	*****	18.8	21	mg/L	5	1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		36	*****	*****	%	1	1/7	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						
Flow, total	SAMPLE MEASUREMENT	*****	19.0	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
TELEPHONE
DATE

 B: Necessary
TYPED OR PRINTED

 Bill Necessary
SIGNATURE

 765 468-6701
AREA CODE AND NO

 04 01 08
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/08)

Page 1 of 2

Name of Facility Farmland W W T P		Permit Number IN0021512	
Certified Operator Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month # 3	March	Year 2008	E-mail address

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("X" if occurred)	Collection System ("X" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D O (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Sat							0.371						0.229													
2	Sun							0.43						0.28													
3	Mon	1						0.638						0.293													
4	Tue	1						0.731					1.4	0.581					4.8								
5	Wed		8'6"					0.837	8.2	20	24			0.639	8.4	18	29			10.2							8'6"
6	Thu							0.761						0.644													
7	Fri							0.523						0.664													
8	Sat	6						0.328						0.589													
9	Sun							0.295						0.688													
10	Mon							0.28						0.688													
11	Tue							0.537						0.609													
12	Wed		8'6"					0.663	7.7	24	13		4.8	0.668	8.5	20	32		4.2	12.0							8'6"
13	Thu	0.1						0.695						0.657													
14	Fri	0.2						0.657						0.668													
15	Sat	0.1						0.638						0.648													
16	Sun	0.1						0.428						0.68													
17	Mon							0.316						0.654													
18	Tue	0.3						0.32				4.1		0.663					4.6								
19	Wed	2	8'6"					0.784	7.8	31	28			0.65	8.3	16	44			10.8							8'6"
20	Thu	0.5						0.893						0.678													
21	Fri							0.785						0.682													
22	Sat	0.1						0.404						0.633													
23	Sun							0.321						0.67													
24	Mon							0.217					8.3	0.673					2.5								
25	Tue							0.18						0.653													
26	Wed		8'6"					0.259	7.8	43	20			0.661	8.9	21	52			13.9							8'6"
27	Thu	0.2						0.168						0.636													
28	Fri	1.5						0.524						0.656													
29	Sat	0.1						0.667						0.715													
30	Sun							0.321						0.656													
31	Mon	0.2						0.249						0.572													
Average		0.8933						0.490839		30	21		4.7	0.614677		18.8	39.3		4.025	11.7							
Maximum		6						0.893	8.2	43	28		8.3	0.715	8.9	21	52		4.8	13.9							
Minimum								0.166	7.6	20	13		1.4	0.229	8.3	16	29		2.5	10.2							
Totals		13.4		0	0	0	0	15.216	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 4/3/08
Signature of Certified Operator Date
Phone Number 765-468-6701

Brian Neumann 4-7-08
Signature of Officer Principal Executive or Authorized Agent Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of	Year
Farmland W W T P	IN0021512	March	2008

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									large amounts of snow allowing dilution
2									
3									
4				8 54				23 2725	
5	139 70	187 63			95 9842	154 641			
6									
7									
8									
9									
10									
11									
12	132 79	71 93		26 56	111 489	178 383		23 4127	
13									
14									
15									
16									
17									
18				10 95				25 4506	
19	202 82	183 19			86 788	238 667			
20									
21									
22									
23									
24				15 03				14 0405	
25									
26	92 94	43 23			115 837	286 834			
27									
28									
29									
30									
31									
Avg	142 06	116 49		15 27	102 525	214 631		21 5441	
Max	202 82	183 19		26 56	115 837	286 834		25 4506	
Min	92 94	43 23		8 54	86 788	154 641		14 0405	
Removal Rates:									Monthly Totals:
Overall BOD removal 36%									Influent flow (mg) 15 216
Overall TSS removal -85%									Effluent flow (mg) 19 055

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Genny Marquis
 (SIGNATURE OF CERTIFIED OPERATOR)

4-3-08
 (DATE)

Brie Macoskey
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

4-7-08
 (DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340
FACILITY FARMLAND STP
LOCATION FARMLAND
ATTN: MR DUANE L COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Form Approved
 OMB No 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

Revised ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 04/01/08		TO 04/30/08	

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.0	*****	9.0	SU		5/7	Grab
00400 1 0 0 Effluent Gross	PERMIT REQUIREMENT				6 DAILY MN		9 DAILY MX			Weekly	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	76.3	254.7	lb/d	*****	29.2	48	mg/L		1/7	Grab
00530 1 0 0 Effluent Gross	PERMIT REQUIREMENT	96.4 MO AVG	144 6 MX WK AV			70 MO AVG	105 MX WK AV			Weekly	GRAB
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	6.5	16.6	lb/d	*****	2.11	3.3	mg/L		1/7	Grab
00610 1 0 0 Effluent Gross	PERMIT REQUIREMENT	Report MO AVG	Report MX WK AV			Report MO AVG	Report MX WK AV			Weekly	GRAB
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	1277	1652	Mgal/d	*****	*****	*****				
50050 1 0 0 Effluent Gross	PERMIT REQUIREMENT	Report MO AVG	Report MX WK AV							Five Per Week	TOTALZ
E coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	188	1050	CFU/10 0mL		1/7	Grab
51041 1 0 0 Effluent Gross	PERMIT REQUIREMENT					Report MO GEO	Report DAILY MX			Weekly	GRAB
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	38.7	95.5	lb/d	*****	17.4	32	mg/L		1/7	Grab
80082 1 0 0 Effluent Gross	PERMIT REQUIREMENT	34.4 MO AVG	55 1 MX WK AV			25 MO AVG	40 MX WK AV			Weekly	GRAB
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		79%	*****	*****	%			
80091 K 0 0 Percent Removal	PERMIT REQUIREMENT				85 MO AV MN					Weekly	GRAB

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Bill Necessary
 TYPED OR PRINTED

Bill Necessary
 SIGNATURE

765 468-6701
 AREA CODE AND NO

05 06 08
 MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
 ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340

FACILITY FARMLAND STP
 LOCATION FARMLAND
 ATTN: MR DUANE L COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

Revised. ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 04/01/08		TO 04/30/08	

Form Approved
 OMB No 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	8.61	Mgal/mo	*****	*****	*****				
82220 1 0 0 Effluent Gross	PERMIT REQUIREMENT		Report MO TOTAL							Monthly	RCOTOT

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Bill Necessary
 TYPED OR PRINTED

Bill Necessary
 SIGNATURE

765 468-6701
 AREA CODE AND NO

05 06 08
 MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant

(Version 12/06)

Page 1 of 2

Name of Facility Farmland W W T P		Permit Number IN0021512	
Certified Operator Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month # 4	April	Year 2008	E-mail address

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge				
Day of the Month	Day of the Week	Precip - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("X" if occurred)	Collection System ("X" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D O (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E Coli colony/100 ml	Upstream Gage Reading (in)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)	
1	Tue	0.8						0.424					2.8	0.644					3.1				1050					
2	Wed		6.6					0.475	7.8	30	19			0.636	9.0	18	48			10.7								6.6
3	Thu							0.304						0.652														
4	Fri	1.1						0.316						0.107														
5	Sat	0.2						0.658						0.19														
6	Sun							0.388						0.244														
7	Mon							0.293						0.269														
8	Tue							0.218						0.271														
9	Wed	0.1	6.6					0.179	7.8	75	48		18	0.258	8.7	9	5		3.1	8.0			580					6.6
10	Thu							0.16						0.282														
11	Fri	2.1						0.33						0.272														
12	Sat	0.1						0.612						0.35														
13	Sun							0.342						0.317														
14	Mon							0.258						0.318														
15	Tue							0.208						0.31														
16	Wed		6.6					0.175	7.9	85	53		18	0.295	8.0	8	8		3.3	7.7			190					6.6
17	Thu							0.153						0.282														
18	Fri							0.136						0.266														
19	Sat							0.119						0.244														
20	Sun	0.2						0.132						0.237														
21	Mon	0.1						0.132						0.207														
22	Tue							0.118						0.185														
23	Wed		6					0.109	7.9	126	84		25	0.139	9.0	32	45		0.51	10.9			20					6
24	Thu							0.108						0.161														
25	Fri	0.2						0.106						0.18														
26	Sat							0.102						0.191														
27	Sun							0.109						0.151														
28	Mon							0.098						0.13														
29	Tue	0.5						0.129						0.141														
30	Wed		6					0.108	7.9	93	72		33	0.133	9.0	20	40		0.56	7.4			100					6
		0.2						0.249						0.572														
Average		0.5091	6.38					0.233613		82	51		19.4	0.277808		17.4	29.2		2.114	8.5			188					6.38
Maximum		2.1	6.6					0.658	7.9	126	72		33	0.652	9.0	32	48		3.3	10.9			1050					6.6
Minimum			6					0.098	7.8	30	19		2.8	0.107	8.0	8	5		0.51	6			20					6
Totals		5.6		0	0	0	0	7.242	I certify under penalty of law that this document and all attachments were prepared under																			

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Bill Necessary
Signature of Officer, Principal Executive, or Authorized Agent

Date

Kenny Marquis
Signature of Certified Operator
Phone Number 765-468-6701

Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of	Year
Farmland W W T P	IN0021512	April	2008

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1				9 91				18 66	spring turnover in both lagoons, heavy debris on surface from turnover
2	118 82	75 31			95 5336	254 758			
3									
4									
5									
6									
7									
8									
9	112 03	68 71		26 89	19 3771	10 7651		6 67433	
10									
11									
12									
13									
14									
15									
16	124 13	77 40		26 29	19 6942	19 6942		8 12386	
17									
18									
19									
20									
21									
22									
23	114 61	58 21		22 74	37 1186	52 198		0 59158	
24									
25									
26									
27									
28									
29									
30	82 27	63 69		29 19	22 1977	44 3954		0 62154	
Avg	110 39	68 67		23 00	38 7842	76 3618		6 53425	
Max	124 13	77 40		29 19	95 5336	254 756		16 66	
Min	82 27	58 21		9 91	19 3771	10 7651		0 59158	

Removal Rates:

Overall BOD removal 79%

Overall TSS removal 43%

Monthly Totals:

Influent flow (mg) 7 242

Effluent flow (mg) 8 612

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(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

5-13-08

5-13-08

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
ADDRESS FARM AND TOWN HALL
PO BOX 336
FARM AND IN 47340

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised ☐

IN0021512 001 A
PERMIT NUMBER PERMITTED FEATURE
MONITORING PERIOD

Form Approved
OMB No. 2040-004
Approval Expires 05-31-95



For any questions call Dan Knowles at 317-232-0019

FACILITY FARMLAND STP
LOCATION FARMLAND
ATTN MR DUANE L COX

FROM 05/01/08 TO 05/31/08

*** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.9	*****	9.0	SU	<input checked="" type="checkbox"/>	1/1	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	150.5	267.9	lb/d	*****	67.5	84	mg/L	<input checked="" type="checkbox"/>	1/1	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	.61	1.7	lb/d	*****	.228	.47	mg/L	<input checked="" type="checkbox"/>	1/1	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	1247	1493	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	133	1260	CFU/100mL	<input checked="" type="checkbox"/>	1/1	Grab
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	46.6	85.6	lb/d	*****	21.5	23	mg/L	<input checked="" type="checkbox"/>	1/1	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		79%	*****	*****	%			
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

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NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Bill Necessary
TYPED OR PRINTED

Bill Necessary
SIGNATURE

765 468 670 06 04 08
AREA CODE AND NO MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
 ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340
 FACILITY FARMLAND STP
 LOCATION FARMLAND
 ATTN MR DUANE L COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

Revised ☐

IN0021512	001 A
PERMIT NUMBER	PERMITTED FEATURE
MONITORING PERIOD	
MO DAY YEAR	MO DAY YEAR
FROM 05/01/08	TO 05/31/08

Form Approved
 OMB No 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	7.67	Mgal/ mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report MO TOTAL							Monthly	RCOTOT
Effluent Gross											

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

B. H. Necessary

B. H. Necessary

765 468-6701

06 04 08

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant

(Version 12/06)

Page 1 of 2

Name of Facility Farmland W W T P		Permit Number IN0021512	
Certified Operator Name Kenny Marquis		Class 1-sp	Certificate Number 12585
Month # 5		May	Year 2008
E-mail address			

General Information						Bypasses/ Overflows		Raw Wastewater					Final Effluent										Controlled Discharge				
Day of the Month	Day of the Week	Precip - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("X" if occurred)	Collection System ("X" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D O (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E Coli colony/100 ml	Upstream Gage Reading (in)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Thu							0.107						0.135													
2	Fri							0.094						0.128													
3	Sat	1.1						0.227						0.188													
4	Sun							0.072						0.089													
5	Mon							0.13						0.137													
6	Tue							0.108						0.132													
7	Wed		8'0					0.102	7.8	137	81		23	0.127	9.0	23	60		0.18	9.0			40				8'0
8	Thu	2.7						0.385						0.157													
9	Fri	1.5						0.685						0.209													
10	Sat							0.54						0.282													
11	Sun	0.8						0.339						0.302													
12	Mon	0.6						0.708						0.428													
13	Tue							0.38						0.467													
14	Wed	1.1	8'6					0.254	7.8	88	70		7.1	0.448	9.0	23	72		0.47	10.3			1260				8'6
15	Thu							0.527						0.407													
16	Fri							0.32						0.493													
17	Sat							0.228						0.378													
18	Sun	0.4						0.204						0.335													
19	Mon							0.201						0.325													
20	Tue	0.1						0.18						0.309													
21	Wed		8'6					0.141	8.0	110	59		22	0.274	8.9	22	84		0.15	11.1			30				8'6
22	Thu							0.127						0.259													
23	Fri							0.117						0.239													
24	Sat							0.115						0.226													
25	Sun							0.114						0.196													
26	Mon							0.098						0.189													
27	Tue							0.119						0.151													
28	Wed	0.2	8'0					0.101	8.1	104	57		28	0.174	9.0	18	54		0.11	6.3			210				8
29	Thu							0.089						0.169													
30	Fri							0.094						0.157													
31	Sat	0.2						0.087						0.155													
Average		0.87						0.220613		105	67		20.0	0.247452		21.5	67.5		0.228	9.2			133				6
Maximum		2.7						0.706	8.1	137	81		28	0.493	9.0	23	84		0.47	11.1			1260				6
Minimum								0.072	7.8	68	57		7.1	0.089	8.9	18	54		0.11	6.3			30				6
Totals		8.7		0	0	0	0	6.839	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 6-10-08
Signature of Certified Operator
Date
Phone Number 765-468-6701

Bill Necessary 6-16-08
Signature of Officer, Principal Executive or Authorized Agent
Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of	Year
Farmland W W T P	IN0021512	May	2008

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									algae bloom in both lagoons, heavy debris on surface from turnover
2									
3									
4									
5									
6									
7	118 61	68 95		19 58	24 3757	63 5889		0 19077	
8									
9									
10									
11									
12									
13									
14	144 13	148 37		15 05	85 603	267 975		1 74928	
15									
16									
17									
18									
19									
20									
21	129 43	69 42		25 89	50 3037	192 069		0 34298	
22									
23									
24									
25									
26									
27									
28	87 66	48 04		23 60	26 1365	78 4096		0 15972	
29									
30									
31									
Avg	119 46	83 70		21 03	46 6047	150 51		0 61069	
Max	144 13	148 37		25 89	85 603	267 975		1 74928	
Min	87 66	48 04		15 05	24 3757	63 5889		0 15972	
Removal Rates:									Monthly Totals:
Overall BOD removal 79%									Influent flow (mg) 6 839
Overall TSS removal -1%									Effluent flow (mg) 7 671

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

16-10-08

6-16-08

PERMIT FEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
ADDRESS FARMLAND TOWN HALL
PO BOX 336
FARMLAND IN 47340

FACILITY FARMLAND STP
LOCATION FARMLAND
ATTN: MR DUANE L COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Form Approved
OMB No 2040-004
Approval Expires 05-31-98

 Revised: ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 06/01/08		TO 06/30/08	



For any questions call Dan Knowles at 317-232-0019

 *** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.8	*****	9.0	SU	0	1/7	Grab
00400 1 0 0 Effluent Gross	PERMIT REQUIREMENT				6 DAILY MN		9 DAILY MX			Weekly	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	123	221	lb/d	*****	55.5	71	mg/L	2	1/7	Grab
00530 1 0 0 Effluent Gross	PERMIT REQUIREMENT	96.4 MO AVG	144.6 MX WK AV			70 MO AVG	105 MX WK AV			Weekly	GRAB
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	1.3	2.5	lb/d	*****	.638	1.3	mg/L	0	1/7	Grab
00610 1 0 0 Effluent Gross	PERMIT REQUIREMENT	Report MO AVG	Report MX WK AV			Report MO AVG	Report MX WK AV			Weekly	GRAB
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	1253	1574	Mgal/d	*****	*****	*****				
50050 1 0 0 Effluent Gross	PERMIT REQUIREMENT	Report MO AVG	Report MX WK AV							Five Per Week	TOTALZ
E coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	177	1350	CFU/10 0mL	0	1/7	Grab
51041 1 0 0 Effluent Gross	PERMIT REQUIREMENT					Report MO GEO	Report DAILY MX			Weekly	GRAB
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	56.3	78.3	lb/d	*****	28.8	53	mg/L	4	1/7	Grab
80082 1 0 0 Effluent Gross	PERMIT REQUIREMENT	34.4 MO AVG	55.1 MX WK AV			25 MO AVG	40 MX WK AV			Weekly	GRAB
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		61%	*****	*****	%			
80091 K 0 0 Percent Removal	PERMIT REQUIREMENT				85 MO AV MN					Weekly	GRAB

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

**NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT**

TELEPHONE
DATE

Bill Necessary
TYPED OR PRINTED

Bill Necessary
SIGNATURE

765 468-6701
AREA CODE AND NO

07 02 08
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
 ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340
 FACILITY FARMLAND STP
 LOCATION FARMLAND
 ATTN: MR DUANE L COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

Revised. ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 06/01/08		TO 06/30/08	

Form Approved
 OMB No 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	7.85	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report MO TOTAL							Monthly	RCOTOT
Effluent Gross											

I certify, under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Bill Necessary	Bill Necessary	7654681701	07	02	08
TYPED OR PRINTED	SIGNATURE	AREA CODE AND NO	MO	DAY	YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W W T P		Permit Number IN0021512	
Certified Operator Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month # 6	June	Year 2008	E-mail address

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("X" if occurred)	Collection System ("X" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D O (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Sun							0.103						0.157													
2	Mon							0.111						0.14													
3	Tue							0.095						0.132													
4	Wed	6.6"						0.259	7.9	78	80		2.6	0.169	9.0	53	53		0.34	4.1			1350				6'6"
5	Thu	0.3						0.834						0.318													
6	Fri							0.382						0.341													
7	Sat	0.2						0.178						0.321													
8	Sun	0.8						0.244						0.342													
9	Mon							0.19						0.368													
10	Tue	3						0.444						0.388													
11	Wed		8'6"					0.684	7.6	25	110		6.2	0.552	8.9	17	48		0.55	5.4			800				6'6"
12	Thu							0.303						0.574													
13	Fri							0.127						0.529													
14	Sat	0.4						0.218						0.272													
15	Sun							0.174						0.288													
16	Mon	0.5						0.151						0.268													
17	Tue							0.134					1.9	0.25					0.36				20				
18	Wed		8'0"					0.118	7.9	51	52			0.235	9.0	17	50			5.0							8'0"
19	Thu							0.107						0.218													
20	Fri							0.098						0.198													
21	Sat							0.1						0.184													
22	Sun	1						0.119						0.156													
23	Mon	1						0.173						0.166													
24	Tue							0.112						0.164													
25	Wed		8'0"					0.1	7.7	140	59		3.5	0.167	8.8	28	71		1.3	2.8			60				8'0"
26	Thu	0.3						0.101						0.185													
27	Fri	0.5						0.116						0.163													
28	Sat	0.4						0.113						0.166													
29	Sun	2.5						0.233						0.154													
30	Mon							0.282						0.177													
								0.181						0.135													
Average		1.3						0.211742		74	78		15.7	0.253387		28.8	55.5		0.638	4.3			177				
Maximum		6						0.834	7.9	140	110		3.5	0.574	9.0	53	71		1.3	5.4			1350				
Minimum								0.095	7.6	25	52		2.6	0.132	8.8	17	48		0.34	2.8			20				
Totals		16.9		0	0	0	0	6.564	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Bill Necessary 7-7-08
Signature of Officer, Principal Executive or Authorized Agent
Date

Kenny Marquis 7/2/08
Signature of Certified Operator
Date
Phone Number 765-468-6701

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of	Year
Farmland W W T P	IN0021512	June	2008

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									high ph, large amounts of algae, consistant rainfall
2									
3									
4	168 59	194 52		5 62	74 7462	74 7462		0 4795	
5									
6									
7									
8									
9									
10									
11	142 70	627 88		35 39	78 3095	221 109		2 53354	
12									
13									
14									
15									
16									
17				21 25				0 75105	
18	50 22	51 20			33 3383	98 0538			
19									
20									
21									
22									
23									
24									
25	116 83	49 24		29 21	39 0212	98 9467		1 8117	
26									
27									
28									
29									
30									
Avg	119 58	230 71		22 87	56 3538	123 214		1 39395	
Max	168 59	627 88		35 39	78 3095	221 109		2 53354	
Min	50 22	49 24		5 62	33 3383	74 7462		0 4795	
Removal Rates:									Monthly Totals:
Overall BOD removal 61%									Influent flow (mg) 6 564
Overall TSS removal 29%									Effluent flow (mg) 7 855

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Denny Mangin
 (SIGNATURE OF CERTIFIED OPERATOR)

7-2-08
 (DATE)

Bill Necessary
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

7-7-08
 (DATE)

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR DUANE L COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised:



IN0021512

001 A

PERMIT NUMBER
PERMITTED FEATURE
MONITORING PERIOD
MO DAY YEAR
MO DAY YEAR
FROM 07/01/08

TO

07/31/08

Form Approved

OMB No 2040-004

Approval Expires 05-31-98



* 1 N 0 0 2 1 5 1 2 0 0 1 A 7 2 0 0 8 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE



NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.8	*****	9.0	SU	<input checked="" type="checkbox"/>	5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	82.8	113.9	lb/d	*****	59.4	73	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	10.2	45.3	lb/d	*****	8.18	36	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	159	233	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	37	850	CFU/100mL	<input checked="" type="checkbox"/>	1/7	Grab
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	30.8	37.1	lb/d	*****	22.2	26	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		82%	*****	*****	%	1		
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
TELEPHONE
DATE

 Bill Necessary
TYPED OR PRINTED

 Bill Necessary
SIGNATURE

 765-468-6701
AREA CODE AND NO

 08 11 08
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
 ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340

FACILITY FARMLAND STP
 LOCATION FARMLAND IN
 ATTN. MR DUANE L COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 07/01/08		TO 07/31/08	

Form Approved
 OMB No 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	4.95	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE		
B:11 Necessary	765 468-6701	08	11	08
TYPED OR PRINTED	SIGNATURE	AREA CODE AND NO	MO	DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/08)

Page 1 of 2

Name of Facility Farmland W W T P		Permit Number IN0021512	
Certified Operator Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month # 7	July	Year 2008	E-mail address

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge					
Day of the Month	Day of the Week	Precip - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D O (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E Coli colony/100 ml	Upstream Gage Reading (in)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)		
1	Tue							0.188						0.187															
2	Wed		8'0					0.123	7.9	99	34		25	0.187	8.8	28	60		1	3.2			.850				8'0		
3	Thu	0.6						0.118						0.185															
4	Fri	2						0.429						0.182															
5	Sat							0.23						0.191															
6	Sun							0.141						0.151															
7	Mon							0.131						0.156															
8	Tue							0.127						0.169															
9	Wed	0.2	8'0					0.113	7.8	116	47		25	0.187	8.9	23	73		0.07	2.9			10				8'0		
10	Thu							0.109						0.194															
11	Fri							0.105						0.179															
12	Sat	0.1						0.098						0.165															
13	Sun	3						0.378						0.217															
14	Mon							0.212						0.233															
15	Tue							0.138						0.216															
16	Wed		8'0					0.118	7.8	92	22		29	0.212	9.0	21	63		0.76	2.9			80				8'0		
17	Thu							0.098						0.178															
18	Fri							0.1						0.169															
19	Sat							0.084						0.139															
20	Sun	0.9						0.129						0.175															
21	Mon	0.1						0.09						0.141															
22	Tue	0.7						0.113						0.152															
23	Wed		8'0					0.098	7.8	127	57		29	0.151	8.8	20	30		38	2.6			10				8		
24	Thu							0.092						0.136															
25	Fri							0.083						0.11															
26	Sat							0.079						0.102															
27	Sun							0.107						0.111															
28	Mon							0.085						0.082															
29	Tue							0.089						0.127															
30	Wed		8'0					0.082	7.8	195	133		33	0.114	8.9	21	71		3.1	3.5			10				8'0		
31	Thu							0.181						0.135															
Average		0.95						0.136839		126	59		28.2	0.159774		22.2	59.4		8.186	3.0			37				6		
Maximum		3						0.429	7.9	195	133		33	0.233	9.0	26	73		38	3.5			850				6		
Minimum								0.079	7.8	92	22		25	0.082	8.8	20	30		0.07	2.6			10				6		
Totals		7.6		0	0	0	0	4.242	I certify under penalty of law that this document and all attachments were prepared under																				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis
Signature of Certified Operator
Phone Number 765-468-6701
Date 8/11/08

Dick Housley
Signature of Officer, Principal Executive, or Authorized Agent
Date 8-12-08

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of	Year
Farmland W W T P	IN0021512	July	2008

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									high algae content
2	101 62	34 90		25 66	36 234	83 6169		1 39362	
3									
4									
5									
6									
7									
8									
9	109 39	44 32		23 67	35 8918	113 918		0 10924	
10									
11									
12									
13									
14									
15									
16	89 08	21 30		28 07	37 1519	111 456		1 34455	
17									
18									
19									
20									
21									
22									
23	103 86	46 62		23 72	25 2019	37 8029		45 3634	
24									
25									
26									
27									
28									
29									
30	133 44	91 01		22 58	19 9779	67 5444		2 94912	
31									
Avg	107 47	47 63		24 72	30 8915	82 8675		10 232	
Max	133 44	91 01		28 07	37 1519	113 918		45 3634	
Min	89 08	21 30		22 58	19 9779	37 8029		0 10924	

Removal Rates:	Monthly Totals:
Overall BOD removal 82%	Influent flow (mg) 4 242
Overall TSS removal -1%	Effluent flow (mg) 4 953

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR DUANE L COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised.



IN0021512

001 A

PERMIT NUMBER
PERMITTED FEATURE
MONITORING PERIOD
MO **DAY** **YEAR**
MO **DAY** **YEAR**
FROM 08/01/08

TO

08/31/08

Form Approved

OMB No 2040-004

Approval Expires 05-31-98



* 1 N 0 0 2 1 5 1 2 0 0 1 A 8 2 0 0 8 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE



NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.7	*****	9.0	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	58.0	89.9	lb/d	*****	72.3	84	mg/L		1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	1.35	1.0	lb/d	*****	1.56	1.1	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	1093	191	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	76	570	CFU/100 mL		1/7	Grab
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	18.6	29.9	lb/d	*****	22.8	25	mg/L		1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		84%	*****	*****	%			
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

**NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT**
TELEPHONE
DATE

 Bill Nemesary
TYPED OR PRINTED

 Bill Nemesary
SIGNATURE

 765.48-6701
AREA CODE AND NO

 09 04 08
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
 ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340

FACILITY FARMLAND STP
 LOCATION FARMLAND IN
 ATTN: MR DUANE L COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 08/01/08		TO 08/31/08	

Form Approved
 OMB No 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	2.89	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Bill Necessary
 TYPED OR PRINTED

Bill Necessary
 SIGNATURE

765/468-6701
 AREA CODE AND NO

09 04 08
 MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation

Lagoon Type

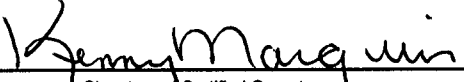

Wastewater Treatment Plant

(Version 12/06)

Page 1 of 2

Name of Facility Farmland W W T P		Permit Number IN0021512	
Certified Operator Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month # 8	August	Year 2008	E-mail address

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D O (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E Coli colony/100 ml	Upstream Gage Reading (in)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Fri							0 079						0 097													
2	Sat	1 3"						0 115						0 112													
3	Sun							0 097						0 111													
4	Mon							0 089						0 088													
5	Tue	3 0"						0 198					3 9	0 109					1 1				570				
6	Wed	8"	6'0"					0 386	7 8	47	16			0 189	8 7	19	57			4 1							6'0"
7	Thu							0 136						0 191													
8	Fri							0 11						0 175													
9	Sat							0 096						0 153													
10	Sun							0 096						0 146													
11	Mon							0 1						0 135													
12	Tue							0 098						0 127													
13	Wed		6'0"					0 079	7 8	164	28		37	0 113	8 9	25	78		0 02	4 6			150				6'0"
14	Thu							0 086						0 11													
15	Fri							0 081						0 091													
16	Sat							0 078						0 082													
17	Sun							0 08						0 078													
18	Mon							0 087						0 072													
19	Tue							0 086						0 076													
20	Wed		6'0"					0 073	7 9	180	77		42	0 067	9 0	22	70		0 03	3 8			20				6'0"
21	Thu							0 081						0 069													
22	Fn							0 085						0 068													
23	Sat							0 076						0 064													
24	Sun							0 087						0 071													
25	Mon							0 08						0 055													
26	Tue							0 077						0 045													
27	Wed		6'0"					0 083	7 8	173	7		41	0 042	8 8	25	84		1 1	3 6			20				6'0"
28	Thu							0 079						0 044													
29	Fri							0 077						0 045													
30	Sat							0 069						0 04													
31	Sun							0 074						0 033													
Average								0 100581		141	32		31 0	0 093484		22 8	72 3		0 563	4 0			76				
Maximum								0 386	7 9	180	77		42	0 191	9 0	25	84		1 1	4 6			570				
Minimum								0 069	7 6	47	7		3 9	0 033	8 7	19	57		0 02	3 6			20				
Totals		0		0	0	0	0	3 118	I certify under penalty of law that this document and all attachments were prepared under																		

Signature of Certified Operator  Date 9/8/08	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Signature of Officer, Principal Executive, or Authorized Agent  Date 9-10-08
Phone Number 765-468-6701		

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of	Year
Farmland W W T P	IN0021512	August	2008

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									high algae content
2									
3									
4									
5				6 44				1 00057	
6	151 39	51 54			29 9669	89 9007			
7									
8									
9									
10									
11									
12									
13	108 12	18 46		24 39	23 5746	73 5528		0 01886	
14									
15									
16									
17									
18									
19									
20	109 65	46 91		25 59	12 3005	39 1381		0 01677	
21									
22									
23									
24									
25									
26									
27	119 83	4 85		28 40	8 76225	29 4412		0 38554	
28									
29									
30									
31									
Avg	122 25	30 44		21 21	18 6511	58 0082		0 35543	
Max	151 39	51 54		28 40	29 9669	89 9007		1 00057	
Min	108 12	4 85		6 44	8 76225	29 4412		0 01677	

Removal Rates:		Monthly Totals:	
Overall BOD removal	84%	Influent flow (mg)	3 118
Overall TSS removal	-126%	Effluent flow (mg)	2 898

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis
 (SIGNATURE OF CERTIFIED OPERATOR)

9-8-08
 (DATE)

Bill Neessary
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

9-10-08
 (DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
ADDRESS FARMLAND TOWN HALL
PO BOX 336
FARMLAND IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

ATTN MR DUANE L COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 09/01/08		TO 09/30/08	

Form Approved
OMB No 2040-004
Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.4	*****	8.8	SU	<input checked="" type="checkbox"/>	5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	13.8	21.1	lb/d	*****	39	65	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96 4	144 6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	1.05	1.77	lb/d	*****	2.65	4.1	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	1053	135	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	32	200	CFU/10 mL	<input checked="" type="checkbox"/>	1/7	Grab
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	5.6	7.8	lb/d	*****	15	18	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		91%	*****	*****	%	<input checked="" type="checkbox"/>		
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Bill Necessary
TYPED OR PRINTED

Bill Necessary
SIGNATURE

765 468 6701
AREA CODE AND NO

10 03 08
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN MR DUANE L COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512 001 A

PERMIT NUMBER PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM 09/01/08

TO 09/30/08

Form Approved
OMB No 2040-004
Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	1.64	Mgal/ mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT

TELEPHONE

DATE

B:11 Necessary
TYPED OR PRINTED

Bill Necessary
SIGNATURE

765 468 6701
AREA CODE AND NO

10 03 08
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W W T P			Permit Number IN0021512	
Certified Operator Name Kenny Marquis		Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month # 9	September	Year 2008	E-mail address	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge				
Day of the Month	Day of the Week	Precip - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D O (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)	
1	Mon							0.073						0.032														
2	Tue							0.083						0.041														
3	Wed		8'0					0.075	7.7	218	86		38	0.039	8.8	15	65		0.8	2.9			50				6'0	
4	Thu							0.081						0.044														
5	Fri	0.1						0.071						0.042														
6	Sat							0.09						0.046														
7	Sun							0.062						0.027														
8	Mon							0.09						0.031														
9	Tue	0.5						0.107						0.031														
10	Wed		8'0					0.081	8.0	182	70		38	0.038	8.8	17	50		3.1	5.2			10				6'0	
11	Thu							0.087						0.03														
12	Fri	0.2						0.104						0.062														
13	Sat	0.2						0.09						0.059														
14	Sun							0.087						0.063														
15	Mon	0.2						0.094						0.054														
16	Tue							0.09					43	0.054					2.8				10					
17	Wed		6'0					0.078	8.0	146	65			0.056	8.4	10	18			4.0							6'0	
18	Thu							0.082						0.059														
19	Fri							0.094						0.058														
20	Sat	0.1						0.076						0.057														
21	Sun							0.081						0.051														
22	Mon							0.099						0.061														
23	Tue							0.084						0.055														
24	Wed		6'0					0.075	8.1	144	16		40	0.052	8.6	18	23		4.1	4.3			200				6'0	
25	Thu							0.084						0.057														
26	Fri							0.078						0.061														
27	Sat							0.077						0.066														
28	Sun							0.085						0.063														
29	Mon							0.088						0.057														
30	Tue	0.1						0.085						0.064														
								0.181						0.135														
Average		0.2						0.086839		173	62		39.8	0.053065		15.0	39.0		2.65	4.1			32					
Maximum		0.5						0.181	8.1	218	96		43	0.135	8.8	18	65		4.1	5.2			200					
Minimum								0.062	7.7	144	16		38	0.027	8.4	10	18		0.6	2.9			10					
Totals		1.4			0	0	0	2.692																				
I certify under penalty of law that this document and all attachments were prepared under																												

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 10-3-08
Signature of Certified Operator Date
Phone Number 765-468-6701

Bill Vucelja 10-6-08
Signature of Officer, Principal Executive, or Authorized Agent Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/08)

Name of Facility	Permit Number	For Month Of	Year
Farmland W W T P	IN0021512	September	2008

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									Enter Comments Below high algae content, extremely dry conditions
2									
3	136 44	60 08		23 78	4 88183	21 1546		0 19527	
4									
5									
6									
7									
8									
9									
10	123 02	47 32		25 69	5 39087	15 8555		0 98304	
11									
12									
13									
14									
15									
16				32 30				1 26176	
17	95 03	42 31			4 6732	8 41176			
18									
19									
20									
21									
22									
23									
24	90 13	10 01		25 04	7 81092	9 98062		1 77915	
25									
26									
27									
28									
29									
30									
Avg	111 16	39 93		26 70	5 6892	13 8506		1 05481	Removal Rates: Overall BOD removal 91% Overall TSS removal 37% Monthly Totals: Influent flow (mg) 2 692 Effluent flow (mg) 1 645
Max	136 44	60 08		32 30	7 81092	21 1546		1 77915	
Min	90 13	10 01		23 78	4 6732	8 41176		0 19527	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR DUANE L COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised:



IN0021512

001 A

PERMIT NUMBER

PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

10/01/08

TO

10/31/08

Form Approved

OMB No 2040-004

Approval Expires 05-31-98



* 1 N 0 0 2 1 5 1 2 0 0 1 A 1 0 2 0 0 8 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE



NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.8	*****	9.0	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	27.6	40.2	lb/d	*****	55	68	mg/L		1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	7.6	1.88	lb/d	*****	1.60	3.9	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	058	084	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	176	930	CFU/100mL		1/7	Grab
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	9.2	12.4	lb/d	*****	18.4	21	mg/L		1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		90%	*****	*****	%		1/7	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

HAZEL LEWIS

TYPED OR PRINTED

Hazel Lewis VP

SIGNATURE

TELEPHONE

765 468-6701

AREA CODE AND NO

DATE

11 07 08

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR DUANE L COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised:

☐

IN0021512

001 A

PERMIT NUMBER

PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

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Approval Expires 05-31-98



* 1 N 0 0 2 1 5 1 2 0 0 1 A 1 0 2 0 0 8 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE

☐

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	1.80	Mgal/ mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

**NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT**
TELEPHONE
DATE

HAZEL LEWIS

TYPED OR PRINTED

Hazel Lewis VP

SIGNATURE

765/468-6701

AREA CODE AND NO

11 07 08

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant

(Version 12/06)

Page 1 of 2

Name of Facility Farmland W W T P			Permit Number IN0021512	
Certified Operator Name Kenny Marquis		Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month	#	October	Year	2008
E-mail address				

General Information						Bypasses/ Overflows	Raw Wastewater						Final Effluent										Controlled Discharge				
Day of the Month	Day of the Week	Precip - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("X" if occurred)	Collection System ("X" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D O (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Wed		8'0					0.075	8.0	184	51		42	0.058	8.8	13	42		3.9	6.5			210				8'0
2	Thu							0.08						0.058													
3	Fri							0.085						0.05													
4	Sat							0.068						0.04													
5	Sun							0.085						0.017													
6	Mon							0.074						0.046													
7	Tue							0.084						0.076													
8	Wed	0.4	8'0					0.08	8.1	183	87		30	0.062	8.9	21	48		0.47	5.7			430				8'0
9	Thu	0.1						0.087						0.047													
10	Fri							0.073						0.047													
11	Sat							0.072						0.05													
12	Sun							0.078						0.049													
13	Mon							0.083						0.05													
14	Tue							0.086					50	0.058					2.8				40				
15	Wed	0.1	8'0					0.089	8.1	188	98			0.055	9.0	18	54			5.8							8'0
16	Thu	0.5						0.112						0.068													
17	Fri							0.081						0.069													
18	Sat							0.071						0.059													
19	Sun							0.08						0.058													
20	Mon							0.087						0.065													
21	Tue							0.072						0.067													
22	Wed		8'0					0.074	8.1	178	74		49	0.052	8.9	19	65		0.93	8.8			50				8'0
23	Thu							0.071						0.061													
24	Fri	0.2						0.069						0.08													
25	Sat	0.7						0.153						0.084													
26	Sun							0.095						0.071													
27	Mon							0.087						0.075													
28	Tue		8'0					0.078	8.0	191	83		38	0.071	9.0	21	68		0.12	10.4			930				8'0
29	Wed							0.069						0.06													
30	Thu							0.079						0.062													
31	Fri							0.078						0.061													
Average		0.3333						0.08171		180	79		41.8	0.058129		18.4	55.4		1.604	7.4			176				
Maximum		0.7						0.153	8.1	191	98		50	0.084	9.0	21	68		3.9	10.4			930				
Minimum								0.066	8.0	164	51		30	0.017	8.8	13	42		0.12	5.8			40				
Totals		2		0	0	0	0	2.533																			

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis
Signature of Certified Operator
Phone Number **765-468-6701**

11-07-08
Date

Daniel Lewis, VP
Signature of Officer, Principal Executive, or Authorized Agent

11-13-08
Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of	Year
Farmland W W T P	IN0021512	October	2008

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1	102 64	31 92		26 29	6 29213	20 3284		1 88764	enter Comments Below high algae content, extremely dry conditions
2									
3									
4									
5									
6									
7									
8	122 17	58 08		20 03	10 8652	24 8347		0 24317	
9									
10									
11									
12									
13									
14				27 54				1 21503	
15	138 14	72 79			8 26155	24 7847			
16									
17									
18									
19									
20									
21									
22	109 92	45 70		30 26	8 24486	28 2061		0 40356	
23									
24									
25									
26									
27									
28	124 32	54 03		24 73	12 4424	40 2897		0 0711	
29									
30									
31									
Avg	119 44	52 50		25 77	9 22123	27 6887		0 7641	
Max	138 14	72 79		30 26	12 4424	40 2897		1 88764	
Min	102 64	31 92		20 03	6 29213	20 3284		0 0711	

Removal Rates:	Monthly Totals:
Overall BOD removal 90%	Influent flow (mg) 2 533
Overall TSS removal 30%	Effluent flow (mg) 1 802

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<i>Kenny Marquis</i> (SIGNATURE OF CERTIFIED OPERATOR)	11-07-08 (DATE)
<i>Dorel Lewis VP</i> (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	11-13-08 (DATE)

Phone. 765-468-6701
FAX: 765-468-7067

TOWN OF FARMLAND

104 E. Henry Street
P.O. Box 336
Farmland, IN 47340

Indiana Dept. Of Environmental Mgmt.
Office Of Water Quality

To Whom It May Concern,

Along with this notice is our monthly report of operation. Due to a death of our Town Council President, Bill Necessary I am having our vice-president sign the appropriate reports. Ms. Hazel Lewis is the vice-president and will be moving to the presidents position upon the appointment of a new town board member. This process may take 30 days or possibly longer based on the political process. Thank you for your understanding during this unusual situation.

Kenny E. Marquis
Utilities Supt./Town Of Farmland

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR DUANE L COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised:



IN0021512

001 A

PERMIT NUMBER
PERMITTED FEATURE
MONITORING PERIOD
MO DAY YEAR
MO DAY YEAR
FROM 11/01/08

TO 11/30/08

Form Approved

OMB No 2040-004

Approval Expires 05-31-98



* 1 N 0 0 2 1 5 1 2 0 0 1 A 1 1 2 0 0 8 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE



NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH 00400 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	*****	*****		8.9	*****	9.0	SU		5/7	Grab
	PERMIT REQUIREMENT				6		9			Weekly	GRAB
					DAILY MN		DAILY MX				
Solids, total suspended 00530 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	32.5	47.7	lb/d	*****	50	67	mg/L		1/7	Grab
	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N) 00610 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	1.463	1.832	lb/d	*****	1.568	1.0	mg/L		1/7	Grab
	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant 50050 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	1.109	1.63	Mgal/d	*****	*****	*****				
	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C 80082 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	13.9	24.4	lb/d	*****	19.8	23	mg/L		1/7	Grab
	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal 80091 K 0 0 Percent Removal	SAMPLE MEASUREMENT	*****	*****		90%	*****	*****	%		1/7	Grab
	PERMIT REQUIREMENT				85					Weekly	GRAB
					MO AV MN						
Flow, total 82220 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	*****	3.37	Mgal/mo	*****	*****	*****				
	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
TELEPHONE
DATE

Hazel Lewis

[Signature]

765 468-6701

12 09 08

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
 ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340

FACILITY FARMLAND STP
 LOCATION FARMLAND IN
 ATTN: MR DUANE L COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	
FROM 11/01/08			TO 11/30/08

Form Approved
 OMB No 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	Frequency of Analysis	Sample Type
	Average	Maximum	Units	Minimum	Average	Maximum	Units			

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE		
Hazel Lewis	765 468-6701	12	09	08
TYPED OR PRINTED	SIGNATURE	AREA CODE AND NO	MO	DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant

(Version 12/06)

Page 1 of 2

Name of Facility Farmland W W T P		Permit Number IN0021512	
Certified Operator Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month # 11 November Year 2008		E-mail address	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge				
Day of the Month	Day of the Week	Precip - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("X" if occurred)	Collection System ("X" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D O (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E Coli colony/100 ml	Upstream Gage Reading (in)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)	
1	Sat							0.68						0.63														
2	Sun							0.08						0.088														
3	Mon							0.093						0.087														
4	Tue							0.081						0.087														
5	Wed		8'0					0.088	7.9	234	91		42	0.054	9.0	23	67		0.23	8.5							8'0	
6	Thu							0.053						0.062														
7	Fri							0.076						0.063														
8	Sat							0.089						0.061														
9	Sun							0.078						0.051														
10	Mon							0.091						0.051														
11	Tue							0.082						0.052														
12	Wed		8'0					0.077	7.9	202	100		45	0.059	8.9	19	62		0.29	10.8							8'0	
13	Thu	0.6						0.144						0.079														
14	Fri							0.1						0.097														
15	Sat	0.8						0.162						0.102														
16	Sun	0.3						0.283						0.155														
17	Mon							0.139						0.143														
18	Tue							0.092						0.142														
19	Wed		8'0					0.086	7.9	206	98		39	0.133	8.9	22	43		0.75	12.6							8'0	
20	Thu							0.087						0.133														
21	Fri							0.078						0.12														
22	Sat							0.073						0.106														
23	Sun							0.088						0.1														
24	Mon	0.2						0.093						0.087														
25	Tue							0.097						0.102														
26	Wed		8'0					0.077	7.9	187	61		41	0.093	8.9	15	28		1	14.3							8'0	
27	Thu							0.092						0.099														
28	Fri							0.08						0.094														
29	Sat							0.092						0.096														
30	Sun							0.071						0.078														
								0.181						0.135														
Average		0.475						0.117516		207	88		41.8	0.109		19.8	50.0		0.568	11.6								
Maximum		0.8						0.66	7.9	234	100		45	0.63	9.0	23	67		1	14.3								
Minimum								0.053	7.9	187	61		39	0.051	8.9	15	28		0.23	8.5								
Totals		1.9		0	0	0	0	3.643	I certify under penalty of law that this document and all attachments were prepared under																			

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 12/9/08
Signature of Certified Operator Date
Phone Number 765-468-6701

Daniel Hewes 12-12-08
Signature of Officer, Principal Executive or Authorized Agent Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of	Year
Farmland W W T P	IN0021512	November	2008

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below	
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	enter Comments Below high algae content, extremely dry conditions	
1										
2										
3										
4										
5	132.79	51.64		23.83	10.3645	30.1922		0.10364		
6										
7										
8										
9										
10										
11										
12	129.80	64.26		28.92	9.35475	30.526		0.14278		
13										
14										
15										
16										
17										
18										
19	147.84	70.33		27.99	24.4175	47.7251		0.83241		
20										
21										
22										
23										
24										
25										
26	120.16	39.20		26.35	11.6413	21.7304		0.77609		
27										
28										
29										
30										
Avg	132.65	58.36		26.77	13.9445	32.5434		0.46373	Removal Rates: Overall BOD removal 90% Overall TSS removal 43% Monthly Totals: Influent flow (mg) 3.643 Effluent flow (mg) 3.379	
Max	147.84	70.33		28.92	24.4175	47.7251		0.83241		
Min	120.16	39.20		23.83	9.35475	21.7304		0.10364		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR DUANE L COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised:



IN0021512

001 A

PERMIT NUMBER

PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM 12/01/08

TO 12/31/08

Form Approved

OMB No 2040-004

Approval Expires 05-31-98



* 1 N 0 0 2 1 5 1 2 0 0 1 A 1 2 2 0 0 8 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE



NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.2	*****	8.8	SU			
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	Grab
Effluent Gross					DAILY MN		DAILY MX				GRAB
Solids, total suspended	SAMPLE MEASUREMENT	35.3	81.9	lb/d	*****	16.6	2.5	mg/L			
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	Grab
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				GRAB
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	10.0	25.7	lb/d	*****	3.68	5.5	mg/L			
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	Grab
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				GRAB
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	249	595	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	27.2	60.7	lb/d	*****	12.6	15	mg/L			
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	Grab
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				GRAB
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		85%	*****	*****	%			
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	Grab
Percent Removal					MO AV, MN						GRAB
Flow, total	SAMPLE MEASUREMENT	*****	7.73	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
TELEPHONE
DATE

 Hazel Lewis
TYPED OR PRINTED

 Hazel Lewis
SIGNATURE

 765-48-6701 01 06 09
AREA CODE AND NO MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN MR DUANE L COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised

☐

IN0021512

001 A

PERMIT NUMBER

PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

12/01/08

TO

12/31/08

Form Approved

OMB No 2040-004

Approval Expires 05-31-98



* 1 N 0 0 2 1 5 1 2 0 0 1 A 1 2 2 0 0 8 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE

☐

NOTE Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
	Average	Maximum	Units	Minimum	Average	Maximum	Units			

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

Hazel Lewis

765/468-6701

01 06 09

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W W T P		Permit Number IN0021512	
Certified Operator Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month # 12	December	Year 2008	E-mail address

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D O (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E Coli colony/100 ml	Upstream Gage Reading (in)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Mon							0.129						0.084													
2	Tue							0.108						0.089													
3	Wed		8'0"					0.091	7.8	210	90		21	0.084	8.8	15	20		1.7	11.6							8'0"
4	Thu							0.099						0.091													
5	Fri							0.096						0.081													
6	Sat	1						0.091						0.071													
7	Sun							0.103						0.092													
8	Mon							0.088						0.073													
9	Tue	0.1						0.084						0.089													
10	Wed	1	8'0"					0.445	8.0	61	35		8.8	0.129	8.8	12	13		2.5	15.1							8'0"
11	Thu							0.232						0.158													
12	Fri							0.138						0.159													
13	Sat	1						0.106						0.15													
14	Sun	0.3						0.131						0.178													
15	Mon	0.3						0.163						0.163													
16	Tue							0.115						0.14													
17	Wed		8'0"					0.121	8.0	91	45		21	0.158	8.4	12	15		4	10.6							8'0"
18	Thu							0.112						0.162													
19	Fri	1.5						0.237						0.183													
20	Sat							0.79						0.379													
21	Sun							0.371						0.339													
22	Mon							0.21						0.22													
23	Tue							0.171						0.24													
24	Wed	1.5	8'0"					0.399	7.7	15	10		17	0.393	8.2	11	25		4.7	11.1							8'0"
25	Thu							0.712						0.52													
26	Fri							0.341						0.499													
27	Sat							0.73						0.521													
28	Sun	0.6						0.753						0.565													
29	Mon							0.504						0.595													
30	Tue		8'0"					0.301	7.9	37	13		6.2	0.56	8.2	13	10		5.5	10.3							8'0"
31	Wed							0.243						0.567													
Average		0.8111						0.264839		83	39		14.8	0.249419		12.6	16.6		3.68	11.7							
Maximum		1.5						0.79	8.0	210	90		21	0.595	8.8	15	25		5.5	15.1							
Minimum								0.084	7.7	15	10		6.2	0.071	8.2	11	10		1.7	10.3							
Totals		7.3		0	0	0	0	8.21	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 11-09
Signature of Certified Operator
Phone Number **765-468-6701**

Danay Lewis 1-5-09
Signature of Officer, Principal Executive or Authorized Agent
Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of	Year
Farmland W W T P	IN0021512	December	2008

Page 2 of 2

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									Enter Comments Below
2									
3	159 47	68 35		15 95	10 5147	14 0198		1 19167	
4									
5									
6									
7									
8									
9									
10	226 53	129 97		32 68	12 9181	13 9946		2 69126	
11									
12									
13									
14									
15									
16									
17	91 89	45 44		21 20	15 8221	19 7777		5 27404	
18									
19									
20									
21									
22									
23									
24	49 94	33 30		56 60	36 0754	81 9896		15 414	
25									
26									
27									
28									
29									
30	92 94	32 65		15 57	60 7516	46 732		25 7026	
31									
Avg	124 15	61 94		28 40	27 2164	35 3027		10 0547	
Max	226 53	129 97		56 60	60 7516	81 9896		25 7026	
Min	49 94	32 65		15 57	10 5147	13 9946		1 19167	

Removal Rates:

Overall BOD removal85%

Overall TSS removal57%

Monthly Totals:

Influent flow (mg) 8 21

Effluent flow (mg) 7 732

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

ATTN: MR. DUANE L. COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)**

Revised: ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 01/01/09		TO 01/31/09	

Form Approved
 OMB No. 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.0	*****	8.2	SU	<input checked="" type="checkbox"/>	5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	27.5	53.0	lb/d	*****	23	30	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	10.4	19.4	lb/d	*****	7.0	8.6	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	1234	1602	Mgal/d	*****	*****	*****		<input checked="" type="checkbox"/>		
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	24.1	50.4	lb/d	*****	19.3	24	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		85%	*****	*****	%	<input checked="" type="checkbox"/>	1/7	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						
Flow, total	SAMPLE MEASUREMENT	*****	7.26	Mgal/mo	*****	*****	*****		<input checked="" type="checkbox"/>		
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Hazel Lewis *Hazel Lewis*
 TYPED OR PRINTED SIGNATURE

TELEPHONE

765/468-6701
 AREA CODE AND NO.

DATE

02 03 09
 MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
 ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340
 FACILITY FARMLAND STP
 LOCATION FARMLAND IN
 ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 01/01/09		TO 01/31/09	

Form Approved
 OMB No. 2040-004
 Approval Expires 05-31-98



* I N 0 0 2 1 5 1 2 0 0 1 A 1 2 0 0 9 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
	Average	Maximum	Units	Minimum	Average	Maximum	Units			

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE		
Hazel Lewis	765/468-6701	02	03	09
TYPED OR PRINTED	SIGNATURE	AREA CODE AND NO.	MO	DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON.MUNICIPAL MINORRANDOLPH COUNTY

Send by 28th of the Month to:

Indiana Department of Environmental Management

Office of Water Quality, Mail Code 65-42

100 North Senate Avenue

Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant

(Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month: # 1 January		Year: 2009 E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Thu							0.154						0.402													
2	Fri							0.19						0.53													
3	Sat	0.2						0.146						0.426													
4	Sun							0.149						0.409													
5	Mon							0.146					20	0.353					6.6								
6	Tue	0.1						0.14						0.344													
7	Wed		60					0.133	7.9	109	58			0.318	8.2	19	20			10.7							60
8	Thu							0.135						0.256													
9	Fri	0.1						0.124						0.549													
10	Sat	0.1						0.109						0.594													
11	Sun	0.3						0.134						0.602													
12	Mon							0.136						0.599													
13	Tue	4						0.129					21	0.166					6.1								
14	Wed		60					0.115	8.0	111	57			0.042	8.2	14	18			12.1							60
15	Thu							0.129						0.086													
16	Fri	1						0.123						0.09													
17	Sat	1						0.137						0.096													
18	Sun	0.5						0.133						0.086													
19	Mon	0.1						0.125						0.085													
20	Tue	0.1						0.131						0.097													
21	Wed		60					0.105	8.1	122	51		24	0.092	8.1	20	24		8.6	10.4							60
22	Thu							0.118						0.092													
23	Fri							0.115						0.1													
24	Sat	0.1						0.12						0.098													
25	Sun	0.1						0.118						0.089													
26	Mon							0.122						0.087													
27	Tue							0.112						0.095													
28	Wed	10	60					0.126	8.1	185	73		29	0.129	8.0	24	30		6.8	11.7							60
29	Thu	2.5						0.086						0.113													
30	Fri							0.105						0.128													
31	Sat							0.106						0.116													
Average		1.3467						0.127452		132	60		23.5	0.234419		19.3	23.0		7.025	11.2							
Maximum		10						0.19	8.1	185	73		29	0.602	8.2	24	30		8.6	12.1							
Minimum								0.086	7.9	109	51		20	0.042	8.0	14	18		6.1	10.4							
Totals		20.2		0	0	0	0	3.951	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Certified Operator
Kenny Marquis 2/3/09
Date
Phone Number: 765-468-6701

Signature of Officer, Principal Executive, or Authorized Agent
Chapel Lewis 2-9-09
Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	January	2009

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									extreme amounts of snowfall
2									
3									
4									
5				24.37				19.4422	
6									
7	120.98	64.37			50.4205	53.0742			
8									
9									
10									
11									
12									
13				22.61				8.45015	
14	106.52	54.70			4.90686	6.30882			
15									
16									
17									
18									
19									
20									
21	106.90	44.69		21.03	15.3548	18.4258		6.60256	
22									
23									
24									
25									
26									
27									
28	194.52	76.76		30.49	25.8361	32.2952		7.32023	
29									
30									
31									
Avg	132.23	60.13		24.62	24.1296	27.526		10.4538	
Max	194.52	76.76		30.49	50.4205	53.0742		19.4422	
Min	106.52	44.69		21.03	4.90686	6.30882		6.60256	

Removal Rates:	Monthly Totals:
Overall BOD removal: 85%	Influent flow (mg): 3.951
Overall TSS removal: 62%	Effluent flow (mg): 7.267

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Jenny Margulis
 (SIGNATURE OF CERTIFIED OPERATOR)

2-3-09
 (DATE)

Wendel Lewis
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

2-9-09
 (DATE)

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised:



IN0021512

001 A

PERMIT NUMBER

PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

02/01/09

TO

02/28/09

Form Approved

OMB No. 2040-004

Approval Expires 05-31-98



* I N 0 0 2 1 5 1 2 0 0 1 A 2 2 0 0 9 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE



NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		7.9	*****	8.2	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	78.5	223	lb/d	*****	26.3	43	mg/L		1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	19.4	43.3	lb/d	*****	8.12	8.8	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	300	1667	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	50.1	109.3	lb/d	*****	21	25	mg/L		1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		77%	*****	*****	%		1/7	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						
Flow, total	SAMPLE MEASUREMENT	*****	8.41	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
TELEPHONE
DATE

 Hazel Lewis
TYPED OR PRINTED

 Hazel Lewis
SIGNATURE

 765/468-6701
AREA CODE AND NO.

 030209
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised:

☐

IN0021512

001 A

PERMIT NUMBER
PERMITTED FEATURE
MONITORING PERIOD
MO DAY YEAR
MO DAY YEAR
FROM

02/01/09

TO

02/28/09

Form Approved

OMB No. 2040-004

Approval Expires 05-31-98



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For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE

☐

NOTE: Read Instructions before completing this form

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
	Average	Maximum	Units	Minimum	Average	Maximum	Units			

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

**NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT**
TELEPHONE
DATE

Hazel Lewis

765/468-6701

03 02 09

TYPED OR PRINTED
SIGNATURE
AREA CODE AND NO.
MO
DAY
YEAR
COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:

Indiana Department of Environmental Management

Office of Water Quality, Mail Code 65-42

100 North Senate Avenue

Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant

(Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month: # 2 February		Year: 2009	
E-mail address:			

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Sun							0.105						0.12													
2	Mon							0.143						0.112													
3	Tue							0.12					26	0.116					7.3								
4	Wed	2.60						0.102	8.1	124	46			0.099	8.2	19	18			12.4				8.2		60	
5	Thu							0.112						0.098													
6	Fri							0.114						0.104													
7	Sat							0.127						0.106													
8	Sun							0.743						0.155													
9	Mon							0.751						0.255													
10	Tue							0.643					2.9	0.27					8.8								
11	Wed	1.66"						0.666	7.7	29	36			0.331	7.9	19	19			7.8						66"	
12	Thu							0.823						0.553													
13	Fri							0.719						0.62													
14	Sat							0.42						0.667													
15	Sun							0.28						0.627													
16	Mon							0.212						0.566													
17	Tue	0.1						0.208						0.656													
18	Wed	0.1 60						0.17	8.0	93	36			0.624	8.1	21	43			10.9						60	
19	Thu							0.179					16	0.65					8								
20	Fri							0.155						0.612													
21	Sat							0.125						0.329													
22	Sun	1						0.144						0.073													
23	Mon							0.133						0.058													
24	Tue							0.122					26	0.108					8.4								
25	Wed	60						0.115	8.0	114	49			0.11	8.1	25	25			15.7							
26	Thu							0.115						0.117													
27	Fri	0.5						0.23						0.126													
28	Sat							0.298						0.155													
																										</	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Certified Operator
Kenny Marquis 3/2/09
Date
Phone Number: 765-468-6701

Signature of Officer, Principal Executive, or Authorized Agent
Shane Lewis 3-9-09
Date

(Version 12/06)

Page 2 of 2

Enter Comments Below:

3-9-09
(DATE)

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised:



IN0021512

001 A

PERMIT NUMBER

PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM 03/01/09

TO 03/31/09

 Form Approved
OMB No. 2040-004
Approval Expires 05-31-98


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For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE



NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.1	*****	8.6	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	22.4	45.1	lb/d	*****	23.3	44	mg/L		1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	7.64	9.50	lb/d	*****	7.25	7.7	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	128	153	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	22.5	28.7	lb/d	*****	22.5	28	mg/L		1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		78%	*****	*****	%		1/7	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						
Flow, total	SAMPLE MEASUREMENT	*****	3.98	Mgal/mo	*****	*****	*****			1/7	Grab
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
TELEPHONE
DATE

Hazel Lewis

TYPED OR PRINTED

SIGNATURE

765 468-6701

AREA CODE AND NO.

04 03 09

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON.MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised:

☐

IN0021512

001 A

PERMIT NUMBER

PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

03/01/09

TO

03/31/09

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OMB No. 2040-004

Approval Expires 05-31-98



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PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
	Average	Maximum	Units	Minimum	Average	Maximum	Units			

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

**NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT**
TELEPHONE
DATE

Hazel Lewis

765 468-6701 04 03 09

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON.MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month: # 3 March		Year: 2009 E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Sun							0.2						0.144													
2	Mon							0.157						0.137													
3	Tue							0.152						0.148													
4	Wed		6'0					0.123	8.1	114	52		21	0.13	8.4	20	8		7.4	13.1							6'0
5	Thu							0.127						0.145													
6	Fri							0.114						0.14													
7	Sat							0.103						0.132													
8	Sun	0.1						0.129						0.14													
9	Mon	0.1						0.147						0.145													
10	Tue							0.126					23	0.148					7.7								
11	Wed	0.2	6'0					0.144	8.0	74	35			0.148	8.1	15	8			8.7							6'0
12	Thu							0.153						0.148													
13	Fri							0.127						0.132													
14	Sat							0.118						0.129													
15	Sun							0.127						0.135													
16	Mon							0.123						0.125													
17	Tue							0.112					26	0.128					7.5								
18	Wed		6'0					0.102	8.0	116	52			0.123	8.5	28	44			11.4							6'0
19	Thu	0.2						0.126						0.131													
20	Fri							0.112						0.123													
21	Sat							0.97						0.11													
22	Sun							0.109						0.112													
23	Mon							0.104						0.107													
24	Tue							0.095						0.103													
25	Wed	0.1	6'0					0.102	8.1	101	67		20	0.094	8.6	27	33		6.4	7.8							6'0
26	Thu							0.123						0.112													
27	Fri							0.099						0.105													
28	Sat							0.104						0.112													
29	Sun	1						0.273						0.108													
30	Mon	0.1						0.276						0.142													
31	Tue							0.194						0.153													
Average		0.2571						0.163581		101	52		22.5	0.128677		22.5	23.3		7.25	10.3							
Maximum		1						0.97	8.1	116	67		26	0.153	8.6	28	44		7.7	13.1							
Minimum								0.095	8.0	74	35		20	0.094	8.1	15	8		6.4	7.8							
Totals		1.8		0	0	0	0	5.071	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 4-3-09
Signature of Certified Operator
Date
Phone Number: 765-468-6701

Hazel Lewis
Signature of Officer, Principal Executive, or Authorized Agent
Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	March	2009

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									
2									
3									
4	117.01	53.37		21.56	21.697	8.6788		8.02789	
5									
6									
7									
8									
9									
10				24.18				9.50996	
11	88.92	42.06			18.5259	9.88048			
12									
13									
14									
15									
16									
17				24.30				8.0112	
18	98.74	44.26			28.7402	45.1631			
19									
20									
21									
22									
23									
24									
25	85.97	57.03		17.02	21.1796	25.8862		5.02035	
26									
27									
28									
29									
30									
31									
Avg	97.66	49.18		21.77	22.5357	22.4022		7.64235	
Max	117.01	57.03		24.30	28.7402	45.1631		9.50996	
Min	85.97	42.06		17.02	18.5259	8.6788		5.02035	
Removal Rates:									Monthly Totals:
Overall BOD removal: 78%									Influent flow (mg): 5.071
Overall TSS removal: 55%									Effluent flow (mg): 3.989

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis
 (SIGNATURE OF CERTIFIED OPERATOR)

4-3-09
 (DATE)

Wade Lewis
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised:

☐

IN0021512

001 A

PERMIT NUMBER PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

04/01/09

TO

04/30/09

Form Approved

OMB No. 2040-004

Approval Expires 05-31-98



* I N 0 0 2 1 5 1 2 0 0 1 A 4 2 0 0 9 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE

☐

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.5	*****	8.7	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	87.5	147.6	lb/d	*****	31.8	57	mg/L		1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	10.19	17.61	lb/d	*****	3.9	6.1	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	334	667	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	1822	14000	CFU/10 mL			
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	75.6	122.1	lb/d	*****	26.6	30	mg/L		2/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		55%	*****	*****	%		1/7	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis Hazel Lewis

765/468-6701

05 05 09

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON. MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised:

☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO
04	01	09	04
FROM		TO	
04/01/09		04/30/09	

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98



* I N 0 0 2 1 5 1 2 0 0 1 A 4 2 0 0 9 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE

☐

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	10.025	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis
TYPED OR PRINTED

Hazel Lewis
SIGNATURE

765 468-6701
AREA CODE AND NO.

05 05 09
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON.MUNICIPAL MINORRANDOLPH COUNTY

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/08)

Page 1 of 2

Name of Facility Fairland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2009
Month: # 4 April		Year: 2009	
E-mail address:			

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coll colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Wed		6'0"					0.159	8.1	77	41		21	0.153	8.7	27	29		6.1	9.5			2450				6'0"
2	Thu							0.144						0.157													
3	Fri	0.5						0.284						0.166													
4	Sat							0.263						0.181													
5	Sun							0.205						0.185													
6	Mon	1.1						0.674						0.258													
7	Tue	0.1						0.807					6.4	0.364					5.8				9000				
8	Wed		6'6"					0.358	8.1	52	21			0.351	8.7	28	11			10.9							6'6"
9	Thu							0.27						0.348													
10	Fri	0.5						0.24						0.336													
11	Sat							0.385						0.374													
12	Sun							0.251						0.3													
13	Mon							0.186						0.34													
14	Tue	1						0.816					4.9	0.667					1.6				14000				
15	Wed		6'6"					0.775	7.9	50	17			0.61	8.5	24	29			6.9							6'6"
16	Thu							0.428						0.663													
17	Fri							0.285						0.485													
18	Sat	0.3						0.189						0.308													
19	Sun							0.197						0.363													
20	Mon	0.3						0.233						0.39													
21	Tue	0.1						0.282					13	0.354					4.6				650				
22	Wed		6'6"					0.243	8.0	82	27			0.345	8.5	30	33			9.6							6'6"
23	Thu							0.218						0.329													
24	Fri							0.177						0.309													
25	Sat							0.16						0.312													
26	Sun							0.152						0.28													
27	Mon	0.1						0.134						0.235													
28	Tue	0.5						0.137						0.24													
29	Wed	0.7	6'6"					0.394	8.0	33	17		14	0.265	8.7	24	57		1.4	6.4			100				6'6"
30	Thu	0.6						0.726						0.357													
Average		0.4833						0.325067		59	25		11.9	0.334167		26.6	31.8		3.9	8.7			1822				
Maximum		1.1						0.816	8.1	82	41		21	0.667	8.7	30	57		6.1	10.9			14000				
Minimum								0.134	7.9	33	17		4.9	0.153	8.5	24	11		1.4	6.4			100				
Totals		5.8		0	0	0	0	9.752																			

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 5-6-09
Signature of Certified Operator Date
Phone Number: 765-468-6701

Dayel Lewis 5-8-09
Signature of Officer, Principal Executive, or Authorized Agent Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	April	2009

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading			
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)
1	102.17	54.40		27.86	34.4732	37.0268		7.78839
2								
3								
4				#VALUE!				
5								
6								
7				43.10				17.618
8	155.35	62.74			82.0147	32.22		
9								
10								
11								
12								
13								
14				33.37				8.90578
15	323.37	109.95			122.171	147.623		
16								
17								
18								
19								
20								
21				30.59				13.589
22	166.28	54.75			86.3708	95.0078		
23								
24								
25								
26								
27								
28								
29	108.50	55.89		46.03	53.0742	126.051		3.096
30								
Avg	171.13	67.55		#VALUE!	75.6207	87.5858		10.1994
Max	323.37	109.95		#VALUE!	122.171	147.623		17.618
Min	102.17	54.40		#VALUE!	34.4732	32.22		3.096

Enter Comments Below:

spring turnover-high PH, algae excessive, APPROX. 6.0" raw fall.

Removal Rates:

Overall BOD removal: 55%

Overall TSS removal: -29%

Monthly Totals:

Influent flow (mg): 9.752

Effluent flow (mg): 10.025

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised:



IN0021512

001 A

PERMIT NUMBER

PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

05/01/09

TO

05/31/09

Form Approved

OMB No. 2040-004

Approval Expires 05-31-98



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For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE



NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.9	*****	8.9	SU		5/4	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	129.9	183.6	lb/d	*****	57.3	71	mg/L		1/4	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	3.55	9.69	lb/d	*****	1.12	2.4	mg/L		1/4	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	311	1642	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	709	1400	CFU/10 OmL		1/4	Grab
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	64.4	128.8	lb/d	*****	27.3	40	mg/L		1/4	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		80%	*****	*****	%		1/4	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

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NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis
TYPED OR PRINTED

Hazel Lewis
SIGNATURE

765418670106 03 09
AREA CODE AND NO. MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
 ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340

FACILITY FARMLAND STP
 LOCATION FARMLAND IN
 ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512	001 A
PERMIT NUMBER	PERMITTED FEATURE
MONITORING PERIOD	
MO DAY YEAR	MO DAY YEAR
FROM 05/01/09	TO 05/31/09

Form Approved
 OMB No. 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	9.65	Mgal/ mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
 AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis
 TYPED OR PRINTED

Hazel Lewis
 SIGNATURE

765468-6701
 AREA CODE AND NO.

06 03 09
 MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2011
Month: # 5 May		Year: 2009 E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Fri	0.8						0.804						0.54													
2	Sat	0.1						0.719						0.613													
3	Sun							0.495						0.642													
4	Mon							0.296					14	0.484					2.4				1400				
5	Tue							0.201						0.429													
6	Wed		6'6"					0.158	8.1	106	61			0.386	8.9	40	57			8.7							6'6"
7	Thu	0.4						0.271						0.409													
8	Fri							0.227						0.396													
9	Sat							0.219						0.383													
10	Sun							0.179						0.354													
11	Mon							0.143						0.292													
12	Tue							0.137						0.29													
13	Wed		6'6"					0.123	8.0	127	67		25	0.262	8.9	31	52		0.9	8.1			560				6'6"
14	Thu	1.5						0.467						0.287													
15	Fri							0.812						0.397													
16	Sat	0.2						0.501						0.58													
17	Sun							0.133						0.202													
18	Mon							0.211						0.358													
19	Tue							0.155					20	0.324					0.8				870				
20	Wed		6'6"					0.128	8.1	107	67			0.292	8.9	16	71			9.3							6'6"
21	Thu							0.125						0.286													
22	Fri							0.101						0.227													
23	Sat							0.122						0.243													
24	Sun							0.096						0.177													
25	Mon							0.075						0.133													
26	Tue							0.111						0.14													
27	Wed		6'0"					0.091	8.0	200	93		35	0.121	8.9	22	49		0.4	5.8			370				6'0"
28	Thu	0.2						0.101						0.122													
29	Fri							0.106						0.116													
30	Sat	0.1						0.082						0.09													
31	Sun							0.089						0.083													
Average		0.4714						0.241226		135	72		23.5	0.311548		27.3	57.3		1.125	8.0			709				
Maximum		1.5						0.812	8.1	200	93		35	0.642	8.9	40	71		2.4	9.3			1400				
Minimum								0.075	8.0	106	61		14	0.083	8.9	16	49		0.4	5.8			370				
Totals		3.3		0	0	0	0	7.478	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Certified Operator
Kenny Marquis
Date
6/12/09

Signature of Office, Principal Executive, or Authorized Agent
Daniel Lewis
Date
6-15-09

Phone Number: **765-468-6701**

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	May	2009

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									Spring turnover, large amounts of algae
2									
3									
4				34.58				9.69355	
5									
6	139.76	80.43			128.847	183.607			
7									
8									
9									
10									
11									
12									
13	130.36	68.77		25.66	67.7781	113.692		1.96775	
14									
15									
16									
17									
18									
19				25.87				2.16302	
20	114.29	71.57			38.9878	173.009			
21									
22									
23									
24									
25									
26									
27	151.88	70.62		26.58	22.2144	49.4775		0.4039	
28									
29									
30									
31									
Avg	134.07	72.85		28.17	64.4568	129.946		3.55706	
Max	151.88	80.43		34.58	128.847	183.607		9.69355	
Min	114.29	68.77		25.66	22.2144	49.4775		0.4039	
Removal Rates:									Monthly Totals:
Overall BOD removal: 80%									Influent flow (mg): 7.478
Overall TSS removal: 20%									Effluent flow (mg): 9.658

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

[Signature]
 (SIGNATURE OF CERTIFIED OPERATOR)

6-12-09
 (DATE)

[Signature]
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

6-15-09
 (DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
 ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340

 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

Revised:

IN0021512 001 A
 PERMIT NUMBER PERMITTED FEATURE
 MONITORING PERIOD

Form Approved
 OMB No. 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

FACILITY FARMLAND STP

LOCATION FARMLAND IN

ATTN: MR. DUANE L. COX

FROM 06/01/09 TO 06/30/09
 MO DAY YEAR MO DAY YEAR

 *** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.8	*****	9.0	SU	<input checked="" type="checkbox"/>	5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	43.3	67.2	lb/d	*****	44.5	56	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	.397	.520	lb/d	*****	.44	.69	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	137	244	Mgal/d	*****	*****	*****		<input checked="" type="checkbox"/>	Five Per Week	TOTALZ
50050 1 0 0	PERMIT REQUIREMENT	Report	Report								
Effluent Gross		MO AVG	MX WK AV								
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	22	50	CFU/100mL	<input checked="" type="checkbox"/>	5/7	Grab
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	15.1	22.4	lb/d	*****	15.3	17	mg/L	<input checked="" type="checkbox"/>	5/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		86%	*****	*****	%	<input checked="" type="checkbox"/>	1/7	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
 AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

TYPED OR PRINTED

Hazel Lewis

SIGNATURE

765 468-6701 07 01 09

AREA CODE AND NO. MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)Revised: ☐

IN0021512

001 A

PERMIT NUMBER

PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

06/01/09

TO

06/30/09

Form Approved

OMB No. 2040-004

Approval Expires 05-31-98



* 1 N 0 0 2 1 5 1 2 0 0 1 A 6 2 0 0 9 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	4.11	Mgal/ mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

Hazel Lewis

765/468-6701

07 01 09

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON. MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2011
Month: # 6 June		Year: 2009 E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Mon							0.106						0.072													
2	Tue	0.3						0.107						0.063													
3	Wed	0.3	6'6"					0.147	7.9	77	63		16	0.072	8.9	16	56		0.69	3.6			10				6'6"
4	Thu	1						0.36						0.109													
5	Fri							0.148						0.12													
6	Sat							0.109						0.244													
7	Sun							0.113						0.202													
8	Mon							0.095						0.155													
9	Tue							0.102						0.164													
10	Wed	0.1	6'0"					0.086	8.0	145	82		31	0.125	9.0	11	29		0.25	5.8			50				6'0"
11	Thu	1						0.165						0.122													
12	Fri							0.286						0.141													
13	Sat							0.124						0.123													
14	Sun							0.109						0.115													
15	Mon							0.111						0.116													
16	Tue							0.103						0.115													
17	Wed	0.3	6'0"					0.128	7.9	60	34		22	0.12	8.8	17	42		0.52	3.7			50				6'0"
18	Thu							0.119						0.163													
19	Fri							0.105						0.183													
20	Sat	0.6						0.246						0.191													
21	Sun							0.189						0.221													
22	Mon							0.116						0.186													
23	Tue							0.112						0.185													
24	Wed		6'0"					0.096	7.9	163	72		30	0.158	8.8	17	51		0.3	3.9			10				6'0"
25	Thu							0.093						0.146													
26	Fri	0.6						0.151						0.131													
27	Sat							0.116						0.127													
28	Sun							0.1						0.101													
29	Mon							0.103						0.08													
30	Tue							0.091						0.06													
Average		0.525						0.134533		111	63		24.8	0.137		15.3	44.5		0.44	4.3			22				
Maximum		1						0.36	8.0	163	82		31	0.244	9.0	17	56		0.69	5.8			50				
Minimum								0.086	7.9	60	34		16	0.06	8.8	11	29		0.25	3.6			10				
Totals		4.2		0	0	0	0	4.036	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 7-1-09
Signature of Certified Operator
Date
Phone Number: 765-468-6701

Daniel Lewis 7-6-09
Signature of Officer, Principal Executive, or Authorized Agent
Date

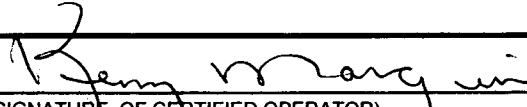
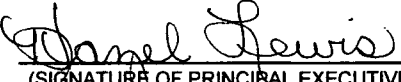
Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	June	2009

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:						
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)							
1									spring turnover-high PH, algae excessive						
2															
3	94.46	77.28		19.63	9.61344	33.647		0.41458							
4				#VALUE!											
5															
6															
7															
8															
9															
10	104.06	58.85		22.25	11.4744	30.2506		0.26078							
11															
12															
13															
14															
15															
16															
17	64.09	36.32		23.50	17.0238	42.0588		0.52073							
18															
19															
20															
21															
22															
23															
24	130.58	57.68		24.03	22.4147	67.244		0.39555							
25															
26															
27															
28															
29															
30															
Avg	98.30	57.53		#VALUE!	15.1316	43.3001		0.39791	<table border="1"> <tr> <td>Removal Rates:</td> <td>Monthly Totals:</td> </tr> <tr> <td>Overall BOD removal: 86%</td> <td>Influent flow (mg): 4.036</td> </tr> <tr> <td>Overall TSS removal: 29%</td> <td>Effluent flow (mg): 4.11</td> </tr> </table>	Removal Rates:	Monthly Totals:	Overall BOD removal: 86%	Influent flow (mg): 4.036	Overall TSS removal: 29%	Effluent flow (mg): 4.11
Removal Rates:	Monthly Totals:														
Overall BOD removal: 86%	Influent flow (mg): 4.036														
Overall TSS removal: 29%	Effluent flow (mg): 4.11														
Max	130.58	77.28		#VALUE!	22.4147	67.244		0.52073							
Min	64.09	36.32		#VALUE!	9.61344	30.2506		0.26078							

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

 (SIGNATURE OF CERTIFIED OPERATOR)	7-1-09 (DATE)
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	7-6-09 (DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
ADDRESS FARMLAND TOWN HALL
PO BOX 336
FARMLAND IN 47340

FACILITY FARMLAND STP
LOCATION FARMLAND
ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512			001 A		
PERMIT NUMBER			PERMITTED FEATURE		
MONITORING PERIOD					
MO	DAY	YEAR	MO	DAY	YEAR
FROM 07/01/09			TO 07/31/09		

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.7	*****	9.0	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	31.2	40.1	lb/d	*****	63.2	69	mg/L		1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	.320	.425	lb/d	*****	.68	1.0	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	.070	.124	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	10	10	CFU/10 mL		5	Grab
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	12.9	17.3	lb/d	*****	26.2	32	mg/L		1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		83%	*****	*****	%		1/7	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Hazel Lewis
TYPED OR PRINTED

Hazel Lewis
SIGNATURE

TELEPHONE

765/468-6701

AREA CODE AND NO.

DATE

08 10 09

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON.MUNICIPAL MINORRANDOLPH COUNTY

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP
ADDRESS FARMLAND TOWN HALL
PO BOX 336
FARMLAND IN 47340
FACILITY FARMLAND STP
LOCATION FARMLAND IN
ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98



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Revised: ☐

IN0021512			001 A			
PERMIT NUMBER			PERMITTED FEATURE			
MONITORING PERIOD						
MO	DAY	YEAR		MO	DAY	YEAR
FROM 07/01/09			TO 07/31/09			

For any questions call Dan Knowles at 317-232-0019
*** Mark box if NO DISCHARGE ☐ ***
NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	2.17	Mgal/ mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report				.			Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE			
Hazel Lewis	765 468-6701	8	10	09	
TYPED OR PRINTED	SIGNATURE	AREA CODE AND NO.	MO	DAY	YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2011
Month: # 7 July		Year: 2009 E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge				
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)	
1	Wed		60"					0.084	7.8	146	56		27	0.053	8.7	28	59		0.7	3.1			10				60"	
2	Thu							0.088						0.069														
3	Fri							0.089						0.097														
4	Sat							0.078						0.093														
5	Sun	0.1						0.091						0.109														
6	Mon							0.081						0.091														
7	Tue							0.085						0.095														
8	Wed		60"					0.08	7.8	148	42		38	0.083	9.0	25	58		0.3	3.3			10				60"	
9	Thu							0.08						0.078														
10	Fri							0.078						0.074														
11	Sat							0.074						0.069														
12	Sun	0.6						0.122						0.095														
13	Mon							0.095						0.095														
14	Tue							0.087						0.077														
15	Wed		60"					0.077	7.8	138	83		33	0.062	8.9	25	69		0.63	3.0			10				60"	
16	Thu							0.081						0.065														
17	Fri							0.079						0.056														
18	Sat							0.083						0.049														
19	Sun							0.078						0.045														
20	Mon	0.2						0.076						0.045														
21	Tue							0.077					30	0.051					0.78				10					
22	Wed	0.3	60"					0.081	7.8	143	92			0.049	8.9	21	61			3.2							60"	
23	Thu	0.4						0.133						0.023														
24	Fri	0.1						0.095						0.124														
25	Sat	0.3						0.094						0.071														
26	Sun							0.109						0.076														
27	Mon							0.101						0.07														
28	Tue							0.081						0.057														
29	Wed		60"					0.08	7.6	175	69		29	0.051	8.9	32	69		1	2.5			10				60"	
30	Thu							0.081						0.049														
31	Fri	0.2						0.088						0.049														
Average		0.275						0.08729		150	68		31.4	0.07		26.2	63.2		0.682	3.0			10					
Maximum		0.6						0.133	7.8	175	92		38	0.124	9.0	32	69		1	3.3			10					
Minimum								0.074	7.6	138	42		27	0.023	8.7	21	58		0.3	2.5			10					
Totals		2.2		0	0	0	0	2.706	I certify under penalty of law that this document and all attachments were prepared under																			

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 8/10/09
Signature of Certified Operator
Phone Number: 765-468-6701

Daniel Lewis 8-13-09
Signature of Officer, Principal Executive, or Authorized Agent

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)


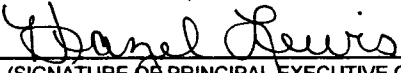
Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	July	2009

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1	102.34	39.25		18.93	12.384	26.0948		0.3096	
2									
3									
4									
5									
6									
7									
8	98.80	28.04		25.37	17.3159	40.1728		0.20779	
9									
10									
11									
12									
13									
14									
15	88.67	53.33		21.20	12.9348	35.6999		0.32596	
16									
17									
18									
19									
20									
21				19.28				0.33196	
22	96.66	62.19			8.58701	24.9432			
23									
24									
25									
26									
27									
28									
29	116.83	46.06		19.36	13.619	29.3661		0.4256	
30									
31									
Avg	100.66	45.78		20.83	12.9681	31.2554		0.32018	
Max	116.83	62.19		25.37	17.3159	40.1728		0.4256	
Min	88.67	28.04		18.93	8.58701	24.9432		0.20779	

Removal Rates:	Monthly Totals:
Overall BOD removal: 83%	Influent flow (mg): 2.706
Overall TSS removal: 8%	Effluent flow (mg): 2.17

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

 (SIGNATURE OF CERTIFIED OPERATOR)	8-10-09 (DATE)
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	8-13-09 (DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
ADDRESS FARMLAND TOWN HALL
PO BOX 336
FARMLAND IN 47340

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

FACILITY FARMLAND STP

LOCATION FARMLAND IN

ATTN: MR. DUANE L. COX

Revised: ☐

IN0021512			001 A		
PERMIT NUMBER			PERMITTED FEATURE		
MONITORING PERIOD					
MO	DAY	YEAR	MO	DAY	YEAR
FROM 08/01/09			TO 08/31/09		

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.8	*****	8.9	SU	<input checked="" type="checkbox"/>	5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	51.6	61.9	lb/d	*****	71.3	79	mg/L	1	1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	1.642	1.56	lb/d	*****	1.84	2.0	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	1090	114	Mgal/d	*****	*****	*****		<input checked="" type="checkbox"/>		
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	30	210	CFU/10 0mL	<input checked="" type="checkbox"/>		
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	19.2	20.3	lb/d	*****	27.0	32	mg/L	1	1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		82%	*****	*****	%	1	1/7	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis
TYPED OR PRINTED

Daniel Lewis
SIGNATURE

765 468-6701
AREA CODE AND NO.

09 14 09
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON. MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
 ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340
 FACILITY FARMLAND STP
 LOCATION FARMLAND IN
 ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
08/01/09		TO 08/31/09	

Form Approved
 OMB No. 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	2.79	Mgal/ mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis
 TYPED OR PRINTED

Hazel Lewis
 SIGNATURE

765 468-6701
 AREA CODE AND NO.

09 14 09
 MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON. MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
 Indiana Department of Environmental Management
 Office of Water Quality, Mail Code 65-42
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2011
Month: # 8 August		Year: 2009	
E-mail address:			

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Sat							0.072						0.043													
2	Sun	0.1						0.069						0.051													
3	Mon							0.114						0.048													
4	Tue	0.1						0.078						0.058													
5	Wed		6'0"					0.09	7.7	144	66		26	0.092	8.9	24	66		0.59	4.0			210				6'0"
6	Thu							0.088						0.109													
7	Fri							0.088						0.112													
8	Sat	0.1						0.074						0.113													
9	Sun							0.078						0.108													
10	Mon							0.086						0.108													
11	Tue							0.08						0.107													
12	Wed		6'0"					0.073	7.7	161	70		41	0.094	8.8	26	79		0.44	3.9			10				6'0"
13	Thu							0.101						0.092													
14	Fri							0.087						0.086													
15	Sat							0.1						0.089													
16	Sun							0.108						0.085													
17	Mon							0.094						0.07													
18	Tue							0.105						0.077													
19	Wed		6'0"					0.099	7.8	152	49		27	0.067	8.9	32	71		0.36	2.8			10				6'0"
20	Thu	1						0.184						0.096													
21	Fri							0.123						0.114													
22	Sat	0.1						0.098						0.102													
23	Sun							0.113						0.104													
24	Mon							0.12						0.1													
25	Tue							0.111						0.104													
26	Wed		6'0"					0.1	7.9	150	69		38	0.094	8.8	26	69		2	4.6			40				6'0"
27	Thu							0.104						0.096													
28	Fri	0.1						0.104						0.094													
29	Sat	0.4						0.11						0.096													
30	Sun							0.12						0.103													
31	Mon							0.104						0.078													
Average		0.2714						0.099194		152	64		33.0	0.09		27.0	71.3		0.848	3.8			30				
Maximum		1						0.184	7.9	161	70		41	0.114	8.9	32	79		2	4.6			210				
Minimum								0.069	7.7	144	49		26	0.043	8.8	24	66		0.36	2.8			10				
Totals		1.9		0	0	0	0	3.075	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 9/14/09
 Signature of Certified Operator
 Phone Number: 765-468-6701

Daniel Lewis 9-17-09
 Signature of Officer, Principal Executive, or Authorized Agent
 Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	August	2009

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									spring turnover-high PH, algae excessive
2									
3									
4				#VALUE!					
5	108.15	49.57		19.53	18.4258	50.6708		0.45297	
6									
7									
8									
9									
10									
11									
12	98.08	42.64		24.98	20.3952	61.97		0.34515	
13									
14									
15									
16									
17									
18									
19	125.58	40.48		22.31	17.8917	39.6972		0.20128	
20									
21									
22									
23									
24									
25									
26	125.18	57.58		31.71	20.3952	54.1257		1.56886	
27									
28									
29									
30									
31									
Avg	114.25	47.57		#VALUE!	19.277	51.6159		0.64206	
Max	125.58	57.58		#VALUE!	20.3952	61.97		1.56886	
Min	98.08	40.48		#VALUE!	17.8917	39.6972		0.20128	
Removal Rates:									Monthly Totals:
Overall BOD removal: 82%									Influent flow (mg): 3.075
Overall TSS removal: -12%									Effluent flow (mg): 2.79

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<i>Kenny Marquin</i> (SIGNATURE OF CERTIFIED OPERATOR)	9-14-09 (DATE)
<i>Daniel Lewis</i> (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	9-17-09 (DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)**

Form Approved
 OMB No. 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

FACILITY FARMLAND STP

LOCATION FARMLAND IN

ATTN: MR. DUANE L. COX

Revised: ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 09/01/09		TO 09/30/09	

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.3	*****	8.7	SU	<input checked="" type="checkbox"/>	5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	40.8	51.5	lb/d	*****	68	84	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	.888	2.29	lb/d	*****	1.3	2.9	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	.072	.095	Mgal/d	*****	*****	*****		<input checked="" type="checkbox"/>		
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	38	230	CFU/10 0mL	<input checked="" type="checkbox"/>		
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	11.6	18.2	lb/d	*****	18.6	26	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		90%	*****	*****	%	<input checked="" type="checkbox"/>	1/7	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
 AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis ONAFIC
 TYPED OR PRINTED NAME SIGNATURE

765 468-6701
 AREA CODE AND NO.

10 06 09
 MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON.MUNICIPAL MINORRANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised:

☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 09/01/09		TO 09/30/09	

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

☐ ☐ ☐


* I N 0 0 2 1 5 1 2 0 0 1 A 9 2 0 0 9 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE

☐

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total 82220 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	*****	2.25	Mgal/ mo	*****	*****	*****				
	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

Hazel Lewis

765 468-6701

10 06 09

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

151

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:

Indiana Department of Environmental Management

Office of Water Quality, Mail Code 65-42

100 North Senate Avenue

Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant

(Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2011
Month: # 9 September Year: 2009		E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge					
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)		
1	Tue							0.105						0.093															
2	Wed		6'0"					0.095	7.8	142	66		26	0.084	8.7	26	67		1.2	5.3			60					6'0"	
3	Thu							0.104						0.09															
4	Fri							0.093						0.082															
5	Sat							0.085						0.081															
6	Sun							0.099						0.083															
7	Mon	0.1						0.102						0.086															
8	Tue							0.112						0.088															
9	Wed		6'0"					0.1	7.7	158	63		34	0.095	8.4	22	65		2.9	3.4			10					6'0"	
10	Thu							0.093						0.092															
11	Fri							0.096						0.085															
12	Sat							0.078						0.087															
13	Sun							0.078						0.077															
14	Mon							0.08						0.066															
15	Tue							0.075						0.07															
16	Wed		6'0"					0.071	7.7	206	85		49	0.069	8.4	12	67		1.5	5.5			60					6'0"	
17	Thu							0.074						0.058															
18	Fri							0.073						0.053															
19	Sat							0.073						0.049															
20	Sun							0.078						0.047															
21	Mon	0.3						0.094						0.045															
22	Tue	0.4						0.11						0.073															
23	Wed	0.1	6'0"					0.072	7.6	133	39		22	0.069	8.3	13	57		0.41	5.8			10					6'0"	
24	Thu							0.092						0.078															
25	Fri							0.086						0.062															
26	Sat	0.3						0.086						0.072															
27	Sun							0.086						0.069															
28	Mon							0.079						0.058															
29	Tue							0.083						0.065															
30	Wed		6'0"					0.076	7.9	267	111		47	0.049	8.6	20	84		0.49	8.5			230					6'0"	
								0.104						0.078															
Average		0.24						0.08829		181	73		35.6	0.072677		18.6	68.0		1.73	5.7			38						
Maximum		0.4						0.112	7.9	267	111		49	0.095	8.7	26	84		2.9	8.5			230						
Minimum								0.071	7.6	133	39		22	0.045	8.3	12	57		0.41	3.4			10						
Totals		1.2		0	0	0	0	2.737																					
I certify under penalty of law that this document and all attachments were prepared under																													

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Certified Operator
Kenny Marquis
Date
10/5/09
Phone Number: **765-468-6701**

Signature of Officer, Principal Executive, or Authorized Agent
Cheryl Lewis
Date
10-5-09

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)


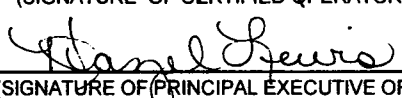
Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	September	2009

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									excessive algae
2	112.57	52.32		20.61	18.2255	46.9657		0.84118	
3									
4				#VALUE!					
5									
6									
7									
8									
9	131.85	52.57		28.37	17.4411	51.5304		2.29905	
10									
11									
12									
13									
14									
15									
16	122.05	50.36		29.03	6.90966	38.5789		0.86371	
17									
18									
19									
20									
21									
22									
23	79.91	23.43		13.22	7.48547	32.8209		0.23608	
24									
25									
26									
27									
28									
29									
30	169.34	70.40		29.81	8.1781	34.348		0.20036	
Avg	123.15	49.82		#VALUE!	11.648	40.8488		0.88807	
Max	169.34	70.40		#VALUE!	18.2255	51.5304		2.29905	
Min	79.91	23.43		#VALUE!	6.90966	32.8209		0.20036	

Removal Rates: Overall BOD removal: 90% Overall TSS removal: 7%	Monthly Totals: Influent flow (mg): 2.737 Effluent flow (mg): 2.253
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5004 OCT - 1 10-13

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	 (SIGNATURE OF CERTIFIED OPERATOR)	10-5-09 (DATE)
	 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	10-5-09 (DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

Revised:



IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 10/01/09		TO 10/31/09	



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH 00400 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	*****	*****	lb/d	8.6	*****	8.7	SU	Ø	5/7	Grab
	PERMIT REQUIREMENT				6		9				
					DAILY MN		DAILY MX				
Solids, total suspended 00530 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	85.7	107.6	lb/d	*****	69.8	75	mg/L	Ø	1/7	Grab
	PERMIT REQUIREMENT	96.4	144.6			70	105				
		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N) 00610 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	1.51	1.00	lb/d	*****	1.40	1.81	mg/L	Ø	1/7	Grab
	PERMIT REQUIREMENT	Report	Report			Report	Report				
		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant 50050 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	1147	1191	Mgal/d	*****	*****	*****			Five Per Week	TOTALZ
	PERMIT REQUIREMENT	Report	Report								
		MO AVG	MX WK AV								
E. coli, colony forming units (CFU) 51041 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	*****	*****		*****	453	630	CFU/100mL	Ø	Weekly	GRAB
	PERMIT REQUIREMENT					Report	Report				
						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C 80082 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	25.8	30.1	lb/d	*****	21	23	mg/L	Ø	1/7	Grab
	PERMIT REQUIREMENT	34.4	55.1			25	40				
		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal 80091 K 0 0 Percent Removal	SAMPLE MEASUREMENT	*****	*****		84%	*****	*****	%	1	1/7	Grab
	PERMIT REQUIREMENT					85					
						MO AV MN					

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

TYPED OR PRINTED

Hazel Lewis

SIGNATURE

765/468-6701

AREA CODE AND NO.

11 02 09

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised:

☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 10/01/09		TO 10/31/09	

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

☐ ☐ ☐


For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE

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NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	4.57	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

Hazel Lewis

765 468-6701

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SIGNATURE

AREA CODE AND NO.

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DAY

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COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON.MUNICIPAL MINORRANDOLPH COUNTY

Send by 28th of the Month to:
 Indiana Department of Environmental Management
 Office of Water Quality, Mail Code 65-42
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2011
Month: # 10 October		Year: 2009 E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Thu							0.08						0.053													
2	Fri	2.2						0.166						0.071													
3	Sat	0.1						0.278						0.171													
4	Sun							0.106						0.167													
5	Mon							0.102						0.171													
6	Tue							0.09						0.165													
7	Wed		6'0					0.081	8.0	176	71		30	0.149	8.7	21	66		0.81	7.3			570			6'0	
8	Thu							0.081						0.144													
9	Fri	0.9						0.172						0.141													
10	Sat	0.1						0.303						0.191													
11	Sun							0.126						0.172													
12	Mon							0.127						0.177													
13	Tue							0.116						0.183													
14	Wed	0.1	6'0					0.096	8.0	161	72		30	0.172	8.7	21	75		0.53	9.6			560			6'0	
15	Thu	0.4						0.112						0.161													
16	Fri							0.125						0.161													
17	Sat							0.098						0.152													
18	Sun							0.104						0.144													
19	Mon							0.105						0.138													
20	Tue							0.099						0.139													
21	Wed		6'0					0.08	7.9	160	64		32	0.127	8.6	19	72		0.18	10.8			630			6'0	
22	Thu							0.076						0.122													
23	Fri	0.6						0.119						0.133													
24	Sat							0.189						0.152													
25	Sun							0.118						0.139													
26	Mon							0.102						0.126													
27	Tue							0.088						0.133													
28	Wed	0.6	6'0					0.179	7.9	43	27		13	0.14	8.6	23	66		0.1	9.8			210			6'0	
29	Thu							0.165						0.16													
30	Fri							0.118						0.155													
31	Sat	0.7						0.336						0.161													
Average		0.6333						0.133452		135	59		26.3	0.147419		21.0	69.8		0.405	9.4			453				
Maximum		2.2						0.336	8.0	176	72		32	0.191	8.7	23	75		0.81	10.8			630				
Minimum								0.076	7.9	43	27		13	0.053	8.6	19	66		0.1	7.3			210				
Totals		5.7		0	0	0	0	4.137	I certify under penalty of law that this document and all attachments were prepared under																		

Kenny Marquis 11/2/09
 Signature of Certified Operator
 Phone Number: 765-466-6701

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Shagel Lewis 11-2-09
 Signature of Officer, Principal Executive, or Authorized Agent
 Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	October	2009

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									large amounts of algae
2									
3									
4									
5									
6									
7	118.97	47.99		20.28	26.1115	82.0647		1.00716	
8									
9									
10									
11									
12									
13									
14	128.98	57.68		24.03	30.1421	107.651		0.76073	
15									
16									
17									
18									
19									
20									
21	106.82	42.73		21.36	20.1365	76.3067		0.19077	
22									Removal Rates: Overall BOD removal: 84% Overall TSS removal: -19% Monthly Totals: Influent flow (mg): 4.137 Effluent flow (mg): 4.57
23									
24									
25									
26									
27									
28	64.23	40.33		19.42	26.8709	77.1078		0.11683	
29									
30									
31									
Avg	104.75	47.18		21.27	25.8153	85.7824		0.51887	
Max	128.98	57.68		24.03	30.1421	107.651		1.00716	
Min	64.23	40.33		19.42	20.1365	76.3067		0.11683	

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(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised:



IN0021512			001 A		
PERMIT NUMBER			PERMITTED FEATURE		
MONITORING PERIOD					
MO	DAY	YEAR	MO	DAY	YEAR
FROM 11/01/09			TO 11/30/09		

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE



NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.2	*****	8.7	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	70.9	109.9	lb/d	*****	61.3	72	mg/L		1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	1.08	1.72	lb/d	*****	1.11	1.5	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	126	207	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	21.8	30.5	lb/d	*****	19.5	21	mg/L		5/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		87%	*****	*****	%		10	
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						
Flow, total	SAMPLE MEASUREMENT	*****	3.80	Mgal/mo	*****	*****	*****			100%	
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

Hazel Lewis

765 468-6701

12 01 09

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON.MUNICIPAL MINORRANDOLPH COUNTY

Send by 28th of the Month to:

Indiana Department of Environmental Management

Office of Water Quality, Mail Code 65-42

100 North Senate Avenue

Indianapolis, Indiana 46204-2251

Monthly Report of Operation **Lagoon Type** **Wastewater Treatment Plant** (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2011
Month: # 11 November Year: 2009		E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (In.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Sun							0.263						0.207													
2	Mon							0.15						0.175													
3	Tue							0.122						0.188													
4	Wed		6'0"					0.101	8.0	126	48		27	0.183	8.7	20	72		0.15	10.3							6'0"
5	Thu							0.101						0.193													
6	Fri							0.084						0.182													
7	Sat							0.086						0.158													
8	Sun							0.093						0.141													
9	Mon							0.091						0.138													
10	Tue		6'0"					0.09	8.0	150	62		31	0.148	8.6	20	71		1.4	9.5							6'0"
11	Wed							0.081						0.137													
12	Thu							0.083						0.126													
13	Fri							0.08						0.108													
14	Sat							0.078						0.103													
15	Sun							0.086						0.099													
16	Mon							0.099						0.101													
17	Tue							0.083					32	0.098					1.4								
18	Wed	0.4	6'0"					0.109	8.0	145	69			0.103	8.5	21	57			8.8							6'0"
19	Thu							0.137						0.104													
20	Fri							0.114						0.099													
21	Sat							0.103						0.106													
22	Sun							0.104						0.104													
23	Mon							0.089						0.09													
24	Tue							0.091						0.103													
25	Wed	0.1	6'0"					0.085	7.9	178	72		38	0.099	8.2	17	45		1.5	8.3							6'0"
26	Thu	0.1						0.097						0.109													
27	Fri							0.091						0.096													
28	Sat							0.101						0.106													
29	Sun							0.084						0.096													
30	Mon	0.2						0.118						0.109													
Average		0.2						0.103133		150	63		32.0	0.126967		19.5	61.3		1.113	9.2							
Maximum		0.4						0.263	8.0	178	72		38	0.207	8.7	21	72		1.5	10.3							
Minimum								0.078	7.9	126	48		27	0.09	8.2	17	45		0.15	8.3							
Totals		0.8		0	0	0	0	3.094	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis
 Signature of Certified Operator

12-7-09
 Date

Phone Number: 765-468-6701

Daniel Lewis
 Signature of Officer, Principal Executive, or Authorized Agent

12/7/09
 Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	November	2009

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									large amounts of algae
2									
3									
4	106.20	40.46		22.76	30.5427	109.954		0.22907	
5									
6									
7									
8									
9									
10	112.66	46.57		23.28	24.7012	87.6893		1.72908	
11									
12									
13									
14									
15									
16									
17				22.16				1.14493	
18	131.89	62.76			18.0502	48.9935			
19									
20									
21									
22									
23									
24									
25	126.26	51.07		26.95	14.0446	37.177		1.23923	
26									
27									
28									
29									
30									
Avg	119.25	50.21		23.79	21.8347	70.9534		1.08558	
Max	131.89	62.76		26.95	30.5427	109.954		1.72908	
Min	106.20	40.46		22.16	14.0446	37.177		0.22907	
Removal Rates:									Monthly Totals:
Overall BOD removal: 87%									Influent flow (mg): 3.094
Overall TSS removal: 2%									Effluent flow (mg): 3.809

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis
 (SIGNATURE OF CERTIFIED OPERATOR)

12-7-09
 (DATE)

Daniel Lewis
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

12-7-09
 (DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
ADDRESS FARMLAND TOWN HALL
PO BOX 336
FARMLAND IN 47340

FACILITY FARMLAND STP
LOCATION FARMLAND IN
ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512			001 A		
PERMIT NUMBER			PERMITTED FEATURE		
MONITORING PERIOD					
MO	DAY	YEAR	MO	DAY	YEAR
FROM 12/01/09			TO 12/31/09		

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		7.9	*****	8.1	SU	<input checked="" type="checkbox"/>	5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	37.1	53.2	lb/d	*****	27.2	44	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	8.49	15.1	lb/d	*****	5.12	7.8	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	.175	.256	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	23.0	30.5	lb/d	*****	16.2	21	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		84%	*****	*****	%	<input checked="" type="checkbox"/>	1/7	Grab
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						
Flow, total	SAMPLE MEASUREMENT	*****	5.43	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis
TYPED OR PRINTED

Hazel Lewis
SIGNATURE

765468-6701
AREA CODE AND NO.

01 06 10
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2011
Month: # 12 December Year: 2009		E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Tue							0.11					31	0.113					2.3								
2	Wed	0.1	6'0"					0.089	7.9	156	77			0.115	8.1	20	40			9.7							6'0"
3	Thu	0.5						0.29						0.119													
4	Fri							0.204						0.121													
5	Sat							0.123						0.108													
6	Sun							0.143						0.135													
7	Mon	0.5						0.108						0.11													
8	Tue							0.107						0.131													
9	Wed	0.5	6'0"					0.142	7.9	102	70		12	0.145	8.1	21	44		3.8	9.6							6'0"
10	Thu							0.246						0.168													
11	Fri							0.162						0.155													
12	Sat	0.5						0.124						0.152													
13	Sun							0.235						0.168													
14	Mon							0.477						0.196													
15	Tue							0.27						0.183													
16	Wed		6'0"					0.187	7.9	77	34		14	0.256	8.0	9	17		4.8	10.8							6'0"
17	Thu							0.196						0.209													
18	Fri							0.143						0.213													
19	Sat	2						0.138						0.216													
20	Sun							0.144						0.214													
21	Mon	0.5						0.119						0.179													
22	Tue							0.125						0.192													
23	Wed		6'0"					0.122	7.8	92	37		20	0.179	7.9	14	16		6.9	7.9							6'0"
24	Thu							0.13						0.179													
25	Fri	0.3						0.265						0.185													
26	Sat							0.447						0.178													
27	Sun							0.309						0.253													
28	Mon	3						0.178						0.208													
29	Tue							0.165					18	0.233					7.8								
30	Wed		6'0"					0.15	7.9	71	48			0.215	8.0	17	19			4.8							6'0"
31	Thu							0.15						0.214													
Average		0.8778						0.187032		100	53		19.0	0.175419		16.2	27.2		5.12	8.6							
Maximum		3						0.477	7.9	156	77		31	0.256	8.1	21	44		7.8	10.8							
Minimum								0.089	7.8	71	34		12	0.106	7.9	9	16		2.3	4.8							
Totals		7.9		0	0	0	0	5.798	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis
Signature of Certified Operator
Phone Number: 765-468-6701

1-6-10
Date

Hazel Lewis 1-6-10
Signature of Officer, Principal Executive, or Authorized Agent
Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	December	2009

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1				28.46				2.16887	large amounts of algae
2	115.86	57.19			19.1935	38.387			
3									
4									
5									
6									
7									
8									
9	120.87	82.95		14.22	25.4105	53.2411		4.5981	
10									
11									
12									
13									
14									
15									
16	120.16	53.06		21.85	19.2269	36.3174		10.2543	
17									
18									
19									
20									
21									
22									
23	93.66	37.67		20.36	20.9126	23.9001		10.3069	
24									
25									
26									
27									
28									
29				24.78				15.1662	
30	88.87	60.08			30.501	34.0893			
31									
Avg	107.89	58.19		21.93	23.0489	37.187		8.49888	
Max	120.87	82.95		28.46	30.501	53.2411		15.1662	
Min	88.87	37.67		14.22	19.1935	23.9001		2.16887	

Removal Rates:

Overall BOD removal: 84%

Overall TSS removal: 49%

Monthly Totals:

Influent flow (mg): 5.798

Effluent flow (mg): 5.438

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Mangini
 (SIGNATURE OF CERTIFIED OPERATOR)

1-6-10
 (DATE)

Daniel Lewis
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

1-6-10
 (DATE)

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised:



IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO
FROM	01/01/10	TO	01/31/10

 Form Approved
OMB No. 2040-004
Approval Expires 05-31-98


* 1 N 0 0 2 1 5 1 2 0 0 1 A 1 2 0 1 0 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE



NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		7.9	*****	8.0	SU		5/7	Grab
00400 1 0 0 Effluent Gross	PERMIT REQUIREMENT				6		9			Weekly	GRAB
					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	19.9	23.6	lb/d	*****	12.5	15	mg/L		1/7	Grab
00530 1 0 0 Effluent Gross	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	15.8	28.9	lb/d	*****	9.27	12	mg/L		1/7	Grab
00610 1 0 0 Effluent Gross	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	204	342	Mgal/d	*****	*****	*****				
50050 1 0 0 Effluent Gross	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	32.5	65.7	lb/d	*****	18.5	25	mg/L		1/7	Grab
80082 1 0 0 Effluent Gross	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		81%	*****	*****	%			
80091 K 0 0 Percent Removal	PERMIT REQUIREMENT				85					Weekly	GRAB
					MO AV MN						
Flow, total	SAMPLE MEASUREMENT	*****	6.34	Mgal/mo	*****	*****	*****				
82220 1 0 0 Effluent Gross	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
TELEPHONE
DATE

Hazel Lewis

Signature

765/468-6701

2 4 10

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis		Class 1-sp	Expiration Date 6/30/2012
Month: # 1 January		Year: 2010	E-mail address:

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent											Controlled Discharge				
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)		
1	Fri							0.18						0.22															
2	Sat							0.162						0.22															
3	Sun							0.133						0.199															
4	Mon							0.13						0.185															
5	Tue							0.143						0.215															
6	Wed		6'0"					0.122	7.8	102	52		23	0.197	7.9	11	14		6.5	6.5							6'0"		
7	Thu	5						0.121						0.165															
8	Fri	1						0.125						0.187															
9	Sat	0.5						0.107						0.175															
10	Sun							0.116						0.184															
11	Mon							0.103						0.156															
12	Tue							0.095						0.163															
13	Wed		6'0"					0.084	7.7	135	83		26	0.143	7.9	14	12		7.6	5.9							6'0"		
14	Thu							0.088						0.15															
15	Fri							0.105						0.149															
16	Sat							0.116						0.145															
17	Sun							0.178						0.147															
18	Mon							0.167						0.13															
19	Tue							0.166						0.155															
20	Wed		6'0"					0.142	7.9	94	57		19	0.149	8.0	24	15		12	4.5							6'0"		
21	Thu							0.143						0.161															
22	Fri	0.5						0.326						0.171															
23	Sat	0.1						0.322						0.206															
24	Sun	0.3						0.365						0.216															
25	Mon							0.821						0.272															
26	Tue	0.5						0.6						0.324															
27	Wed		6'0"					0.284	7.9	66	22		10	0.315	7.9	25	9		11	4.9							6'0"		
28	Thu							0.233						0.342															
29	Fri							0.179						0.301															
30	Sat							0.18						0.331															
31	Sun							0.151						0.272															
Average		1.1286						0.199581		99	54		19.5	0.204677		18.5	12.5		9.275	5.5									
Maximum		5						0.821	7.9	135	83		26	0.342	8.0	25	15		12	6.5									
Minimum								0.084	7.7	66	22		10	0.13	7.9	11	9		6.5	4.5									
Totals		7.9		0	0	0	0	6.187	I certify under penalty of law that this document and all attachments were prepared under																				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Officer, Principal Executive, or Authorized Agent
Date

Signature of Certified Operator
Date
Phone Number: 765-468-6701

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	January	2010

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									large amounts of snow/rain
2									
3									
4									
5									
6	103.85	52.94		23.42	18.0836	23.0155		10.6858	
7									
8									
9									
10									
11									
12									
13	94.63	58.18		18.23	16.7067	14.32		9.06935	
14									
15									
16									
17									
18									
19									
20	111.39	67.54		22.51	29.8417	18.6511		14.9209	
21									
22									
23									
24									
25									
26									
27	156.42	52.14		23.70	65.7169	23.6581		28.9154	
28									
29									
30									
31									
Avg	116.57	57.70		21.96	32.5872	19.9112		15.8979	
Max	156.42	67.54		23.70	65.7169	23.6581		28.9154	
Min	94.63	52.14		18.23	16.7067	14.32		9.06935	

Removal Rates:	Monthly Totals:
Overall BOD removal: 81%	Influent flow (mg): 6.187
Overall TSS removal: 77%	Effluent flow (mg): 6.345

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<i>Kenny Marguin</i>	2-4-10
(SIGNATURE OF CERTIFIED OPERATOR)	(DATE)
<i>Shaneel Brown</i>	2-11-10
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	(DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
ADDRESS FARMLAND TOWN HALL
PO BOX 336
FARMLAND IN 47340

FACILITY FARMLAND STP
LOCATION FARMLAND
ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 02/01/10		TO 02/28/10	

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98



* 1 N 0 0 2 1 5 1 2 0 0 1 A 2 2 0 1 0 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH 00400 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	*****	*****		7.7	*****	8.0	SU	<input checked="" type="checkbox"/>	5/7	Grab
	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Solids, total suspended 00530 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	23.4	28.8	lb/d	*****	13.8	18	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
	PERMIT REQUIREMENT	96.4 MO AVG	144.6 MX WK AV			70 MO AVG	105 MX WK AV			Weekly	GRAB
Nitrogen, ammonia total (as N) 00610 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	21.8	24.6	lb/d	*****	12.5	14	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
	PERMIT REQUIREMENT	Report MO AVG	Report MX WK AV			Report MO AVG	Report MX WK AV			Weekly	GRAB
Flow, in conduit or thru treatment plant 50050 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	211	331	Mgal/d	*****	*****	*****				
	PERMIT REQUIREMENT	Report MO AVG	Report MX WK AV							Five Per Week	TOTALZ
BOD, carbonaceous, 05 day, 20 C 80082 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	54.8	59.1	lb/d	*****	32.3	36	mg/L	3	1/7	Grab
	PERMIT REQUIREMENT	34.4 MO AVG	55.1 MX WK AV			25 MO AVG	40 MX WK AV			Weekly	GRAB
BOD, carb-5 day, 20 deg C, percent removal 80091 K 0 0 Percent Removal	SAMPLE MEASUREMENT	*****	*****		67%	*****	*****	%	1	3/7	Grab
	PERMIT REQUIREMENT				85 MO AV MN					Weekly	GRAB
Flow, total 82220 1 0 0 Effluent Gross	SAMPLE MEASUREMENT	*****	6.54	Mgal/ mo	*****	*****	*****			5/7	
	PERMIT REQUIREMENT		Report MO TOTAL							Monthly	RCOTOT

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis
TYPED OR PRINTED

Hazel Lewis
SIGNATURE

765 468-6701
AREA CODE AND NO.

3 1 10
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON.MUNICIPAL MINORRANDOLPH COUNTY

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation **Lagoon Type** **Wastewater Treatment Plant** (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2012
Month: # 2 February		Year: 2010	
E-mail address:			

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge					
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)		
1	Mon							0.133						0.245															
2	Tue							0.128					20	0.269					11										
3	Wed		6'0"					0.123	7.9	160	62			0.247	8.0	27	14			3.1							6'0"		
4	Thu							0.117						0.237															
5	Fri							0.116						0.228															
6	Sat	10						0.097						0.208															
7	Sun							0.133						0.3															
8	Mon							0.123						0.236															
9	Tue	2						0.113						0.226															
10	Wed	2	6'0"					0.124	7.8	88	35		14	0.211	7.8	32	12		14	4.6							6'0"		
11	Thu							0.112						0.188															
12	Fri							0.117						0.183															
13	Sat							0.108						0.165															
14	Sun							0.143						0.198															
15	Mon	2						0.104						0.154															
16	Tue	2						0.1						0.163															
17	Wed		6'0"					0.106	7.9	96	51		23	0.17	7.7	34	18		13	4.0							6'0"		
18	Thu							0.114						0.162															
19	Fri							0.115						0.144															
20	Sat							0.114						0.146															
21	Sun	0.1						0.121						0.132															
22	Mon	0.1						0.299						0.153															
23	Tue							0.496						0.182															
24	Wed		6'0"					0.364	7.9	47	18		9.2	0.197	7.8	36	11		12	4.7							6'0"		
25	Thu							0.304						0.221															
26	Fri							0.246						0.217															
27	Sat							0.221						0.225															
28	Sun							0.197						0.232															
								0.179						0.301															
								0.18						0.331															
								0.151						0.272															
Average		2.6						0.164452		98	42		16.6	0.211065		32.3	13.8		12.5	4.1									
Maximum		10						0.496	7.9	160	62		23	0.331	8.0	36	18		14	4.7									
Minimum								0.097	7.8	47	18		9.2	0.132	7.7	27	11		11	3.1									
Totals		18.2		0	0	0	0	5.098	I certify under penalty of law that this document and all attachments were prepared under																				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 3-1-10
Signature of Certified Operator
Date
Phone Number: 765-468-6701

Daniel Lewis 3-1-10
Signature of Officer, Principal Executive, or Authorized Agent
Date

(Version 12/06)

Page 2 of 2

Enter Comments Below:

large amounts of snow 18.2 inches a lot of dilution

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

3-1-10
(DATE)

Hazel Lewis
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

3-1-10
(DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

ATTN: MR. DUANE L. COX

 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised:



IN0021512

001 A

PERMIT NUMBER

PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

03/01/10

TO

03/31/10

 Form Approved
OMB No. 2040-004
Approval Expires 05-31-98


* 1 N 0 0 2 1 5 1 2 0 0 1 A 3 2 0 1 0 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE



NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		7.8	*****	8.1	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	26.5	57.2	lb/d	*****	9.0	19	mg/L		1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	32.6	38.1	lb/d	*****	10.9	12	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	363	501	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	55.7	77.6	lb/d	*****	20.8	34	mg/L	2	1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		48%	*****	*****	%	1		
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						
Flow, total	SAMPLE MEASUREMENT	*****	11.2	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

Hazel Lewis

765 468-6701

04 05 10

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON, MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME **FARMLAND MUNICIPAL STP**
 ADDRESS **FARMLAND TOWN HALL**
PO BOX 336
FARMLAND IN 47340

FACILITY **FARMLAND STP**
 LOCATION **FARMLAND IN**
 ATTN: **MR. DUANE L. COX**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)**

 Revised: ☐

IN0021512			001 A		
PERMIT NUMBER			PERMITTED FEATURE		
MONITORING PERIOD					
MO	DAY	YEAR	MO	DAY	YEAR
FROM 03/01/10			TO 03/31/10		

Form Approved
 OMB No. 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

 *** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		7.8	*****	8.1	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	26.5	57.2	lb/d	*****	9.0	19	mg/L		1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	32.6	38.1	lb/d	*****	10.9	12	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	.363	.501	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	55.7	77.6	lb/d	*****	20.8	34	mg/L	2	1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		48%	*****	*****	%	1		
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						
Flow, total	SAMPLE MEASUREMENT	*****	11.2	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis
 TYPED OR PRINTED

Hazel Lewis
 SIGNATURE

765 468-1671
 AREA CODE AND NO.

04 05 10
 MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON. MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2012
Month: # 3 March		Year: 2010 E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Mon							0.217						0.22													
2	Tue							0.308					9.9	0.254					12								
3	Wed		6'0"					0.26	7.8	46	20			0.223	7.9	34	8			3.7							6'0"
4	Thu							0.355						0.295													
5	Fri							0.33						0.248													
6	Sat							0.291						0.232													
7	Sun							0.343						0.267													
8	Mon							0.483						0.296													
9	Tue							0.486					7	0.28					11								
10	Wed	0.5	6'0"					0.433	7.8	30	11			0.304	7.9	28	3			3.8							6'0"
11	Thu							0.406						0.354													
12	Fri	0.1						0.304						0.361													
13	Sat	0.6						0.518						0.373													
14	Sun	0.7						0.945						0.501													
15	Mon							0.717						0.445													
16	Tue							0.428						0.472													
17	Wed		6'0"					0.297	7.8	43	14		9.5	0.443	7.8	21	6			9.8	3.6						6'0"
18	Thu							0.237						0.439													
19	Fri							0.2						0.433													
20	Sat							0.172						0.415													
21	Sun							0.15						0.377													
22	Mon	0.4						0.158						0.356													
23	Tue	0.5						0.832					4.6	0.416					11								
24	Wed		6'0"					0.4	7.9	23	9			0.361	8.0	13	19			6.3							6'0"
25	Thu							0.304						0.477													
26	Fri	0.3						0.438						0.382													
27	Sat							0.392						0.425													
28	Sun	0.5						0.289						0.39													
29	Mon	0.3						0.614						0.392													
30	Tue							0.475						0.433													
31	Wed		6'0"					0.285	7.9	58	20		11	0.413	8.1	8	9			11	7.0						6'0"
Average		0.4333						0.389258		40	15		8.4	0.363774		20.8	9.0		10.96	4.9							
Maximum		0.7						0.945	7.9	58	20		11	0.501	8.1	34	19		12	7							
Minimum								0.15	7.8	23	9		4.6	0.22	7.8	8	3		9.8	3.6							
Totals		3.9		0	0	0	0	12.067	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Certified Operator
Phone Number: **765-468-6701**

Date

Kenny Marquis
Signature of Officer, Principal Executive, or Authorized Agent

Date

4-15-10

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	March	2010

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									large amounts of rain plus a large amount of snow run-off provided a lot of dilution
2				25.45				25.4356	
3	99.81	43.39			63.2718	14.8875			
4									
5									
6									
7									
8									
9				28.39				25.7026	
10	108.40	39.75			71.0326	7.61064			
11									
12									
13									
14									
15									
16									
17	106.57	34.70		23.55	77.6335	22.181		36.229	
18									
19									
20									
21									
22									
23				31.94				38.1867	
24	76.77	30.04			39.1631	57.2384			
25									
26									
27									
28									
29									
30									
31	137.94	47.57		26.16	27.5719	31.0184		37.9113	
Avg	105.90	39.09		27.10	55.7346	26.5872		32.693	
Max	137.94	47.57		31.94	77.6335	57.2384		38.1867	
Min	76.77	30.04		23.55	27.5719	7.61064		25.4356	
									Removal Rates: Overall BOD removal: 48% Overall TSS removal: 39%
									Monthly Totals: Influent flow (mg): 12.067 Effluent flow (mg): 11.277

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

Theresa Davis

4-15-10

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 04/01/10		TO 04/30/10	

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.3	*****	8.8	SU	<input checked="" type="checkbox"/>	5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	38.1	56.3	lb/d	*****	22.8	28	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	8.4	20.6	lb/d	*****	4	8.4	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	1262	1441	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	65	390	CFU/10 0mL		5	
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	30.0	36.2	lb/d	*****	19	25	mg/L	<input checked="" type="checkbox"/>	1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		80%	*****	*****	%	1		
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

Dan Knowles

765 468-6701

05 14 10

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP
 ADDRESS FARMLAND TOWN HALL
 PO BOX 336
 FARMLAND IN 47340
 FACILITY FARMLAND STP
 LOCATION FARMLAND IN
 ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

Form Approved
 OMB No. 2040-004
 Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

Revised: <input type="checkbox"/>		IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE			
MONITORING PERIOD					
MO	DAY	YEAR	MO	DAY	YEAR
FROM 04/01/10			TO 04/30/10		

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum				Units
Flow, total	SAMPLE MEASUREMENT	*****	8.147	Mgal/mo	*****	*****	*****			
82220 1 0 0	PERMIT REQUIREMENT		Report						Monthly	RCOTOT
Effluent Gross			MO TOTAL							

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.	NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE		DATE	
	Hazel Lewis		765/468-6701		05 14 10	
	TYPED OR PRINTED		SIGNATURE		AREA CODE AND NO.	

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON.MUNICIPAL MINORRANDOLPH COUNTY

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation **Lagoon Type** **Wastewater Treatment Plant** (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2012
Month: # 4 April	Year: 2010	E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge											
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)								
1	Thu							0.236						0.441																					
2	Fri							0.186						0.419																					
3	Sat							0.155						0.389																					
4	Sun							0.159						0.376																					
5	Mon							0.145						0.34																					
6	Tue	0.1						0.151						0.352																					
7	Wed		6'0"					0.125	8.0	101	60		18	0.295	8.3	14	19		8.4	8.8			390				6'0"								
8	Thu	1						0.333						0.311																					
9	Fri	0.1						0.458						0.341																					
10	Sat							0.229						0.332																					
11	Sun							0.187						0.321																					
12	Mon							0.14						0.265																					
13	Tue							0.146						0.288																					
14	Wed		6'0"					0.115	8.0	59	26		15	0.241	8.6	18	28		5.2	11.0			230				6'0"								
15	Thu							0.134						0.28																					
16	Fri							0.108						0.204																					
17	Sat							0.106						0.204																					
18	Sun							0.105						0.171																					
19	Mon							0.107						0.156																					
20	Tue							0.104						0.149																					
21	Wed		6'0"					0.093	8.0	91	23		17	0.132	8.6	19	18		1.5	12.7			10				6'0"								
22	Thu							0.104						0.141																					
23	Fri							0.089						0.122																					
24	Sat							0.094						0.129																					
25	Sun	0.2						0.103						0.118																					
26	Mon	0.5						0.159						0.125																					
27	Tue							0.141						0.15																					
28	Wed		6'0"					0.105	8.1	125	48		26	0.137	8.8	25	26		0.9	9.6			20				6'0"								
29	Thu							0.614						0.392																					
30	Fri							0.475						0.433																					
								0.285						0.413																					
Average		0.38						0.183581		94	39		19.0	0.262806		19.0	22.8		4	10.5			65												
Maximum		1						0.614	8.1	125	60		26	0.441	8.8	25	28		8.4	12.7			390												
Minimum								0.089	8.0	59	23		15	0.118	8.3	14	18		0.9	8.8			10												
Totals		1.9		0	0	0	0	5.691	I certify under penalty of law that this document and all attachments were prepared under																										

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 5-14-10
Signature of Certified Operator Date
- Phone Number: 765-468-6701

Harrel Lewis 5-19-10
Signature of Officer, Principal Executive, or Authorized Agent Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	April	2010

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									spring turnover high ph
2									
3									
4									
5									
6									
7	105.36	62.59		18.78	34.4649	46.7737		20.6789	
8									
9									
10									
11									
12									
13									
14	56.62	24.95		14.40	36.2006	56.3121		10.458	
15									
16									
17									
18									
19									
20									
21	70.62	17.85		13.19	20.9293	19.8277		1.65231	
22									
23									
24									
25									
26									
27									
28	109.53	42.06		22.78	28.5816	29.7249		1.02894	
29									
30									
Avg	85.53	36.86		17.29	30.0441	38.1596		8.45453	
Max	109.53	62.59		22.78	36.2006	56.3121		20.6789	
Min	56.62	17.85		13.19	20.9293	19.8277		1.02894	

Removal Rates:

Overall BOD removal: 80%

Overall TSS removal: 42%

Monthly Totals:

Influent flow (mg): 5.691

Effluent flow (mg): 8.147

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

5-14-10

5-19-10

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

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* 1 N 0 0 2 1 5 1 2 0 0 1 A 5 2 0 1 0 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

Revised: ☐

IN0021512	001 A
PERMIT NUMBER	PERMITTED FEATURE
MONITORING PERIOD	
MO DAY YEAR	MO DAY YEAR
FROM 05/01/10	TO 05/31/10

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

PARAMETER

QUANTITY OR LOADING

QUALITY OR CONCENTRATION

NO. EX Frequency of Analysis Sample Type

PARAMETER		QUANTITY OR LOADING		Units	QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum		Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.8	*****	8.9	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	97.1	178.7	lb/d	*****	48	60	mg/L	2	4/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	1.607	1.43	lb/d	*****	.365	.85	mg/L		4/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	.235	.453	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	199	930	CFU/10 0mL			
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	43.2	71.5	lb/d	*****	22	25	mg/L	2	4/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		78%	*****	*****	%	1		
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis
TYPED OR PRINTED

Daniel Lewis
SIGNATURE

765/468-6701
AREA CODE AND NO.

06 07 10
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON. MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

* I N 0 0 2 1 5 1 2 0 0 1 A 5 2 0 1 0 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	7.29	Mgal/ mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

Hazel Lewis

765/468-6701

06 07 10

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
 Indiana Department of Environmental Management
 Office of Water Quality, Mail Code 65-42
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis		Class 1-sp	Certificate Number 12585
Month: # 5 May		Year: 2010	Expiration Date 6/30/2012
E-mail address:			

General Information							Bypasses/ Overflows	Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Sat	0.1						0.078						0.111													
2	Sun	0.9						0.228						0.179													
3	Mon							0.196						0.168													
4	Tue	0.2						0.191						0.194													
5	Wed		6'0"					0.129	8.1	179	95		27	0.166	8.8	25	40		0.41	7.7			600				6'0"
6	Thu							0.123						0.175													
7	Fri							0.109						0.159													
8	Sat	0.1						0.109						0.152													
9	Sun							0.113						0.131													
10	Mon							0.1						0.109													
11	Tue	0.8						0.167						0.122													
12	Wed		6'6"					0.243	8.2	64	20		21	0.151	8.8	20	51		0.1	9.0			1280				6'6"
13	Thu	0.4						0.271						0.176													
14	Fri	0.2						0.173						0.191													
15	Sat							0.138						0.181													
16	Sun							0.136						0.2													
17	Mon	0.2						0.226						0.19													
18	Tue	1.3						0.448					3.9	0.203					0.85				930				
19	Wed	0.1	6'6"					0.498	8.0	51	21			0.264	8.8	19	41			6.6							6'6"
20	Thu							0.312						0.302													
21	Fri	0.3						0.244						0.321													
22	Sat	1.2						0.491						0.344													
23	Sun							0.669						0.453													
24	Mon							0.271						0.376													
25	Tue							0.196						0.401													
26	Wed		6'6"					0.151	8.0	109	45		23	0.357	8.9	24	60		0.1	9.6			10				6'6"
27	Thu	0.2						0.154						0.355													
28	Fri	0.5						0.185						0.322													
29	Sat							0.141						0.306													
30	Sun							0.127						0.276													
31	Mon							0.115						0.257													
Average		0.4643						0.217161		101	45		18.7	0.235226		22.0	48.0		0.365	8.2			199				
Maximum		1.3						0.669	8.2	179	95		27	0.453	8.9	25	60		0.85	9.6			930				
Minimum								0.078	8.0	51	20		3.9	0.109	8.8	19	40		0.1	6.6			10				
Totals		6.5		0	0	0	0	6.732	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 6-7-10
 Signature of Certified Operator
 Date

Daniel Lewis 6-7-10
 Signature of Owner, Principal Executive, or Authorized Agent
 Date

Phone Number: 765-468-6701

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	May	2010

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									spring turnover high ph
2									
3									
4									
5	192.69	102.27		29.07	34.6318	55.4108		0.56796	
6									
7									
8									
9									
10									
11									
12	129.78	40.56		42.58	25.2019	64.2648		0.12601	
13									
14									
15									
16									
17									
18				14.58				1.43993	
19	211.95	87.27			41.8585	90.3263			
20									
21									
22									
23									
24									
25									
26	137.35	56.70		28.98	71.5	178.75		0.29792	
27									
28									
29									
30									
31									
Avg	167.94	71.70		28.80	43.298	97.188		0.60795	Removal Rates:
Max	211.95	102.27		42.58	71.5	178.75		1.43993	
Min	129.78	40.56		14.58	25.2019	55.4108		0.12601	Monthly Totals:

Overall BOD removal: 78%	Influent flow (mg): 6.732
Overall TSS removal: -6%	Effluent flow (mg): 7.292

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<i>Kenny Marguin</i> (SIGNATURE OF CERTIFIED OPERATOR)	6-7-10 (DATE)
<i>Donald Lewis</i> (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	6-7-10 (DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

Revised:



IN0021512

001 A

PERMIT NUMBER PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

06/01/10

TO

06/30/10



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For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.8	*****	8.9	SU		7	Grab
00400 1 0 0 Effluent Gross	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Solids, total suspended	SAMPLE MEASUREMENT	172	268	lb/d	*****	56.4	67	mg/L	2	7	Grab
00530 1 0 0 Effluent Gross	PERMIT REQUIREMENT	96.4 MO AVG	144.6 MX WK AV			70 MO AVG	105 MX WK AV			Weekly	GRAB
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	1.14	2.29	lb/d	*****	1.48	1.1	mg/L		7	Grab
00610 1 0 0 Effluent Gross	PERMIT REQUIREMENT	Report MO AVG	Report MX WK AV			Report MO AVG	Report MX WK AV			Weekly	GRAB
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	361	644	Mgal/d	*****	*****	*****				
50050 1 0 0 Effluent Gross	PERMIT REQUIREMENT	Report MO AVG	Report MX WK AV							Five Per Week	TOTALZ
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	158	840	CFU/10 0mL			
51041 1 0 0 Effluent Gross	PERMIT REQUIREMENT					Report MO GEO	Report DAILY MX			Weekly	GRAB
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	18.6	21	lb/d	*****	55.6	86.1	mg/L	3	7	Grab
80082 1 0 0 Effluent Gross	PERMIT REQUIREMENT	34.4 MO AVG	55.1 MX WK AV			25 MO AVG	40 MX WK AV			Weekly	GRAB
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		59%	*****	*****	%			
80091 K 0 0 Percent Removal	PERMIT REQUIREMENT				85 MO AV MN					Weekly	GRAB

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

Hazel Lewis

765/468-6701

07

06

10

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP
ADDRESS FARMLAND TOWN HALL
PO BOX 336
FARMLAND IN 47340
FACILITY FARMLAND STP
LOCATION FARMLAND IN
ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ***

NOTE: Read Instructions before completing this form

Revised: ☐

IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
FROM 06/01/10		TO 06/30/10	

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	10.8	Mgal/ mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.	NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE		DATE		
	Hazel Lewis		Hazel Lewis		705 468-6701 07 06 10		
	TYPED OR PRINTED		SIGNATURE		AREA CODE AND NO. MO DAY YEAR		

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation **Lagoon Type** **Wastewater Treatment Plant** (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2012
Month: # 6	June	Year: 2010	E-mail address:

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge													
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)										
1	Tue	0.6						0.262						0.263																							
2	Wed		6'6"					0.161	8.0	41	16		9.9	0.234	8.9	21	63		0.7	9.0			80				6'6"										
3	Thu	0.3						0.165						0.251																							
4	Fri							0.167						0.252																							
5	Sat							0.124						0.252																							
6	Sun							0.258						0.251																							
7	Mon							0.258						0.251																							
8	Tue							0.162						0.25																							
9	Wed	0.8	6'6"					0.251	8.2	19	21		3.9	0.25	8.8	20	51		1.1	4.4			840				6'6"										
10	Thu							0.2						0.25																							
11	Fri							0.219						0.25																							
12	Sat	0.1						0.152						0.25																							
13	Sun	0.3						0.178						0.25																							
14	Mon	0.1						0.171						0.25																							
15	Tue	1.5						0.428						0.211																							
16	Wed	0.1	6'6"					0.72	7.9	28	16		5.5	0.219	8.9	21	67		0.3	3.2			10				6'6"										
17	Thu							0.361						0.245																							
18	Fri							0.724						0.252																							
19	Sat	0.9						0.385						0.272																							
20	Sun							0.514						0.314																							
21	Mon	2.1						0.229						0.285																							
22	Tue	0.9						0.697						0.596																							
23	Wed	0.1	6'6"					0.779	7.9	45	23		4.5	0.609	8.8	14	48		0.1	3.8			590				6'6"										
24	Thu							0.388						0.614																							
25	Fri							0.236						0.619																							
26	Sat							0.167						0.613																							
27	Sun							0.152						0.634																							
28	Mon	0.8						0.226						0.62																							
29	Tue							0.314						0.644																							
30	Wed		6'6"					0.164	8.0	92	46		20	0.607	8.8	17	53		0.2	5.7			250				6'6"										
Average		0.6615						0.307067		45	24		8.8	0.361933		18.6	56.4		0.48	5.2			158														
Maximum		2.1						0.779	8.2	92	46		20	0.644	8.9	21	67		1.1	9			840														
Minimum								0.124	7.9	19	16		3.9	0.211	8.8	14	48		0.1	3.2			10														
Totals		8.6		0	0	0	0	9.212	I certify under penalty of law that this document and all attachments were prepared under																												

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 7-6-10
Signature of Certified Operator Date
Phone Number: 765-468-6701

Daniel Lewis 7-6-10
Signature of Officer, Principal Executive, or Authorized Agent Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	June	2010

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									periods of high rainfall high ph effluent equipment struck by lightning-flows estimated 6-7 until 6-14. equipment replaced by b.l. anderson
2	55.09	21.50		13.30	41.0073	123.022		1.36691	
3									
4									
5									
6									
7									
8									
9	39.80	43.99		8.17	41.725	106.399		2.29488	
10									
11									
12									
13									
14									
15									
16	168.24	96.13		33.05	38.3787	122.446		0.54827	
17									
18									
19									
20									
21									
22									
23	292.53	149.52		29.25	71.1495	243.941		0.50821	
24									
25									
26									
27									
28									
29									
30	125.91	62.95		27.37	86.1121	268.467		1.01308	
Avg	136.31	74.82		22.23	55.6745	172.855		1.14627	
Max	292.53	149.52		33.05	86.1121	268.467		2.29488	
Min	39.80	21.50		8.17	38.3787	106.399		0.50821	
Removal Rates:									Monthly Totals:
Overall BOD removal: 59%									Influent flow (mg): 9.212
Overall TSS removal: -131%									Effluent flow (mg): 10.858

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenn Marguin
 (SIGNATURE OF CERTIFIED OPERATOR)

7-6-10
 (DATE)

Harold Davis
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

7-6-10
 (DATE)

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised:



IN0021512			001 A		
PERMIT NUMBER			PERMITTED FEATURE		
MONITORING PERIOD					
MO	DAY	YEAR	MO	DAY	YEAR
07/01/10			07/31/10		

 Form Approved
OMB No. 2040-004
Approval Expires 05-31-98


For any questions call Dan Knowles at 317-232-0019

 *** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.7	*****	9.0	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				8.6		9.0			Weekly	GRAB
Effluent Gross					DAILY/MN		DAILY/MX				
Solids, total suspended	SAMPLE MEASUREMENT	30.9	37.1	lb/d	*****	53.8	57	mg/L		1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	116.7	130.1	lb/d	*****	129.3	154	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	138	1636	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	23	140	CFU/10 mL			
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY/MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	20.3	27	lb/d	*****	11.4	14.7	mg/L		1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		83%	*****	*****	%		1/7	
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV/MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
TELEPHONE
DATE

 Hazel Lewis
TYPED OR PRINTED

 Hazel Lewis
SIGNATURE

 765/468-6701
AREA CODE AND NO.

 08 02 10
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON, MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised:

☐

IN0021512

001 A

PERMIT NUMBER

PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

07/01/10

TO

07/31/10

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

☐ ☐ ☐


For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE

☐

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	4.28	Mgal/ mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT

TELEPHONE

DATE

Nazd Lewis

Daniel Lewis

765-486-6701

08 02 10

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON. MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2012
Month: # 7	July	Year: 2010	E-mail address:

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Thu							0.148						0.636													
2	Fri							0.125						0.589													
3	Sat							0.123						0.633													
4	Sun							0.101						0.547													
5	Mon							0.101						0.064													
6	Tue							0.121						0.044													
7	Wed		6'0"					0.097	8.0	136	46		21	0.051	8.7	27	56		0.21	3.9			10				6'0"
8	Thu							0.105						0.059													
9	Fri	0.1						0.095						0.06													
10	Sat							0.089						0.065													
11	Sun							0.104						0.059													
12	Mon							0.181						0.066													
13	Tue							0.14						0.09													
14	Wed		6'0"					0.099	8.1	123	60		19	0.084	8.9	21	53		0.17	3.7			140				6'0"
15	Thu							0.101						0.081													
16	Fri	0.1						0.103						0.079													
17	Sat							0.097						0.074													
18	Sun	0.1						0.09						0.065													
19	Mon	0.5						0.143						0.077													
20	Tue							0.106						0.083													
21	Wed	0.1	6'0"					0.093	8.0	110	52		23	0.076	8.9	16	49		0.25	3.3			10				6'0"
22	Thu							0.094						0.076													
23	Fri							0.097						0.074													
24	Sat	0.2						0.093						0.068													
25	Sun	0.6						0.161						0.077													
26	Mon							0.165						0.096													
27	Tue							0.105						0.077													
28	Wed		6'0"					0.087	8.1	104	59		23	0.067	9.0	17	57		0.54	3.0			20				6'0"
29	Thu	0.2						0.107						0.068													
30	Fri							0.098						0.057													
31	Sat							0.085						0.042													
Average		0.2375						0.111419		118	54		21.5	0.138194		20.3	53.8		0.293	3.5			23				
Maximum		0.6						0.181	8.1	136	60		23	0.636	9.0	27	57		0.54	3.9			140				
Minimum								0.085	8.0	104	46		19	0.042	8.7	16	49		0.17	3			10				
Totals		1.9		0	0	0	0	3.454	I certify under penalty of law that this document and all attachments were prepared under																		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Certified Operator *Kenny Marquis* 8/2/10
Phone Number: 765-468-6701

Signature of Officer, Principal Executive, or Authorized Agent *Hazel Lewis* 8-2-10
Date


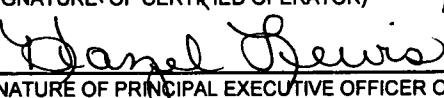
Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	July	2010

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:							
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)								
1									algae bloom along with possible turnover account for high ph							
2																
3																
4																
5																
6																
7	110.09	37.24		17.00	11.4911	23.8333		0.08937								
8																
9																
10																
11																
12																
13																
14	101.62	49.57		15.70	14.7206	37.1519		0.11917								
15																
16																
17																
18																
19																
20																
21	85.37	40.36		17.85	10.1475	31.0768		0.15856								
22																
23																
24																
25																
26																
27																
28	75.51	42.83		16.70	9.50496	31.8696		0.30192		<table border="1"> <tr> <td>Removal Rates:</td> <td>Monthly Totals:</td> </tr> <tr> <td>Overall BOD removal: 83%</td> <td>Influent flow (mg): 3.454</td> </tr> <tr> <td>Overall TSS removal: 1%</td> <td>Effluent flow (mg): 4.284</td> </tr> </table>	Removal Rates:	Monthly Totals:	Overall BOD removal: 83%	Influent flow (mg): 3.454	Overall TSS removal: 1%	Effluent flow (mg): 4.284
Removal Rates:	Monthly Totals:															
Overall BOD removal: 83%	Influent flow (mg): 3.454															
Overall TSS removal: 1%	Effluent flow (mg): 4.284															
29																
30																
31																
Avg	93.14	42.50		16.81	11.466	30.9829		0.16725								
Max	110.09	49.57		17.85	14.7206	37.1519		0.30192								
Min	75.51	37.24		15.70	9.50496	23.8333		0.08937								

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

 (SIGNATURE OF CERTIFIED OPERATOR)	8/2/10 (DATE)
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	8-2-10 (DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised:



IN0021512			001 A		
PERMIT NUMBER			PERMITTED FEATURE		
MONITORING PERIOD					
MO	DAY	YEAR	MO	DAY	YEAR
08/01/10			08/31/10		

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.9	*****	9.0	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	93.2	122	lb/d	*****	55.5	62	mg/L		4/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	1.817	1.67	lb/d	*****	475	82	mg/L		4/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	218	266	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	40	40	CFU/10 0mL			
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	34.6	43.5	lb/d	*****	20.8	22	mg/L		4/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40		1	Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		81%	*****	*****	%			
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis
TYPED OR PRINTED

Hazel Lewis
SIGNATURE

765 468-6701
AREA CODE AND NO.

09 02 10
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON, MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised:

☐

IN0021512				001 A			
PERMIT NUMBER				PERMITTED FEATURE			
MONITORING PERIOD							
MO	DAY	YEAR		MO	DAY	YEAR	
08/01/10				08/31/10			

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

☐ ☐ ☐


For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	6.76	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

Hazel Lewis

765 448-6701

09 02 10

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
 Indiana Department of Environmental Management
 Office of Water Quality, Mail Code 65-42
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis		Class 1-sp	Certificate Number 12585
Month: # 8 August		Year: 2010	Expiration Date 6/30/2012
E-mail address:			

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge			
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)
1	Sun							0.125						0.062													
2	Mon							0.113						0.078													
3	Tue							0.097					33	0.082					0.45				<10				
4	Wed	0.5	6'0"					0.123	8.1	83	24			0.091	9.0	21	54			3.9							6'0"
5	Thu	3.5						0.627						0.184													
6	Fri							0.541						0.24													
7	Sat							0.193						0.235													
8	Sun							0.162						0.266													
9	Mon							0.118						0.219													
10	Tue							0.111					29	0.245					0.82				40				
11	Wed	1.3	6'0"					0.228	8.0	32	22			0.237	8.9	22	62			4.1							6'0"
12	Thu							0.816						0.243													
13	Fri							0.297						0.242													
14	Sat							0.19						0.26													
15	Sun							0.127						0.215													
16	Mon							0.132						0.238													
17	Tue							0.12						0.257													
18	Wed		6'0"					0.104	8.0	148	54		22	0.238	8.9	20	55		0.14	4.4			<10				6'0"
19	Thu							0.102						0.242													
20	Fri							0.097						0.244													
21	Sat							0.092						0.235													
22	Sun	0.1						0.097						0.243													
23	Mon							0.109						0.237													
24	Tue							0.092					24	0.247					0.49				<10				
25	Wed		6'0"					0.085	8.0	181	58			0.237	9.0	20	51			4.4							6'0"
26	Thu							0.091						0.248													
27	Fri							0.085						0.242													
28	Sat							0.083						0.245													
29	Sun							0.096						0.254													
30	Mon							0.082						0.22													
31	Tue							0.091						0.244													
Average		1.35						0.175032		111	40		27.0	0.218323		20.8	55.5		0.475	4.2			40				
Maximum		3.5						0.816	8.1	181	58		33	0.266	9.0	22	62		0.82	4.4			40				
Minimum								0.082	8.0	32	22		22	0.062	8.9	20	51		0.14	3.9			40				
Totals		5.4		0	0	0	0	5.426	I certify under penalty of law that this document and all attachments were prepared under																		

Kenny Marquis 9/2/10
 Signature of Certified Operator
 Phone Number: 765-468-6701

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Hazel Lewis 8-31-10
 Signature of Officer, Principal Executive, or Authorized Agent
 Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	August	2010

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									algae bloom along with possible turnover account for high ph
2									
3				26.71				0.30793	
4	85.19	24.63			15.9473	41.0073			
5									
6									
7									
8									
9									
10				26.86				1.67651	
11	60.89	41.86			43.5108	122.621			
12									
13									
14									
15									
16									
17									
18	128.45	46.87		19.09	39.3884	108.318		0.27572	
19									
20									
21									
22									
23									
24				18.43				1.01	
25	128.39	41.14			39.5553	100.866			
26									
27									
28									
29									
30									
31									
Avg	100.73	38.62		22.77	34.6005	93.2032		0.81754	
Max	128.45	46.87		26.86	43.5108	122.621		1.67651	
Min	60.89	24.63		18.43	15.9473	41.0073		0.27572	

Removal Rates:	Monthly Totals:
Overall BOD removal: 81%	Influent flow (mg): 5.426
Overall TSS removal: -41%	Effluent flow (mg): 6.768

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

9-2-10

8-31-10

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

Revised:


IN0021512
001 A
PERMIT NUMBER
PERMITTED FEATURE
MONITORING PERIOD
MO DAY YEAR
MO DAY YEAR
FROM
09/01/10
TO
09/30/10

Form Approved

OMB No. 2040-004

Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

 *** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.9	*****	9.0	SU		7/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY/MN		DAILY/MX				
Solids, total suspended	SAMPLE MEASUREMENT	73.6	112.4	lb/d	*****	59.6	69	mg/L		7/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	1.832	1.58	lb/d	*****	.63	.81	mg/L		7/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	150	268	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	86	150	CFU/10 0mL			
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	21.7	35.1	lb/d	*****	17	19	mg/L		7/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		91%	*****	*****	%			
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV/MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
TELEPHONE
DATE

Hazel Lewis

TYPED OR PRINTED

Hazel Lewis

SIGNATURE

765 468-6701

AREA CODE AND NO.

10 18 10

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON. MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised:

☐

IN0021512			001 A			
PERMIT NUMBER			PERMITTED FEATURE			
MONITORING PERIOD						
MO	DAY	YEAR		MO	DAY	YEAR
09/01/10			TO	09/30/10		

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

☐ ☐ ☐


* I N 0 0 2 1 5 1 2 0 0 1 A 9 2 0 1 0 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	4.51	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis
TYPED OR PRINTED

Hazel Lewis
SIGNATURE

765/468-6701
AREA CODE AND NO.

10 18 10
MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON. MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Monthly Report of Operation **Lagoon Type** **Wastewater Treatment Plant** (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name Kenny Marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2012
Month: # 9 September Year: 2010		E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge													
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)										
1	Wed		6'0"					0.087	8.0	172	67		29	0.239	8.9	14	53		0.39	4.1			<10				6'0"										
2	Thu							0.086						0.243																							
3	Fri							0.086						0.242																							
4	Sat							0.08						0.268																							
5	Sun							0.088						0.216																							
6	Mon							0.074						0.245																							
7	Tue							0.101						0.246																							
8	Wed		6'0"					0.074	8.1	238	96		38	0.221	9.0	17	61		0.74	5.6			70				6'0"										
9	Thu							0.094						0.261																							
10	Fri							0.081						0.243																							
11	Sat	0.3						0.083						0.244																							
12	Sun							0.107						0.252																							
13	Mon							0.102						0.229																							
14	Tue							0.095						0.248																							
15	Wed		6'0"					0.077	8.1	169	54		29	0.234	8.9	18	50		0.81	4.8			<10				6'0"										
16	Thu							0.083						0.247																							
17	Fri							0.076						0.085																							
18	Sat							0.076						0.04																							
19	Sun							0.091						0.036																							
20	Mon							0.096						0.034																							
21	Tue							0.079					39	0.031					0.79				60														
22	Wed	0.1	6'0"					0.08	8.1	168	70			0.027	9.0	17	65			4.5							6'0"										
23	Thu	0.3						0.09						0.038																							
24	Fri							0.082						0.039																							
25	Sat							0.071						0.035																							
26	Sun							0.089						0.04																							
27	Mon							0.091						0.039																							
28	Tue	0.2						0.92						0.058																							
29	Wed		6'0"					0.08	8.1	196	77		36	0.066	9.0	19	69		0.42	6.8			150				6'0"										
30	Thu							0.081						0.073																							
Average		0.225						0.113333		189	73		34.2	0.150633		17.0	59.6		0.63	5.2			86														
Maximum		0.3						0.92	8.1	238	96		39	0.268	9.0	19	69		0.81	6.8			150														
Minimum								0.071	8.0	168	54		29	0.027	8.9	14	50		0.39	4.1			60														
Totals		0.9		0	0	0	0	3.4	I certify under penalty of law that this document and all attachments were prepared under																												

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis
Signature of Certified Operator
Date: **10-18-10**
Phone Number: **765-468-6701**

Sharon Jewell
Signature of Officer, Principal Executive, or Authorized Agent
Date: **10-18-10**

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

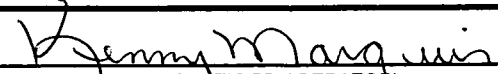
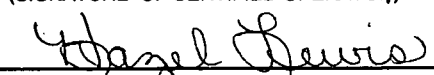
Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	September	2010

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1	124.87	48.64		21.05	27.9224	105.706		0.77784	algae bloom along with possible turnover account for high ph
2									
3									
4									
5									
6									
7									
8	146.97	59.28		23.47	31.3522	112.499		1.36474	
9									
10									
11									
12									
13									
14									
15	108.59	34.70		18.63	35.1491	97.6365		1.58171	
16									
17									
18									
19									
20									
21				25.71				0.20437	
22	112.16	46.73			3.83036	14.6455			
23									
24									
25									
26									
27									
28									
29	130.85	51.41		24.03	10.4646	38.0031		0.23132	
30									
Avg	124.69	48.15		22.58	21.7437	73.698		0.832	
Max	146.97	59.28		25.71	35.1491	112.499		1.58171	
Min	108.59	34.70		18.63	3.83036	14.6455		0.20437	

Removal Rates:	Monthly Totals:
Overall BOD removal: 91%	Influent flow (mg): 3.4
Overall TSS removal: 18%	Effluent flow (mg): 4.519

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

	10-18-10
(SIGNATURE OF CERTIFIED OPERATOR)	(DATE)
	10-18-10
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	(DATE)

PERMITTEE NAME/ADDRESS
NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)**

 Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

Revised:



IN0021512			001 A		
PERMIT NUMBER			PERMITTED FEATURE		
MONITORING PERIOD					
MO	DAY	YEAR	MO	DAY	YEAR
10/01/10			10/31/10		



* I N 0 0 2 1 5 1 2 0 0 1 A 1 0 2 0 1 0 *

For any questions call Dan Knowles at 317-232-0019

 *** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.9	*****	9.0	SU		5h	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	33.1	44.9	lb/d	*****	65.3	71	mg/L		1h	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	116.9	125.4	lb/d	*****	133	147	mg/L		1h	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	106.2	110.9	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
E. coli, colony forming units (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	206	380	CFU/10 mL		1h	Grab
51041 1 0 0	PERMIT REQUIREMENT					Report	Report			Weekly	GRAB
Effluent Gross						MO GEO	DAILY MX				
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	8.6	11.7	lb/d	*****	16.8	18	mg/L		1h	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		89%	*****	*****	%		5h	
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Hazel Lewis

TYPED OR PRINTED

Hazel Lewis

SIGNATURE

TELEPHONE

765468-6701

AREA CODE AND NO.

DATE

11 08 10

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON, MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512			001 A		
PERMIT NUMBER			PERMITTED FEATURE		
MONITORING PERIOD					
MO	DAY	YEAR	MO	DAY	YEAR
10/01/10			10/31/10		

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98

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* I N 0 0 2 1 5 1 2 0 0 1 A 1 0 2 0 1 0 *

For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
Flow, total	SAMPLE MEASUREMENT	*****	1.94	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

Hazel Lewis

765 468-6701

11 08 10

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON. MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
 Indiana Department of Environmental Management
 Office of Water Quality, Mail Code 65-42
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2012
Month: # 10 October		Year: 2010 E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge				
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)	
1	Fri							0.083						0.074														
2	Sat							0.069						0.067														
3	Sun	0.4						0.102						0.085														
4	Mon							0.095						0.079														
5	Tue							0.089						0.086														
6	Wed		6'0"					0.075	8.1	178	81		33	0.078	9.0	18	69		0.26	7.8			140				6'0"	
7	Thu							0.083						0.077														
8	Fri							0.079						0.072														
9	Sat							0.081						0.071														
10	Sun							0.08						0.053														
11	Mon							0.074						0.067														
12	Tue							0.095						0.071														
13	Wed		6'0"					0.072	8.1	124	59		22	0.057	9.0	18	67		0.34	6.7			210				6'0"	
14	Thu	0.3						0.094						0.067														
15	Fri							0.076						0.062														
16	Sat							0.07						0.055														
17	Sun							0.085						0.057														
18	Mon							0.091						0.048														
19	Tue							0.084						0.05														
20	Wed		6'0"					0.077	8.1	207	77		59	0.045	9.0	15	71		0.25	6.5			380				6'0"	
21	Thu							0.082						0.042														
22	Fri							0.079						0.035														
23	Sat							0.079						0.039														
24	Sun	0.1						0.086						0.034														
25	Mon							0.092						0.038														
26	Tue							0.091						0.054														
27	Wed	0.2	6'0"					0.098	8.0	128	43		28	0.065	8.9	16	54		0.47	6.8			160				6'0"	
28	Thu							0.091						0.064														
29	Fri							0.084						0.064														
30	Sat							0.074						0.082														
31	Sun							0.09						0.109														
Average		0.25						0.083871		159	65		35.5	0.062806		16.8	65.3		0.33	7.0			206					
Maximum		0.4						0.102	8.1	207	81		59	0.109	9.0	18	71		0.47	7.8			380					
Minimum								0.069	8.0	124	43		22	0.034	8.9	15	54		0.25	6.5			140					
Totals		1		0	0	0	0	2.6	I certify under penalty of law that this document and all attachments were prepared under																			

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 11-8-10
 Signature of Certified Operator Date
 Phone Number: 765-468-6701

Daniel Lewis 11-8-10
 Signature of Officer, Principal Executive, or Authorized Agent Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	October	2010

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1									algae bloom along with possible turnover account for high ph
2									
3									
4									
5									
6	111.41	50.70		20.65	11.7164	44.9128		0.16924	
7									
8									
9									
10									
11									
12									
13	74.50	35.45		13.22	8.56197	31.8696		0.16173	
14									
15									
16									
17									
18									
19									
20	133.01	49.48		37.91	5.63288	26.6623		0.09388	
21									
22									
23									
24									
25									
26									
27	104.68	35.17		22.90	8.6788	29.291		0.25494	
28									
29									
30									
31									
Avg	105.90	42.70		23.67	8.64751	33.1839		0.16995	
Max	133.01	50.70		37.91	11.7164	44.9128		0.25494	
Min	74.50	35.17		13.22	5.63288	26.6623		0.09388	
Removal Rates:									Monthly Totals:
Overall BOD removal: 89%									Influent flow (mg): 2.6
Overall TSS removal: 0%									Effluent flow (mg): 1.947

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marguin
 (SIGNATURE OF CERTIFIED OPERATOR)

11-8-10
 (DATE)

Daniel Lewis
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

11-9-10
 (DATE)

PERMITTEE NAME/ADDRESS

NAME FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021512

001 A

PERMIT NUMBER

PERMITTED FEATURE

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

11/01/10

TO

11/30/10

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		8.2	*****	8.6	SU		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY MN		DAILY MX				
Solids, total suspended	SAMPLE MEASUREMENT	32.5	49.5	lb/d	*****	35.3	60	mg/L		1/7	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	.39	.48	lb/d	*****	.44	.68	mg/L		1/7	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	151	369	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTALZ
Effluent Gross		MO AVG	MX WK AV								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	14.6	20.7	lb/d	*****	14.5	15	mg/L		1/7	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO AVG	MX WK AV			MO AVG	MX WK AV				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		89%	*****	*****	%		01/7	
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO AV MN						
Flow, total	SAMPLE MEASUREMENT	*****	4.53	Mgal/mo	*****	*****	*****			1/7	
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Hazel Lewis

Hazel Lewis

25 1468-6701

12 01 10

TYPED OR PRINTED

SIGNATURE

AREA CODE AND NO.

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS

(Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON, MUNICIPAL MINOR RANDOLPH COUNTY

Send by 28th of the Month to:
 Indiana Department of Environmental Management
 Office of Water Quality, Mail Code 65-42
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant (Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name kenny marquis	Class 1-sp	Certificate Number 12585	Expiration Date 6/30/2012
Month: # 11 November Year: 2010		E-mail address:	

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge					
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)		
1	Mon							0.094						0.108															
2	Tue							0.085						0.111															
3	Wed		6'0"					0.079	7.8	174	47		38	0.099	8.5	15	60		0.45	9.8							6'0"		
4	Thu							0.081						0.099															
5	Fri							0.076						0.098															
6	Sat							0.087						0.099															
7	Sun							0.08						0.089															
8	Mon							0.08						0.079															
9	Tue							0.08					31	0.085					0.68										
10	Wed		6'0"					0.075	7.7	187	58			0.081	8.6	14	36			7.3							6'0"		
11	Thu							0.081						0.082															
12	Fri							0.086						0.084															
13	Sat							0.069						0.079															
14	Sun	0.4						0.12						0.096															
15	Mon							0.094						0.097															
16	Tue							0.081					37	0.095					0.3										
17	Wed	1.2	6'0"					0.28	7.8	60	25			0.136	8.3	14	24			8.4							6'0"		
18	Thu							0.124						0.157															
19	Fri							0.096						0.156															
20	Sat							0.091						0.157															
21	Sun							0.097						0.149															
22	Mon							0.094						0.131															
23	Tue	0.6						0.19						0.158															
24	Wed		6'0"					0.131	7.7	116	60		25	0.166	8.2	15	21		0.35	9.9							6'0"		
25	Thu	1.5						0.203						0.135															
26	Fri	1.6						0.971						0.363															
27	Sat							0.391						0.369															
28	Sun							0.186						0.31															
29	Mon							0.161						0.323															
30	Tue							0.394						0.344															
Average		1.06						0.158567		134	48		32.8	0.1511		14.5	35.3		0.445	8.9									
Maximum		1.6						0.971	7.8	187	60		38	0.369	8.6	15	60		0.68	9.9									
Minimum								0.069	7.7	60	25		25	0.079	8.2	14	21		0.3	7.3									
Totals		5.3		0	0	0	0	4.757																					
I certify under penalty of law that this document and all attachments were prepared under																													

Kenny Marquis
 Signature of Certified Operator
 Phone Number: 765-468-6701

Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Nazzel Lewis
 Signature of Officer, Principal Executive, or Authorized Agent

Date

12-6-10

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	November	2010

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading			
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)
1								
2								
3	114.71	30.98		25.05	12.3923	49.5693		0.37177
4								
5								
6								
7								
8								
9				20.70				0.48234
10	117.04	36.30			9.46323	24.334		
11								
12								
13								
14								
15								
16				25.01				0.23783
17	140.20	58.42			15.8889	27.2381		
18								
19								
20								
21								
22								
23								
24	126.81	65.59		27.33	20.7791	29.0907		0.48484
25								
26								
27								
28								
29								
30								
Avg	124.69	47.82		24.52	14.6309	32.558		0.3942
Max	140.20	65.59		27.33	20.7791	49.5693		0.48484
Min	114.71	30.98		20.70	9.46323	24.334		0.23783

Enter Comments Below:

algae bloom along with possible turnover account for high ph

NOV 11 10 01 AM '10

Removal Rates:

Overall BOD removal: 89%

Overall TSS removal: 26%

Monthly Totals:

Influent flow (mg): 4.757

Effluent flow (mg): 4.533

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

12-1-10

12-6-10

PERMITTEE NAME/ADDRESS

NAMES FARMLAND MUNICIPAL STP

ADDRESS FARMLAND TOWN HALL

PO BOX 336

FARMLAND

IN 47340

FACILITY FARMLAND STP

LOCATION FARMLAND

IN

ATTN: MR. DUANE L. COX

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Revised:



IN0021512		001 A	
PERMIT NUMBER		PERMITTED FEATURE	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
12/01/10		TO 12/31/10	

Form Approved
OMB No. 2040-004
Approval Expires 05-31-98



For any questions call Dan Knowles at 317-232-0019

*** Mark box if NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	Frequency of Analysis	Sample Type
		Average	Maximum	Units	Minimum	Average	Maximum	Units			
pH	SAMPLE MEASUREMENT	*****	*****		7.8	*****	8.4	SU		5h	Grab
00400 1 0 0	PERMIT REQUIREMENT				6		9			Weekly	GRAB
Effluent Gross					DAILY:MN		DAILY:MX				
Solids, total suspended	SAMPLE MEASUREMENT	30.9	56.0	lb/d	*****	20.4	32	mg/L		1h	Grab
00530 1 0 0	PERMIT REQUIREMENT	96.4	144.6			70	105			Weekly	GRAB
Effluent Gross		MO:AVG	MX:WK:AVG			MO:AVG	MX:WK:AVG				
Nitrogen, ammonia total (as N)	SAMPLE MEASUREMENT	1.5	3.3	lb/d	*****	1.09	2.8	mg/L		1h	Grab
00610 1 0 0	PERMIT REQUIREMENT	Report	Report			Report	Report			Weekly	GRAB
Effluent Gross		MO:AVG	MX:WK:AVG			MO:AVG	MX:WK:AVG				
Flow, in conduit or thru treatment plant	SAMPLE MEASUREMENT	218	378	Mgal/d	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	Report	Report							Five Per Week	TOTAL
Effluent Gross		MO:AVG	MX:WK:AVG								
BOD, carbonaceous, 05 day, 20 C	SAMPLE MEASUREMENT	31.1	50.8	lb/d	*****	19.8	29	mg/L		1h	Grab
80082 1 0 0	PERMIT REQUIREMENT	34.4	55.1			25	40			Weekly	GRAB
Effluent Gross		MO:AVG	MX:WK:AVG			MO:AVG	MX:WK:AVG				
BOD, carb-5 day, 20 deg C, percent removal	SAMPLE MEASUREMENT	*****	*****		83%	*****	*****	%			
80091 K 0 0	PERMIT REQUIREMENT				85					Weekly	GRAB
Percent Removal					MO:AV:MN						
Flow, total	SAMPLE MEASUREMENT	*****	6.77	Mgal/mo	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT		Report							Monthly	RCOTOT
Effluent Gross			MO:TOTAL								

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

NAME AND TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Troy Bain

TYPED OR PRINTED

SIGNATURE

TELEPHONE

765468-6701

AREA CODE AND NO.

DATE

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

DISCHARGE WASTE STABILIZATION LAGOON.MUNICIPAL MINORRANDOLPH COUNTY

Send by 28th of the Month to:

Indiana Department of Environmental Management

Office of Water Quality, Mail Code 65-42

100 North Senate Avenue

Indianapolis, Indiana 46204-2251

Monthly Report of Operation Lagoon Type Wastewater Treatment Plant

(Version 12/06)

Page 1 of 2

Name of Facility Farmland W.W.T.P.		Permit Number IN0021512	
Certified Operator: Name kenny marquis		Class 1-sp	Certificate Number 12585
Month: # 12 December		Year: 2010	Expiration Date 6/30/2012
E-mail address:			

General Information						Bypasses/ Overflows		Raw Wastewater						Final Effluent										Controlled Discharge				
Day of the Month	Day of the Week	Precip. - Inches	1st Cell Water Level (ft.)	Chemical Used (lbs)	Chemical Used (lbs)	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	TSS (mg/l)	Phosphorus (mg/l)	Ammonia (mg/l)	D.O. (mg/l)	Residual Chlorine (mg/l) (Cont. Tank)	Residual Chlorine (mg/l) (Final)	E. Coli colony/100 ml	Upstream Gage Reading (in.)	Upstream Flow (MGD)	Dilution Ratio (Discharge / Upstream)	Last Cell Water Level (ft.)	
1	Wed		6'0"					0.616	7.6	47	20		8.1	0.106	8.1	16	16		0.53	11.3							6'0"	
2	Thu							0.279						0.378														
3	Fri							0.189						0.356														
4	Sat	2						0.167						0.369														
5	Sun	1						0.159						0.339														
6	Mon							0.145						0.291														
7	Tue							0.139					21	0.297					0.46									
8	Wed		6'0"					0.123	7.7	156	54			0.267	8.3	21	14			14.9							6'0"	
9	Thu							0.124						0.261														
10	Fri	0.3						0.115						0.243														
11	Sat							0.101						0.221														
12	Sun							0.194						0.232														
13	Mon	2						0.197						0.231														
14	Tue							0.149						0.222														
15	Wed		6'0"					0.132	7.8	133	39		24	0.21	8.4	29	32		0.46	12.3							6'0"	
16	Thu	2						0.143						0.215														
17	Fri							0.117						0.209														
18	Sat							0.112						0.19														
19	Sun							0.11						0.182														
20	Mon							0.117						0.192														
21	Tue							0.112					23	0.191					1.2									
22	Wed		6'0"					0.105	7.7	143	67			0.176	8.1	17	21			12.7							6'0"	
23	Thu							0.105						0.174														
24	Fri							0.114						0.16														
25	Sat							0.117						0.169														
26	Sun							0.097						0.149														
27	Mon							0.109						0.152														
28	Tue							0.109						0.15														
29	Wed		6'0"					0.105	7.7	106	46		24	0.143	7.8	16	19		2.8	12.0							6'0"	
30	Thu							0.114						0.15														
31	Fri							0.288						0.148														
Average		1.46						0.154935		117	45		20.0	0.218484		19.8	20.4		1.09	12.6								
Maximum		2						0.616	7.8	156	67		24	0.378	8.4	29	32		2.8	14.9								
Minimum								0.097	7.6	47	20		8.1	0.106	7.8	16	14		0.46	11.3								
Totals		7.3		0	0	0	0	4.803	I certify under penalty of law that this document and all attachments were prepared under																			

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kenny Marquis 1-5-11

Signature of Certified Operator

Date

Phone Number: 765-468-6701

Signature of Officer, Principal Executive, or Authorized Agent

Date

Monthly Report of Operation
Lagoon Type
Wastewater Treatment Plant
 (Version 12/06)

Name of Facility	Permit Number	For Month Of:	Year
Farmland W.W.T.P.	IN0021512	December	2010

Page 2 of 2

Day of the Month	Influent Loading				Effluent Loading				Enter Comments Below:
	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	CBOD (lbs)	TSS (lbs)	Phosphorus (lbs)	Ammonia (lbs)	
1	241.60	102.81		41.64	14.1531	14.1531		0.46882	algae bloom along with possible turnover account for high ph
2									
3									
4									
5									
6									
7				24.36				1.14009	
8	160.12	55.43			48.7904	31.1836			
9									
10									
11									
12									
13									
14									
15	146.50	42.96		26.44	50.8211	56.0784		0.80613	
16									
17									
18									
19									
20									
21				21.50				1.91267	
22	125.30	58.71			24.9682	30.8431			
23									
24									
25									
26									
27									
28									
29	92.88	40.31		21.03	19.0934	22.6734		3.34134	
30									
31									
Avg	153.28	60.04		26.99	31.1652	30.9883		1.53381	
Max	241.60	102.81		41.64	50.8211	56.0784		3.34134	
Min	92.88	40.31		21.03	14.1531	14.1531		0.46882	
Removal Rates:									Monthly Totals:
Overall BOD removal: 83%									Influent flow (mg): 4.803
Overall TSS removal: 55%									Effluent flow (mg): 6.773

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

August 19, 2008

EFILE
100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

VIA CERTIFIED MAIL

7002 0510 0002 5823 2054

Mr. Bill Necessary, President
Town Council of Farmland
104 E. Henry Street
P.O. Box 336
Farmland, Indiana 47340

Rè: Adoption of Agreed Order
Commissioner, Indiana Department of Environmental
Management

v.

Town of Farmland
Case No. 2008-17799-W

Dear Mr. Necessary:

This is to inform you that the Agreed Order in the above-referenced case has been approved and adopted by the Indiana Department of Environmental Management. A copy of the Agreed Order is enclosed.

Please note the terms of compliance contained in the Agreed Order. The time frames for compliance are effective upon your receipt of this correspondence. If you have any questions, please contact Paul Cluxton at 317/232-8432.

Sincerely,

Lori Kyle Endris
Chief
Office of Enforcement

Enclosure

cc: Mr. Kenny Marquis, Utility Manager
Randolph County Health Department



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
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STATE OF INDIANA)	SS:	BEFORE THE INDIANA DEPARTMENT OF
)		ENVIRONMENTAL MANAGEMENT
COUNTY OF MARION)		
)		
COMMISSIONER OF THE DEPARTMENT)		
OF ENVIRONMENTAL MANAGEMENT)		
)		
	)	Complainant,	
)		
	)	v.	Case No. 2008-17799-W
)		
TOWN OF FARMLAND,)		
)		
	)	Respondent.	

AGREED ORDER

Complainant and Respondent desire to settle and compromise this action without hearing or adjudication of any issue of fact or law, and consent to the entry of the following Findings of Fact and Order.

I. FINDINGS OF FACT

1. Complainant is the Commissioner ("Complainant") of the Indiana Department of Environmental Management ("IDEM"), a department of the State of Indiana created by Indiana Code ("IC") 13-13-1-1.
2. Respondent is the Town of Farmland ("Respondent"), which owns and operates the Farmland wastewater treatment system, which includes municipal sanitary sewers and a two-cell flow-through waste stabilization lagoon wastewater treatment plant ("WWTP") located at 303 North Plum Street in Farmland, Randolph County, Indiana (the "Site").
3. The Respondent is authorized by National Pollutant Discharge Elimination System ("NPDES") Permit Number IN 0021512 ("Permit") to discharge 0.165 MGD of wastewater treated in accordance with the terms and conditions of the Permit from its WWTP into Receiving Waters named West Fork White River via Outfall 001.
4. IDEM has jurisdiction over the parties and the subject matter of this action.

5. Pursuant to IC 13-30-3-3, IDEM issued a Notice of Violation via Certified Mail to Bill Necessary, President, Town Council of Farmland.
6. During an investigation conducted by a representative of IDEM, the following violations were found:
 - a. Pursuant to 327 IAC 5-2-8(1) and Part II.A.1. of the Permit, the Respondent is required to comply with all terms and conditions of the Permit.

Part I.A.1 of the Permit contains the final effluent limitations applicable to the discharge from Outfall 001.

Discharge Monitoring Reports and Monthly Reports of Operation submitted by Respondent to IDEM for the period of July 2005 through February 2008 reveal violations of final effluent limitations contained in Part I.A.1 of the Permit as follows:

The monthly average concentration effluent limitations for Total Suspended Solids were exceeded during August, September, October, and November 2006.

The weekly and/or monthly average pounds per day loading effluent limitations for Total Suspended Solids were exceeded during July and September 2005; March, April, May, August, September, October, November and December 2006; February, March, and December 2007; and January 2008.

The monthly average concentration effluent limitation for Biochemical Oxygen Demand was exceeded during September 2006.

The weekly and/or monthly average pounds per day loading effluent limitation for Biochemical Oxygen Demand (BOD) were exceeded during July, August, September, and December 2005; January, February, March, April, May, September, October, November, and December 2006; January, March, April, May, and December 2007; and January and February 2008.

The monthly average minimum percent removal of BOD effluent limitation of 85% was violated during November 2005; January, April, June, September, October, November, and December 2006; January, February, March, April, and May 2007; and January and February 2008.

The daily maximum pH effluent was exceeded during April, May, and June 2006; and April, May; and August 2007.

These failures to meet effluent limitations contained in the Permit are in violation of 327 IAC 5-2-8(1) and Parts I.A.1 and II.A.1. of the Permit.

- b. Pursuant to 327 IAC 5-2-8(1), Part II.A.1. of the Permit, 327 IAC 5-2-8(8), and Part II.B.1 of the Permit, the Respondent is required to, at all times, maintain in good working order and efficiently operate all waste collection, control, treatment, and disposal facilities.

The failure to meet the above noted effluent limitations of the Permit indicates Respondent's failure to at all times maintain in good working order and efficiently operate all waste collection, control, treatment, and disposal facilities, in violation of 327 IAC 5-2-8(1), Part II.A.1. of the Permit, 327 IAC 5-2-8(8), and Part II.B.1 of the Permit.

- c. Pursuant to 327 IAC 5-2-8(3) and part II.A.2 of the Permit, Respondent shall take all reasonable steps to minimize any adverse effects to the environment resulting from noncompliance with the Permit.

The above effluent violations of the Permit continued over a significant time period of July 2005 through February 2008, indicating Respondent failed to comply with its duty to mitigate the adverse impacts resulting from noncompliance with the Permit, in violation of 327 IAC 5-2-8(3) and part II.A.2 of the Permit.

7. In recognition of the settlement reached, Respondent waives any right to administrative and judicial review of this Agreed Order.

II. ORDER

1. This Agreed Order shall be effective ("Effective Date") when it is approved by Complainant or Complainant's delegate, and has been received by Respondent. This Agreed Order shall have no force or effect until the Effective Date.
 2. Respondent shall comply with statutes, rules, and/or permit conditions listed in the findings above at issue.
 3. Within 90 days of the Effective Date, Respondent shall develop and submit to IDEM for approval a "Compliance Plan" which identifies actions that Respondent will take to achieve and maintain compliance with its Permit, specifically including the actions the Respondent will take to:
 - a. evaluate and determine the means to be implemented to consistently meet the effluent limits of the Permit; and
 - b. conduct an evaluation of the sanitary sewer collection system to identify sources of inflow and infiltration (I&I) and perform the necessary corrective actions.
- The Compliance Plan shall include an implementation and completion schedule, including specific milestone dates.

4. The Respondent shall, within six months of completion of the Compliance Plan required by Paragraph 3 above (Performance Period), demonstrate five consecutive months of compliance (Compliance Demonstration) with the effluent limitations and above-requirements contained in its Permit. During the Performance Period, Respondent shall be subject to stipulated penalties, as specified below, for violations of the effluent limitations or requirements of the Permit. In the event that Respondent fails to make the Compliance Demonstration, Respondent shall, within sixty days of becoming aware that the Compliance Demonstration cannot be achieved, develop and submit to IDEM, for approval, an "Additional Action Plan" which identifies the additional actions that Respondent will take to achieve and maintain compliance with the effluent limitations and above requirements contained in its Permit. The Additional Action Plan, if required, shall include an implementation and completion schedule, including specific milestone dates.
5. The plans required by Paragraphs 3 and 4 above are subject to IDEM approval. In the event IDEM determines that any plan submitted by Respondent is deficient or otherwise unacceptable, Respondent shall revise and resubmit the plan to IDEM in accordance with IDEM's notice. After three submissions of such plan by Respondent, IDEM may modify and approve any such plan and Respondent must implement the plan as modified by IDEM.

Respondent, upon receipt of written notification from IDEM, shall immediately implement the approved plan and adhere to the milestone dates therein. The approved Compliance Plan and Additional Action Plan shall be incorporated into the Agreed Order and shall be deemed an enforceable part thereof. Failure by Respondent to submit any plan by the specified date, or to meet any of the milestones in the approved plan will subject Respondent to stipulated penalties as described below. Failure to achieve compliance at the conclusion of work under an Additional Action Plan will subject Respondent to additional enforcement action.

6. Respondent shall notify IDEM, in writing, within 10 days of completion of each action or milestone contained in any plan approved by IDEM pursuant to this Agreed Order. The notification shall include a description of the action completed and the date it was completed.
7. All submittals required by this Agreed Order, unless notified otherwise in writing, shall be sent to:
Paul Cluxton, Enforcement Case Manager
Indiana Department of Environmental Management
Office of Enforcement – Mail Code 60-02
100 North Senate Avenue
Indianapolis, IN 46204-2251
8. In the event the terms and conditions of the following paragraphs are violated, Complainant may assess and Respondent shall pay a stipulated penalty in the following amount:

<u>Paragraph</u>	<u>Violation</u>	<u>Stipulated Penalty</u>
3	Failure to submit compliance plan within the required time period.	\$250 per week late, or part thereof.
4	Failure to comply with the effluent limitations and requirements of the permit after completion of the Compliance Plan.	\$500 per violation event.
4	Failure to submit Additional Action Plan within the required time period, if required.	\$250 per week late, or part thereof.
5	Failure to revise and resubmit any plan required pursuant to this Agreed Order, as required.	\$250 per week late, or part thereof.
5	Failure to implement the approved Plan or to meet the approved milestone dates.	\$500 per week late, or part thereof.
6	Failure to notify IDEM, in writing, within 10 days of completion of each action contained in the approved plan.	\$250 per week late, or part thereof.
9.	Stipulated penalties shall be due and payable within thirty days after the Respondent receives written notice that Complainant has determined a stipulated penalty is due. Assessment and payment of stipulated penalties shall not preclude Complainant from seeking any additional relief against Respondent for violation of this Agreed Order. In lieu of any of the stipulated penalties set out above, Complainant may seek any other remedies or sanctions available by virtue of Respondent's violation of this Agreed Order, or Indiana law, including but not limited to, civil penalties pursuant to IC 13-30-4.	
10.	Stipulated penalties are payable by check to the Environmental Management Special Fund. Checks shall include the Case Number of this action and shall be mailed to: Indiana Department of Environmental Management Cashiers Office – Mail Code 50-10C 100 N. Senate Avenue Indianapolis, IN 46204-2251	
11.	In the event that any stipulated amount assessed pursuant to Paragraph Nos. 8 and 9 is not paid within 30 days of notice that it is due, Respondent shall pay interest on the unpaid balance at the	

rate established by IC 24-4.6-1-101. The interest shall continue to accrue until the stipulated penalty is paid in full.

12. This Agreed Order shall apply to and be binding upon Respondent and its successors and assigns. Respondent's signatories to this Agreed Order certify that they are fully authorized to execute this Agreed Order and legally bind the party they represent. No change in ownership, corporate, or partnership status of Respondent shall in any way alter its status or responsibilities under this Agreed Order.
13. In the event that any terms of this Agreed Order are found to be invalid, the remaining terms shall remain in full force and effect and shall be construed and enforced as if this Agreed Order did not contain the invalid terms.
14. Respondent shall provide a copy of this Agreed Order, if in force, to any subsequent owners or successors before ownership rights are transferred. Respondent shall ensure that all contractors, firms and other persons performing work under this Agreed Order comply with the terms of this Agreed Order.
15. This Agreed Order is not and shall not be interpreted to be a permit or a modification of an existing permit. This Agreed Order, and IDEM's review or approval of any submittal made by Respondent pursuant to this Agreed Order, shall not in any way relieve Respondent of its obligation to comply with the requirements of its applicable permit or any applicable Federal or State law or regulation.
16. Complainant does not, by its approval of this Agreed Order, warrant or aver in any manner that Respondent's compliance with any aspect of this Agreed Order will result in compliance with the provisions of any permit, order, or any applicable Federal or State law or regulation. Additionally, IDEM or anyone acting on its behalf shall not be held liable for any costs or penalties Respondent may incur as a result of Respondent's efforts to comply with this Agreed Order.
17. Nothing in this Agreed Order shall prevent or limit IDEM's rights to obtain penalties or injunctive relief under any applicable Federal or State law or regulation.
18. Nothing in this Agreed Order shall prevent IDEM or anyone acting on its behalf from communicating with the EPA or any other agency or entity about any matters relating to this enforcement action. IDEM or anyone acting on its behalf shall not be held liable for any costs or penalties Respondent may incur as a result of such communications with the EPA or any other agency or entity.
19. "Force Majeure" for purposes of this Agreed Order, is defined as any event arising from causes totally beyond the control and without fault of Respondent that delays or prevents the performance of any obligation under this Agreed Order despite Respondent's best efforts to fulfill the obligation. The requirement that Respondent exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best

efforts to address the effects of any potential force majeure event (1) as it is occurring and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent possible. "Force Majeure" does not include changed business or economic conditions, financial inability to complete the work required by this Agreed Order, or increases in costs to perform the work.

Respondent shall notify IDEM by calling the case manager within three (3) calendar days and by writing no later than seven (7) calendar days after it has knowledge of any event which Respondent contends is a force majeure. Such notification shall describe the anticipated length of the delay, the cause or causes of the delay, the measures taken or to be taken by Respondent to minimize the delay, and the timetable by which these measures will be implemented. Respondent shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of force majeure for that event. Respondent shall have the burden of demonstrating that the event is a force majeure. The decision of whether an event is a force majeure shall be made by IDEM.

IDEM agrees that, if a delay is attributable to a force majeure, IDEM shall extend, in writing, the time period for performance under this Agreed Order, by the amount of time that is directly attributable to the event constituting the force majeure.

20. This Agreed Order shall remain in effect until Respondent has complied with all terms and conditions of Order Paragraph Nos. 3 through 11 and IDEM issues a Resolution of Case letter.

TECHNICAL RECOMMENDATION:
Department of Environmental Management

By: Mark W. Stanifer
Mark W. Stanifer, Chief
Water Enforcement Section
Office of Enforcement

Date: 6-20-2008

COUNSEL FOR COMPLAINANT:
For the Department of Environmental
Management

By: Tracy A. Holton
Deputy Attorney General

Date: 7/1/08

RESPONDENT:
Town of Farmland

By: Bill Neessary

Printed: BILL NECESSARY

Title: President, Town Council

Date: 8-5-08

COUNSEL FOR RESPONDENT:

By: Jim E. White

Date: 8/5/08

APPROVED AND ADOPTED BY THE INDIANA DEPARTMENT OF ENVIRONMENTAL
MANAGEMENT THIS 14th DAY OF August, 200 8.

For the Commissioner

Robert B. Keene
Robert B. Keene

Assistant Commissioner

Office of Legal Counsel and Enforcement



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

January 26, 2009

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

EFILE

Town Council of Farmland
104 E. Henry Street
P.O. Box 336
Farmland, Indiana 47340

Re: Approval of Farmland Compliance Plan
Case No: 2008-17799-W
Farmland, Randolph County, Indiana

Dear Council Members:

This office has reviewed the Farmland's Wastewater Compliance Plan and status information (copy enclosed) received December 12, 2008. The Plan is hereby approved with the condition that the updated/remaining schedule be submitted to the Water Enforcement Section by August 1, 2009, including actions items 7-9 and their targeted completion dates for IDEM review and approval. The performance period for compliance referenced in Paragraph 4 of the Agreed Order, Case No. 2008-17799-W, would begin after implementation of all Compliance Plan scheduled items.

If you have any questions concerning this correspondence, please contact Paul Cluxton at 317/232-8432.

Sincerely,

Mark W. Stanifer, Chief
Water Enforcement Section
Office of Water Quality

Enclosure

cc: Kenny Marquis, Farmland Utility Manager
Steve Henschen, P.E. Vice President
Bonar Group -by e-mail

COMPLIANCE PLAN STATUS REPORT No. 1
TOWN OF FARMLAND
12/9/2008

This Compliance Plan has been prepared in accordance with the Agreed Order between the Town of Farmland and the Indiana Department of Environmental Management herein referred to as "IDEM."

The Town of Farmland and the Indiana Department of Environmental Management executed an agreed order with and effective date of August 14, 2008.

The **bold** font indicates the action items required by IDEM as part of the agreed Order, followed by the Town's proposed actions in standard font.

A. Actions that Farmland will take to evaluate and determine the means to be implemented to consistently meet the effluent limits of the permit

1. Perform a WWTP evaluation and analysis
 - a. Review flow data and MRO's
 - b. Review operational procedures
 - c. Identify improvements required to allow the WWTP to meet the effluent limits
 - d. Evaluate cost for various improvements
 - e. Recommend improvements
 - f. Identify funding sources
 - g. Implementation

12/9/2008 update
Town has retained Bonar Group to assist
Review of past records is complete
Evaluation of WWTP has started

B. Actions that Farmland will take to conduct an evaluation of the sanitary sewer collection system to identify sources of inflow and infiltration (I & I) and perform the necessary corrective actions

1. Collection System
 - a. Inspect every utility customers property for evidence of illegal connections (down spouts/foundation drains/yard drains)
 - b. Smoke test entire system
 - c. Inspect every manhole in system to identify potential sources of inflow/infiltration
 - d. Send enforcement letters to customers with illegal connections or leaking service lines requiring lines to be replaced or disconnection of downspouts/yard drains
 - e. Televisize certain segments of system identified as suspect areas (if found to be necessary)
 - f. Identify cost and funding sources for proposed work identified in paragraphs g through i below
 - g. Install flow measuring devices in key segments of system to identify sources of inflow and infiltration (if determined to be necessary)
 - h. Repair manholes identified as sources of I/I
 - i. Repair/replace sewer lines identified as sources of I/I (if identified)

12/9/2008 update
Inspections and smoke testing started June 2, 2008

Inspections and smoke testing completed August 1, 2008

Town staff inspected 162 manholes and smoke tested the entire sanitary sewer system

Town staff identified 62 violations follows:

<u>Violation</u>	<u>No. of violations</u>	<u>No. repaired as of 12/9/2008</u>
Manholes leaking (at castings)	18	17 1 manhole replaced
Downspouts connected to system-	5	5
Open sanitary sewer cleanouts-	13	13
Open sanitary sewer laterals-	9	6
Leaking sanitary sewer laterals-	15	13
Storm drains connected to sanitary sewer-	2	1

An implementation and completion schedule, including specific milestone dates

<u>ACTION ITEM</u>	<u>SUBMITTAL / COMPLETION SCHEDULE</u>
1. WWTP analysis, Section A.1.a through A.1.e	May 1, 2009
2. Inspect properties, Section B.1.a	completed- August 1, 2008
3. Smoke Test, Section B.1.b	completed- August 1, 2008
4. Inspect manholes, Section B.1.c	completed- August 1, 2008
5. Send enforcement letter, Section B.1.d	ongoing as violations are found
6. Televis segments of the sewer system, Section B.1.e	July 1, 2009
7. Identify funding sources, Section A.1.f/B.1.f	August 1, 2009
8. Flow monitoring, Section B.1.g	*
9. Manhole and sewer line repairs, Section A.2.i through A.2.j	*

* - Date to be determined after completion of analysis and funding source identification, compliance plan to be updated with completion dates for these tasks by August 1, 2009



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT EFILE

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Mitchell E. Daniels, Jr.
Governor

July 8, 2008

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

VIA CERTIFIED MAIL: 7000 0600 0027 2038 1202

Mr. Bill Necessary, President
Town Council of Farmland
104 E. Henry Street
P.O. Box 336
Farmland, Indiana 47340

Re: Notice of Violation and Proposed Agreed Order
Town of Farmland Wastewater Treatment
Case # 2008-17799-W
NPDES Permit No. IN0021512
Farmland, Randolph County

Qualified offer of settlement: inadmissible pursuant to Rule 408 of the Ind. Rules of Evidence. IDEM asserts that any offer to compromise a claim or any acceptance of such offer does not bind or obligate the parties of this enforcement action in the absence of a final order of the agency.

Dear Mr. Necessary:

This is to advise that the Indiana Department of Environmental Management (IDEM) has conducted an investigation of the Town of Farmland's wastewater treatment system. As a result of information obtained during that investigation, IDEM has made a preliminary determination that violations of water pollution rules and permit exist. Pursuant to IC 13-30-3-3, enclosed please find a Notice of Violation that sets forth the alleged violations, and a proposed Agreed Order, setting forth IDEM's specific findings of violation and the actions necessary to resolve the violations.

You may request a settlement conference to discuss the allegations and the actions necessary to correct and resolve the violations, which may include injunctive relief and the establishment of a compliance schedule.

IDEM is not required to extend the offer of entry into an Agreed Order for more than 60 days. You may enter into an Agreed Order without admitting that the violations occurred. If an Agreed Order is not entered into, IDEM may proceed to issue a unilateral notice and order requiring compliance with the environmental law, rules, and/or permit, including payment of a civil penalty.

Please contact me at 317-232-8432 if you have any questions or if you wish to request a settlement conference.

Sincerely,



Paul Cluxton, Case Manager
Water Section
Office of Enforcement

Enclosures

cc: Kenny Marquis, Superintendent
Randolph County Health Department (w/NOV only)
<http://www.in.gov/idem> (w/NOV only)



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels, Jr.

Governor

July 8, 2008

Thomas W. Easterly

Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

NOTICE OF VIOLATION

Via Certified Mail#: 7000 0600 0027 2038 1202

To: Mr. Bill Necessary, President
Town Council of Farmland
104 E. Henry Street
P.O. Box 336
Farmland, Indiana 47340

Case No. 2008-17799-W

Based on an investigation, the Indiana Department of Environmental Management ("IDEM") has reason to believe that the Town of Farmland ("Respondent") has violated environmental rules and/or its permit. The violations are based on the following:

1. Respondent owns and operates the Farmland wastewater treatment system, which includes municipal sanitary sewers and a two-cell flow-through waste stabilization lagoon wastewater treatment plant ("WWTP") located at 303 North Plum Street in Farmland, Randolph County, Indiana (the "Site").
2. The Respondent is authorized by National Pollutant Discharge Elimination System ("NPDES") Permit Number IN 0021512 ("Permit") to discharge 0.165 MGD of wastewater treated in accordance with the terms and conditions of the NPDES Permit from its WWTP into Receiving Waters named West Fork White River via Outfall 001.
3. Pursuant to 327 IAC 5-2-8(1) and Part II.A.1. of the Permit, the Respondent is required to comply with all terms and conditions of the Permit.

Part I.A.1 of the Permit contains the final effluent limitations applicable to the discharge from Outfall 001.

Discharge Monitoring Reports and Monthly Reports of Operation submitted by Respondent to IDEM for the period of July 2005 through February 2008 reveal violations of final effluent limitations contained in Part I.A.1 of the Permit as follows:

The monthly average concentration effluent limitations for Total Suspended Solids were exceeded during August, September, October, and November 2006.

The weekly and/or monthly average pounds per day loading effluent limitations for Total Suspended Solids were exceeded during July and September 2005; March, April, May, August, September, October, November and December 2006; February, March, and December 2007; and January 2008.

The monthly average concentration effluent limitation for Biochemical Oxygen Demand was exceeded during September 2006.

The weekly and/or monthly average pounds per day loading effluent limitation for Biochemical Oxygen Demand (BOD) were exceeded during July, August, September, and December 2005; January, February, March, April, May, September, October, November, and December 2006; January, March, April, May, and December 2007; and January and February 2008.

The monthly average minimum percent removal of BOD effluent limitation of 85% was violated during November 2005; January, April, June, September, October, November, and December 2006; January, February, March, April, and May 2007; and January and February 2008.

The daily maximum pH effluent was exceeded during April, May, and June 2006; and April, May, and August 2007.

These failures to meet effluent limitations contained in the Permit are in violation of 327 IAC 5-2-8(1) and Parts I.A.1 and II.A.1. of the Permit.

4. Pursuant to 327 IAC 5-2-8(1), Part II.A.1. of the Permit, 327 IAC 5-2-8(8), and Part II.B.1 of the Permit, the Respondent is required to, at all times, maintain in good working order and efficiently operate all waste collection, control, treatment, and disposal facilities.

The failure to meet the above noted effluent limitations of the Permit indicates Respondent's failure to at all times maintain in good working order and efficiently operate all waste collection, control, treatment, and disposal facilities, in violation of 327 IAC 5-2-8(1), Part II.A.1. of the Permit, 327 IAC 5-2-8(8), and Part II.B.1 of the Permit.

5. Pursuant to 327 IAC 5-2-8(3) and part II.A.2 of the Permit, Respondent shall take all reasonable steps to minimize any adverse effects to the environment resulting from noncompliance with the Permit.

The above effluent violations of the Permit continued over a significant time period of July 2005 through February 2008, indicating Respondent failed to comply with

its duty to mitigate the adverse impacts resulting from noncompliance with the Permit, in violation of 327 IAC 5-2-8(3) and part II.A.2 of the Permit.

In accordance with IC 13-30-3-3, the Commissioner herein provides notice that violations may exist and offers an opportunity to enter into an Agreed Order providing for the actions required to correct the violations and, as necessary and appropriate, for the payment of a civil penalty. The Commissioner is not required to extend this offer for more than sixty (60) days.

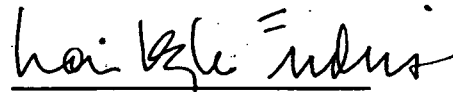
As provided in IC 13-30-3-3, an alleged violator may enter into an Agreed Order without admitting that the violations occurred. IDEM encourages settlement by Agreed Order, thereby resulting in quicker correction of the environmental violations and avoidance of extensive litigation. Timely settlement by Agreed Order may result in a reduced civil penalty. Also, settlement discussions will allow the opportunity to present any mitigating factors that may be relevant to the violations.

If an Agreed Order is not entered into within sixty (60) days of receipt of this Notice of Violation, the Commissioner may issue a Notice and Order under IC 13-30-3-4 containing the actions that must be taken to correct the violations and requiring the payment of an appropriate civil penalty. Pursuant to IC 13-30-4-1, the Commissioner may assess penalties of up to \$25,000 per day for each violation.

Please contact Paul Cluxton at 317/232-8432 within fifteen (15) days after receipt of this Notice to discuss resolution of this matter.

Date: 7.3.08

For the Commissioner:



Lori Kyle Endris

Chief

Office of Enforcement

cc: Kenny Marquis, Utility Superintendent
Randolph County Health Department

<http://www.in.gov/idem/enforcement/>

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
 ADDRESS 147 W WASHINGTON ST
 PO BOX 38
 PARKER CITY IN 47368
 FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MINOR
 F - FINAL
 EFFLUENT

Form Approved
 OMB No 2040-000
 Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
PH	SAMPLE MEASUREMENT	*****	*****		7.5	*****	8.2	(12)	0	5/7 GR
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MIN	*****	9.0 DAILY MX	SU	5 TMS/WEEK	GRAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	17	23.8	(26)	*****	8	9.4	(19)	0	2/7 COMP
00530 1 2 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	47.6 MO AVG	71.3 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L	TWICE/ WEEK	COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.267	.314	(03)	*****	*****	*****		7/7	TOTAL
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****	5 TMS/WEEK	TOTAL
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	35.2	47	(26)	*****	16.6	20.1	(19)	0	2/7 COMP
80082 1 2 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	39.6 MO AVG	63.4 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L	TWICE/ WEEK	COMP24
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL	SAMPLE MEASUREMENT	*****	*****		83.4	*****	*****	(23)	0	2/7 COMP
80091 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	REPORT MO AVG	*****	*****	PER- CENT	TWICE/ WEEK	COMP24
SOLIDS, SUSPENDED PERCENT REMOVAL	SAMPLE MEASUREMENT	*****	*****		84	*****	*****	(23)	0	2/7 COMP
81011 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	REPORT MO AVG	*****	*****	PER- CENT	TWICE/ WEEK	COMP24
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	8.286	(3R)	*****	*****	*****		1/31	RCD
82220 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL	*****	*****	*****	*****	ONCE/ MONTH	RCDTOT

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
 OR AUTHORIZED AGENT

FRED LUTWISTON PRES
 TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

M E Deckman
 SIGNATURE OF PRINCIPAL EXECUTIVE
 OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

705 487-9449 2 9 06
 AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
 RANDOLPH COUNTY



**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Substitute for State Form 10829 (R/1-2003)

Page 1 of 4

Name of Facility		Permit Number	
Town of Parker City		IN0020729	
Month	Year	Plant Design Flow	Telephone Number
January	2006	0 192 mgd	765-468-7949
Certified Operator Name		Class	Certificate Number
Michael Deckman		III	5542
		Expiration Date	
		6/30/07	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Total=	Bypass At Plant Site ("X" If Occurred)	Collection System Overflow ("X" If Occurred)	CHEMICALS USED			RAW SEWAGE								
				0			Precipitation - Inches	Chlorine - Lbs	Lbs/Day or Gal /Day	Lbs/Day or Gal /Day	Total Flow - MG	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp Solids - mg/l	Susp Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Sun																	
2	Mon			.1							7.6							
3	Tue										7.6							
4	Wed										7.7	95	226.6	86	205.13			
5	Thu										7.6	92	184.91	35	70.348			
6	Fri										7.4							
7	Sat										7.5							
8	Sun																	
9	Mon			.38														
10	Tue										7.5	131	199.93	55	83.942			
11	Wed										7.8							
12	Thu											94	201.48	48	102.88			
13	Fri																	
14	Sat																	
15	Sun																	
16	Mon			.56							7.4							
17	Tue			2 SNOW							7.7	82	225	39	107.01			
18	Wed										7.7							
19	Thu										7.8	58	177.53	46	140.8			
20	Fri			.34							7.8							
21	Sat																	
22	Sun																	
23	Mon										7.7							
24	Tue										7.7	117	214.67	39	71.557			
25	Wed										7.8							
26	Thu										7.8	132	212.47	63	101.41			
27	Fri										7.8							
28	Sat					X												
29	Sun			.87														
30	Mon										7.7							
31	Tue										7.7	98	187.98	39	74.81			
Average												99.889	203.4	50	106.43			
Maximum											7.8	132	226.6	86	205.13			
Minimum											7.4	58	177.53	35	70.348			
No of Data				0	0	1	0	0	0	0	20	9	9	9	9	0	0	0

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<i>Michael Deckman</i>	2/9/06
(SIGNATURE OF CERTIFIED OPERATOR)	(DATE)
<i>Michael Deckman</i>	2/9/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	(DATE)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: Town of Parker City
 Permit Number: IN0020729
 For Month Of: January
 Year: 2006

ME Dealman 2/9/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
ME Dealman 2/9/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 2 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	PRIMARY EFFLUENT			RBC				SECONDARY EFFLUENT			FINAL EFFLUENT						
	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Trickling Filter		Load Cell Weight - 1000 lbs	Dissolved Oxygen After 1st Stage	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l	
				Total Flow to Filter - mgd	Biological Growth (L)ight, (N)ormal, (H)eavy												
1																	
2														79			
3														80			
4	75	37												80			
5	87	31												81			
6														82			
7														80			
8																	
9																	
10	99	35												75			
11														81			
12	102	26															
13																	
14																	
15																	
16														77			
17	69	35												79			
18														79			
19	67	44												80			
20														80			
21																	
22																	
23														79			
24	94	30												79			
25														81			
26	103	52												80			
27														80			
28																	
29																	
30														81			
31	81	30												80			
Avg	86 333	35 556															
Max	103	52												82			
Min	67	26												75			
Data	9	9	0	0	0	0	0	0	0	0	0	0	0	20	0	0	

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc)

3rd Decant, top off DRYING BEDS
 7th Decant, clean PRIMARY.

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: Town of Parker City
 Permit Number: IN0020729
 For Month Of: January
 Year: 2006

McDeekman 2/9/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
McDeekman 3/9/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	FINAL EFFLUENT															
	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow - MG	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp Solids - mg/l	Susp Solids - mg/l Weekly Average	Susp Solids - lbs	Susp Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average		
1	0 332															
2	0 358															
3	0 316															
4	0 286		13 8		32 936		6 3		15 036							
5	0 241		18 6		37 407		8 7		17 497							
6	0 214															
7	0 211	0 27971		16 2		35 172		7 5		16 266						
8	0 2															
9	0 177															
10	0 183		21		32 07		9 3		14 202							
11	0 272															
12	0 257		19 2		41 178		9 5		20 374							
13	0 329															
14	0 337	0 25071		20 1		36 624		9 4		17 288						
15	0 298															
16	0 26															
17	0 329		16 1		44 203		11 1		30 475							
18	0 308															
19	0 367		16 3		49 921		5 6		17 151							
20	0 277															
21	0 357	0 31371		16 2		47 062		8 35		23 813						
22	0 293															
23	0 229															
24	0 22		14 5		26 621		7 2		13 218							
25	0 19															
26	0 193		15 3		24 642		7 5		12 079							
27	0 186															
28	0 229	0 22		14 9		25 631		7 35		12 649						
29	0 283															
30	0 324															
31	0 23		14 4		27 639		6 8		13 052							
Avg	0 26729		16 578		35 179		8		17 009							
Max	0 367	0 31371	21	20 1	49 921	47 062	11 1	9 4	30 475	23 813						
Min	0 177	0 22	13 8	14 9	24 642	25 631	5 6	7 35	12 079	12 649						
Data	31	4	9	4	9	4	9	4	9	4	0	0	0	0	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow	
Percent Removal	BOD5	S S	Ammonia	Phosphorus	(million gallons)	8 286
Primary Treatment	13 6	28 9			Percent Capacity (actual flow/design)	139%
Secondary Treatment	NA	NA				
Overall Treatment	83 4	84 0	NA	NA		

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility	Permit Number	For Month Of	Year
Town of Parker City	IN0020729	January	2006

<i>McDonn</i> 2/9/06 (SIGNATURE OF CERTIFIED OPERATOR)	(Date)
<i>McDonn</i> 2/9/06 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	(Date)

Page 4 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION												
	Primary Sludge Gal x 1000	Secondary Sludge Gal x 1000	Anaerobic Only			Supernatant Withdrawn hrs or Gal x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs or Gal x 1000			
			pH	Gas Production Cubic Ft x 1000	Temperature - F										
1															
2															
3												45			
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
Avg												45			
Max												45			
Min												45			
Data	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

Send completed forms by the 28th of the month to
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION
P O BOX 6015
INDIANAPOLIS, INDIANA 46206-6015

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
ADDRESS 147 W WASHINGTON ST
PO BOX 38
PARKER CITY IN 47368

FACILITY PARKER CITY MUNICIPAL STP
LOCATION PARKER CITY
ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised ☐

IN0020729 001A
PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD
MO DAY YEAR MO DAY YEAR
02 01 06 TO 02 28 06

MINOR
F - FINAL
EFFLUENT

Form Approved
OMB No 2040-000
Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
PH	SAMPLE MEASUREMENT	*****	*****		7.6	*****	8.2	(12)	0	5/7	6R
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			*****	6.0 DAILY MIN		9.0 DAILY MX	SU		5 TMS/WEEK	GRAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	27.2	37.8	(26)	*****	12.9	14.8	(19)	0	2/7	Comp
00530 1 2 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	47.6 MO AVG	71.3 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		TWICE/ WEEK	COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	255	317	(03)	*****	*****	*****		-	7/7	Tot
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/WEEK	TOTALZ
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	33.8	45.6	(26)	*****	15.6	16.7	(19)	0	3/7	Comp
80082 1 2 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	39.6 MO AVG	63.4 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		TWICE/ WEEK	COMP24
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL	SAMPLE MEASUREMENT	*****	*****		86	*****	*****	(23)	0	3/7	Comp
80091 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			*****	REPORT MO AVG			PER- CENT		TWICE/ WEEK	COMP24
SOLIDS, SUSPENDED PERCENT REMOVAL	SAMPLE MEASUREMENT	*****	*****		77	*****	*****	(23)		2/7	Comp
81011 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			*****	REPORT MO AVG			PER- CENT		TWICE/ WEEK	COMP24
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	7.143	(3R)	*****	*****	*****		-	1/31	Rco
82220 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT		REPORT MO TOTAL	MGAL	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

TYPED OR PRINTED
THOMAS LUDINGTON
PRES

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT
ME Deckman

TELEPHONE DATE
765 4187944 3 22 06
AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
RANDOLPH COUNTY



**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Substitute for State Form 10829 (R/1-2003)

Page 1 of 4

Name of Facility		Permit Number	
Town of Parker City		IN0020729	
Month	Year	Plant Design Flow	Telephone Number
February	2006	0 192 mgd	765-468-7949
Certified Operator Name		Class	Certificate Number
Michael Deckman		III	5542
		Expiration Date	
		6/30/07	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Total=	Bypass At Plant Site ("x" if Occurred)	Collection System Overflow ("x" if Occurred)	CHEMICALS USED			RAW SEWAGE							
				0			Chlorine - Lbs	Lbs/Day or Gal /Day	Lbs/Day or Gal /Day	Total Flow - MG	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp Solids - mg/l	Susp Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Wed										7 8						
2	Thu			.73							7 9	125	420 13	46	154 61		
3	Fn										7 2						
4	Sat			2" SN													
5	Sun																
6	Mon																
7	Tue										7 7	94	217 16	45	103 96		
8	Wed										7 8						
9	Thu										7 9	131	246 91	58	109 32		
10	Fn			.5" SN													
11	Sat			1.5 SN							7 4						
12	Sun			.5 SN							7 5						
13	Mon										7 8						
14	Tue										7 8	98	210 05	59	126 46		
15	Wed										7 7						
16	Thu			.69							7 9	92	276 22	75	225 18		
17	Fn										8 0						
18	Sat																
19	Sun																
20	Mon										7 6						
21	Tue										7 8	84	148 52	38	67 187		
22	Wed										7 8						
23	Thu											110	172 47	52	81 532		
24	Fn										7 8						
25	Sat																
26	Sun																
27	Mon																
28	Tue										7 8	152	204 1	69	92 649		
Average												110 75	236 94	55 25	120 11		
Maximum											8 0	152	420 13	75	225 18		
Minimum											7.2	84	148 52	38	67 187		
No of Data				0	0	0	0	0	0	0	18	8	8	8	8	0	0

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael Deckman 3/22/06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Michael Deckman 3/22/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 2 of 4 Substitute for State Form 10829 (R/1-2003)

Substitute for State Form 10829 (R/1-2003)

2154 DECANT.
22nd Fill DRYING BEDS

(DATE)

2006

(DATE)

FINAL EFFLUENT

Avg	0 25511		15 625		33 783		12 875		27 214							
Max	0 403	0 31714	18 9	16 65	63 561	45 6	20	14 75	42 96	37 779						
Min	0 155	0 20357	12 5	13 2	24 329	27 452	5 4	7 8	10 184	16 881						
Data	28	4	8	4	8	4	8	4	8	4	0	0	0	0	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow (million gallons)	7 143
Percent Removal	BOD5	S S	Ammonia	Phosphorus	Percent Capacity (actual flow/design)	133%
Primary Treatment	23 3	29 9				
	NA	NA				
Secondary Treatment	81 6	66 8				
Overall Treatment	85 9	76 7	NA	NA		

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: IN0020729 For Month Of: February Year: 2006

ONE Deekman 3/22/06
 (SIGNATURE OF CERTIFIED OPERATOR) (Date)
ONE Deekman 3/22/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Page 4 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION											
	Primary Sludge Gal x 1000	Secondary Sludge Gal x 1000	Anaerobic Only			Supernatant Withdrawn hrs or Gal x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs or Gal x 1000		
			pH	Gas Production Cubic Ft x 1000	Temperature - F									
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22												8		
23														
24														
25														
26														
27														
28														
Avg												8		
Max												8		
Min												8		
Data	0	0	0	0	0	0	0	0	0	0	0	1	0	0

Send completed forms by the 28th of the month to
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION
 P O BOX 6015
 INDIANAPOLIS, INDIANA 46206-6015

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
 ADDRESS 147 W WASHINGTON ST
 PO BOX 38
 PARKER CITY IN 47368
 FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised ☐

IN0020729 001A
 PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD
 MO DAY YEAR MO DAY YEAR
 03 01 06 TO 03 31 06

MINOR
 F - FINAL
 EFFLUENT

Form Approved
 OMB No 2040-000
 Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
PH	SAMPLE MEASUREMENT	*****	*****		7.5	*****	8.0	(12)	0	5/7 6R
00400 1 0 0	PERMIT REQUIREMENT			*****	6.0 DAILY MN		9.0 DAILY MX	SU		5 TMS/WEEK GRAB
EFFLUENT GROSS VALUE										
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	28.1	40.1	(26)	*****	16.1	21.4	(19)	0	7/7 Comp
00530 1 2 0	PERMIT REQUIREMENT	47.6 MO AVG	71.3 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		TWICE/WEEK COMP24
EFFLUENT GROSS VALUE										
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.223	.32	(03)	*****	*****	*****		no	7/7 Tot
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/WEEK TOTALZ
EFFLUENT GROSS VALUE										
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	23	31.5	(26)	*****	14	17.6	(19)	0	7/7 Comp
80082 1 2 0	PERMIT REQUIREMENT	39.6 MO AVG	63.4 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		TWICE/WEEK COMP24
EFFLUENT GROSS VALUE										
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL	SAMPLE MEASUREMENT	*****	*****		83.4	*****	*****	(23)	no	7/7 Comp
80091 1 0 0	PERMIT REQUIREMENT			*****	REPORT MO AVG			PER-CENT		TWICE/WEEK COMP24
EFFLUENT GROSS VALUE										
SOLIDS, SUSPENDED PERCENT REMOVAL	SAMPLE MEASUREMENT	*****	*****		78.3	*****	*****	(23)	no	7/7 Comp
81011 1 0 0	PERMIT REQUIREMENT			*****	REPORT MO AVG			PER-CENT		TWICE/WEEK COMP24
EFFLUENT GROSS VALUE										
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	6.9	(3R)	*****	*****	*****		no	1/30 200
82220 1 0 0	PERMIT REQUIREMENT		REPORT MO TOTAL	MGAL	*****	*****	*****	*****		ONCE/MONTH RCOTOT
EFFLUENT GROSS VALUE										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Fred Ludington
 TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

705 468-7449 4 26 06
 AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
 RANDOLPH COUNTY



**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Substitute for State Form 10829 (R/1-2003)

Page 1 of 4

Name of Facility		Permit Number	
Town of Parker City		IN0020729	
Month	Year	Plant Design Flow	Telephone Number
March	2006	0 192 mgd	765-468-7949
Certified Operator Name		Class	Certificate Number
Michael Deckman		III	5542
		Expiration Date	
		6/30/07	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Total=	Bypass At Plant Site ("x" if Occurred)	Collection System Overflow ("x" if Occurred)	CHEMICALS USED			RAW SEWAGE								
				5 37			Precipitation - Inches	Chlorine - Lbs	Lbs/Day or Gal /Day	Lbs/Day or Gal /Day	Total Flow - MG	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp Solids - mg/l	Susp Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Wed										7 8							
2	Thu										7 7	161	216 18					
3	Fn																	
4	Sat																	
5	Sun										7 7							
6	Mon										7 8							
7	Tue			0 14								138	173 79	40	50 374			
8	Wed			0 23							7 7							
9	Thu			1 05		x					7 8	104	163 93	58	91 423			
10	Fn					x					7 7							
11	Sat			2 15		x					7 3							
12	Sun			0 49		x												
13	Mon					x					7 1							
14	Tue											38	115 68	21	63 926			
15	Wed																	
16	Thu											16	38 698	41	99 163			
17	Fn										7 6							
18	Sat																	
19	Sun																	
20	Mon										7 6							
21	Tue			0 1								57	100 78	120	212 17			
22	Wed										7 6							
23	Thu											61	88 521	118	171 24			
24	Fn																	
25	Sat										7 7							
26	Sun																	
27	Mon										7 5							
28	Tue										7 5	103	120 26	117	136 61			
29	Wed																	
30	Thu										7 7	82	93 008	78	88 471			
31	Fn			1 21		x					7 7							
Average												84 444	123 43	74 125	114 17			
Maximum				2 15							7 8	161	216 18	120	212 17			
Minimum											7 1	16	38 698	21	50 374			
No of Data				7	0	6	0	0	0	0	17	9	9	8	8	0	0	0

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael Deckman 4/26/06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Michael Deckman 4/26/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **March** Year: **2006**

medellan 4/26/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
medellan 4/26/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 2 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	PRIMARY EFFLUENT			RBC			SECONDARY EFFLUENT			FINAL EFFLUENT						
	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Trickling Filter Total Flow to Filter - mgd	Biological Growth (L)light, (N)ormal, (H)heavy	Load Cell Weight - 1000 lbs	Dissolved Oxygen After 1st Stage	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
1														79		
2	126													80		
3																
4																
5														78		
6														80		
7	132	38												79		
8														80		
9	80	47												79		
10														75		
11																
12														79		
13																
14	32	24														
15																
16	53	23														
17														80		
18																
19																
20														78		
21	48	68														
22														78		
23	96	51														
24																
25														79		
26																
27														78		
28	86	48												76		
29																
30	64	47												79		
31														79		
Avg	79.667	43.25														
Max	132	68												80		
Min	32	23												75		
Data	9	8		0	0	0	0	0	0	0	0	0	0	17	0	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **March** Year: **2006**

me Deakmon 4/26/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)

me Deakmon 4/26/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	FINAL EFFLUENT															
	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow - MG	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp Solids - mg/l	Susp Solids - mg/l Weekly Average	Susp Solids - lbs	Susp Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average		
1	0 158															
2	0 161		16 3		21 9											
3	0 132															
4	0 152	0 159		17 55		23 579		20		26 871						
5	0 144															
6	0 152															
7	0 151		20 2		25 454		19 6		24 698							
8	0 176															
9	0 189		13 6		21 45		16 7		26 339							
10	0 387															
11	0 395	0 22771		16 9		23 452		18 15		25 519						
12	0 396															
13	0 373															
14	0 365		10 7		32 591		11 4		34 724							
15	0 298															
16	0 29		12 6		30 493		18 8		45 497							
17	0 274															
18	0 25	0 32086		11 65		31 542		15 1		40 11						
19	0 225															
20	0 189															
21	0 212		17 2		30 429		28 8		50 951							
22	0 177															
23	0 174		13 1		19 022		14		20 328							
24	0 202															
25	0 17	0 19271		15 15		24 725		21 4		35 64						
26	0 151															
27	0 131															
28	0 14		10 8		12 618		9 4		10 982							
29	0 141															
30	0 136		11 8		13 392		9 7		11 009							
31	0 409	0 18467		11 3		13 005		9 55		10 995						
Avg	0 22258		14 033		23 039		16 05		28 066							
Max	0 409	0 32086	20 2	17 55	32 591	31 542	28 8	21 4	50 951	40 11						
Min	0 131	0 159	10 7	11 3	12 618	13 005	9 4	9 55	10 982	10 995						
Data	31	5	9	5	9	5	8	5	8	5	0	0	0	0	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow	
Percent Removal	BOD5	SS	Ammonia	Phosphorus	(million gallons)	6 9
Primary Treatment	5 7	41 7			Percent Capacity (actual flow/design)	116%
Secondary Treatment	82 4	62 9				
Overall Treatment	83 4	78 3	NA	NA		

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

MEH Deekman 4/26/06
 (SIGNATURE OF CERTIFIED OPERATOR) (Date)
MEH Deekman 4/26/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Name of Facility
 Town of Parker City
 Permit Number
 IN0020729
 For Month Of
 March
 Year
 2006

Page 4 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION												
	Primary Sludge Gal x 1000	Secondary Sludge Gal x 1000	Anaerobic Only			Supernatant Withdrawn hrs or Gal x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs or Gal x 1000			
			pH	Gas Production Cubic Ft x 1000	Temperature - F										
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
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20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
Avg															
Max															
Min															
Data	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Send completed forms by the 28th of the month to
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION
 P O BOX 6015
 INDIANAPOLIS, INDIANA 46206-6015

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
ADDRESS 147 W WASHINGTON ST
PO BOX 38
PARKER CITY IN 47368

FACILITY PARKER CITY MUNICIPAL STP
LOCATION PARKER CITY
ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised ☐

IN0020729		001A	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
MO	DAY	YEAR	TO
04	01	06	04 30 06

MINOR
F - FINAL
EFFLUENT

Form Approved
OMB No 2040-000
Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
PH	SAMPLE MEASUREMENT	*****	*****		7.6	*****	8.1	(12)	0	5/7	GR
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		5 TMS/WEEK	GRAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	39.3	55.1	(26)	*****	26.5	38.4	(19)	0	3/7	COMP
00530 1 2 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	47.6 MO AVG	71.3 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		TWICE/WEEK	COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.207	.257	(03)	*****	*****	*****			7/7	TOTL2
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/WEEK	TOTAL2
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	.017	.05	(19)	0	5/7	GR
50060 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L		5 TMS/WEEK	GRAB
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		.5	*****	1.31	(19)	0	5/7	GR
50060 X 1 0 END-CHLORINE CONTACT	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY MN	*****	REPORT DAILY MX	MG/L		5 TMS/WEEK	GRAB
E COLI, COLONY FORMING UNITS (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	79.6	600	(3Z)	1	3/7	GR
51041 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	125.0 MO GEOMN	235.0 DAILY MX	CFU/ 100ML		TWICE/WEEK	GRAB
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	19.4	34.6	(26)	*****	12.2	17.8	(19)	0	3/7	COMP
80082 1 2 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	39.6 MO AVG	63.4 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		TWICE/WEEK	COMP24
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.					TELEPHONE		DATE			
TYPED OR PRINTED						765 9687949		5 26 06			
SIGNATURE OF PRINCIPAL EXECUTIV OFFICER OR AUTHORIZED AGENT					AREA CODE	NUMBER	MO	DAY	YEAR		

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
ADDRESS 147 W WASHINGTON ST
PO BOX 38
PARKER CITY IN 47368

FACILITY PARKER CITY MUNICIPAL STP
LOCATION PARKER CITY
ATTN. MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised ☐

IN0020729 001A
PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD
MO DAY YEAR MO DAY YEAR
04 01 06 TO 04 30 06

MINOR
F - FINAL
EFFLUENT

Form Approved
OMB No 2040-000
Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL 80091 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	***** *****	84 REPORT MO AVG	***** *****	***** *****	(23) PER-CENT	0	3/7	COMP
SOLIDS, SUSPENDED PERCENT REMOVAL 81011 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	***** *****	82.57 REPORT MO AVG	***** *****	***** *****	(23) PER-CENT	0	3/7	COMP
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	6.214 REPORT MO TOTAL	(3R) MGAL	***** *****	***** *****	***** *****	***** *****	✓	30/30	RCO
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT	6.21									
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

FRED LUDINGTON PRES

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

ME Deckman

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 418-9444 5 26 06
AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
RANDOLPH COUNTY



**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Substitute for State Form 10829 (R/1-2003)

Page 1 of 4

Name of Facility		Permit Number	
Town of Parker City		IN0020729	
Month	Year	Plant Design Flow	Telephone Number
April	2006	0 192 mgd	765-468-7949
Certified Operator Name		Class	Certificate Number
Michael Deckman		III	5542
		Expiration Date	
		6/30/07	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Total=	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				3 25			Chlorine - Lbs	Lbs/Day or Gal /Day	Lbs/Day or Gal /Day	Total Flow - MG	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp Solids - mg/l	Susp Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Sat																
2	Sun			0 25													
3	Mon										7 4						
4	Tue										7 3	0 76	1 8381	23	55 628		
5	Wed										7 6						
6	Thu			0 32							7 7	0 94	1 9599				
7	Fn										7 5						
8	Sat																
9	Sun																
10	Mon										7 7						
11	Tue										7 7	111	144 42				
12	Wed										7 5						
13	Thu			0 35								125	183 48	61	89 538		
14	Fn			0 17							7 9						
15	Sat			0 16							7 7			61	117 01		
16	Sun			0 59							7 6						
17	Mon										7 6						
18	Tue											73	141 86	55	106 88		
19	Wed										7 5						
20	Thu										7 6			49	66 203		
21	Fn																
22	Sat																
23	Sun																
24	Mon										7 8						
25	Tue			0 22							7 7	116	148 99	91	116 88		
26	Wed										7 9						
27	Thu											99	109 81	87	96 502		
28	Fn																
29	Sat																
30	Sun			1 19													
Average												75 1	104 62	61	92 662		
Maximum				1 19							7 9	125	183 48	91	117 01		
Minimum											7 3	0 76	1 8381	23	55 628		
No of Data				8	0	0	0	0	0	0	17	7	7	7	7	0	0

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael Deckman 5/26/06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Michael Deckman 5/26/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **April** Year: **2006**

ME Weckman 5/26/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)

ME Weckman 5/26/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 2 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	PRIMARY EFFLUENT			RBC				SECONDARY EFFLUENT			FINAL EFFLUENT						
	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Trckling Filter		Load Cell Weight - 1000 lbs	Dissolved Oxygen After 1st Stage	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l	
				Total Flow to Filter - mgd	Biological Growth (L)ight, (N)ormal, (H)eavy												
1																	
2																	
3														8.1			
4	50	18									0.55	0.01		7.7			
5											0.71	0.04		7.8			
6	79										0.56	0.03	210	7.7			
7													190	7.6			
8																	
9																	
10											0.57	0.01		7.9			
11	83	42									0.69	0.01		8.0			
12											0.58	0.01		7.6			
13	91	34									0.53	0.01	600				
14											0.5	0.01	75	7.8			
15											0.53	0.01		7.6			
16											0.68	0.01		7.7			
17											0.51	0.01		7.8			
18	45	31									0.74						
19											0.96	0.01	30	7.8			
20		28									1.05	0.01		7.7			
21											0.96	0.01	100				
22																	
23																	
24											0.96	0.01		7.7			
25	72	45									1.31	0.04		7.8			
26											0.84	0.01		7.8			
27	72	37									0.78	0.02	30				
28											1	0.05	10				
29																	
30																	
Avg	70.286	33.571									0.7505	0.0168	79.626				
Max	91	45									1.31	0.05	600	8.1			
Min	45	18									0.5	0.01	10	7.6			
Data	7	7	0	0	0	0	0	0	0	0	20	19	8	17	0	0	

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.)

16 - Decant 10th - Filters annual septic unloading, wasn't too bad this year Running both filter pumps may have helped

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **April** Year: **2006**

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

Page 3 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	FINAL EFFLUENT															
	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow - MG	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp Solids - mg/l	Susp Solids - mg/l Weekly Average	Susp Solids - lbs	Susp Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average		
1	0 341															
2	0 31															
3	0 316															
4	0 29		6 1		14 762		9 6		23 232							
5	0 211															
6	0 25		8		16 69											
7	0 227															
8	0 196	0 25714		7 05		15 726		9 6		23 232						
9	0 178															
10	0 184															
11	0 156		13 5		17 575		30		39 055							
12	0 163															
13	0 176		16 6		24 381		46 8		68 736							
14	0 202															
15	0 23	0 18414		15 05		20 978		38 4		53 895						
16	0 289															
17	0 296															
18	0 233		17 8		34 61		23		44 721							
19	0 203															
20	0 162						48 5		65 567							
21	0 161															
22	0 15	0 21343		17 8		34 61		35 75		55 144						
23	0 148															
24	0 147															
25	0 154		11 1		14 265		16 7		21 462							
26	0 146															
27	0 133		12 3		13 652		10 8		11 987							
28	0 137															
29	0 148	0 14471		11 7		13 958		13 75		16 724						
30	0 277															
Avg	0 20713		12 2		19 419		26 486		39 251							
Max	0 341	0 25714	17 8	17 8	34 61	34 61	48 5	38 4	68 736	55 144						
Min	0 133	0 14471	6 1	7 05	13 652	13 958	9 6	9 6	11 987	16 724						
Data	30	4	7	4	7	4	7	4	7	4	0	0	0	0	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow (million gallons)	6 214
Percent Removal	BOD5	S S	Ammonia	Phosphorus	Percent Capacity (actual flow/design)	108%
Primary Treatment	6 4	45 0				
Secondary Treatment	82 6	21 1				
Overall Treatment	83 8	56 6	NA	NA		

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility	Permit Number	For Month Of	Year
Town of Parker City	IN0020729	April	2006

<i>medeckman</i>	<i>5/24/06</i>
(SIGNATURE OF CERTIFIED OPERATOR)	(Date)
<i>medeckman</i>	<i>5/26/06</i>
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	(Date)

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Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION												
	Primary Sludge Gal x 1000	Secondary Sludge Gal x 1000	Anaerobic Only			Supernatant Withdrawn hrs or Gal x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs or Gal x 1000			
			pH	Gas Production Cubic Ft x 1000	Temperature - F										
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
Avg															
Max															
Min															
Data	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Send completed forms by the 28th of the month to
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION
P O BOX 6015
INDIANAPOLIS, INDIANA 46206-6015

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
 ADDRESS 147 W WASHINGTON ST
 PO BOX 38
 PARKER CITY IN 47368
 FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised ☐

IN0020729 001A
 PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD
 MO DAY YEAR MO DAY YEAR
 05 01 06 TO 05 31 06

MINOR
 F - FINAL
 EFFLUENT

Form Approved
 OMB No 2040-000
 Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
PH	SAMPLE MEASUREMENT	*****	*****		7.1	*****	7.8	(12)	0	5/7	GR
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		5 TMS/WEEK	GRAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	40.9	67	(26)	*****	19.2	30.6	(19)	0	7/7	Comp
00530 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	47.6 MO AVG	71.3 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		TWICE/WEEK	COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.256	.33	(03)	*****	*****	*****			7/7	TOT
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/WEEK	TOTALZ
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	.01.6	.04	(19)	0	5/7	GR
50060 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.03 DAILY MX	MG/L		5 TMS/WEEK	GRAB
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		.5	*****	.9	(19)	0	5/7	GR
50060 X 1 0 END-CHLORINE CONTACT	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY MN	*****	REPORT DAILY MX	MG/L		5 TMS/WEEK	GRAB
E COLI, COLONY FORMING UNITS (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	58	600	(3Z)	1	7/7	GR
51041 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	125.0 MO GEOMN	235.0 DAILY MX	CFU/ 100ML		TWICE/WEEK	GRAB
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	28	30.5	(26)	*****	13	18	(19)	0	7/7	Comp
80082 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	39.6 MO AVG	63.4 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		TWICE/WEEK	COMP24

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

FRED LUDINGTON PRES
 TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIV OFFICER OR AUTHORIZED AGENT
 ME Deckman

TELEPHONE DATE
 765 487-4446 6 26 06
 AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
 RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
 ADDRESS 147 W WASHINGTON ST
 PO BOX 38
 PARKER CITY IN 47368
 FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised ☐

IN0020729 001A
 PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD
 MO DAY YEAR MO DAY YEAR
 05 01 06 TO 05 31 06

MINOR
 F - FINAL
 EFFLUENT

Form Approved
 OMB No 2040-000
 Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***
 NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL 80091 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	*****	82.5 REPORT MO AVG	*****	*****	(23) PER-CENT	0 TWICE/ WEEK	COMP COMP24
SOLIDS, SUSPENDED PERCENT REMOVAL 81011 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	*****	68.2 REPORT MO AVG	*****	*****	(23) PER-CENT	0 TWICE/ WEEK	COMP COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	7.94 REPORT MO TOTAL	(3R) MGAL	*****	*****	*****	***** ONCE/ MONTH	31/31 RCOTOT	
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

FRED W DINGWATER PRES

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

ME Deckman

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

705 4687949

DATE

6 26 06

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
 RANDOLPH COUNTY



**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Substitute for State Form 10829 (R/1-2003)

Page 1 of 4

Name of Facility		Permit Number	
Town of Parker City		IN0020729	
Month	Year	Plant Design Flow	Telephone Number
May	2006	0 192 mgd	765-468-7949
Certified Operator Name		Class	Certificate Number
Michael Deckman		III	5542
		Expiration Date	
		6/30/07	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Total=	Bypass At Plant Site ("x" if Occurred)	Collection System Overflow ("x" if Occurred)	CHEMICALS USED			RAW SEWAGE							
				Precipitation - Inches			Chlorine - Lbs	Lbs/Day or Gal /Day	Lbs/Day or Gal /Day	Total Flow - MG	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp Solids - mg/l	Susp Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Mon										7 5						
2	Tue			0 62								54	155 82	29	83 684		
3	Wed			0 13													
4	Thu										7 5	82	114 21	156	217 27		
5	Fri																
6	Sat										7 5						
7	Sun										7 9						
8	Mon										7 9						
9	Tue										7 9			52	58 98		
10	Wed			1 96	x						7 8						
11	Thu			0 67	x							24	75 46	21	66 028		
12	Fri			0 7	x												
13	Sat			0 29	x												
14	Sun			0 15	x						7 4						
15	Mon			0 22	x						7 3						
16	Tue										7 4	37	106 15	32	91 807		
17	Wed			0 77	x												
18	Thu			0 16								28	91 54				
19	Fri																
20	Sat																
21	Sun										7 5						
22	Mon																
23	Tue											128	197 49	83	128 06		
24	Wed																
25	Thu			1 33	x							130	331 77	59	150 57		
26	Fri				x						7 7						
27	Sat																
28	Sun																
29	Mon																
30	Tue											111	148 12	52	69 389		
31	Wed										7 7						
Average												74 25	152 57	60 5	108 22		
Maximum				1 96							7 9	130	331 77	156	217 27		
Minimum											7 3	24	75 46	21	58 98		
No of Data				11	0	9	0	0	0	0	13	8	8	8	8	0	0

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael Deckman 6/26/06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Michael Deckman 6/26/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: Town of Parker City
 Permit Number: IN0020729
 For Month Of: May
 Year: 2006

ME Deekman 6/26/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
ME Deekman 6/26/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 2 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	PRIMARY EFFLUENT			RBC				SECONDARY EFFLUENT			FINAL EFFLUENT					
	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Trckling Filter Total Flow to Filter - mgd	Biological Growth (L)ight, (N)ormal, (H)eavy	Load Cell Weight - 1000 lbs	Dissolved Oxygen After 1st Stage	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
1											0 5	0 01		7 6		
2	47	23														
3											0 53	0 01				
4	48	89									0 57	0 01	190	7 7		
5													590			
6											0 55	0 01		7 7		
7														7 7		
8											0 69	0 01		7 6		
9		37									0 75	0 02		7 7		
10											0 7		10	7 7		
11	19	13									0 52	0 01				
12											0 57	0 01	80			
13																
14														7 7		
15											0 69	0 01		7 7		
16	23	22									0 71	0 02	20	7 8		
17											0 68	0 02	70			
18	22															
19																
20																
21													10	7 8		
22											0 83	0 04				
23	90	44									0 8	0 02				
24											0 77	0 01				
25	90	37									0 89	0 02				
26											0 53	0 01	600	7 1		
27											0 59	0 01				
28																
29																
30	89	35									0 84	0 01				
31											0 9	0 04	10	7 7		
Avg	53 5	37 5									0 6805	0 0158	58 091			
Max	90	89									0 9	0 04	600	7 8		
Min	19	13									0 5	0 01	10	7 1		
Data	8	8	0	0	0	0	0	0	0	0	20	19	9	13	0	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **May** Year: **2006**

Mike Johnson 6/26/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)

Mike Johnson 6/26/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 Substitute for State Form 10829 (R/1-2003)

FINAL EFFLUENT																
Day Of Month	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow - MG	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp Solids - mg/l	Susp Solids - mg/l Weekly Average	Susp Solids - lbs	Susp Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average		
1	0 218															
2	0 346		11 4		32 916		32 7		94 417							
3	0 249															
4	0 167		20 2		28 151		28 5		39 718							
5	0 148															
6	0 166	0 22443		15 8		30 534		30 6		67 068						
7	0 122															
8	0 142															
9	0 136						21 9		24 855							
10	0 202															
11	0 377		9 6		30 202		21		66 067							
12	0 389															
13	0 443	0 25871		9 6		30 202		21 45		45 461						
14	0 336															
15	0 345															
16	0 344		8		22 965		13 5		38 754							
17	0 233															
18	0 392		10 2		33 367											
19	0 39															
20	0 27	0 33		9 1		28 166		13 5		38 754						
21	0 23															
22	0 23															
23	0 185		12 2		18 835		8 2		12 659							
24	0 177															
25	0 306		14 1		36 005		11 1		28 345							
26	0 334															
27	0 26	0 246		13 15		27 42		9 65		20 502						
28	0 258															
29	0 213															
30	0 16		18		24 034		17		22 698							
31	0 172	0 20075		18		24 034		17		22 698						
Avg	0 25613		12 963		28 309		19 238		40 939							
Max	0 443	0 33	20 2	18	36 005	30 534	32 7	30 6	94 417	67 068						
Min	0 122	0 20075	8	9 1	18 835	24 034	8 2	9 65	12 659	20 502						
Data	31	5	8	5	8	5	8	5	8	5	0	0	0	0	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow (million gallons)
Percent Removal	BOD5	S S	Ammonia	Phosphorus	7 94
Primary Treatment	27 9	38 0			Percent Capacity (actual flow/design) 133%
Secondary Treatment	75 8	48 7			
Overall Treatment	82 5	68 2	NA	NA	

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility	Permit Number	For Month Of	Year
Town of Parker City	IN0020729	May	2006

Page 4 of 4 Substitute for State Form 10829 (R/1-2003)

<i>ME Weckman</i>	6/26/06
(SIGNATURE OF CERTIFIED OPERATOR)	(Date)
<i>ME Weckman</i>	6/26/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	(Date)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION											
	Primary Sludge Gal x 1000	Secondary Sludge Gal x 1000	Anaerobic Only			Supernatant Withdrawn hrs or Gal x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs or Gal x 1000		
			pH	Gas Production Cubic Ft x 1000	Temperature - F									
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22												5		
23														
24														
25														
26														
27														
28														
29														
30														
31														
Avg												5		
Max												5		
Min												5		
Data	0	0	0	0	0	0	0	0	0	0	0	0	1	0

Send completed forms by the 28th of the month to
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION
P O BOX 6015
INDIANAPOLIS, INDIANA 46206-6015

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
ADDRESS 147 W WASHINGTON ST
PO BOX 38
PARKER CITY IN 47368

FACILITY PARKER CITY MUNICIPAL STP
LOCATION PARKER CITY
ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised ☐

IN0020729	001A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
MO	DAY	YEAR	MO	DAY	YEAR	
06	01	06	TO	06	30	06

MINOR
F - FINAL
EFFLUENT

Form Approved
OMB No 2040-000
Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***
NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
PH	SAMPLE MEASUREMENT	*****	*****		7.6	*****	8.1	(12)	0	5/7 GR
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU	5 TMS/WEEK	GRAB
EFFLUENT GROSS VALUE										
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	22.8	32.2	(26)	*****	14.5	19	(19)	0	3/7 COMP
00530 1 1 0	PERMIT REQUIREMENT	47.6 MO AVG	71.3 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L	TWICE/WEEK	COMF-24
EFFLUENT GROSS VALUE										
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.204	.213	(03)	*****	*****	*****		0	7/7 TOT
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****	5 TMS/WEEK	TOTALZ
EFFLUENT GROSS VALUE										
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	.012	.03	(19)	0	5/7 GR
50060 1 1 0	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L	5 TMS/WEEK	GRAB
EFFLUENT GROSS VALUE										
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		.666	*****	.83	(19)	0	5/7 GR
50060 X 1 0	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY MN	*****	REPORT DAILY MX	MG/L	5 TMS/WEEK	GRAB
END-CHLORINE CONTACT										
E COLI, COLONY FORMING UNITS (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	25.7	360	(3Z)	1	3/7 GR
51041 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	125.0 MO GEOMN	235.0 DAILY MX	CFU/100ML	TWICE/WEEK	GRAB
EFFLUENT GROSS VALUE										
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	20.5	25	(26)	*****	13.7	15.8	(19)	0	3/7 COMP
80082 1 1 0	PERMIT REQUIREMENT	39.6 MO AVG	63.4 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L	TWICE/WEEK	COMF-24
EFFLUENT GROSS VALUE										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Fred W. Dunnington pres
TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT
705 418 7449

TELEPHONE DATE
705 418 7449 7 26 06
AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
 ADDRESS 147 W WASHINGTON ST
 PO BOX 38
 PARKER CITY IN 47368
 FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised ☐

IN0020729		001A	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
06	01	06	06 30 06


MINOR F - FINAL EFFLUENT Form Approved OMB No 2040-000 Approval Expires 05-31-98

* I N 0 0 2 0 7 2 9 0 0 1 A 0 6 0 6 *

For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***
 NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL 80091 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	*****	88.5 REPORT MO AVG	*****	*****	(23) PER-CENT	0 4/7	Comp
SOLIDS, SUSPENDED PERCENT REMOVAL 81011 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	*****	73.1 REPORT MO AVG	*****	*****	(23) PER-CENT	0 3/7	Comp
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	6.115 REPORT MO TOTAL	(3R) MGAL	*****	*****	*****	*****	✓ 1/30	RCD
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE		
TYPED OR PRINTED			765 418-7444	7	26	06

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
 RANDOLPH COUNTY



**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Substitute for State Form 10829 (R/1-2003)

Page 1 of 4

Name of Facility		Permit Number	
Town of Parker City		IN0020729	
Month	Year	Plant Design Flow	Telephone Number
June	2006	0 192 mgd	765-468-7949
Certified Operator Name		Class	Certificate Number
Michael Deckman		III	5542
			Expiration Date
			6/30/07

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Total=	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				4 61			Chlorine - Lbs	Lbs/Day or Gal /Day	Lbs/Day or Gal /Day	Total Flow - MG	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp Solids - mg/l	Susp Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Thu			1 57							7 4	122	268 61	49	107 89		
2	Fn			0 17													
3	Sat																
4	Sun																
5	Mon										7 4						
6	Tue										8 0	101	135 62	49	65 794		
7	Wed			0 37							7 6						
8	Thu											134	195 57	48	70 056		
9	Fn			0 67													
10	Sat			0 23							7 4						
11	Sun										7 5						
12	Mon																
13	Tue										7 6	94	135 63	44	63 484		
14	Wed																
15	Thu											132	171 74	49	63 751		
16	Fn																
17	Sat			0 63													
18	Sun			0 31							7 6						
19	Mon										7 7						
20	Tue											89	144	48	77 662		
21	Wed										7 9						
22	Thu			0 42								133	237 37	54	96 377		
23	Fn										7 9						
24	Sat																
25	Sun																
26	Mon										7 9						
27	Tue										7 8	127	142 99	77	86 694		
28	Wed			0 24													
29	Thu											136	148 59	66	72 108		
30	Fn																
Average												118 67	175 57	53 778	78 201		
Maximum				1 57							8 0	136	268 61	77	107 89		
Minimum											7 4	89	135 62	44	63 484		
No of Data				9	0	0	0	0	0	0	13	9	9	9	9	0	0

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Michael Deckman 7/26/06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)

Michael Deckman 7/26/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: Town of Parker City
 Permit Number: IN0020729
 For Month Of: June
 Year: 2006

ME Weckman 7/26/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
ME Weckman 7/26/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 2 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	PRIMARY EFFLUENT			RBC			SECONDARY EFFLUENT			FINAL EFFLUENT						
	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Trickling Filter Total Flow to Filter - mgd	Biological Growth (L)ight, (N)ormal, (H)eavy	Load Cell Weight - 1000 lbs	Dissolved Oxygen After 1st Stage	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
1	89	42											10	7.8		
2																
3																
4											0.57	0.01				
5											0.81	0.02		7.6		
6	62	27									0.83	0.03		7.9		
7											0.74		50	7.9		
8	85	32									0.76	0.01				
9											0.81		10			
10											0.6	0.01		7.8		
11											0.55	0.01		8.0		
12											0.74	0.02				
13	75	28									0.7	0.01		7.9		
14											0.6	0.01				
15	107	35									0.62	0.01	10			
16													10			
17																
18														7.9		
19											0.61	0.01		8.0		
20	55	24									0.55	0.01				
21											0.54	0.01		7.7		
22	111	35									0.57	0.01				
23											0.61	0.01	105	8.0		
24																
25																
26											0.69	0.01		8.1		
27	107	41									0.67	0.01		8.0		
28											0.71	0.01				
29	133	51									0.7	0.01	10			
30											0.59	0.01	360			
Avg	91.556	35									0.6623	0.012	25.678			
Max	133	51									0.83	0.03	360	8.1		
Min	55	24									0.54	0.01	10	7.6		
Data	9	9	0	0	0	0	0	0	0	0	22	20	8	13	0	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **June** Year: **2006**
 Town of Parker City

ME Weekman 7/26/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
ME Weekman 7/26/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	FINAL EFFLUENT															
	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow - MG	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp Solids - mg/l	Susp Solids - mg/l Weekly Average	Susp Solids - lbs	Susp Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average		
1	0 264		16 7		36 791		25 5		56 179							
2	0 411															
3	0 393															
4	0 196															
5	0 219															
6	0 161		12 4		16 66		13 6		18 272							
7	0 211															
8	0 175		13 4		19 569		11 8		17 232							
9	0 187															
10	0 342	0 213		12 9		18 114		12 7		17 752						
11	0 249															
12	0 211															
13	0 173		9 1		13 138		5 4		7 7959							
14	0 16															
15	0 156		10 4		13 539		5 1		6 6393							
16	0 147															
17	0 154	0 17857		9 75		13 338		5 25		7 2176						
18	0 257															
19	0 205															
20	0 194		15 9		25 741		20 7		33 512							
21	0 197															
22	0 214		13 6		24 287		17 3		30 895							
23	0 207															
24	0 199	0 21043		14 75		25 014		19		32 203						
25	0 149															
26	0 14															
27	0 135		15 1		17 011		16		18 025							
28	0 149															
29	0 131		16 5		18 038		14 9		16 289							
30	0 129	0 13883		15 8		17 525		15 45		17 157						
Avg	0 20383		13 678		20 53		14 478		22 76							
Max	0 411	0 213	16 7	15 8	36 791	25 014	25 5	19	56 179	32 203						
Min	0 129	0 13883	9 1	9 75	13 138	13 338	5 1	5 25	6 6393	7 2176						
Data	30	4	9	4	9	4	9	4	9	4	0	0	0	0	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow (million gallons)	6 115
Percent Removal	BOD5	S S	Ammonia	Phosphorus	Percent Capacity (actual flow/design) 106%	
Primary Treatment	22 8	34 9				
Secondary Treatment	85 1	58 6				
Overall Treatment	88 5	73 1	NA	NA		

**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Name of Facility: **Town of Parker City** Permit Number: **IN0020729** For Month Of: **June** Year: **2006**

meckelmann 7/24/06
(SIGNATURE OF CERTIFIED OPERATOR) (Date)

meckelmann 7/24/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Page 4 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION												
	Primary Sludge Gal x 1000	Secondary Sludge Gal x 1000	Anaerobic Only			Supernatant Withdrawn hrs or Gal x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs or Gal x 1000			
			pH	Gas Production Cubic Ft x 1000	Temperature - F										
1															
2															
3															
4															
5															
6															
7															
8															
9															
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21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
Avg															
Max															
Min															
Data	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Send completed forms by the 28th of the month to
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION
P O BOX 6015
INDIANAPOLIS, INDIANA 46206-6015

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
 ADDRESS 147 W WASHINGTON ST
 PO BOX 38
 PARKER CITY IN 47368
 FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN. MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised ☐ DISCHARGE MONITORING REPORT - (DMR)

IN0020729 001A
 PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD
 MO DAY YEAR MO DAY YEAR
 FROM 07 01 06 TO 07 31 06

MINOR F - FINAL EFFLUENT
 Form Approved OMB No 2040-000
 Approval Expires 05-31-98
 * I N 0 0 2 0 7 2 9 0 0 1 A 0 7 0 6 *

For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
PH	SAMPLE MEASUREMENT	*****	*****		7.3	*****	7.9	(12)	0	5/7	Grab
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		5 TMS/WEEK	GRAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	14.6	19.5	(26)	*****	14.4	18.2	(19)	0	2/7	Comp
00530 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	47.6 MO AVG	71.3 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		TWICE/WEEK	COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	117	127	(03)	*****	*****	*****		0	7/7	Tot
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/WEEK	TOTALZ
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	.015	.04	(19)	0	5/7	Grab
50060 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L		5 TMS/WEEK	GRAB
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		.77	*****	1.23	(19)	0	5/7	Grab
50060 X 1 0 END-CHLORINE CONTACT	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY MN	*****	REPORT DAILY MX	MG/L		5 TMS/WEEK	GRAB
E COLI, COLONY FORMING UNITS (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	72.2	67,000	(3Z)	1	2/7	Grab
51041 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	125.0 MO GEOMN	235.0 DAILY MX	CFU/ 100ML		TWICE/WEEK	GRAB
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	20.4	22.3	(26)	*****	20.4	22.6	(19)	0	2/7	Comp
80082 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	39.6 MO AVG	63.4 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		TWICE/WEEK	COMP24

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Fred Ludington - Pres.
 TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIV OFFICER OR AUTHORIZED AGENT
 meDeckman

TELEPHONE DATE
 765 468-7949 8 24 06
 AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR RANDOLPH COUNTY

MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
 ADDRESS 147 W WASHINGTON ST
 PO BOX 38
 PARKER CITY IN 47368
 FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised ☐ DISCHARGE MONITORING REPORT (DMR)

IN0020729 001A
 PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD
 MO DAY YEAR MO DAY YEAR
 FROM 07 01 06 TO 07 31 06


MINOR F - FINAL EFFLUENT
 Form Approved OMB No 2040-000
 Approval Expires 05-31-98
 * I N 0 0 2 0 7 2 9 0 0 1 A 0 7 0 6 *

For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL 80091 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	*****	90.5 REPORT MO AVG	*****	*****	(23) PER-CENT	0	2/7	Comp
SOLIDS, SUSPENDED PERCENT REMOVAL 81011 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	*****	83.3 REPORT MO AVG	*****	*****	(23) PER-CENT	0	2/7	Comp
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	3.616 REPORT MO TOTAL	(80) MGAL/MONTH	*****	*****	*****	*****	0	1/31	RCO
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.	 SIGNATURE OF PRINCIPAL EXECUTIV OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE		
Fred Ludington - Pres. TYPED OR PRINTED			765 468-7949	8	24	06

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR RANDOLPH COUNTY

MUNICIPAL MINOR RANDOLPH COUNTY



**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Substitute for State Form 10829 (R/1-2003)

Page 1 of 4

Name of Facility		Permit Number	
Town of Parker City		IN0020729	
Month	Year	Plant Design Flow	Telephone Number
July	2006	0 192 mgd	765-468-7949
Certified Operator Name		Class	Certificate Number
Michael Deckman		III	5542
		Expiration Date	
		6/30/07	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Total=	Bypass At Plant Site ("x" if Occurred)	Collection System Overflow ("x" if Occurred)	CHEMICALS USED			RAW SEWAGE								
				2 44			Precipitation - Inches	Chlorine - Lbs	Lbs/Day or Gal /Day	Lbs/Day or Gal /Day	Total Flow - MG	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp Solids - mg/l	Susp Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Sat																	
2	Sun			0 12														
3	Mon						147											
4	Tue			0 39								164	151 82	76 8	71 097			
5	Wed																	
6	Thu						141					203 6	212 25	49 3	51 395			
7	Fn																	
8	Sat						138											
9	Sun																	
10	Mon						134											
11	Tue			0 42								198 7	241 95	76 8	93 515			
12	Wed																	
13	Thu						126					181 3	172 37	71 7	68 169			
14	Fn																	
15	Sat																	
16	Sun																	
17	Mon																	
18	Tue											216 3	200.24	73 3	67 857			
19	Wed																	
20	Thu						109					254 4	237 63	71 3	66 6			
21	Fri			0 49														
22	Sat																	
23	Sun																	
24	Mon																	
25	Tue											222	199 96	71 2	64 131			
26	Wed			0 11			97											
27	Thu						245					279 6	345 12	201	248 1			
28	Fn			0 91														
29	Sat																	
30	Sun																	
31	Mon																	
Average							142 13					214 99	220 17	86 425	91 358			
Maximum				0 91			245					279 6	345 12	201	248 1			
Minimum							97					164	151 82	49 3	51 395			
No of Data				6	0	0	8	0	0	0	0	8	8	8	8	0	0	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

ME Deckman 8/24/06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
ME Deckman 8/24/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: **Town of Parker City** Permit Number: **IN0020729** For Month Of: **July** Year: **2006**

ME Rehman 8/24/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
ME Rehman 8/24/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 2 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	PRIMARY EFFLUENT			RBC				SECONDARY EFFLUENT			FINAL EFFLUENT					
	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Trckling Filter Total Flow to Filter - mgd	Biological Growth (L)light, (N)ormal, (H)heavy	Load Cell Weight - 1000 lbs	Dissolved Oxygen After 1st Stage	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
1														7.4		
2																
3														7.7		
4	121	35.3									0.79	0.01		7.4		
5																
6	178.5	39.2									0.6	0.01	10	7.6		
7													220			
8											0.79	0.01		7.8		
9											0.54	0.01		7.5		
10											0.54			7.6		
11	192.9	65.4									0.58					
12											0.52			7.9		
13	174.8	48.5									0.58		10			
14											1.23	0.04	10			
15											0.81	0.01		7.7		
16														7.3		
17											1	0.01		7.4		
18	201	52.6									0.81	0.01		7.5		
19											0.79		100			
20	180.9	48.5									0.92		10	7.5		
21																
22											1.1	0.03				
23																
24											0.9		50	7.8		
25	208.4	45.5									0.91					
26																
27	206	62.6									0.63					
28													67000			
29																
30											0.53	0.01		7.6		
31											0.91					
Avg	182.94	49.7									0.774	0.015	72.183			
Max	208.4	65.4									1.23	0.04	67000	7.9		
Min	121	35.3									0.52	0.01	10	7.3		
Data	8	8	0	0	0	0	0	0	0	0	20	10	8	15	0	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.)

5th - Decant, Clean Beds - Refill. - Sludge to Landfill.
 31st Clean Beds - Refill.

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **July** Year: **2006**

ME Dechman **8/24/06**
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)

ME Dechman **8/24/06**
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 Substitute for State Form 10829 (R/1-2003)

FINAL EFFLUENT																
Day Of Month	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow - MG	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp Solids - mg/l	Susp Solids - mg/l Weekly Average	Susp Solids - lbs	Susp Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average		
1	0 11															
2	0 117															
3	0 125															
4	0 111		22 2		20 564		16 1		14 913							
5	0 107															
6	0 125		23		23 992		11 5		11 996							
7	0 109															
8	0 111	0 115		22 6		22 278		13 8		13 455						
9	0 107															
10	0 117															
11	0 146		14 6		17 788		16 7		20 347							
12	0 12															
13	0 114		26 5		25 21		19 7		18 741							
14	0 122															
15	0 161	0 12671		20 55		21 499		18 2		19 544						
16	0 081															
17	0 111															
18	0 111		20 5		18 989		14 1		13 061							
19	0 106															
20	0 112		22		20 562		8 4		7 851							
21	0 111															
22	0 124	0 108		21 25		19 776		11 25		10 456						
23	0 089															
24	0 127															
25	0 108		18		16 223		18 1		16 313							
26	0 103															
27	0 148		16 1		19 884		10 9		13 462							
28	0 142															
29	0 139	0 12229		17 05		18 054		14 5		14 887						
30	0 095															
31	0 107															
Avg	0 11665		20 363		20 402		14 438		14 585							
Max	0 161	0 12671	26 5	22 6	25 21	22 278	19 7	18 2	20 347	19 544						
Min	0 081	0 108	14 6	17 05	16 223	18 054	8 4	11 25	7 851	10 456						
Data	31	4	8	4	8	4	8	4	8	4	0	0	0	0	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow (million gallons)	3 616
Percent Removal	BOD5	S S	Ammonia	Phosphorus	Percent Capacity (actual flow/design) 61%	
Primary Treatment	14 9	42 5				
Secondary Treatment	88 9	71 0				
Overall Treatment	90 5	83 3	NA	NA		

**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Name of Facility: **Town of Parker City** Permit Number: **IN0020729** For Month Of: **July** Year: **2006**

ME Weckman 8/24/06
(SIGNATURE OF CERTIFIED OPERATOR) (Date)

ME Weckman 8/24/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Page 4 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION												
	Primary Sludge Gal x 1000	Secondary Sludge Gal x 1000	Anaerobic Only			Supernatant Withdrawn hrs or Gal x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs or Gal x 1000			
			pH	Gas Production Cubic Ft x 1000	Temperature - F										
1															
2															
3															
4															
5												96			
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31												96			
Avg												96			
Max												96			
Min												96			
Data	0	0	0	0	0	0	0	0	0	0	0	2	0	0	

Send completed forms by the 28th of the month to
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION
P O BOX 6015
INDIANAPOLIS, INDIANA 46206-6015

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
 ADDRES 147 W WASHINGTON ST
 PO BOX 38
 PARKER CITY IN 47368
 FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised ☐ DISCHARGE MONITORING REPORT (DMR)

IN0020729 001A
 PERMIT NUMBER DISCHARGE NUMBER

MINOR F - FINAL Form Approved
 EFFLUENT OMB No 2040-000
 Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU			
PH	SAMPLE MEASUREMENT	*****	*****		7.5	*****	7.9	(12)	0	7/7 GR
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY/MN	*****	9.0 DAILY/MX	SU		5 TMS/WEEK GRAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	21.4	30.2	(26)	*****	19.4	29.4	(19)	0	7/7 COMP
00530 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	47.6 MO AVG	71.3 MX/WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX/WK AV	MG/L		TWICE/WEEK COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.141	.231	(03)	*****	*****	*****			7/7 tot
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX/WK AV	MGD	*****	*****	*****	*****		5 TMS/WEEK TOTALZ
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	.017	.05	(19)	0	7/7 CR
50060 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY/MX	MG/L		5 TMS/WEEK GRAB
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		.41	*****	1.29	(19)	1	7/7 CR
50060 X 1 0 END-CHLORINE CONTACT	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY/MN	*****	REPORT DAILY/MX	MG/L		5 TMS/WEEK GRAB
E COLI, COLONY FORMING UNITS (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	25.6	4000	(3Z)	1	7/7 CR
51041 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	125.0 MO GEOMN	235.0 DAILY/MX	CFU/ 100ML		TWICE/WEEK GRAB
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	18.6	21.4	(26)	*****	13.0 17	23	(19)	0	7/7 COMP
80082 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	39.6 MO AVG	63.4 MX/WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX/WK AV	MG/L		TWICE/WEEK COMP24

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
 OR AUTHORIZED AGENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

ME Deckman

SIGNATURE OF PRINCIPAL EXECUTIV
 OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

165 408 7944 9 22 06
 AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
 RANDOLPH COUNTY

MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)
NAME PARKER CITY MUNICIPAL STP
ADDRESS 147 W WASHINGTON ST
PO BOX 38
PARKER CITY IN 47368
FACILITY PARKER CITY MUNICIPAL STP
LOCATION PARKER CITY
ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
Revised ☐ DISCHARGE MONITORING REPORT (DMR)
IN0020729 001A
PERMIT NUMBER DISCHARGE NUMBER
MONITORING PERIOD
MO DAY YEAR MO DAY YEAR
FROM 08 01 06 TO 08 31 06

MINOR F - FINAL EFFLUENT
Form Approved OMB No 2040-000
Approval Expires 05-31-98
Barcode: 1 N 0 0 2 0 7 2 9 0 0 1 A 0 8 0 6
For Any Questions call Deborah Brents at 317-232-8741
*** NO DISCHARGE ***
NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL 80091 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		89.2	*****	*****	(23)	0	7/7	COMP
	PERMIT REQUIREMENT	*****	*****	*****	REPORT MO AVG	*****	*****	PER-CENT		TWICE/WEEK	COMP24
SOLIDS, SUSPENDED PERCENT REMOVAL 81011 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		71.4	*****	*****	(23)	0	7/7	COMP
	PERMIT REQUIREMENT	*****	*****	*****	REPORT MO AVG	*****	*****	PER-CENT		TWICE/WEEK	COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	4.38	(80)	*****	*****	*****			1/31	RCOT
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL/MONTH	*****	*****	*****	*****		ONCE/MONTH	RCOTOT
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Fred Ludington TYPED OR PRINTED	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.	TELEPHONE 765 468 1944	DATE			
			9	22	06	
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT M E Deckman		AREA CODE	NUMBER	MO	DAY	YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR RANDOLPH COUNTY



**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Substitute for State Form 10829 (R/1-2003)

Page 1 of 4

Name of Facility		Permit Number	
Town of Parker City		IN0020729	
Month	Year	Plant Design Flow	Telephone Number
August	2006	0 192 mgd	765-468-7949
Certified Operator Name		Class	Certificate Number
Michael Deckman		III	5542
		Expiration Date	
		6/30/07	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Total=	Bypass At Plant Site ("X" If Occurred)	Collection System Overflow ("X" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				5 97			Chlorine - Lbs	Lbs/Day or Gal/Day	Lbs/Day or Gal/Day	Total Flow - MG	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp Solids - mg/l	Susp Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Tue										7 3	172 7	151 23	64 6	56 57		
2	Wed																
3	Thu			0 18			231				7 5	251	249 11	71 3	70 762		
4	Fn										7 4						
5	Sat						227										
6	Sun																
7	Mon										7 7						
8	Tue						220					190 7	168 59	53 5	47 296		
9	Wed			1 49							7 7						
10	Thu											105 9	147 5	81 5	113 51		
11	Fn						213										
12	Sat																
13	Sun										7 7						
14	Mon						206										
15	Tue						203					170	178 64	60 6	63 681		
16	Wed						201				7 7						
17	Thu											137 2	123 58	117 1	105 47		
18	Fn						196										
19	Sat						194										
20	Sun						191										
21	Mon						189				7 6						
22	Tue											157 6	177 44	72	81 065		
23	Wed						184				7 6						
24	Thu											162 5	153 14	77	72 566		
25	Fn						177				7 4						
26	Sat			3 47							7 6						
27	Sun			0 13			173				7 5						
28	Mon			0 36			170										
29	Tue						168				7 3	113	212 04	44 7	83 88		
30	Wed										7 4						
31	Thu			0 34							7 6	116 7	196 6	35 5	59 806		
Average							196 44					157 73	175 79	67 78	75 461		
Maximum				3 47			231				7 7	251	249 11	117 1	113 51		
Minimum							168				7 3	105 9	123 58	35 5	47 296		
No of Data				6	0	0	16	0	0	0	15	10	10	10	10	0	0

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Michael Deckman 9/22/06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Michael Deckman 9/22/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: **Town of Parker City** Permit Number: **IN0020729** For Month Of: **August** Year: **2006**

McDechman 9/22/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
McDechman 9/22/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 2 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	PRIMARY EFFLUENT			RBC				SECONDARY EFFLUENT			FINAL EFFLUENT					
	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Trickling Filter Total Flow to Filter - mgd	Biological Growth (L)ight, (N)ormal, (H)eavy	Load Cell Weight - 1000 lbs	Dissolved Oxygen After 1st Stage	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
1	141.5	45.5									0.53	0.01		7.8		
2											0.55	0.01	60			
3	191.6	51.1									0.58	0.01	10	7.6		
4											0.72	0.01		7.5		
5																
6																
7											0.54	0.01		7.8		
8	162.5	38.2									0.78	0.01				
9											0.63	0.01		7.8		
10	92.4	38.4									1.2	0.05	10			
11											0.61	0.02	50			
12																
13														7.8		
14											0.53	0.02				
15	215.1	58.7									0.92					
16											0.75	0.04		7.6		
17	136.1	71.8									0.68	0.04	10			
18											1.29		10			
19																
20											0.6	0.01				
21											0.78			7.7		
22	120.7	54									0.46					
23											0.96	0.02	10	7.7		
24	117.7	78.3														
25											0.74	0.01	10	7.6		
26											1.13	0.01		7.9		
27														7.9		
28											0.41	0.01				
29	63.3	23									0.6		4000	7.6		
30											0.63			7.7		
31	87.1	30.2									0.77	0.01	10	7.5		
Avg	132.8	48.92									0.7246	0.0172	25.581			
Max	215.1	78.3									1.29	0.05	4000	7.9		
Min	63.3	23									0.41	0.01	10	7.5		
Data	10	10	0	0	0	0	0	0	0	0	24	18	10	15	0	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.)

22nd - Decant and fill west drying bed

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **August** Year: **2006**

McArdman 9/22/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
McArdman 9/22/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	FINAL EFFLUENT															
	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow - MG	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp Solids - mg/l	Susp Solids - mg/l Weekly Average	Susp Solids - lbs	Susp Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average		
1	0 105		28 4		24 885		22 3		19 54							
2	0 113															
3	0 119		18 1		17 974		15 6		15 492							
4	0 11															
5	0 107	0 108		23 25		21 43		18 95		17 516						
6	0 109															
7	0 118															
8	0 106		11 9		10 526		7 4		6 5458							
9	0 102															
10	0 167		14 1		19 65		19 3		26 897							
11	0 154															
12	0 144	0 12857		13		15 088		13 35		16 721						
13	0 106															
14	0 123															
15	0 126		21 5		22 607		25 7		27 023							
16	0 117															
17	0 108		21 6		19 467		24		21 63							
18	0 107															
19	0 118	0 115		21 55		21 037		24 85		24 327						
20	0 11															
21	0 104															
22	0 135		17 1		19 264		27		30 418							
23	0 1															
24	0 113		17 8		16 785		31 8		29 987							
25	0 096															
26	0 307	0 13786		17 45		18 025		29 4		30 202						
27	0 335															
28	0 217															
29	0 225		8 6		16 148		8 8		16 523							
30	0 177															
31	0 202	0 2312	11 1	9 85	18 711	17 429	12 1	10 45	20 397	18 46						
Avg	0 14129		17 02		18 602		19 4		21 445							
Max	0 335	0 2312	28 4	23 25	24 885	21 43	31 8	29 4	30 418	30 202						
Min	0 096	0 108	8 6	9 85	10 526	15 088	7 4	10 45	6 5458	16 721						
Data	31	5	10	5	10	5	10	5	10	5	0	0	0	0	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow (million gallons)
Percent Removal	BOD5	S S	Ammonia	Phosphorus	4 38
Primary Treatment	15 8	27 8			Percent Capacity (actual flow/design) 74%
	NA	NA			
Secondary Treatment	87 2	60 3			
Overall Treatment	89 2	71 4	NA	NA	

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility
 Town of Parker City
 Permit Number
 IN0020729
 For Month Of
 August
 Year
 2006

(SIGNATURE OF CERTIFIED OPERATOR)

(Date)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(Date)

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Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION										
	Primary Sludge Gal x 1000	Secondary Sludge Gal x 1000	Anaerobic Only			Supernatant Withdrawn hrs or Gal x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs or Gal x 1000	
			pH	Gas Production Cubic Ft x 1000	Temperature - F								
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22												56	
23													
24													
25													
26													
27													
28													
29													
30													
31													
Avg												56	
Max.												56	
Min												56	
Data	0	0	0	0	0	0	0	0	0	0	0	1	0

Send completed forms by the 28th of the month to
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION
 P O BOX 6015
 INDIANAPOLIS, INDIANA 46206-6015

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
 ADDRESS 147 W WASHINGTON ST
 PO BOX 38
 PARKER CITY IN 47368

FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN. MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised ☐ DISCHARGE MONITORING REPORT (DMR)

IN0020729 001A
 PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD
 MO DAY YEAR MO DAY YEAR
 FROM 09 01 06 TO 09 30 06

MINOR F - FINAL EFFLUENT Form Approved OMB No 2040-000 Approval Expires 05-31-98
 * I N 0 0 2 0 7 2 9 0 0 1 A 0 9 0 6 *

For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU				UNITS
PH	SAMPLE MEASUREMENT	*****	*****		7.7	*****	8.0	(12)	0	7/7	GR
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY/MN	*****	9.0 DAILY/MX	SU		5 TMSI/WEEK	GRAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	18.2	23.6	(26)	*****	16	19.3	(19)	0	7/7	COMP
00530 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	47.6 MO AVG	71.3 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		TWICE/WEEK	COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.135	.149	(03)	*****	*****	*****		10	7/7	TOT
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMSI/WEEK	TOTALZ
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	.013	.05	(19)	0	5/7	GR
50060 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY/MX	MG/L		5 TMSI/WEEK	GRAB
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		.78	*****	1.36	(19)	0	5/7	GR
50060 X 1 0 END-CHLORINE CONTACT	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY/MN	*****	REPORT DAILY/MX	MG/L		5 TMSI/WEEK	GRAB
E COLI, COLONY FORMING UNITS (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	10.9	20	(3Z)	0	7/7	GR
51041 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	125.0 MO GEOMN	235.0 DAILY/MX	CFU/ 100ML		TWICE/WEEK	GRAB
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	13.3	15.7	(26)	*****	11.9	13	(19)	0	7/7	COMP
80082 1 1 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	39.6 MO AVG	63.4 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		TWICE/WEEK	COMP24
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.					TELEPHONE		DATE			
TYPED OR PRINTED						SIGNATURE OF PRINCIPAL EXECUTIV OFFICER OR AUTHORIZED AGENT		AREA CODE	NUMBER	MO	DAY	YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
 RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
 ADDRESS 147 W WASHINGTON ST
 PO BOX 38
 PARKER CITY IN 47368
 FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN. MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised

DISCHARGE MONITORING REPORT (DMR)

MINOR
 F - FINAL
 EFFLUENT

Form Approved
 OMB No 2040-000
 Approval Expires 05-31-98



* 1 N 0 0 2 0 7 2 9 0 0 1 A 0 9 0 6 *

For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL 80091 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		91.5	*****	*****	(23)	0	7/7	Comp
	PERMIT REQUIREMENT	*****	*****	*****	REPORT MO AVG	*****	*****	PER- CENT		TWICE/ WEEK	COMP24
SOLIDS, SUSPENDED PERCENT REMOVAL 81011 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		79.5	*****	*****	(23)	0	7/7	Comp
	PERMIT REQUIREMENT	*****	*****	*****	REPORT MO AVG	*****	*****	PER- CENT		TWICE/ WEEK	COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	4.055	(80)	*****	*****	*****			1/30	RCO
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL/ MONTH	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
 OR AUTHORIZED AGENT

Fred Ludington pres
 TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

ME Deckman

SIGNATURE OF PRINCIPAL EXECUTIV
 OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

705 468 7949/0 26 do
 AREA
 CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
 RANDOLPH COUNTY



**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Substitute for State Form 10829 (R/1-2003)

Page 1 of 4

Name of Facility		Permit Number	
Town of Parker City		IN0020729	
Month	Year	Plant Design Flow	Telephone Number
September	2006	0 192 mgd	765-468-7949
Certified Operator Name		Class	Certificate Number
Michael Deckman		III	5542
		Expiration Date	
		6/30/07	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Total=	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				Precipitation - Inches			Chlorine - Lbs	Lbs/Day or Gal /Day	Lbs/Day or Gal /Day	Total Flow - MG	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp Solids - mg/l	Susp Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Fn										7 5						
2	Sat																
3	Sun																
4	Mon																
5	Tue										7 6	152 7	166 83	52	56 812		
6	Wed																
7	Thu										7 5	175 3	173 98	116 7	115 82		
8	Fn										7 7						
9	Sat																
10	Sun																
11	Mon										7 6						
12	Tue			0 42								110 9	139 66	57 1	71 908		
13	Wed			0 05													
14	Thu										7 9	144 9	151 06	75	78 188		
15	Fn										7 9						
16	Sat																
17	Sun			0 03													
18	Mon			0 43													
19	Tue											143 5	141 22	48	47 238		
20	Wed										7 7						
21	Thu			0 27							7 2	136	149 72	175	192 65		
22	Fn			0 59							7 3						
23	Sat										7 4						
24	Sun																
25	Mon																
26	Tue											136	139 51	59 3	60 831		
27	Wed			0 6							7 7						
28	Thu											111 5	167 38	40 5	60 799		
29	Fn										7 8						
30	Sat																
Average												138 85	153 67	77 95	85 531		
Maximum				0 6							7 9	175 3	173 98	175	192 65		
Minimum											7 2	110 9	139 51	40 5	47 238		
No of Data				7	0	0	0	0	0	0	13	8	8	8	8	0	0

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<i>Michael Deckman</i>	<i>10/26/06</i>
(SIGNATURE OF CERTIFIED OPERATOR)	(DATE)
<i>Michael Deckman</i>	<i>10/26/06</i>
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	(DATE)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: Town of Parker City
 Permit Number: IN0020729
 For Month Of: September
 Year: 2006

ME. Redman 10/24/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
ME. Redman 10/24/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 2 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	PRIMARY EFFLUENT			RBC			SECONDARY EFFLUENT			FINAL EFFLUENT						
	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Trickling Filter Total Flow to Filter - mgd	Biological Growth (L)light, (N)ormal, (H)heavy	Load Cell Weight - 1000 lbs	Dissolved Oxygen After 1st Stage	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
1											0 55	0 01		7 8		
2											0 6	0 01				
3											0 93	0 02				
4																
5	113 9	51 3									1 09	0 01	10	7 8		
6											0 77	0 01				
7	151 1	51 5									0 68	0 01		7 7		
8											0 63	0 01	10	7 9		
9																
10																
11											0 59	0 01	10	7 8		
12	106 9	54									0 95	0 02				
13											0 77	0 01				
14	168 9	64									1 36	0 01	10	7 9		
15											0 88	0 01		7 9		
16																
17																
18											0 64	0 01				
19	117 7	49									0 79	0 01				
20											0 78	0 01		7 8		
21	128	71									1 29	0 05	10	8 0		
22											0 53	0 01	10	7 8		
23														7 8		
24																
25											0 6	0 01	20			
26	111	49 7									0 63	0 01				
27														7 8		
28	96 3	28									0 53	0 01				
29											0 88	0 01	10	7 9		
30																
Avg	124 23	52 313									0 7843	0 0129	10 905			
Max	168 9	71									1 36	0 05	20	8 0		
Min	96 3	28									0 53	0 01	10	7 7		
Data	8	8	0	0	0	0	0	0	0	0	21	21	8	13	0	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, mplant treatment process bypass, etc)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: **Town of Parker City** Permit Number: **IN0020729** For Month Of: **September** Year: **2006**

me. [Signature] 10/26/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
me. [Signature] 10/26/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	FINAL EFFLUENT															
	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow - MG	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp Solids - mg/l	Susp Solids - mg/l Weekly Average	Susp Solids - lbs	Susp Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average		
1	0 143															
2	0 142															
3	0 135															
4	0 131															
5	0 131		11 8		12 9		19 5		21 317							
6	0 113															
7	0 119		14 1		14 002		14 5		14 399							
8	0 125															
9	0 116	0 12429		12 95		13 451		17		17 858						
10	0 118															
11	0 111															
12	0 151		12 6		15 877		19 8		24 95							
13	0 116															
14	0 125		12 1		12 622		18 4		19 194							
15	0 107															
16	0 104	0 11886		12 35		14 25		19 1		22 072						
17	0 126															
18	0 142															
19	0 118		10 1		9 9456		5 1		5 022							
20	0 126															
21	0 132		9		9 9139		12 2		13 439							
22	0 205															
23	0 175	0 14629		9 55		9 9297		8 65		9 2304						
24	0 128															
25	0 127															
26	0 123		13 7		14 062		22 5		23 095							
27	0 196															
28	0 18		11 5		17 274		16 1		24 184							
29	0 15															
30	0 14	0 14914		12 6		15 668		19 3		23 639						
Avg	0 13517		11 863		13 325		16 013		18 2							
Max	0 205	0 14914	14 1	12 95	17 274	15 668	22 5	19 3	24 95	23 639						
Min	0 104	0 11886	9	9 55	9 9139	9 9297	5 1	8 65	5 022	9 2304						
Data	30	4	8	4	8	4	8	4	8	4	0	0	0	0		

MONTHLY REMOVAL SUMMARY					Total Monthly Flow (million gallons)	4 055
Percent Removal	BOD5	SS	Ammonia	Phosphorus		
Primary Treatment	10 5	32 9				
	NA	NA				
Secondary Treatment	90 5	69 4				
Overall Treatment	91 5	79 5	NA	NA		
					Percent Capacity (actual flow/design)	70%

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **September** Year: **2006**

Page 4 of 4 Substitute for State Form 10829 (R/1-2003)

(SIGNATURE OF CERTIFIED OPERATOR)

(Date)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(Date)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION												
	Primary Sludge Gal x 1000	Secondary Sludge Gal x 1000	Anaerobic Only			Supernatant Withdrawn hrs or Gal x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs or Gal x 1000			
			pH	Gas Production Cubic Ft. x 1000	Temperature - F										
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
Avg															
Max.															
Min															
Data	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Send completed forms by the 28th of the month to
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION
P O BOX 6015
INDIANAPOLIS, INDIANA 46206-6015

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
 ADDRESS 147 W WASHINGTON ST
 PO BOX 38
 PARKER CITY IN 47368
 FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised ☐ DISCHARGE MONITORING REPORT (DMR)

MINOR F - FINAL
 EFFLUENT Form Approved OMB No 2040-000
 Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
PH	SAMPLE MEASUREMENT	*****	*****		7.6	*****	7.9	(12)	C	7/7	GR
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		5 TMS/WEEK	GRAB
EFFLUENT GROSS VALUE											
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	34	60	(26)	*****	15.0	23.7	(19)	0	7/7	COMP
00530 1 1 0	PERMIT REQUIREMENT	47.6 MO AVG	71.3 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		TWICE/WEEK	COMP24
EFFLUENT GROSS VALUE											
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.239	.297	(03)	*****	*****	*****		-	7/7	TOT
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/WEEK	TOTALZ
EFFLUENT GROSS VALUE											
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	.01	.02	(19)	0	7/7	GR
50060 1 1 0	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L		5 TMS/WEEK	GRAB
EFFLUENT GROSS VALUE											
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		.51	*****	.97	(19)	0	7/7	GR
50060 X 1 0	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY MN	*****	REPORT DAILY MX	MG/L		5 TMS/WEEK	GRAB
END-CHLORINE CONTACT											
E COLI, COLONY FORMING UNITS (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	51.3	3000	(32)	1	7/7	GR
51041 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	125.0 MO GEOMN	235.0 DAILY MX	CFU/100ML		TWICE/WEEK	GRAB
EFFLUENT GROSS VALUE											
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	24.5	37.7	(26)	*****	11.4	13.9	(19)	0	7/7	COMP
80082 1 1 0	PERMIT REQUIREMENT	39.6 MO AVG	63.4 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		TWICE/WEEK	COMP24
EFFLUENT GROSS VALUE											

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

FRED LUDINGTON PRES
 TYPED OR PRINTED

765 4657949 11 29 06
 AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP
 ADDRESS 147 W WASHINGTON ST
 PO BOX 38
 PARKER CITY IN 47368

FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised

DISCHARGE MONITORING REPORT (DMR)

IN0020729 001A
 PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD
 MO DAY YEAR MO DAY YEAR
 FROM 10 01 06 TO 10 31 06

MINOR
 F - FINAL
 EFFLUENT

Form Approved
 OMB No 2040-000
 Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL 80091 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		87.1	*****	*****	(23)	0	2/7	comp
	PERMIT REQUIREMENT	*****	*****	*****	REPORT MO AVG	*****	*****	PER- CENT		TWICE/ WEEK	COMP24
SOLIDS, SUSPENDED PERCENT REMOVAL 81011 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		67.2	*****	*****	(23)	0	7/7	comp
	PERMIT REQUIREMENT	*****	*****	*****	REPORT MO AVG	*****	*****	PER- CENT		TWICE/ WEEK	COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	7.4	(80)	*****	*****	*****		✓	1/91	RCO
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL/ MONTH	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
 OR AUTHORIZED AGENT

FRED W DINGMAN PRES

TYPED OR PRINTED

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ME Deckman

SIGNATURE OF PRINCIPAL EXECUTIV
 OFFICER OR AUTHORIZED AGENT

TELEPHONE

765 468 7949 11 29 06

AREA
 CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
 RANDOLPH COUNTY

MUNICIPAL MINOR RANDOLPH COUNTY



**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Substitute for State Form 10829 (R/1-2003)

Page 1 of 4

Name of Facility		Permit Number	
Town of Parker City		IN0020729	
Month	Year	Plant Design Flow	Telephone Number
October	2006	0 192 mgd	765-468-7949
Certified Operator Name		Class	Certificate Number
Michael Deckman		III	5542
		Expiration Date	
		6/30/07	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Total=	Bypass At Plant Site ("x" if Occurred)	Collection System Overflow ("x" if Occurred)	CHEMICALS USED			RAW SEWAGE							
				6 65			Chlorine - Lbs	Lbs/Day or Gal /Day	Lbs/Day or Gal /Day	Total Flow - MG	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp Solids - mg/l	Susp Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Sun																
2	Mon			0 47													
3	Tue										137	188 53	47	64 677			
4	Wed									7 6							
5	Thu			1 81							48	148 52	30	92 824			
6	Fn																
7	Sat																
8	Sun																
9	Mon									7 7							
10	Tue									7 7	125	194 95	41	63 943			
11	Wed			0 23													
12	Thu									7 7	113	137 59	147	178 99			
13	Fn									7 7							
14	Sat																
15	Sun																
16	Mon			2 42													
17	Tue									7 3							
18	Wed			0 28						7 4	45	156 12	27	93 675			
19	Thu			0 29						7 3							
20	Fn									7 3	51	150 57	14	41 333			
21	Sat																
22	Sun																
23	Mon									7 5							
24	Tue									7 9	78	121	31	48 088			
25	Wed																
26	Thu			0 47						7 4	124	226 48	52	94 976			
27	Fn			0 68													
28	Sat																
29	Sun																
30	Mon																
31	Tue										79	154 17	25	48 789			
Average											88 889	164 21	46	80 811			
Maximum				2 42						7 9	137	226 48	147	178 99			
Minimum										7 3	45	121	14	41 333			
No of Data				8	0	0	0	0	0	12	9	9	9	9	0	0	0

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

ME Deckman 11/27/06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
ME Deckman 11/27/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

RCVD DEC 1 '06

NO \$

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: IN0020729 For Month Of: October Year: 2006

Page 2 of 4 Substitute for State Form 10829 (R/1-2003)

ME Weckman 11/27/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
ME Weckman 11/27/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Day Of Month	PRIMARY EFFLUENT			RBC			SECONDARY EFFLUENT			FINAL EFFLUENT					
	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Trickling Filter	Biological Growth (L)ight, (N)ormal, (H)eavy	Load Cell Weight - 1000 lbs	Dissolved Oxygen After 1st Stage	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E Coli - colony/100 ml	pH	Phosphorus - mg/l
1															
2											0 69	0 01			
3	97	36									0 57	0 01			
4											0 6	0 02	20	7 8	
5	48	26													
6													670		
7															
8															
9											0 8	0 01		7 8	
10	99	32									0 9	0 01		7 7	
11											0 92	0 01			
12	90	27									0 97	0 01	10	7 7	
13											0 87	0 01	10	7 6	
14															
15															
16											0 84	0 01			
17											0 58	0 01		7 9	
18	36	22									0 55	0 01		7 8	
19											0 55	0 01	3000	7 7	
20	42	14											120	7 7	
21															
22															
23											0 63	0 01		7 6	
24	62	24									0 94	0 01	10	7 9	
25											0 95	0 01			
26	95	45									0 89	0 01	10	7 8	
27											0 51	0 01			
28															
29															
30											0 65	0 01			
31	53	22									0 73	0 01			
Avg	69 111	27 556									0 7442	0 0105	51 336		
Max	99	45									0 97	0 02	3000	7 9	
Min	36	14									0 51	0 01	10	7 6	
Data	9	9	0	0	0	0	0	0	0	0	19	19	8	12	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, implant treatment process bypass, etc.)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **October** Year: **2006**

ME Weckman 11/27/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
ME Weckman 11/27/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 Substitute for State Form 10829 (R/1-2003)

FINAL EFFLUENT																
Day Of Month	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow - MG	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp Solids - mg/l	Susp Solids - mg/l Weekly Average	Susp Solids - lbs	Susp Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average		
1	0 145															
2	0 159															
3	0 165		14 1		19 415		24 6		33 872							
4	0 28															
5	0 371		13 6		42 106		22 8		70 589							
6	0 291															
7	0 21	0 23157		13 85		30 76		23 7		52 231						
8	0 191															
9	0 182															
10	0 187		12		18 726		11 2		17 478							
11	0 163															
12	0 146		10 4		12 671		12 4		15 108							
13	0 147															
14	0 136	0 16457		11 2		15 699		11 8		16 293						
15	0 136															
16	0 28															
17	0 271															
18	0 416		11 5		39 922		21		72 902							
19	0 368															
20	0 354		12		35 45		16 1		47 561							
21	0 257	0 29743		11 75		37 686		18 55		60 232						
22	0 257															
23	0 214															
24	0 186		10 3		15 987		10 1		15 677							
25	0 207															
26	0 219		11 5		21 017		8 3		15 169							
27	0 38															
28	0 365	0 26114		10 9		18 502		9 2		15 423						
29	0 256															
30	0 233															
31	0 234		7 6		14 841		9 2		17 965							
Avg	0 2389		11 444		24 459		15 078		34 036							
Max	0 416	0 29743	14 1	13 85	42 106	37 686	24 6	23 7	72 902	60 232						
Min	0 136	0 16457	7 6	10 9	12 671	15 699	8 3	9 2	15 108	15 423						
Data	31	4	9	4	9	4	9	4	9	4	0	0	0	0	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow	
Percent Removal	BOD5	SS	Ammonia	Phosphorus	(million gallons)	7 406
Primary Treatment	22 3	40 1			Percent Capacity (actual flow/design) 124%	
Secondary Treatment	83 4	45 3				
Overall Treatment	87 1	67 2	NA	NA		

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility _____ Permit Number _____ For Month Of _____ Year _____
 Town of Parker City IN0020729 October 2006

Page 4 of 4 Substitute for State Form 10829 (R/1-2003)

ME Beckman 11/27/06
 (SIGNATURE OF CERTIFIED OPERATOR) (Date)
ME Beckman 11/27/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION												
	Primary Sludge Gal x 1000	Secondary Sludge Gal x 1000	Anaerobic Only			Supernatant Withdrawn hrs or Gal x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs or Gal x 1000			
			pH	Gas Production Cubic Ft x 1000	Temperature - F										
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12												12			
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
Avg													12		
Max													12		
Min													12		
Data	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0

Send completed forms by the 28th of the month to
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION
 P O BOX 6015
 INDIANAPOLIS, INDIANA 46206-6015

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 PO BOX 38
 PARKER CITY IN 47368

FACILITY PARKER CITY MUNICIPAL STP
 LOCATION PARKER CITY
 ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised ☐ DISCHARGE MONITORING REPORT (DMR)

IN0020729 001A
 PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD
 MO DAY YEAR MO DAY YEAR
 FROM 11 01 06 TO 11 30 06

MINOR F - FINAL EFFLUENT Form Approved OMB No 2040-000 Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

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PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
PH	SAMPLE MEASUREMENT	*****	*****		7.8	*****	8.1	(12)	0	5/7	Grab.
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY/MN	*****	9.0 DAILY/MX	SU		5 TMS/WEEK	GRAB
EFFLUENT GROSS VALUE											
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	17.5	25.7	(26)	*****	9.1	10.4	(19)	0	2/7	Comp
00530 1 1 0	PERMIT REQUIREMENT	47.6 MO AVG	71.3 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		TWICE/WEEK	COMP24
EFFLUENT GROSS VALUE											
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.215	.267	(03)	*****	*****	*****		-	7/7	Tot.
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/WEEK	TOTALZ
EFFLUENT GROSS VALUE											
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	20.7	28.0	(26)	*****	11.1	12.1	(19)	0	2/7	Comp.
80082 1 1 0	PERMIT REQUIREMENT	39.6 MO AVG	63.4 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		TWICE/WEEK	COMP24
EFFLUENT GROSS VALUE											
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL	SAMPLE MEASUREMENT	*****	*****		89.2	*****	*****	(23)	0	2/7	Comp
80091 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	REPORT MO AVG	*****	*****	PER-CENT		TWICE/WEEK	COMP24
EFFLUENT GROSS VALUE											
SOLIDS, SUSPENDED PERCENT REMOVAL	SAMPLE MEASUREMENT	*****	*****		81.5	*****	*****	(23)	0	2/7	Comp
81011 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	REPORT MO AVG	*****	*****	PER-CENT		TWICE/WEEK	COMP24
EFFLUENT GROSS VALUE											
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	6.45	(80)	*****	*****	*****			1/30	RCO
82220 1 0 0	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL/MONTH	*****	*****	*****	*****		ONCE/MONTH	RCOTOT
EFFLUENT GROSS VALUE											

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Fred Ludington - Pres.

TYPED OR PRINTED

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Mr. Deckman

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 468-7949 12 19 06

AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR RANDOLPH COUNTY

MUNICIPAL MINOR RANDOLPH COUNTY



**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Substitute for State Form 10829 (R/1-2003)

Page 1 of 4

Name of Facility		Permit Number	
Town of Parker City		IN0020729	
Month	Year	Plant Design Flow	Telephone Number
November	2006	0 192 mgd	765-468-7949
Certified Operator Name		Class	Certificate Number
Michael Deckman		III	5542
		Expiration Date	
		6/30/07	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Total=	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				4 71			Chlorine - Lbs	Lbs/Day or Gal /Day	Lbs/Day or Gal /Day	Total Flow - MG	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp Solids - mg/l	Susp Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Wed																
2	Thu									7 8	68 4	132 35	26 9	52 048			
3	Fn									7 7							
4	Sat																
5	Sun									7 7							
6	Mon			0 32													
7	Tue										101 4	209 73	34 5	71 357			
8	Wed									7 6							
9	Thu										106 1	169 9	78 7	126 02			
10	Fn			0 27													
11	Sat																
12	Sun									7 7							
13	Mon																
14	Tue									7 7	124 6	195 36	74	116 03			
15	Wed																
16	Thu			1 2							26 5	84 205	36 4	115 66			
17	Fn			0 17													
18	Sat																
19	Sun																
20	Mon									7 5							
21	Tue										92 7	153 08					
22	Wed									7 8			40 9	70 268			
23	Thu										118 3	197 32	33 3	55 544			
24	Fn									7 7							
25	Sat																
26	Sun																
27	Mon																
28	Tue									7 5	141 5	187 64	86 7	114 97			
29	Wed																
30	Thu			2 75						7 6	149 3	244 05	29 4	48 058			
Average											103 2	174 85	48 978	85 551			
Maximum				2 75						7 8	149 3	244 05	86 7	126 02			
Minimum										7 5	26 5	84 205	26 9	48 058			
No of Data				5	0	0	0	0	0	11	9	9	9	9	0	0	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<i>Michael Deckman</i>	12/19/06
(SIGNATURE OF CERTIFIED OPERATOR)	(DATE)
<i>Michael Deckman</i>	12/19/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	(DATE)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

me. Weckman 12/19/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
me. Weckman 12/19/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Name of Facility: _____ Permit Number: IN0020729 For Month Of: November Year: 2006
 Town of Parker City
 Page 2 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	PRIMARY EFFLUENT			RBC			SECONDARY EFFLUENT			FINAL EFFLUENT						
	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Trickling Filter Total Flow to Filter - mgd	Biological Growth (L)ight, (N)ormal, (H)eavy	Load Cell Weight - 1000 lbs	Dissolved Oxygen After 1st Stage	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E Coll - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
1																
2	37.8	18.7												8.1		
3														8.0		
4																
5														7.8		
6																
7	73.9	33.2														
8														7.9		
9	89.7	49.4														
10																
11																
12														7.9		
13																
14	8.4	30.3												7.8		
15																
16	30.4	18														
17																
18																
19																
20														7.9		
21	6.1															
22		23												7.9		
23	129.5	36														
24														7.8		
25																
26																
27																
28	9.3	56.3												7.8		
29																
30	96.4	41												7.8		
Avg	77.3	33.989														
Max	129.5	56.3												8.1		
Min	30.4	18												7.8		
Data	9	9	0	0	0	0	0	0	0	0	0	0	0	11	0	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: **Town of Parker City** Permit Number: **IN0020729** For Month Of: **November** Year: **2006**

ME Dechman 12/19/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
ME Dechman 12/19/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 Substitute for State Form 10829 (R/1-2003)

FINAL EFFLUENT																
Day Of Month	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow - MG	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp Solids - mg/l	Susp Solids - mg/l Weekly Average	Susp Solids - lbs	Susp Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average		
1	0 217															
2	0 232		10 6		20 522		8 9		17 231							
3	0 188															
4	0 194	0 222		9 1		17 681		9 05		17 598						
5	0 184															
6	0 182															
7	0 248		12 4		25 663		10 3		21 316							
8	0 213															
9	0 192		11 7		18 746		10 4		16 663							
10	0 204															
11	0 203	0 20371		12 05		22 204		10 35		18 99						
12	0 2															
13	0 197															
14	0 188		12 4		19 454		7 6		11 923							
15	0 318															
16	0 381		11 5		36 564		12 4		39 425							
17	0 302															
18	0 284	0 26714		11 95		28 009		10		25 674						
19	0 236															
20	0 245															
21	0 198		10 7		17 68											
22	0 206						10 5		18 05							
23	0 2		12 3		20 529		8 7		14 52							
24	0 195															
25	0 18	0 20857		11 5		19 104		9 6		16 285						
26	0 17															
27	0 182															
28	0 159		10 6		14 065		7		9 288							
29	0 156															
30	0 196	0 17929	8	10 067	13 085	15 277	5 8	7 0667	9 4866	10 768						
Avg	0 215		11 133		20 701		9 0667		17 545							
Max	0 381	0 26714	12 4	12 05	36 564	28 009	12 4	10 35	39 425	25 674						
Min	0 156	0 17929	8	9 1	13 085	15 277	5 8	7 0667	9 288	10 768						
Data	30	5	9	5	9	5	9	5	9	5	0	0	0	0	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow (million gallons)
Percent Removal	BOD5	S S	Ammonia	Phosphorus	6 45
Primary Treatment	25 1	30 6			Percent Capacity (actual flow/design) 112%
Secondary Treatment	85 6	73 3			
Overall Treatment	89 2	81 5	NA	NA	

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **November** Year: **2006**

ME Dechman **12/19/06**
 (SIGNATURE OF CERTIFIED OPERATOR) (Date)

ME Dechman **12/19/06**
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Page 4 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION											
	Primary Sludge Gal x 1000	Secondary Sludge Gal x 1000	Anaerobic Only			Supernatant Withdrawn hrs or Gal x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs or Gal x 1000		
			pH	Gas Production Cubic Ft x 1000	Temperature - F									
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
Avg														
Max														
Min														
Data	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Send completed forms by the 28th of the month to
 INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION
 P O BOX 6015
 INDIANAPOLIS, INDIANA 46206-6015

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME PARKER CITY MUNICIPAL STP

ADDRESS 147 W WASHINGTON ST

PO BOX 38

PARKER CITY

IN

47368

FACILITY PARKER CITY MUNICIPAL STP

LOCATION PARKER CITY

ATTN: MR M E DECKMAN, CERT OPER

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised

DISCHARGE MONITORING REPORT (DMR)

IN0020729

001A

PERMIT NUMBER

DISCHARGE NUMBER

MINOR
F - FINAL
EFFLUENT

Form Approved
OMB No 2040-000
Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
PH	SAMPLE MEASUREMENT	*****	*****		7.5	*****	8.0	(12)		5/7	Grab
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY/MN	*****	9.0 DAILY/MX	SU		5 TMS/WEEK	GRAB
EFFLUENT GROSS VALUE											
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	21.9	29.5	(26)	*****	9.1	12.3	(19)			
00530 1 2 0	PERMIT REQUIREMENT	47.6 MO AVG	71.3 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		TWICE/ WEEK	COMP24
EFFLUENT GROSS VALUE											
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.259	.311	(03)	*****	*****	*****				
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/WEEK	TOTALZ
EFFLUENT GROSS VALUE											
BOD, CARBONAGEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	23.7	28.7	(26)	*****	9.8	11.4	(19)			
80082 1 2 0	PERMIT REQUIREMENT	39.6 MO AVG	63.4 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		TWICE/ WEEK	COMP24
EFFLUENT GROSS VALUE											
BOD, CARB-5 DAY, 20 DEG C, PERCENT REMVL	SAMPLE MEASUREMENT	*****	*****		85.3	*****	*****	(23)			
80091 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	REPORT MO AVG	*****	*****	PER- CENT		TWICE/ WEEK	COMP24
EFFLUENT GROSS VALUE											
SOLIDS, SUSPENDED PERCENT REMOVAL	SAMPLE MEASUREMENT	*****	*****		76.6	*****	*****	(23)			
81011 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	REPORT MO AVG	*****	*****	PER- CENT		TWICE/ WEEK	COMP24
EFFLUENT GROSS VALUE											
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	8.03	(80)	*****	*****	*****				
82220 1 0 0	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL/ MONTH	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT
EFFLUENT GROSS VALUE											

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

ME Deckman

SIGNATURE OF PRINCIPAL EXECUTIV
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Fred Ludington - Pres.

TYPED OR PRINTED

765-468-7949

1 22 07

AREA
CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) FLOW METER(S) SHOULD BE CALIBRATED AT LEAST ONCE ANNUALLY

MUNICIPAL MINOR
RANDOLPH COUNTY

MUNICIPAL MINOR RANDOLPH COUNTY



**Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant**

Substitute for State Form 10829 (R/1-2003)

Page 1 of 4

Name of Facility		Permit Number	
Town of Parker City		IN0020729	
Month	Year	Plant Design Flow	Telephone Number
December	2006	0 192 mgd	765-468-7949
Certified Operator Name		Class	Certificate Number
Michael Deckman		III	5542
		Expiration Date	
		6/30/07	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature	Total=	Bypass At Plant Site ("X" If Occurred)	Collection System Overflow ("X" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				Precipitation - Inches			Chlorine - Lbs	Lbs/Day or Gal/Day	Lbs/Day or Gal/Day	Total Flow - MG	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp Solids - mg/l	Susp Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Fn					X											
2	Sat					X											
3	Sun																
4	Mon										7 5						
5	Tue										7 7	66 3	143 21	45	97 203		
6	Wed										7 7						
7	Thu											65 4	103 63	44 7	70 832		
8	Fn																
9	Sat																
10	Sun																
11	Mon										7 9						
12	Tue			0 61								72 8	211 29	29 5	85 618		
13	Wed										7 6						
14	Thu											79 2	199 48	28 7	72 286		
15	Fri																
16	Sat																
17	Sun																
18	Mon																
19	Tue										7 6						
20	Wed			0 43								81	139 16	33 6	57 726		
21	Thu										7 5	91	274 74	47	141 9		
22	Fn										7 6						
23	Sat																
24	Sun																
25	Mon			0 69													
26	Tue										7 3	24 2	76 493	41 4	130 86		
27	Wed										7 3						
28	Thu											56	136 84	40 5	98 967		
29	Fn										7 5						
30	Sat										7 7						
31	Sun			1 13													
Average												66 988	160 61	38 8	94 423		
Maximum				1 13							7 9	91	274 74	47	141 9		
Minimum											7 3	24 2	76 493	28 7	57 726		
No of Data				4	0	2	0	0	0	0	12	8	8	8	8	0	0

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<i>Michael Deckman</i>	1/22/07
(SIGNATURE OF CERTIFIED OPERATOR)	(DATE)
<i>Michael Deckman</i>	1/22/07
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	(DATE)

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: **Town of Parker City** Permit Number: **IN0020729** For Month Of: **December** Year: **2006**

Page 2 of 4 Substrate for State Form 10829 (R/1-2003)

me Beckman 1/22/07
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
me Beckman 1/22/07
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Day Of Month	PRIMARY EFFLUENT			RBC			SECONDARY EFFLUENT			FINAL EFFLUENT						
	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Trickling Filter	Biological Growth (L)light, (N)ormal, (H)heavy	Load Cell Weight - 1000 lbs	Dissolved Oxygen After 1st Stage	CBOD5 - mg/l	Susp Solids - mg/l	Dissolved Oxygen - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E Coll - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
1																
2																
3																
4														7 5		
5	56 8	32 5												7 9		
6														7 5		
7	50 9	29 3														
8																
9																
10																
11														7 6		
12	50 3	23 5												7 6		
13																
14	45 5	21 7														
15																
16																
17																
18																
19														7 8		
20	61	33 3														
21	71	44												7 6		
22														7 7		
23																
24																
25																
26	20 6	17 8												7 9		
27														7.9		
28	28 4	15 8												7 6		
29														8 0		
30																
31																
Avg	48 063	27 238														
Max.	71	44												8 0		
Min	20 6	15 8												7 5		
Data	8	8	0	0	0	0	0	0	0	0	0	0	0	12	0	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, implant treatment process bypass, etc)

Large rain amount, snow accumulations melt.

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **December** Year: **2006**

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

Page 3 of 4 Substitute for State Form 10829 (R/1-2003)

FINAL EFFLUENT																
Day Of Month	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow - MG	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp Solids - mg/l	Susp Solids - mg/l Weekly Average	Susp Solids - lbs	Susp Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average		
1	0 323															
2	0 323															
3	0 332															
4	0 27															
5	0 259		9 2		19 884		7 1		15 346							
6	0 271															
7	0 19		10 3		16 331		9 2		14 587							
8	0 192															
9	0 16	0 23914		9 75		18 108		8 15		14 966						
10	0 14															
11	0 172															
12	0 348		11 1		32 235		8 3		24 104							
13	0 286															
14	0 302		10		25 202		11 9		29 99							
15	0 226															
16	0 2	0 23914		10 55		28 718		10 1		27 047						
17	0 188															
18	0 215															
19	0 2															
20	0 206		11		18 91		11 5		19 769							
21	0 362		11 7		35 344		13		39 272							
22	0 205															
23	0 183	0 22271		11 35		27 127		12 25		29 52						
24	0 284															
25	0 304															
26	0 379		6 4		20 242		5 9		18 66							
27	0 361															
28	0 293		8 9		21 761		5 6		13 692							
29	0 247															
30	0 312	0 31143		7 65		21 001		5 75		16 176						
31	0 3															
Avg	0 25913		9 825		23 739		9 0625		21 928							
Max	0 379	0 31143	11 7	11 35	35 344	28 718	13	12 25	39 272	29 52						
Min	0 14	0 22271	6 4	7 65	16 331	18 108	5 6	5 75	13 692	14 966						
Data	31	4	8	4	8	4	8	4	8	4	0	0	0	0	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow
Percent Removal	BOD5	S S	Ammonia	Phosphorus	(million gallons) 8 033
Primary Treatment	28 3	29 8			
	NA	NA			
Secondary Treatment	79 6	66 7			
Overall Treatment	85 3	76 6	NA	NA	
					Percent Capacity
					(actual flow/design) 135%

Monthly Report of Operation
Trickling Filter or RBC
Wastewater Treatment Plant

Name of Facility: _____ Permit Number: **IN0020729** For Month Of: **December** Year: **2006**

ME Doelman 1/22/07
 (SIGNATURE OF CERTIFIED OPERATOR) (Date)
ME Doelman 1/22/07
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Page 4 of 4 Substitute for State Form 10829 (R/1-2003)

Day Of Month	SLUDGE TO		Anaerobic Only					DIGESTER OPERATION							
	DIGESTER														
	Primary Sludge Gal x 1000	Secondary Sludge Gal x 1000	pH	Gas Production Cubic Ft x 1000	Temperature - F	Supernatant Withdrawn hrs or Gal x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs or Gal x 1000			
1															
2															
3															
4															
5															
6															
7															
8															
9															
10												8			
11															
12															
13															
14															
15															
16															
17															
18															
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21															
22															
23															
24															
25															
26															
27															
28															
29															
30															
31															
Avg												8			
Max												8			
Min												8			
Data	0	0	0	0	0	0	0	0	0	0	0	1	0		
Send completed forms by the 28th of the month to INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF WATER QUALITY, DATA MANAGEMENT SECTION P O BOX 6015 INDIANAPOLIS, INDIANA 46206-6015															

Randolph County

IN0020729



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

January 16, 2008

100 North Senate Avenue
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.idem.in.gov

Thomas W. Easterly
Commissioner

VIA CERTIFIED MAIL

7002 0510 0002 5824 3463

cc: Becky Vincher
Pam Grams
Don Daily
Deb Dubetzky
Barb McDowell

Fred Ludington, President
Town Council of Parker City
147 West Washington Street
Parker City, IN 47368-0038

Re: Adoption of Agreed Order
Commissioner, Indiana Department of
Environmental Management

v.

Parker City
Case No. 2007-16691-W

Dear Mr. Ludington:

This is to inform you that the Agreed Order in the above-referenced case has been approved and adopted by the Indiana Department of Environmental Management. A copy of the Agreed Order is enclosed.

Please note the terms of compliance contained in the Agreed Order. The time frames for compliance are effective upon your receipt of this correspondence. Please note that the first monthly installment payment on the civil penalty is due within thirty (30) days after the effective date of the Agreed Order. Thereafter each payment is due within thirty (30) days of the previous due date. Each payment should be made payable to the Environmental Management Special Fund and sent to Cashier - Mail Code 50-10C, IDEM, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251. Please include the Case Number on the front of the check. If you have any questions, please contact Dave Knox at 317/233-5975.

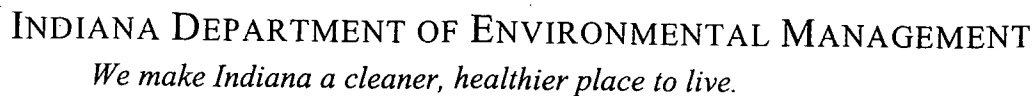
Sincerely,

Lori Kyle Endris

Lori Kyle Endris
Chief
Office of Enforcement

Enclosure

cc: Randolph County Health Department
<http://www.in.gov/idem> (enclosure only)



100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

STATE OF INDIANA) SS: BEFORE THE INDIANA DEPARTMENT OF
) ENVIRONMENTAL MANAGEMENT
COUNTY OF MARION)
)
COMMISSIONER OF THE DEPARTMENT)
OF ENVIRONMENTAL MANAGEMENT)
)
)
Complainant,)
)
v.) Case No. 2007-16691-W
)
TOWN OF PARKER CITY)
)
Respondent.)

Complainant and Respondent desire to settle and compromise this action without hearing or adjudication of any issue of fact or law, and consent to the entry of the following Findings of Fact and Order.

1. Complainant is the Commissioner ("Complainant") of the Indiana Department of Environmental Management ("IDEM"), a department of the State of Indiana created by Indiana Code ("IC") 13-13-1-1.
2. Respondent is the Town of Parker City ("Respondent"), which owns and operates a Class I wastewater treatment plant (WWTP) with National Pollutant Discharge Elimination System ("NPDES") Permit No. IN0020729, located 0.25 mile south of South Street, on Main Street, in Parker City, Randolph County, Indiana (the "Site").
3. IDEM has jurisdiction over the parties and the subject matter of this action.

4. Pursuant to IC 13-30-3-3, IDEM issued a Notice of Violation, on April 12, 2007, via Certified Mail to:

Mr. Fred Ludington, President
Town Council of Parker City
147 West Washington Street
P.O. Box 38
Parker City, IN 47368-0038

5. During an investigation conducted by a representative of IDEM, the following violations were found:

- a. Pursuant to IC 13-30-2-1 a person may not discharge, emit, cause, allow, or threaten to discharge, emit, cause, or allow any contaminant or waste into the environment in any form that causes or would cause pollution that violates or would violate rules, standards, or discharge or emission requirements adopted by the appropriate board under the environmental management laws.

Pursuant to IC 13-18-4-5 states, in part, that a person may not: (1) throw, run, drain, or otherwise dispose into any of the streams or waters of Indiana; or (2) cause, permit, or suffer to be thrown, run, drained, allowed to seep, or otherwise disposed into any waters, any organic or inorganic matter that causes or contributes to a polluted condition of any waters, as determined by a rule of the board adopted under IC 13-18-4-1 and IC 13-18-4-3.

Pursuant to 327 IAC 5-2-8(1) and Part II.A.1 of the Permit, Respondent is required to comply with all terms and conditions of the Permit.

Pursuant to 327 IAC 5-2-8(8) and Part II.B.1(a) of the Permit, Respondent is required to maintain in good working order and efficiently operate all waste collection, control, treatment, and disposal facilities.

IDEM records review and a February 21, 2007 inspection of the WWTP revealed that approximately forty-four (44) Sanitary Sewer Overflows (SSOs) were reported by the Respondent to have occurred from the WWTP and sanitary sewer collection system in the most recent three year period. A March 29, 2007 Inspection Summary Letter/Referral to the Office of Enforcement also emphasized that the Notice of Inspection for February 21, 2007 reported observation of unsatisfactory areas of evaluation regarding: Maintenance (hydraulic overloading of WWTP); CSO/SSO (Sewer Overflow); Self-Monitoring Program (failure to perform flow-weighted composite sampling); Records/Reports (missing information on 12/06 Discharge Monitoring Report (DMR)). These occurrences are in violation of IC 13-30-2-1, IC 13-18-4-5, 327 IAC 5-2-8(1), 327 IAC 5-2-8(8), and Parts I.A.1. and II.B.1(a) of the Permit.

- b. Pursuant to Part I.A.1. of the Permit, Parker City is required to meet flow monitoring requirements and effluent limitations for carbonaceous Biochemical Oxygen Demand, five day (cBOD5), Total Suspended Solids (TSS), pH, Total Residual Chlorine (TRC), and E. coli for the Site.

IDEM records review and a February 21, 2007 inspection of the WWTP revealed that approximately eight (8) months of E. coli effluent limitations violations occurred during the most recent two year period. There were also isolated occurrences of TSS and TRC effluent limitations violations during the same period. These occurrences of exceeding effluent limitations are in violation of 327 IAC 5-2-8(1), and Part I.A.1. of the Permit.

6. In recognition of the settlement reached, Respondent waives any right to administrative and judicial review of this Agreed Order.

II. ORDER

1. This Agreed Order shall be effective ("Effective Date") when it is approved by Complainant or Complainant's delegate, and has been received by Respondent. This Agreed Order shall have no force or effect until the Effective Date.
2. Respondent shall comply with statutes, rules, and/or permit conditions or listed in the findings here and/or above at issue.
3. Within sixty (60) days of the Effective Date of this Agreed Order, the Respondent shall develop and submit to IDEM for its approval a compliance plan (CP) that includes the following:
 - a. actions that Respondent will take to eliminate discharges from its collection system, including SSO# 002, SSO# 003, and Outfall 101.
 - b. actions that Respondent will take to ensure that the collection system is at all times efficiently operated and maintained in good working order. Specific requirements that need to be included in this part of the CP are included in Attachment A which is hereby incorporated into this Agreed Order and deemed an enforceable part thereof.
 - c. actions that Respondent will take to consistently meet TRC and E. coli effluent limits, and disinfection requirements;
 - d. an implementation and completion schedule, including specific milestone dates for developing and implementing the items required by items a, b, and c above.
4. The Respondent shall, within twelve months of the completion of the portion of the CP required by Paragraph 3 (Performance Period), demonstrate a period of six consecutive months that discharges from the collection system, and TRC and E. coli effluent violations do not occur. During the Performance Period, the Respondent shall be subject to stipulated penalties, as specified below. Within sixty days of the date that Respondent fails to achieve the Compliance

Demonstration or it becomes aware that it will not be able to achieve the Compliance Demonstration within the Performance Period, it shall develop and submit to IDEM, for approval, a plan which identifies the additional actions that Respondent will take to eliminate discharges from the collection system and/or effluent violations. This "Additional Action Plan", if required, shall include a new implementation and completion schedule, including specific milestone dates.

5. The plans required by Paragraphs 3 and 4 above are subject to IDEM approval. In the event IDEM determines that any plan submitted by Respondent is deficient or otherwise unacceptable, Respondent shall revise and resubmit the plan to IDEM in accordance with IDEM's notice. After three submissions of such plan by Respondent, IDEM may modify and approve any such plan and Respondent must implement the plan as modified by IDEM.

The Respondent, upon receipt of written notification from IDEM, shall immediately implement the approved plan and adhere to the milestone dates therein. The approved Compliance Plan and Additional Action Plan shall be incorporated into the Agreed Order and shall be deemed an enforceable part thereof. Failure by the Respondent to submit any plan by the specified date, or to meet any of the milestones in the approved plan will subject the Respondent to stipulated penalties as described below. Failure to achieve compliance at the conclusion of work under an Additional Action Plan will subject Respondent to additional enforcement action.

6. Beginning on the Effective Date of this Agreed Order and continuing until the completion of the Plans required by Paragraphs 3, 4, and 5, the Respondent shall, at all times, operate its existing wastewater collection and treatment system as efficiently and effectively as possible and shall be subject to stipulated penalties for the occurrence of discharges from the collection system, and for its failure to report such events.

7. Respondent shall inspect all known overflow points present in the wastewater collection system as often as necessary, including, but not limited to, during and after precipitation events, in order to determine whether discharges from these outfalls occur. Respondent shall document its inspections by recording the following:

- a. the date and time of the inspection;
- b. the name of the person(s) conducting the inspection;
- c. the weather conditions at the time of the inspection, particularly noting the following:
 - i. the date that the most recent precipitation event began;
 - ii. the time that the most recent precipitation event began; and
 - iii. except for inspections conducted during precipitation events, the time that the precipitation event ended, and the volume of the precipitation event;
- d. the particular SSO point being inspected;
- e. the appearance of the SSO point, and the surrounding area, specifically noting whether a discharge event from the SSO point occurred, is occurring, or is about to occur; and
- f. the remedial measures taken in the event that a discharge from the SSO point is found to have occurred, to be occurring, or about to occur.

The Respondent shall retain copies of the required documentation and shall allow IDEM representatives to inspect and copy these records upon request.

8. Within 30 days of the Effective Date of this Agreed Order, the Respondent shall determine whether it has sufficient legal authority to:
- implement and enforce its sewer use ordinances, service agreements and/or other legally binding documents;
 - require that all sewers and connections be properly designed and constructed;
 - test and inspect all new and rehabilitated sewers, including both collector sewers and service laterals;
 - regulate flows from satellite collection systems (if any); and
 - Prohibit the connection or introduction of stormwater sources to the collection system.

In the event that the Respondent determines that it does not have such sufficient legal authority described above, the Respondent shall take all necessary steps to obtain such legal authority.

Within 120 days of the Effective Date of this Agreed Order, the Respondent shall submit to IDEM a statement certifying that it has the legal authority required herein.

9. In the event the terms and conditions of the following paragraphs are violated, Complainant may assess and Respondent shall pay a stipulated penalty in the following amount:

Order Paragraph Number	Violation	Penalty Amount
3	Failure to submit the CP, as required, within the given time period.	\$250 per each week or part thereof late
4	Sanitary sewer overflow events that occur during the Performance Period.	\$2000 for each event
4	Failure to submit the Additional Action Plan, if required, within the given time period.	\$250 per each week or part thereof late
5	Failure to submit or resubmit a revised CP or Additional Action Plan, if required, within the given time period.	\$250 per each week or part thereof late
5	Failure to meet any milestone date set forth in the approved CP or Additional Action Plan.	\$500 per each week or part thereof late
6	Failure to prevent, or to the extent prevention is not possible, to minimize, the discharge from any overflow or bypass point present in the sewer system or at the wastewater treatment facility prior to the Performance Period.	\$500 per each event
6	Failure to report overflow events from the collection system.	\$500 per each event
7	Failure to inspect overflow points, document the inspections, maintain records and/or make the records available to IDEM.	\$500 per each event
8	Failure to demonstrate, within the given time period, that Respondent has the necessary legal authority.	\$250 per each week or part thereof late

8	Failure to timely submit certification statement	\$250 per each week or part thereof late
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10. All submittals required by this Agreed Order, unless Respondent is notified otherwise in writing by IDEM, shall be sent to:

Dave Knox, Enforcement Case Manager
Office of Enforcement – Mail Code 60-02
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, IN 46204-2251

11. Respondent is assessed a civil penalty of Twelve Thousand Dollars (\$12,000). Said penalty amount shall be due and payable to the Environmental Management Special Fund in 36 consecutive monthly installment payments. The first installment payment shall be in the amount of Two Hundred Seventy Five Dollars (\$275) and shall be due within 30 days of the Effective Date of this Agreed Order. Each of the remaining 35 monthly installment payments shall be in the amount of Three Hundred Thirty Five Dollars (\$335), and shall be due within 30 days of the preceding month's due date. In the event that the civil penalty installment is not paid within thirty (30) days of the due date, Respondent shall pay interest on the unpaid balance at the rate established by IC 24-4.6-1-101. The interest shall continue to accrue until the civil penalty is paid in full.
12. Stipulated penalties shall be due and payable within thirty (30) days after Respondent receives written notice that Complainant has determined a stipulated penalty is due. Assessment and payment of stipulated penalties shall not preclude Complainant from seeking any additional relief against Respondent for violation of this Agreed Order. In lieu of any of the stipulated penalties set out above, Complainant may seek any other remedies or sanctions available by virtue of Respondent's violation of this Agreed Order or Indiana law, including, but not limited to, civil penalties pursuant to IC 13-30-4.
13. Civil and stipulated penalties are payable by check to the "Environmental Management Special Fund." Checks shall include the Case Number of this action and shall be mailed to:

Indiana Department of Environmental Management
Cashier – Mail Code 50-10C
100 North Senate Avenue
Indianapolis, IN 46204-2251

14. This Agreed Order shall apply to and be binding upon Respondent and its successors and assigns. Respondent's signatories to this Agreed Order certify that they are fully authorized to execute this Agreed Order and legally bind the party they represent. No change in ownership, corporate, or partnership status of Respondent shall in any way alter its status or responsibilities under this Agreed Order.

15. In the event that any terms of this Agreed Order are found to be invalid, the remaining terms shall remain in full force and effect and shall be construed and enforced as if this Agreed Order did not contain the invalid terms.
16. The Respondent shall provide a copy of this Agreed Order, if in force, to any subsequent owners or successors before ownership rights are transferred. Respondent shall ensure that all contractors, firms and other persons performing work under this Agreed Order comply with the terms of this Agreed Order.
17. This Agreed Order is not and shall not be interpreted to be a permit or a modification of an existing permit. This Agreed Order, and IDEM's review or approval of any submittal made by Respondent pursuant to this Agreed Order, shall not in any way relieve Respondent of its obligation to comply with the requirements of its applicable permit or any applicable Federal or State law or regulation.
18. Complainant does not, by its approval of this Agreed Order, warrant or aver in any manner that Respondent's compliance with any aspect of this Agreed Order will result in compliance with the provisions of any permit, order, or any applicable Federal or State law or regulation. Additionally, IDEM or anyone acting on its behalf shall not be held liable for any costs or penalties Respondent may incur as a result of Respondent's efforts to comply with this Agreed Order.
19. Nothing in this Agreed Order shall prevent or limit IDEM's rights to obtain penalties or injunctive relief under any applicable Federal or State law or regulation, except that IDEM may not, and hereby waives its right to, seek additional civil penalties for the same violations specified in the NOV.
20. Nothing in this Agreed Order shall prevent IDEM or anyone acting on its behalf from communicating with the EPA or any other agency or entity about any matters relating to this enforcement action. IDEM or anyone acting on its behalf shall not be held liable for any costs or penalties Respondent may incur as a result of such communications with the EPA or any other agency or entity.
21. This Agreed Order shall remain in effect until Respondent has complied with all terms and conditions of Paragraphs 3 through 13 of this Agreed Order and IDEM issues a Resolution of Case letter to Respondent.

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TECHNICAL RECOMMENDATION:
Department of Environmental Management

By: Mark W. Stanifer
Mark W. Stanifer, Chief
Water Section
Office of Enforcement

Date: 12-21-2007

RESPONDENT:
Town of Parker City

By: Fred Ludington
Fred Ludington, President
Parker City Town Council

Date: 1/2/08

COUNSEL FOR COMPLAINANT:
For the Department of Environmental
Management

By: Ann D. Hill
Deputy Attorney General

Date: 12/26/07

COUNSEL FOR RESPONDENT:

By: J. E. Hill

Date: 1/4/08

APPROVED AND ADOPTED BY THE INDIANA DEPARTMENT OF ENVIRONMENTAL
MANAGEMENT THIS 15th DAY OF January, 2008.

For the Commissioner

Robert B. Keene
Robert B. Keene
Assistant Commissioner
Office of Legal Counsel and Enforcement

Attachment A

The portion of the Compliance Plan required pursuant to Order Paragraph 3b shall provide for the following:

1. Development and implementation of a Maintenance Program that includes, but is not necessarily limited to:
 - a. routine/ongoing preventive maintenance of facilities and equipment, using a predictive approach to continually review and update maintenance procedures;
 - b. identification of critical parts needed for system operation and maintenance;
 - c. establishment and maintenance of an adequate inventory of replacement parts; and
 - d. routine/ongoing efforts to identify sources of infiltration and inflow and to systematically eliminate those sources.
2. Development and implementation of an Operations and Capacity Management Program that includes, but is not necessarily limited to:
 - a. routine/ongoing assessment of the structural integrity and capacity of the collection system and treatment facilities;
 - b. evaluation of the impact of industrial and other non-domestic collection systems tributary to all overflow and/or bypass points, and identification and implementation of actions necessary to address such impacts;
 - c. Identification and prioritization of structural and hydraulic deficiencies (particularly those that allow for infiltration and inflow to the collection system and limit the capacity of the sewer lines to transport all collected water to the treatment plant for treatment and/or those that are causing or contributing to collection system discharges) and identification and implementation of rehabilitative actions needed to correct each deficiency,
 - d. monitoring of the collection system, both routinely and during all precipitation events, to identify discharges, and
 - e. Procedures for responding to and operating during conditions likely to result in collection system discharges, such as floods, equipment failure, and power failure.
3. Development and implementation of an Information Management Program that includes, but is not necessarily limited to:
 - a. Development and maintenance of an accurate and up-to-date map of the collection system,
 - b. Procedures for recording and reporting collection system discharge events, consistent with the requirements of the Permit,
 - c. Identification and illustration of trends in overflow occurrences,
 - d. Procedures for responding to overflows,
 - e. Procedures for tracking collection system problems (including customer complaints).
 - f. Maintenance of all records resulting from work performed in the collection system

- including work orders associated with investigations, inspections, new installations, preventive and routine maintenance, and corrective actions;
- g. Procedures for complying with the records retention requirements of the NPDES permit;
 - h. Documentation of all activities taken in order to implement the portion of the CP required pursuant to Order Paragraph 3b.
4. Development and implementation of a Training and Review Program that includes, but is not necessarily limited to:
- a. Appropriate regular and refresher training on a routine basis for employees and other affected persons, on procedures for implementation of the provisions of the CP required pursuant to Order Paragraph 3b, and
 - b. Annual reviews by representatives of all levels of management and staff to assess the overall effectiveness of the portion of the CP required pursuant to Order Paragraph 3b, and recommend adjustments.
5. Development and implementation of a Monitoring and Modification Program that includes, but is not necessarily limited to:
- a. Ongoing monitoring of the implementation and effectiveness of the portion of the CP required pursuant to Order Paragraph 3b, and
 - b. Modification and update as necessary to ensure that the purpose of the CP required pursuant to Order Paragraph 3b is achieved.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. DANIEL D. ROACH, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised: DISCHARGE MONITORING REPORT (DMR)

MINOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-000
Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		10.2	*****	*****	(19)	0	2/7	2GRAB
00300 1 2 0	PERMIT REQUIREMENT	*****	*****	*****	5.0 DAILY MN	*****	*****	MG/L		TWICE/WEEK	GRAB-2
EFFLUENT GROSS VALUE											
PH	SAMPLE MEASUREMENT	*****	*****		8.1	*****	8.5	(12)	0	4/7	GRAB
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		TWICE/WEEK	GRAB
EFFLUENT GROSS VALUE											
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	.61	1.04	(26)	*****	6.8	10.7	(19)	0	1/7	24HC
00530 1 2 0	PERMIT REQUIREMENT	4.6 MO AVG	6.9 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
NITROGEN, AMMONIA TOTAL (AS N)	SAMPLE MEASUREMENT	.019	.026	(26)	*****	.21	.27	(19)	0	1/7	24HC
00610 1 2 0	PERMIT REQUIREMENT	0.24 MO AVG	0.37 MX WK AV	LBS/DY	*****	1.6 MO AVG	2.4 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.0085	.0091	(03)	*****	*****	*****		0	5/7	TOTAL
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5TMS/WEEK	TOTALZ
EFFLUENT GROSS VALUE											
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	.36	.55	(26)	*****	4.2	7.6	(19)	0	1/7	24HC
80082 1 2 0	PERMIT REQUIREMENT	3.8 MO AVG	6.1 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	.264	(3R)	*****	*****	*****		0	1/31	TOTAL
82220 1 0 0	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL	*****	*****	*****	*****		ONCE/MONTH	REPORT
EFFLUENT GROSS VALUE											

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Daniel D. Roach

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 853 5464

02 17 06

AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC

RANDOLPH COUNTY

SEMI PUBLIC MINOR RANDOLPH COUNTY

16 FEB 06

Monthly Report of Operation
Package Type Wastewater
Treatment Plants Less Than 0.05 mgd
(Pending Approval - 12/05)

Page 1 of 2

Name of Facility UNION SCHOOL CORPORATION			Permit Number IN0031135		Phone Number: 765-853-5464	
Certified Operator: Name DAVID L. WEIST		Class III	Certificate Number 8828	Expiration Date 6/30/ 2007		E-mail Address (if available):
Month: # : 1		Name: January		Year: 2006		Treatment Plant design flow: 0.0183 mgd

General Information				Bypasses/ Overflows		Raw Wastewater									Aeration Tank						Final Effluent						
Day of the Month	Day of the Week	Man Hours	Precip. - Inches	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)	30 Minute Settling	MLSS	Sludge Vol. Index (SVI) - ml/gm	D.O.	Temperature	WAS Gal.	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)
1	Sun																					0.005					
2	Mon	1					8.4									77			8.1	10.6		0.0096	8.5				
3	Tue	1					8.3									79			8.6	11.2	X	0.0101	8.3				
4	Wed	1					8.1									74			8.1	11.8	X	0.0111	8.3				
5	Thu	2					8.1	64	5.50	168	14.44	14.2	1.22			77	3305	233	7.4	10.6		0.0103	8.5	2.9	0.2493	5.1	0.4384
6	Fri	1																				0.0058					
7	Sat																					0.005					
8	Sun																					0.005					
9	Mon	1					8.4									83			8.1	9.6		0.0102	8.5				
10	Tue	1					8.0									85			9.4	11.2	X	0.0102	8.1				
11	Wed	1					7.7									81			8.6	10.1		0.0088	8.3				
12	Thu	1					7.9	205	20.19	401	39.49	28.3	2.79			80	3483	230	7.9	10.6	X	0.0118	8.4	2.8	0.2757	5.8	0.5711
13	Fri	1	0.15																		X	0.0115					
14	Sat																					0.005					
15	Sun																					0.005					
16	Mon	1					8.2									84			9.4	11.5	X	0.0096	8.3				
17	Tue	1	0.1				8.1									88			9.3	11.5	X	0.0105	8.2				
18	Wed	3					8.3									91			9.2	10.5		0.0102	8.1				
19	Thu	1					8.2	100	9.76	136	13.28	20.9	2.04			80	3643	220	8.9	10.6	X	0.0117	8.4	3.6	0.3515	10.7	1.0447
20	Fri	1	0.2																			0.012					
21	Sat																					0.005					
22	Sun																					0.005					
23	Mon	3					8.3									69			7.9	15		0.0095	8.5				
24	Tue	1					8.1									74			8.0	14.3	X	0.0091	8.3				
25	Wed	1					8.0									79			7.1	14.1		0.0098	8.4				
26	Thu	1					8.2	129	9.26	279	20.02	20.5	1.47			73	3419	214	9.6	12.6		0.0086	8.3	7.6	0.5454	5.6	0.4019
27	Fri	1																			X	0.0121					
28	Sat																					0.005					
29	Sun		0.2																			0.005					
30	Mon	1					8.3									89			9.9	11.2		0.01	8.3				
31	Tue	1					8.0									89						0.0067	8.5				
Average		1.2						125	11.18	246	21.81	21	1.88			81	3463	224	8.6	11.59		0.00852		4.2	0.3555	6.8	0.614
Maximum		3	0.2				8.4	205	20.19	401	39.49	28.3	2.79			91	3643	233	9.9	15		0.0121	8.5	7.6	0.5454	10.7	1.0447
Minimum		1					7.7	64	5.50	136	13.28	14.2	1.22			69	3305	214	7.1	9.6		0.005	8.1	2.8	0.2493	5.1	0.4019
Total		27	0.65																								

Sludge Hauled Off Site (Gal):
1000

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David L. Weist 16 FEB 06
Signature of Certified Operator Date

Daniel D. Roay 02-17-06
Signature of Principal Executive Officer or Authorized Agent Date

Name of Facility: UNION SCHOOL CORPORATION		Month/Year: January 2006
Total Monthly Flow 0.2642 mg	Percent Capacity (average flow / design) 47%	

MONTHLY REMOVAL SUMMARY				
	BOD5	S.S.	Ammonia	Phosphorus
Percent Removal	96.6	97.2	99.0	NA

Day of the Month	Final Effluent							
	D.O. (mg/l)	Residual Chlorine (mg/l) - Contact	Residual Chlorine (mg/l) - Final	E. Coli colony/100 ml	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)
1								
2								
3	10.2							
4								
5	10.2				0.243	0.02089		
6								
7								
8								
9								
10	11.1							
11								
12	10.6				0.267	0.02629		
13								
14								
15								
16								
17	11.7							
18								
19	11.9				0.161	0.01572		
20								
21								
22								
23								
24	10.7							
25								
26	10.5				0.157	0.01127		
27								
28								
29								
30								
31	11.5							
Avg	10.9				0.207	0.01854		
Max	11.9				0.267	0.02629		
Min	10.2				0.157	0.01127		

Enter Comments Below:

THE SIX BLOWERS WERE INSPECTED. ALL BLOWERS NEEDED AIR FILTERS CHANGED AND ONE SURGE BASIN BLOWER NEEDED MAJOR REPAIR. ONE ACTIVATED SLUDGE AIR LINE WAS REPAIRED.

Send by 28th of the Month to:

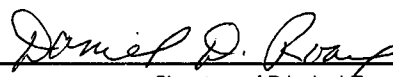
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251



Signature of Certified Operator

17 FEB 06

Date



Signature of Principal Executive Officer or Authorized Agent

02-17-06

Date

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAM² UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP
8707 W US 36
MODOC IN 47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. DANIEL D. ROACH, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised: DISCHARGE MONITORING REPORT (DMR)

MINOR F - FINAL EFFLUENT Form Approved OMB No. 2040-000 Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		11.0	*****	*****	(19)	0	2/7	2GRAB
00300 1 2 0	PERMIT REQUIREMENT	*****	*****	*****	5.0 DAILY MN	*****	*****	MG/L		TWICE/WEEK	GRAB-2
EFFLUENT GROSS VALUE											
PH	SAMPLE MEASUREMENT	*****	*****		8.2	*****	8.5	(12)	0	2/7	GRAB
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		TWICE/WEEK	GRAB
EFFLUENT GROSS VALUE											
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	.84	1.62	(26)	*****	12.4	19.6	(19)	0	1/7	24HC
00530 1 2 0	PERMIT REQUIREMENT	4.6 MO AVG	6.9 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
NITROGEN, AMMONIA TOTAL (AS N)	SAMPLE MEASUREMENT	.008	.015	(26)	*****	.18	.12	(19)	0	1/7	24HC
00610 1 2 0	PERMIT REQUIREMENT	0.24 MO AVG	0.37 MX WK AV	LBS/DY	*****	1.6 MO AVG	2.4 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.00632	.00817	(03)	*****	*****	*****		0	5/7	TOTAL
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5TMS/WEEK	TOTAL2
EFFLUENT GROSS VALUE											
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	.27	.40	(26)	*****	4.1	5.5	(19)	0	1/7	24HC
80082 1 2 0	PERMIT REQUIREMENT	3.8 MO AVG	6.1 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	1.769	(3R)	*****	*****	*****		0	1/28	TOTAL
82220 1 0 0	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL	*****	*****	*****	*****		ONCE/MONTH	REPORT
EFFLUENT GROSS VALUE											

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Daniel D. Roach
TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Daniel D. Roach
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE			
765	853 5464	03	24	06	
AREA CODE	NUMBER	MO	DAY	YEAR	

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC
RANDOLPH COUNTY

SEMI PUBLIC MINOR RANDOLPH COUNTY

23 MAR 06 MD

Monthly Report of Operation
Package Type Wastewater
Treatment Plants Less Than 0.05 mgd
(Pending Approval - 12/05)

Page 1 of 2

Name of Facility UNION SCHOOL CORPORATION		Permit Number IN0031135		Phone Number: 765-853-5464	
Certified Operator: Name DAVID L. WEIST		Class III	Certificate Number 8828	Expiration Date 6/30/ 2007	
Month: # : 2		Name: February		Year: 2006	
Treatment Plant design flow:					0.0183 mgd

General Information				Bypasses/ Overflows	Raw Wastewater										Aeration Tank						Final Effluent						
Day of the Month	Day of the Week	Man Hours	Precip. - Inches	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)	30 Minute Settling	MLSS	Sludge Vol. Index (SVI) - ml/gm	D.O.	Temperature	WAS Gal.	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)
1	Wed	1					8.3									84			8.4	10.1		0.0085	8.2				
2	Thu	1					8.0	171	14.27	367	30.63	29.7	2.48			83	3642	228	9.0	11.9		0.01	8.3	4.8	0.4006	19.4	1.6189
3	Fri	1	0.8																		X	0.0128					
4	Sat		0.2																			0.005					
5	Sun																					0.005					
6	Mon	1					8.2									84			8.8	9.1		0.0139	8.4				
7	Tue	1					7.9									81			7.4	9.9		0.0133	8.3				
8	Wed	1					8.1									83			8.6	10.4		0.0074	8.3				
9	Thu	1					8.0	97	5.99	32	1.98	20.5	1.27			81	3740	217	8.8	8.8		0.0074	8.4	5.5	0.3396	16.8	1.0375
10	Fri	1																				0.0052					
11	Sat																					0.005					
12	Sun																					0.005					
13	Mon	1					8.2									79			9.1	12.7	X	0.0078	8.5				
14	Tue	1					8.1									54			9.7	11.6		0.0058	8.3				
15	Wed	1					7.8									84			9.8	9.8		0.0063	8.3				
16	Thu	1					7.8	213	12.09	198	11.24	20.3	1.15			77	3797	203	7.8	7.8	X	0.0068	8.3	4.3	0.244	9.3	0.5277
17	Fri	1																				0.0042					
18	Sat																					0.0025					
19	Sun																					0.0025					
20	Mon	1					8.1									84			8.0	8.4		0.0054	8.4				
21	Tue	1					8.0									83			7.8	9.9	X	0.0045	8.3				
22	Wed	1					8.1									84			8.1	9.4		0.0046	8.4				
23	Thu	1					8.0	216	9.73	647	29.16	27.4	1.23			84	2995	280	9.1	10.9		0.0054	8.5	1.8	0.0811	4.1	0.1848
24	Fri	1																			X	0.004					
25	Sat																					0.0025					
26	Sun																					0.0025					
27	Mon	1					8.2									81			9.9	10.1		0.0081	8.4				
28	Tue	1					8.1									82			9.7	10		0.0055	8.4				

Sludge Hauled Off Site (Gal):

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<i>David L. Weist</i>	23 MAR 06
Signature of Certified Operator	Date
<i>Donald D. Roop</i>	3-24-06
Signature of Principal Executive Officer or Authorized Agent	Date

MONTHLY REMOVAL SUMMARY				
	BOD5	S.S.	Ammonia	Phosphorus
Percent Removal	97.6	96.0	99.5	NA

Day of the Month	Final Effluent							
	D.O. (mg/l)	Residual Chlorine (mg/l) - Contact	Residual Chlorine (mg/l) - Final	E. Coli colony/100 ml	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)
1								
2	11.4				0.182	0.01519		
3								
4								
5								
6								
7	11.0							
8								
9	11.1				0.129	0.00797		
10								
11								
12								
13								
14	11.9							
15								
16	11.6				0.101	0.00573		
17								
18								
19								
20								
21	11.9							
22								
23	11.5				0.0652	0.00294		
24								
25								
26								
27								
28	11.9							
Avg	11.5				0.1193	0.00796		
Max	11.9				0.182	0.01519		
Min	11				0.0652	0.00294		

Send by 28th of the Month to:
Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

David L. West
Signature of Card

Signature of Certified Operator

23 MAR 06

Date _____

Daniel D. Roach

Signature of Principal Executive Officer or Authorized Agent

3-24-06

Date _____

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL
 ADDRESS UNION SCHOOL CORP
 8707 W US 36
 MODOC IN 47358
 FACILITY UNION ELEMENTARY & HIGH SCHOOL
 LOCATION MODOC
 ATTN: MR. DANIEL D. ROACH, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

Revised:

IN0031135		001A	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
03	01	06	03 31 06

MINOR F - FINAL EFFLUENT
 Form Approved OMB No. 2040-000
 Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
OXYGEN, DISSOLVED (DO) 00300 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		9.0	*****	*****	(19)	0	2/7	2GRAB
	PERMIT REQUIREMENT	*****	*****	*****	5.0 DAILY MN	*****	*****	MG/L		TWICE/WEEK	GRAB
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		8.1	*****	8.5	(12)	0	2/7	GRAB
	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		TWICE/WEEK	GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	.61	1.14	(26)	*****	9.4	14.7	(19)	0	1/7	24HC
	PERMIT REQUIREMENT	4.6 MO AVG	6.9 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		WEEKLY	COMP24
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	.007	.012	(26)	*****	.12	.20	(19)	0	1/7	24HC
	PERMIT REQUIREMENT	0.24 MO AVG	0.37 MX WK AV	LBS/DY	*****	1.6 MO AVG	2.4 MX WK AV	MG/L		WEEKLY	COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	.006	.0065	(03)	*****	*****	*****		0	5/7	TOTAL
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5TMS/WEEK	TOTAL
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	.26	.39	(26)	*****	4.1	5.0	(19)	0	1/7	24HC
	PERMIT REQUIREMENT	3.8 MO AVG	6.1 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		WEEKLY	COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	.1402	(3R)	*****	*****	*****		0	1/31	TOTAL
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL	*****	*****	*****	*****		ONCE/MONTH	RCOTOT

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

DANIEL D. ROACH
 SUPERINTENDENT

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 853-5464 04 25 06
 AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION SEC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC
 RANDOLPH COUNTY

SEMI-PUBLIC MINOR RANDOLPH COUNTY

21 APR 06

Monthly Report of Operation
Package Type Wastewater
Treatment Plants Less Than 0.05 mgd
(Pending Approval - 12/05)

Page 1 of 2

Name of Facility UNION SCHOOL CORPORATION		Permit Number IN0031135		Phone Number: 765-853-5464	
Certified Operator: Name DAVID L. WEIST		Class III	Certificate Number 8828	Expiration Date 6/30/ 2007	
Month: # : 3		Name: March		Year: 2006	
Treatment Plant design flow:					0.0183 mgd

General Information				Bypasses/ Overflows		Raw Wastewater										Aeration Tank						Final Effluent					
Day of the Month	Day of the Week	Man Hours	Precip. - Inches	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)	30 Minute Settling	MLSS	Sludge Vol. Index (SVI) - ml/gm	D.O.	Temperature	WAS Gal.	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)
1	Wed	1					8.0									81			9.9	10.1		0.0068	8.5				
2	Thu	1					7.8	192	8.81	419	19.23	27.8	1.28			82	5659	145	9.7	10	X	0.0055	8.1	2.6	0.1193	4.3	0.1974
3	Fri	1																				0.0055					
4	Sat																					0.0025					
5	Sun																					0.0025					
6	Mon	1					8.1									67			8.9	13.6		0.0056	8.5				
7	Tue	1					7.7									80			9.4	10.5		0.0076	8.4				
8	Wed						7.7									87			8.9	13.2		0.0074	8.4				
9	Thu	1					7.6	173	10.39	564	33.89	17.7	1.06			80	3629	220	7.8	14.6		0.0072	8.1	5	0.3004	12	0.721
10	Fri	1																			X	0.0075					
11	Sat																					0.0025					
12	Sun																					0.0025					
13	Mon	1					7.9									77			7.4	15.3		0.007	8.1				
14	Tue	1					8.0									79			7.1	13.2		0.0092	8.4				
15	Wed	1					8.0									83			7.6	11.8		0.0092	8.4				
16	Thu	1					8.0	65	5.04	216	16.76	14.9	1.16			83	4076	204	7.7	13.9		0.0093	8.3	5	0.388	14.7	1.1408
17	Fri	1																			X	0.0057					
18	Sat																					0.0025					
19	Sun																					0.0025					
20	Mon	1					8.2									86			8.6	10		0.0097	8.4				
21	Tue	1					8.1									84			8.1	9.2		0.0068	8.5				
22	Wed	1					8.0									83			6.9	8.8	X	0.0074	8.3				
23	Thu	1					7.9	160	10.15	222	14.08	23.1	1.47			81	3786	214	8.0	9.4		0.0076	8.1	3.8	0.241	12.6	0.7991
24	Fri	1																			X	0.0083					
25	Sat																					0.0025					
26	Sun																					0.0025					
27	Mon	1					8.3									84			7.7	14		0.0077	8.5				
28	Tue	1					7.9									83			6.4	13.8		0.0063	8.4				
29	Wed	1					8.0									80			8.6	12.9		0.0076	8.3				
30	Thu	1					8.1	153	9.83	243	15.61	29.8	1.91			80	3718	215	8.0	13.1		0.0077	8.5	4.1	0.2635	3.2	0.2056
31	Fri	1																				0.0076					
Average		1.0						149	8.85	333	19.92	23	1.38			81	4174	200	8.2	12.08		0.00614		4.1	0.2625	9.4	0.6128
Maximum		1					8.3	192	10.39	564	33.89	29.8	1.91			87	5659	220	9.9	15.3		0.0097	8.5	5	0.388	14.7	1.1408
Minimum		1					7.6	65	5.04	216	14.08	14.9	1.06			67	3629	145	6.4	8.8		0.0025	8.1	2.6	0.1193	3.2	0.1974
Total		22	0	0	0																						

Sludge Hauled Off Site (Gal):
4500 gal

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<i>David L. Weist</i>	20 APR 06
Signature of Certified Operator	Date
<i>Daniel D. Bray</i>	4-25-06
Signature of Principal Executive Officer or Authorized Agent	Date

Name of Facility: UNION SCHOOL CORPORATION		Month/Year: March 2006
Total Monthly Flow 0.1902 mg	Percent Capacity (average flow / design) 34%	

MONTHLY REMOVAL SUMMARY				
	BOD5	S.S.	Ammonia	Phosphorus
Percent Removal	97.2	97.2	99.5	NA

Day of the Month	Final Effluent							
	D.O. (mg/l)	Residual Chlorine (mg/l) - Contact	Residual Chlorine (mg/l) - Final	E. Coli colony/100 ml	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)
1								
2	11.2				0.158	0.00725		
3								
4								
5								
6								
7	11.6							
8								
9	10.2				0.202	0.01214		
10								
11								
12								
13								
14	9.0							
15								
16	10.7				0.0286	0.00222		
17								
18								
19								
20								
21	10.5							
22								
23	11.6				0.046	0.00292		
24								
25								
26								
27								
28	11.5							
29								
30	10.9				0.144	0.00925		
31								
Avg	10.8				0.11572	0.00676		
Max	11.6				0.202	0.01214		
Min	9				0.0286	0.00222		

Enter Comments Below:

Send by 28th of the Month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

<i>David H. Weist</i>	20 APR 06
Signature of Certified Operator	Date
<i>Daniel D. Roay</i>	4-25-06
Signature of Principal Executive Officer or Authorized Agent	Date

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME - UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. DANIEL D. ROACH, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised:

DISCHARGE MONITORING REPORT (DMR)

MINOR

F - FINAL

EFFLUENT

Form Approved

OMB No. 2040-000

Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		8.1	*****	*****	(19)	0	16/30	2 GRAB
00300 1 2 0	PERMIT REQUIREMENT	*****	*****	*****	5.0 DAILY MN	*****	*****	MG/L		TWICE/WEEK	GRAB
EFFLUENT GROSS VALUE											
PH	SAMPLE MEASUREMENT	*****	*****		7.9	*****	9.0	(12)	0	16/30	GRAB
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		TWICE/WEEK	GRAB
EFFLUENT GROSS VALUE											
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	.52	.77	(26)	*****	8.9	14.2	(19)	0	1/7	24 HC
00530 1 2 0	PERMIT REQUIREMENT	4.6 MO AVG	6.9 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
NITROGEN, AMMONIA TOTAL (AS N)	SAMPLE MEASUREMENT	.008	.021	(26)	*****	.14	.39	(19)	0	1/7	24 HC
00610 1 2 0	PERMIT REQUIREMENT	0.24 MO AVG	0.37 MX WK AV	LBS/DY	*****	1.6 MO AVG	2.4 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.0054	.0067	(03)	*****	*****	*****		0	5/7	TOTAL
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/WEEK	TOTAL
EFFLUENT GROSS VALUE											
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	.003	.02	(19)	0	2/7	GRAB
50060 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L		TWICE/WEEK	GRAB
EFFLUENT GROSS VALUE											
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		.51	*****	1.14	(19)	0	2/7	GRAB
50060 X 0 0	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY MN	*****	REPORT DAILY MX	MG/L		TWICE/WEEK	GRAB
END-CHLORINE CONTACT											

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Daniel D. Roach
SUPERINTENDENT

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Daniel D. Roach
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 853 5464 05 30 06
AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION SEC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC

RANDOLPH COUNTY

SEMI-PUBLIC MINOR RANDOLPH COUNTY

26 MAY 06

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME - UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. DANIEL D. ROACH, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised:

IN0031135

001A

PERMIT NUMBER

DISCHARGE NUMBER

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM 04 01 06

TO 04 30 06

MINOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-000

Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			UNITS	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	.24	.31	(26)	*****	3.9	4.3	(19)	0	1/7	24HC
80082 1 2 0	PERMIT REQUIREMENT	3.8	6.1	LBS/DY	*****	25.0	40.0	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE		MO AVG	MX WK AV			MO AVG	MX WK AV				
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	1608	(3R)	*****	*****	*****		0	1/30	TOTAL
82220 1 0 0	PERMIT REQUIREMENT	*****	REPORT	MGAL	*****	*****	*****	*****		ONCE/MONTH	RCOTO1
EFFLUENT GROSS VALUE			MO TOTAL								
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Daniel D. Roach
SUPERINTENDENT

TYPED OR PRINTED

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Daniel D. Roach

SIGNATURE OF PRINCIPAL EXECUTIVE

OFFICER OR AUTHORIZED AGENT

TELEPHONE

765 853
5464

AREA CODE

NUMBER

DATE

05 30 06

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC

RANDOLPH COUNTY

SEMI PUBLIC MINOR RANDOLPH COUNTY

26 MAY 06

Monthly Report of Operation
Package Type Wastewater
Treatment Plants Less Than 0.05 mgd
(Pending Approval - 12/05)

Page 1 of 2

Name of Facility UNION SCHOOL CORPORATION		Permit Number IN0031135		Phone Number: 765-853-5464	
Certified Operator: Name DAVID L. WEIST		Class III	Certificate Number 8828	Expiration Date 6/30/ 2007	
Month: # : 4		Name: April		Year: 2006	
Treatment Plant design flow:					0.0183 mgd

General Information				Bypasses/ Overflows	Raw Wastewater										Aeration Tank						Final Effluent						
Day of the Month	Day of the Week	Man Hours	Precip. - Inches	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)	30 Minute Settling	MLSS	Sludge Vol. Index (SVI) - ml/gm	D.O.	Temperature	WAS Gal.	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)
1	Sat																					0.0025					
2	Sun																					0.0025					
3	Mon	1					8.0									84			8.6	13.1		0.0067	8.4				
4	Tue	1					8.0									81			7.3	14		0.001	8.4				
5	Wed	1					8.1									87			8.6	14.5		0.0008	8.4				
6	Thu	1					9.6	156	8.46	164	8.90	31.5	1.71			86	3345	257	9.2	14		0.0065	9.0	4.2	0.2278	14.2	0.7702
7	Fri	1																				0.0029					
8	Sat																					0.0025					
9	Sun																					0.0025					
10	Mon	1					8.2									84			8.1	11		0.0079	8.4				
11	Tue	1					8.1									84			7.4	12.6		0.0074	8.3				
12	Wed	1					9.1									83			8.1	10.3		0.0067	8.8				
13	Thu	1					9.0	219	14.62	219	14.62	36.2	2.42			80	2966	270	7.4	15.3		0.008	8.3	3.5	0.2337	5.8	0.3872
14	Fri	1																				0.0075					
15	Sat																					0.005					
16	Sun																					0.005					
17	Mon	1					8.2									64			6.1	17		0.0089	8.2				
18	Tue	1					8.0									77			6.8	15.9	X	0.0093	8.1				
19	Wed	1					7.7									83			6.0	14.8		0.0078	7.9				
20	Thu	1					7.9	64	3.47	146	7.92	29.6	1.61			80	3111	257	7.2	15.1	X	0.0065	8.0	3.4	0.1844	11	0.5967
21	Fri	1																				0.0044					
22	Sat																					0.0025					
23	Sun																					0.0025					
24	Mon	1					8.1									70			4.1	18.2		0.0077	8.4				
25	Tue	1					7.8									81			3.8	17.1	X	0.0058	8.0				
26	Wed	1					7.6									84			4.4	15.8		0.0065	8.2				
27	Thu	1					7.9	123	8.72	193	13.69	32.6	2.31			83	2850	291	4.9	14		0.0085	8.3	4.3	0.305	4.5	0.3192
28	Fri	1																			X	0.01					
29	Sat																					0.0025					
30	Sun																					0.0025					
Average		1.0						141	8.82	181	11.28	32	2.01			81	3068	269	6.8	14.54		0.00536		3.9	0.2377	8.9	0.5183
Maximum		1					9.6	219	14.62	219	14.62	36.2	2.42			87	3345	291	9.2	18.2		0.01	9.0	4.3	0.305	14.2	0.7702
Minimum		1					7.6	64	3.47	146	7.92	29.6	1.61			64	2850	257	3.8	10.3		0.0008	7.9	3.4	0.1844	4.5	0.3192
Total		20	0	0	0																						

Sludge Hauled Off Site (Gal):
5000 GAL

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David L. Weist 26 MAY 06
Signature of Certified Operator Date

Daniel D. Roach 05-30-06
Signature of Principal Executive Officer or Authorized Agent Date

Name of Facility: UNION SCHOOL CORPORATION		Month/Year: April 2006
Total Monthly Flow 0.1608 mg	Percent Capacity (average flow / design) 29%	

MONTHLY REMOVAL SUMMARY				
	BOD5	S.S.	Ammonia	Phosphorus
Percent Removal	97.3	95.1	99.6	NA

Day of the Month	Final Effluent							
	D.O. (mg/l)	Residual Chlorine (mg/l) - Contact	Residual Chlorine (mg/l) - Final	E. Coli colony/100 ml	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)
1								
2								
3	10.5							
4	9.1							
5	10.3	0.73	0.02					
6	10.8	0.51	0	55	0.388	0.02105		
7								
8								
9								
10	10.2							
11	9.7	0.61	0					
12	9.9							
13	9.7	0.62	0	10	0.01	0.00067		
14								
15								
16								
17	8.4	0.73	0					
18	9.5							
19	8.7							
20	9.2	0.62	0	520	0.0127	0.00069		
21								
22								
23								
24	9.5							
25	8.1	0.8	0					
26	9.2							
27	8.4	1.14	0	187	0.148	0.0105		
28								
29								
30								
Avg	9.5	0.72	0.0025	86	0.13968	0.00823		
Max	10.8	1.14	0.02	520	0.388	0.02105		
Min	8.1	0.51	0	10	0.01	0.00067		

Enter Comments Below:

THIS THE FIRST MOUTH THAT THE E-COLI PERMIT LIMITS ARE IN EFFECT. IT HAS BEEN A TRIAL AND ERROR METHOD TO KILL E-COLI AND NOT EXCEED THE CHLOTINE LIMITS. THE UNEVEN FLOW CYCLE OF THE SCHOOL CAUSES PROBLEMS. NO OR LOW FLOWS IN THE EVENINGS AND ON WEEKENDS CAUSES SOLIDS TO RISE IN THE CLARIFIER AND SOLIDS TO GO OVER THE WEIRS AND INTO THE EFFLUENT WHEN FLOWS DO OCCUR. THE REMOVAL OF SLUDGE FROM THE AERATION TANK ON A REGULAR BASIS SHOULD CONTROL E-COLI GROWTH.

Send by 28th of the Month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

<i>David L. Weist</i>	26 MAY 06
Signature of Certified Operator	Date
<i>Donal D. Reap</i>	05-30-06
Signature of Principal Executive Officer or Authorized Agent	Date

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. DANIEL D. ROACH, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised:

DISCHARGE MONITORING REPORT (DMR)

MINOR

F - FINAL

EFFLUENT

Form Approved

OMB No. 2040-000

Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		8.1	*****	*****	(19)	0	2/7	2 GRAB
00300 1 1 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	*****	MG/L		TWICE/ WEEK	GRAB 2
EFFLUENT GROSS VALUE											
PH	SAMPLE MEASUREMENT	*****	*****		8.0	*****	8.4	(12)	0	4/7	GRAB
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		TWICE/ WEEK	GRAB
EFFLUENT GROSS VALUE											
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	0.82	2.09	(26)	*****	9.3	16.9	(19)	0	1/7	24 HC
00530 1 1 0	PERMIT REQUIREMENT	2.7 MO AVG	4.1 MX WK AV	LBS/DY	*****	18.0 MO AVG	27.0 MX WK AV	MG/L		WEEKLY	COMP 24
EFFLUENT GROSS VALUE											
NITROGEN, AMMONIA TOTAL (AS N)	SAMPLE MEASUREMENT	.014	.040	(26)	*****	.188	.32	(19)	0	1/7	24 HC
00610 1 1 0	PERMIT REQUIREMENT	0.17 MO AVG	0.24 MX WK AV	LBS/DY	*****	.11 MO AVG	.16 MX WK AV	MG/L		WEEKLY	COMP 24
EFFLUENT GROSS VALUE											
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.0077	.0105	(03)	*****	*****	*****		0	5/7	TOTAL
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TIMES/ WEEK	TOTAL 2
EFFLUENT GROSS VALUE											
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	.02	.05	(19)	0	2/7	GRAB
50060 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L		TWICE/ WEEK	GRAB
EFFLUENT GROSS VALUE											
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		.6	*****	.93	(19)	0	2/7	GRAB
50060 X 0 0	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY MN	*****	REPORT DAILY MX	MG/L		TWICE/ WEEK	GRAB
END-CHLORINE CONTACT											

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

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SIGNATURE OF PRINCIPAL EXECUTIV OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

TYPED OR PRINTED

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC

RANDOLPH COUNTY

SEMI PUBLIC MINOR RANDOLPH COUNTY

23 JUN 06

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. DANIEL D. ROACH, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised:

DISCHARGE MONITORING REPORT (DMR)

MINOR

F - FINAL

EFFLUENT

Form Approved

OMB No. 2040-000

Approval Expires 05-31-98



* IN 0031135001A0506 *

For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	.26	.33	(26)	*****	3.4	4.1	(19)	0	1/7	24HC
80082 1 1 0	PERMIT REQUIREMENT	2.3 MO AVG	3.4 MX WK AV	LBS/DY	*****	15.0 MO AVG	22.0 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	12384	(3R)	*****	*****	*****		0	1/31	TOTAL
82220 1 0 0	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL	*****	*****	*****	*****		ONCE/MONTH	RCOTOT
EFFLUENT GROSS VALUE											
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

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SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

TYPED OR PRINTED

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC

RANDOLPH COUNTY

SEMI PUBLIC MINOR RANDOLPH COUNTY

23 JUN 06

Monthly Report of Operation
Package Type Wastewater
Treatment Plants Less Than 0.05 mgd
(Pending Approval - 12/05)

Name of Facility UNION SCHOOL CORPORATION			Permit Number IN0031135		Phone Number: 765-853-5464	
Certified Operator: Name DAVID L. WEIST		Class III	Certificate Number 8828	Expiration Date 6/30/ 2007		E-mail Address (if available):
Month: # : 5		Name: May		Year: 2006		Treatment Plant design flow: 0.0183 mgd

Page 1 of 2

General Information				Bypasses/ Overflows		Raw Wastewater										Aeration Tank						Final Effluent					
Day of the Month	Day of the Week	Man Hours	Precip. - Inches	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)	30 Minute Settling	MLSS	Sludge Vol. Index (SVI) - ml/gm	D.O.	Temperature	WAS Gal.	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)
1	Mon						8.1									83			4.8	16.1		0.008	8.1				
2	Tue						8.4									77			6.1	16.8		0.0101	8.1				
3	Wed						8.2									80			5.8	17.8		0.0086	8.0				
4	Thu						8.0	140	10.28	243	17.84	27.9	2.05			81	2700	300	6.1	18.2		0.0088	8.2	4.1	0.3011	10	0.7344
5	Fri																					0.0066					
6	Sat																					0.0025					
7	Sun																					0.0025					
8	Mon						8.2									76			7.4	17.6		0.0024	8.3				
9	Tue						7.8									74			5.7	16.8		0.0064	8.1				
10	Wed						7.9									86			5.9	17.1		0.0146	8.2				
11	Thu						8.1	118	14.57	228	28.16	39.8	4.92			81	2588	313	6.2	16.5		0.0148	8.4	2.7	0.3335	16.9	2.0873
12	Fri																					0.0266					
13	Sat																					0.0025					
14	Sun																					0.0025					
15	Mon						8.0									71			8.7	15.7		0.015	8.1				
16	Tue						8.2									74			7.4	17.8		0.0098	8.3				
17	Wed						8.0									79			5.0	17.3		0.0164	8.0				
18	Thu						8.1	50	4.97	50	4.97	20.2	2.01			64	2649	242	5.9	17.2		0.0119	8.2	3	0.2979	2.9	0.288
19	Fri																					0.0157					
20	Sat																					0.0025					
21	Sun																					0.0025					
22	Mon						8.0									76			8.4	17.2		0.0084	8.1				
23	Tue						8.0									60			6.2	16.6		0.007	8.0				
24	Wed						7.9									64			6.0	16.7		0.0066	8.1				
25	Thu						8.0	81	1.96	125	3.03	47.4	1.15			70	2509	279	6.6	17.8		0.0029	8.2	3.7	0.0895	7.4	0.1791
26	Fri																					0.0079					
27	Sat																					0.0025					
28	Sun																					0.0025					
29	Mon																					0.0025					
30	Tue																					0.006					
31	Wed																					0.0014					
Average								97	7.95	162	13.50	34	2.53			75	2612	283	6.4	17.08		0.00769		3.4	0.2555	9.3	0.8222
Maximum							8.4	140	14.57	243	28.16	47.4	4.92			86	2700	313	8.7	18.2		0.0266	8.4	4.1	0.3335	16.9	2.0873
Minimum							7.8	50	1.96	50	3.03	20.2	1.15			60	2509	242	4.8	15.7		0.0014	8.0	2.7	0.0895	2.9	0.1791
Total		0	0	0	0																						

Sludge Hauled Off Site (Gal):
5000

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David L. Weist 23 JUN 06
Signature of Certified Operator Date
Phil Dubb 26 JUN 06
Signature of Principal Executive Officer or Authorized Agent Date

Name of Facility: UNION SCHOOL CORPORATION		Month/Year: May 2006
Total Monthly Flow 0.2384 mg	Percent Capacity (average flow / design) 42%	

MONTHLY REMOVAL SUMMARY				
	BOD5	S.S.	Ammonia	Phosphorus
Percent Removal	96.5	94.2	99.4	NA

Day of the Month	Final Effluent							
	D.O. (mg/l)	Residual Chlorine (mg/l) - Contact	Residual Chlorine (mg/l) - Final	E. Coli colony/100 ml	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)
1								
2	8.6	1.58	0.02					
3								
4	8.2	1.1	0.02	600	0.129	0.00947		
5								
6								
7								
8								
9	9.2							
10		0.6	0.01					
11	8.3	0.66	0.03	1000	0.32	0.03952		
12								
13								
14								
15								
16	9.2	0.9	0.01					
17								
18	8.1	0.66	0.01	4600	0.01	0.00099		
19								
20								
21								
22								
23	9.1							
24		0.97	0.04					
25	9.1	0.81	0.05	75	0.291	0.00704		
26								
27								
28								
29								
30								
31		1.06	0.02					
Avg	8.7	0.9267	0.0233	675	0.1875	0.01426		
Max	9.2	1.58	0.05	4600	0.32	0.03952		
Min	8.1	0.6	0.01	75	0.01	0.00099		

Enter Comments Below:

E-coli is a problem. The uneven flows are a feast or famine for E-coli reduction. The times when there is no or little flow the E-coli seem to multiple. When flows are high the disinfection can not keep up. Any assistance by Oats is welcome.

Send by 28th of the Month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

<i>David L. Weist</i>	23 JUN 06
Signature of Certified Operator	Date
<i>Phil Durr</i>	6/26/06
Signature of Principal Executive Officer or Authorized Agent	Date

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. DANIEL D. ROACH, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised:

DISCHARGE MONITORING REPORT (DMR)

MINOR

F - FINAL

EFFLUENT

Form Approved

OMB No. 2040-000

Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		7.2	*****	*****	(19)	0	2/7	2 GRAB
00300 1 1 0	PERMIT REQUIREMENT	*****	*****	*****	6.0	*****	*****	MG/L		TWICE/ WEEK	GRAB
EFFLUENT GROSS VALUE					DAILY MN						
PH	SAMPLE MEASUREMENT	*****	*****		8.0	*****	8.6	(12)	0	2/7	GRAB
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0	*****	9.0	SU		TWICE/ WEEK	GRAB
EFFLUENT GROSS VALUE					DAILY MN		DAILY MX				
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	0.78	1.74	(26)	*****	26.7	84.1	(19)	2	1/7	24HC
00530 1 1 0	PERMIT REQUIREMENT	2.7	4.1	LBS/DY	*****	18.0	27.0	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE		MO AVG	MX WK AV			MO AVG	MX WK AV				
NITROGEN, AMMONIA TOTAL (AS N)	SAMPLE MEASUREMENT	0.029	0.053	(26)	*****	0.58	0.71	(19)	0	1/7	24HC
00610 1 1 0	PERMIT REQUIREMENT	0.17	0.24	LBS/DY	*****	1.1	1.6	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE		MO AVG	MX WK AV			MO AVG	MX WK AV				
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.00354	.00180	(03)	*****	*****	*****		0	5/7	TOTAL
50050 1 0 0	PERMIT REQUIREMENT	REPORT	REPORT	MGD	*****	*****	*****	*****		5 TMS/ WEEK	TOTAL
EFFLUENT GROSS VALUE		MO AVG	MX WK AV								
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	.032	0.05	(19)	0	2/7	GRAB
50060 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06	0.06	MG/L		TWICE/ WEEK	GRAB
EFFLUENT GROSS VALUE						MO AVG	DAILY MX				
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		0.52	*****	0.89	(19)	0	2/7	GRAB
50060 X 0 0	PERMIT REQUIREMENT	*****	*****	*****	0.5	*****	REPORT	MG/L		TWICE/ WEEK	GRAB
END-CHLORINE CONTACT					DAILY MN		DAILY MX				

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Sharon Hankford
TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Sharon Hankford
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC

RANDOLPH COUNTY

SEMI-PUBLIC MINOR RANDOLPH COUNTY

24 JUL 06

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL
 ADDRESS UNION SCHOOL CORP
 8707 W US 36
 MODOC IN 47358
 FACILITY UNION ELEMENTARY & HIGH SCHOOL
 LOCATION MODOC
 ATTN: MR. DANIEL D. ROACH, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised:

DISCHARGE MONITORING REPORT (DMR)

IN0031135		001A	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
06	01	06	06 30 06

MINOR F - FINAL EFFLUENT Form Approved OMB No. 2040-000 Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER	<div></div>	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	0.39	1.48	(26)	*****	6.8	9.1	(19)	0	1/7	24Hr
	PERMIT REQUIREMENT	2.3 MO AVG	3.4 MX WK AV	LBS/DY	*****	15.0 MO AVG	22.0 MX WK AV	MG/L		WEEKLY	COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	1,062	(3R)	*****	*****	*****		0	1/30	TOTAL
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL	*****	*****	*****	*****		ONCE/MONTH	RCOTOT
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Sharon Lankford
 TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC

SEMI PUBLIC MINOR RANDOLPH COUNTY

EPA FORM 3320-1 (03-99) Revised by Indiana (December 2003)

(REPLACES EPA FORM T-40 WHICH MAY NOT BE USED.)

Mail Preprinted Forms to IDEM (No Photo Copies)

Page 2

248 JUL 06

RANDOLPH COUNTY

Monthly Report of Operation
Package Type Wastewater
Treatment Plants Less Than 0.05 mgd
(Pending Approval - 12/05)

Name of Facility UNION SCHOOL CORPORATION		Permit Number IN0031135		Phone Number: 765-853-5464	
Certified Operator: Name DAVID L. WEIST		Class III		Certificate Number 8828	
		Expiration Date 6/30/ 2007		E-mail Address (if available):	
Month: # : 6		Name: June		Year: 2006	
				Treatment Plant design flow: 0.0183 mgd	

Page 1 of 2

General Information				Bypasses/ Overflows	Raw Wastewater										Aeration Tank						Final Effluent						
Day of the Month	Day of the Week	Man Hours	Precip - Inches	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)	30 Minute Settling	MLSS	Sludge Vol. Index (SVI) - ml/gm	D.O.	Temperature	WAS Gal.	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)
1	Thu	1	1.3				7.7									63			5.9	19.4		0.0014	8.3				
2	Fri	1	0.3				7.8	72	2.88	146	5.85	25.6	1.03			69	2451	282	6.1	20	xxx	0.0048	8.0	3.9	0.1562	10.7	0.4286
3	Sat																					0.0025					
4	Sun																					0.0025					
5	Mon																					0.0048					
6	Tue	1					8.3									61			6.2	19.6		0.0012	8.4				
7	Wed	1	0.3				8.1									61			6.6	19.4		0.0015	8.1				
8	Thu	1					7.9									77						0.0015					
9	Fri	1	0.4				8.2	65	4.83	103	7.65	22.4	1.66			54	2396	225	7.5	20.8		0.0089	8.2	2.4	0.1782	5.4	0.4011
10	Sat		0.4																			0.0025					
11	Sun		0.2																		xxx	0.0025					
12	Mon	1					8.2									61			6.9	20.1	xxx	0.0013	8.3				
13	Tue	1					8.1									70			6.4	18.9		0.007	8.4				
14	Wed	1					8.3									64			6.3	20.1		0.014	8.6				
15	Thu	1					8.1	35	3.21	156	14.32	8.57	0.79			7.1	2604	27	6.0	20.2		0.011	8.3	16.1	1.4779	19	1.7441
16	Fri	1																			xxx	0.0013					
17	Sat																					0.0025					
18	Sun		0.4																			0.0025					
19	Mon	1					8.3									79			6.1	20		0.0013	8.1				
20	Tue	1	0.5				8.1									83					xxx	0.0009	8.0				
21	Wed	1					8.2									63			7.4	23.4		0.0066	8.2				
22	Thu	1	0.1				8.1	31	0.28	68	0.62	5.89	0.05			73	2463	296	7.0	24		0.0011	8.3	2.5	0.0229	14.2	0.1303
23	Fri	1																				0.0113					
24	Sat																					0.0025					
25	Sun																					0.0025					
26	Mon	1					8.1									71			6.6	20.8		0.0009	8.3				
27	Tue	1					7.9									70			6.0	20.2		0.0014	8.3				
28	Wed	1	0.5				8.1									72			7.5	24.5		0.0011	8.5				
29	Thu	1					7.9	38	0.54	191	2.71	5.19	0.07			73	2239	326	6.9	21.2		0.0017	8.2	9.1	0.1291	84.1	1.1931
30	Fri	1																			xxx	0.0012					
Average		1.0						48	2.35	133	6.23	14	0.72			65	2431	231	6.6	20.79		0.00354		6.8	0.3929	26.7	0.7794
Maximum		1	1.3				8.3	72	4.83	191	14.32	25.6	1.66			83	2604	326	7.5	24.5		0.014	8.6	16.1	1.4779	84.1	1.7441
Minimum		1					7.7	31	0.28	68	0.62	5.19	0.05			7.1	2239	27	5.9	18.9		0.0009	8.0	2.4	0.0229	5.4	0.1303
Total		21	4.4	0	0																						

Sludge Hauled Off Site (Gal):

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David L. Weist 21 JUL 06
Signature of Certified Operator Date

Sharon Laubond 7-31-06
Signature of Principal Executive Officer or Authorized Agent Date

Name of Facility: UNION SCHOOL CORPORATION		Month/Year: June 2006
Total Monthly Flow 0.1062 mg	Percent Capacity (average flow / design) 19%	

MONTHLY REMOVAL SUMMARY				
	BOD5	S.S.	Ammonia	Phosphorus
Percent Removal	85.9	79.9	95.7	NA

Day of the Month	Final Effluent							
	D.O. (mg/l)	Residual Chlorine (mg/l) - Contact	Residual Chlorine (mg/l) - Final	E. Coli colony/100 ml	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)
1		0.8	0.04					
2	8.3			1000				
3								
4								
5								
6	8.8							
7	7.7	0.62	0.05					
8	8.8							
9	8.8	0.6	0.01	0	0.71	0.05273		
10								
11								
12	7.7							
13	8.0							
14	7.6	0.89	0.04					
15	8.2	0.58	0.02	240	0.56	0.05141		
16								
17								
18								
19	7.6							
20	7.2							
21	8.2	0.86	0.04					
22	7.3	0.7	0.03	25	0.583	0.00535		
23								
24								
25								
26	8.1							
27	7.5							
28	8.4	0.66	0.02					
29	7.9	0.52	0.04	93	0.478	0.00678		
30								
Avg	8.0	0.6922	0.0322	56	0.58275	0.02907		
Max	8.8	0.89	0.05	1000	0.71	0.05273		
Min	7.2	0.52	0.01	0	0.478	0.00535		

Enter Comments Below:
SCHOOL NOT IN OPERATION EXCEPT FOR SUMMER CLEANING.

Send by 28th of the Month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

<i>David L. West</i>	21 JUL 06
Signature of Certified Operator	Date
<i>x Sharon Laakeford</i>	7-31-06
Signature of Principal Executive Officer or Authorized Agent	Date

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL
 ADDRESS UNION SCHOOL CORP
 8707 W US 36
 MODOC IN 47358
 FACILITY UNION ELEMENTARY & HIGH SCHOOL
 LOCATION MODOC
 ATTN: MR. PHIL DUBBS Supt.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised: DISCHARGE MONITORING REPORT (DMR)

MINOR F - FINAL EFFLUENT Form Approved OMB No. 2040-000 Approval Expires 05-31-98

IN0031135 001A
 PERMIT NUMBER DISCHARGE NUMBER



For Any Questions call Deborah Brents at 317-232-8741

MONITORING PERIOD
 MO DAY YEAR TO MO DAY YEAR
 07 01 06 TO 07 31 06

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
OXYGEN, DISSOLVED (DO) 00300 1 1 0	SAMPLE MEASUREMENT	*****	*****		5.6	*****	*****	(19)	1	2/7	2GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	*****	MG/L		TWICE/ WEEK	GRAB-2
PH 00400 1 0 0	SAMPLE MEASUREMENT	*****	*****		7.4	*****	8.6	(12)	0	14/31	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		TWICE/ WEEK	GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 1 0	SAMPLE MEASUREMENT	0.65	2.04	(26)	*****	21.9	33.0	(19)	2	1/7	24HC
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	2.7 MO AVG	4.1 MX WK AV	LBS/DY	*****	18.0 MO AVG	27.0 MX WK AV	MG/L		WEEKLY	COMP24
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 1 0	SAMPLE MEASUREMENT	0.013	0.038	(26)	*****	0.42	0.75	(19)	0	1/7	24HC
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	0.17 MO AVG	0.24 MX WK AV	LBS/DY	*****	1.1 MO AVG	1.6 MX WK AV	MG/L		WEEKLY	COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0	SAMPLE MEASUREMENT	0.0024	0.0031	(03)	*****	*****	*****		0	5/7	TOTAL
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/WEEK	TOTALZ
CHLORINE, TOTAL RESIDUAL 50060 1 0 0	SAMPLE MEASUREMENT	*****	*****		*****	0.0388	0.05	(19)	0	2/7	GRAB
EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L		TWICE/ WEEK	GRAB
CHLORINE, TOTAL RESIDUAL 50060 X 0 0	SAMPLE MEASUREMENT	*****	*****		0.53	*****	1.3	(19)	0	2/7	GRAB
END-CHLORINE CONTACT	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY MN	*****	REPORT DAILY MX	MG/L		TWICE/ WEEK	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Sharon Lankford Business Manager	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.	TELEPHONE 765-853-5464	DATE			
			MO	DAY	YEAR	
TYPED OR PRINTED	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT Sharon Lankford	AREA CODE	NUMBER	MO	DAY	YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION SEC. IF FINAL LIMITS FOR AMMONIA NITROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC RANDOLPH COUNTY

HEAVY RAIN ON 26, 27 JUL CAUSED SOLIDS TO WASH TO EFFLUENT

23 AUG 06

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL
 ADDRESS UNION SCHOOL CORP
 8707 W US 36
 MODOC IN 47358
 FACILITY UNION ELEMENTARY & HIGH SCHOOL
 LOCATION MODOC
 ATTN: MR. PHIL WRAY, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised: ☐ DISCHARGE MONITORING REPORT (DMR)

IN0031135 001A
 PERMIT NUMBER DISCHARGE NUMBER


MINOR F - FINAL EFFLUENT
 Form Approved OMB No. 2040-000
 Approval Expires 05-31-98
 * I N 0 0 3 1 1 3 5 0 0 1 A 0 7 0 6 *

For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER	<div></div>	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU				UNITS
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	0,0687	0.16	(26)	*****	3,5	4.0	(19)	0	1/7	24HC
80082 1 1 0	PERMIT REQUIREMENT	2.3 MO AVG	3.4 MX WK AV	LBS/DY	*****	15.0 MO AVG	23.0 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	0.0747	(80)	*****	*****	*****		0	1/31	TOTAL
82220 1 0 0	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL/ MONTH	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT
EFFLUENT GROSS VALUE											
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE	DATE		
Sharon Hankford Business Manager TYPED OR PRINTED			765 853-5464	8	23	06

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NITROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC RANDOLPH COUNTY

Monthly Report of Operation
Package Type Wastewater
Treatment Plants Less Than 0.05 mgd
(Pending Approval - 12/05)

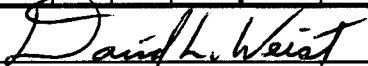
Name of Facility UNION SCHOOL CORPORATION		Permit Number IN0031135		Phone Number: 765-853-5464	
Certified Operator: Name DAVID L. WEIST		Class III	Certificate Number 8828	Expiration Date 6/30/ 2007	
Month: # : 7		Name: July		Year 2006	Treatment Plant design flow: 0.0183 mgd

Page 1 of 2

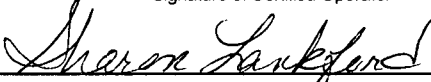
General Information				Bypasses/ Overflows	Raw Wastewater										Aeration Tank						Final Effluent						
Day of the Month	Day of the Week	Man Hours	Precip. - Inches	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)	30 Minute Settling	MLSS	Sludge Vol. Index (SVI) - ml/gm	D.O.	Temperature	WAS Gal.	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)
1	Sat																					0.0025					
2	Sun																					0.0025					
3	Mon	1					8.2									51			6.8	20.8		0.0008	8.5				
4	Tue	1	0.3													69			7.3			0.0007					
5	Wed	1	0.3				8.1									60			7.0	21		0.0009	8.6				
6	Thu	1					7.9	28	0.14	97	0.49	0.883	0.00			56	2370	236	6.6	20.8		0.0006	8.4	3.8	0.019	23	0.1152
7	Fri	1																			XXX	0.0014					
8	Sat																					0.0013					
9	Sun																					0.0013					
10	Mon	1					8.2									44			6.8	22.6	XXX	0.0006	8.1				
11	Tue	1					8.1									43			6.6	22.9		0.0061	8.3				
12	Wed	1	0.3				8.2									71			5.4	23		0.016	8.0				
13	Thu	1					8.1	40	0.37	607	5.57	1.97	0.02			57	2279	250	6.0	22.8		0.0011	7.6	4	0.0367	12.7	0.1166
14	Fri	1	0.1																		XXX	0.0008					
15	Sat																					0.0007					
16	Sun																					0.0007					
17	Mon	1					8.1									57			7.7	23.6		0.0016	7.6				
18	Tue	1					8.0									51			6.6	23.8		0.0015	7.4				
19	Wed	1					8.2									44			6.6	22.6		0.0054	7.6				
20	Thu	1					8.3	24	0.40	130	2.17	3.3	0.06			41	2250	182	6.9	25	XXX	0.002	8.5	3.5	0.0584	19	0.3171
21	Fri	1																				0.001					
22	Sat																					0.001					
23	Sun																					0.0009					
24	Mon	1					7.9									56			7.9	23		0.0013	8.6				
25	Tue	1					7.7									57			6.6	22.8		0.0015	8.4				
26	Wed	1	0.3				7.5									59			6.0	23.6		0.0017	8.3				
27	Thu	1	0.9					23	1.42	62	3.83	2.9	0.18			46	2344	196	6.3	22.8		0.0074		2.6	0.1606	33	2.0378
28	Fri	1																			XXX	0.008					
29	Sat																					0.001					
30	Sun																					0.001					
31	Mon	1					8.1									47			7.3	24.5		0.0014	7.8				
Average		1.0						29	0.58	224	3.01	2	0.06			53	2311	216	6.7	22.85		0.00241		3.5	0.0687	21.9	0.6467
Maximum		1	0.9				8.3	40	1.42	607	5.57	3.3	0.18			71	2370	250	7.9	25		0.016	8.6	4	0.1606	33	2.0378
Minimum		1					7.5	23	0.14	62	0.49	0.883	0.00			41	2250	182	5.4	20.8		0.0006	7.4	2.6	0.019	12.7	0.1152
Total		21	2.2	0	0																						

Sludge Hauled Off Site (Gal):

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


 Signature of Certified Operator

23 AUG 06
 Date


 Signature of Principal Executive Officer or Authorized Agent

8-23-06
 Date

Name of Facility: UNION SCHOOL CORPORATION		Month/Year: July 2006
Total Monthly Flow 0.0747 mg	Percent Capacity (average flow / design) 13%	

MONTHLY REMOVAL SUMMARY				
	BOD5	S.S.	Ammonia	Phosphorus
Percent Removal	87.9	90.2	81.3	NA

Day of the Month	Final Effluent							
	D.O. (mg/l)	Residual Chlorine (mg/l) - Contact	Residual Chlorine (mg/l) - Final	E. Coli colony/100 ml	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)
1								
2								
3								
4	8.5							
5		0.59	0.03					
6	8.1	0.61	0.03	175	0.243	0.00122		
7								
8								
9								
10								
11	9.8							
12		0.53	0.03					
13	5.6	0.91	0.05	1000	0.0857	0.00079		
14								
15								
16								
17								
18	6.9							
19		0.61	0.05					
20	8.0	0.61	0.04	155	0.75	0.01252		
21								
22								
23								
24								
25	8.0							
26		0.76	0.04					
27	6.1	1.3	0.04	160	0.612	0.03779		
28								
29								
30								
31	7.0							
Avg	7.6	0.74	0.0388	257	0.42268	0.01308		
Max	9.8	1.3	0.05	1000	0.75	0.03779		
Min	5.6	0.53	0.03	155	0.0857	0.00079		

Enter Comments Below:

HEAVY RAIN ON 26, 27 JUL, CAUSED A
HYDRAULIC OVERLOAD. SOLIDS WASH
TO FINAL TO EXCEED LIMITS.

Send by 28th of the Month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

David L. Weist

Signature of Certified Operator

23 AUG 06

Date

Sharon Hankford

Signature of Principal Executive Officer or Authorized Agent

8-23-06

Date

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. PHIL WRAY, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised: DISCHARGE MONITORING REPORT (DMR)



IN0031135

001A

PERMIT NUMBER

DISCHARGE NUMBER

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

08 01 06

TO

08 31 06

MINOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-000
Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU			
OXYGEN, DISSOLVED (DO) 00300 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		6.3	*****	*****	(19)	2/7	2 GRAB
	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	*****	MG/L	TWICE/ WEEK	GRAB-2
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		7.4	*****	9.5	(12)	2/7	GRAB
	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU	TWICE/ WEEK	GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	.43	.94	(26)	*****	15.0	22.5	(19)	1/7	24HC
	PERMIT REQUIREMENT	2.7 MO AVG	4.1 MX WK AV	LBS/DY	*****	18.0 MO AVG	27.0 MX WK AV	MG/L	WEEKLY	COMP24
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	0.013	0.021	(26)	*****	0.43	0.66	(19)	1/7	24HC
	PERMIT REQUIREMENT	0.17 MO AVG	0.24 MX WK AV	LBS/DY	*****	1.1 MO AVG	1.6 MX WK AV	MG/L	WEEKLY	COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	0.00386	0.0068	(03)	*****	*****	*****		5/7	TOTAL
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****	5 TMS/WEEK	TOTALZ
CHLORINE, TOTAL RESIDUAL 50060 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	0.026	0.05	(19)	2/7	GRAB
	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L	TWICE/ WEEK	GRAB
CHLORINE, TOTAL RESIDUAL 50060 X 0 0 END-CHLORINE CONTACT	SAMPLE MEASUREMENT	*****	*****		0.58	*****	1.97	(19)	2/7	GRAB
	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY MN	*****	REPORT DAILY MX	MG/L	TWICE/ WEEK	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

Sharon Lankford

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Sharon Lankford

SIGNATURE OF PRINCIPAL EXECUTIV
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA
CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC

RANDOLPH COUNTY

SEMI-PUBLIC MINOR RANDOLPH COUNTY

20SEP06

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. PHIL WRAY, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised:

DISCHARGE MONITORING REPORT (DMR)

MINOR

F - FINAL

EFFLUENT

Form Approved

OMB No. 2040-000

Approval Expires 05-31-98



* 1 N 0 0 3 1 1 3 5 0 0 1 A 0 8 0 6 *

For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER	<div></div>	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU				UNITS
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	0.0552	0.077	(26)	*****	2.3	3.8	(19)	0	1/7	24HC
80082 1 1 0	PERMIT	2.3	3.4	LBS/DY	*****	15.0	23.0	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE	REQUIREMENT	MO AVG	MX WK AV			MO AVG	MX WK AV				
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	0.1196	(80)	*****	*****	*****		0	1/31	TOTAL
82220 1 0 0	PERMIT	*****	REPORT	MGAL/ MONTH	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT
EFFLUENT GROSS VALUE	REQUIREMENT		MO TOTAL								
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Sharon Leukford

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC RANDOLPH COUNTY

20 SEP 06

SEMI PUBLIC MINOR, RANDOLPH COUNTY

Monthly Report of Operation
Package Type Wastewater
Treatment Plants Less Than 0.05 mgd
(Pending Approval - 12/05)

Page 1 of 2

Name of Facility UNION SCHOOL CORPORATION		Permit Number IN0031135		Phone Number: 765-853-5464	
Certified Operator: Name DAVID L. WEIST		Class III		Certificate Number 8828	
		Expiration Date 6/30/ 2007		E-mail Address (if available):	
Month: # : 8		Name: August		Year 2006	
				Treatment Plant design flow: 0.0183 mgd	

General Information				Bypasses/ Overflows		Raw Wastewater										Aeration Tank						Final Effluent					
Day of the Month	Day of the Week	Man Hours	Precip. - Inches	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)	30 Minute Settling	MLSS	Sludge Vol. Index (SVI) - ml/gm	D.O.	Temperature	WAS Gal.	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)
1	Tue	1					8.3									37			6.9	24.8		0.0018	7.7				
2	Wed	1					8.1									34			6.0	24.9		0.0007	7.4				
3	Thu	1					8.3	30	0.35	290	3.39	4.28	0.05			40	2319	172	6.1	23.8		0.0014	7.6	2.7	0.0315	22.5	0.2629
4	Fri	1																			xxx	0.0033					
5	Sat																					0.0033					
6	Sun																					0.0033					
7	Mon	1					8.0									43			7.4	23.2		0.0013	8.4				
8	Tue	1					8.0									41			6.9	22.5		0.0009	8.5				
9	Wed	1					8.0									50			7.4	22.9		0.0034	8.5				
10	Thu	1					9.3	26	0.69	105	2.80	2.36	0.06			49	2279	215	6.4	23.4		0.0032	9.5	2.4	0.0641	6.2	0.1656
11	Fri	1																				0.0028					
12	Sat																					0.0028					
13	Sun																					0.0028					
14	Mon	1					8.2									43			7.9	23		0.0007	8.5				
15	Tue	1					8.1									40			7.0	22.6		0.006	8.3				
16	Wed	1					8.3									64			6.9	21.5		0.0009	8.3				
17	Thu	1					8.5	23	0.19	112	0.93	7.12	0.06			43	2271	189	7.1	22.6		0.001	8.3	3.8	0.0317	18.1	0.151
18	Fri	1																				0.0023					
19	Sat																					0.0023					
20	Sun																					0.0023					
21	Mon	1																				0.0066					
22	Tue	1					8.0									54			5.2	21.6		0.0062	8.2				
23	Wed	1					7.6									50			6.1	21.9		0.0061	7.9				
24	Thu	1					7.4	108	5.95	166	9.14	24.6	1.35			47	2600	181	5.8	22.6		0.0066	8.2	1.4	0.0771	17	0.9363
25	Fri	1																				0.0067					
26	Sat																					0.0067					
27	Sun																					0.0067					
28	Mon	1					7.8									58			7.0	24.1		0.0065	7.9				
29	Tue	1														68			6.3	24.2		0.0083					
30	Wed	1														66			6.2	24.2		0.0061					
31	Thu	1					7.9	104	5.73	321	17.68	29.9	1.65			60	2511	239	6.7	24.4		0.0066	7.8	1.3	0.0716	11.2	0.6169
Average		1.0						58	2.58	199	6.79	14	0.63			49	2396	199	6.6	23.23		0.00386		2.3	0.0552	15.0	0.4265
Maximum		1					9.3	108	5.95	321	17.68	29.9	1.65			68	2600	239	7.9	24.9		0.0083	9.5	3.8	0.0771	22.5	0.9363
Minimum		1					7.4	23	0.19	105	0.93	2.36	0.05			34	2271	172	5.2	21.5		0.0007	7.4	1.3	0.0315	6.2	0.151
Total		23	0	0	0																						

Sludge Hauled Off Site (Gal):

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David L. Weist 185EP00
Signature of Certified Operator Date

Marion Lockford 9-19-06
Signature of Principal Executive Officer or Authorized Agent Date

Name of Facility: UNION SCHOOL CORPORATION		Month/Year: August 2006	
Total Monthly Flow 0.1196 mg		Percent Capacity (average flow / design) 21%	

MONTHLY REMOVAL SUMMARY				
	BOD5	S.S.	Ammonia	Phosphorus
Percent Removal	96.0	92.5	96.8	NA


Day of the Month	Final Effluent							
	D.O. (mg/l)	Residual Chlorine (mg/l) - Contact	Residual Chlorine (mg/l) - Final	E. Coli colony/100 ml	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)
1	8.0							
2	7.3	0.84	0.02					
3	7.6	0.95	0.03	163	0.359	0.00419		
4								
5								
6								
7	8.0							
8	8.0							
9	7.5	0.79	0.02					
10	6.3	0.76	0.01	153	0.659	0.0176		
11								
12								
13								
14	8.2							
15	7.1							
16	7.8	0.59	0.01					
17	8.0	0.58	0.04	128	0.418	0.00349		
18								
19								
20								
21								
22	8.4							
23	8.2	0.81	0.05					
24	8.4	0.82	0.02	87	0.38	0.02093		
25								
26								
27								
28								
29								
30		1.97	0.02					
31		0.88	0.04	73	0.335	0.01845		
Avg	7.8	0.899	0.026	115	0.4302	0.01293		
Max	8.4	1.97	0.05	163	0.659	0.02093		
Min	6.3	0.58	0.01	73	0.335	0.00349		

Enter Comments Below:

THE E-COLI METHOD WE ARE USING IS THE COLISCAN MF METHOD. THE E-COLI FINAL EFFLUENT LIMITATIONS ARE NOT BEING MET AS OF THIS TIME. THE CHLORINE TABLET METHOD WE USE TO REDUCE E-COLI DEPENDS ON THE FLOW, WHICH IS NOT CONSTANT AT THE SCHOOL. SINCE SCHOOL HAS STARTED THE CHLORINE REQUIREMENTS WILL CHANGE TO REACH THE E-COLI PERMIT LIMITS.

Send by 28th of the Month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251



Signature of Certified Operator

18 SEP 06

Date



Signature of Principal Executive Officer or Authorized Agent

9-19-06

Date

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC ~~DEER~~

ATTN: MR. PHIL WEAVER, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised: DISCHARGE MONITORING REPORT (DMR)

MINOR

F - FINAL

EFFLUENT

Form Approved

OMB No. 2040-000

Approval Expires 05-31-98

IN0031135

001A

PERMIT NUMBER

DISCHARGE NUMBER

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

09 01 06

TO

09 30 06

For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		6.0	*****	*****	(19)	0	2/7	2GRAB
00300 1 1 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	*****	MG/L		TWICE/ WEEK	GRAB-2
EFFLUENT GROSS VALUE											
PH	SAMPLE MEASUREMENT	*****	*****		7.6	*****	9.9	(12)	1	2/7	GRAB
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		TWICE/ WEEK	GRAB
EFFLUENT GROSS VALUE											
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	.041	0.52	(26)	*****	7.8	10.2	(19)	0	1/7	24HC
00530 1 1 0	PERMIT REQUIREMENT	2.7 MO AVG	4.1 MX WK AV	LBS/DY	*****	18.0 MO AVG	27.0 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
NITROGEN, AMMONIA TOTAL (AS N)	SAMPLE MEASUREMENT	0.010	0.017	(26)	*****	0.19	0.297	(19)	0	1/7	24HC
00610 1 1 0	PERMIT REQUIREMENT	0.17 MO AVG	0.24 MX WK AV	LBS/DY	*****	1.1 MO AVG	1.6 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.0067	0.0096	(03)	*****	*****	*****		0	5/7	TOTAL
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/ WEEK	TOTALZ
EFFLUENT GROSS VALUE											
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	0.023	0.03	(19)	0	2/7	GRAB
50060 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L		TWICE/ WEEK	GRAB
EFFLUENT GROSS VALUE											
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		0.64	*****	1.1	(19)	0	2/7	GRAB
50060 X 0 0	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY MN	*****	REPORT DAILY MX	MG/L		TWICE/ WEEK	GRAB
END-CHLORINE CONTACT											

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Sharon Laukford

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Sharon Laukford

SIGNATURE OF PRINCIPAL EXECUTIV

OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 853-5464

10 13 06

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC

RANDOLPH COUNTY

SEMI PUBLIC MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL
 ADDRESS UNION SCHOOL CORP
 8707 W US 36
 MODOC IN 47358
 FACILITY UNION ELEMENTARY & HIGH SCHOOL
 LOCATION MODOC
 ATTN: MR. PHIL WRAY, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised: ☐ DISCHARGE MONITORING REPORT (DMR)

IN0031135 001A
 PERMIT NUMBER DISCHARGE NUMBER

MINOR F - FINAL EFFLUENT
 Form Approved OMB No. 2040-000
 Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	0.118	0.26	(26)	*****	2.6	6.7	(19)	0	1/7	24HC
80082 1 1 0	PERMIT REQUIREMENT	2.3	3.4	LBS/DY	*****	15.0	23.0	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE		MO AVG	MX WK AV			MO AVG	MX WK AV				
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	0.1405	(80)	*****	*****	*****			1/30	TOTAT
82220 1 0 0	PERMIT REQUIREMENT	*****	REPORT	MGAL/ MONTH	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT
EFFLUENT GROSS VALUE			MO TOTAL								
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

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SIGNATURE OF PRINCIPAL EXECUTIV
 OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

Sharon Lankford
 TYPED OR PRINTED

765 853-5464 10 13 06
 AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC
 RANDOLPH COUNTY

SEMI PUBLIC MINOR RANDOLPH COUNTY

12 OCT 06

Monthly Report of Operation
Package Type Wastewater
Treatment Plants Less Than 0.05 mgd

(Pending Approval - 12/05)

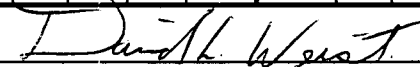
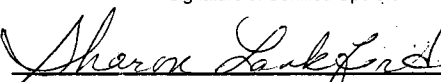
Name of Facility UNION SCHOOL CORPORATION		Permit Number IN0031135		Phone Number: 765-853-5464	
Certified Operator: Name DAVID L. WEIST		Class III	Certificate Number 8828	Expiration Date 6/30/ 2007	
Month: # : 9		Name: September		Year 2006	Treatment Plant design flow: 0.0183 mgd

Page 1 of 2

General Information				Bypasses/ Overflows	Raw Wastewater										Aeration Tank						Final Effluent						
Day of the Month	Day of the Week	Man Hours	Precip. - Inches	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)	30 Minute Settling	MLSS	Sludge Vol. Index (SVI) - ml/gm	D.O.	Temperature	WAS Gal.	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)
1	Fri	1	0.1																			0.0068					
2	Sat																										
3	Sun																										
4	Mon	1																				0.0035					
5	Tue	1					7.9									74			3.8	23.4		0.0087	7.6				
6	Wed	1														67			5.1	22.6		0.0043					
7	Thu	1					7.9	109	6.28	249	14.34	33.5	1.93			73	2386	306	3.6	22.7	XXX	0.0069	7.7	2	0.1152	6.5	0.3743
8	Fri	1																				0.0067					
9	Sat																										
10	Sun																										
11	Mon																					0.0067					
12	Tue	1	0.5				7.8									74			6.7	23.1		0.0068	8.3				
13	Wed	1	0.1													73			6.9	22.8		0.0067					
14	Thu	1					7.7	97	6.23	273	17.54	26.8	1.72			73	2714	269	6.3	23.1	XXX	0.0077	8.3	0.9	0.0578	8.1	0.5205
15	Fri	1																				0.0047					
16	Sat																										
17	Sun																										
18	Mon	1					7.6									67			7.0	22.7		0.0085	8.3				
19	Tue	1	0.6													69			5.9	21.8		0.0062					
20	Wed	1														78			6.7	20.6		0.0066					
21	Thu	11					9.3	170	9.79	422	24.30	35.8	2.06			83	2925	284	6.6	21.1	XXX	0.0069	9.9	0.6	0.0345	6.3	0.3628
22	Fri	1																				0.0093					
23	Sat		0.7																								
24	Sun																										
25	Mon	1					7.8									78			7.0	21.4		0.0071	8.4				
26	Tue	1														74			1.7	21.2		0.0059					
27	Wed	1														70			6.4	21.8		0.0062					
28	Thu	1	0.6				7.7	180	7.06	414	16.24	26.8	1.05			71	2524	281	2.8	20.7	XXX	0.0047	7.8	6.7	0.2628	10.2	0.4001
29	Fri	1																				0.0096					
30	Sat																										
Average		1.5						139	7.34	340	18.10	31	1.69			73	2637	285	5.5	22.07		0.00669		2.6	0.1176	7.8	0.4144
Maximum		11	0.7				9.3	180	9.79	422	24.30	35.8	2.06			83	2925	306	7	23.4		0.0096	9.9	6.7	0.2628	10.2	0.5205
Minimum		1					7.6	97	6.23	249	14.34	26.8	1.05			67	2386	269	1.7	20.6		0.0035	7.6	0.6	0.0345	6.3	0.3628
Total		30	2.6	0	0																						

Sludge Hauled Off Site (Gal):

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

 12 OCT 06
 Signature of Certified Operator Date
 10-12-06
 Signature of Principal Executive Officer or Authorized Agent Date

Name of Facility: UNION SCHOOL CORPORATION		Month/Year: September 2006	
Total Monthly Flow 0.1405 mg		Percent Capacity (average flow / design) 37%	

MONTHLY REMOVAL SUMMARY				
	BOD5	S.S.	Ammonia	Phosphorus
Percent Removal	98.2	97.7	99.4	NA

Day of the Month	Final Effluent							
	D.O. (mg/l)	Residual Chlorine (mg/l) - Contact	Residual Chlorine (mg/l) - Final	E. Coli colony/100 ml	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)
1								
2								
3								
4								
5	6.0							
6		0.83	0.01					
7	7.1	0.68	0.02	230	0.297	0.0171		
8								
9								
10								
11								
12	8.3							
13		1.1	0.03					
14	8.3	0.67	0.02	387	0.148	0.00951		
15								
16								
17								
18								
19	8.0							
20		0.67	0.03					
21	8.7	0.74	0.01	63200	0.0673	0.00388		
22								
23								
24								
25								
26	8.1							
27								
28	7.1	0.64	0.03	63200	0.241	0.00945		
29		1.04	0.03					
30								
Avg	7.7	0.7963	0.0225	4342	0.18833	0.00998		
Max	8.7	1.1	0.03	TNTC	0.297	0.0171		
Min	6	0.64	0.01	230	0.0673	0.00388		

Enter Comments Below:

THE E-COLI PERMIT LIMITS ARE STILL NOT BEING MET. I HAVE CONTACTED THE OATS FOR ADVICE TO CORRECT THIS PROBLEM. THE LACK OF CONSTANT FLOW CAUSES SOLIDS TO RISE TO THE SURFACE AND END UP IN THE EFFLUENT. THE TABLET CHLORINE SYSTEM IS USED TO KILL THE E-COLI COUNT BUT WITHOUT A CONSTANT CHLORINE FLOW THE E-COLI CAN MULTIPLE. I AM HAVING THE SOLIDS LEVELS REDUCED BY WASTING AND REMOVED BY A SLUDGE HAULER. I AM CONTINUING TO TEST FOR E-COLI USING THE COLISCAN METHOD. THE UNION SCHOOL CORP HAS SOLD LAND TO THE CITY OF MODOC TO BUILD A NEW WASTEWATER PLANT TO TREAT SEWAGE FOR MODOC AND THE UNION SCHOOL.

Send by 28th of the Month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

<i>Daniel H. West</i>	12 OCT 06
Signature of Certified Operator	Date
<i>Sharon Langford</i>	10-12-06
Signature of Principal Executive Officer or Authorized Agent	Date

Oct. 14, 2006

To IDEM: COMPLIANCE SECTION

The Union School Corporation wastewater treatment permit number IN0031135, effective February 2006, contains E-Coli permit limits for the first time. The E-Coli method being used to test is the Coliscan method. Beginning in April, the test has been completed with poor results. The chlorine tablet method is used to remove the E-Coli colonies count. The flow at a school wastewater treatment system is not consistent because the school hours are limited. The weekends are usually at no or low flow causing E-Coli to multiply.

The Town of Modoc has purchased land at the Union School and plans to build a new wastewater treatment plant that will handle the town and the school. An engineer firm has been hired and plans have been sent to IDEM for construction permits and approval. The construction is scheduled to begin the spring of 2007.

Sincerely,
Dave Weist
Certified Operator

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. PHIL WRAY, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised:

DISCHARGE MONITORING REPORT (DMR)

MINOR

F - FINAL

EFFLUENT

Form Approved

OMB No. 2040-000

Approval Expires 05-31-98

IN0031135

001A

PERMIT NUMBER

DISCHARGE NUMBER



* I N 0 0 3 1 1 3 5 0 0 1 A 1 0 0 6 *

For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		8.2	*****	*****	(19)	0	2/7	2 GRAB
00300 1 1 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	*****	MG/L		TWICE/ WEEK	GRAB-2
EFFLUENT GROSS VALUE											
PH	SAMPLE MEASUREMENT	*****	*****		7.9	*****	8.5	(12)	0	2/7	GRAB
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		TWICE/ WEEK	GRAB
EFFLUENT GROSS VALUE											
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	0.31	0.62	(26)	*****	5.1	11.2	(19)	0	1/7	24 HC
00530 1 1 0	PERMIT REQUIREMENT	2.7 MO AVG	4.1 MX WK AV	LBS/DY	*****	18.0 MO AVG	27.0 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
NITROGEN, AMMONIA TOTAL (AS N)	SAMPLE MEASUREMENT	0.015	0.026	(26)	*****	0.23	0.38	(19)	0	1/7	24 HC
00610 1 1 0	PERMIT REQUIREMENT	0.17 MO AVG	0.24 MX WK AV	LBS/DY	*****	1.1 MO AVG	1.6 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.008	0.021	(03)	*****	*****	*****		0	5/7	TOTAL
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/ WEEK	TOTALZ
EFFLUENT GROSS VALUE											
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	0.28	0.05	(19)	0	2/7	GRAB
50060 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L		TWICE/ WEEK	GRAB
EFFLUENT GROSS VALUE											
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		0.88	*****	2.2	(19)	0	2/7	GRAB
50060 X 0 0	PERMIT REQUIREMENT	*****	*****	*****	0.5 DAILY MN	*****	REPORT DAILY MX	MG/L		TWICE/ WEEK	GRAB
END-CHLORINE CONTACT											

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Sharon Lankford
Business Manager

TYPED OR PRINTED

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SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 853-5464 11 14 06

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC
RANDOLPH COUNTY

14 NOV 06

SEMI PUBLIC MINOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. PHIL WRAY, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised: DISCHARGE MONITORING REPORT (DMR)



IN0031135

PERMIT NUMBER

001A

DISCHARGE NUMBER

MINOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-000
Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER	<div></div>	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	0.24	0.73	(26)	*****	3.6	10.8	(19)	0	1/7	24HC
	PERMIT	2.3	3.4	LBS/DY	*****	15.0	23.0	MG/L		WEEKLY	COMP24
	REQUIREMENT	MO AVG	MX WK AV			MO AVG	MX WK AV				
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0.1759	(80)	*****	*****	*****		0	1/30	TOTAL
	PERMIT	*****	REPORT	MGAL/ MONTH	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT
	REQUIREMENT		MO TOTAL								
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

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Sharon Leukford
Business Manager

TYPED OR PRINTED

Sharon Leukford
SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765853-5464 11 14 06
AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC
RANDOLPH COUNTY

14 OCT 06

SEMI PUBLIC MINOR RANDOLPH COUNTY

Monthly Report of Operation
Package Type Wastewater
Treatment Plants Less Than 0.05 mgd
(Pending Approval - 12/05)

Page 1 of 2

Name of Facility UNION SCHOOL CORPORATION			Permit Number IN0031135		Phone Number: 765-853-5464	
Certified Operator: Name DAVID L. WEIST		Class III	Certificate Number 8828	Expiration Date 6/30/ 2007		E-mail Address (if available):
Month: # : 10		Name: October		Year: 2006		Treatment Plant design flow: 0.0183 mgd

General Information				Bypasses/ Overflows		Raw Wastewater									Aeration Tank						Final Effluent						
Day of the Month	Day of the Week	Man Hours	Precip. - Inches	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)	30 Minute Settling	MLSS	Sludge Vol. Index (SVI) - ml/gm	D.O.	Temperature	WAS Gal.	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)
1	Sun																										
2	Mon	1	0.2				7.8									79			7.1	20.7		0.0013	7.9				
3	Tue	3														64			6.6	21.6		0.0097					
4	Wed	1	1													70			3.6	21.6		0.0006					
5	Thu	1					7.8	33	2.23	408	27.58	44.1	2.98			75	2590	290	6.9	20.7	XXX	0.0081	8.3	10.8	0.73	4.9	0.3312
6	Fri	1																				0.0069					
7	Sat																										
8	Sun																										
9	Mon	1					8.0									74			7.4	20.3		0.0049	8.0				
10	Tue	1														71			6.8	20.5		0.0059					
11	Wed	1	0.2													75			7.1	20.1		0.007					
12	Thu	1					7.8	146	8.04	141	7.77	32.1	1.77			79	2686	294	7.7	18.2	XXX	0.0066	8.5	2.3	0.1267	11.2	0.6169
13	Fri	1																				0.0089					
14	Sat																										
15	Sun																										
16	Mon	1	2.3				7.8									84			8.3	17.1		0.0212	8.3				
17	Tue	1	0.2													79			7.4	17.9		0.011					
18	Wed	1														84			7.7	18.2		0.0074					
19	Thu	1	0.4				7.8	116	7.07	233	14.19	14.1	0.86			74	2721	272	7.6	17.9		0.0073	8.4	0.8	0.0487	2.1	0.1279
20	Fri	1																				0.0123					
21	Sat																										
22	Sun																										
23	Mon	1					8.0									65			8.9	15.8		0.0061	8.4				
24	Tue	1														79			5.0	15.8		0.0061					
25	Wed	1														84			8.9	15.9		0.0069					
26	Thu	2	0.3				7.9	93	6.91	224	16.64	30.6	2.27									0.0089	8.3	0.6	0.0446	2	0.1485
27	Fri	3																				0.0179					
28	Sat		1.5																								
29	Sun																										
30	Mon	1					8.0									80			9.6	16.4		0.0037	8.4				
31	Tue	1														84			8.9	16.5		0.0072					
Average		1.2						97	6.06	252	16.54	30	1.97			76	2666	285	7.4	18.54		0.008		3.6	0.2375	5.1	0.3061
Maximum		3	2.3				8.0	146	8.04	408	27.58	44.1	2.98			84	2721	294	9.6	21.6		0.0212	8.5	10.8	0.73	11.2	0.6169
Minimum		1					7.8	33	2.23	141	7.77	14.1	0.86			64	2590	272	3.6	15.8		0.0006	7.9	0.6	0.0446	2	0.1279
Total		27	6.1	0	0																						

Sludge Hauled Off Site (Gal):
5000 3 OCT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<i>David L. Weist</i>	14NOV06
Signature of Certified Operator	Date
<i>Sharon Linkford</i>	11-14-06
Signature of Principal Executive Officer or Authorized Agent	Date

Name of Facility: UNION SCHOOL CORPORATION		Month/Year: October 2006
Total Monthly Flow 0.1759 mg	Percent Capacity (average flow / design) 44%	

MONTHLY REMOVAL SUMMARY				
	BOD5	S.S.	Ammonia	Phosphorus
Percent Removal	96.3	98.0	99.2	NA

Day of the Month	Final Effluent							
	D.O. (mg/l)	Residual Chlorine (mg/l) - Contact	Residual Chlorine (mg/l) - Final	E. Coli colony/100 ml	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)
1								
2								
3	8.5							
4		2.2	0.05					
5	8.2	2.2	0.04	63200	0.384	0.02596		
6								
7								
8								
9								
10	8.2							
11		0.88	0.03					
12	9.3	1.19	0.02	380	0.255	0.01404		
13								
14								
15								
16								
17	9.5							
18		1.04	0.04					
19	9.3	1.82	0.03	63200	0.174	0.0106		
20								
21								
22								
23								
24	10.8	0.96	0.02					
25	10.9							
26				133	0.102	0.00758		
27		1.12	0					
28								
29								
30								
31	10.8	2.12	0.02					
Avg	9.5	1.5033	0.0278	3769	0.22875	0.01454		
Max	10.9	2.2	0.05	TNTC	0.384	0.02596		
Min	8.2	0.88	0	133	0.102	0.00758		

Enter Comments Below:

E-Coli permit limits are not being met. Power outage 26 Oct. Motor replaced.

Send by 28th of the Month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

<i>Daniel H. Weist</i>	14 NOV 06
Signature of Certified Operator	Date
<i>Sharon Lankford</i>	11-14-06
Signature of Principal Executive Officer or Authorized Agent	Date

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. PHIL WRAY, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised: DISCHARGE MONITORING REPORT (DMR)



IN0031135

001A

PERMIT NUMBER

DISCHARGE NUMBER

MINOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-000
Approval Expires 05-31-98



For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
OXYGEN, DISSOLVED (DO) 00300 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		9.6	*****	*****	(19)	0	2/7	2 GRAB
	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	*****	MG/L		TWICE/ WEEK	GRAB-2
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		7.8	*****	8.4	(12)	0	2/7	GRAB
	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		TWICE/ WEEK	GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	0.28	0.63	(26)	*****	2.5	3.4	(19)	0	1/7	24HC
	PERMIT REQUIREMENT	2.7 MO AVG	4.1 MX WK AV	LBS/DY	*****	18.0 MO AVG	27.0 MX WK AV	MG/L		WEEKLY	COMP24
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	0.057	0.213	(26)	*****	0.36	0.83	(19)	0	1/7	24HC
	PERMIT REQUIREMENT	0.17 MO AVG	0.24 MX WK AV	LBS/DY	*****	1.1 MO AVG	1.6 MX WK AV	MG/L		WEEKLY	COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	0.0099	0.0157	(03)	*****	*****	*****		0	5/7	TOTAL
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/WEEK	TOTALZ
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	0.18	0.38	(26)	*****	1.7	2.3	(19)	0	1/7	24HC
	PERMIT REQUIREMENT	2.3 MO AVG	3.4 MX WK AV	LBS/DY	*****	15.0 MO AVG	23.0 MX WK AV	MG/L		WEEKLY	COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0.2196	(80)	*****	*****	*****		0	1/30	TOTAL
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL/ MONTH	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Sharon Hankford
Business Manager

TYPED OR PRINTED

Sharon Hankford

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765-853-5464 12 8 06

AREA
CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION SEC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC

RANDOLPH COUNTY

SEMI PUBLIC MINOR, RANDOLPH COUNTY

8 DEC 06

Monthly Report of Operation
Package Type Wastewater
Treatment Plants Less Than 0.05 mgd
(Pending Approval - 12/05)

Name of Facility UNION SCHOOL CORPORATION		Permit Number IN0031135		Phone Number: 765-853-5464	
Certified Operator: Name DAVID L. WEIST		Class III	Certificate Number 8828	Expiration Date 6/30/ 2007	
Month: # : 11		Name: November		Year: 2006	
Treatment Plant design flow:					0.0183 mgd

Page 1 of 2

General Information				Bypasses/ Overflows		Raw Wastewater										Aeration Tank						Final Effluent					
Day of the Month	Day of the Week	Man Hours	Precip. - Inches	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)	30 Minute Settling	MLSS	Sludge Vol. Index (SVI) - ml/gm	D.O.	Temperature	WAS Gal.	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)
1	Wed	1	0.2				7.7									74			8.4	15.4		0.0075	8.4				
2	Thu	1						93	7.84	216	18.21	23.1	1.95			69	2428	284	9.1	14.9	XXX	0.0101		1.9	0.1601	3.4	0.2866
3	Fri	1																				0.0096					
4	Sat																										
5	Sun																										
6	Mon	1	0.3				8.0									80			9.4	14.3		0.0064	8.4				
7	Tue	1														79			9.0	14.3		0.0074					
8	Wed	1					7.7									79			8.8	15.3		0.0065	8.2				
9	Thu	1						146	10.23	337	23.62	26.1	1.83			60	2279	263	7.9	15.9	XXX	0.0084		1	0.0701	1.8	0.1262
10	Fri	1																				0.0107					
11	Sat																										
12	Sun		0.2																								
13	Mon	1	1.3																			0.0063					
14	Tue	1	0.2				7.7									66			6.5	13.8		0.0061	7.8				
15	Wed	1														65			8.9	14.1	XXX	0.0144					
16	Thu	1					7.8	130	11.50	361	31.93	20.6	1.82			79	2125	372	6.1	14.2		0.0106	8.1	2.3	0.2035	2.7	0.2388
17	Fri	1																				0.0202					
18	Sat																										
19	Sun																										
20	Mon	1					8.1									70			9.3	13.5		0.0068	8.4				
21	Tue	1														84			9.5	13.6		0.007					
22	Wed	1					7.9	165	8.54	243	12.57	29.7	1.54			74	2156	343	9.2	13.6	XXX	0.0062	8.4	1.9	0.0983	2.3	0.119
23	Thu																					0.0063					
24	Fri	1																				0.0064					
25	Sat																										
26	Sun																										
27	Mon	1					8.2									87			9.2	14.3		0.0082	8.4				
28	Tue	1														70			8.2	14.7		0.0118					
29	Wed	1	0.1													80			7.0	15.6		0.0099					
30	Thu	1	3.6				7.5	348	95.25	332	90.87	39.1	10.70			70	2262	309	8.0	15.8		0.0328	8.4	1.4	0.3832	2.3	0.6295
Average		1.0						176	26.67	298	35.44	28	3.57			74	2250	314	8.4	14.58		0.00998		1.7	0.183	2.5	0.28
Maximum		1	3.6				8.2	348	95.25	361	90.87	39.1	10.70			87	2428	372	9.5	15.9		0.0328	8.4	2.3	0.3832	3.4	0.6295
Minimum		1					7.5	93	7.84	216	12.57	20.6	1.54			60	2125	263	6.1	13.5		0.0061	7.8	1	0.0701	1.8	0.119
Total		21	5.9	0	0																						

Sludge Hauled Off Site (Gal):
5000

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

<i>David L. Weist</i>	8 DEC 06
Signature of Certified Operator	Date
<i>Sharon Lankford</i>	12-8-06
Signature of Principal Executive Officer or Authorized Agent	Date

Name of Facility: UNION SCHOOL CORPORATION		Month/Year: November 2006
Total Monthly Flow 0.4023 mg	Percent Capacity (average flow / design) 100%	

MONTHLY REMOVAL SUMMARY				
	BOD5	S.S.	Ammonia	Phosphorus
Percent Removal	99.0	99.2	98.7	NA

Day of the Month	Final Effluent							
	D.O. (mg/l)	Residual Chlorine (mg/l) - Contact	Residual Chlorine (mg/l) - Final	E. Coli colony/100 ml	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)
1								
2	10.5				0.01	0.00084		
3								
4								
5								
6								
7	11.2							
8								
9	10.2				0.83	0.05818		
10								
11								
12								
13								
14	9.6							
15								
16	10.8				0.088	0.00778		
17								
18								
19								
20	11.4							
21								
22	11.9				0.072	0.00373		
23								
24								
25								
26								
27								
28	10.6							
29								
30	9.9				0.777	0.21268		
Avg	10.7				0.3554	0.05664		
Max	11.9				0.83	0.21268		
Min	9.6				0.01	0.00084		

Enter Comments Below:

Send by 28th of the Month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

<i>David L. Weist</i>	8 DEC 06
Signature of Certified Operator	Date
<i>Sharon Hankford</i>	12-8-06
Signature of Principal Executive Officer or Authorized Agent	Date

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME UNION ELEMENTARY & HIGH SCHOOL

ADDRESS UNION SCHOOL CORP

8707 W US 36

MODOC

IN

47358

FACILITY UNION ELEMENTARY & HIGH SCHOOL

LOCATION MODOC

ATTN: MR. PHIL WRAY, SUPT.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

Revised: ☐ DISCHARGE MONITORING REPORT (DMR)

IN0031135

001A

PERMIT NUMBER

DISCHARGE NUMBER

MONITORING PERIOD

MO DAY YEAR

MO DAY YEAR

FROM

12 01 06

TO 12 31 06

MINOR

F - FINAL

EFFLUENT

Form Approved

OMB No. 2040-000

Approval Expires 05-31-98



* 1 N 0 0 3 1 1 3 5 0 0 1 A 1 2 0 6 *

For Any Questions call Deborah Brents at 317-232-8741

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAG	MAXIMU	UNITS	MINIMUM	AVERAG	MAXIMU	UNITS			
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		10.4	*****	*****	(19)	0	2/7	2GRAB
00300 1 2 0	PERMIT REQUIREMENT	*****	*****	*****	5.0 DAILY MN	*****	*****	MG/L		TWICE/ WEEK	GRAB-2
EFFLUENT GROSS VALUE											
PH	SAMPLE MEASUREMENT	*****	*****		7.8	*****	8.5	(12)	0	2/7	GRAB
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	9.0 DAILY MX	SU		TWICE/ WEEK	GRAB
EFFLUENT GROSS VALUE											
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	0.537	0.928	(26)	*****	6.9	11.7	(19)	0	1/7	24HC
00530 1 2 0	PERMIT REQUIREMENT	4.6 MO AVG	6.9 MX WK AV	LBS/DY	*****	30.0 MO AVG	45.0 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
NITROGEN, AMMONIA TOTAL (AS N)	SAMPLE MEASUREMENT	0.027	0.041	(26)	*****	.35	.51	(19)	0	1/7	24HC
00610 1 2 0	PERMIT REQUIREMENT	0.24 MO AVG	0.37 MX WK AV	LBS/DY	*****	1.6 MO AVG	2.4 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.00972	.0106	(03)	*****	*****	*****		0	5/7	TOTAL
50050 1 0 0	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/ WEEK	TOTALZ
EFFLUENT GROSS VALUE											
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	0.194	0.278	(26)	*****	2.6	2.7	(19)	0	1/7	24HC
80082 1 2 0	PERMIT REQUIREMENT	3.8 MO AVG	6.1 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		WEEKLY	COMP24
EFFLUENT GROSS VALUE											
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	0.2042	(80)	*****	*****	*****		0	1/31	TOTAL
82220 1 0 0	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL/ MONTH	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT
EFFLUENT GROSS VALUE											

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Sharon Hankford

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765-853-5464

1 11 07

TYPED OR PRINTED

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here) NOTIFY IDEM COMPLIANCE EVALUATION S EC. IF FINAL LIMITS FOR AMMONIA NIT

ROGEN CAN BE MET PRIOR TO 11/1/02. SEMI PUBLIC RANDOLPH COUNTY

SEMI PUBLIC MINOR RANDOLPH COUNTY

11 JAN 07

Monthly Report of Operation
Package Type Wastewater
Treatment Plants Less Than 0.05 mgd
(Pending Approval - 12/05)

Name of Facility UNION SCHOOL CORPORATION		Permit Number IN0031135		Phone Number: 765-853-5464	
Certified Operator: Name DAVID L. WEIST		Class III		Certificate Number 8828	
		Expiration Date 6/30/ 2007		E-mail Address (if available):	
Month: # : 12		Name: December		Year: 2006	
				Treatment Plant design flow: 0.0183 mgd	

Page 1 of 2

General Information				Bypasses/ Overflows	Raw Wastewater										Aeration Tank						Final Effluent						
Day of the Month	Day of the Week	Man Hours	Precip. - Inches	At Plant Site ("x" if occurred)	Collection System ("x" if occurred)	Influent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)	30 Minute Settling	MLSS	Sludge Vol. Index (SVI) - ml/gm	D.O.	Temperature	WAS Gal.	Effluent Flow Rate (MGD)	pH	CBOD (mg/l)	CBOD (lbs)	TSS (mg/l)	TSS (lbs)
1	Fri	1	3.6																			0.0216					
2	Sat																										
3	Sun																										
4	Mon	1					8.0									85			10.1	11.2		0.0102	8.3				
5	Tue	1														68			8.2	11.6		0.0114					
6	Wed	1					7.8									70			8.0	11.7		0.0069	8.3				
7	Thu	1					7.8	200	12.18	256	15.60	27.8	1.69			71	2019	352	10.4	11.1	XXX	0.0073	8.4	2.4	0.1462	6.5	0.396
8	Fri	1																				0.0103					
9	Sat																										
10	Sun																										
11	Mon	1					8.0									71			9.6	11.4		0.0061	8.3				
12	Tue	1	0.5													77			9.8	11.6		0.0146					
13	Wed	1					7.9									73			6.8	12.9		0.0071	8.1				
14	Thu	1						161	12.76	265	21.01	22	1.74			74	2077	356	9.1	12.9	XXX	0.0095		2.5	0.1982	11.7	0.9275
15	Fri	1																				0.0158					
16	Sat																										
17	Sun		0.3																								
18	Mon	1					8.0									68			9.0	13.5		0.0067	7.8				
19	Tue	1	0.3													56			6.7	12.9		0.0071					
20	Wed	1	0.6													79			7.2	12.8		0.0112					
21	Thu	1	0.2				8.0	154	16.45	358	38.24	35.7	3.81			71	1899	374	9.5	12.6		0.0128	8.3	2.6	0.2777	5.9	0.6302
22	Fri	1																				0.0132					
23	Sat																										
24	Sun																										
25	Mon																					0.0064					
26	Tue	1	0.8				8.2									80			10.0	11.9		0.0064	8.3				
27	Wed	1					8.4									81			10.3	11.7		0.006	8.5				
28	Thu	1						62	3.52	18.8	1.07	2.1	0.12			77	1748	441	10.8	11.6		0.0068		2.7	0.1532	3.4	0.1929
29	Fri																					0.0068					
30	Sat	1																									
31	Sun																										
Average		1.0						144	11.23	224	18.98	22	1.84			73	1936	381	9.0	12.09		0.00972		2.6	0.1938	6.9	0.5367
Maximum		1	3.6				8.4	200	16.45	358	38.24	35.7	3.81			85	2077	441	10.8	13.5		0.0216	8.5	2.7	0.2777	11.7	0.9275
Minimum		1					7.8	62	3.52	18.8	1.07	2.1	0.12			56	1748	352	6.7	11.1		0.006	7.8	2.4	0.1462	3.4	0.1929
Total		20	6.3	0	0																						

Sludge Hauled Off Site (Gal):

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

David L. Weist 11 JAN 07
Signature of Certified Operator Date

Sharon Lentz 1-11-07
Signature of Principal Executive Officer or Authorized Agent Date

Name of Facility: UNION SCHOOL CORPORATION		Month/Year: December 2006	
Total Monthly Flow 0.2042 mg		Percent Capacity (average flow / design) 53%	

MONTHLY REMOVAL SUMMARY				
	BOD5	S.S.	Ammonia	Phosphorus
Percent Removal	98.2	96.9	98.4	NA

Day of the Month	Final Effluent							
	D.O. (mg/l)	Residual Chlorine (mg/l) - Contact	Residual Chlorine (mg/l) - Final	E. Coli colony/100 ml	Ammonia (mg/l)	Ammonia (lbs)	Phosphorus (mg/l)	Phosphorus (lbs)
1								
2								
3								
4								
5	11.5							
6								
7	12.6				0.267	0.01627		
8								
9								
10								
11								
12	11.8							
13								
14	11.5				0.512	0.04059		
15								
16								
17								
18								
19	10.4							
20								
21	11.9				0.348	0.03717		
22								
23								
24								
25								
26	11.9							
27								
28	12.3				0.256	0.01453		
29								
30								
31								
Avg	11.7				0.34575	0.02714		
Max	12.6				0.512	0.04059		
Min	10.4				0.256	0.01453		

Enter Comments Below:

Send by 28th of the Month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

David L. Weist
Signature of Certified Operator

Sharon Sankford
Signature of Principal Executive Officer or Authorized Agent

11 JAN 07

Date

1-11-07

Date

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



IN0021024 001A
 PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD
 MO DAY YEAR MO DAY YEAR
 FROM 01 01 06 TO 01 31 06

For Any Questions call Jessica Osburn at 317-232-3591

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
OXYGEN, DISSOLVED (DO) 00300 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		9.1	*****	*****	(19)	Ø	22/31
	PERMIT REQUIREMENT	*****	*****	*****	5.0 DAILY MN	***** DAILY AV	***** DAILY MX	MG/L		WEEK-DAYS GRAB-3
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		7.7	*****	8.1	(12)	Ø	22/31
	PERMIT REQUIREMENT	*****	*****	*****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		WEEK-DAYS GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	68.889	81.067	(26)	*****	4.4	5.56	(19)	Ø	22/31
	PERMIT REQUIREMENT	548.3 MO AVG	822.4 MX WK AV	LBS/DY	*****	30 MO AVG	45 MX WK AV	MG/L		WEEK-DAYS COMP24
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	.9348	1.7575	(26)	*****	.06	.1036	(19)	Ø	22/31
	PERMIT REQUIREMENT	36.6 30DA AVG	54.8 7 DA AVG	LBS/DY	*****	2.0 30DA AVG	3.0 7 DA AVG	MG/L		WEEK-DAYS COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	1.88353	2.05057	(03)	*****	*****	*****		Ø	31/31
	PERMIT REQUIREMENT	REPORT 30DA AVG	REPORT 7 DA AVG	MGD	*****	*****	*****	*****		WEEK-DAYS TOTALZ
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	41.486	43.329	(26)	*****	2.6	2.64	(19)	Ø	22/31
	PERMIT REQUIREMENT	456.9 MO AVG	731.0 MX WK AV	LBS/DY	*****	25 MO AVG	40 MX WK AV	MG/L		WEEK-DAYS COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	58.389	(3R)	*****	*****	*****		Ø	ONCE
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL	*****	*****	*****	*****		ONCE/ MONTH RCOTOT

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Steven D. Croyle
 SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA
CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
RANDOLPH COUNTY

Winchester WWTP Influent Mass Loadings

Flow x 8.34 x conc. = lbs/day

Surge Basin Influent

Month: JAN

Year: 2006

Day	Flow	CON. CBOD/LBS	CON. TSS/LBS	CON. Ammonia-Nitrogen/LBS
1	.37	19 / 58.6	22 / 67.9	2.08 / 6.4
2	.29	57 / 137.8	56 / 135.4	4.95 / 11.9
3	.11	56.3 / 51.6	67 / 61.5	6.40 / 5.9
4	.06	Not Pumping DURING opp ATT.		
5				
6				
7				
8				
9				
10				
11				
12				
13	.13	Not Pumping DURING opp ATT.		
14				
15				
16				
17	.39	81 / 263	99 / 322	7.4 / 24.1
18	.13	66 / 71.6	51.5 / 55.8	7.62 / 8.3
19	.21	53.5 / 93.7	61.5 / 108	6.20 / 10.9
20	.07	Not pumping DURING opp ATT.		
21	.07	Week END		
22	.01	Weekend		
23	.11	NOT PUMPING DURING opp ATT.		
24	.14	64 / 74.7	82 / 95.7	10.1 / 11.8
25				
26				
27				
28				
29				
30				
31				



Monthly Report of Operation Activated Sludge Type Wastewater Treatment Plant

State Form 10829 (R/12-2005)

Page 1 of 4

Name of Facility		Permit Number	
Winchester Wastewater Treatment Plant		IN0021024	
Month	Year	Plant Design Flow	Telephone Number
January	2006	2.19 mgd	765-584-1331
Facility's e-mail address (if available):		Winchesterwwtp@verizon.net	
Certified Operator: Name	Class	Certificate Number	Expiration Date
Christopher W. Martin	III	16763	6/30/2006

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature (Optional)	Total= 2.55	Bypass At Plant Site ("x" if Occurred)	Collection System Overflow ("x" if Occurred)	CHEMICALS USED			RAW SEWAGE								
				Precipitation - Inches			Chlorine - Lbs	Lbs or Gal	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l	
29	Thu	Fill in December's effluent data on page 3 as necessary for correct weekly average calculations.							3.4291									
30	Fri								1.3309									
31	Sat								1.73									
1	Sun			0.8					1.8222									
2	Mon								1.7113	7.6	26	371.078	30	428.167		2.74		
3	Tue			0.1					1.6609	7.6	68	941.93	62	858.818		4.99		
4	Wed								4.7723	7.5	41.6	1655.72	40	1592.04		6.71		
5	Thu								1.8295	7.6	92	1403.74	19	289.903		7.2		
6	Fri								1.3738	7.5	51	584.332	76.8	879.935		7.59		
7	Sat								1.003									
8	Sun								1.5165									
9	Mon								1.3756	7.7	49.5	567.889	52	596.57		6.9		
10	Tue			0.1					1.379	7.8	58	667.05	16	184.014		9.1		
11	Wed			0.4					1.3562	8.0	15	169.661	59	667.332		9.28		
12	Thu								1.2143	7.7	77	779.799	63	638.018		8.34		
13	Fri			0.25					1.6953	7.9	69	975.577	24	339.331		9.7		
14	Sat								1.4001									
15	Sun								4.0691									
16	Mon								1.2973	7.6	27	292.126	18.8	203.406		4.85		
17	Tue			0.3					1.6179	7.6	69	931.037	52	701.651		8.7		
18	Wed								1.6241	8.0	74	1002.33	99	1340.95		7		
19	Thu								1.7443	7.6	49	712.826	48	698.278		5.92		
20	Fri								1.8253	7.6	44	669.812	65	989.495		6.47		
21	Sat								1.686									
22	Sun								1.5374									
23	Mon								1.4696	7.5	41	502.515	61.5	753.773		4.71		
24	Tue								1.3313	7.6	70	777.213	59.6	661.741		7.92		
25	Wed								1.2685	7.7	57	603.02	70	740.55		7.9		
26	Thu								1.1601	7.4	85	822.395	31	299.932		7.73		
27	Fri								1.171	7.6	78	761.759	52	507.839		9.7		
28	Sat			0.6					1.1859									
29	Sun								1.273									
30	Mon								1.1892	7.6	59.4	589.125	89.7	889.638		6.04		
31	Tue								1.0952	7.5	59.4	542.558	48	438.43		11.8		
Average									1.63404		57	741.977	52	668.173		7.331		
Maximum				0.8					4.7723	8.0	92	1655.72	99	1592.04		11.8		
Minimum									1.003	7.4	15	169.661	16	184.014		2.74		
No. of Data				7	0	0	0	0	31	22	22	22	22	22	0	22		

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

	2/6/06
(SIGNATURE OF CERTIFIED OPERATOR)	(DATE)
	6 Feb 06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	(DATE)

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

Name of Facility: Winchester Wastewater Treatment Plant
 Permit Number: IN0021024
 For Month Of: January
 Year: 2006

CBW 2/6/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
ST 6 Feb 06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 2 of 4 State Form 10829 (R/12-2005)

Day Of Month	PRIMARY EFFLUENT		AERATION							SECONDARY EFFLUENT		FINAL EFFLUENT					
	CBOD5 - mg/l	Susp. Solids - mg/l	Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Temperature - F	Volume - MG	Susp. Solids - mg/l	CBOD5 - mg/l	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
1								4.3396									
2	24	59	74.3	4865	153	5.9	13	3.9757	5784	1.8	3.6				7.9	9.6	
3	52	61	68.5	4550	151	6.9	13	4.1213	5943	1.9	4.4				7.8	9.7	
4	39.6	38	72.8	3953	184	6.8	11	3.8981	5495	1.9	4.3				8.1	9.7	
5	42	40	59.5	3820	156	7.0	13	3.9652	5347	1.9	7.7				8.0	9.8	
6	55	67	63	4001	157	6.8	11	3.9958	5241	2	4.8				7.9	10.2	
7								4.0155									
8								3.8847									
9	24.8	43	77	4427	174	6.9	12	3.9653	5826	2.9	3.5				7.7	9.9	
10	46	76.5	65	4422	147	6.8	12	3.9788	5829	2.3	3.4				7.9	10.4	
11	14	35	62	3961	157	5.6	11	3.8378	5733	2.5	3.8				7.9	9.9	
12	66	75	69.8	4555	153	4.3	12	3.876	5901	2.4	4.4				7.9	9.1	
13	48	28	75.3	4311	175	4.6		4.1865	5773	1.8	3.6				8.1	9.9	
14								3.1818									
15								4.1857									
16	64	55.7	61	4687	130	3.2		3.7533	6853	1.9	1.7				7.9	9.9	
17	62	72	63.3	4476	141	4.4		3.8791	6193	2.1	1.3				7.9	9.7	
18	38	30	63.5	4283	148	6.0		3.7383	6360	3.1	4.3				7.9	10.0	
19	75	79	78.8	4396	179	7.4	12	3.8311	6482	2.2	3.5				7.8	10.3	
20	45	54	73	4411	165	6.5	13	4.1313	6724	2	5				7.9	10.1	
21								3.6545									
22								3.6102									
23	49	53.3	67.3	4536	148	5.4	12	3.8729	6879	2.1	2.3				7.9	10.0	
24	63	109.1	66.3	4409	150	6.3	12	3.6815	6221	3	3.7				7.9	9.9	
25	42	54	65	4248	153	7.3	11	3.7031	5475	2	5.1				7.8	10.3	
26	67	55	65.8	4286	154	6.5	12	3.8181	6239	2.9	5.7				7.9	10.4	
27	59	91	66	4282	154	7.5	11	4.0029	6170	2.5	4.5				7.9	10.5	
28								3.9061									
29								3.573									
30	46.4	84.9	70	4354	161	5.8	13	3.8255	6608	4.2	9.4				7.8	10.3	
31	62.4	172	70	4616	152	6.8	12	3.855	6907	3.9	6.7				7.8	10.5	
Avg.	49.3	65.1	68	4357	156	6.1	12	3.8788	6090	2.4	4.4					10.0	
Max.	75	172	78.8	4865	184	7.5	13	4.3396	6907	4.2	9.4				8.1	10.5	
Min.	14	28	59.5	3820	130	3.2	11	3.1818	5241	1.8	1.3				7.7	9.1	
Data	22	22	22	22	22	22	18	31	22	22	22	0	0	0	22	22	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

Name of Facility: Winchester Wastewater Treatment Permit Number: IN0021024 For Month Of: January Year: 2006

(SIGNATURE OF CERTIFIED OPERATOR) *C.B.W. M.S.* 2/6/06
(DATE)
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) *Stan D. G...* 6 Feb 06
(DATE)

Page 3 of 4 State Form 10829 (R/12-2005)

Day Of Month	FINAL EFFLUENT															
	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average	Oil & Grease - mg/l	
29	1.851		3.4		52.51842		3.2		49.4291		0.022		0.339825			
30	1.455		1.9		23.06975		6		72.85185		0.022		0.267123			
31	1.73															
1	1.8842															
2	1.7446		2		29.117		3		43.676		0.022		0.3203			
3	1.8027		2.7		40.618		8.2		123.36		0.022		0.331			
4	1.623		2		27.088		7.2		97.516		0.0089		0.1205			
5	1.7468		1.9		27.696		4.6		67.054		0.0243		0.3542			
6	1.8407		2.9		44.546		4.8		73.731		0.0395		0.6067			
7	1.73	1.76743		2.3		33.813		5.56		81.067		0.0233		0.3466		
8	1.6301															
9	1.7596		1.8		26.431		3.2		46.988		0.0439		0.6446			
10	1.9445		3		48.681		3.8		61.662		0.035		0.5679			
11	1.5		2.6		32.546		4.5		56.329		0.031		0.388			
12	1.939		2.5		40.452		3.2		51.779		0.036		0.5825			
13	2.0832		1.9		33.03		3.5		60.845		0.05		0.8692			
14	1.5916	1.77829		2.36		36.228		3.64		55.521		0.0392		0.6105		
15	2.1131															
16	1.9798		2.3		37.999		0.7		11.565		0.083		1.3713			
17	2.0602		2.8		48.139		2		34.385		0.062		1.0659			
18	2.0287		2.8		47.403		3.3		55.867		0.051		0.8634			
19	2.1675		2.5		45.219		3.6		65.116		0.051		0.9225			
20	2.0637		2.2		37.887		3.6		61.998		0.055		0.9472			
21	1.941	2.05057		2.52		43.329		2.64		45.786		0.0604		1.0341		
22	1.9757															
23	1.8223		2.3		34.976		2.5		38.018		0.026		0.3954			
24	1.5865		3		39.718		4.9		64.873		0.019		0.2515			
25	1.6883		2.2		30.995		3.8		53.538		0.01		0.1409			
26	2.0841		2.8		48.697		5.2		90.437		0.403		7.0089			
27	1.979		2.9		47.893		7.1		117.25		0.06		0.9909			
28	1.8976	1.86193		2.64		40.456		4.7		72.824		0.1036		1.7575		
29	1.9831															
30	2.0834		4.5		78.237		7.7		133.87		0.052		0.9041			
31	2.1154		3.7		65.316		6		105.92		0.052		0.918			
Avg.	1.88353		2.6		41.486		4.4		68.899		0.06		0.9348			
Max.	2.1675	2.05057	4.5	2.64	78.237	43.329	8.2	5.56	133.87	81.067	0.403	0.1036	7.0089	1.7575		
Min.	1.5	1.76743	1.8	2.3	26.431	33.813	0.7	2.64	11.565	45.786	0.0089	0.0233	0.1205	0.3466		
Data	31	4	22	4	22	4	22	4	22	4	22	4	22	4	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow: (million gallons) 58.389
Percent Removal	BOD5	S.S.	Ammonia	Phosphorus	Percent Capacity (actual flow/design) 86%
Primary Treatment	13.9	-26.1			
Secondary Treatment	95.1	93.2			
Tertiary Treatment	-7.5	0.3			
Overall Treatment	95.5	91.5	99.2	NA	

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

Name of Facility: Winchester Wastewater
Permit Number: IN0021024
For Month Of: January
Year: 2006

Page 4 of 4 State Form 10829 (R/12-2005)

C. W. [Signature] 2/6/06
(SIGNATURE OF CERTIFIED OPERATOR) (Date)
[Signature] C. [Signature]
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION												
	Primary Sludge Gal. x 1000	Waste Act. Sludge Gal. x 1000	Anaerobic Only			Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000			
			pH	Gas Production Cubic Ft. x 1000	Temperature - F										
1	44.74														
2	42.52	41.15													
3	43.87	45.93										40			
4	43.43	35.24													
5	42.5														
6	44.03														
7	44.07														
8	44.28														
9	43.84	13.19													
10	43.42														
11	43.32														
12	43.42														
13	57.2	33.67													
14	24.5														
15	47.06														
16	43.09														
17	41.78	40.8													
18	42.11														
19	43.02											25.852			
20	43.41	24.56													
21	44.03														
22	43.18														
23	43.66	19.23													
24	43.25	46.94													
25	43.26	9.86													
26	43.69														
27	43.56														
28	58.44														
29	29.37														
30	43.81														
31	43.5														
Avg.	43.399	31.057										32.926			
Max.	58.44	46.94										40			
Min.	24.5	9.86										25.852			
Data	31	10	0	0	0	0	0	0	0	0	0	2	0	0	

Send completed forms by the 28th of the month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



For Any Questions call Jessica Osburn at 317-232-3591

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

Revised:



IN0021024
 PERMIT NUMBER
 001A
 DISCHARGE NUMBER

MONITORING PERIOD

MO DAY YEAR TO MO DAY YEAR
 02 01 06 TO 02 28 06

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
OXYGEN, DISSOLVED (DO) 00300 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		9.9	*****	*****	(19)		
	PERMIT REQUIREMENT	*****	*****	*****	5.0 DAILY MN	***** DAILY AV	***** DAILY MX	MG/L		
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		7.7	*****	7.9	(12)		
	PERMIT REQUIREMENT	*****	*****	*****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		
SOLIDS, TOTAL SUSPENDED 00530 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	112.2	144.22	(26)	*****	6.4	8.0	(19)		
	PERMIT REQUIREMENT	548.3 MO AVG	822.4 MX WK AV	LBS/DY	*****	30 MO AVG	45 MX WK AV	MG/L		
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	36.73	84.36	(26)	*****	0.2	0.469	(19)		
	PERMIT REQUIREMENT	36.6 30DA AVG	54.8 7 DA AVG	LBS/DY	*****	2.0 30DA AVG	3.0 7 DA AVG	MG/L		
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	206432	2.1551	(03)	*****	*****	*****			
	PERMIT REQUIREMENT	REPORT 30DA AVG	REPORT 7 DA AVG	MGD	*****	*****	*****	*****		
MERCURY TOTAL RECOVERABLE 71901 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	6.85	7.9	(3M)		
	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT	REPORT DAILY MX	NG/L		
MERCURY TOTAL RECOVERABLE 71901 G 0 1 RAW SEW/INFLUENT	SAMPLE MEASUREMENT	*****	*****		*****	20.3	20.3	(3M)		
	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT	REPORT DAILY MX	NG/L		

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

Steven J. Croyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIV
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 846 945 03 15 06

AREA
CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021024		001A	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
02	01	06	02 28 06

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



For Any Questions call Jessica Osburn at 317-232-3591

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	48.991	66.034	(26)	*****	2.8	3.68	(19)		20/28	Comp
	PERMIT REQUIREMENT	456.9 MO AVG	731.0 MX WK AV	LBS/DY	*****	25 MO AVG	40 MX WK AV	MG/L		WEEK-DAYS	COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	57.801	(3R)	*****	*****	*****			ONCE	RCOTOT
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL	*****	*****	*****	*****		ONCE/MONTH	RCOTOT
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

Steven D Croyle

TYPED OR PRINTED

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SIGNATURE OF PRINCIPAL EXECUTIV
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
RANDOLPH COUNTY

Winchester WWTP Influent Mass Loadings

Flow x 8.34 x conc. = lbs/day

Surge Basin Influent

Month: FEB

Year: 2006

Day	Flow	Con. CBOD/lbs	Con. TSS/lbs	Con. Ammonia-Nitrogen/lbs
1				
2	.30	64.1 \ 160.4	33 \ 82.6	9.94 \ 24.9
3	.27			
4	.68			
5	.25	36 \ 75.1	27 \ 56.3	3.91 \ 8.15
6	.09	49 \ 36.8	46.5 \ 34.9	7.46 \ 5.59
7	.008	59 \ 3.9	36.5 \ 2.4	6.66 \ .44
8				
9				
10				
11				
12				
13				
14				
15				
16	.28	46 \ 154	38 \ 88.7	5.7 \ 13.3
17	.14			
18	.42			
19				
20				
21	.0008	84 \ .56	76 \ .51	7.56 \ .05
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

CBWMS
3/14/06

EXECUTIVE SUMMARY - Detection Highlights

A6B270166

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SAMPLE EEF 02/23/06 11:30 001				
Mercury	7.9	0.50	ng/L	CFR136A 1631E
SAMPLE DUP 02/23/06 11:30 002				
Mercury	5.8	0.50	ng/L	CFR136A 1631E
SAMPLE INF 02/23/06 11:30 003				
Mercury	20.3	2.5	ng/L	CFR136A 1631E



Page 1 of 4

Name of Facility		Permit Number	
Winchester Wastewater Treatment Plant		IN0021024	
Month	Year	Plant Design Flow	Telephone Number
February	2006	2.19 mgd	765-584-1331
Facility's e-mail address (if available):		Winchesterwwtp@verizon.net	
Certified Operator: Name	Class	Certificate Number	Expiration Date
Christopher W. Martin	III	16763	6/30/2006

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature (Optional)	Total=	Bypass At Plant Site ("x" if Occurred)	Collection System Overflow ("x" if Occurred)	CHEMICALS USED			RAW SEWAGE							
				1.1			Precipitation - Inches	Chlorine - Lbs	Lbs or Gal	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l
1	Wed									1.1269	7.6	57	535.706	42	394.731		11.5
2	Thu									1.5474	7.6	54.5	703.34	60	774.319		13.1
3	Fri									1.6343	7.8	70	954.104	94	1281.23		11.4
4	Sat			0.4						1.8119							
5	Sun									1.7168							
6	Mon									1.6635	7.6	67	929.531	19	263.598		4.63
7	Tue									1.5926	7.5	48	637.55	69	916.478		8.45
8	Wed			0.1						1.4997	7.5	52	650.39	55	687.912		4.24
9	Thu									1.3865	7.6	71	821.002	39	450.973		6.41
10	Fri									1.2452	7.7	72	747.718	26	270.009		12.1
11	Sat			0.3						1.27							
12	Sun									1.3371							
13	Mon									1.2727	7.7	29	307.815	16.3	173.013		4.82
14	Tue									1.2182	7.7	102	1036.3	78	792.463		10.3
15	Wed									1.3419	7.6	80	895.316	91.8	1027.37		10.9
16	Thu									1.3114	7.5	71.5	782.001	40	437.483		9.7
17	Fri			0.3						1.5837	7.7	59.3	783.238	39	515.114		10.2
18	Sat									1.4165							
19	Sun									1.2945							
20	Mon									1.3104	7.8	31	338.791	69	754.083		6.55
21	Tue									1.2574	7.7	42	440.442	28	293.628		8.38
22	Wed									1.1624	7.6	63	610.748	51	494.415		8.13
23	Thu									1.0477	7.6	80	699.025	46	401.94		8.86
24	Fri									1.1419	7.8	69	657.118	25	238.086		8.74
25	Sat									1.0004							
26	Sun									0.9393							
27	Mon									0.9768	7.7	65	529.523	59	480.644		7.7
28	Tue									0.9671	7.6	66	532.331	68	548.462		13.1
Average										1.32408		62	679.599	51	559.798		8.961
Maximum				0.4						1.8119	7.8	102	1036.3	94	1281.23		13.1
Minimum										0.9393	7.5	29	307.815	16.3	173.013		4.24
No. of Data				4	0	0	0	0	0	28	20	20	20	20	20	0	20

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR) 3/14/06
(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) 15 March 06
(DATE)

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

Name of Facility: Winchester Wastewater Treatment Plant
 Permit Number: IN0021024
 For Month Of: February
 Year: 2006

[Signature] 3/14/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
[Signature] 15 March 06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 2 of 4 State Form 10829 (R/12-2005)

Day Of Month	PRIMARY EFFLUENT		AERATION							SECONDARY EFFLUENT		FINAL EFFLUENT					
	CBOD5 - mg/l	Susp. Solids - mg/l	Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Temperature - F	Volume - MG	Susp. Solids - mg/l	CBOD5 - mg/l	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
1	49.1	70	73.8	4562	162	7.3	11	3.8241	5767	3.1	7.3				7.7	10.8	
2	57.8	104	68.3	4706	145	8.1	10	3.8478	6299	4.1	9.3				7.9	10.3	
3	47	75	68.5	4329	158	7.7	11	3.7796	6721	5.1	6.9				7.9	10.1	
4								4.0272									
5								3.9033									
6	32	42	69	4552	152	7.9	12	3.8683	6849	1.6	5.2				7.8	10.5	
7	49	65	73	4747	154	7.6	11	3.8762	6622	1.8	4.5				7.9	10.4	
8	55	97	71.3	5027	142	6.4	12	3.8869	7473	1.6	3.7				7.8	10.1	
9	46	37	79.5	5133	155	7.1	11	3.8905	7162	2.2	7.5				7.8	10.4	
10	40	62	64	4983	128	7.3	11	3.5316	6881	1.6	2				7.9	10.2	
11								3.933									
12								4.2253									
13	32	83	54.3	5253	103	7.0	11	3.8963	6724	3	7.3				7.9	10.4	
14	47	72	57.3	4545	126	7.2	11	3.8429	6450	3.3	6.4				7.9	10.2	
15	60	66.9	62.3	4711	132	7.7	11	3.9086	6656	3.2	7.1				7.7	10.5	
16	39	32	58.8	5239	112	6.5	12	3.9363	6977	2.7	7.3				7.9	9.9	
17	47.9	29	64.5	4873	132	6.7	11	3.999	6846	2.2	4.6				7.8	10.2	
18								3.8831									
19								3.7314									
20	20	43	70.5	5251	134	7.1	12	3.8706	7570	1.9	5				7.9	10.2	
21	62	62.5	63.5	5031	126	7.6	11	3.8792	7263	1.9	4.3				7.8	10.3	
22	56	98	61	4908	124	7.5	10	3.946	6059	3.1	5.7				7.8	10.1	
23	43	32	64.3	5329	121	7.7	10	3.8595	6423	3.8	7				7.8	10.4	
24	45	28	56.8	4517	126	7.3	11	4.0961	6008	2.8	7.5				7.8	10.2	
25								3.9137									
26								3.6289									
27	32	72	59	4703	125	6.3	9	3.8315	7421	3.9	9.5				7.9	10.4	
28	53	95	60.5	4722	128	7.7	9	3.8351	6526	3.8	11.3				7.8	10.6	
Avg.	45.6	63.3	65	4856	134	7.3	11	3.8804	6735	2.8	6.5					10.3	
Max.	62	104	79.5	5329	161.77	8.1	12	4.2253	7570	5.1	11.3				7.9	10.8	
Min.	20	28	54.3	4329	103.37	6.3	9	3.5316	5767	1.6	2				7.7	9.9	
Data	20	20	20	20	20	20	20	28	20	20	20	0	0	0	20	20	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):

Name of Facility	Permit Number	For Month Of:	Year
Winchester Wastewater Treatment	IN0021024	February	2006

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT)

(DATE)

Page 3 of 4 State Form 10829 (R/12-2005)

MONTHLY REMOVAL SUMMARY					Total Monthly Flow: (million gallons)	57.801
Percent Removal	BOD5	S.S.	Ammonia	Phosphorus	Percent Capacity (actual flow/design)	94%
Primary Treatment	26.9	-24.7				
Secondary Treatment	93.8	89.8				
Tertiary Treatment	1.6	1.7				
Overall Treatment	95.5	87.5	99.8	NA		

Name of Facility	Permit Number	For Month Of:	Year
Winchester Wastow	IN0021024	February	2006

(Date)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR
AUTHORIZED AGENT)

(Date)

Page 4 of 4 State Form 10829 (R/12-2005)

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
ADDRESS WINCHESTER CITY HALL
113 E WASHINGTON ST
WINCHESTER IN 47394
FACILITY WINCHESTER MUNICIPAL WWTP
LOCATION WINCHESTER
ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



* 1 N 0 0 2 1 0 2 4 0 0 1 A 0 3 0 6 *

Revised:

☐

IN0021024	001A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
MO	DAY	YEAR	TO	MO	DAY	YEAR
03	01	06		03	31	06

For Any Questions call Jessica Osburn at 317-232-3591

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		9.5	*****	*****	(19)		23/31	Grab
00300 1 2 0	PERMIT	*****	*****	*****	5.0	*****	*****	MG/L		WEEK-DAYS	GRAB-3
EFFLUENT GROSS VALUE	REQUIREMENT				DAILY MN	DAILY AV	DAILY MX				
PH	SAMPLE MEASUREMENT	*****	*****		7.3	*****	8.1	(12)		23/31	Grab
00400 1 0 0	PERMIT	*****	*****	*****	6.0	*****	9.0	SU		WEEK-DAYS	GRAB
EFFLUENT GROSS VALUE	REQUIREMENT				MINIMUM		MAXIMUM				
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	89.838	135.91	(26)	*****	6.0	8.92	(19)		23/31	Comp 24
00530 1 2 0	PERMIT	548.3	822.4	LBS/DY	*****	30	45	MG/L		WEEK-DAYS	COMP24
EFFLUENT GROSS VALUE	REQUIREMENT	MO AVG	MX WK AV			MO AVG	MX WK AV				
NITROGEN, AMMONIA TOTAL (AS N)	SAMPLE MEASUREMENT	.4783	.6004	(26)	*****	.03	.0425	(19)		23/31	Comp 24
00610 1 2 0	PERMIT	36.6	54.8	LBS/DY	*****	2.0	3.0	MG/L		WEEK-DAYS	COMP24
EFFLUENT GROSS VALUE	REQUIREMENT	30DA AVG	7 DA AVG			30DA AVG	7 DA AVG				
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	1.83832	2.0759	(03)	*****	*****	*****			31/31	Total
50050 1 0 0	PERMIT	REPORT	REPORT	MGD	*****	*****	*****	*****		WEEK-DAYS	TOTALZ
EFFLUENT GROSS VALUE	REQUIREMENT	30DA AVG	7 DA AVG								
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	48.167	55.392	(26)	*****	3.2	3.84	(19)		23/31	Comp 24
80082 1 2 0	PERMIT	456.9	731.0	LBS/DY	*****	25	40	MG/L		WEEK-DAYS	COMP24
EFFLUENT GROSS VALUE	REQUIREMENT	MO AVG	MX WK AV			MO AVG	MX WK AV				
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	56.988	(3R)	*****	*****	*****			ONCE	RCOTOT
82220 1 0 0	PERMIT	*****	REPORT	MGAL	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT
EFFLUENT GROSS VALUE	REQUIREMENT		MO TOTAL								

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

Steven D. Croyle
TYPED OR PRINTED

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Steven D. Croyle
SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
765 584-6845		04	10	06
AREA CODE	NUMBER	MO	DAY	YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

Winchester WWTP Influent Mass Loadings

Flow x 8.34x conc. = lbs/day

Surge Basin Influent

Month: *MARCH*

Year: *2006*

Day	Flow	Conc. CBOD/LBS	Conc. TSS/LBS	Conc. Ammonia-Nitrogen/LBS
1	<i>.25</i>	<i>91 / 189</i>	<i>78.5 / 164</i>	<i>None RAN DW DID Testing</i>
2				
3				
4				
5				
6				
7				
8				
9	<i>.33</i>	<i>61 / 168</i>	<i>42 / 116</i>	<i>7.6 / 20.9</i>
10				
11				
12	<i>3.1</i>	<i>22.8 / 589.5</i>	<i>6.5 / 169</i>	<i>2.4 / 62</i>
13	<i>1.3</i>	<i>37.1 / 402</i>	<i>41 / 445</i>	<i>3.04 / 33</i>
14	<i>.35</i>	<i>64 / 187</i>	<i>54.5 / 159</i>	<i>4.8 / 14</i>
15	<i>.003</i>	<i>64 / 1.6</i>	<i>436 / 1.1</i>	<i>6.49 / .019</i>
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

CBW AS



**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

State Form 10829 (R/12-2005)

Page 1 of 4

Name of Facility		Permit Number	
Winchester Wastewater Treatment Plant		IN0021024	
Month	Year	Plant Design Flow	Telephone Number
March	2006	2.19 mgd	765-584-1331
Facility's e-mail address (if available): Winchesterwwtp@verizon.net			
Certified Operator: Name		Class	Certificate Number
Christopher W. Martin		III	16763
		Expiration Date	6/30/2006

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature (Optional)	Total= 2.35	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				Precipitation - Inches			Chlorine - Lbs	Lbs or Gal	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Wed									0.6275	7.5	56.5	295.684	105	549.502		13.1
2	Thu									0.8883	7.6	111	822.335	58	429.688		12.9
3	Fri									0.8948	7.4	83	619.398	50	373.132		14.7
4	Sat									1.036							
5	Sun									1.3114							
6	Mon			0.1						0.9073	7.7	93.8	709.774	32	242.14		15
7	Tue			0.03						0.8486	7.5	108	764.351	33.4	236.383		10.3
8	Wed			0.07						1.033	7.5	92	792.6	41	353.224		14
9	Thu			0.21						1.4784	7.8	87	1072.7	52	641.153		12.2
10	Fri			0.5						1.7928	7.7	66	986.829	122	1824.14		7.3
11	Sat									1.4189							
12	Sun			1.11						1.8598							
13	Mon			0.06						1.6553	7.8	24.4	336.847	10.5	144.955		4.6
14	Tue			0.04						1.6867	7.4	35.4	497.975	18	253.207		2.87
15	Wed									1.6748	7.5	65	907.909	48	670.456		5.6
16	Thu									1.5645	7.7	60	782.876	35.3	460.592		5.62
17	Fri			0.01						1.3396	7.5	63	703.853	118	1318.33		6.24
18	Sat									1.5155							
19	Sun									1.214							
20	Mon									1.2015	7.7	61	611.251	32.5	325.667		5.73
21	Tue									1.168	7.5	76	740.325	27	263.01		10.8
22	Wed						35	30		1.1489	7.5	83	795.292	67	641.982		11.8
23	Thu						40	30		1.0581	7.6	65	573.596	181	1597.24		9.73
24	Fri						40	30		0.9689	7.6	69	557.563	40	323.225		10.8
25	Sat			0.13			40	31		0.945							
26	Sun						40	30		1.111							
27	Mon						40	30		0.9883	7.5	35	288.485	26.5	218.424		5.76
28	Tue			0.08			40	30		0.9324	7.5	67	521.006	52	404.363		12.1
29	Wed			0.01			40	30		0.9313	7.6	68	528.159	33	256.312		11.1
30	Thu						40	30		0.9118	7.4	70	532.309	61	463.869		12.4
31	Fri						40	30		1.8427	7.6	56	860.615	72	1106.5		12.8
Average							39.5	30.1		1.22436		69	665.293	57	569.456		9.889
Maximum				1.11			40	31		1.8598	7.8	111	1072.7	181	1824.14		15
Minimum							35	30		0.6275	7.4	24.4	288.485	10.5	144.955		2.87
No. of Data				12	0	0	10	10	0	31	23	23	23	23	23	0	23

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT)

(DATE)

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

4-7-06

(SIGNATURE OF CERTIFIED OPERATOR) (DATE)

10 Apr 06

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Name of Facility: Winchester Wastewater Treatment Plant Permit Number: IN0021024 For Month Of: March Year: 2006

Page 2 of 4 State Form 10829 (R/12-2005)

Day Of Month	PRIMARY EFFLUENT		AERATION							SECONDARY EFFLUENT		FINAL EFFLUENT					
	CBOD5 - mg/l	Susp. Solids - mg/l	MIXED LIQUOR				RETURN SLUDGE			CBOD5 - mg/l	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
			Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Temperature - F	Volume - MG	Susp. Solids - mg/l								
1	114	95	69	5311	130	8.2	10	3.2863		4.2	11.9				7.7	9.9	
2	72	103	57.8	4967	116	4.5	10	4.0655	6841	4.1	9.1				7.6	10.3	
3	50	35	63.5	4956	128	7.2	10	4.3696	6754	3.1	7.7				7.5	10.5	
4								3.8036									
5								4.0054									
6	44.4	120	66.8	5089	131	5.6	11	4.0112	7127	2.9	5.9				8.1	10.4	
7	71	90.2	69.3	5302	131	1.8	13	3.9407	7128	4.1	7.6				7.8	10.2	
8	52	23	76.8	5189	148	7.0	11	4.0514	6825	3.2	6				7.8	10.5	
9	57	55	69.3	5172	134	4.8	12	4.0791	6443	3.3	5.6				7.9	9.6	
10	55	78	60	4926	122	5.4	13	4.1542	7470	2.9	5.7				7.9	9.7	
11								3.165									
12								4.4158									
13	24.2	3.3	54	4829	112	7.0	13	3.8635	7233	2	1.2				7.9	9.6	
14	33.3	63.5	52.5	5078	103	6.8	12	3.886	7034	1.9	5.1				7.8	10.2	
15	40	60	55.5	5228	106	6.6	12	4.0099	6905	2.1	7.5				7.9	10.0	
16	50	30	54.8	4514	121	6.8	11	3.7402	6908	2.5	4.4				7.8	10.1	
17	63	58	59.8	4751	126	7.2	11	3.8427	6743	2.5	7.1				7.8	10.1	
18								4.1506									
19								4.0404									
20	34	58	56	5134	109	6.8	11	3.9246	6579	3.1	6.6				7.3	10.3	
21	50	40.5	58	5128	113	6.6	11	3.9242	7015	3.5	4.3				7.8	10.6	
22	39	21	68.5	5634	122	7.3	10	3.9551	7347	3.3	6.3	0.69	0.03	12	7.8	11.6	
23	45	83	58.5	5385	109	7.0	10	3.9564	7201	3.7	5				7.8	10.1	
24	41	30	64.5	5289	122	7.8	11	3.5501	6870	2.8	4.8	1.13	0.05	105	7.9	10.3	
25								4.023				1.31	0.01	74			
26								4.3181				1.35	0.06	70			
27	47	69	68.3	5465	125	6.7	12	3.9333	7530	3.3	9	0.8	0.01	76	7.7	10.2	
28	61	118.5	63.8	6287	101	5.0	12	3.9634	7652	4.4	7.5	0.9	0.04	92	7.6	10.0	
29	50	103	66.8	5406	124	5.6	12	4.0912	6715	3.5	10.1	2	0.03	11	7.6	10.1	
30	56	77	57	5138	111	6.4	12	3.9551	6632	3.2	3.9	1.06	0.01	28	7.5	9.8	
31	54	75	59.5	5694	104	4.7	14	4.2691	6656	3.9	5.9	2.26	0.03	36	7.5	9.5	
Avg.	52.3	64.7	62	5212	120	6.2	11	3.9595	6982	3.2	6.4	1.2778	0.03	43		10.2	
Max.	114	120	76.8	6287	148.01	8.2	14	4.4158	7652	4.4	11.9	2.26	0.06	105	8.1	11.6	
Min.	24.2	3.3	52.5	4514	101.48	1.8	10	3.165	6443	1.9	1.2	0.69	0.01	11	7.3	9.5	
Data	23	23	23	23	23	23	23	31	22	23	23	9	9	9	23	23	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):
 started up chlorine and sulfur dioxide on 3-22-06 to make sure system was operational and to get set up for ecoli season.

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

Name of Facility: Winchester Wastewater Treatment
 Permit Number: IN0021024
 For Month Of: March
 Year: 2006

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

Page 3 of 4 State Form 10829 (R/12-2005)

Day Of Month	FINAL EFFLUENT															
	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average	Oil & Grease - mg/l	
1	0.9917		3.5		28.965		10		82.757		0.01		0.0828			
2	1.8345		4.8		73.483		8.4		128.59		0.01		0.1531			
3	2.2367		2.6		48.53		6.7		125.06		0.01		0.1867			
4	1.249	1.80144		3.6		55.392		8.92		135.91		0.0082		0.1246		
5	1.704															
6	1.93		3.2		51.539		3.9		62.813		0.0402		0.6475			
7	1.8219		4.3		65.376		7.6		115.55		0.0163		0.2478			
8	1.4144		2.9		34.229		4.1		48.393		0.0281		0.3317			
9	1.8227		3.5		53.237		5.1		77.573		0.069		1.0495			
10	1.9304		3.4		54.771		7.75		124.85		0.028		0.4511			
11	1.3965	1.71713		3.46		51.83		5.69		85.835		0.0363		0.5455		
12	2.2348															
13	2.0463		2.1		35.86		2.3		39.276		0.0372		0.6352			
14	2.1325		1.3		23.134		4		71.183		0.0216		0.3844			
15	2.0575		2.1		36.057		4.2		72.113		0.0321		0.5512			
16	1.9699		2.3		37.809		4		65.755		0.0206		0.3386			
17	2.002		2.2		36.755		6.95		116.11		0.0425		0.71			
18	2.0883	2.0759		2		33.923		4.29		72.888		0.0308		0.5239		
19	1.9799															
20	2.0399		3.1		52.771		5.7		97.031		0.0654		1.1133			
21	2.081		3.2		55.571		5		86.83		0.0117		0.2032			
22	1.8091		3.3		49.82		5.9		89.072		0.0084		0.1268			
23	1.7878		4.1		61.169		7.5		111.89		0.0399		0.5953			
24	1.7811		3.2		47.562		7.2		107.02		0.0129		0.1917			
25	2.11	1.94126		3.38		53.379		6.26		98.368		0.0277		0.4461		
26	2.1082															
27	1.9527		1.3		21.184		6		97.772		0.0467		0.761			
28	1.3748		5.3		60.805		4.8		55.069		0.0419		0.4807			
29	1.733		4.6		66.525		7.6		109.91		0.0301		0.4353			
30	1.6551		3.4		46.96		5.6		77.346		0.0321		0.4434			
31	1.7122	1.756	4.6	3.84	65.726	52.24	7.3	6.26	104.3	88.88	0.0617	0.0425	0.8816	0.6004		
Avg	1.83832		3.2		48.167		6.0		89.838		0.03		0.4783			
Max	2.2367	2.0759	5.3	3.84	73.483	55.392	10	8.92	128.59	135.91	0.069	0.0425	1.1133	0.6004		
Min	0.9917	1.71713	1.3	2	21.184	33.923	2.3	4.29	39.276	72.888	0.0084	0.0082	0.0828	0.1246		
Data	31	5	23	5	23	5	23	5	23	5	23	5	23	5	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow:	
Percent Removal	BOD5	S.S.	Ammonia	Phosphorus	(million gallons)	56.988
Primary Treatment	24.6	-13.2			Percent Capacity (actual flow/design) 84%	
Secondary Treatment	93.9	90.0				
Tertiary Treatment	-1.1	7.2				
Overall Treatment	95.3	89.5	99.7	NA		

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

Name of Facility: Winchester Wastewater
 Permit Number: IN0021024
 For Month Of: March
 Year: 2006

[Signature] 4-7-06
 (SIGNATURE OF CERTIFIED OPERATOR) (Date)
[Signature] 10 Apr 06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Page 4 of 4 State Form 10829 (R/12-2005)

Day Of Month	SLUDGE TO DIGESTER		Anaerobic Only			DIGESTER OPERATION									
	Primary Sludge Gal. x 1000	Waste Act. Sludge Gal. x 1000	pH	Gas Production Cubic Ft. x 1000	Temperature - F	Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000			
1	28.24														
2	42.43														
3	57.94														
4	28.75														
5	43.43														
6	43.31	32.04													
7	43.24														
8	43.21	24.19													
9	14.68	21.96													
10	49.76														
11	35.63														
12	43.23	8.64													
13	42.51	19.16													
14	42.65														
15	43.03														
16	43.53														
17	44.5											42.738			
18	43.77	57.32													
19	44.07														
20	43.9														
21	43.99														
22	43.65	20.71													
23	43.77														
24	34.87											21.235			
25	30.2														
26	30.82														
27	30.37														
28	21.27	24.95										45.3			
29	31.16	72.42													
30	48.53														
31	80.05	22.17													
Avg.	40.661	30.356										36.424			
Max.	80.05	72.42										45.3			
Min.	14.68	8.64										21.235			
Data	31	10	0	0	0	0	0	0	0	0	0	3	0	0	

Send completed forms by the 28th of the month to:

Indiana Department of Environmental Management
 Office of Water Quality, Mail Code 65-42
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2251

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021024	001A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
MO	DAY	YEAR	TO	MO	DAY	YEAR
04	01	06	TO	04	30	06

MAJOR F - FINAL EFFLUENT

Form Approved OMB No. 2040-0004
 Approval Expires 05-31-98

* 1 N 0 0 2 1 0 2 4 0 0 1 A 0 4 0 6 *

For Any Questions call Jessica Osburn at 317-232-3591

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		8.9	*****	*****	(19)	20/30	Grab
00300 1 2 0	PERMIT REQUIREMENT	*****	*****	*****	5.0	*****	*****	MG/L	WEEK-DAYS	GRAB-3
EFFLUENT GROSS VALUE					DAILY MN	DAILY AV	DAILY MX			
PH	SAMPLE MEASUREMENT	*****	*****		7.1	*****	8.9	(12)	20/30	Grab
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	6.0	*****	9.0	SU	WEEK-DAYS	GRAB
EFFLUENT GROSS VALUE					MINIMUM		MAXIMUM			
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	72.302	87.333	(26)	*****	5.5	6.72	(19)	20/30	comp 24
00530 1 2 0	PERMIT REQUIREMENT	548.3	822.4	LBS/DY	*****	30	45	MG/L	WEEK-DAYS	COMP 24
EFFLUENT GROSS VALUE		MO AVG	MX WK AV			MO AVG	MX WK AV			
NITROGEN, AMMONIA TOTAL (AS N)	SAMPLE MEASUREMENT	.6682	1.0928	(26)	*****	.05	.0802	(19)	20/30	comp
00610 1 2 0	PERMIT REQUIREMENT	36.6	54.8	LBS/DY	*****	2.0	3.0	MG/L	WEEK-DAYS	COMP 24
EFFLUENT GROSS VALUE		30DA AVG	7 DA AVG			30DA AVG	7 DA AVG			
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	1.64441	1.7918	(03)	*****	*****	*****		30/30	Total
50050 1 0 0	PERMIT REQUIREMENT	REPORT	REPORT	MGD	*****	*****	*****	*****	WEEK-DAYS	TOTALZ
EFFLUENT GROSS VALUE		30DA AVG	7 DA AVG							
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	.028	.05	(19)	5 TMS/WK	Grab
50060 1 1 0	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06	0.06	MG/L	5 TMS/WK	GRAB
EFFLUENT GROSS VALUE						MO AVG	DAILY MX			
E.COLI, COLONY FORMING UNITS (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	18	57	(3Z)	20/30	Grab
51041 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	125	235	CFU/100ML	WEEK-DAYS	GRAB
EFFLUENT GROSS VALUE						MO GEO	DAILY MX			

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Steven D. Croyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

45 584-6845 05 17 06

AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021024	001A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
MO	DAY	YEAR	TO	MO	DAY	YEAR
04	01	06		04	30	06

MAJOR F - FINAL EFFLUENT

Form Approved OMB No. 2040-0004
 Approval Expires 05-31-98

* 1 N 0 0 2 1 0 2 4 0 0 1 A 0 4 0 6 *

For Any Questions call Jessica Osburn at 317-232-3591

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
MERCURY TOTAL RECOVERABLE 71901 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	1.7	2.0	(3M)	ONCE/2 MNTS	Grab
	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT	REPORT DAILY MX	NG/L	ONCE/ 2 MNTS	GRAB
MERCURY TOTAL RECOVERABLE 71901 G 0 1 RAW SEW/INFLUENT	SAMPLE MEASUREMENT	*****	*****		*****	456	456	(3M)	ONCE/2 MNTS	Grb
	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT	REPORT DAILY MX	NG/L	ONCE/ 2 MNTS	GRAB
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	37.025	37.219	(26)	*****	2.8	2.92	(19)	20/30 WEEK-DAYS	Comp
	PERMIT REQUIREMENT	456.9 MO AVG	731.0 MX WK AV	LBS/DY	*****	25 MO AVG	40 MX WK AV	MG/L	WEEK-DAYS	COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	49.332	(3R)	*****	*****	*****		ONCE/ MONTH	RCOTOT
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL	*****	*****	*****	*****	ONCE/ MONTH	RCOTOT
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Steven D. Boyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIV OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR RANDOLPH COUNTY



Monthly Report of Operation Activated Sludge Type Wastewater Treatment Plant

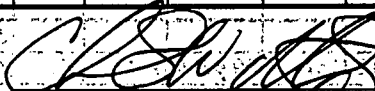
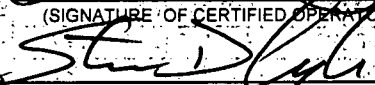
State Form 10829 (R/12-2005)

Page 1 of 4

Name of Facility		Permit Number	
Winchester Wastewater Treatment Plant		IN0021024	
Month	Year	Plant Design Flow	Telephone Number
April	2006	2.19 mgd	765-584-1331
Facility's e-mail address (if available): Winchesterwwtp@verizon.net			
Certified Operator: Name		Class	Certificate Number
Christopher W. Martin		III	16763
		Expiration Date	6/30/2006

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature (Optional)	Total=	Bypass At Plant Site ("X" If Occurred)	Collection System Overflow ("X" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				8.3			Chlorine - Lbs	50% Lbs or Gal	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Sat			1.1			38	32		1.4852							
2	Sun			1.4			38	32		1.726							
3	Mon						38	32		1.7612	7.7	59	866.616	74	1086.94		5.45
4	Tue			1.3			38	30		1.6617	7.4	44	609.777	28	388.04		4.5
5	Wed						30	25		1.5289	7.5	46	586.547	21	267.772		5.5
6	Thu						30	25		1.423	7.6	71.4	847.362	46	545.92		9.8
7	Fri			0.85			30	25		1.4878	7.4	55	682.454	72	893.394		8.3
8	Sat						30	20		1.3772							
9	Sun						30	20		1.0761							
10	Mon			0.1			25	20		1.1337	7.3	79	746.95	50	472.753		13.2
11	Tue						25	20		1.1043	7.6	94	865.727	87	801.258		11.8
12	Wed						25	20		1.0475	7.5	58.5	511.065	35	305.765		12.8
13	Thu						25	20		1.1899	7.5	72	714.511	30	297.713		13.1
14	Fri			1.2			25	24		1.337	7.6	104	1159.66	191	2129.76		11.8
15	Sat			0.8			35	26		1.302							
16	Sun						35	26		1.4125							
17	Mon			0.3			30	22		1.4564	7.7	94.4	1146.62	60.3	732.426		17.3
18	Tue						28	22		1.3204	7.2	51.3	564.923	32	352.388		18.9
19	Wed									1.1653	7.5	50	485.93	47	456.774		8.1
20	Thu						30	28		1.1454	8.3	66	630.474	58	554.053		7.9
21	Fri									1.1326	8.4	60	566.753	45	425.065		11.5
22	Sat						38	35		1.1281							
23	Sun						38	35		0.9491							
24	Mon						38	35		1.0067	7.2	76.5	642.285	146	1225.8		11.3
25	Tue						37	31		1.0933	7.4	82	747.686	66	601.796		6.69
26	Wed						38	34		1.0114	7.7	54	455.494	76	641.066		7.61
27	Thu						34	32		0.9787	7.5	61.8	504.434	69	563.203		6.8
28	Fri						34	32		0.9535	7.4	64	508.94	45	357.849		7.46
29	Sat						38	34		0.9286							
30	Sun			1.25			38	34		1.159							
Average							32.786	27.536		1.24942		67	692.21	64	654.987		9.991
Maximum							38	35		1.7612	8.4	104	1159.66	191	2129.76		18.9
Minimum							25	20		0.9286	7.2	44	455.494	21	267.772		4.5
No. of Data							9	0	0	28	28	0	30	20	20	20	0

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


(SIGNATURE OF CERTIFIED OPERATOR) 5/17/06
(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) 17 May 06
(DATE)

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

Name of Facility: Winchester Wastewater Treatment Plant
 Permit Number: IN0021024
 For Month Of: April
 Year: 2006

C.B.W. 11/18 5/17/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Steve D. Ryle 17 May 06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

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Day Of Month	PRIMARY EFFLUENT		AERATION							SECONDARY EFFLUENT		FINAL EFFLUENT					
	CBOD5 - mg/l	Susp. Solids - mg/l	MIXED LIQUOR				RETURN SLUDGE			CBOD5 - mg/l	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
			Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Temperature - F	Volume - MG	Susp. Solids - mg/l								
1								3.633									
2								3.9789									
3	36	50	56.5	4652	121	7.0	13	3.9848	6473	2.7	5.2	1.21	0.01	22	7.7	9.9	
4	37	86	60.8	5049	120	6.9	13	4.106	7089	1.6	6	1.6	0.05	16	7.8	10.6	
5	42.9	59	60.3	4846	124	6.7	12	3.9545	6865	2.1	5.4	1.28	0.05	10	7.7	9.9	
6	62.4	24	62.5	5213	120	6.7		3.9777	6657	2.5	4.8	1.28	0.03	18	7.7	10.1	
7	57	116	57.5	5384	107	6.6	12	3.5989	7210	1.7	6	0.59	0.04	10	8.0	9.6	
8								4.8738									
9								3.6294									
10	29	55	61.3	5116	120	4.2	13	3.8809	7422	2.3	4.3	0.66	0.02	13	7.8	9.7	
11	67	84	61	5184	118	4.4	15	3.981	7183	3	5.7	0.52	0.01	14	7.8	9.5	
12	51.3	41	62.3	5626	111	3.9	15	3.9721	7293	2.5	6.1	0.71	0.02	17	7.8	9.6	
13	60	77	59.8	6120	98	4.3	15	4.0489	6921	2.6	3.8	0.9	0.03	4	7.3	9.9	
14								4.1209				0.58	0.05	57	7.7	8.9	
15								3.9893									
16								3.9758									
17	27.8	53.8	69	6076	114	5.3	14	3.9481	7440	1.7	4.7	0.6	0.02	6	7.8	9.2	
18	54	95	69.3	5740	121	5.4	14	3.9542	7454	2.2	6.2	1.02	0.04	3	7.7	9.5	
19	50	26	70	5551	126	4.9	14	2.6884	8102	2.4	4.4	0.58	0.05	45	7.1	9.3	
20	48	50	57.5	5629	102	3.7	16	4.1245	7110	2.9	4.4	0.65	0.04	38	7.8	9.1	
21	63	73	62.3	5790	108	2.7	16	4.1649	7707	2	5.6	0.87	0.01	19	8.9	9.1	
22								4.3416									
23								3.7007									
24	30.3	9	61	4840	126	5.3	16	4.0271	7157	2.4	4.9	0.91	0.02	25	7.6	9.4	
25	57	87	54.3	5234	104	4.1	17	4.0244	6357	2.8	4.2	0.64	0.03	41	7.6	9.0	
26	66	98	53.8	4970	108	4.1	15	4.9057	6610	3	4.5	0.92	0.01	38	7.9	9.1	
27	55.8	27	56	5756	97	5.5	15	4.1543	6234	3.1	5.8	1.22	0.02	34	7.8	9.2	
28	43	33	57.8	5139	112	5.3	16	4.182	6410	2.8	6.8	1.27	0.01	24	7.6	9.5	
29								4.2836									
30								4.2011									
Avg.	49.3	60.2	61	5364	114	5.1	15	4.0135	7037	2.4	5.2	0.9005	0.028	18		9.5	
Max.	67	116	70	6120	126.1	7	17	4.9057	8102	3.1	6.8	1.6	0.05	57	8.9	10.6	
Min.	27.8	9	53.8	4652	97.29	2.7	12	2.6884	6234	1.6	3.8	0.52	0.01	3	7.1	8.9	
Data	19	19	19	19	19	19	18	30	19	19	19	20	20	20	20	20	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):
 HAD STORM WHICH CAUSED LIFTSTATION THAT PUMPS TO LAGOONS TO FAIL AND OVERFLOW REPORTED AND SENT IN PAPERWORK. HAD OVERFLOW OF FILTER INFLUENT TANK ON 4-20-06 AND ALARM WAS NOT REPORTED BY POLICE DEPT. TO ON CALL OPERATOR. REPORTED AND SENT IN PAPERWORK. BOWEN ENGINEERING BEGAN WORK FOR INSTALLATION OF NEW BLOWERS, AIRLINES AND FINE BUBBLE DIFFUSIORS.

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

Name of Facility: Winchester Wastewater Treatment Permit Number: IN0021024 For Month Of: April Year: 2006

(SIGNATURE OF CERTIFIED OPERATOR) *CSW* 5/17/06 (DATE)
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) *Stanley* 17 May 06 (DATE)

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Day Of Month	FINAL EFFLUENT														
	Flow		BOD				Total Suspended Solids				Ammonia				Other
	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average	Oil & Grease - mg/l
1	1.6032														
2	1.8184														
3	1.8535		3		46.402		6.1		94.351		0.01		0.1547		
4	1.9523		3		48.876		3.5		57.022		0.0303		0.4936		
5	1.6226		2		27.081		5.4		73.119		0.01		0.1354		
6	1.7373		2.3		33.345		5.6		81.188		0.01		0.145		
7	1.4567		2.5		30.39		5		60.781		0.01		0.1216		
8	2.1018	1.7918		2.56		37.219		5.12		73.292		0.0141		0.2101	
9	1.6027														
10	1.7204		2.2		31.585		3.6		51.684		0.148		2.1248		
11	1.4036		3.4		39.824		6.6		77.306		0.124		1.4524		
12	1.489		2.9		36.035		5.7		70.827		0.109		1.3544		
13	1.7005		3.3		46.829		4		56.763		0.01		0.1419		
14	1.351		2.8		31.567		1.9		21.421		0.01		0.1127		
15	1.839	1.5866		2.92		37.168		4.36		55.6		0.0802		1.0373	
16	1.7843														
17	1.7401		2.2		31.946		3.9		56.632		0.116		1.6845		
18	1.9304		2.4		38.662		3.7		59.604		0.121		1.9492		
19	1.1394		2.5		23.771		3.8		36.132		0.0298		0.2833		
20	1.5591		3.6		46.838		9		117.1		0.0586		0.7624		
21	1.5179		3.5		44.334		13.2		167.2		0.062		0.7847		
22	1.8829	1.65059		2.84		37.11		6.72		87.333		0.0775		1.0928	
23	1.7025														
24	1.6516		2.5		34.457		3.8		52.374		0.0565		0.7787		
25	1.5766		3		39.47		6.2		81.572		0.0071		0.0934		
26	1.457		2.9		35.26		4.4		53.498		0.01		0.1216		
27	1.5529		3.2		41.469		6.3		81.641		0.042		0.5443		
28	1.4914		2.6		32.359		7.7		95.832		0.01		0.1245		
29	1.4408	1.55326		2.84		36.603		5.68		72.983		0.0251		0.3325	
30	1.6535														
Avg	1.64441		2.8		37.025		5.5		72.302		0.05		0.6682		
Max	2.1018	1.7918	3.6	2.92	48.876	37.219	13.2	6.72	167.2	87.333	0.148	0.0802	2.1248	1.0928	
Min	1.1394	1.55326	2	2.56	23.771	36.603	1.9	4.36	21.421	55.6	0.0071	0.0141	0.0934	0.2101	
Data	30	4	20	4	20	4	20	4	20	4	20	4	20	4	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow:
Percent Removal	BOD5	S.S.	Ammonia	Phosphorus	(million gallons) 49.332
Primary Treatment	26.5	5.8			Percent Capacity (actual flow/design) 75%
Secondary Treatment	95.1	91.4			
Tertiary Treatment	-14.5	-5.2			
Overall Treatment	95.8	91.4	99.5	NA	

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

5/17/06

(SIGNATURE OF CERTIFIED OPERATOR) _____ (Date)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) _____ (Date)

Name of Facility: Winchester Wastew
Permit Number: IN0021024
For Month Of: April
Year: 2006

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Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION											
	Primary Sludge Gal. x 1000	Waste Act. Sludge Gal. x 1000	Anaerobic Only			Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000		
			pH	Gas Production Cubic Ft. x 1000	Temperature - F									
1	100.9													
2	44.9													
3	29.96													
4	29.86	20.02												
5	29.98													
6	30.02													
7	31.98													
8	36.42	46.49												
9	26.65													
10	31.55													
11	31.85											39.8		
12	31.66	6.67												
13	31.24	34.03												
14	31.44													
15	31.81													
16	21.1													
17	31.79													
18	32.01													
19	31.16	53.87												
20	31.44													
21	31.46	52.52												
22	42.46													
23	21.36													
24	31.92	14.89												
25	31.14	57.92												
26	30.69													
27	31.37													
28	31.21													
29	31.59													
30	31.63													
Avg.	33.752	35.801											39.8	
Max.	100.9	57.92											39.8	
Min.	21.1	6.67											39.8	
Data	30	8	0	0	0	0	0	0	0	0	0	0	1	0

Send completed forms by the 28th of the month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

EXECUTIVE SUMMARY - Detection Highlights

A6E010186

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SAMPLE EFF 04/27/06 10:00 001				
Mercury	2.0	0.50	ng/L	CFR136A 1631E
SAMPLE DUP 04/27/06 10:00 002				
Mercury	1.4	0.50	ng/L	CFR136A 1631E
SAMPLE INFLUENT 04/27/06 10:00 003				
Mercury	456	20.0	ng/L	CFR136A 1631E

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
ADDRESS WINCHESTER CITY HALL
113 E WASHINGTON ST
WINCHESTER IN 47394
FACILITY WINCHESTER MUNICIPAL WWTP
LOCATION WINCHESTER
ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



* 1 N 0 0 2 1 0 2 4 0 0 1 A 0 5 0 6 *

For Any Questions call Jessica Osburn at 317-232-3591

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

Revised:



IN0021024	001A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

MO	DAY	YEAR	MO	DAY	YEAR
05	01	06	05	31	06

FROM

TO

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
OXYGEN, DISSOLVED (DO) 00300 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		8.8	*****	*****	(19)	23/31	Grab
	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	*****	MG/L	WEEK-DAYS	GRAB-3
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		7.3	*****	8.0	(12)	23/31	Grab
	PERMIT REQUIREMENT	*****	*****	*****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU	WEEK-DAYS	GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	52.895	74.617	(26)	*****	6.7	7.4	(19)	23/31	Comp 24
	PERMIT REQUIREMENT	292.4 MO AVG	438.6 MX WK AV	LBS/DY	*****	16 MO AVG	24 MX WK AV	MG/L	WEEK-DAYS	COMP24
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	3.366	12.655	(26)	*****	.53	1.6878	(19)	23/31	Comp 24
	PERMIT REQUIREMENT	27.4 30DA AVG	42.0 7 DA AVG	LBS/DY	*****	1.5 30DA AVG	2.3 7 DA AVG	MG/L	WEEK-DAYS	COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	.98514	1.32668	(03)	*****	*****	*****		31/31	TOTALZ
	PERMIT REQUIREMENT	REPORT 30DA AVG	REPORT 7 DA AVG	MGD	*****	*****	*****	*****	WEEK-DAYS	TOTALZ
CHLORINE, TOTAL RESIDUAL 50060 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	.0313	.06	(19)	23/31	Grab
	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L	5 TMS/WK	GRAB
E.COLI, COLONY FORMING UNITS (CFU) 51041 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	29	154	(3Z)	23/31	Grab
	PERMIT REQUIREMENT	*****	*****	*****	*****	125 MO GEO	235 DAILY MX	CFU/ 100ML	WEEK-DAYS	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

Steven J. Croyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Signature of Steven J. Croyle

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

761 584 6015 x 12 x

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021024		001A	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
MO	DAY	YEAR	
05	01	06	
FROM		TO	
05	01	06	

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



For Any Questions call Jessica Osburn at 317-232-3591

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	23.711	32.227	(26)	*****	3.1	3.92	(19)		23/31	Comp
	PERMIT REQUIREMENT	182.8 MO AVG	274.1 MX WK AV	LBS/DY	*****	10 MO AVG	15 MX WK AV	MG/L		WEEK- DAYS	COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	30.539	(3R)	*****	*****	*****			once/ month	RCOTOT
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

Steven D Croyle
 TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Steven D Croyle
 SIGNATURE OF PRINCIPAL EXECUTIV
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 5846845		06	12	06
AREA CODE	NUMBER	MO	DAY	YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
RANDOLPH COUNTY



Monthly Report of Operation Activated Sludge Type Wastewater Treatment Plant


State Form 10829 (R/12-2005)

Page 1 of 4

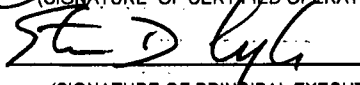
Name of Facility Winchester Wastewater Treatment Plant		Permit Number IN0021024	
Month May	Year 2006	Plant Design Flow 2.19 mgd	Telephone Number 765-584-1331
Facility's e-mail address (if available): Winchesterwwtp@verizon.net			
Certified Operator: Name Christopher W. Martin	Class III	Certificate Number 16763	Expiration Date 6/30/2006

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature (Optional)	Total= 7.05	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				Precipitation - Inches			Chlorine - Lbs	Lbs or Gal	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Mon			0.8			38	35		1.264	7.5	88	927.675	173	1823.72		10.7
2	Tue						40	35		1.0498	7.6	70	612.873	60	525.32		9.5
3	Wed			0.5			40	35		1.0047	7.5	43	360.306	31	259.755		5.5
4	Thu			0.2			40	35		0.6847	7.7	54	308.361	54	308.361		9.5
5	Fri						36	35		0.6598	7.6	72	396.197	89	489.743		11.9
6	Sat						35	30		0.84							
7	Sun						35	25		0.8778							
8	Mon						28	30		0.7858	7.7	36	235.929	32	209.714		7.5
9	Tue						28	28		0.8757	7.8	95	693.817	65	474.717		8.12
10	Wed			1.4			26	30		1.11	7.6	87	805.394	66	610.988		15.7
11	Thu			1.4			30	32		0.9919	7.5	71	587.344	35	289.536		14.4
12	Fri			0.7			40	36		1.0055	7.7	46	385.75	41	343.821		5.62
13	Sat			0.3			34	33		1.0697							
14	Sun			0.4			34	30		0.9782							
15	Mon						38	32		0.8038	7.6	28.3	189.714	32	214.518		5.03
16	Tue						32	32		1.2049	7.5	100.4	1008.91	79	793.86		7.96
17	Wed						34	32		1.0288	7.6	62	531.972	20	171.604		6.48
18	Thu						34	32		1.1352	7.4	36	340.832	32	302.962		2.24
19	Fri						34	32		0.9902	7.4	48	396.397	38.4	317.117		4.18
20	Sat						34	32		1.3294							
21	Sun						34	32		1.1586							
22	Mon						28	32		0.3925	7.7	42	137.485	42	137.485		3.38
23	Tue						22	25		0.4689	7.6	42	164.246	18	70.3913		8.21
24	Wed						5	36		0.1615	7.8	10	13.4691	68	91.5899		7.2
25	Thu									0.9	7.7	47	352.782	46	345.276		9.71
26	Fri			1.25			20	46		0.9886	7.6	64	527.675	29	239.103		8.94
27	Sat			0.1			32	30		1.015							
28	Sun						32	30		1.052							
29	Mon						32	30		0.9921	7.6	74	612.284	51	421.98		9.62
30	Tue						28	26		1.0231	7.7	104.5	891.662	48	409.567		6.88
31	Wed						35	28		0.9775	7.6	46	375.008	71	578.817		9.6
Average							31.933	31.867		0.92967		59	472.003	53	409.998		8.168
Maximum				1.4			40	46		1.3294	7.8	104.5	1008.91	173	1823.72		15.7
Minimum							5	25		0.1615	7.4	10	13.4691	18	70.3913		2.24
No. of Data				10	0	0	30	30	0	31	23	23	23	23	23	0	23

I certify, under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.


 (SIGNATURE OF CERTIFIED OPERATOR)

6/12/06
 (DATE)


 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

12 Jun 06
 (DATE)

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

[Signature] *Chalob*
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
[Signature] *12 June 06*
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Name of Facility: Winchester Wastewater Treatment Plant
 Permit Number: IN0021024
 For Month Of: May
 Year: 2006
 Page 2 of 4 State Form 10829 (R/12-2005)

Day Of Month	PRIMARY EFFLUENT		AERATION							SECONDARY EFFLUENT		FINAL EFFLUENT					
	CBOD5 - mg/l	Susp. Solids - mg/l	MIXED LIQUOR				RETURN SLUDGE			CBOD5 - mg/l	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
			Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Temperature - F	Volume - MG	Susp. Solids - mg/l								
1	92	98	63	5331	118	5.2	16	3.2239	6332	3.5	6.5	0.52	0.02	64	7.3	8.9	
2	59	73.7	61	5385	113	5.7	17	3.1088	6003	2.8	7.1	0.94	0.03	40	7.8	9.5	
3	34	53	67.5	5087	133	5.9	16	2.4665	5792	3.2	6.4	1.29	0.04	42	7.8	9.1	
4	48	58	70.5	5004	141	5.7	17	2.1915	6607	2.5	4.4	2.08	0.03	15	7.8	9.0	
5	29	42	67	4938	136	5.9	17	1.9672	6202	2.2	4.2	2.15	0.01	20	7.7	8.8	
6								2.236									
7								2.396									
8	67	65	72	5161	140	6.2	16	2.2042	7012	3	6	0.9	0.02	36	7.9	9.0	
9	68	62	65.5	4472	146	6.4	17	2.1573	6433	3.2	4.9	1.3	0.04	70	8.0	9.2	
10	58	44	51	4718	108	6.0	17	2.2075	6796	2.3	3.7	1.19	0.01	21	7.8	8.8	
11	67	55	64	4560	140	6.9	17	2.0886	6642	2.3	5.1	0.84	0.03	154	7.8	9.0	
12	34	53	61	4582	133	7.7	15	2.144	6412	2.2	11.8	1.86	0.03	28	7.9	9.1	
13								2.2303									
14								2.1171									
15	23.7	43	60	4446	135	7.7	16	2.1256	6544	1.7	6.9	1.8	0.03	25	7.8	9.4	
16	47.7	49	57	4599	124	7.2	16	2.1883	6205	2.2	5.6	1.8	0.01	20	7.8	9.3	
17	41	20	42	3891	108	7.2	16	2.1705	6108	2.5	6.6	1.14	0.02	19	7.7	9.0	
18	34	52	34	3687	92	7.1	16	2.1969	5977	2.2	5.6	1.41	0.04	29	7.6	9.3	
19	29	43.8	45	4597	98	7.1	15	3.1585	6427	2.5	4.4	0.4	0.03	12	7.8	9.1	
20								2.1117									
21								1.9401									
22	29	40	10	981	102	9.7	15	1.2131	966	3.8	7.7	2.6	0.04	54	7.7	9.1	
23	28	24	13	1348	96	9.3	16	0.8901	1987	4	3.4	2.37	0.03	0	7.8	9.5	
24	12.5	20	13.5	1448	93	8.9	17	1.1349	2169	3.2	9.2	2.78	0.03	14	7.9	9.5	
25	37	29	16	1586	101	7.0	17	1.2287	1234	4	6	1.19	0.03	34	7.8	9.4	
26	54	74	16	1649	97	8.9	18	2.0048	2670	2.9	3.1	0.74	0.03	21	7.8	9.3	
27								2.0398									
28								1.917									
29								2.4314				2.55	0.06	38	7.5	9.3	
30	75.9	78	21	1651	127	7.5	18	3.444	2364	2.7	4.8	1.89	0.06	117	7.5	9.4	
31	54	46	16	1717	93	7.0	18	3.7341	2547	2.7	8.1	2.2	0.05	66	7.4	8.8	
Avg.	46.4	51.0	45	3674	117	7.1	16	2.2151	4974	2.8	6.0	1.5626	0.0313	29		9.2	
Max.	92	98	72	5385	146.47	9.7	18	3.7341	7012	4	11.8	2.78	0.06	154	8.0	9.5	
Min.	12.5	20	10	981	92.216	5.2	15	0.8901	966	1.7	3.1	0.4	0.01	0	7.3	8.8	
Data	22	22	22	22	22	22	22	31	22	22	22	23	23	23	23	23	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):
 DURING THE MONTH OF MAY WE INSTALLED NEW KAESER BLOWERS AND SANITARE FINE BUBBLE AIREATION IN OUR TANKS. WE ALSO INSTALLED NEW AIR LINES. WE ONLY RAN HALF OF OUR PLANT AT A TIME TO ALLOW FOR THESE REPAIRS. ALL TANKS ARE BACK IN OPERATION.

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

6/12/06

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

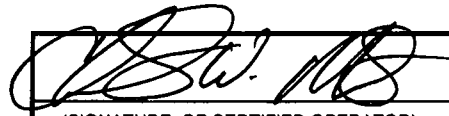
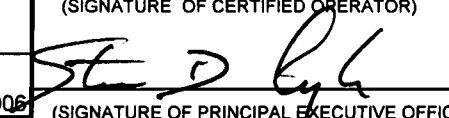
Name of Facility: Winchester Wastewater Treatment
 Permit Number: IN0021024
 For Month Of: May
 Year: 2006

Page 3 of 4 State Form 10829 (R/12-2005)

Day Of Month	FINAL EFFLUENT															
	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average	Oil & Grease - mg/l	
1	1.1362		3		28.445		7.5		71.112		0.01		0.0948			
2	1.205		3		30.167		5.1		51.284		0.0018		0.0181			
3	1.1637		3.1		30.104		7.1		68.949		0.21		2.0393			
4	0.8312		3.4		23.584		5.5		38.15		0.0127		0.0881			
5	0.7455		3.1		19.286		11.8		73.41		0.01		0.0622			
6	0.86	1.08501		3.12		26.317		7.4		60.581		0.0489		0.4605		
7	0.7982															
8	0.7635		3.4		21.663		4.6		29.308		0.01		0.0637			
9	0.9665		3.3		26.616		5.6		45.166		0.01		0.0807			
10	1.1163		2.9		27.015		5		46.578		0.01		0.0932			
11	0.9903		2.7		22.313		8		66.112		0.104		0.8595			
12	1.0002		2.9		24.205		7.4		61.765		0.0161		0.134			
13	1.0698	0.95783		3.04		24.362		6.12		49.786		0.03		0.2462		
14	1.1357															
15	0.8446		1.8		12.687		4.9		34.536		0.028		0.1973			
16	1.0891		2.2		19.995		5.8		52.714		0.01		0.0909			
17	1.1173		3.1		28.904		8.6		80.185		0.019		0.1772			
18	1.1245		2.5		23.46		7.3		68.503		0.01		0.0938			
19	0.7513		2.7		16.928		7.8		48.903		0.01		0.0627			
20	1.3362	1.05696		2.46		20.395		6.88		56.968		0.0154		0.1244		
21	1.1869															
22	0.4718		4.9		19.292		9.3		36.616		2.71		10.67			
23	0.4902		4.6		18.817		6.8		27.817		2.14		8.7541			
24	0.2984		3.9		9.7116		4.8		11.953		2.19		5.4534			
25	0.9209		2.8		21.518		5.6		43.035		0.884		6.7935			
26	0.8443		3.4		23.955		5.2		36.638		0.515		3.6285			
27	0.975	0.74107		3.92		18.659		6.34		31.212		1.6878		7.0599		
28	1.0765															
29	1.2036		3.1		31.137		9.3		93.41		1.13		11.35			
30	1.2758		3		31.94		6.9		73.461		1.1		11.711			
31	1.7508	1.32668	2.3	2.8	33.604	32.227	3.9	6.7	56.981	74.617	1.02	1.0833	14.903	12.655		
Avg	0.98514		3.1		23.711		6.7		52.895		0.53		3.366			
Max	1.7508	1.32668	4.9	3.92	33.604	32.227	11.8	7.4	93.41	74.617	2.71	1.6878	14.903	12.655		
Min	0.2984	0.74107	1.8	2.46	9.7116	18.659	3.9	6.12	11.953	31.212	0.0018	0.0154	0.0181	0.1244		
Data	31	5	23	5	23	5	23	5	23	5	23	5	23	5	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow:
Percent Removal	BOD5	S.S.	Ammonia	Phosphorus	(million gallons) 30.539
Primary Treatment	21.8	3.8			
Secondary Treatment	94.0	88.3			
Tertiary Treatment	-10.4	-11.9			
Overall Treatment	94.8	87.4	93.5	NA	Percent Capacity (actual flow/design) 45%

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

 6/12/06
 (SIGNATURE OF CERTIFIED OPERATOR) (Date)
 12/6/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Name of Facility: Winchester Wastewater Treatment Plant
 Permit Number: IN0021024
 For Month Of: May
 Year: 2006
 Page 4 of 4 State Form 10829 (R/12-2005)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION											
	Primary Sludge Gal. x 1000	Waste Act. Sludge Gal. x 1000	Anaerobic Only			Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l. or NH3-N mg/l.	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000		
1	31.41	5.081												
2	20.9	39.87												
3	20.37											29.931		
4	40.91	13.76												
5	30.6													
6	31													
7	41.73													
8	30.85	45.77												
9	30.89											32.831		
10	31.17	30.11												
11	30.6													
12	29.75													
13	30.91													
14	31.18													
15	31.03													
16	30.52	37.65												
17	30.64													
18	31.31													
19	50.46													
20	40.17													
21	20.06													
22	29.67													
23	29.89											38		
24	29.77													
25	29.1													
26	29.38													
27	35.92													
28	23.95													
29	30.8													
30	31.78													
31	33.25													
Avg.	31.289	28.707										33.587		
Max.	50.46	45.77										38		
Min.	20.06	5.081										29.931		
Data	31	6	0	0	0	0	0	0	0	0	0	3	0	0

Send completed forms by the 28th of the month to:

Indiana Department of Environmental Management
 Office of Water Quality, Mail Code 65-42
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2251

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
ADDRESS WINCHESTER CITY HALL
113 E WASHINGTON ST
WINCHESTER IN 47394
FACILITY WINCHESTER MUNICIPAL WWTP
LOCATION WINCHESTER
ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



* 1 N 0 0 2 1 0 2 4 0 0 1 A 0 6 0 6 *

IN0021024 001A
PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD

MO DAY YEAR MO DAY YEAR
FROM 06 01 06 TO 06 30 06

For Any Questions call Jessica Osburn at 317-232-3591

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
OXYGEN, DISSOLVED (DO) 00300 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		7.9	*****	*****	(19)		22/30	Grab
	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	*****	*****	MG/L		WEEK-DAYS	GRAB-3
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		7.4	*****	8.1	(12)		22/30	Grab
	PERMIT REQUIREMENT	*****	*****	*****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		WEEK-DAYS	GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	83.389	92.33	(26)	*****	7.1	7.54	(19)		22/30	Comp 24
	PERMIT REQUIREMENT	292.4 MO AVG	438.6 MX WK AV	LBS/DY	*****	16 MO AVG	24 MX WK AV	MG/L		WEEK-DAYS	COMP24
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	1.3668	1.6535	(26)	*****	.12	.015141	(19)		22/30	Comp 24
	PERMIT REQUIREMENT	27.4 30DA AVG	42.0 7 DA AVG	LBS/DY	*****	1.5 30DA AVG	2.3 7 DA AVG	MG/L		WEEK-DAYS	COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	1.38349	1.4331	(03)	*****	*****	*****			30/30	TOTAL 2
	PERMIT REQUIREMENT	REPORT 30DA AVG	REPORT 7 DA AVG	MGD	*****	*****	*****	*****		WEEK-DAYS	TOTALZ
CHLORINE, TOTAL RESIDUAL 50060 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	.0364	.06	(19)		5TMS/WK	Grab
	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L		5 TMS/ WEEK	GRAB
E.COLI, COLONY FORMING UNITS (CFU) 51041 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	42	98	(3Z)		22/30	Grab
	PERMIT REQUIREMENT	*****	*****	*****	*****	125 MO GEO	235 DAILY MX	CFU/ 100ML		WEEK-DAYS	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

Steven D Croyle
TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIV
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 584-6845 07 24 06
AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021024	001A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD						
MO	DAY	YEAR	TO	MO	DAY	YEAR
06	01	06		06	30	06

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



For Any Questions call Jessica Osburn at 317-232-3591

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
MERCURY TOTAL RECOVERABLE 71901 1 0 1 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	2.25	2.3	(3M)	ONCE/2 MNTS	Grab
	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT	REPORT DAILY MX	NG/L	ONCE/ 2 MNTS	GRAB
MERCURY TOTAL RECOVERABLE 71901 G 0 1 RAW SEW/INFLUENT	SAMPLE MEASUREMENT	*****	*****		*****	42.2	42.2	(3M)	ONCE/2 MNTS	Grab
	PERMIT REQUIREMENT	*****	*****	*****	*****	REPORT	REPORT DAILY MX	NG/L	ONCE/ 2 MNTS	GRAB
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	33.601	39.835	(26)	*****	2.9	3.44	(19)	22/30	COMP24
	PERMIT REQUIREMENT	182.8 MO AVG	274.1 MX WK AV	LBS/DY	*****	10 MO AVG	15 MX WK AV	MG/L	WEEK-DAYS	COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	41.505	(3R)	*****	*****	*****		ONCE/ MONTH	RCOTOT
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL	*****	*****	*****	*****	ONCE/ MONTH	RCOTOT
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Steven D Croyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIV OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

755 34685 07 24 06

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
RANDOLPH COUNTY

EXECUTIVE SUMMARY - Detection Highlights

A6F290160

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
EFFLUENT 06/26/06 001				
Mercury	2.3	0.50	ng/L	CFR136A 1631E
EFFL. DUPLICATE 06/26/06 002				
Mercury	2.2	0.50	ng/L	CFR136A 1631E
RAW 06/26/06 003				
Mercury	42.2	2.5	ng/L	CFR136A 1631E



Monthly Report of Operation Activated Sludge Type Wastewater Treatment Plant

State Form 10829 (R/12-2005)

Page 1 of 4

Name of Facility		Permit Number	
Winchester Wastewater Treatment Plant		IN0021024	
Month	Year	Plant Design Flow	Telephone Number
June	2006	2.19 mgd	765-584-1331
Facility's e-mail address (if available):		Winchesterwwtp@verizon.net	
Certified Operator: Name		Class	Certificate Number
Christopher W. Martin		III	16763
		Expiration Date	6/30/2006

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature (Optional)	Total=	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				3.7			Chlorine - Lbs	Lbs or Gal	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Thu						40	30		1.1591	7.7	51	493.012	26	251.339		8.16
2	Fri			1.3			40	32		1.4252	7.2	56.4	670.38	92	1093.53		16.6
3	Sat			0.3			40	32		1.4909							
4	Sun						40	32		1.09							
5	Mon						44	38		1.1593	7.7	33.2	320.996	53	512.434		10.9
6	Tue						44	38		1.0587	7.7	79.5	701.95	42	370.841		11.4
7	Wed						45	40		1.1747	7.7	59.1	579.003	117	1146.25		10
8	Thu			0.3			50	44		1.0535	7.6	47	412.951	50	439.31		11.9
9	Fri						45	32		0.9418	7.7	48	377.021	51	400.585		12.6
10	Sat			0.4				32		1.3215							
11	Sun			0.4			40	32		1.2371							
12	Mon						40	32		1.1269	7.6	30	281.95	25	234.959		7.41
13	Tue						45	32		1.0133	7.6	59	498.604	52	439.448		8.61
14	Wed						45	34		0.9872	7.4	56	461.062	64	526.928		11.8
15	Thu						45	34		0.9349	7.7	101	787.504	23	179.333		8.84
16	Fri						45	34			7.5	79	1027.89	35	455.393		8.91
17	Sat						48	35									
18	Sun						45	35									
19	Mon			0.4			55	32		0.982	7.6	45	368.545	59	483.203		14.6
20	Tue						55	32		0.9681	7.6	50	403.698	77	621.694		12
21	Wed						55	32		1.1516	7.5	78	749.139	87	835.578		12
22	Thu						55	32		1.1198	7.5	49	457.617	44	410.922		11.9
23	Fri			0.1			45	50		1.0617	7.5	88	779.203	82	726.075		11.8
24	Sat						45	46		1.0477							
25	Sun						50	46		0.8019							
26	Mon						45	48		0.9277	7.7	86.6	670.026	68	526.117		9.62
27	Tue						48	57		0.8409	7.7	89.9	630.478	126	883.651		14.3
28	Wed						57	42		0.9789	7.6	58	473.514	57	465.349		12.3
29	Thu			0.5			60	38		0.8967	7.4	116	867.503	73	545.929		14.1
30	Fri						60	38		0.9234	7.5	67	515.977	45	346.552		13.5
Average							47.276	37.033		1.06943		65	569.455	61	540.701		11.51
Maximum							60	57		1.4909	7.7	116	1027.89	126	1146.25		16.6
Minimum							40	30		0.8019	7.2	30	281.95	23	179.333		7.41
No. of Data							29	30	0	27	22	22	22	22	22	0	22

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

	7/24/06
(SIGNATURE OF CERTIFIED OPERATOR)	(DATE)
	2/2/06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	(DATE)

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

[Signature] 7/24/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
[Signature] 24 July 06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Name of Facility: Winchester Wastewater Treatment Plant
 Permit Number: IN0021024
 For Month Of: June
 Year: 2006

Page 2 of 4 State Form 10829 (R/12-2005)

Day Of Month	PRIMARY EFFLUENT		AERATION							SECONDARY EFFLUENT		FINAL EFFLUENT					
	CBOD5 - mg/l	Susp. Solids - mg/l	MIXED LIQUOR					RETURN SLUDGE		CBOD5 - mg/l	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
			Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Temperature - F	Volume - MG	Susp. Solids - mg/l								
1	70	27	19	2203	86	6.7	19	4.17	3368	3.9	9.3	0.98	0.01	48	7.9	8.5	
2	51	86	24	3264	74	5.7	19	4.218	3544	1.5	5.7	1.42	0.01	58	7.5	8.3	
3								4.4555									
4								3.4765									
5	27.3	165	32.5	3618	90	6.4	18	4.1046	4622	1.2	5.5	1.45	0.04	43	8.1	8.8	
6	51.2	86	34	3872	88	6.4	18	4.0449	4574	1.7	4.4	1.36	0.05	68	7.5	8.8	
7	36.2	107	34.3	4139	83	6.1	19	3.9627	4464	2.5	5.6	1.8	0.03	98	7.6	8.5	
8	38	59	36	4151	87	6.0	18	4.0147	4116	2.1	9.4	1.13	0.05	42	7.9	9.1	
9	31	52	37.8	3894	97	5.8		3.7033	5129	2	5.9	2	0.01	32	7.9	8.7	
10								4.046									
11								3.9583									
12	2.3	79	42.8	4566	94	6.9	18	3.986	4449	2.3	5.4	1.22	0.06	24	7.5	8.9	
13	44	99	45.5	4151	110	6.3	18	3.9335	4864	3.1	4.1	1.3	0.06	30	7.7	8.6	
14	44	110	43.3	3944	110	6.2	19	3.842	4917	4.3	5.4	1.09	0.05	40	7.6	8.7	
15	81	27	52.5	3986	132	6.0	18	3.8786	4575	3	3.5	1.32	0.02	28	7.8	8.8	
16	54	71	36	4298	84	5.7	19	3.4302	4540	3.4	4.7	0.91	0.06	46	7.4	8.5	
17								3.905									
18								4.2078									
19	49	66	45	4063	111	6.0	20	3.8876	5144	2.8	8.3	2	0.06	22	7.7	8.9	
20	33	33	44.5	4156	107	5.9	20	3.9037	4431	3.1	6.8	1.21	0.01	38	7.5	8.3	
21	54	75	43	4526	95	6.0		3.9721	5486	3	9.5	1.14	0.03	58	7.9	8.5	
22	49	70	43	3976	108	6.0	20	3.9844	4958	3	8	0.89	0.04	11	7.9	8.3	
23	66	91	47.8	4009	119	4.1		4.001	4978	2.5	5.9	1.21	0.04	97	7.9	8.3	
24								4.4653									
25								3.4249									
26	57.6	61	54.5	4330	126	5.7	20	3.9879	5872	3.6	5.1	0.54	0.04	49	7.9	7.9	
27	57	92	55	4559	121	5.5	20	4.0454	5397	2.5	6.1	1.63	0.05	40	7.9	8.1	
28	48	79	59	4622	128	5.4	21	3.9119	5452	2.5	7.9	1.38	0.02	67	7.9	8.1	
29	54	54	55.5	4860	114	6.0	20	3.946	5583	2.6	7.2	2.51	0.01	79	7.7	8.4	
30	64	53	59	4787	123	6.0	21	4.4409	5398	2.5	7.2	1.97	0.05	24	7.9	8.2	
Avg.	48.3	74.6	42.9	4090	104	5.9	19	3.977	4812	2.7	6.4	1.3845	0.0364	42		8.5	
Max.	81	165	59	4860	131.71	6.9	21	4.4653	5872	4.3	9.5	2.51	0.06	98	8.1	9.1	
Min.	2.3	27	19	2203	73.529	4.1	18	3.4249	3368	1.2	3.5	0.54	0.01	11	7.4	7.9	
Data	22	22	22	22	22	22	19	30	22	22	22	22	22	22	22	22	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):
 FROM 6/16/06THRU 6/18/06 RAW INFLUENT METER NOT WORKING PROPERLY WE CLEANED THE CONE FOR THE ULTRA SONIC PROBE.

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

Name of Facility: Winchester Wastewater Treatment
 Permit Number: IN0021024
 For Month Of: June
 Year: 2006

CBO. M8 7/24/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Stan S. Lyle 24 July 06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 State Form 10829 (R/12-2005)

FINAL EFFLUENT																
Day Of Month	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average	Oil & Grease - mg/l	
1	1.5703		4.1		53.727		6.9		90.419		0.555		7.2728			
2	1.6749		2.5		34.943		9.2		128.59		0.0619		0.8652			
3	1.7167															
4	1.2564															
5	1.451		1.1		13.319		5.9		71.441		0.058		0.7023			
6	1.4804		1.8		22.237		9.5		117.36		0.109		1.3466			
7	1.5954		2.5		33.284		7.7		102.51		0.0157		0.209			
8	1.4346		2.6		31.127		8.1		96.971		0.0961		1.1505			
9	1.3954		2		23.289		6.3		73.361		0.0886		1.0317			
10	1.4185	1.4331		2		24.651		7.5		92.33		0.0735		0.888		
11	1.2021															
12	1.3491		2.6		29.271		5.5		61.92		0.184		2.0715			
13	1.2334		2.3		23.673		6		61.756		0.0737		0.7586			
14	1.2229		4		40.82		5.6		57.149		0.0682		0.696			
15	1.4911		4.6		57.239		4.1		51.017		0.0365		0.4542			
16	1.5601		3.7		48.17		8.1		105.45		0.039		0.5077			
17	1.01	1.29553		3.44		39.835		5.86		67.459		0.0803		0.8976		
18	1.8302															
19	1.2607		3.4		35.77		8.9		93.633		0.118		1.2414			
20	1.3777		3.7		42.539		10.2		117.27		0.331		3.8055			
21	1.1389		2.5		23.76		5.5		52.273		0.14		1.3306			
22	1.4459		3.3		39.818		6.6		79.636		0.085		1.0256			
23	1.2478		2.3		23.95		6.5		67.684		0.083		0.8643			
24	1.3448	1.378		3.04		33.167		7.54		82.099		0.1514		1.6535		
25	1.0427															
26	1.641		2.2		30.127		7.2		98.598		0.14		1.9172			
27	1.2843		3.1		33.224		8.1		86.812		0.026		0.2787			
28	1.3035		3.1		33.721		5.1		55.476		0.0824		0.8963			
29	1.197		3.2		31.965		7		69.923		0.078		0.7791			
30	1.3279	1.2994	3	2.92	33.244	32.456	8.6	7.2	95.299	81.222	0.078	0.0809	0.8643	0.9471		
Avg	1.38349		2.9		33.601		7.1		83.389		0.12		1.3668			
Max	1.8302	1.4331	4.6	3.44	57.239	39.835	10.2	7.54	128.59	92.33	0.555	0.1514	7.2728	1.6535		
Min	1.01	1.29553	1.1	2	13.319	24.651	4.1	5.86	51.017	67.459	0.0157	0.0735	0.209	0.888		
Data	30	4	22	4	22	4	22	4	22	4	22	4	22	4	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow:
Percent Removal	BOD5	S.S.	Ammonia	Phosphorus	(million gallons) 41.505
Primary Treatment	25.6	-21.8			Percent Capacity (actual flow/design) 63%
Secondary Treatment	94.4	91.4			
Tertiary Treatment	-7.6	-11.1			
Overall Treatment	95.5	88.4	99.0	NA	

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

Name of Facility: Winchester Wastewater
 Permit Number: IN0021024
 For Month Of: June
 Year: 2006

[Signature] 7/24/06
 (SIGNATURE OF CERTIFIED OPERATOR) (Date)
[Signature] 27 July 06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Page 4 of 4 State Form 10829 (R/12-2005)

Day Of Month	SLUDGE TO DIGESTER		Anaerobic Only			DIGESTER OPERATION									
	Primary Sludge Gal. x 1000	Waste Act. Sludge Gal. x 1000	pH	Gas Production Cubic Ft. x 1000	Temperature - F	Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000			
1	77.51														
2	166.37														
3	200.074														
4	152.68														
5	172.52											39.688			
6	181.31														
7	175.63														
8	181.59														
9	161.87														
10	180.49														
11	186.23														
12	183.88														
13	166.91	47.3													
14	189.38											37.916			
15	185.82														
16	171.29														
17	195.88														
18	195.88														
19	176.46														
20	181.31														
21	172.93														
22	174.2														
23	188.1														
24	218.64														
25	157.51														
26	199.53														
27	142.68	96.89													
28	192.08														
29	208.55											51.395			
30	212.96														
Avg.	178.342	72.095										43			
Max.	218.64	96.89										51.395			
Min.	77.51	47.3										37.916			
Data	30	2	0	0	0	0	0	0	0	0	0	3	0	0	0

Send completed forms by the 28th of the month to:

Indiana Department of Environmental Management
 Office of Water Quality, Mail Code 65-42
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2251

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021024		001A	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
MO	DAY	YEAR	TO
07	01	06	07 31 06

MAJOR F - FINAL EFFLUENT

Form Approved OMB No. 2040-0004
 Approval Expires 05-31-98

1 N 0 0 2 1 0 2 4 0 0 1 A 0 7 0 6 *

For Any Questions call Dan Knowles at 317-232-0019

*** NO DISCHARGE ☐ ***
 NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
OXYGEN, DISSOLVED (DO) 00300 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		7.0	*****	*****	(19)	Ø	20/31
	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	***** DAILY AV	***** DAILY MX	MG/L		5 TMS/ WEEK GRAB-4
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		7.4	*****	8.2	(12)	Ø	20/31
	PERMIT REQUIREMENT	*****	*****	*****	6.0 DAILY MN	***** DAILY AV	9.0 DAILY MX	SU		5 TMS/ WEEK GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	124.19	151.97	(26)	*****	10.9	12.24	(19)	Ø	21/31
	PERMIT REQUIREMENT	292.4 MO AVG	438.6 MX WK AV	LBS/DY	*****	16.0 MO AVG	24.0 MX WK AV	MG/L		5 TMS/ WEEK COMP24
NITROGEN, AMMONIA: TOTAL (AS N) 00610 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	.7308	.9653	(26)	*****	.06	.0892	(19)	Ø	21/31
	PERMIT REQUIREMENT	27.4 MO AVG	42.0 MX WK AV	LBS/DY	*****	1.5 MO AVG	2.3 MX WK AV	MG/L		5 TMS/ WEEK COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	1.31193	1.44907	(03)	*****	*****	*****		Ø	31/31
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT MX WK AV	MGD	*****	*****	*****	*****		5 TMS/ WEEK TOTALZ
CHLORINE, TOTAL RESIDUAL 50060 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	.0319	.06	(19)	Ø	21/31
	PERMIT REQUIREMENT	*****	*****	*****	*****	0.06 MO AVG	0.06 DAILY MX	MG/L		5 TMS/ WEEK GRAB
E.COLI, COLONY FORMING UNITS (CFU) 51041 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		*****	27	101	(32)	Ø	21/31
	PERMIT REQUIREMENT	*****	*****	*****	*****	125.0 MO GEOMN	235.0 DAILY MX	CFU/ 100ML		5 TMS/ WEEK GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Steven D. Croyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Steven D. Croyle

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 584-845

8 23 06

AREA CODE

NUMBER

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

7-14-06 PLANT DOWN DURING OPERATOR ATTENDANCE FOR TANK CLEANING.

MUNICIPAL MAJOR
 RANDOLPH COUNTY

MUNICIPAL MAJOR RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98

Revised:

☐

IN0021024	001A
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

MO	DAY	YEAR	TO	MO	DAY	YEAR
07	01	06		07	31	06



For Any Questions call Dan Knowles at 317-232-0019

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	28.745	36.937	(26)	*****	2.6	2.92	(19)	Ø	21/31
	PERMIT REQUIREMENT	182.8 MO AVG	274.1 MX WK AV	LBS/DY	*****	10.0 MO AVG	15.0 MX WK AV	MG/L	5 TMS/ WEEK	COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	40.67	(80)	*****	*****	*****		Ø	ONCE/ month RCOTOT
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL/ MONTH	*****	*****	*****	*****	ONCE/ MONTH	RCOTOT
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

Steven D. Croyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Signature of Steven D. Croyle

SIGNATURE OF PRINCIPAL EXECUTIV
OFFICER OR AUTHORIZED AGENT

TELEPHONE

765 584-6888

DATE

23 06

AREA CODE

NUMBER

MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
RANDOLPH COUNTY



Monthly Report of Operation Activated Sludge Type Wastewater Treatment Plant

State Form 10829 (R/12-2005)

Page 1 of 4

Name of Facility Winchester Wastewater Treatment Plant		Permit Number IN0021024	
Month July	Year 2006	Plant Design Flow 2.19 mgd	Telephone Number 765-584-1331
Facility's e-mail address (if available): Winchesterwwtp@verizon.net			
Certified Operator: Name Christopher W. Martin		Class III	Certificate Number 16763
		Expiration Date 6/30/2008	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature (Optional)	Total= 3.1	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				Precipitation - Inches			Chlorine - Lbs	Lbs or Gal	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Sat						60	38		0.7649							
2	Sun						60	38		0.9784							
3	Mon			0.3			60	38		1.0237	7.6	96	819.615	93	794.002		8.14
4	Tue			0.3			70	40		1.0421	7.5	113	982.096	111	964.714		11.5
5	Wed						60	38		0.928	7.5	62	479.85	138	1068.05		13.1
6	Thu						42	44		0.8504	7.5	59	418.448	85	602.849		13.5
7	Fri						60	38		0.7985	7.4	71	472.824	43	286.358		15.3
8	Sat						62	42		0.8481							
9	Sun						58	42		0.762							
10	Mon						46	38		0.792	7.2	88.3	583.246	109	719.976		19.7
11	Tue						42	38		0.8865	7.4	103.8	767.436	40	295.736		15.4
12	Wed			0.3			39	36		0.8008	7.2	69	460.828	57	380.684		15.9
13	Thu			0.1			38	34		0.252	7.2	59	123.999	109	229.083		12.3
14	Fri									0.6626		63	348.143	71	392.352		15.7
15	Sat						42	36		0.8447							
16	Sun						42	36		0.6954							
17	Mon						40	36		0.7565	7.7	56.3	355.209	96	605.684		11
18	Tue						40	36		0.6996	7.8	80.7	470.857	102	595.136		11.2
19	Wed						45	38		0.6371	7.5	97	515.401	97	515.401		21.4
20	Thu						45	38		0.7135	7.4	88	523.652	49	291.579		15.5
21	Fri						40	38		0.5083	7.5	91	385.769	58	245.875		26
22	Sat			0.9			40	38		0.8119							
23	Sun						40	38		0.9064							
24	Mon						50	44		0.8946	7.7	53	395.431	31	231.29		6.26
25	Tue						50	44		0.8312	7.4	64	443.661	46	318.882		13.3
26	Wed						52	44		0.9737	7.5	95	771.463	83	674.015		10.3
27	Thu			0.3			55	40		1.0434	7.5			78	678.753		14.6
28	Fri			0.9			57	44		0.9497	7.5	89	704.924	57	451.468		9.84
29	Sat						55	42		1.238							
30	Sun						54	42		0.9573							
31	Mon						55	36		0.9948	7.4	31	257.196	38	315.272		5.42
Average							49.967	39.133		0.83375		76	514.002	76	507.484		13.59
Maximum				0.9			70	44		1.238	7.8	113	982.096	138	1068.05		26
Minimum							38	34		0.252	7.2	31	123.999	31	229.083		5.42
No. of Data				7	0	0	30	30	0	31	20	20	20	21	21	0	21

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Christopher W. Martin 8/22/06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)

Steve Lyle 23 Aug 06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

C. S. W. Miller 8/22/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Stan D. Gyle 23 Aug 06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Name of Facility: Winchester Wastewater Treatment Plant
 Permit Number: IN0021024
 For Month Of: July
 Year: 2006

Page 2 of 4 State Form 10829 (R/12-2005)

Day Of Month	PRIMARY EFFLUENT		AERATION							SECONDARY EFFLUENT		FINAL EFFLUENT					
			MIXED LIQUOR				RETURN SLUDGE										
	CBOD5 - mg/l	Susp. Solids - mg/l	Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Temperature - F	Volume - MG	Susp. Solids - mg/l	CBOD5 - mg/l	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
1								4.2422									
2								3.4105									
3	81	53	56	4497	125	6.1	21	4.0838	5568	3.2	8.7	1.59	0.05	46	7.8	8.6	
4	42	62						3.8756		2.1	10.2	1.3	0.01	40	7.5	8.3	
5	50	65	55	4517	122	6.1	21	3.8723	5583	2.3	8.1	1.37	0.04	75	7.7	8.6	
6	45	17	56.5	4599	123	5.9	21	3.9754	6085	2.5	6.2	1.87	0.01	25	7.7	8.5	
7	38	77	54	4835	112	5.5	22	3.8806	6339	2.7	9.9	0.9	0.01	11	7.6	8.3	
8								4.284									
9								3.8372									
10	54.6	71	64.5	5255	123	5.5	21	3.9026	5942	2.7	9.8	1.27	0.01	18	7.5	8.4	
11	63	102	55.5	5147	108	5.6	21	4.1072	5291	1.9	10.3	1.28	0.05	31	7.7	8.2	
12	49	58	64	5076	126	5.8	21	4.0903	5576	3.1	10.9	1.61	0.02	37	7.7	8.3	
13	34	43	56.5	5048	112	5.4	22	2.1784	5687	1.9	7.4	1.7	0.05	20	7.4	8.4	
14	49	61	61.3	5208	118	6.3	23	3.6625	5536	3	5.8						
15								4.339									
16								3.6747									
17	52.4	76	56.5	5049	112	5.0	23	3.9585	5830	1.8	7.6	1.23	0.05	44	8.1	7.8	
18	61.6	65	56	4922	114	4.9	21	3.9806	6333	1.1	7.5	0.78	0.02	26	8.2	8.1	
19	58	40	60.5	5162	117	4.8	22	4.0459	6037	2.3	10.2	1.16	0.05	21	7.8	8.2	
20	61	49	58.5	5172	113	4.1		3.986	6784	1.7	11	1.4	0.04	30	7.6	7.7	
21	47	63	65	5559	117	3.5	23	4.2699	7179	1.8	11.4	0.67	0.06	101	7.9	7.0	
22								3.6016				0.98	0.03	77			
23								4.143									
24	43	56	62.5	4856	129	5.0	21	3.9316	6309	2.6	9.1	1.27	0.02	10	7.8	8.5	
25	44	56	64.5	5149	125	4.4	22	4.1027	5935	2.2	7.7	1.08	0.04	30	7.7	8.3	
26	57	63	58	4651	125	4.4	22	3.9786	5674	2.3	11	1.08	0.04	12	7.8	8.1	
27	63	72	59.5	5150	116	3.6	24	4.0781	6382	2.4	12	0.8	0.02	15	7.8	7.6	
28	60	52	63	5227	121	5.8	22	3.4373	6982	3.5	14.4	1	0.04	12	7.7	7.7	
29								4.125									
30								4.3077									
31	40	72	56	5166	108	5.6	23	3.9475	6048	2.6	6.9	0.91	0.01	19	7.6	7.5	
Avg.	52.0	60.6	59	5012	118	5.2	22	3.9132	6055	2.4	9.3	1.2024	0.0319	27		8.1	
Max.	81	102	65	5559	128.71	6.3	24	4.339	7179	3.5	14.4	1.87	0.06	101	8.2	8.6	
Min.	34	17	54	4497	107.83	3.5	21	2.1784	5291	1.1	5.8	0.67	0.01	10	7.4	7	
Data	21	21	20	20	20	20	19	31	20	21	21	21	21	21	20	20	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):

PLANT DOWN DURING OPERATOR ATTENDANCE FOR TANK CLEANING ON 7-14-06

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

8/22/06
(DATE)

(SIGNATURE OF CERTIFIED OPERATOR)

23 Aug 06
(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

Name of Facility: Winchester Wastewater Treatment
Permit Number: IN0021024
For Month Of: July
Year: 2006

Page 3 of 4 State Form 10829 (R/12-2005)

FINAL EFFLUENT																
Day Of Month	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average	Oil & Grease - mg/l	
1	0.8361															
2	0.9089															
3	1.1516		3.5		33.635		12.4		119.17		0.01		0.0961			
4	1.3964		2.3		26.802		10		116.53		0.0942		1.0977			
5	1.3882		2.8		32.437		6.3		72.983		0.0631		0.731			
6	1.798		2.4		36.01		12.3		184.55		0.0062		0.093			
7	1.8574		3.6		55.8		17.2		266.6		0.052		0.806			
8	1.643	1.44907		2.92		36.937		11.64		151.97		0.0451		0.5648		
9	1.2684															
10	1.2104		3.3		33.333		12.7		128.28		0.046		0.4646			
11	1.2423		2.5		25.917		10.9		113		0.01		0.1037			
12	1.1119		3		27.836		11.7		108.56		0.01		0.0928			
13	0.5298		2		8.8424		8.1		35.812		0.05		0.2211			
14	1.002		2.8		23.413		10.4		86.962		0.0585		0.4892			
15	1.2538	1.08837		2.72		23.868		10.76		94.523		0.0349		0.2743		
16	1.2023															
17	1.3706		2.7		30.882		6.6		75.489		0.021		0.2402			
18	1.3542		2.1		23.732		9.8		110.75		0.036		0.4068			
19	1.335		2.3		25.623		7.9		88.011		0.076		0.8467			
20	1.7177		2.3		32.969		13		186.34		0.107		1.5338			
21	1.4469		1.8		21.734		11.1		134.03		0.107		1.292			
22	1.1749	1.37166		2.24		26.988		9.68		118.92		0.0694		0.8639		
23	1.4911															
24	1.4192		2		23.686		14		165.81		0.153		1.812			
25	1.4071		2.5		29.356		8.8		103.33		0.032		0.3758			
26	1.3605		3.4		38.601		10		113.53		0.0189		0.2146			
27	1.4459		2.2		26.545		11.1		133.93		0.0373		0.4501			
28	1.154		2		19.26		17.3		166.6		0.205		1.9742			
29	1.08	1.33683		2.42		27.49		12.24		136.64		0.0892		0.9653		
30	1.6286															
31	1.4836		2.2		27.237		7.9		97.807		0.162		2.0057			
Avg	1.31193		2.6		28.745		10.9		124.19		0.06		0.7308			
Max	1.8574	1.44907	3.6	2.92	55.8	36.937	17.3	12.24	266.6	151.97	0.205	0.0892	2.0057	0.9653		
Min	0.5298	1.08837	1.8	2.24	8.8424	23.868	6.3	9.68	35.812	94.523	0.0062	0.0349	0.0928	0.2743		
Data	31	4	21	4	21	4	21	4	21	4	21	4	21	4	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow:	
Percent Removal	BOD5	S.S.	Ammonia	Phosphorus	(million gallons)	40.67
Primary Treatment	31.9	20.0			Percent Capacity (actual flow/design)	60%
Secondary Treatment	95.5	84.6				
Tertiary Treatment	-8.0	-17.0				
Overall Treatment	96.7	85.6	99.5	NA		

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

Name of Facility: Winchester Wastewater Treatment Plant
Permit Number: IN0021024
For Month Of: July
Year: 2006

[Signature] 8/22/06
(SIGNATURE OF CERTIFIED OPERATOR) (Date)
[Signature] 23 Aug 06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Page 4 of 4 State Form 10829 (R/12-2005)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION												
	Primary Sludge Gal. x 1000	Waste Act. Sludge Gal. x 1000	Anaerobic Only			Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000			
			pH	Gas Production Cubic Ft. x 1000	Temperature - F										
1	20.036														
2	15.739														
3	20.318														
4	19.206														
5	18.752														
6	42.24														
7	29.64														
8	29.13														
9	29.07														
10	28.78	39.57													
11	28.64														
12	28.75														
13	14.78												44.365		
14	49.65														
15	40.09														
16	20.22														
17	30.12														
18	30.17														
19	30.24														
20	30														
21	39.64	62.57											42.385		
22	19.9														
23	30.25														
24	30.25														
25	30.31														
26	30.18														
27	30.11														
28	26.62	24.76													
29	32														
30	30.77														
31	30														
Avg.	28.568	42.3											43.375		
Max.	49.65	62.57											44.365		
Min.	14.78	24.76											42.385		
Data	31	3	0	0	0	0	0	0	0	0	0	0	2	0	

Send completed forms by the 28th of the month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MAJOR F - FINAL EFFLUENT
 Form Approved OMB No. 2040-0004
 Approval Expires 05-31-98



For Any Questions call Dan Knowles at 317-232-0019

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
OXYGEN, DISSOLVED (DO) 00300 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	***** *****	7.3 6.0 DAILY MN	***** ***** DAILY AV	***** ***** DAILY MX	(19) MG/L	23/31 5 TMS/ WEEK	Grb4 GRAB-4
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	***** *****	7.5 6.0 DAILY MN	***** ***** DAILY AV	8.4 9.0 DAILY MX	(12) SU	23/31 5 TMS/ WEEK	Grb GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	59.186 292.4 MO AVG	114.01 438.6 MX WK AV	(26) LBS/DY	***** *****	8.1 16.0 MO AVG	12.44 24.0 MX WK AV	(19) MG/L	23/31 5 TMS/ WEEK	Comp24 COMP24
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	.883 27.4 MO AVG	1.3604 42.0 MX WK AV	(26) LBS/DY	***** *****	.13 1.5 MO AVG	.1774 2.3 MX WK AV	(19) MG/L	23/31 5 TMS/ WEEK	Comp24 COMP24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	.86112 REPORT MO AVG	1.1732 REPORT MX WK AV	(03) MGD	***** *****	***** *****	***** *****	***** *****	31/31 5 TMS/ WEEK	TOTAL2 TOTALZ
CHLORINE, TOTAL RESIDUAL 50060 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	***** *****	***** *****	.0491 0.06 MO AVG	.06 0.06 DAILY MX	(19) MG/L	23/31 5 TMS/ WEEK	Grb GRAB
E.COLI, COLONY FORMING UNITS (CFU) 51041 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	***** *****	***** *****	24 125.0 MO GEOMN	79 235.0 DAILY MX	(3Z) CFU/ 100ML	23/31 5 TMS/ WEEK	Grb GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE DATE
 AREA CODE NUMBER MO DAY YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
 RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



For Any Questions call Dan Knowles at 317-232-0019

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

Revised:

☐

IN0021024		001A	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
MO	DAY	YEAR	MO DAY YEAR
08	01	06	08 31 06

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
MERCURY TOTAL RECOVERABLE 71901 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	***** *****	***** *****	***** *****	4.5 REPORT DAILY MX	(3M) NG/L	ONCE/2 MNTS ONCE/ 2 MNTS	GRAB GRAB
MERCURY TOTAL RECOVERABLE 71901 G 0 0 RAW SEW/INFLUENT	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	***** *****	***** *****	***** *****	80 REPORT DAILY MX	(3M) NG/L	ONCE/2 MNTS ONCE/ 2 MNTS	GRAB GRAB
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	20.364 182.8 MO AVG	32.191 274.1 MX WK AV	(26) LBS/DY	***** *****	2.8 10.0 MO AVG	3.54 15.0 MX WK AV	(19) MG/L	23/31 5 TMS/ WEEK	COMP24 COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	26.695 REPORT MO TOTAL	(80) MGAL/ MONTH	***** *****	***** *****	***** *****	***** *****	ONCE/ MONTH ONCE/ MONTH	RCOTOT RCOTOT
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Steven D Croyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

[Signature]

SIGNATURE OF PRINCIPAL EXECUTIV OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 589 6845 09 28 06

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
RANDOLPH COUNTY



Monthly Report of Operation Activated Sludge Type Wastewater Treatment Plant

State Form 10829 (R/12-2005)

Page 1 of 4

Name of Facility		Permit Number	
Winchester Wastewater Treatment Plant		IN0021024	
Month	Year	Plant Design Flow	Telephone Number
August	2006	2.19 mgd	765-584-1331
Facility's e-mail address (if available): Winchesterwwtp@verizon.net			
Certified Operator: Name		Class	Certificate Number
Christopher W. Martin		III	16763
			Expiration Date
			6/30/2008

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature (Optional)	Total=	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				5			Chlorine - Lbs	Lbs or Gal	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Tue						55	36		0.8647	7.5	79	569.716	125	901.45		8.96
2	Wed						50	36		0.8203	7.3	125	855.163	37	253.128		13.8
3	Thu						48	30		1.198	7.4	132	1318.85	107	1069.07		14.8
4	Fri			0.5			48	30		0.8499	7.5	84	595.406	28	198.469		10.1
5	Sat						45	30		0.9							
6	Sun						45	30		0.839							
7	Mon						15	34		0.8103	7.8	52.2	352.762	51	344.653		8.48
8	Tue						50	32		0.878	7.8	51.3	375.645	69	505.254		23.2
9	Wed						48	32		0.775	7.3	67	433.055	30	193.905		17.7
10	Thu						50	32		0.85	7.7	48	340.272	80	567.12		18.1
11	Fri			0.5			48	24		0.8313	7.7	44	305.054	30	207.991		16
12	Sat						45	24		0.5782							
13	Sun						45	24		0.8051							
14	Mon						45	25		0.9226	7.6	112	861.782	165.4	1272.67		13.5
15	Tue			0.5			50	30		0.7708	7.7	102	655.704	42	269.996		16.1
16	Wed						36	30		0.6516	8.0	105	570.606	122	662.99		13.8
17	Thu						36	30		0.6898	7.7	96	552.281	57	327.917		14.8
18	Fri						40	38		0.6859	7.8	91	520.557	65	371.826		12.8
19	Sat						40	38		0.599							
20	Sun						40	38		0.6576							
21	Mon						40	38		0.6516	7.5	145	787.98	78	423.879		9.6
22	Tue						30	42		0.6273	7.6	105	549.327	59	308.669		17.6
23	Wed						30	40		0.6941	7.5	16	92.6207	46	266.285		14.9
24	Thu						21	32		0.6513	7.5	105	570.343	37	200.978		17.8
25	Fri						21	32		0.6094	7.5	157	797.936	38	193.131		18.1
26	Sat						21	36		1.2546							
27	Sun			3			21	40		1.1965							
28	Mon			0.4			40	50		1.2594	7.6	53.5	561.932	48	504.163		8.59
29	Tue						40	46		1.1266	7.5	69	648.313	35	328.855		7.67
30	Wed			0.1			40	50		0.949	7.6	120.5	953.717	50	395.733		10
31	Thu						35	43		0.846	7.5	104	733.787	38	268.114		14.5
Average							39.29	34.581		0.83364		90	608.818	62	436.358		13.95
Maximum							55	50		1.2594	8.0	157	1318.85	165.4	1272.67		23.2
Minimum							15	24		0.5782	7.3	16	92.6207	28	193.131		7.67
No. of Data							31	31	0	31	23	23	23	23	23	0	23

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Christopher W. Martin 9-25-06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Stanley L. ... 28 SEPT 06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

Name of Facility: Winchester Wastewater Treatment Plant
 Permit Number: IN0021024
 For Month Of: August
 Year: 2006

[Signature] 8-25-06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
[Signature] 8/25/06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 2 of 4 State Form 10829 (R/12-2005)

Day Of Month	PRIMARY EFFLUENT		AERATION							SECONDARY EFFLUENT		FINAL EFFLUENT					
	CBOD5 - mg/l	Susp. Solids - mg/l	Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Temperature - F	Volume - MG	Susp. Solids - mg/l	CBOD5 - mg/l	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
1	61	76	60	5468	110	5.3	23	3.9531	6138	3.1	16.7	1.07	0.03	21	7.7	7.3	
2	69	45	52.5	5023	105	5.8	23	3.8171	5555	3.3	13.6	1.62	0.06	17	7.5	8.0	
3	50	46	51	4712	108	5.6	24	3.9228	5586	2.3	9.2	1.72	0.06	22	7.7	7.8	
4	63	43	44	4927	89	6.2	23	3.468	5544	2.1	7.5	1.78	0.06	15	7.9	8.1	
5								4.063									
6								4.2949									
7	82.4	72	49.5	5054	98	6.3	23	3.9856	5121	2.8	12.8	0.94	0.05	21	8.0	8.0	
8	61.6	104	54.8	4693	117	6.1	23	4.0176	5689	1.9	9	1.66	0.06	25	8.4	8.2	
9	50	52	50.8	4826	105	5.9	23	3.9536	5469	2.1	6.7	1.25	0.02	13	7.7	7.5	
10	48	109	54.8	5060	108	5.5	23	3.3668	5213	3.8	12.1	1.74	0.02	43	8.2	8.0	
11	81	92	66	5544	119	5.2	23	4.3268	6247	3.1	9.3	1.21	0.05	64	8.0	8.0	
12								3.2736									
13								4.3081									
14	219	48	56.5	5664	100	5.9	22	3.8625	5875	2.4	9.3	2.43	0.06	79	7.8	8.2	
15	70	75	62	5120	121	6.2	23	4.0823	5149	1	7.1	2.02	0.05	32	7.9	8.3	
16	59	27	70.5	5971	118	2.2	23	3.9568	3595	1.5	7.7	2.14	0.06	7	8.1	8.0	
17	75	22	52.5	5008	105	6.2	23	4.1022	5929	1.6	7.5	2.39	0.05	42	8.1	8.6	
18	73	29	57.5	5038	114	6.0	23	4.2505	5401	1.4	4	1.53	0.06	31	8.0	7.8	
19								3.7264									
20								4.2745									
21	79.2	66	58	5089	114	5.6	21	4.0381	5585	1.8	6.8	2.62	0.06	30	7.9	8.0	
22	62.7	80	53.3	5030	106	5.8	22	4.1723	5404	1.9	7.1	1.41	0.06	26	8.0	7.3	
23	60	43	37	5597	66	6.0	23	4.0496	5324	1.4	7.4	1.74	0.06	37	7.8	8.1	
24	80	27	54.3	4695	116	5.9	24	4.1507	5275	2	8	1.02	0.01	16	7.9	8.5	
25	92	49	61.8	5262	117	5.9		3.8412	5009	3.9	5.6	1.26	0.06	11	7.9	8.1	
26								4.4108									
27								3.7346									
28	14.3	45	54.3	4584	118	6.5	23	4.1004	5848	1	4.5	0.54	0.03	41	7.8	8.4	
29	34.1	50	52	4789	109	6.6	22	3.6873	5194	2.5	5.6	1.14	0.06	15	7.9	7.8	
30	48.8	24	50	4855	103	6.2	23	4.1533	5213	1.9	6.6	2.4	0.06	23	7.8	8.3	
31	39	25	50.3	4408	114	6.4	23	4.1206	5402	2.1	6.5	2.03	0.04	21	7.8	8.9	
Avg.	68.4	54.3	54	5062	108	5.8	23	3.9827	5425	2.2	8.3	1.6374	0.0491	24		8.1	
Max.	219	109	70.5	5971	121.09	6.6	24	4.4108	6247	3.9	16.7	2.62	0.06	79	8.4	8.9	
Min.	14.3	22	37	4408	66.107	2.2	21	3.2736	3595	1	4	0.54	0.01	7	7.5	7.3	
Data	23	23	23	23	23	23	22	31	23	23	23	23	23	23	23	23	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

Name of Facility: Winchester Wastewater Treatment Permit Number: IN0021024 For Month Of: August Year: 2006

CRW/MB 9-25-06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Stan D. Galt 28 Sept 06
(SIGNATURE OF PRINCIPAL/EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 State Form 10829 (R/12-2005)

Day Of Month	FINAL EFFLUENT														
	Flow		BOD				Total Suspended Solids				Ammonia				Other
	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average	Oil & Grease - mg/l
1	1.1706		4.8		46.89		19.4		189.51		0.166		1.6216		
2	1.0734		4.5		40.309		8.3		74.347		0.029		0.2598		
3	1.0779		3		26.985		11.3		101.64		0.01		0.09		
4	0.8359		2.8		19.532		15.3		106.73		0.171		1.1928		
5	0.92	1.17		3.46		32.191		12.44		114.01		0.1076		1.034	
6	1.0426														
7	0.9695		2.7		21.844		8.5		68.769		0.214		1.7314		
8	1.228		3		30.743		7.6		77.882		0.171		1.7523		
9	0.8907		2.9		21.555		7.9		58.72		0.066		0.4906		
10	0.8336		4.6		31.999		8		55.651		0.154		1.0713		
11	0.7463		4.5		28.025		7		43.595		0.282		1.7563		
12	0.4958	0.88664		3.54		26.833		7.8		60.923		0.1774		1.3604	
13	0.5646														
14	0.7068		1.9		11.207		9.8		57.803		0.142		0.8376		
15	0.5879		1.6		7.8496		4.9		24.04		0.137		0.6721		
16	0.5503		1.9		8.7253		9.9		45.463		0.184		0.845		
17	0.6986		2.7		15.741		6.6		38.477		0.091		0.5305		
18	0.5621		1.7		7.9742		6.8		31.897		0.027		0.1266		
19	0.48	0.5929		1.96		10.299		7.6		39.536		0.1162		0.6024	
20	0.6436														
21	0.7176		2.2		13.174		7.2		43.116		0.221		1.3234		
22	0.6565		2.2		12.053		5.1		27.94		0.172		0.9423		
23	0.6036		1.6		8.0593		5.3		26.696		0.0694		0.3496		
24	0.7889		1.9		12.508		7.3		48.059		0.0724		0.4766		
25	0.6745		4.3		24.203		8.5		47.844		0.0558		0.3141		
26	1.3095	0.7706		2.44		14		6.68		38.731		0.1181		0.6812	
27	1.338														
28	1.4181		1.3		15.384		4.2		49.703		0.0768		0.9089		
29	1.2704		2.7		28.624		5.6		59.368		0.0962		1.0199		
30	0.9685		1.9		15.356		5.9		47.685		0.0664		0.5367		
31	0.871	1.1732	2.7	2.15	19.625	19.747	5	5.175	36.342	48.275	0.201	0.1101	1.461	0.9816	
Avg	0.86112		2.8		20.364		8.1		59.186		0.13		0.883		
Max	1.4181	1.1732	4.8	3.54	46.89	32.191	19.4	12.44	189.51	114.01	0.282	0.1774	1.7563	1.3604	
Min	0.48	0.5929	1.3	1.96	7.8496	10.299	4.2	5.175	24.04	38.731	0.01	0.1076	0.09	0.6024	
Data	31	5	23	5	23	5	23	5	23	5	23	5	23	5	0 0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow: (million gallons)
Percent Removal	BOD5	S.S.	Ammonia	Phosphorus	26.695
Primary Treatment	23.8	13.1			Percent Capacity (actual flow/design) 39%
Secondary Treatment	96.8	84.7			
Tertiary Treatment	-24.6	2.7			
Overall Treatment	96.9	87.1	99.1	NA	

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

Name of Facility: Winchester Wastewater Treatment Plant
Permit Number: IN0021024
For Month Of: August
Year: 2006

(Signature of Certified Operator) [Signature] 9-25-06 (Date)
(Signature of Principal Executive Officer or Authorized Agent) [Signature] 28 Sept 06 (Date)

Page 4 of 4 State Form 10829 (R/12-2005)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION												
			Anaerobic Only			Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000			
	pH	Gas Production Cubic Ft. x 1000	Temperature - F												
1	29.75	45.03													
2	29.39														
3	30.18														
4	24.91														
5	30														
6	35.13														
7	30.28														
8	30.56												51.685		
9	30.98												28.663		
10	30.9														
11	40.91														
12	20.5														
13	30.61														
14	30.63														
15	28.89														
16	30.3														
17	31.09														
18	41.41														
19	20.58														
20	30.88														
21	30.71														
22	30.69														
23	31.03														
24	39.96														
25	50.46														
26	50.53														
27	38.55														
28	40.04	37.93													
29	40.85														
30	40.83														
31	40.89														
Avg.	33.626	41.48											40.174		
Max.	50.53	45.03											51.685		
Min.	20.5	37.93											28.663		
Data	31	2	0	0	0	0	0	0	0	0	0	0	2	0	0

Send completed forms by the 28th of the month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

EXECUTIVE SUMMARY - Detection Highlights

A6I070215

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
RAW SAMPLE #1 09/05/06 001				
Mercury	80.0	5.0	ng/L	CFR136A 1631E
EFFLUENT SAMPLE #1 09/05/06 002				
Mercury	4.4	0.50	ng/L	CFR136A 1631E
EFFLUENT SAMPLE #2 09/05/06 003				
Mercury	4.5	0.50	ng/L	CFR136A 1631E
FIELD BLANK 09/05/06 004				
Mercury	0.70	0.50	ng/L	CFR136A 1631E

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP

ADDRESS WINCHESTER CITY HALL

113 E WASHINGTON ST

WINCHESTER

IN

47394

FACILITY WINCHESTER MUNICIPAL WWTP

LOCATION WINCHESTER

ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised:



IN0021024

PERMIT NUMBER

001A

DISCHARGE NUMBER

MONITORING PERIOD

MO DAY YEAR

09 01 06

MO DAY YEAR

09 30 06

FROM

TO

MAJOR
F - FINAL
EFFLUENTForm Approved
OMB No. 2040-0004
Approval Expires 05-31-98

For Any Questions call Dan Knowles at 317-232-0019

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		7.7	*****	*****	(19)	Ø 21/30	Grab 4
00300 1 1 0	PERMIT	*****	*****	*****	6.0	*****	*****	MG/L	5 TMS/ WEEK	GRAB-4
EFFLUENT GROSS VALUE	REQUIREMENT				DAILY MN	DAILY AV	DAILY MX			
PH	SAMPLE MEASUREMENT	*****	*****		7.5	*****	8.0	(12)	Ø 21/30	Grab
00400 1 0 0	PERMIT	*****	*****	*****	6.0	*****	9.0	SU	5 TMS/ WEEK	GRAB
EFFLUENT GROSS VALUE	REQUIREMENT				DAILY MN		DAILY MX			
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	62.65	132.01	(26)	*****	7.4	12.44	(19)	Ø 21/30	comp 24
00530 1 1 0	PERMIT	292.4	438.6	LBS/DY	*****	16.0	24.0	MG/L	5 TMS/ WEEK	COMP24
EFFLUENT GROSS VALUE	REQUIREMENT	MO AVG	MX WK AV			MO AVG	MX WK AV			
NITROGEN, AMMONIA TOTAL (AS N)	SAMPLE MEASUREMENT	.6143	.8959	(26)	*****	.09	.1478	(19)	Ø 21/30	comp 24
00610 1 1 0	PERMIT	27.4	42.0	LBS/DY	*****	1.5	2.3	MG/L	5 TMS/ WEEK	COMP24
EFFLUENT GROSS VALUE	REQUIREMENT	MO AVG	MX WK AV			MO AVG	MX WK AV			
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	.9333	1.22377	(03)	*****	*****	*****		Ø 30/30	Total 2
50050 1 0 0	PERMIT	REPORT	REPORT	MGD	*****	*****	*****	*****	5 TMS/ WEEK	TOTALZ
EFFLUENT GROSS VALUE	REQUIREMENT	MO AVG	MX WK AV							
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****		*****	.0381	.06	(19)	Ø 21/30	GRAB
50060 1 1 0	PERMIT	*****	*****	*****	*****	0.06	0.06	MG/L	5 TMS/ WEEK	GRAB
EFFLUENT GROSS VALUE	REQUIREMENT					MO AVG	DAILY MX			
E.COLI, COLONY FORMING UNITS (CFU)	SAMPLE MEASUREMENT	*****	*****		*****	21	56	(32)	Ø 21/30	GRAB
51041 1 0 0	PERMIT	*****	*****	*****	*****	125.0	235.0	CFU/ 100ML	5 TMS/ WEEK	GRAB
EFFLUENT GROSS VALUE	REQUIREMENT					MO GEOMIN	DAILY MX			

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

Steven D. Croyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIV
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765 584 6815 10 16 06

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
RANDOLPH COUNTY

MUNICIPAL MAJOR RANDOLPH COUNTY

Cm 10-16-06

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



For Any Questions call Dan Knowles at 317-232-0019

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

Revised:

☐

IN0021024		001A	
PERMIT NUMBER		DISCHARGE NUMBER	
MONITORING PERIOD			
MO	DAY	YEAR	
09	01	06	
FROM		TO	
09	01	06	
09	30	06	

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	19.518	28.38	(26)	*****	2.5	2.62	(19)	Ø	21/30
80082 1 1 0	PERMIT REQUIREMENT	182.8	274.1	LBS/DY	*****	10.0	15.0		5 TMS/ WEEK	COMP24
EFFLUENT GROSS VALUE		MO AVG	MX WK AV			MO AVG	MX WK AV			
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	27.999	(80)	*****	*****	*****		Ø	once/ month
82220 1 0 0	PERMIT REQUIREMENT	*****	REPORT	MGAL/ MONTH	*****	*****	*****	*****		ONCE/ MONTH
EFFLUENT GROSS VALUE			MO TOTAL							RCOTOT
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Steven D Croyle

TYPED OR PRINTED

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Steven D Croyle
 SIGNATURE OF PRINCIPAL EXECUTIV
 OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
765 946845		10	16	06
AREA CODE	NUMBER	MO	DAY	YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
RANDOLPH COUNTY

MUNICIPAL MAJOR RANDOLPH COUNTY



Monthly Report of Operation Activated Sludge Type Wastewater Treatment Plant


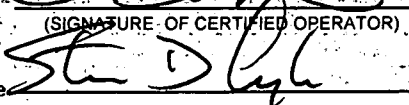
State Form 10829 (R/12-2005)

Page 1 of 4

Name of Facility		Permit Number	
Winchester Wastewater Treatment Plant		IN0021024	
Month	Year	Plant Design Flow	Telephone Number
September	2006	2.19 mgd	765-584-1331
Facility's e-mail address (if available): Winchesterwtp@verizon.net			
Certified Operator: Name		Class	Certificate Number
Christopher W. Martin		III	16763
		Expiration Date	6/30/2008

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature (Optional)	Total=	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE								
				1.8			Precipitation - Inches	Chlorine - Lbs	Lbs or Gal	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Fri			0.1			30	38		0.7938	7.5	128	847.397	86	569.345		11.61	
2	Sat						30	38		0.7259								
3	Sun						30	35		0.6847								
4	Mon						40	30		0.6886	7.5	39	223.974	29	166.545		10.5	
5	Tue						30	38		0.692	7.4	56	323.192	16	92.3405		9.94	
6	Wed						25	30		0.696	7.5	113	655.924	50	290.232		18.5	
7	Thu						30	32		0.672	7.8	173	969.575	42	235.388		15.6	
8	Fri						30	32		0.622	7.7	119	617.31	51	264.561		17.3	
9	Sat						30	30		0.64								
10	Sun						20	30		0.69								
11	Mon						25	32		0.686	7.4	46	263.177	34.5	197.383		10.7	
12	Tue			0.5			35	45		0.986	7.4	123	1011.46	37	304.26		18.8	
13	Wed						40	49		0.535	7.5	147	655.899	33	147.243		17.6	
14	Thu						40	49		0.595	7.6	102	506.155	33	163.756		11.8	
15	Fri						35	45		0.6246	7.5	99	515.707	207.1	1078.82		17.8	
16	Sat						40	48		0.6433								
17	Sun						35	50		0.6871								
18	Mon						38	50		0.722	7.5	69	415.482	43	258.924		7.11	
19	Tue			0.6			44	50		0.6201	7.7	140	724.029	76	393.044		16.2	
20	Wed						35	46		0.6309	7.4	76	399.89	100	526.171		14.2	
21	Thu						40	50		0.651	7.5	93	504.929	97	526.646		16.4	
22	Fri						32	43		0.859	7.6	95	680.586	52	372.531		16.4	
23	Sat						35	30		0.93								
24	Sun						25	30		0.793								
25	Mon						30	42		0.707	7.4	80	471.71	38	224.062		9.17	
26	Tue						30	60		0.698	7.3	165	960.518	48	279.423		15.2	
27	Wed						28	47		0.846	7.5	78	550.34	39	275.17		17.2	
28	Thu			0.6			27	46		0.756	7.5	100	630.504	36	226.981		18.4	
29	Fri						27	48		0.723	7.4	104	627.101	30	180.895		16.4	
30	Sat						27	47		0.648								
Average								32.1	41.333		0.7082		102	597.85	56	322.558		14.61
Maximum				0.6				44	60		0.986	7.8	173	1011.46	207.1	1078.82		18.8
Minimum								20	30		0.535	7.3	39	223.974	16	92.3405		7.11
No. of Data				4	0	0	30	30	0	30	21	21	21	21	21	0	21	0

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

 10/16/06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
 16 Oct 2006
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

[Signature] 10-16-06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)

[Signature] 16 Oct 2006
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Name of Facility: Winchester Wastewater Treatment Plant Permit Number: IN0021024 For Month Of: September Year: 2006

Page 2 of 4 State Form 10829 (R/12-2005)

Day Of Month	PRIMARY EFFLUENT		AERATION							SECONDARY EFFLUENT		FINAL EFFLUENT					
	CBOD5 - mg/l	Susp. Solids - mg/l	MIXED LIQUOR				RETURN SLUDGE			CBOD5 - mg/l	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
			Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Temperature - F	Volume - MG	Susp. Solids - mg/l								
1	56	57	48.8	4458	109	7.0	23	4.2402	4821	2	4.6	1.25	0.05	41	7.8	8.4	
2								4.0613									
3								4.1897									
4								4.1859				1.35	0.06	25	7.6	8.2	
5	29	49	56	4418	127	6.5	21	4.1923	4863	2	5.7	1.62	0.04	6	8.0	7.7	
6	50	54	46.5	4049	115	6.5	22	4.1422	4171	1.4	5.2	1.13	0.03	23	7.7	8.5	
7	78	39	43.5	4478	97	6.8	23	4.186	4402	2	5.8	1.76	0.06	16	8.0	8.6	
8	72	65	43.5	4051	107	6.2	21	3.7665	4136	1.9	10	1.73	0.05	18	8.0	8.3	
9								4.172									
10								4.589									
11	89	38	45	4349	103	6.7	21	4.1398	4203	1.6	7.2	1.54	0.04	8	7.8	8.3	
12	78	77.5	46.3	4290	108	6.6	21	4.1407	3939	1.9	11.8	0.95	0.05	43	7.8	8.3	
13	55	25	45	4506	100	7.3		4.1252	4523	3.1	5.7	0.99	0.02	14	7.8	8.2	
14	49	29	42.5	4144	103	7.2	21	4.1316	4403	1.9	6.4	1.16	0.04	25	7.9	7.9	
15	54	70.4	62.5	4676	134	4.8		3.9435	4036	2.7	7.3	0.85	0.01	12	7.5	8.1	
16								4.1073									
17								4.316									
18	48	48	42.5	4683	91	6.8	22	4.0941	4240	3.6	7.3	1	0.04	38	7.8	8.3	
19	86	81	43.5	4106	106	6.8	21	4.0809	4482	2.3	6.3	1.73	0.02	19	7.8	8.1	
20	48	58	47	3715	127	7.0	19	4.1703	4609	3	7.8	2.06	0.04	33	7.7	8.2	
21	62	74	49.8	3928	127	7.1	19	4.1154	4288	2	5.9	2.1	0.06	8	7.7	8.3	
22	50	23	45	4420	102	7.0	20	3.6182	3629	3	6.5	1.39	0.02	15	7.7	8.2	
23								4.11									
24								4.6406									
25	76	59	45	3772	119	6.1	19	4.0568	3778	2.2	8.1	1.72	0.03	32	7.8	7.8	
26	73	77	46.3	3323	139	6.4	20	4.2019	3971	1.3	4.1	2.01	0.04	56	7.7	8.4	
27	88	63	42.5	4864	87	7.0	20	4.1986	3673	2.4	7.1	1.12	0.04	23	7.9	8.2	
28	74	26	38.8	3770	103	6.8	20	4.1364	3773	1.8	5.4	0.91	0.03	32	7.8	8.2	
29	63	57	42.5	3692	115	6.7	20	4.3484	4439	2.4	5.1	1.23	0.03	29	7.8	8.2	
30								4.274									
Avg.	63.9	53.5	46	4185	111	6.7	21	4.1558	4219	2.2	6.7	1.4095	0.0381	21		8.2	
Max.	89	81	62.5	4864	139.33	7.3	23	4.6406	4863	3.6	11.8	2.1	0.06	56	8.0	8.6	
Min.	29	23	38.8	3323	87.377	4.8	19	3.6182	3629	1.3	4.1	0.85	0.01	6	7.5	7.7	
Data	20	20	20	20	20	20	18	30	20	20	20	21	21	21	21	21	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

Name of Facility: Winchester Wastewater Treatment
 Permit Number: IN0021024
 For Month Of: September
 Year: 2006

(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)

(DATE)

Page 3 of 4 State Form 10829 (R/12-2005)

Day Of Month	FINAL EFFLUENT															
	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average	Oil & Grease - mg/l	
1	0.9262		1.7		13.14		3.1		23.96		0.1274		0.9847			
2	0.8038															
3	0.6742															
4	0.7188		3.4		20.395		5.1		30.592		0.506		3.0352			
5	0.751		1.6		10.027		5.3		33.216		0.203		1.2722			
6	0.633		2		10.565		4.5		23.771		0.01		0.0528			
7	0.637		2.3		12.226		4.7		24.984		0.01		0.0532			
8	0.794		2.3		15.24		3.5		23.191		0.01		0.0663			
9	0.86	0.724		2.32		13.691		4.62		27.151		0.1478		0.8959		
10	0.95															
11	1.263		2.5		26.349		34.5		363.62		0.01		0.1054			
12	1.45		2.8		33.881		7.1		85.912		0.01		0.121			
13	1.352		3.3		37.232		5.7		64.31		0.01		0.1128			
14	1.2474		1.8		18.737		4.9		51.007		0.088		0.916			
15	1.1406		2.7		25.699		10		95.183		0.0322		0.3065			
16	1.1634	1.22377		2.62		28.38		12.44		132.01		0.03		0.3124		
17	1.1296															
18	1.049		2		17.508		4.7		41.143		0.0212		0.1856			
19	0.9262		2.9		22.415		7.1		54.877		0.0491		0.3795			
20	0.9368		2.2		17.199		5.6		43.779		0.0647		0.5058			
21	0.856		2.3		16.43		8		57.147		0.129		0.9215			
22	0.937		3.2		25.022		8		62.554		0.01		0.0782			
23	1.15	0.9978		2.52		19.714		6.68		51.9		0.0548		0.4141		
24	1.084															
25	0.863		2.9		20.885		8.1		58.334		0.0149		0.1073			
26	0.8		1.8		12.017		7.9		52.74		0.01		0.0668			
27	0.875		2.8		20.445		7.9		57.685		0.042		0.3067			
28	0.777		2.9		18.804		5.6		36.311		0.21		1.3617			
29	0.751		2.5		15.668		5		31.335		0.313		1.9616			
30	0.5	0.80714		2.58		17.564		6.9		47.281		0.118		0.7608		
Avg	0.9333		2.5		19.518		7.4		62.65		0.09		0.6143			
Max	1.45	1.22377	3.4	2.62	37.232	28.38	34.5	12.44	363.62	132.01	0.506	0.1478	3.0352	0.8959		
Min	0.5	0.724	1.6	2.32	10.027	13.691	3.1	4.62	23.191	27.151	0.01	0.03	0.0528	0.3124		
Data	30	4	21	4	21	4	21	4	21	4	21	4	21	4		

MONTHLY REMOVAL SUMMARY					Total Monthly Flow:
Percent Removal	BOD5	S.S.	Ammonia	Phosphorus	(million gallons) 27.999
Primary Treatment	37.4	4.6			Percent Capacity (actual flow/design) 43%
Secondary Treatment	96.5	87.5			
Tertiary Treatment	-11.1	-11.7			
Overall Treatment	97.6	86.7	99.4	NA	

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

C.B.W. 108 10-16-06
 (SIGNATURE OF CERTIFIED OPERATOR) (Date)

Stu S. Ryle 14 Oct 2006
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Name of Facility: Winchester Wastew
 Permit Number: IN0021024
 For Month Of: September
 Year: 2006

Page 4 of 4 State Form 10829 (R/12-2005)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION											
	Primary Sludge Gal. x 1000	Waste Act. Sludge Gal. x 1000	Anaerobic Only			Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000		
			pH	Gas Production Cubic Ft. x 1000	Temperature - F									
1	40.06													
2	41.68													
3	41.19													
4	40.86													
5	40.25	94.55												
6	40.85													
7	40.42													
8	31.5											36		
9	50													
10	41.5													
11	41.4													
12	41.3													
13	41.5													
14	41.45													
15	41.73													
16	41.5													
17	41.52													
18	41.3													
19	41													
20	41.1													
21	41.1													
22	40.6													
23	41													
24	39.5													
25	39.5													
26	40.1	62.46												
27	39.8													
28	39.9													
29	40.7													
30	49.3													
Avg.	41.12	78.505										36		
Max.	50	94.55										36		
Min.	31.5	62.46										36		
Data	30	2	0	0	0	0	0	0	0	0	0	1	0	0

Send completed forms by the 28th of the month to:

Indiana Department of Environmental Management
 Office of Water Quality, Mail Code 65-42
 100 North Senate Avenue
 Indianapolis, Indiana 46204-2251

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP

ADDRESS WINCHESTER CITY HALL

113 E WASHINGTON ST

WINCHESTER

IN

47394

FACILITY WINCHESTER MUNICIPAL WWTP

LOCATION WINCHESTER

ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised:



IN0021024

001A

PERMIT NUMBER

DISCHARGE NUMBER

MONITORING PERIOD

MO DAY YEAR

10 01 06

MO DAY YEAR

10 31 06

FROM

TO

MAJOR
F - FINAL
EFFLUENTForm Approved
OMB No. 2040-0004
Approval Expires 05-31-98

For Any Questions call Dan Knowles at 317-232-0019

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER	<div></div>	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
OXYGEN, DISSOLVED (DO) 00300 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	 *****	7.8 6.0 DAILY MN	***** ***** DAILY AV	***** ***** DAILY MX	(19) MG/L	Ø 5 TMS/ WEEK	22/31 GRAB-4	Grb-4
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	 *****	7.4 6.0 DAILY MN	***** ***** DAILY AV	7.9 9.0 DAILY MX	(12) SU	Ø 5 TMS/ WEEK	22/31 GRAB	Grb-4
SOLIDS, TOTAL SUSPENDED 00530 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	50.383 292.4 MO AVG	68.247 438.6 MX WK AV	(26) LBS/DY	***** *****	6.1 16.0 MO AVG	7.94 24.0 MX WK AV	(19) MG/L	Ø 5 TMS/ WEEK	22/31 COMP24	Comp 24
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	.5205 27.4 MO AVG	1.0916 42.0 MX WK AV	(26) LBS/DY	***** *****	0.06 1.5 MO AVG	0.0943 2.3 MX WK AV	(19) MG/L	Ø 5 TMS/ WEEK	22/31 COMP24	Comp 24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	1.03081 REPORT MO AVG	1.33861 REPORT MX WK AV	(03) MGD	***** *****	***** *****	***** *****	 *****	Ø 5 TMS/ WEEK	31/31 TOTALZ	TOTALZ
CHLORINE, TOTAL RESIDUAL 50060 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	 *****	***** *****	0.0395 0.06 MO AVG	.06 0.06 DAILY MX	(19) MG/L	Ø 5 TMS/ WEEK	22/31 GRAB	Grb
E.COLI, COLONY FORMING UNITS (CFU) 51041 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	 *****	***** *****	17 125.0 MO GEOMN	147 235.0 DAILY MX	(3Z) CFU/ 100ML	Ø 5 TMS/ WEEK	22/31 GRAB	Grb

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Steven D Croyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIV OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

765-384-6845 11 15 06

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

Revised: ☐

IN0021024			001A			
PERMIT NUMBER			DISCHARGE NUMBER			
MONITORING PERIOD						
MO	DAY	YEAR		MO	DAY	YEAR
10	01	06	TO	10	31	06

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



For Any Questions call Dan Knowles at 317-232-0019

*** NO DISCHARGE ☐ ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
MERCURY TOTAL RECOVERABLE	SAMPLE MEASUREMENT	*****	*****		*****	*****	3.05	(3M)	ONCE/2 MNTS	Grab
71901 1 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	REPORT DAILY MX	NG/L	ONCE/ 2 MNTS	GRAB
EFFLUENT GROSS VALUE										
MERCURY TOTAL RECOVERABLE	SAMPLE MEASUREMENT	*****	*****		*****	*****	142	(3M)	ONCE/2 MNTS	Grab
71901 G 0 0	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	REPORT DAILY MX	NG/L	ONCE/ 2 MNTS	GRAB
RAW SEW/INFLUENT										
BOD, CARBONACEOUS 05 DAY, 20C	SAMPLE MEASUREMENT	17.173	22.526	(26)	*****	2.1	2.24	(19)	22/31	Comp 24
80082 1 1 0	PERMIT REQUIREMENT	182.8 MO AVG	274.1 MX WK AV	LBS/DY	*****	10.0 MO AVG	15.0 MX WK AV	MG/L	5 TMS/ WEEK	COMP24
EFFLUENT GROSS VALUE										
FLOW, TOTAL	SAMPLE MEASUREMENT	*****	31.955	(80)	*****	*****	*****		ONCE/ month	RCOTOT
82220 1 0 0	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL/ MONTH	*****	*****	*****	*****	ONCE/ MONTH	RCOTOT
EFFLUENT GROSS VALUE										
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
znone	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Steven D Croyle
 TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIV OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
RANDOLPH COUNTY

EXECUTIVE SUMMARY - Detection Highlights

A6J270221

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
SAMPLE EFF 10/25/06 13:00 001				
Mercury	3.0	0.50	ng/L	CFR136A 1631E
SAMPLE EFF DUP 10/25/06 13:00 002				
Mercury	3.1	0.50	ng/L	CFR136A 1631E
SAMPLE RAW INF. 10/25/06 13:00 003				
Mercury	142	10.0	ng/L	CFR136A 1631E



Monthly Report of Operation Activated Sludge Type Wastewater Treatment Plant

State Form 10829 (R/12-2005)

Page 1 of 4

Name of Facility		Permit Number	
Winchester Wastewater Treatment Plant		IN0021024	
Month	Year	Plant Design Flow	Telephone Number
October	2006	2.19 mgd	765-584-1331
Facility's e-mail address (if available): Winchesterwwtp@verizon.net			
Certified Operator: Name		Class	Certificate Number
Christopher W. Martin		III	16763
			Expiration Date
			6/30/2008

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature (Optional)	Total= 6.1	Bypass At Plant Site ("x" if Occurred)	Collection System Overflow ("x" if Occurred)	CHEMICALS USED			RAW SEWAGE							
				Precipitation - Inches			Chlorine - Lbs	Lbs or Gal	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Sun						30	50		0.62							
2	Mon			0.2			28	50		0.658	7.7	94	515.846	101.5	557.004		12.4
3	Tue						28	50		0.681	7.6	86	488.44	105	596.352		17.1
4	Wed						25	48		0.721	7.5	110	661.445	53	318.696		16.8
5	Thu			1			35	55		0.7612	7.5	122	774.506	37	234.891		16.6
6	Fri						35	55		0.4978	7.5	77	319.677	110	456.682		8.57
7	Sat						35	55		1.11							
8	Sun						35	55		0.867							
9	Mon						35	38		0.779	7.4	121	786.12	63.5	412.551		9.17
10	Tue						30	36		0.773	7.4	219	1411.85	69	444.831		16
11	Wed			0.2			35	36		0.873	7.5	116	844.575	50	364.041		15.5
12	Thu						28	33		0.788	7.5	116	762.343	37	243.161		16.7
13	Fri						30	32		0.7372	7.4	48	295.116	39	239.782		10.1
14	Sat						25	28		0.7223							
15	Sun						25	28		0.6905							
16	Mon						15	32		1.166	7.4	63	612.64	31	301.458		9.7
17	Tue			2.3			40	52		1.479	7.4	73	900.445	31	382.381		17.5
18	Wed			0.2			45	55		1.243	7.4	41	425.031	21	217.699		2.11
19	Thu						40	52		1.2292	7.6	55	563.834	18	184.528		6.44
20	Fri			0.4			30	50		1.1628	7.4	50	484.888	40	387.91		8.08
21	Sat						35	50		1.15							
22	Sun						30	50		1.238							
23	Mon						32	48		0.966	7.4	57	459.217	34	273.919		4.31
24	Tue						22	36		0.915	7.7	84	641.012	52	396.817		11.6
25	Wed						22	35		0.874	7.6	97	707.049	35	255.121		15.7
26	Thu						22	35		0.8785	7.7	102	747.322	19	139.207		15
27	Fri			0.3			20	34		1.2069	7.5	91	915.965	54	543.539		14.8
28	Sat						22	25		1.2066							
29	Sun			1.5			22	25		1.209							
30	Mon						30	31		1.224	7.6	61	622.698	21	214.371		6
31	Tue						26	31		1.237	7.6	49	505.512	61	629.311		11.7
Average							29.419	41.613		0.9569		88	656.615	49	354.284		11.9
Maximum				2.3			45	55		1.479	7.7	219	1411.85	110	629.311		17.5
Minimum							15	25		0.4978	7.4	41	295.116	18	139.207		2.11
No. of Data				8	0	0	31	31	0	31	22	22	22	22	22	0	22

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(SIGNATURE OF CERTIFIED OPERATOR)

(DATE)

(SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT)

(DATE)

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

[Signature] 15 Nov 2006
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
[Signature] 15 Nov 2006
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Name of Facility: Winchester Wastewater Treatment Plant
 Permit Number: IN0021024
 For Month Of: October
 Year: 2006

Page 2 of 4 State Form 10829 (R/12-2005)

Day Of Month	PRIMARY EFFLUENT		AERATION							SECONDARY EFFLUENT		FINAL EFFLUENT					
	CBOD5 - mg/l	Susp. Solids - mg/l	MIXED LIQUOR				RETURN SLUDGE			CBOD5 - mg/l	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
			Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Temperature - F	Volume - MG	Susp. Solids - mg/l								
1								3.8883									
2	95	74	50	3673	136	6.4	19	3.3291	4304	2	7.8	1.39	0.06	20	7.9	8.2	
3	76	40	40	4154	96	5.9	20	4.0197	4574	2.2	5.9	1	0.05	27	7.8	7.8	
4	92	59	38.8	3952	98			4.0096	4094	2.8	8.2	1.73	0.05	147	7.8	7.8	
5	107	28	37.5	3762	100	6.9	19	4.1822	3628	3.1	5.6	1.73	0.05	26	7.8	8.1	
6	94	29	34.5	3457	100	6.8	19	3.8224	4252	1.9	7.7	1.43	0.03	10	7.7	8.6	
7								4.108									
8								4.6037									
9	106	36	45.5	3943	115	6.9	19	4.1189	4698	1.8	6.9	1.88	0.06	8	7.9	8.4	
10	133	27	43	4188	103	5.0	19	3.742	4199	1.9	6	3.35	0.03	22	7.8	8.6	
11	65	38	39	3600	108	5.3	20	4.0821	3930	3	8.8	1.75	0.03	26	7.7	8.5	
12	80	30	46.5	4062	114	5.4	19	4.0344	4128	2.2	6.2	1.76	0.06	12	7.8	8.7	
13	81	35	41.3	4145	100			3.8307	4204	1.9	4.2	2.29	0.06	10	7.7	8.4	
14								4.1072									
15								4.0371									
16	74	31	46.3	3984	116	6.0	19	3.9675	3779	2.3	6	0.96	0.02	23	7.4	8.7	
17	73	31	55	3513	157	6.4	19	4.0461	4995	1.5	4.5	0.97	0.04	40	7.7	8.6	
18	31	21	46.5	3790	123	7.1	18	3.9419	5313	1.8	4.6	1.35	0.02	13	7.7	8.3	
19	36	50	38.5	3388	114	8.0	19	3.9498	3702	1.4	5.1	1.58	0.01	21	7.8	8.4	
20	36	25	41.3	2869	144	9.0	19	3.6178	3151	1.2	8.2	0.81	0.05	32	7.8	8.4	
21								3.937									
22								4.6868									
23	43	69	41.3	3380	122	9.0	18	3.9933	4119	2.2	4.6	1.02	0.02	11	7.9	9.2	
24	40	45	41.3	3475	119	7.7	16	4.0577	3449	2.5	5.3	1.39	0.06	10	7.8	9.1	
25	52	35	42.5	3418	124	7.7	16	4.0334	4557	1.9	5.2	1.1	0.06	8	7.8	9.1	
26	44	29	47.5	3596	132	8.6	17	4.0299	3894	1.8	3.4	0.97	0.06	15	7.8	8.9	
27	48	45	45	3498	129	8.6	17	3.9249	4119	1.8	5.5	0.97	0.03	16	7.8	8.8	
28								4.0672									
29								4.2677									
30	38	19	50.3	3475	145	9.2	16	4.0294	4319	2	4.8	0.73	0.02	6	7.8	9.4	
31	48	48	46.5	3534	132	8.9	17	4.0553	4840	2	5.2	1.01	0	12	7.8	8.9	
Avg.	67.8	38.4	44	3675	119	7.2	18	4.0168	4193	2.1	5.9	1.4168	0.0395	17		8.6	
Max.	133	74	55	4188	156.56	9.2	20	4.6868	5313	3.1	8.8	3.35	0.06	147	7.9	9.4	
Min.	31	19	34.5	2869	96.293	5	16	3.3291	3151	1.2	3.4	0.73	0	6	7.4	7.8	
Data	22	22	22	22	22	20	20	31	22	22	22	22	22	22	22	22	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

Name of Facility: Winchester Wastewater Treatment Permit Number: IN0021024 For Month Of: October Year: 2006

[Signature] 15 NOV 06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
[Signature] 15 Nov 2006
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 State Form 10829 (R/12-2005)

FINAL EFFLUENT																
Day Of Month	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average	Oil & Grease - mg/l	
1	0.616															
2	0.599		2.3		11.497		5.8		28.992		0.046		0.2299			
3	0.698		2.2		12.815		9.6		55.918		0.143		0.8329			
4	0.782		1.7		11.094		8.3		54.164		0.0833		0.5436			
5	0.5768		2.8		13.478		7.4		35.619		0.024		0.1155			
6	0.3982		2.2		7.3106		8.6		28.578		0.0538		0.1788			
7	0.63	0.61429		2.24		11.239		7.94		40.654		0.07		0.3802		
8	0.747															
9	0.725		2.3		13.915		5.4		32.671		0.076		0.4598			
10	0.658		1.6		8.7856		4.8		26.357		0.0812		0.4459			
11	0.779		2.5		16.252		5.4		35.104		0.0541		0.3517			
12	0.661		2.7		14.893		6.2		34.199		0.0268		0.1478			
13	0.7391		2.1		12.952		5.1		31.456		0.0282		0.1739			
14	0.7606	0.72424		2.24		13.36		5.38		31.957		0.0533		0.3158		
15	0.7463															
16	1.249		1.9		19.804		4.2		43.776		0.216		2.2513			
17	1.577		1.8		23.688		5.2		68.432		0.109		1.4344			
18	1.478		1.7		20.968		4.6		56.736		0.0383		0.4724			
19	1.5305		2.4		30.653		5.9		75.355		0.0341		0.4355			
20	1.3995		1.5		17.518		8.3		96.934		0.074		0.8642			
21	1.39	1.33861		1.86		22.526		5.64		68.247		0.0943		1.0916		
22	1.521															
23	1.163		2.3		22.322		4.5		43.674		0.0632		0.6134			
24	1.146		2.1		20.083		7.4		70.769		0.0572		0.547			
25	0.959		1.8		14.405		7.3		58.421		0.0242		0.1937			
26	1.0644		2.1		18.653		4.7		41.747		0.0459		0.4077			
27	1.4913		1.8		22.401		8.2		102.05		0.01		0.1244			
28	1.4548	1.25707		2.02		19.573		6.42		63.332		0.0401		0.3772		
29	1.4635															
30	1.474		2.5		30.751		3		36.902		0.041		0.5043			
31	1.478		1.1		13.567		4.1		50.569		0.01		0.1233			
Avg	1.03081		2.1		17.173		6.1		50.383		0.06		0.5205			
Max	1.577	1.33861	2.8	2.24	30.751	22.526	9.6	7.94	102.05	68.247	0.216	0.0943	2.2513	1.0916		
Min	0.3982	0.61429	1.1	1.86	7.3106	11.239	3	5.38	26.357	31.957	0.01	0.0401	0.1155	0.3158		
Data	31	4	22	4	22	4	22	4	22	4	22	4	22	4	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow:
Percent Removal	BOD5	S.S.	Ammonia	Phosphorus	(million gallons) 31.955
Primary Treatment	22.8	22.0			Percent Capacity (actual flow/design) 47%
Secondary Treatment	97.0	84.6			
Tertiary Treatment	-0.4	-3.3			
Overall Treatment	97.7	87.6	99.5	NA	

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

Name of Facility: Winchester Wastewater Treatment Plant
Permit Number: IN0021024
For Month Of: October
Year: 2008

(Signature of Certified Operator) *[Signature]* 15 Nov 08
(Date)
(Signature of Principal Executive Officer or Authorized Agent) *[Signature]* 15 Nov 2008
(Date)

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Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION											
	Primary Sludge Gal. x 1000	Waste Act. Sludge Gal. x 1000	Anaerobic Only			Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000		
			pH	Gas Production Cubic Ft. x 1000	Temperature - F									
1	29.5													
2	40													
3	39.7													
4	39.9													
5	39.77													
6	24.38													
7	56													
8	39.1													
9	39.8													
10	39.4	54.72										45.331		
11	40.1													
12	40													
13	40.55													
14	40.43													
15	40.32													
16	40.4													
17	39.9													
18	40.5	0.776												
19	39.96	24.76												
20	39.54													
21	40													
22	40.8													
23	40.3													
24	40.4													
25	40.3													
26	40.34													
27	40.21													
28	40.26													
29	42.39													
30	0.82											31.484		
31	35.7													
Avg.	38.412	26.752										38.408		
Max.	56	54.72										45.331		
Min.	0.82	0.776										31.484		
Data	31	3	0	0	0	0	0	0	0	0	0	2	0	0

Send completed forms by the 28th of the month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394

FACILITY WINCHESTER MUNICIPAL WWTP

LOCATION WINCHESTER

ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



For Any Questions call Dan Knowles at 317-232-0019

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				UNITS
OXYGEN, DISSOLVED (DO) 00300 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	***** *****	8.3 6.0 DAILY MN	***** ***** DAILY AV	***** ***** DAILY MX	(19) MG/L	22/30 5 TMS/ WEEK	GRAB-4 GRAB-4
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	***** *****	***** *****	7.6 6.0 DAILY MN	***** ***** DAILY AV	8.0 9.0 DAILY MX	(12) SU	22/30 5 TMS/ WEEK	GRAB GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	87.149 292.4 MO AVG	117.8 438.6 MX WK AV	(26) LBS/DY	***** *****	6.6 16.0 MO AVG	8.66 24.0 MX WK AV	(19) MG/L	22/30 5 TMS/ WEEK	COMP 24 COMP 24
NITROGEN, AMMONIA TOTAL (AS N) 00610 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	0.27 27.4 MO AVG	0.6243 42.0 MX WK AV	(26) LBS/DY	***** *****	0.02 15 MO AVG	0.0433 2.3 MX WK AV	(19) MG/L	22/30 5 TMS/ WEEK	COMP 24 COMP 24
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	1.56232 REPORT MO AVG	1.64768 REPORT MX WK AV	(03) MGD	***** *****	***** *****	***** *****	***** *****	30/30 5 TMS/ WEEK	TOTALZ TOTALZ
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 1 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	28.693 182.8 MO AVG	32.034 274.1 MX WK AV	(26) LBS/DY	***** *****	2.2 10.0 MO AVG	2.34 15.0 MX WK AV	(19) MG/L	22/30 5 TMS/ WEEK	COMP 24 COMP 24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT PERMIT REQUIREMENT	***** *****	46.87 REPORT MO TOTAL	(80) MGAL/ MONTH	***** *****	***** *****	***** *****	***** *****	ONCE/ MONTH ONCE/ MONTH	RCOTOT RCOTOT

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
OR AUTHORIZED AGENT

Steven D. Croyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

ON 11-14-06 OUR EFFLUENT METER WAS BLOWN DO TO A POWER SURGE. CONTACTED HURST TECH SERVICES TO ORDER NEW METER. NOTIFIED ANDY SCHMIDT IDEM ABOUT ISSUE. WE ARE USING OUR 2ND TO PRIMARY METER READING. THIS INCLUDES ALL FLOWS FROM LAGOONS AND RECIRCULATION AND MIRRORS OUR EFF.

MUNICIPAL MAJOR
RANDOLPH COUNTY



**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

State Form 10829 (R/12-2005)

Page 1 of 4

Name of Facility Winchester Wastewater Treatment Plant		Permit Number IN0021024	
Month November	Year 2006	Plant Design Flow 2.19 mgd	Telephone Number 765-584-1331
Facility's e-mail address (if available): Winchesterwwtp@verizon.net			
Certified Operator: Name Christopher W. Martin		Class III	Certificate Number 16763
		Expiration Date 6/30/2008	

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature (Optional)	Total=	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE								
				2.4			Precipitation - Inches	Chlorine - Lbs	Lbs or Gal	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Wed			0.2						1.113	7.6	53	491.968	33	306.32		8.32	
2	Thu									1.032	7.6	29	249.6	38	327.061		10.4	
3	Fri									0.9	7.5	55	412.83	48	360.288		12.8	
4	Sat									0.9								
5	Sun									0.974								
6	Mon			0.3						0.912	7.6	43	327.061	56	425.94		10.4	
7	Tue									1.124	7.4	98.9	927.104	31	290.599		18.4	
8	Wed									0.962	7.5	51	409.177	20	160.462		10.3	
9	Thu									0.905	7.4	68	513.244	17.5	132.085		13.2	
10	Fri									0.9328	7.5	46	357.859	25	194.489		10.8	
11	Sat			0.2						0.8825								
12	Sun									0.8085								
13	Mon									0.8542	7.7	33.3	237.23	66	470.186		13.5	
14	Tue			0.1						0.84	7.4	90	630.504	17	119.095		10.3	
15	Wed			1.3						1.256	7.4	104	1089.4	32	335.201		11.1	
16	Thu			0.2						1.545	7.4	59	760.233	21	270.591		9.66	
17	Fri									1.3431	7.5	36	403.252	11	123.216		3.02	
18	Sat									1.616								
19	Sun									1.1549								
20	Mon									1.198	7.6	57.5	574.501	55.5	554.518		7.04	
21	Tue									1.13	7.5	55.7	524.928	47	442.937		8.49	
22	Wed									1.1109	7.7	86	796.782	38	352.066		10.2	
23	Thu									0.9791	7.5	96	783.907	87.4	713.682		11.2	
24	Fri									0.9494	7.5	51	403.818	37.9	300.092		7.5	
25	Sat									0.8996								
26	Sun									0.877								
27	Mon									0.881	7.6	34	249.816	33.5	246.143		7.44	
28	Tue									0.838	7.6	77	538.147	27	188.701		15.4	
29	Wed									0.733	7.5	63	385.133	43	262.868		13.6	
30	Thu			0.1						1.5509	7.5	55	711.398	28	362.166		14.2	
Average										1.04006		61	535.359	37	315.396		10.79	
Maximum				1.3						1.616	7.7	104	1089.4	87.4	713.682		18.4	
Minimum										0.733	7.4	29	237.23	11	119.095		3.02	
No. of Data				7	0	0	0	0	0	30	22	22	22	22	22	0	22	0

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Christopher W. Martin 10/9/06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Steve Lytle 11 Dec 06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant

C. D. M. 12/10/06
 (SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Stan D. Lyle 11 Dec 06
 (SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Name of Facility: Winchester Wastewater Treatment Plant
 Permit Number: IN0021024
 For Month Of: November
 Year: 2006

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Day Of Month	PRIMARY EFFLUENT		AERATION							SECONDARY EFFLUENT		FINAL EFFLUENT					
	CBOD5 - mg/l	Susp. Solids - mg/l	MIXED LIQUOR					RETURN SLUDGE		CBOD5 - mg/l	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
			Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Temperature - F	Volume - MG	Susp. Solids - mg/l								
1	47	18	49	3560	138	8.7	18	3.7926	3672	2.3	5.3				7.9	8.4	
2	56	50	43.5	3836	113	8.6	16	3.7719	4157	2.1	3.6				7.9	8.3	
3	57	58	50	3507	143	8.5	15	3.4808	4317	1.8	4.6				7.8	8.5	
4								3.814									
5								4.1681									
6	46	59	43.5	3375	129	9.4		3.8105	4318	1.9	4.4				7.7	9.9	
7	30.6	59	40	3912	102	7.5		3.7994	4027	2	4.4				7.9	9.9	
8	45	30	57.5	3549	162	7.8	17	3.8307	4498	2.3	5.4				8.0	9.5	
9	47	34	43.8	3504	125	6.6	18	3.8238	3850	2.3	4.1				7.8	9.0	
10	35	18	56	3445	163	8.0	17	4.0604	4166	1.9	4.1				8.0	8.9	
11								3.8305									
12								3.579									
13	26	48	51	4122	124	7.9	15	3.8132	4554	1.1	5.1				7.8	9.8	
14	49.6	23	46	3604	128	7.8	16	3.9504	4461	1.9	3				7.8	9.6	
15	52	18	50	3638	137	8.1	15	3.9428	5011	2.8	4.6				7.6	9.7	
16	66	20	47.5	3673	129	7.5	15	3.9745	4771	3.1	3.1				7.8	9.7	
17	29	9	56	3767	149	8.1	15	3.6853	4777	2.2	5.4				7.8	9.4	
18								4.6434									
19								3.5592									
20	75.8	65	43.8	3868	113	8.1	15	3.9508	4801	2.6	4.2				7.8	9.1	
21	55.5	66.5	57.5	3790	152		16	3.9226	4476	3	5.4				7.9	9.3	
22	49	56	54	3402	159	8.1	14	3.8548	4601	2.1	6.7				7.9	8.9	
23								3.6127							7.7	9.5	
24								3.8421							7.7	9.4	
25								3.8742									
26								4.0119									
27	24	4.4	57	3485	164	7.7	15	3.7587	4792	1.5	4.4				7.8	8.9	
28	41	42	52	3995	130	7.7	15	3.7751	4764	1.5	5.9				7.8	9.4	
29	30	42	52	3914	133	7.3	15	3.7653	4620	1.9	4.4				7.8	9.2	
30	38	33	40.5	3756	108	7.4	16	3.8192	4603	2.1	10.1				7.8	8.5	
Avg.	45.0	37.6	50	3685	135	7.9	16	3.8506	4462	2.1	4.9					9.2	
Max.	75.8	66.5	57.5	4122	163.56	9.4	18	4.6434	5011	3.1	10.1				8.0	9.9	
Min.	24	4.4	40	3375	102.25	6.6	14	3.4808	3672	1.1	3				7.6	8.3	
Data	20	20	20	20	20	19	18	30	20	20	20	0	0	0	22	22	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):

ON 11-14-06 OUR EFF. METER WAS BLOWN DO TO A POWER SURGE. CONTACTED HURST TECH. SERVICES TO ORDER NEW UNIT. CONTACTED ANDY SCHMIDT ABOUT ISSUE. WE USED WHAT IS OUR RAW TO PRIMARY METER READING WHICH MIRRORS OUR EFF. METER READING. THE RAW TO PRIMARY METER TELLS US WHAT IS PUMPED INTO OUR PRIMARY TANKS. THIS INCLUDES ANY FLOW FROM LAGOONS AND RECIRCULATION WATER.

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

Name of Facility: Winchester Wastewater Treatment Permit Number: IN0021024 For Month Of: November Year: 2006

C.B.W. MS 12/7/06
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Stan D. Lytle 11 Dec 06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

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Day Of Month	FINAL EFFLUENT														
	Flow		BOD				Total Suspended Solids				Ammonia				Other
	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average	Oil & Grease - mg/l
1	1.368		2.2		25.115		4.6		52.513		0.0151		0.1724		
2	1.29273		2.4		25.891		5		53.939		0.01		0.1079		
3	1.63865		1.9		25.982		6.3		86.15		0.01		0.1367		
4	1.2977	1.43037		2.02		24.261		4.6		56.015		0.0172		0.2089	
5	1.81174														
6	1.82874		2		30.522		5.5		83.935		0.01		0.1526		
7	1.32		2.4		26.437		6.5		71.6		0.01		0.1102		
8	1.182		2.7		26.632		6		59.183		0.01		0.0986		
9	1.289		1.7		18.286		4.4		47.33		0.01		0.1076		
10	1.6207		1.8		24.345		7.5		101.44		0.01		0.1352		
11	1.6014	1.52194		2.12		25.244		5.98		72.696		0.01		0.1208	
12	1.451														
13	1.63824		1.8		24.608		6.1		83.394		0.0188		0.257		
14	1.66934		1.8		25.075		8		111.45		0.0261		0.3636		
15	1.69748		2.8		39.663		3.2		45.33		0.0489		0.6927		
16	1.69047		2.8		39.5		3.3		46.553		0.01		0.1411		
17	1.50156		2.5		31.326		7.9		98.991		0.01		0.1253		
18	1.81138	1.63707		2.34		32.034		5.7		77.142		0.0228		0.3159	
19	1.27702														
20	1.40496		2.3		26.966		3.8		44.553		0.0051		0.0598		
21	1.73774		2		29.003		8.4		121.81		0.0252		0.3654		
22	1.83444		1.9		29.086		6.4		97.974		0.01		0.1531		
23	1.58357		2.6		34.359		13.4		177.08		0.01		0.1321		
24	1.56498		2.76		36.045		11.3		147.58		0.01		0.1306		
25	1.51833	1.56015		2.312		31.092		8.66		117.8		0.0121		0.1682	
26	1.49419														
27	1.75539		3.15		46.143		7.1		104.01		0.0601		0.8804		
28	1.79025		1.6		23.903		10.9		162.84		0.021		0.3137		
29	1.39445		1.7		19.782		4.2		48.874		0.024		0.2793		
30	1.80413	1.64768	1.5	1.9875	22.583	28.103	4.7	6.725	70.761	96.621	0.068	0.0433	1.0238	0.6243	
Avg	1.56232		2.2		28.693		6.6		87.149		0.02		0.27		
Max	1.83444	1.64768	3.15	2.34	46.143	32.034	13.4	8.66	177.08	117.8	0.068	0.0433	1.0238	0.6243	
Min	1.182	1.43037	1.5	1.9875	18.286	24.261	3.2	4.6	44.553	56.015	0.0051	0.01	0.0598	0.1208	
Data	30	5	22	5	22	5	22	5	22	5	22	5	22	5	0 0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow:
Percent Removal	BOD5	S.S.	Ammonia	Phosphorus	(million gallons) 46.87
Primary Treatment	26.2	-1.9			Percent Capacity (actual flow/design) 71%
Secondary Treatment	95.3	87.0			
Tertiary Treatment	-3.6	-33.8			
Overall Treatment	96.4	82.2	99.8	NA	

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

Name of Facility: Winchester Wastewater Treatment Plant
Permit Number: IN0021024
For Month Of: November
Year: 2006

[Signature] 12/7/06
(SIGNATURE OF CERTIFIED OPERATOR) (Date)
[Signature] 11 Dec 06
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (Date)

Page 4 of 4 State Form 10829 (R/12-2005)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION												
	Primary Sludge Gal. x 1000	Waste Act. Sludge Gal. x 1000	Anaerobic Only			Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000			
			pH	Gas Production Cubic Ft. x 1000	Temperature - F										
1	36.6														
2	40.4														
3	40.1														
4	39	38.34													
5	39														
6	39														
7	38.9														
8	40.5														
9	38.3														
10	49.65														
11	39.66														
12	33.05														
13	36.44														
14	40.3														
15	39.2														
16	39.4														
17	39.32														
18	49.23														
19	32.95														
20	44.1														
21	31.1														
22	38.81	89.08													
23	38.43														
24	38.52														
25	38.38														
26	37.96														
27	38.4														
28	38.6											65.298			
29	37.8	51.01													
30	41.98	29.93													
Avg.	39.169	52.09										65.298			
Max.	49.65	89.08										65.298			
Min.	31.1	29.93										65.298			
Data	30	4	0	0	0	0	0	0	0	0	0	1	0	0	

Send completed forms by the 28th of the month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MAJOR
F - FINAL
EFFLUENT

Form Approved
OMB No. 2040-0004
Approval Expires 05-31-98



For Any Questions call Dan Knowles at 317-232-0019

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	*****	*****		9.0	*****	*****	(19)	Ø 21/31	Grab
00300 1 2 0	PERMIT	*****	*****	*****	5.0	*****	*****	MG/L	5 TMS/ WEEK	GRAB-4
EFFLUENT GROSS VALUE	REQUIREMENT				DAILY MN	DAILY AV	DAILY MX			
PH	SAMPLE MEASUREMENT	*****	*****		7.7	*****	8.0	(12)	Ø 21/31	Grab
00400 1 0 0	PERMIT	*****	*****	*****	6.0	*****	9.0	SU	5 TMS/ WEEK	GRAB
EFFLUENT GROSS VALUE	REQUIREMENT				DAILY MN		DAILY MX			
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	103.46	135.79	(26)	*****	7.8	9.575	(19)	Ø 20/31	Comp 24
00530 1 2 0	PERMIT	548.3	822.4	LBS/DY	*****	30.0	45.0	MG/L	5 TMS/ WEEK	COMP24
EFFLUENT GROSS VALUE	REQUIREMENT	MO-AVG	MX WK AV			MO-AVG	MX WK AV			
NITROGEN, AMMONIA TOTAL (AS N)	SAMPLE MEASUREMENT	1.3303	1.9352	(26)	*****	.10	.155	(19)	Ø 20/31	Comp 24
00610 1 2 0	PERMIT	36.6	54.8	LBS/DY	*****	2.0	3.0	MG/L	5 TMS/ WEEK	COMP24
EFFLUENT GROSS VALUE	REQUIREMENT	MO-AVG	MX WK AV			MO-AVG	MX WK AV			
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	1.56842	1.73877	(03)	*****	*****	*****		Ø 31/31	TOTAL 2
50050 1 0 0	PERMIT	1.33032	1.93522	MGD	*****	*****	*****	*****	5 TMS/ WEEK	TOTAL 2
EFFLUENT GROSS VALUE	REQUIREMENT	REPORT	REPORT							
		MO-AVG	MX WK AV							
MERCURY TOTAL RECOVERABLE	SAMPLE MEASUREMENT	*****	*****		*****	*****	4.15	(3M)	Ø ONCE/2 MNTS	Grab
71901 1 0 0	PERMIT	*****	*****	*****	*****	*****	REPORT	NG/L	ONCE/ 2 MNTS	GRAB
EFFLUENT GROSS VALUE	REQUIREMENT						DAILY MX			
MERCURY TOTAL RECOVERABLE	SAMPLE MEASUREMENT	*****	*****		*****	*****	8.0	(3M)	Ø ONCE/2 MNTS	GRAB
71901 G 0 0	PERMIT	*****	*****	*****	*****	*****	REPORT	NG/L	ONCE/ 2 MNTS	GRAB
RAW SEW/INFLUENT	REQUIREMENT						DAILY MX			

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Steven D Croyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

Signature of Steven D Croyle

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

76 546845 01 15 07

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

DURING month of DEC. OUR EFF. Flow meter WAS DOWN DUE TO POWER SURGE. USED RAW TO Primary READING Which mirrors EFF. Readings. NEW meter Installed 1-4-07

MUNICIPAL MAJOR
RANDOLPH COUNTY

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME WINCHESTER MUNICIPAL STP
 ADDRESS WINCHESTER CITY HALL
 113 E WASHINGTON ST
 WINCHESTER IN 47394
 FACILITY WINCHESTER MUNICIPAL WWTP
 LOCATION WINCHESTER
 ATTN: HON. STEVEN CROYLE, MAYOR

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

MAJOR F - FINAL EFFLUENT
 Form Approved OMB No. 2040-0004
 Approval Expires 05-31-98



For Any Questions call Dan Knowles at 317-232-0019

*** NO DISCHARGE ***

NOTE: Read Instructions before completing this form

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
BOD, CARBONACEOUS 05 DAY, 20C 80082 1 2 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	33.265	42.586	(26)	*****	2.5	2.94	(19)	0	01/31	Comp 24
	PERMIT REQUIREMENT	456.9 MO AVG	731.0 MX WK AV	LBS/DY	*****	25.0 MO AVG	40.0 MX WK AV	MG/L		5 TMS/ WEEK	COMP24
FLOW, TOTAL 82220 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	48.621	(80)	*****	*****	*****		0	once/ month	RCOTOT
	PERMIT REQUIREMENT	*****	REPORT MO TOTAL	MGAL/ MONTH	*****	*****	*****	*****		ONCE/ MONTH	RCOTOT
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
znone	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

Steven D Croyle

TYPED OR PRINTED

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

7589686 15 07

AREA CODE

NUMBER

MO

DAY

YEAR

COMMENTS AND EXPLANATION OF ANY VIOLATION (Reference all attachments here)

MUNICIPAL MAJOR
 RANDOLPH COUNTY



Monthly Report of Operation Activated Sludge Type Wastewater Treatment Plant

State Form 10829 (R/12-2005)

Page 1 of 4

Name of Facility		Permit Number	
Winchester Wastewater Treatment Plant		IN0021024	
Month	Year	Plant Design Flow	Telephone Number
December	2006	2.19 mgd	765-584-1331
Facility's e-mail address (if available): Winchesterwwtp@verizon.net			
Certified Operator: Name		Class	Certificate Number
Christopher W. Martin		III	16763
		Expiration Date	6/30/2008

Day Of Month	Day of Week	Man-Hours at Plant (Plants less than 1 MGD only)	Air Temperature (Optional)	Total= 6.3	Bypass At Plant Site ("x" If Occurred)	Collection System Overflow ("x" If Occurred)	CHEMICALS USED			RAW SEWAGE							
				Precipitation - Inches			Chlorine - Lbs	Lbs or Gal	Lbs or Gal	Influent Flow Rate (MGD)	pH	CBOD5 - mg/l	CBOD5 - lbs	Susp. Solids - mg/l	Susp. Solids - lbs	Phosphorus - mg/l	Ammonia - mg/l
1	Fri			3.6						1.1631	7.5	52	504.413	31	300.708		10.7
2	Sat									1.67							
3	Sun									1.729							
4	Mon									1.652	7.3	26	358.22	24	330.664		7.3
5	Tue									1.46	7.6	51	620.996	21	255.704		6.6
6	Wed									1.317	7.5	60.5	664.519	45	494.27		6.66
7	Thu									1.19	7.5	55	545.853	60	595.476		9.12
8	Fri									1.1067	7.6	76	701.471	53	489.184		8.87
9	Sat									1.0324							
10	Sun									0.9949							
11	Mon									0.967	7.6	33	266.138	56.5	455.66		6.65
12	Tue									1.315	7.4	87.5	959.621	65	712.862		9.68
13	Wed			0.5						1.305	7.4	71	772.743	48	522.418		8.76
14	Thu									1.2622	7.5	47	494.757	45	473.704		7.77
15	Fri									1.2454	7.5	67	695.905	31	321.986		13.7
16	Sat									1.1504							
17	Sun									1.103							
18	Mon			0.3						1.235	7.5	73	751.893	69	710.693		13.1
19	Tue									1.139	7.4	95	902.43	51	484.462		8.98
20	Wed			0.3						1.21	7.5	58	585.301	48	484.387		0.093
21	Thu			0.6						1.586	7.4	42	555.544	55	727.498		11.4
22	Fri			0.2						1.6	7.5	77	1027.49	94	1254.34		6.78
23	Sat									1.471							
24	Sun									1.4572							
25	Mon									1.4898	7.8	47	583.972	24	298.198		5.5
26	Tue			0.8						1.567	7.4	84	1097.78	40	522.751		6.13
27	Wed									1.567	7.7	16.8	219.556	32	418.201		3.83
28	Thu									1.5473	7.7	45	580.702	81	1045.26		4.08
29	Fri									1.2387	7.4	53	547.53				8.88
30	Sat									1.3335							
31	Sun									1.9381							
1	Mon	Fill in January's effluent data on page 3 as needed for weekly average calculations.								1.5901							
2	Tue									1.5623							
3	Wed									1.648							
Average										1.35622		58	639.849	49	544.921		7.837
Maximum				3.6						1.9381	7.8	95	1097.78	94	1254.34		13.7
Minimum										0.967	7.3	16.8	219.556	21	255.704		0.093
No. of Data				7	0	0	0	0	0	31	21	21	21	20	20	0	21

I certify under penalty of law that this document and all attachments were prepared, under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

	15-07
(SIGNATURE OF CERTIFIED OPERATOR)	(DATE)
	15 Jan 2007
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT)	(DATE)

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

C. J. V. B. 1-15-07
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
Stacy 12/14/2007
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Name of Facility: Winchester Wastewater Treatment Plant
Permit Number: IN0021024
For Month Of: December
Year: 2006

Page 2 of 4 State Form 10829 (R/12-2005)

Day Of Month	PRIMARY EFFLUENT		AERATION							SECONDARY EFFLUENT		FINAL EFFLUENT					
	CBOD5 - mg/l	Susp. Solids - mg/l	MIXED LIQUOR					RETURN SLUDGE		CBOD5 - mg/l	Susp. Solids - mg/l	Residual Chlorine - Contact Tank	Residual Chlorine - Final	E. Coli - colony/100 ml	pH	Dissolved Oxygen - mg/l	Phosphorus - mg/l
			Settleable Solids % in 30 minutes	Susp. Solids - mg/l	Sludge Vol. Index - ml/gm	Dissolved Oxygen - mg/l	Temperature - F	Volume - MG	Susp. Solids - mg/l								
1	38	21	52	3791	137	8.6	9	3.4296	5193	3	7.9				7.8	9.7	
2								3.902									
3								4.1179									
4	28	24	25	2540	98	9.9	15	3.7157	3353	3.1	7.7				7.8	9.7	
5	35	60	40	3010	133	9.8	14	3.7065	4367	1.5	7.5				7.8	10.1	
6	46	49	45	3492	129	8.8	14	3.824	4407	2.4	6				7.7	9.5	
7	40	60	37.5	3392	111	8.9	14	3.5943	4514	2.1	4.9				7.8	9.9	
8	59	54	33	2789	118	9.4	13	2.0776	3697	1.5	7.6				7.8	10.3	
9								2.1272									
10								2.1935									
11	16.4	48	40	3755	107	10.1	15	3.3606	4444	1.3	3.9				7.7	9.0	
12	55.5	63.5	41	3204	128	8.4	15	3.5206	3945	2.8	7.2				7.7	9.5	
13	67	53	45	3173	142	8.7	15	3.5164	4153	2.3	6.1				7.8	9.7	
14	30	39	46.5	3110	150	8.7	15	3.5041	4032	1.8	6.8				7.8	9.4	
15	44	69	35.5	3041	117	8.6	15	3.7147	3970	2.3	5.9				7.8	9.1	
16								3.551									
17								3.2391									
18	34	53	42	3408	123	8.4	15	3.4855	4511	1.8	5.3				7.8	9.4	
19	50	66	56.5	3372	168	9.4	15	3.5596	4318	2.3	6.1				7.7	9.1	
20	40	40	55	2558	215	8.4	14	3.5342	4055	2.6	7.8				7.8	9.6	
21	34	66	44	2800	157	8.4	15	3.518	4791	3.4	7.4				7.8	9.4	
22								3.7227							7.8	9.7	
23								3.5971									
24								3.2368									
25								3.6253							7.7	9.3	
26	2.3	40	49	3241	151	8.7	14	3.52	4472	1.6	5.8				7.7	9.4	
27	4.8	20	51	3209	159		14	3.5258	3588	2.3	4.1				8.0	9.5	
28	39	36	52	3526	147	8.6	14	3.4413	4531	3	16				7.9	9.6	
29								2.9582							7.8	9.7	
30								3.2402									
31								4.3967									
Avg.	36.8	47.9	44	3190	138	8.9	14	3.4341	4241	2.3	6.9					9.6	
Max.	67	69	56.5	3791	215.01	10.1	15	4.3967	5193	3.4	16				8.0	10.3	
Min.	2.3	20	25	2540	98.425	8.4	9	2.0776	3353	1.3	3.9				7.7	9	
Data	18	18	18	18	18	17	18	31	18	18	18	0	0	0	21	21	0

Comments for the Month (major repairs, breakdowns, process upsets and their causes, inplant treatment process bypass, etc.):

During the month of December our Eff. Flow meter was down due to a power surge in November. We used our Raw to Primary reading for Our eff. It mirrors our Eff. Flow. The new meter was installed on 1-4-07.

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

Name of Facility: Winchester Wastewater Treatment Permit Number: IN0021024 For Month Of: December Year: 2006

CBW. MS 1-15-07
(SIGNATURE OF CERTIFIED OPERATOR) (DATE)
St. Dyl 15 May 2007
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) (DATE)

Page 3 of 4 State Form 10829 (R/12-2005)

FINAL EFFLUENT																
Day Of Month	Flow		BOD				Total Suspended Solids				Ammonia				Other	
	Effluent Flow Rate (MGD)	Effluent Flow Weekly Average	CBOD5 - mg/l	CBOD5 - mg/l Weekly Average	CBOD5 - lbs	CBOD5 - lbs/day Weekly Average	Susp. Solids - mg/l	Susp. Solids - mg/l Weekly Average	Susp. Solids - lbs	Susp. Solids - lbs/day Weekly Average	Ammonia - mg/l	Ammonia - mg/l Weekly Average	Ammonia - lbs	Ammonia - lbs/day Weekly Average	Oil & Grease - mg/l	
1	1.38062		2.2		25.347		3.7		42.629		0.0068		0.0783			
2	1.64535															
3	1.71677															
4	1.57518		3.3		43.378		7.3		95.958		0.0601		0.79			
5	1.50093		1.8		22.546		3.8		47.596		0.0235		0.2943			
6	1.47733		1.7		20.958		4.8		59.176		0.629		7.7545			
7	1.66842		2.4		33.415		4.7		65.438		0.0524		0.7296			
8	1.29206		1.8		19.408		6.3		67.928		0.01		0.1078			
9	1.19819	1.48984		2.2		27.941		5.38		67.219		0.155		1.9352		
10	1.16192															
11	1.20984		1.2		12.115		6		60.577		0.01		0.101			
12	1.64496		2.8		38.436		10.9		149.63		0.4582		6.2898			
13	1.57164		1.8		23.608		6.5		85.25		0.0296		0.3882			
14	1.53281		2.2		28.141		5.7		72.911		0.0314		0.4016			
15	1.49555		2.9		36.193		13.2		164.74		0.01		0.1248			
16	1.37704	1.42768		2.18		27.699		8.46		106.62		0.1078		1.4611		
17	1.28485															
18	1.77075		2.1		31.032		4.6		67.974		0.0316		0.467			
19	1.87651		2.3		36.017		9		140.94		0.0029		0.0454			
20	1.84027		2.2		33.786		7		107.5		0.093		1.4282			
21	2.07231		3		51.88		7.8		134.89		0.101		1.7466			
22	1.75995		4.1		60.216		15.5		227.65		0.0482		0.7079			
23	1.56677	1.73877		2.74		42.586		8.78		135.79		0.0553		0.879		
24	1.80664															
25	1.3405		5		55.932		20.1		224.85		0.0729		0.8155			
26	1.68807		1.3		18.313		5.8		81.704		0.104		1.465			
27	1.66096		2.5		34.652		3.2		44.354		0.115		1.594			
28	1.66035		2.9		40.181		9.2		127.47		0.0921		1.2761			
29	1.31899		3		33.021											
30	1.41038	1.55513		2.94		36.42		9.575		119.59		0.096		1.2877		
31	2.11524															
1	1.73728															
2	1.79223															
3	1.804															
Avg	1.56842		2.5		33.265		7.8		103.46		0.10		1.3303			
Max	2.11524	1.73877	5	2.94	60.216	42.586	20.1	9.575	227.65	135.79	0.629	0.155	7.7545	1.9352		
Min	1.16192	1.42768	1.2	2.18	12.115	27.699	3.2	5.38	42.629	67.219	0.0029	0.0553	0.0454	0.879		
Data	31	4	21	4	21	4	20	4	20	4	20	4	20	4	0	0

MONTHLY REMOVAL SUMMARY					Total Monthly Flow:
Percent Removal	BOD5	S.S.	Ammonia	Phosphorus	(million gallons) 48.621
Primary Treatment	36.4	1.7			
Secondary Treatment	93.8	85.6			
Tertiary Treatment	-9.5	-12.6			
Overall Treatment	95.7	84.1	98.7	NA	Percent Capacity (actual flow/design) 72%

**Monthly Report of Operation
Activated Sludge Type
Wastewater Treatment Plant**

Name of Facility: Winchester Wastew Permit Number: IN0021024 For Month Of: December Year: 2006

(SIGNATURE OF CERTIFIED OPERATOR) 1-15-07
(Date)
(SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT) 15 Jan 2007
(Date)

Page 4 of 4 State Form 10829 (R/12-2005)

Day Of Month	SLUDGE TO DIGESTER		DIGESTER OPERATION										
	Primary Sludge Gal. x 1000	Waste Act. Sludge Gal. x 1000	Anaerobic Only			Supernatant Withdrawn hrs. or Gal. x 1000	Supernatant BOD5 mg/l or NH3-N mg/l	Total Solids in Incoming Sludge - %	Total Solids in Digested Sludge - %	Volatile Solids in Incoming Sludge - %	Volatile Solids in Digested Sludge - %	Digested Sludge Withdrawn hrs. or Gal. x 1000	
1	36.02	37.58											
2	40												
3	42												
4	38.1												
5	39.02												
6	39.38												
7	39.1												
8	39.5												
9	39.51												
10	41.39												
11	39.3												
12	40.4												
13	39.9												
14	44.98												
15	45.71												
16	39.55												
17	30.86												
18	39.7												
19	37.4	41.8											
20	39.5												
21	39.7												
22	49.6												
23	39.7												
24	33.06												
25	36.8												
26	41.34												
27	39.1												
28	40.61												
29	40.69												
30	30.5												
31	50.62												
Avg.	39.775	39.69											
Max.	50.62	41.8											
Min.	30.5	37.58											
Data	31	2	0	0	0	0	0	0	0	0	0	0	0

Send completed forms by the 28th of the month to:

Indiana Department of Environmental Management
Office of Water Quality, Mail Code 65-42
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

EXECUTIVE SUMMARY - Detection Highlights

A6L280157

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>ANALYTICAL METHOD</u>
RAW 12/26/06 08:15 001				
Mercury	8.0	5.0	ng/L	CFR136A 1631E
EFFLUENT 12/26/06 08:20 002				
Mercury	4.3	0.50	ng/L	CFR136A 1631E
EFFLUENT (DUP) 12/26/06 08:25 003				
Mercury	4.0	0.50	ng/L	CFR136A 1631E

Attachment E

Load Duration Curves for the Upper White River Headwaters Watershed TMDL

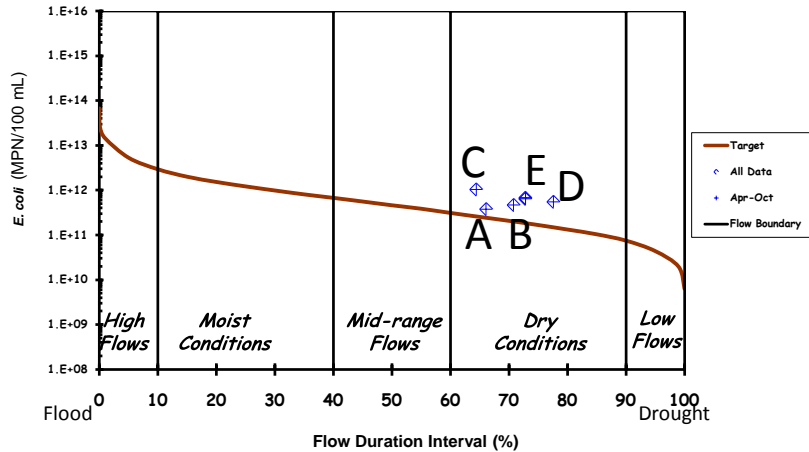
<<left intentionally blank for double-sided printing>>

White River, West Fork at CR 500 S

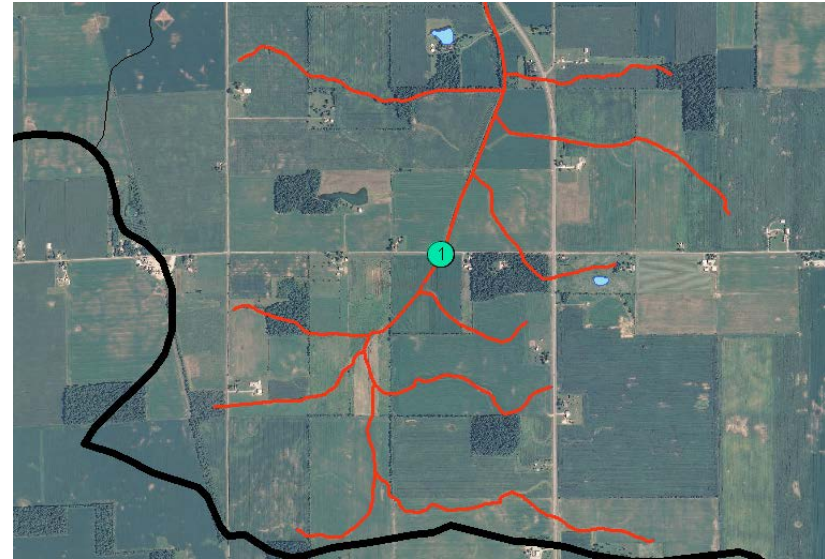
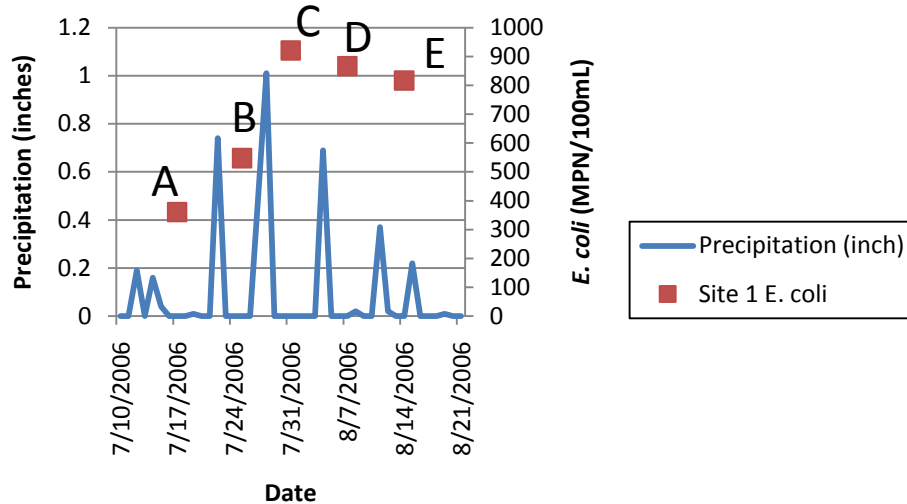
2006 Monitoring Data

Site 1: WWU010-0082

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

Drainage Area:

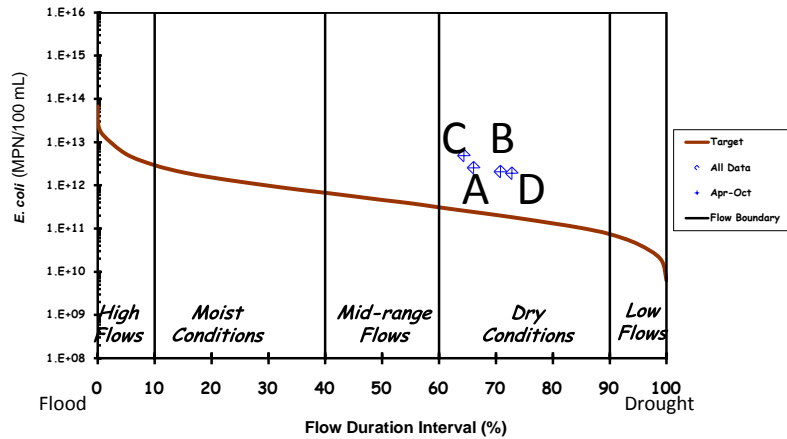
241 square miles

Colvin Ditch at CR 200 E

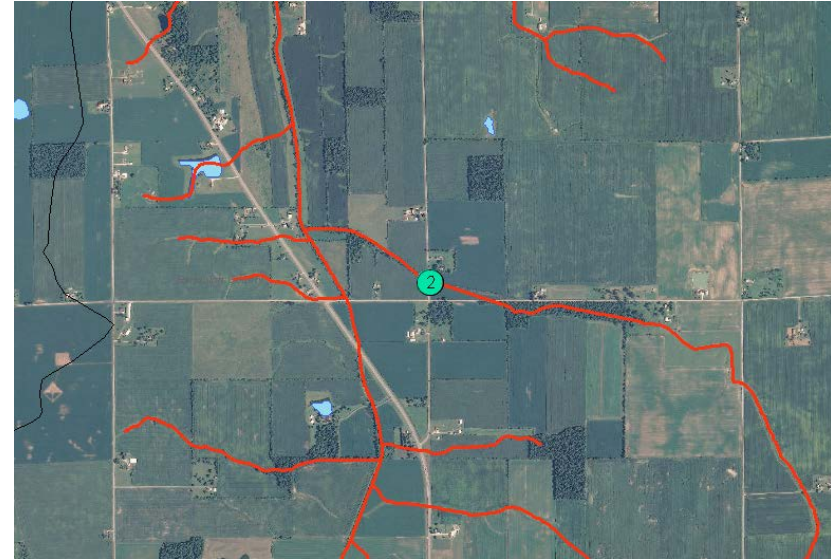
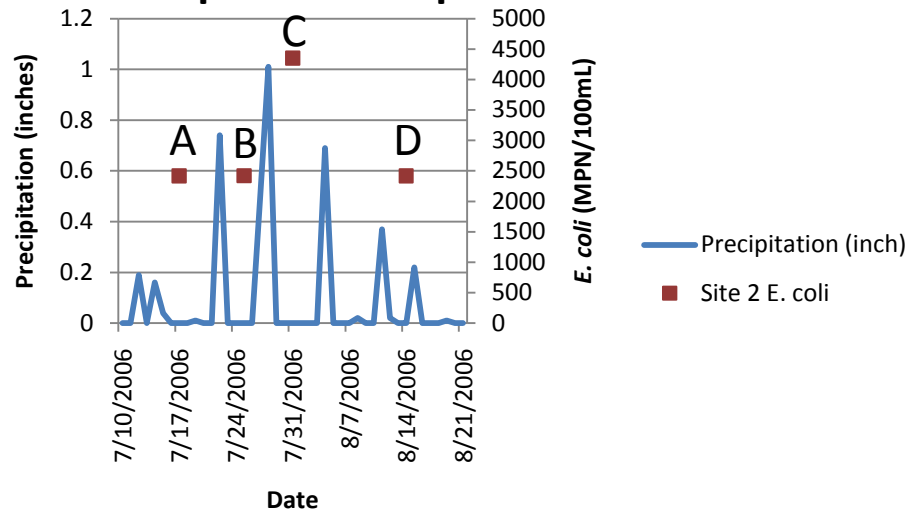
2006 Monitoring Data

Site 2: WWU010-0081

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

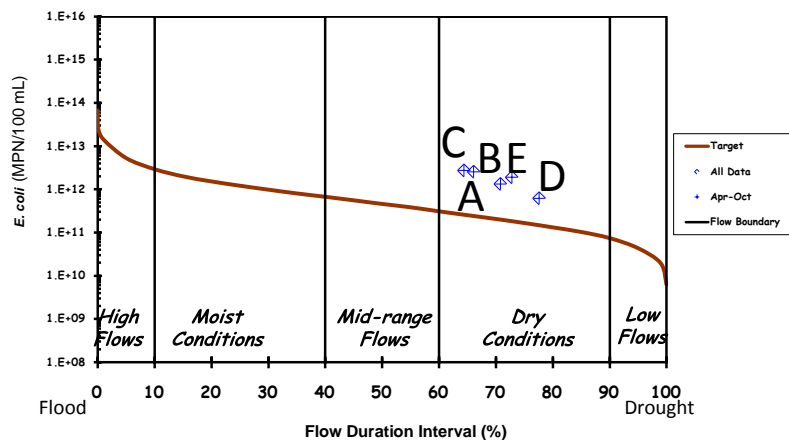
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:

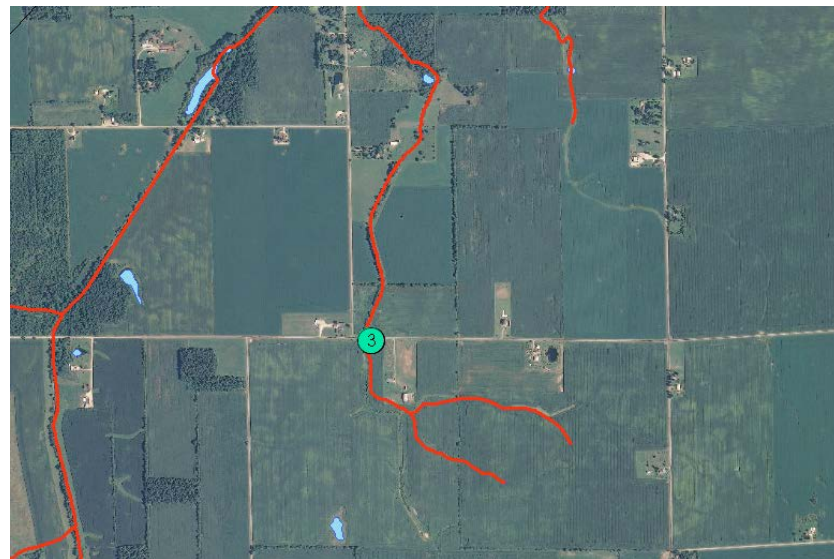
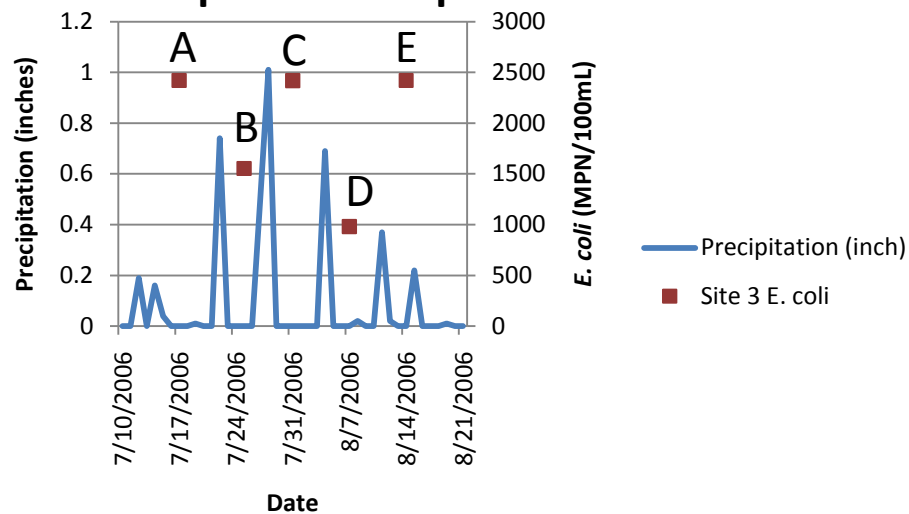
241 square miles

Unnamed Tributary to White River at CR 300 S 2006 Monitoring Data Site 3: WWU010-0080

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

Drainage Area:

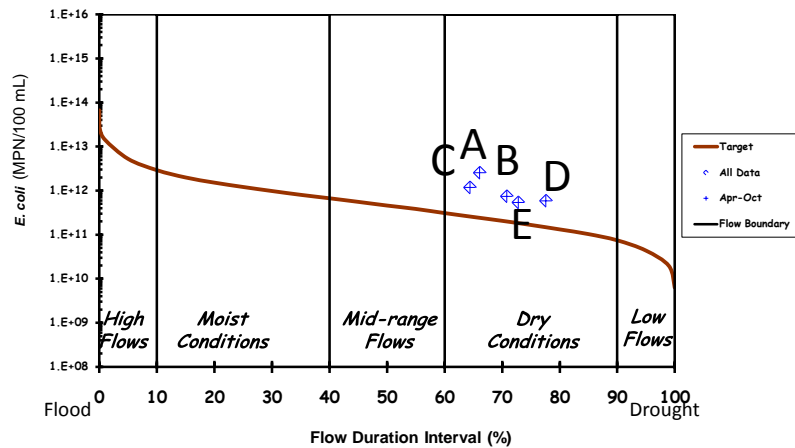
241 square miles

White River, West Fork at CR 200 S

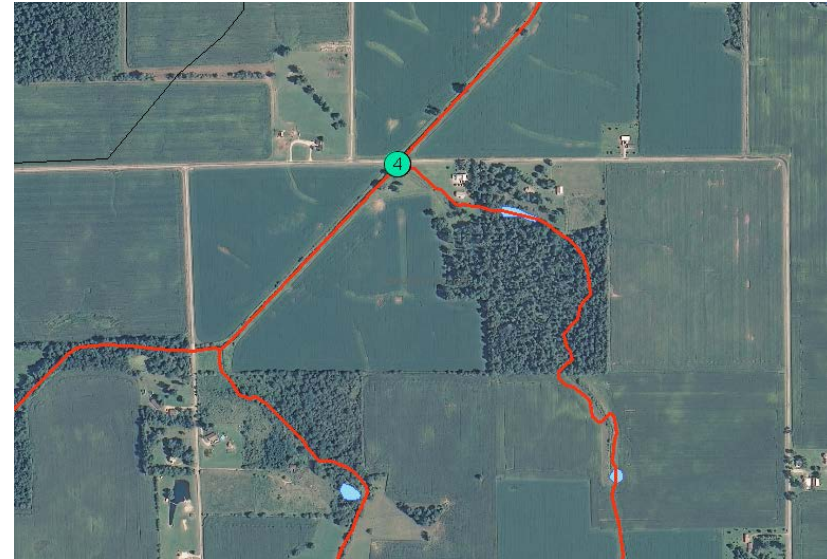
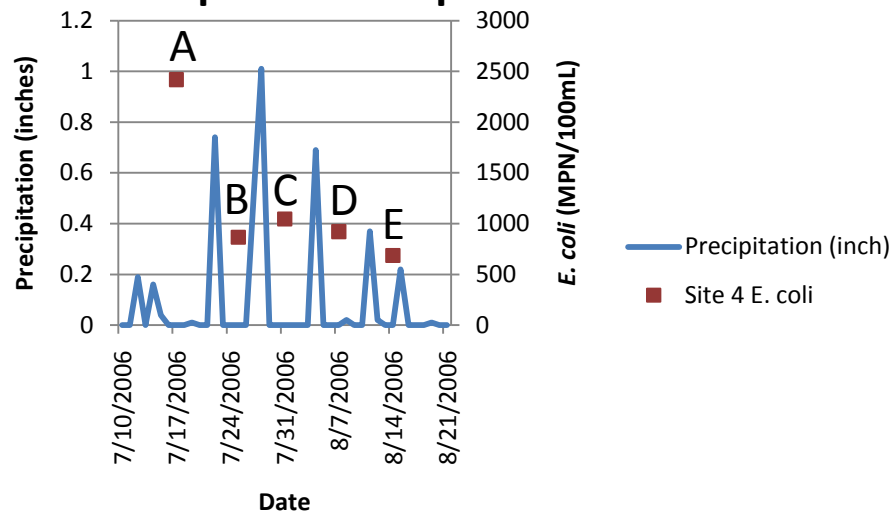
2006 Monitoring Data

Site 4: WWU010-0079

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

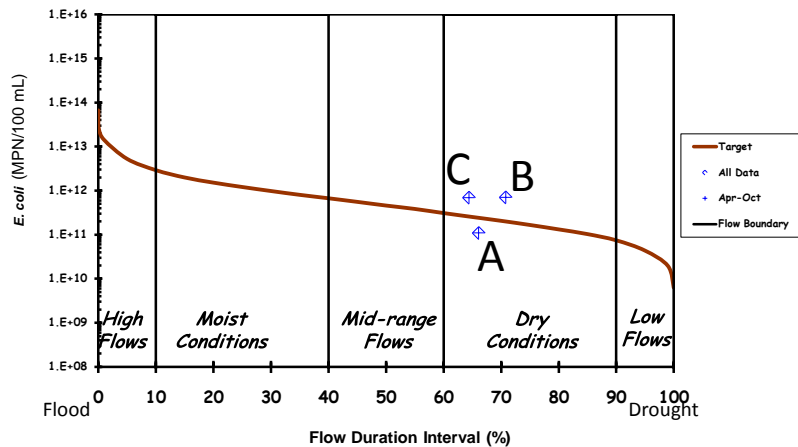
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:

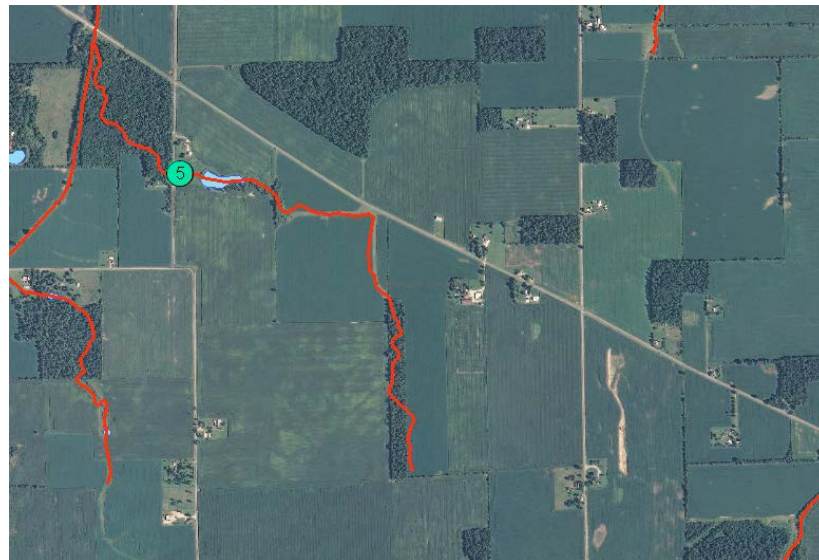
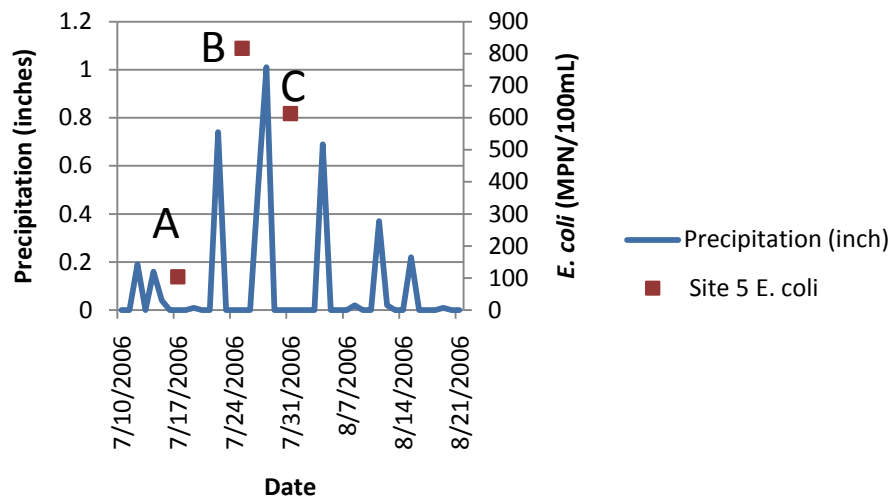
241 square miles

Unnamed Tributary to White River at CR 300 E 2006 Monitoring Data Site 5: WWU010-0078

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000
 Winchester, IN Precipitation Station – State Climate Office

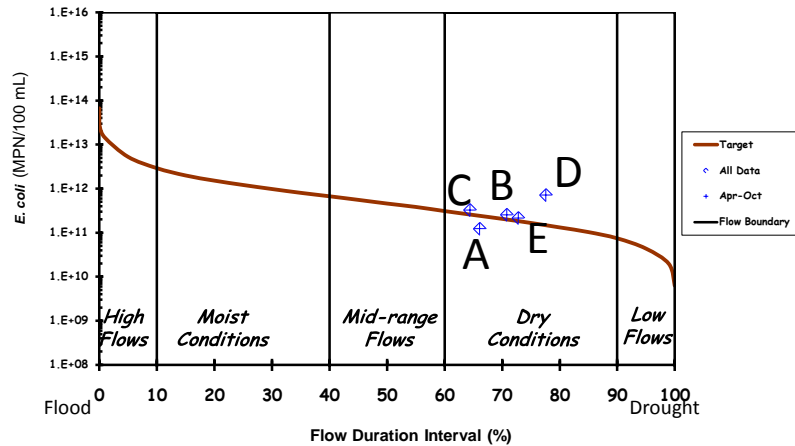
Drainage Area:
 241 square miles

White River, West Fork at Base Road

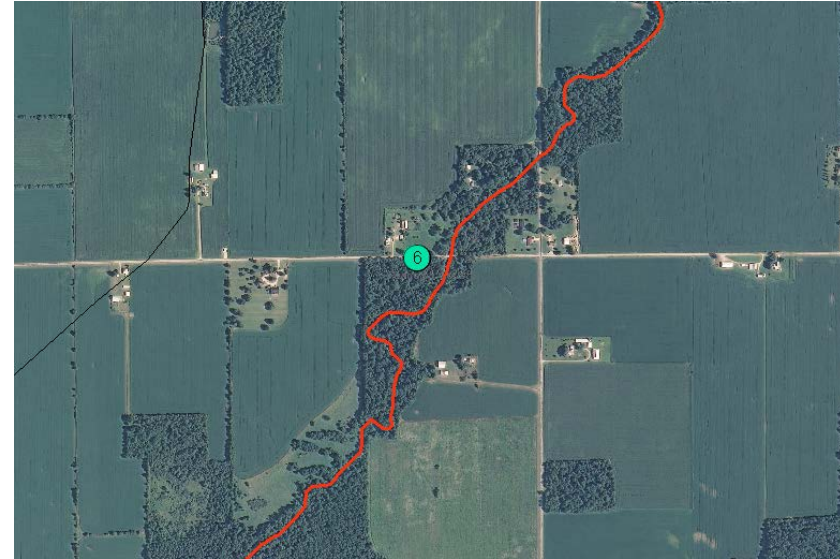
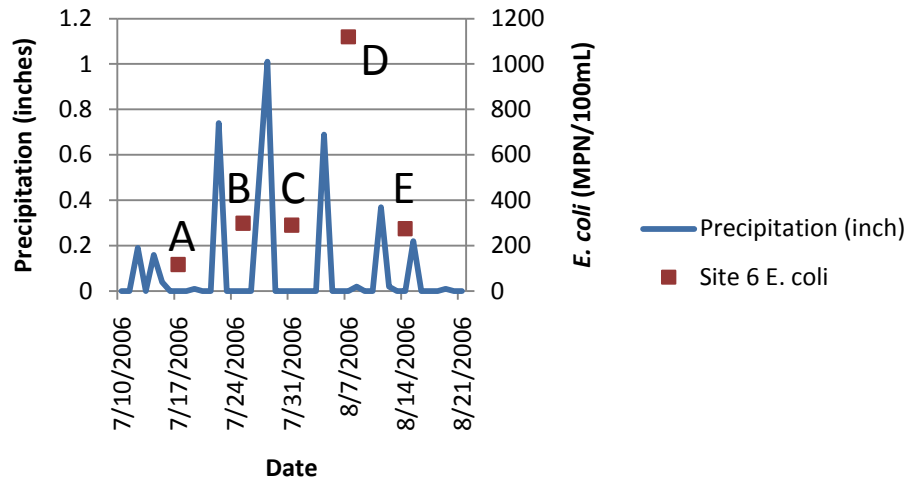
2006 Monitoring Data

Site 6: WWU010-0076

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

Drainage Area:

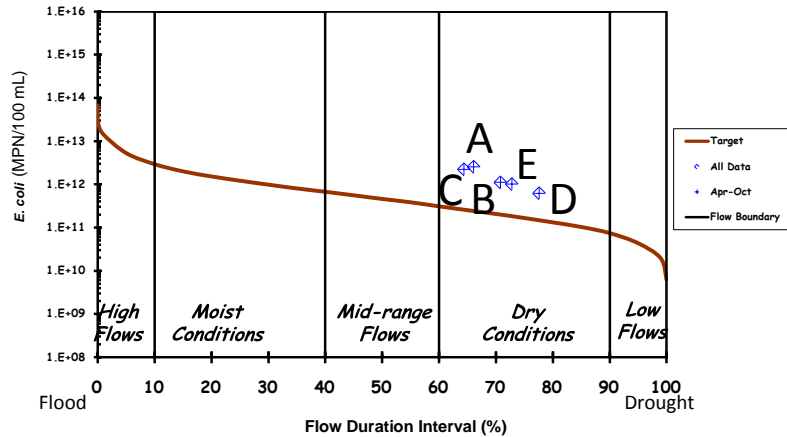
241 square miles

Owl Creek at CR 100 S

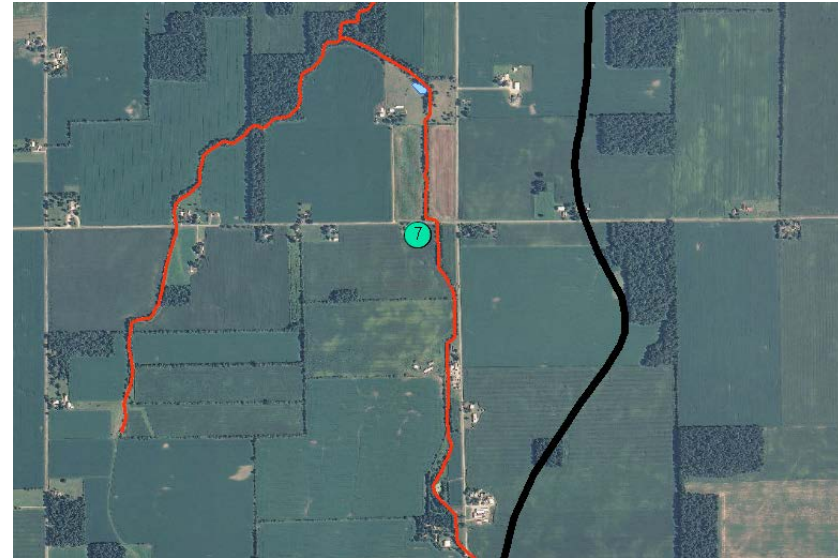
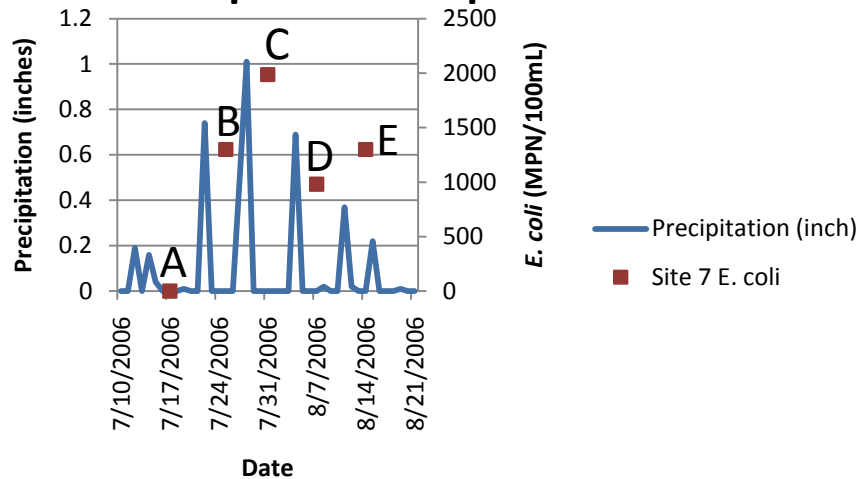
2006 Monitoring Data

Site 7: WWU010-0077

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

Drainage Area:

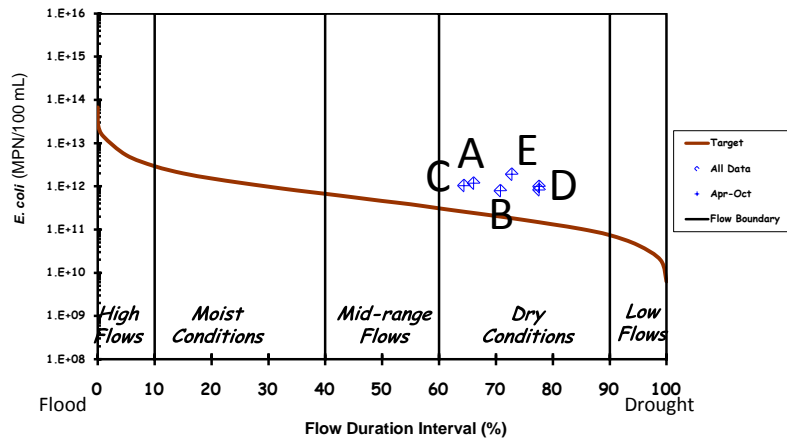
241 square miles

Owl Creek at Base Road

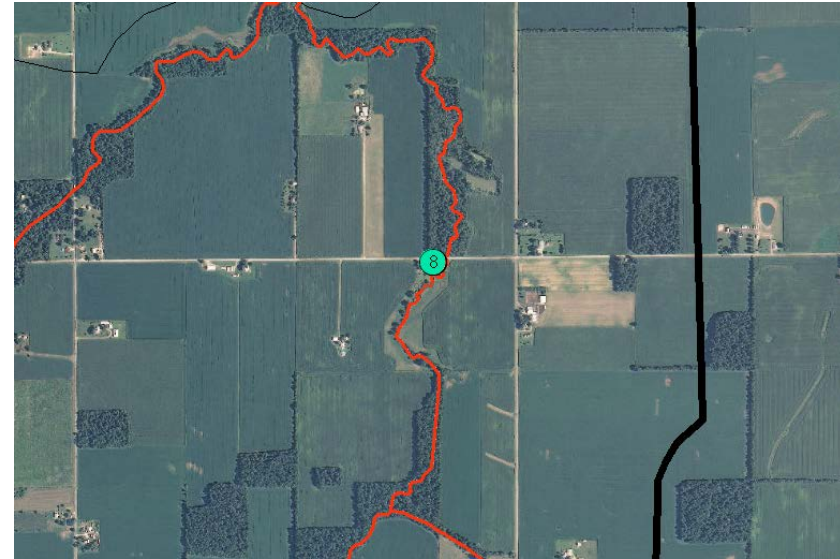
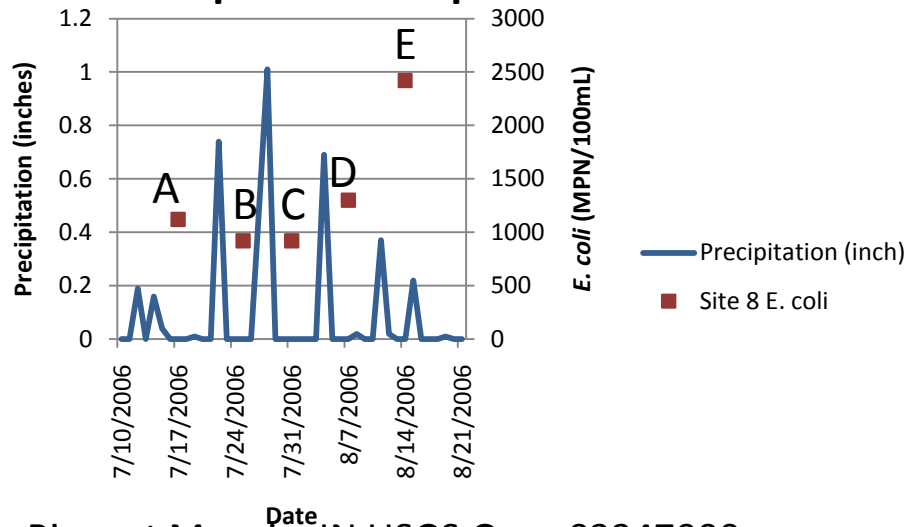
2006 Monitoring Data

Site 8: WWU010-0075

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

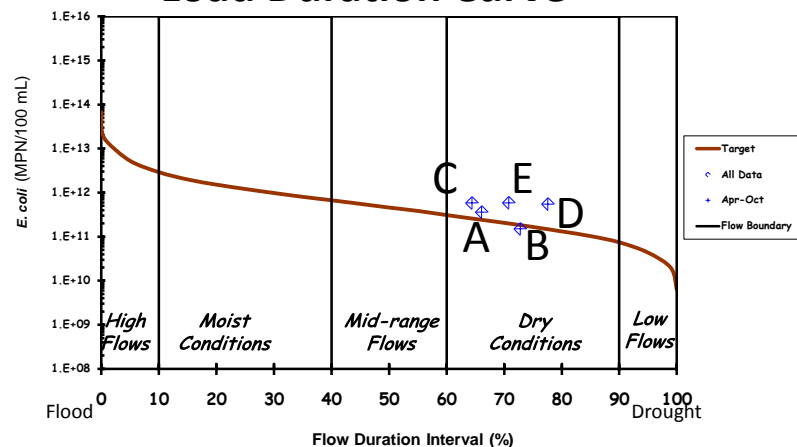
Drainage Area:
241 square miles

White River, West Fork at SR 32

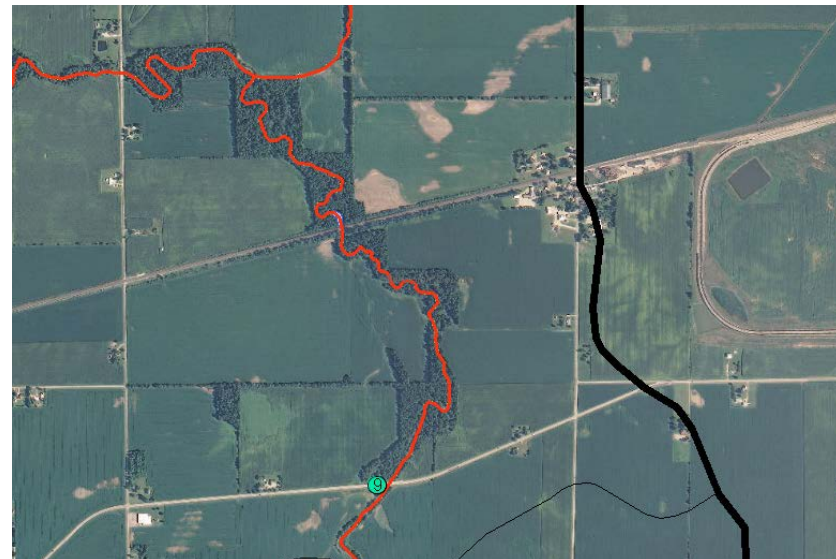
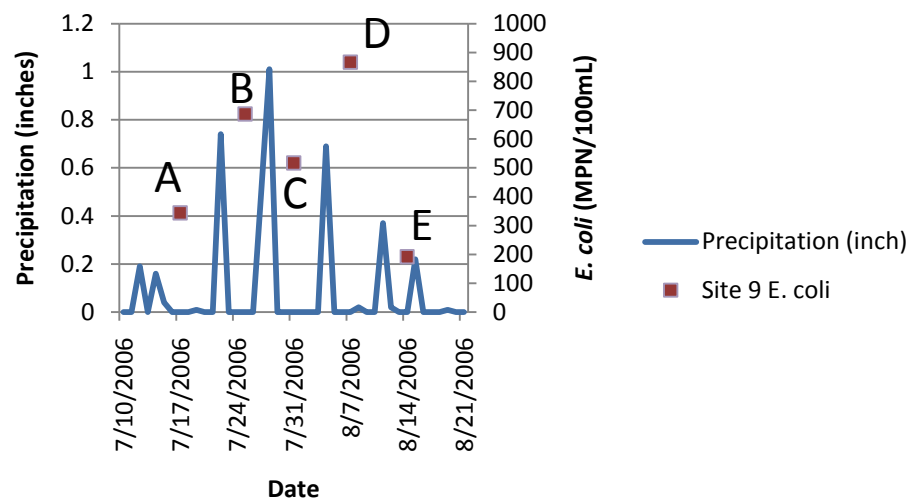
2006 Monitoring Data

Site 9: WWU010-0074

Load Duration Curve



Precipitation Graph



White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

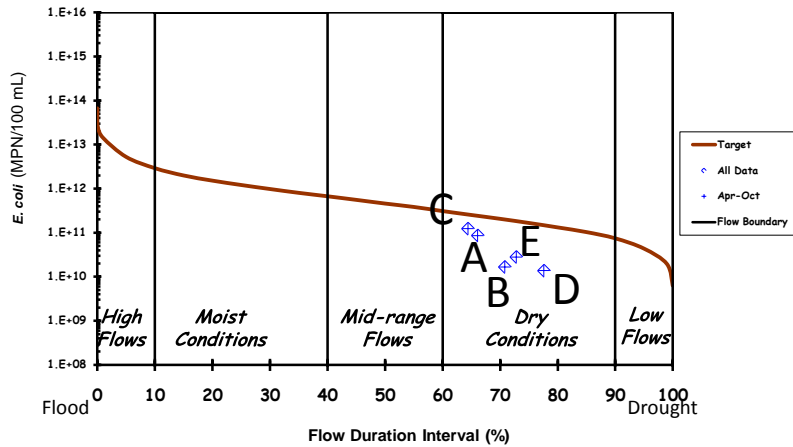
Drainage Area:

241 square miles

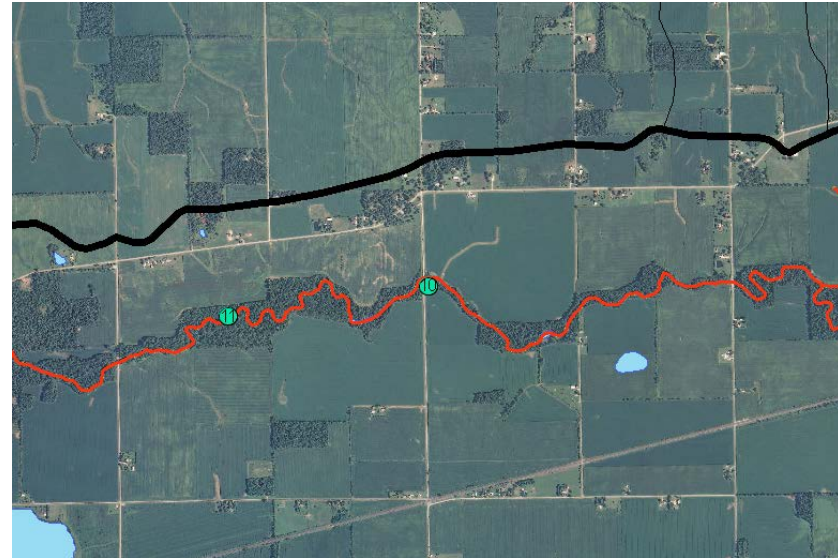
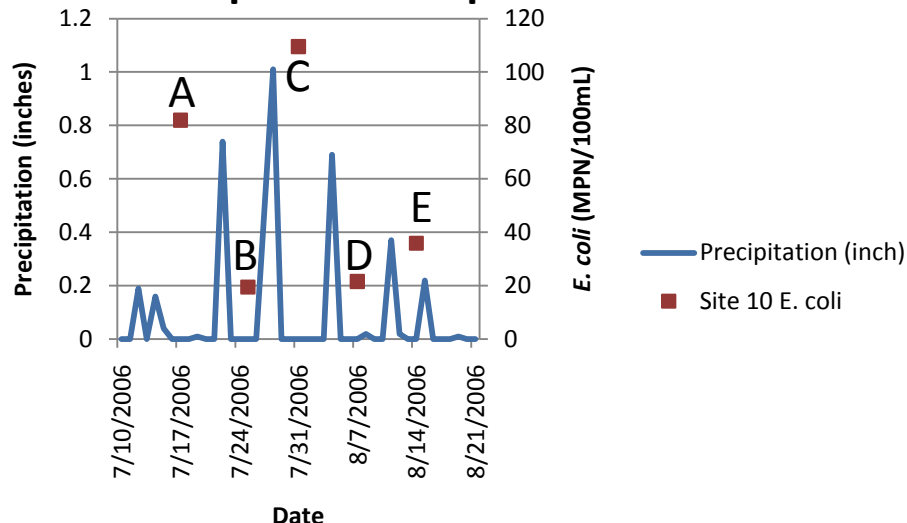
White River, West Fork at CR 300 E

2006 Monitoring Data
Site 10: WWU010-0073

Load Duration Curve



Precipitation Graph



Upstream



Downstream

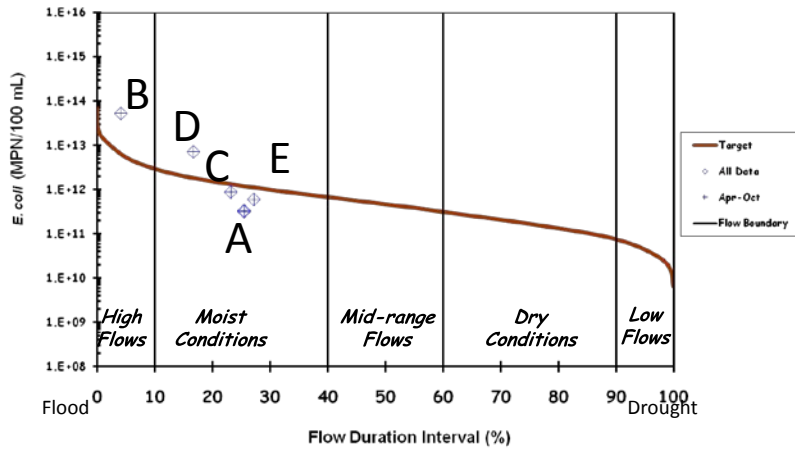
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

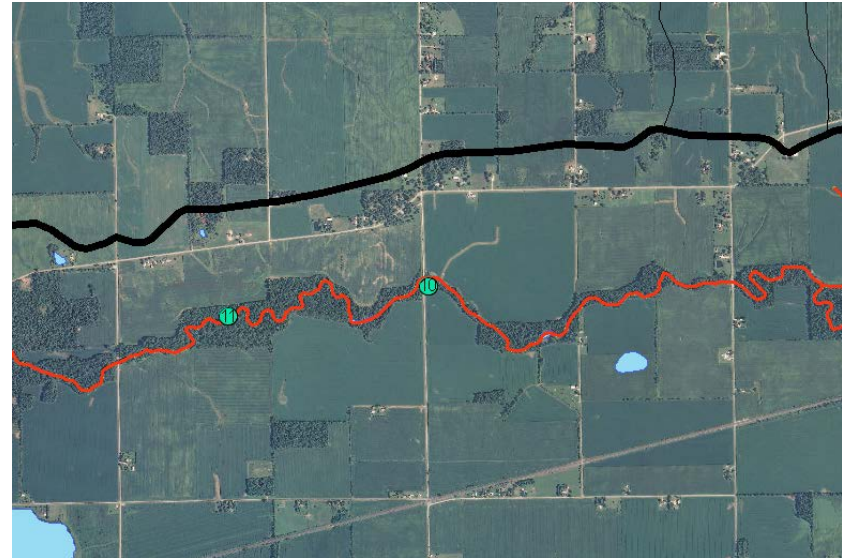
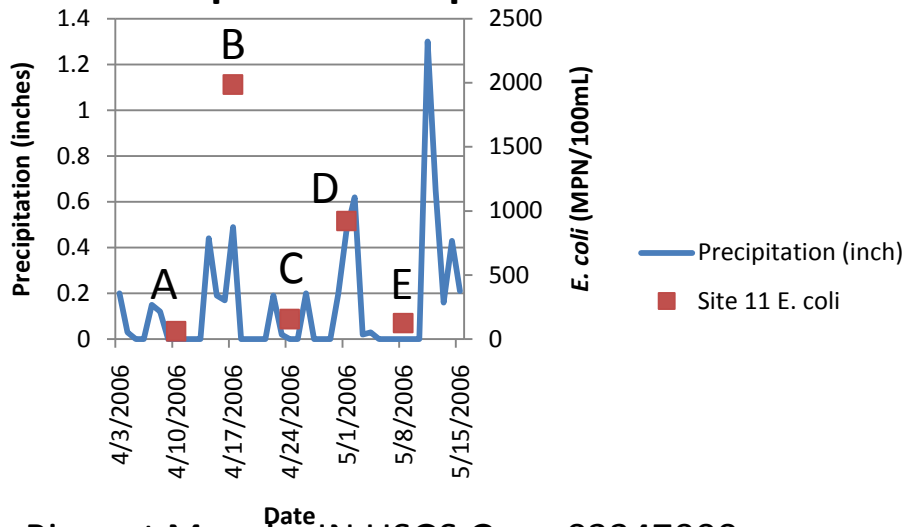
White River, West Fork at CR 200 E

2006 Monitoring Data
Site 11: WWU010-0039

Load Duration Curve



Precipitation Graph



Upstream



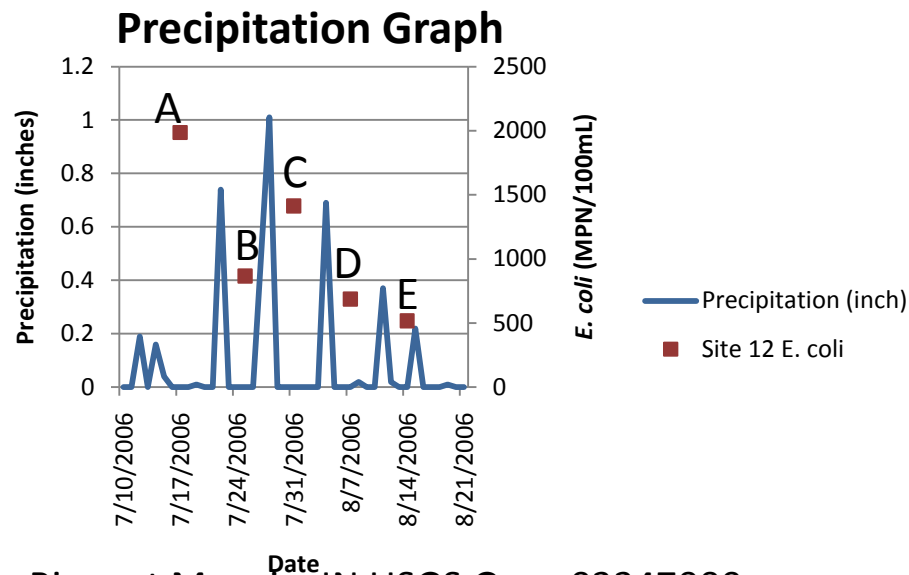
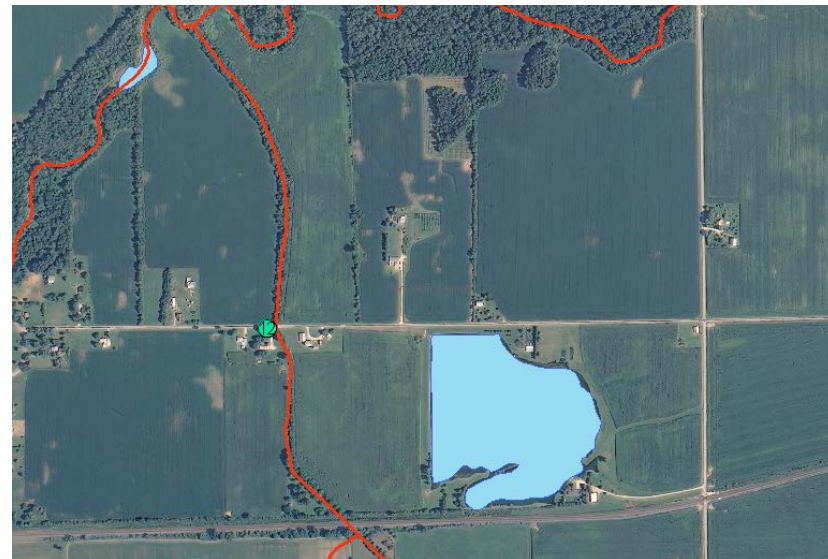
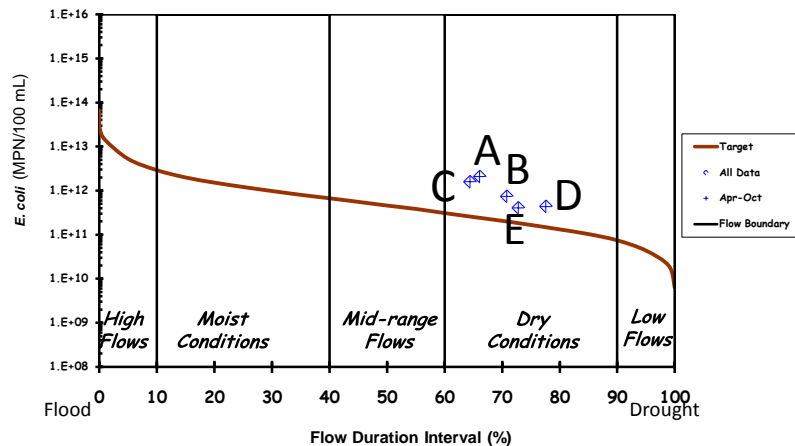
Downstream

White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

Unnamed Tributary to White River at CR 100 N 2006 Monitoring Data Site 12: WWU010-0072

Load Duration Curve



Upstream

Downstream

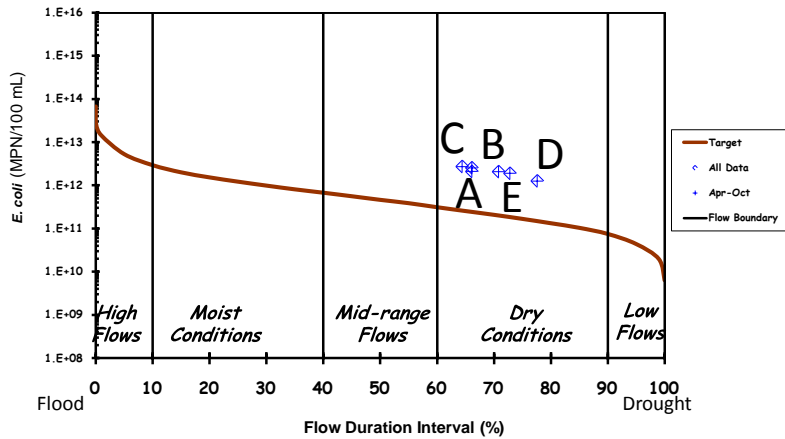
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

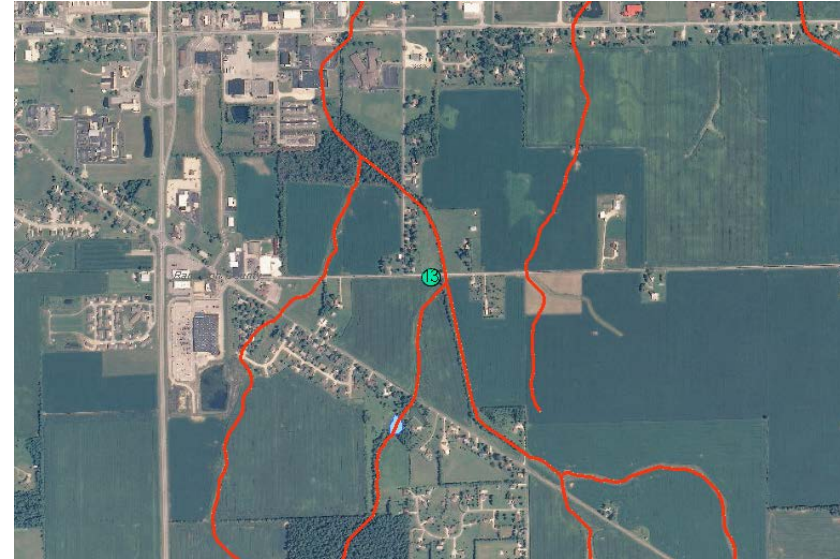
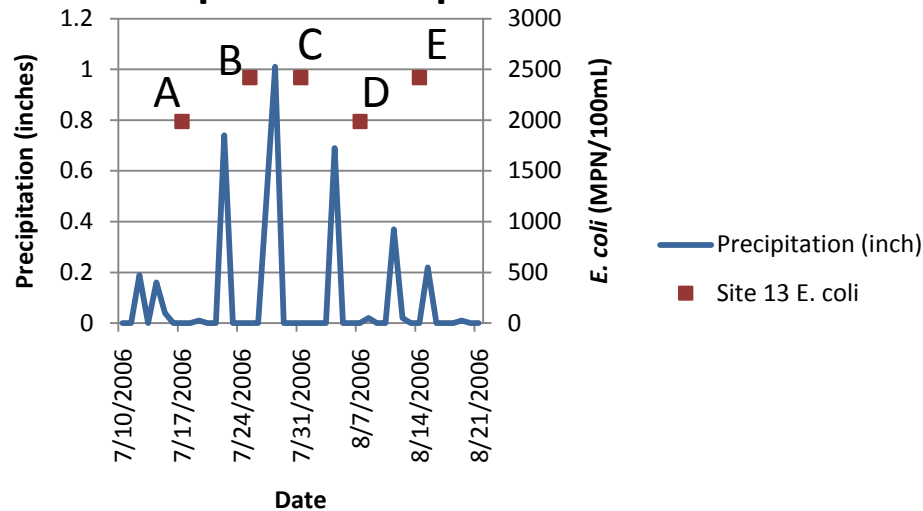
Peach Creek at Base Road

2006 Monitoring Data
Site 13: WWU010-0070

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

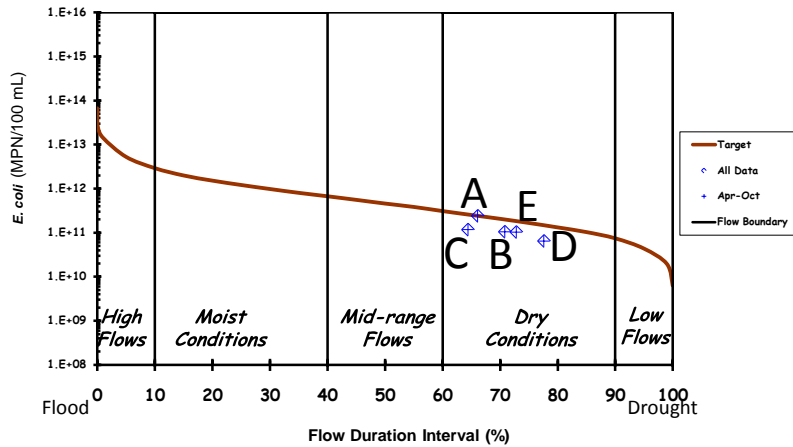
Drainage Area:

241 square miles

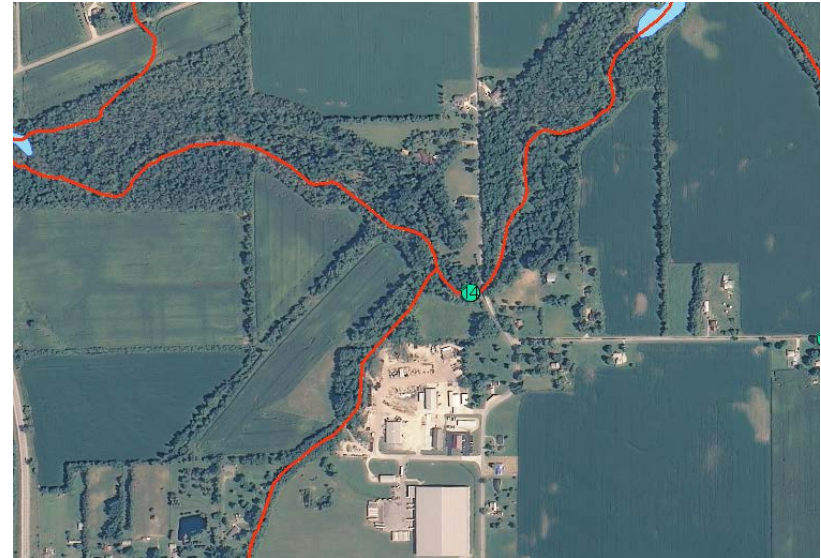
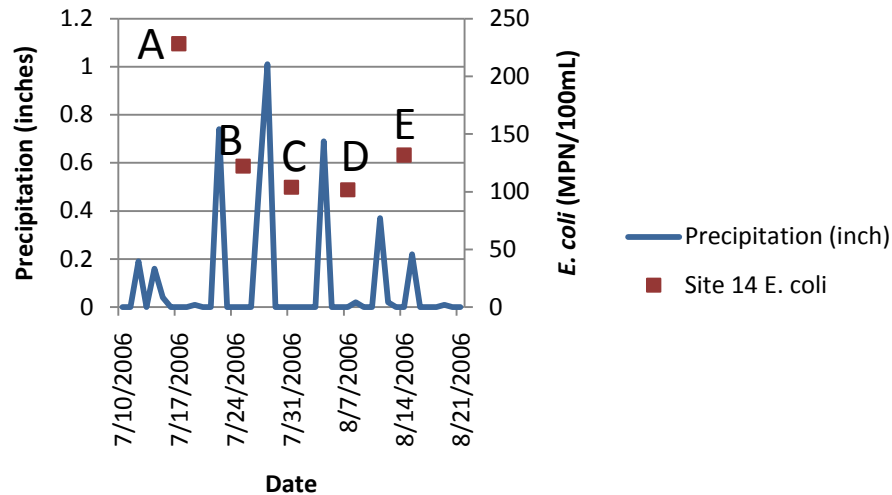
White River, West Fork at CR 100 E

2006 Monitoring Data
Site 14: WWU010-0071

Load Duration Curve



Precipitation Graph



Upstream



Downstream

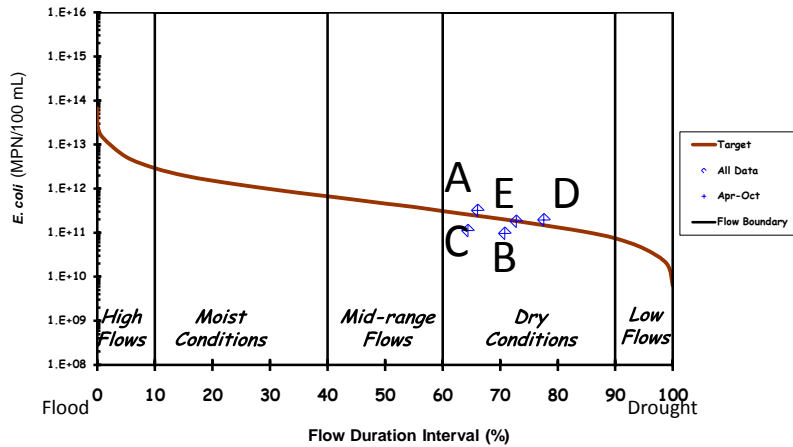
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

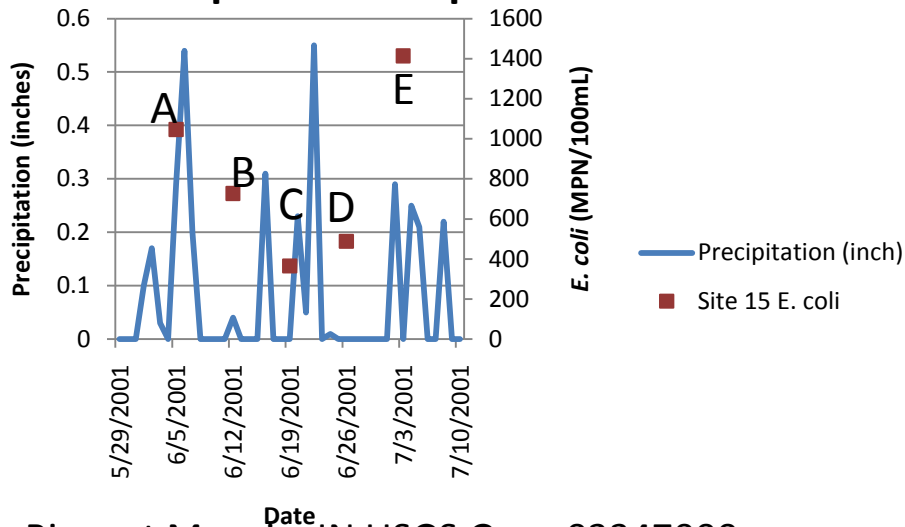
White River, West Fork at US 27

2006 Monitoring Data
Site 15: WWU010-0066

Load Duration Curve



Precipitation Graph



White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

Drainage Area:

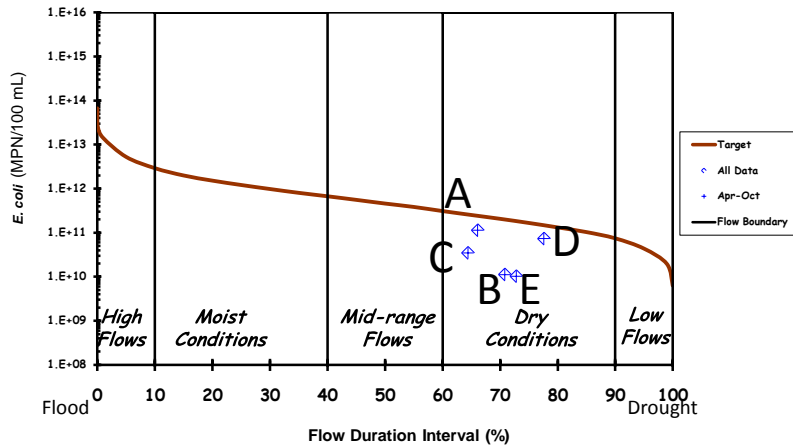
241 square miles

Unnamed Tributary to Salt Creek at Base Rd

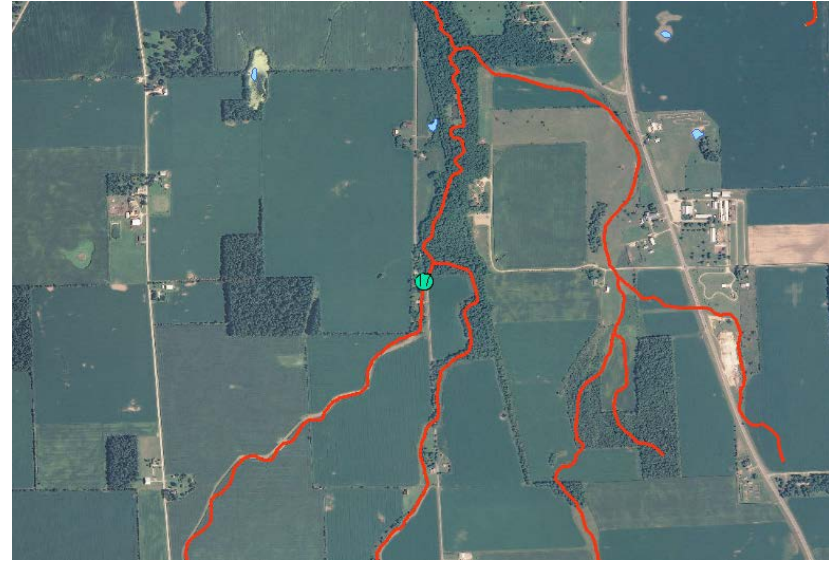
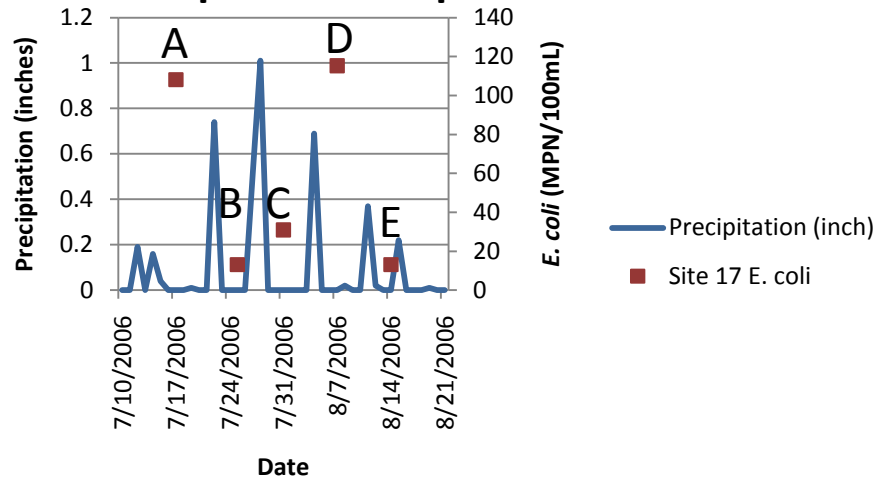
2006 Monitoring Data

Site 17: WWU010-0064

Load Duration Curve



Precipitation Graph



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

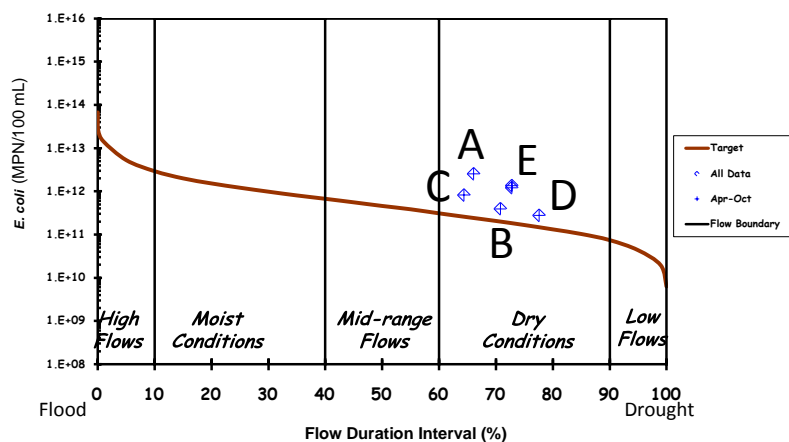
Drainage Area:

241 square miles

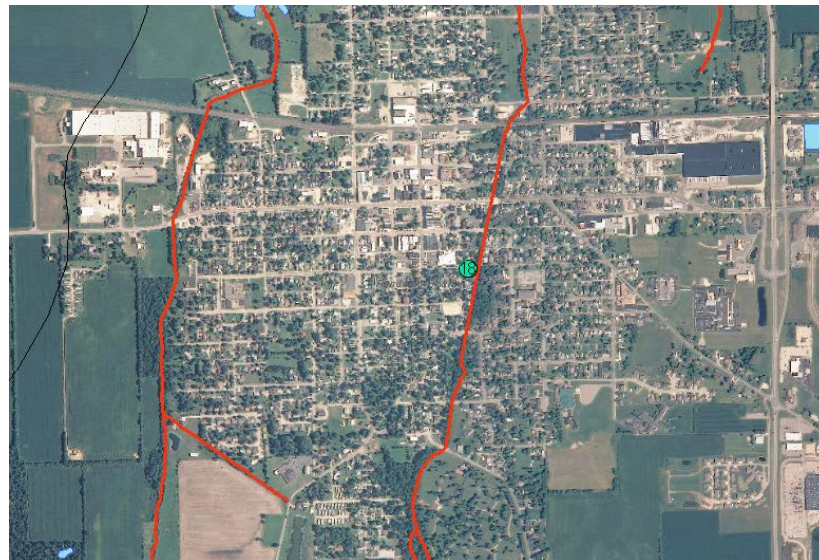
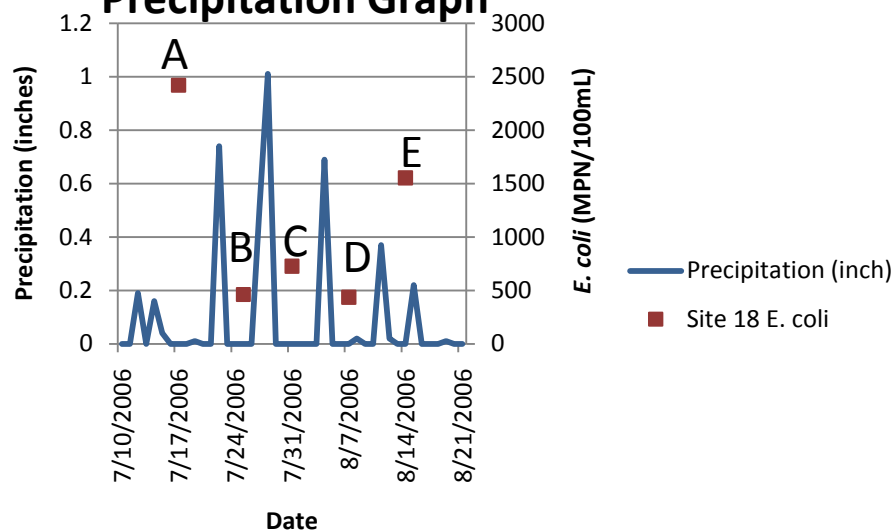
Salt Creek at South St

2006 Monitoring Data
Site 18: WWU010-0067

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

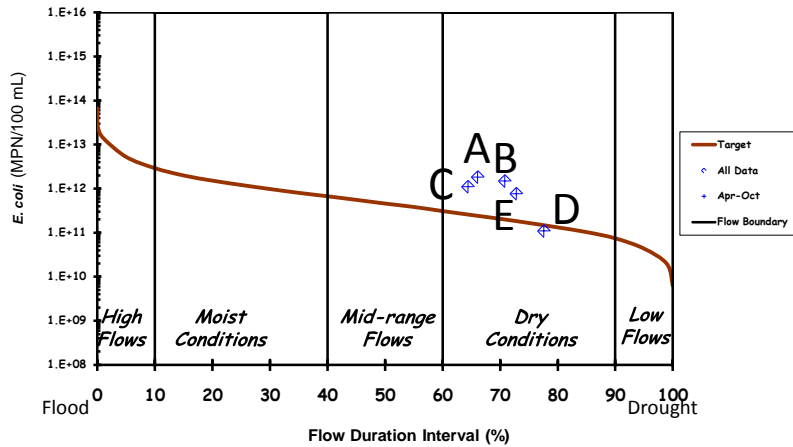
Drainage Area:

241 square miles

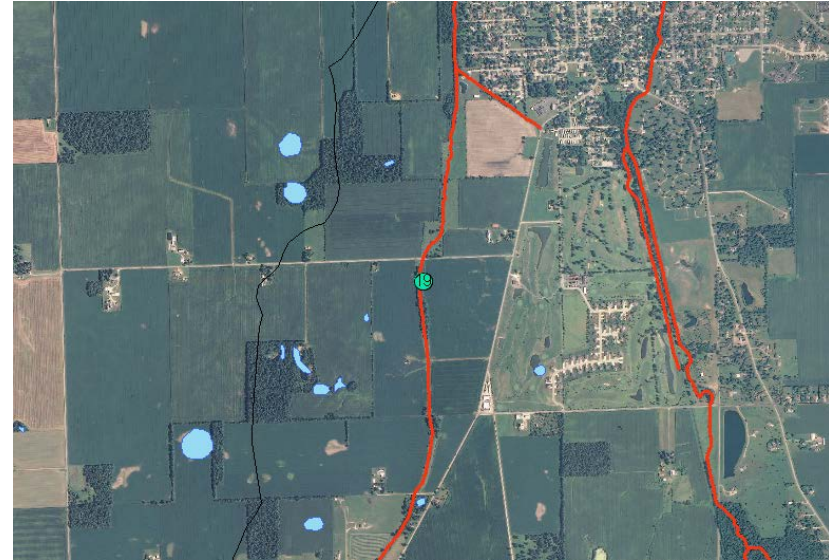
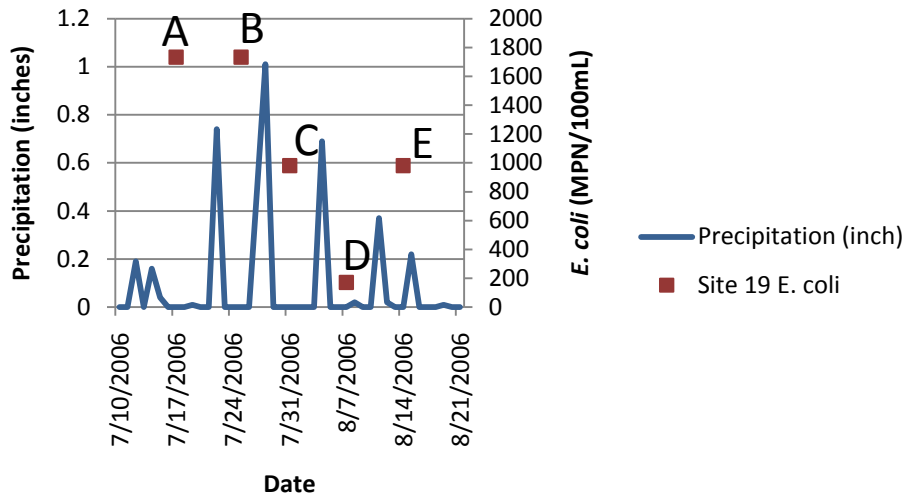
Sugar Creek at CR 50 S

2006 Monitoring Data
Site 19: WWU010-0062

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

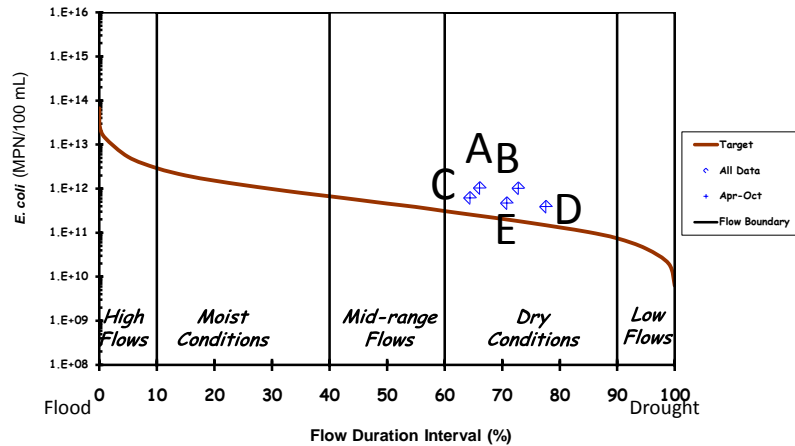
Drainage Area:

241 square miles

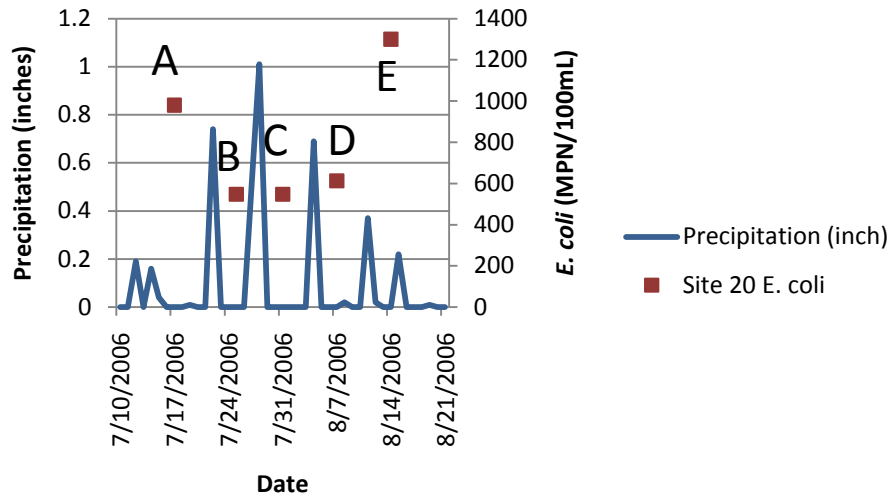
Sugar Creek at W Martin Street

2006 Monitoring Data
Site 20: WWU010-0061

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

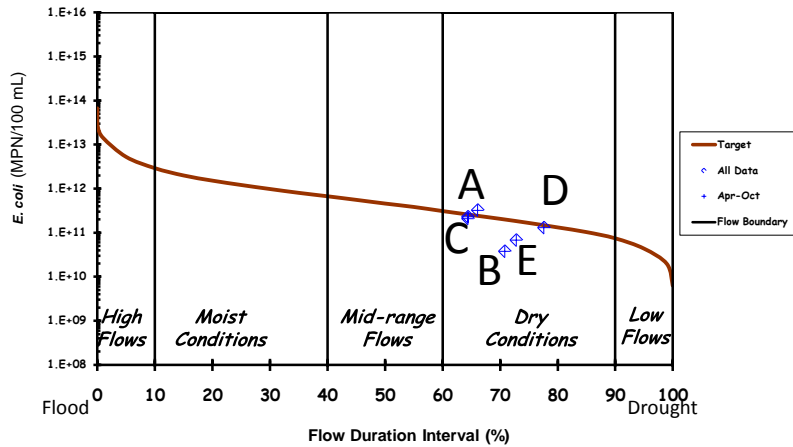
Drainage Area:

241 square miles

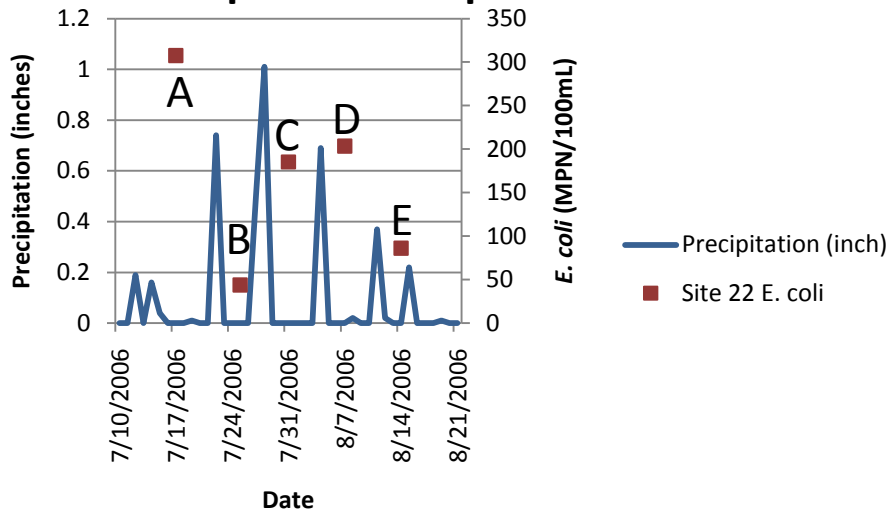
White River, West Fork at Carlos Road

2006 Monitoring Data
Site 22: WWU010-0060

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

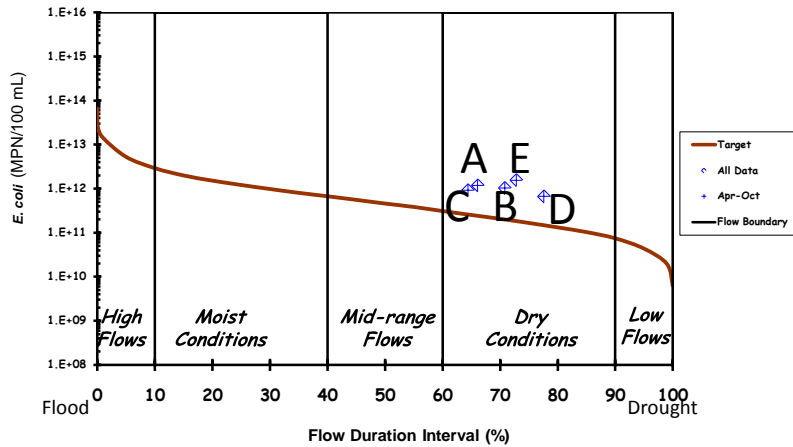
Drainage Area:

241 square miles

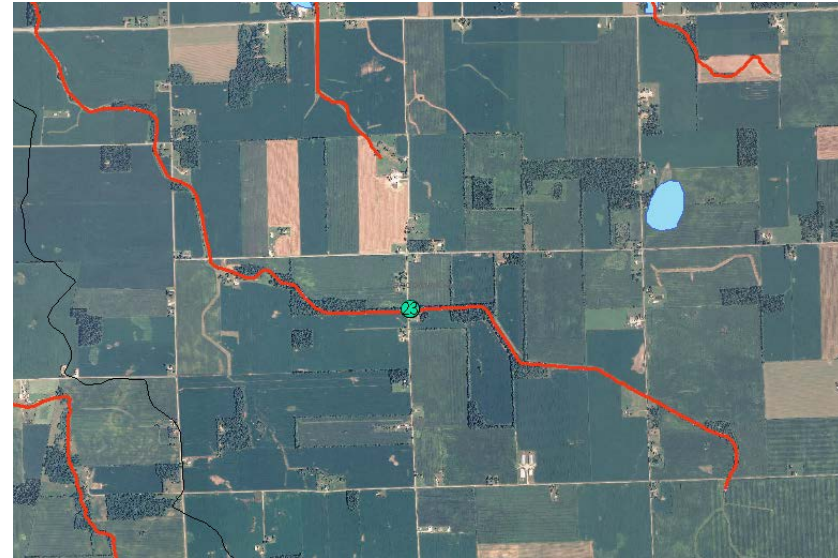
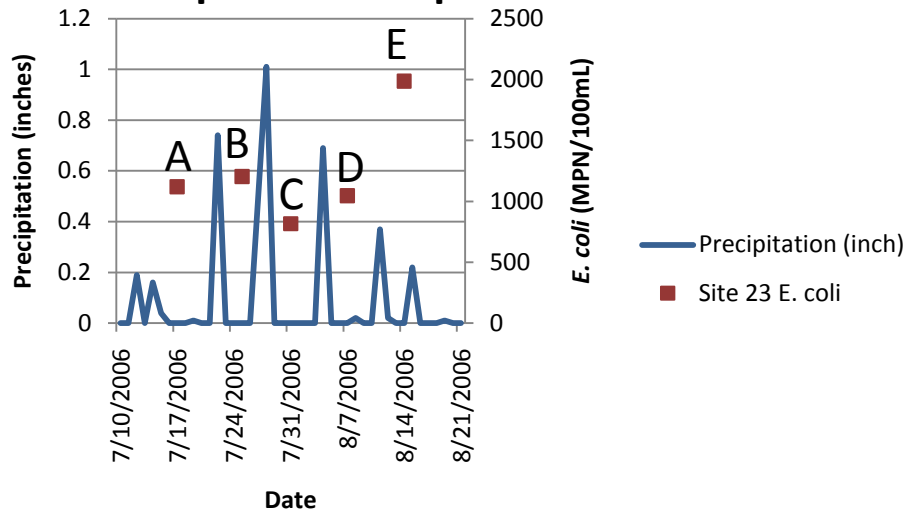
Eightmile Creek at CR 400 W

2006 Monitoring Data
Site 23: WWU010-0059

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

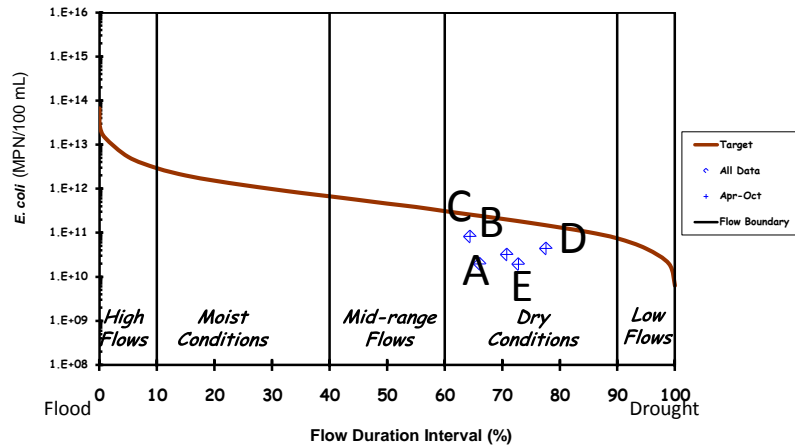
Drainage Area:

241 square miles

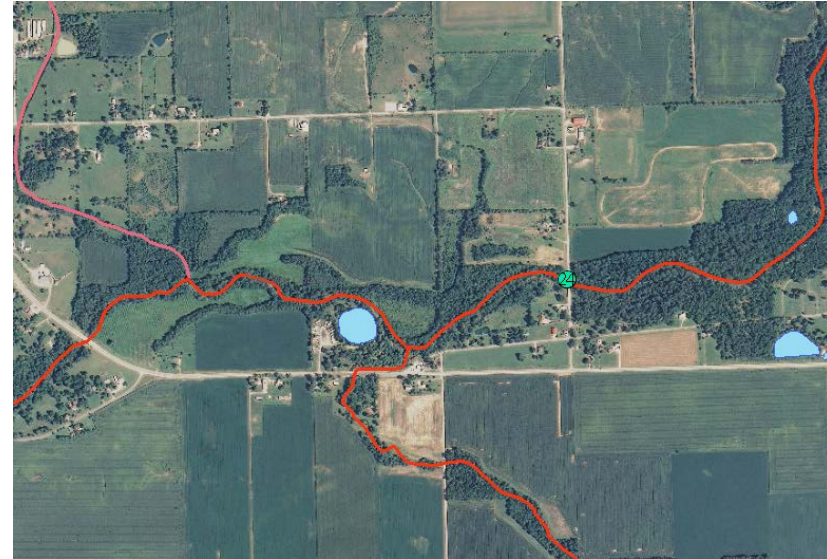
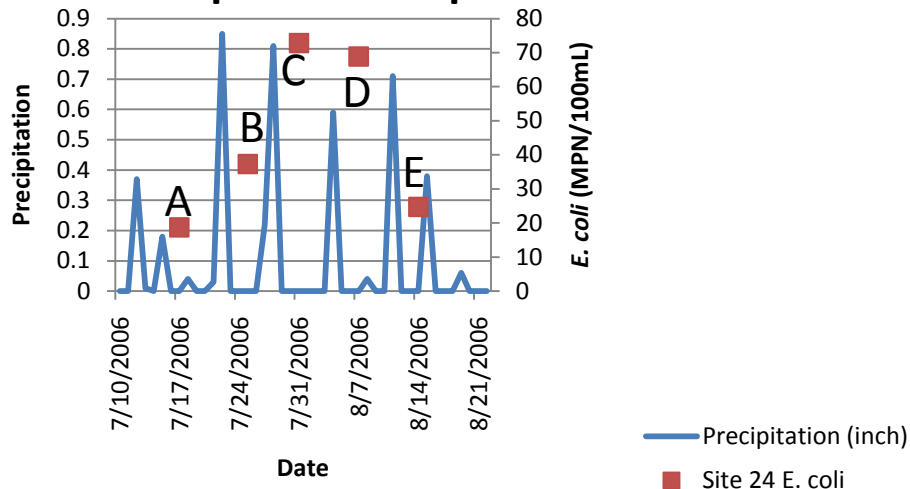
White River, West Fork at CR 675 W

2006 Monitoring Data
Site 24: WWU010-0057

Load Duration Curve



Precipitation Graph



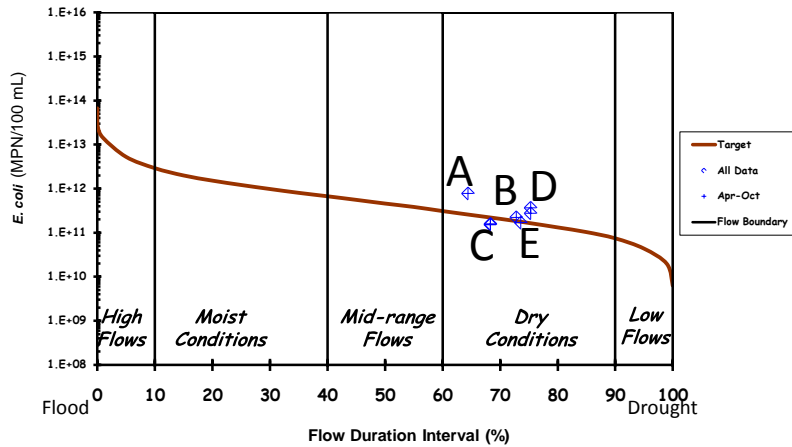
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

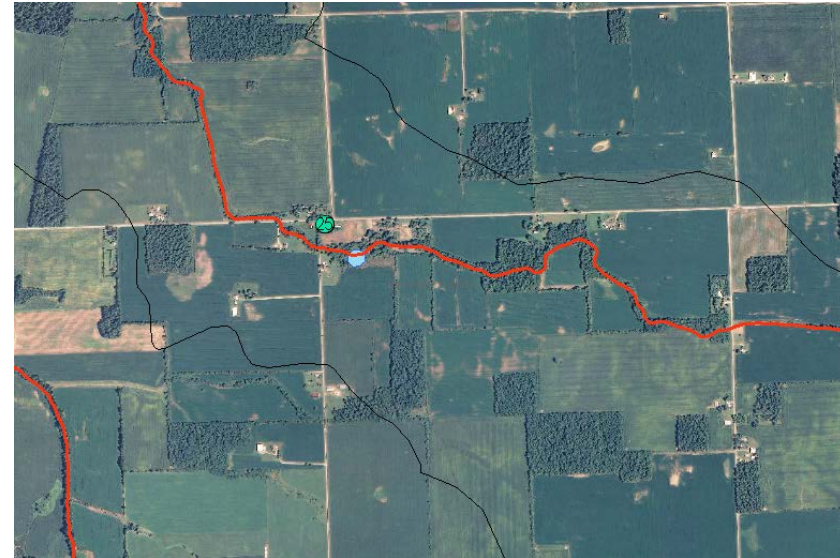
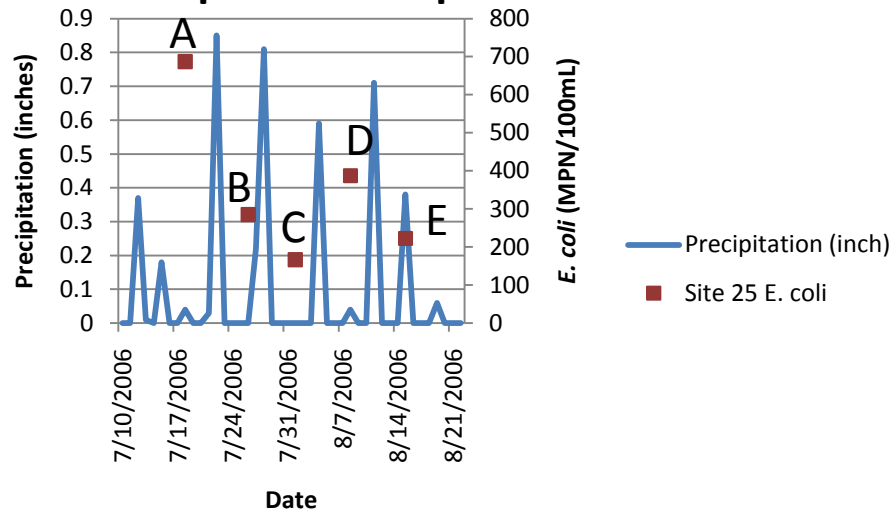
Sparrow Creek at CR 200 S

2006 Monitoring Data
Site 25: WWU010-0058

Load Duration Curve



Precipitation Graph



Upstream

Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

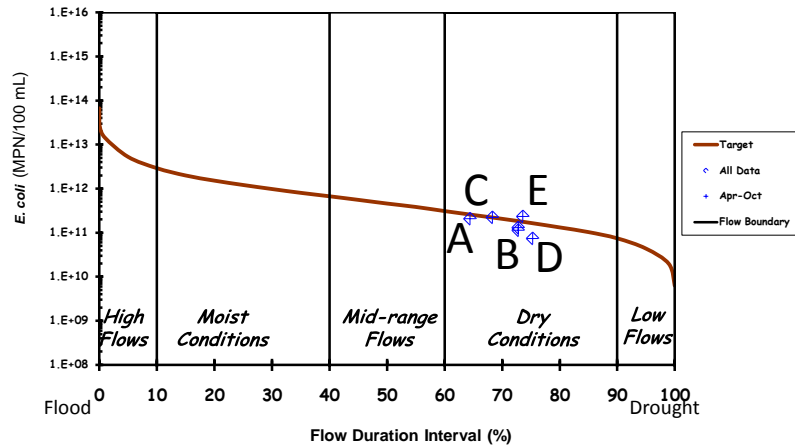
Drainage Area:

241 square miles

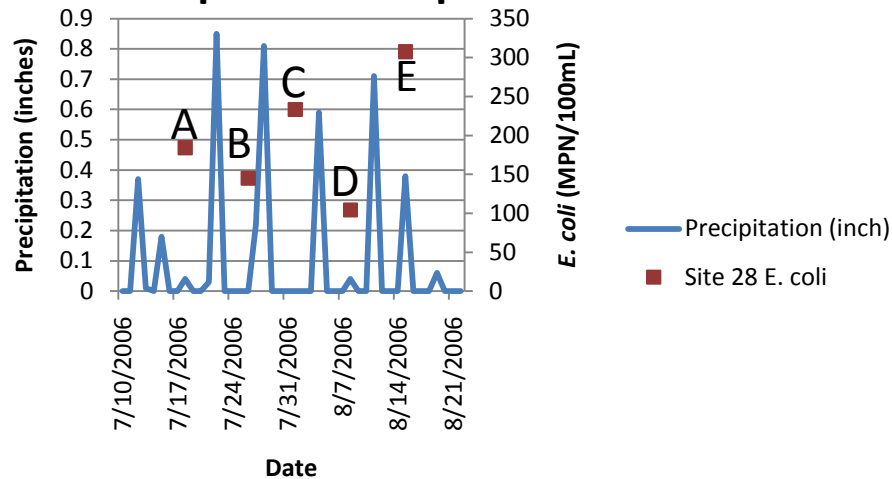
White River, West Fork at CR 900 W

2006 Monitoring Data
Site 28: WWU010-0048

Load Duration Curve



Precipitation Graph



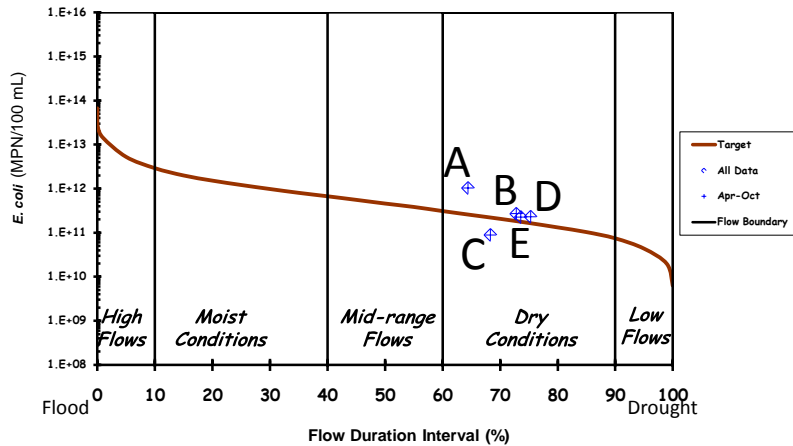
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

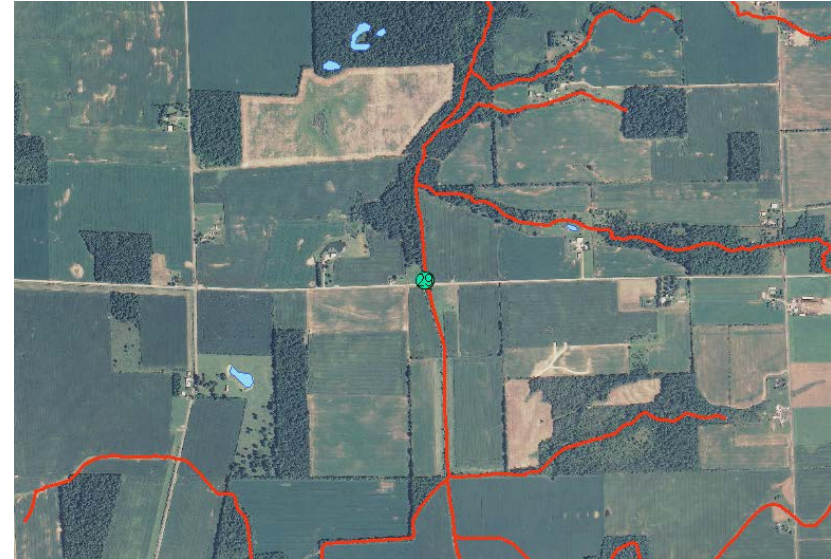
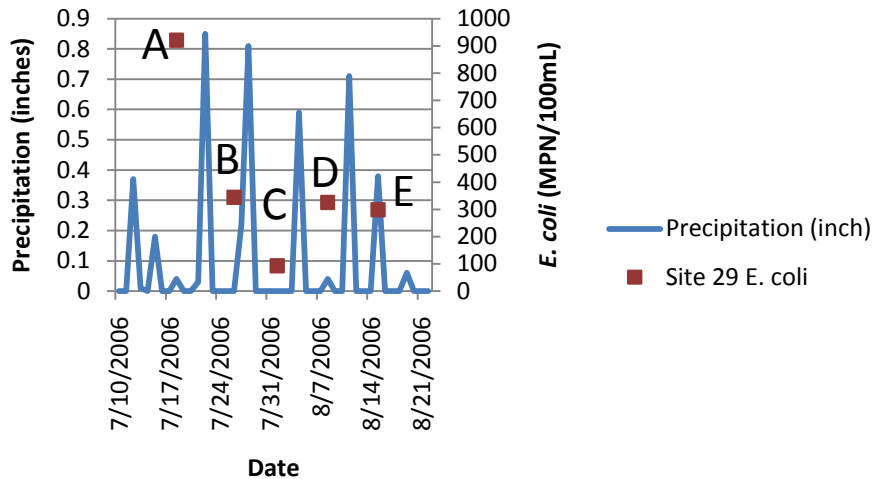
Cabin Creek at CR 500 S

2006 Monitoring Data
Site 29: WWU010-0065

Load Duration Curve



Precipitation Graph



Upstream

Downstream

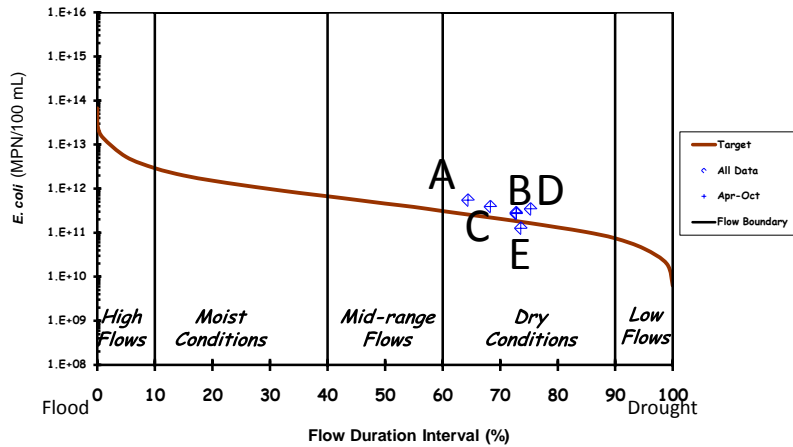
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

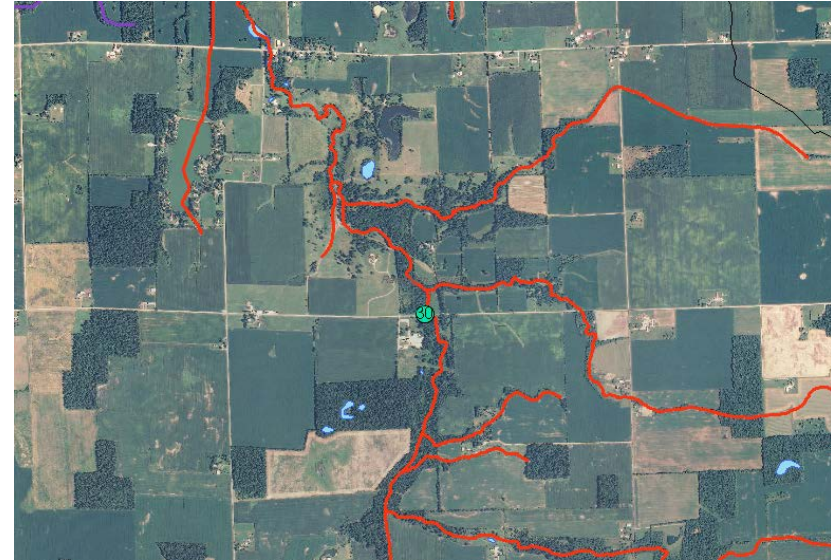
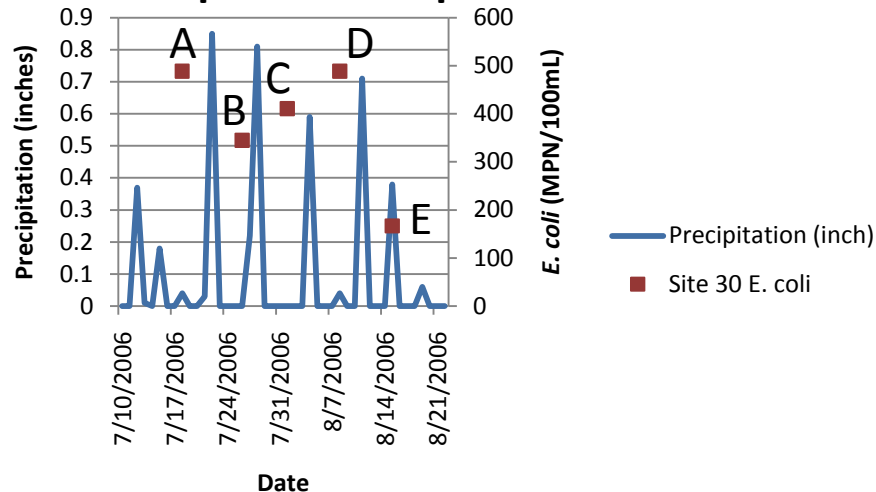
Cabin Creek at CR 400 S

2006 Monitoring Data
Site 30: WWU010-0056

Load Duration Curve



Precipitation Graph



Upstream



Downstream

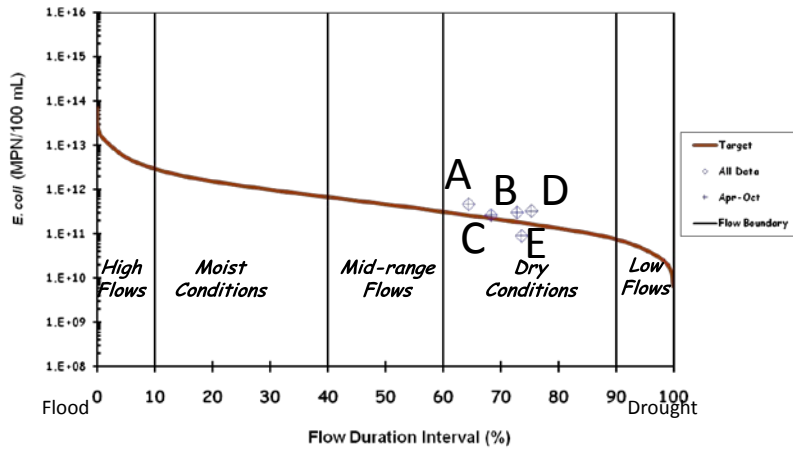
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

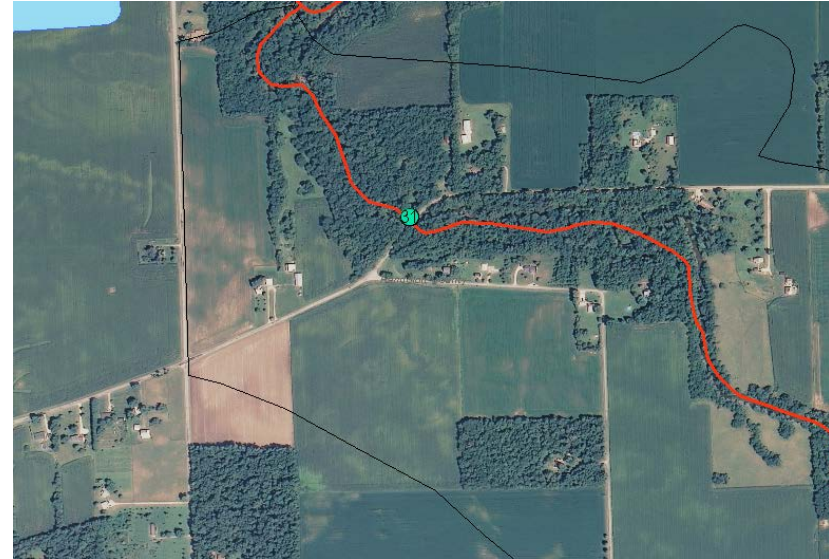
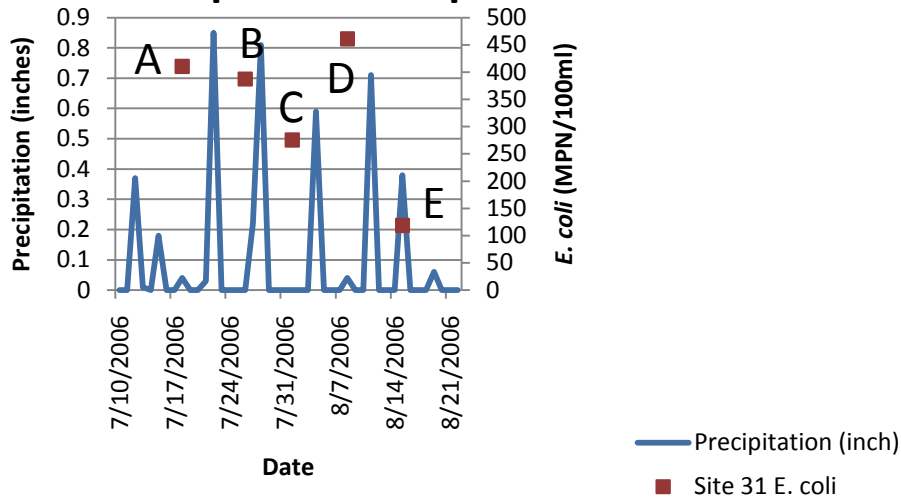
Cabin Creek at Windsor Pike

2006 Monitoring Data
Site 31: WWU010-0003

Load Duration Curve



Precipitation Graph



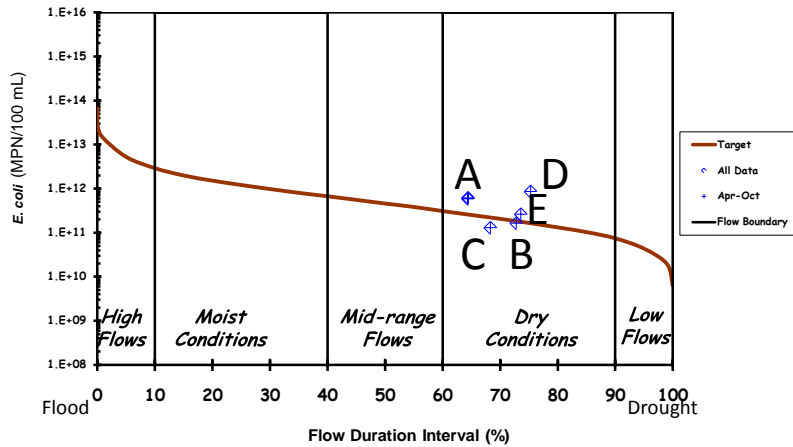
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

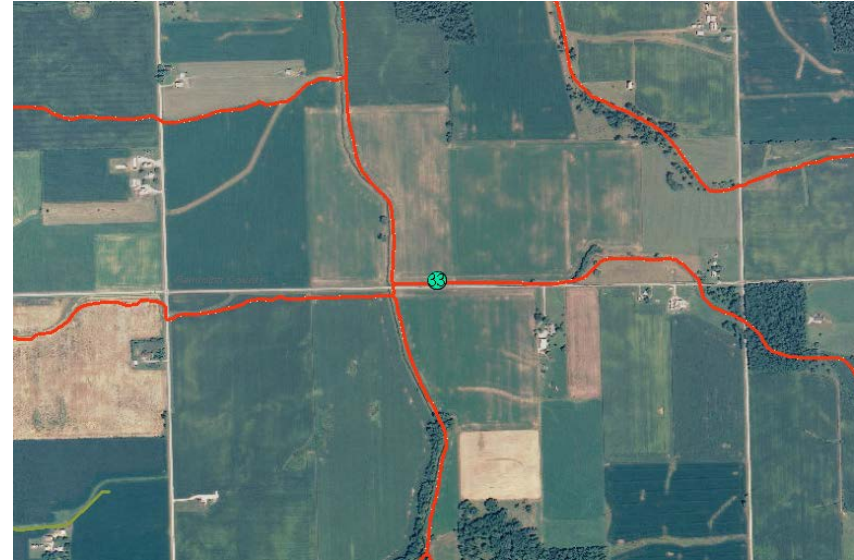
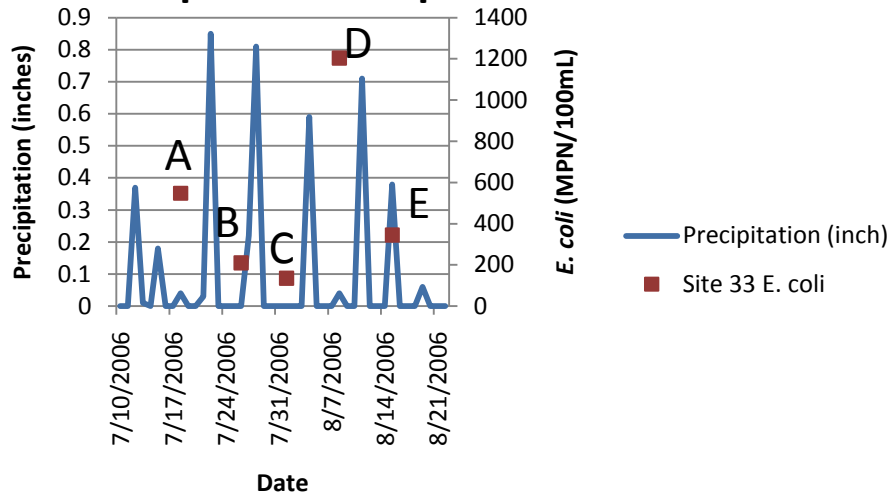
Little White River at CR 600 S

2006 Monitoring Data
Site 33: WWU010-0055

Load Duration Curve



Precipitation Graph



White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

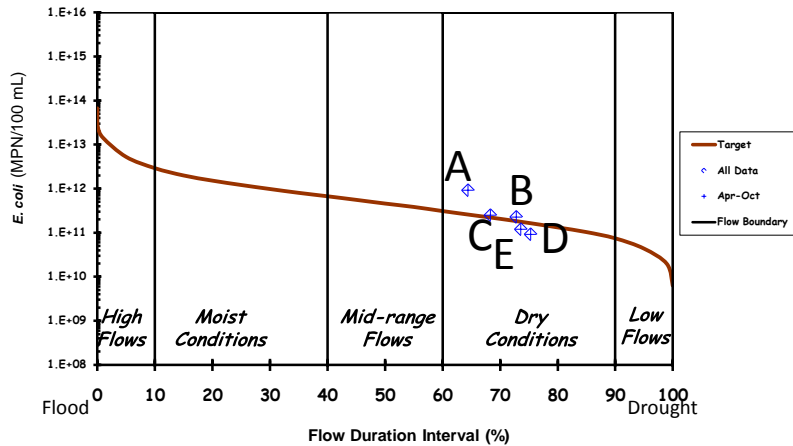
Drainage Area:

241 square miles

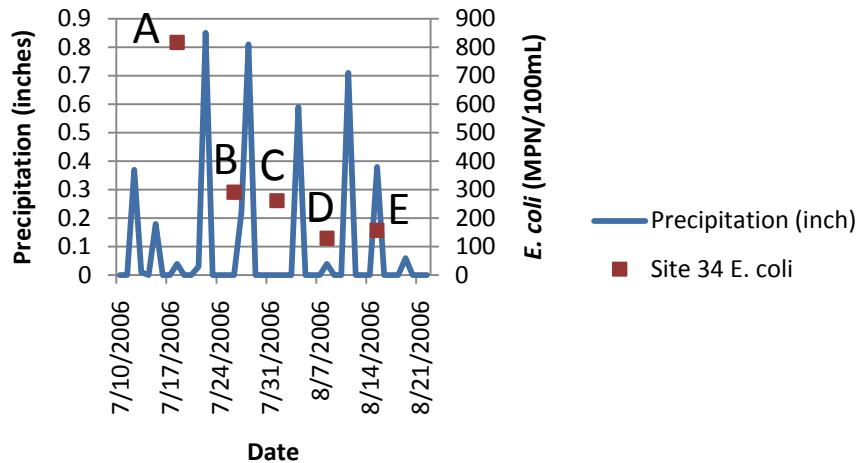
Poplar Run at CR 900 W

2006 Monitoring Data
Site 34: WWU010-0054

Load Duration Curve



Precipitation Graph



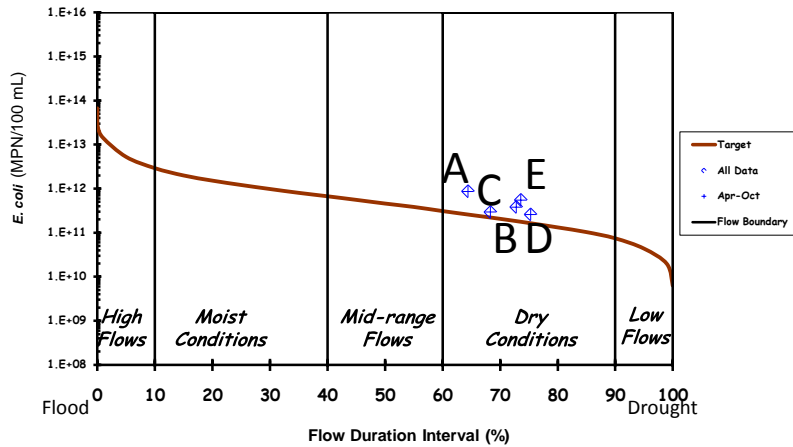
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

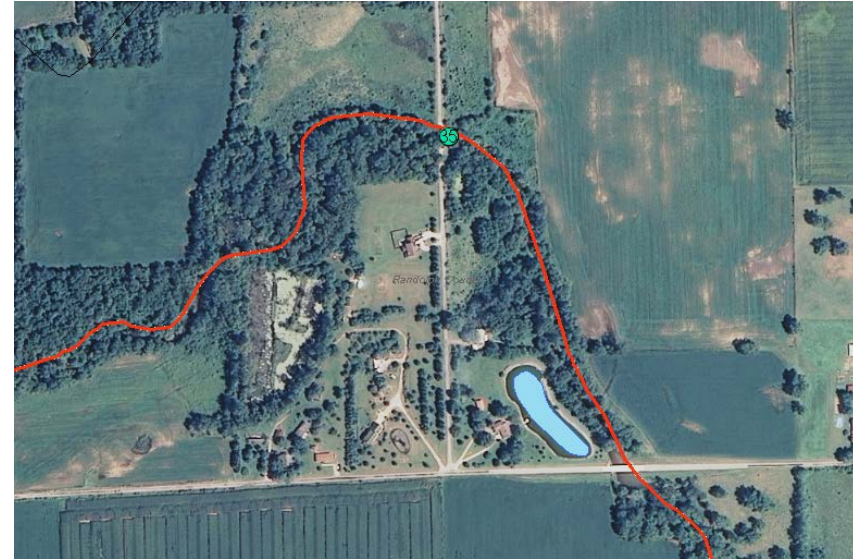
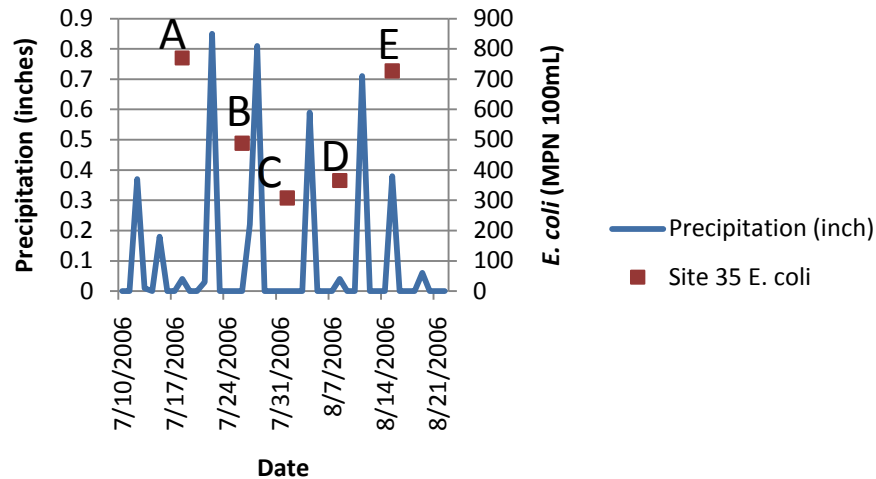
Little White River at CR 1150 W

2006 Monitoring Data
Site 35: WWU010-0050

Load Duration Curve



Precipitation Graph



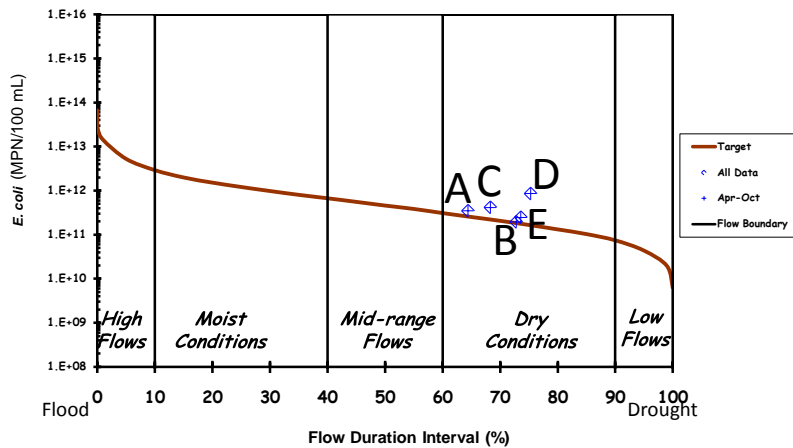
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

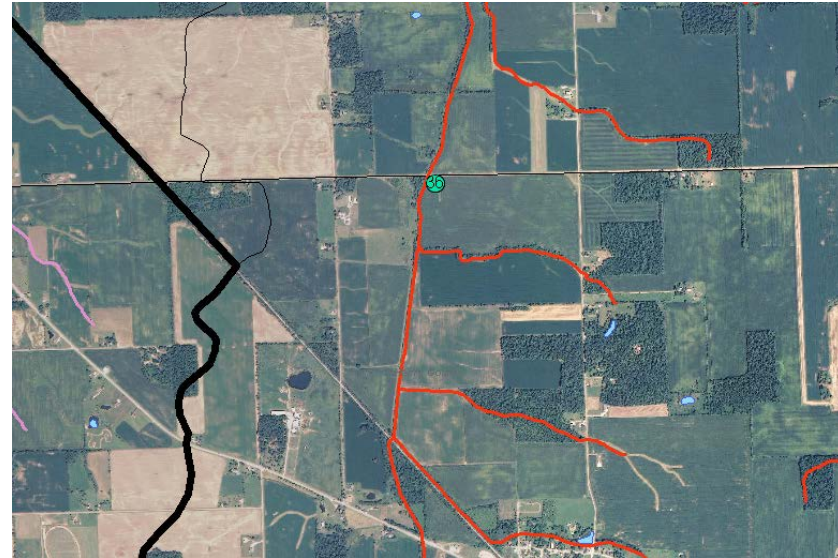
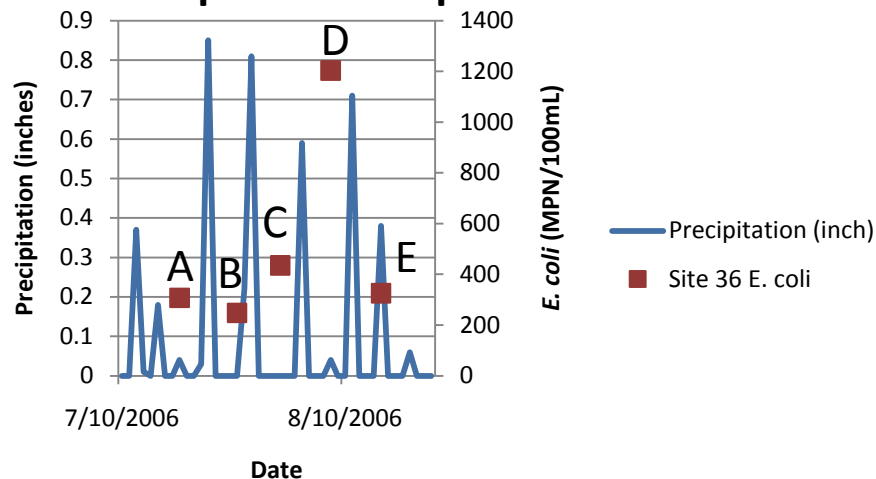
Stoney Creek at County Line Road

2006 Monitoring Data
Site 36: WWU010-0053

Load Duration Curve



Precipitation Graph



Upstream



Downstream

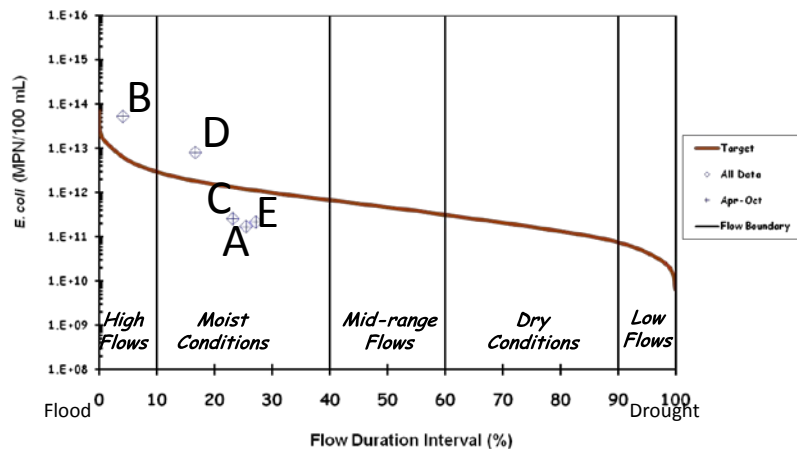
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

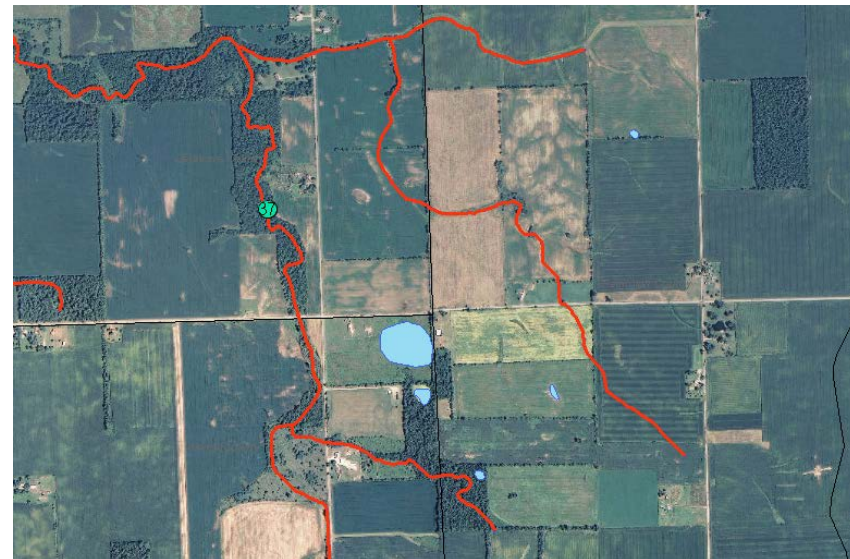
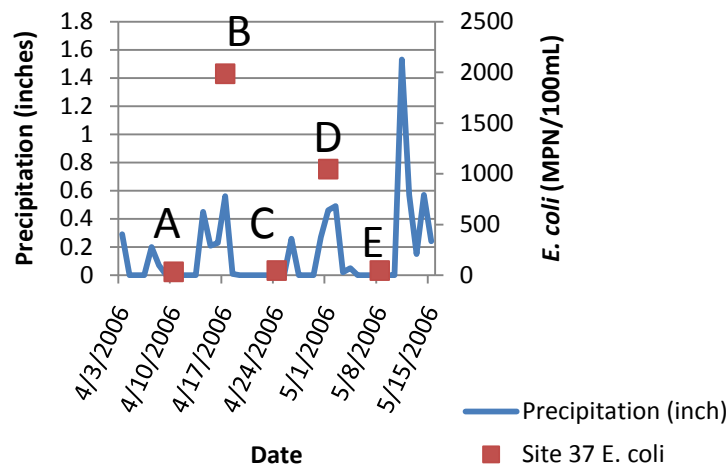
Little Stoney Creek at CR 875 E

2006 Monitoring Data
Site 37: WWU010-0037

Load Duration Curve



Precipitation Graph



Upstream



Downstream

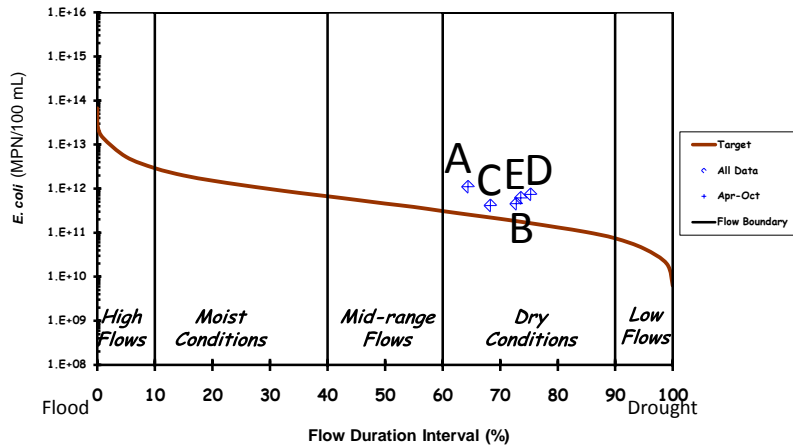
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

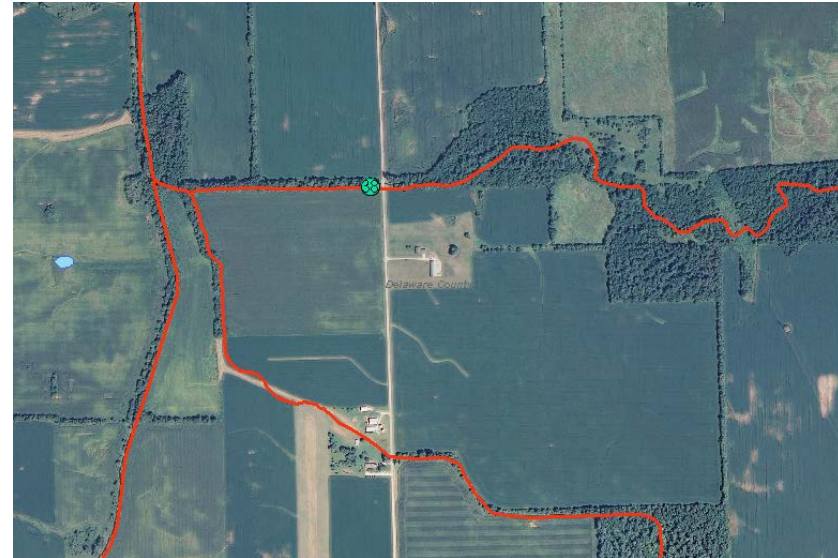
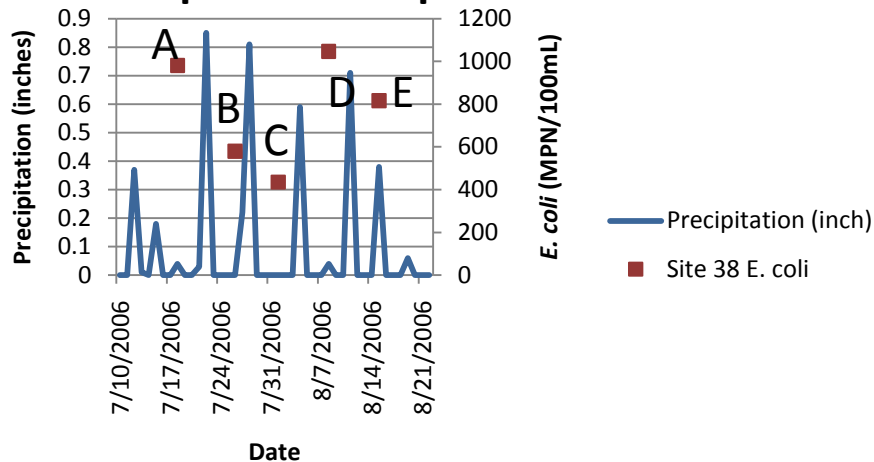
Little Stoney Creek at CR 775 E

2006 Monitoring Data
Site 38: WWU010-0052

Load Duration Curve



Precipitation Graph



Upstream



Downstream

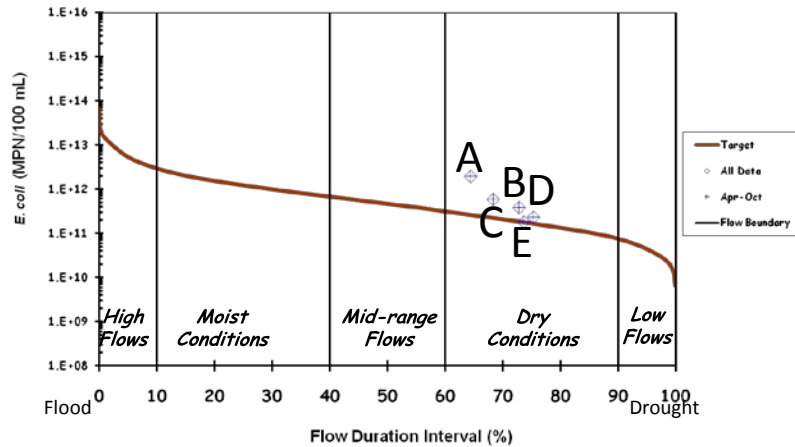
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

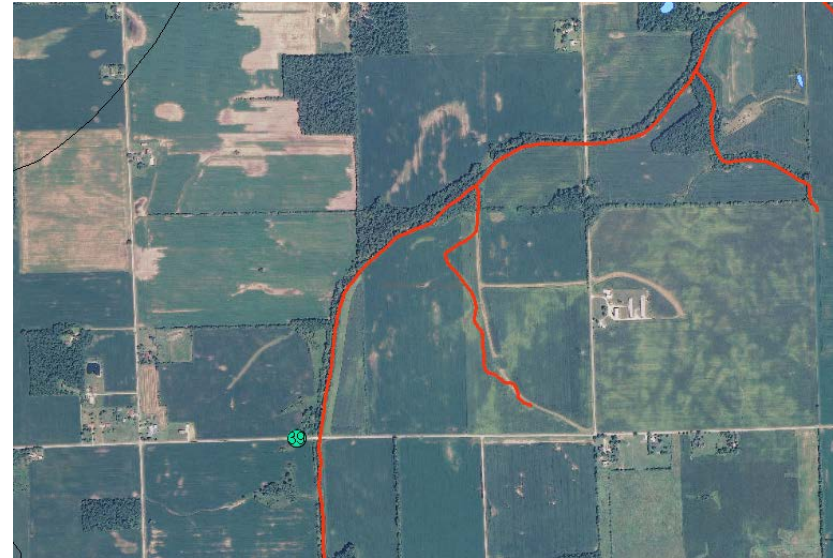
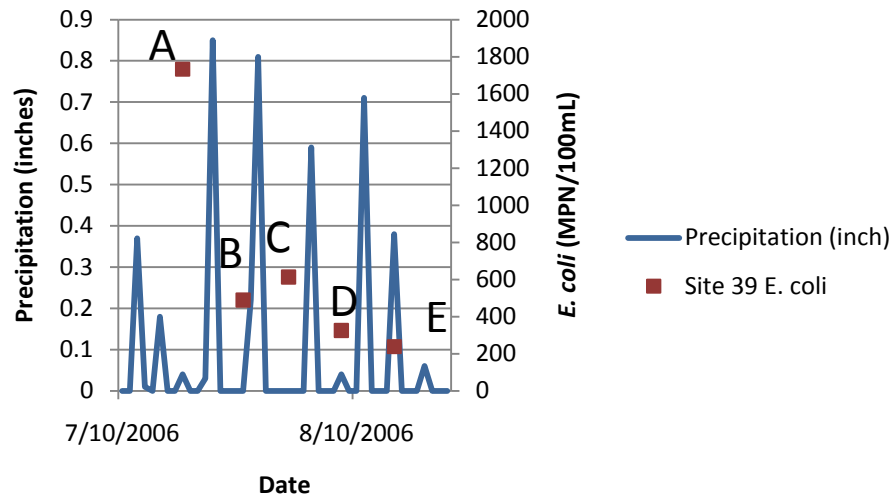
Stoney Creek at CR 700 S

2006 Monitoring Data
Site 39: WWU010-0051

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

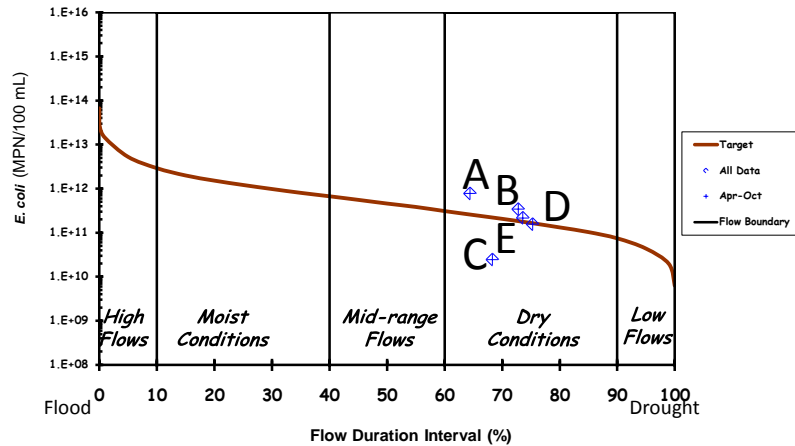
Drainage Area:

241 square miles

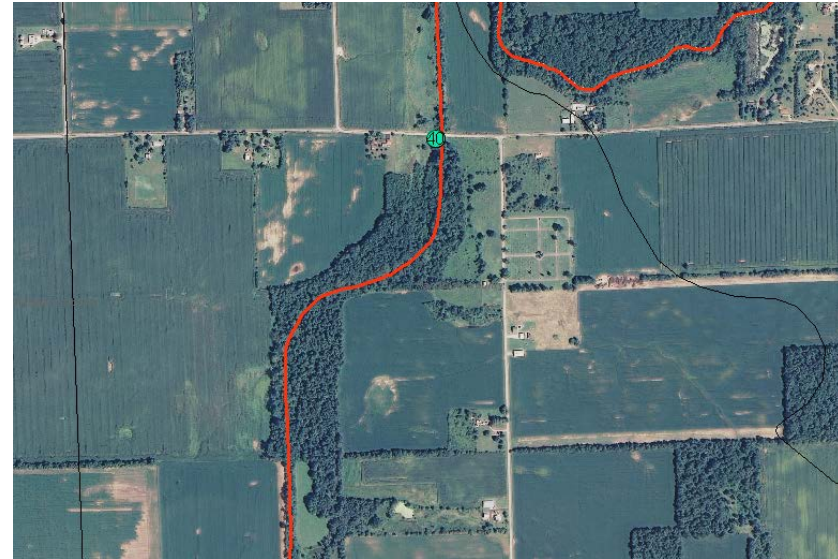
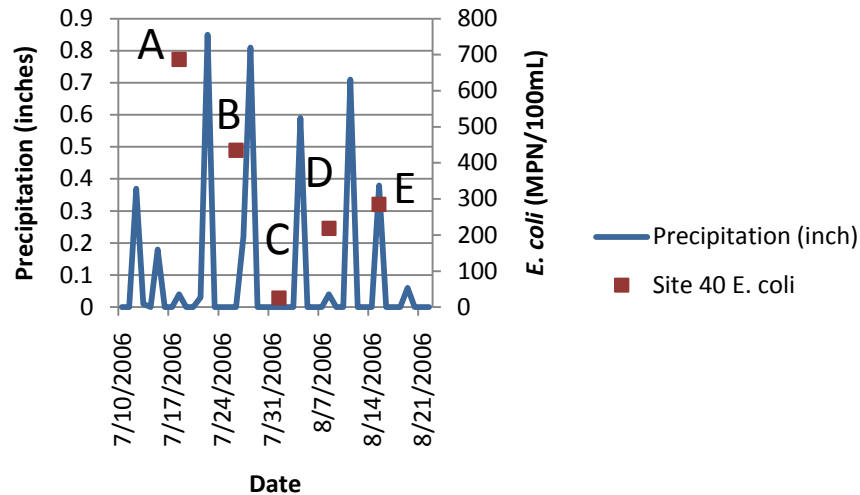
Stoney Creek at CR 200 S

2006 Monitoring Data
Site 40: WWU010-0049

Load Duration Curve



Precipitation Graph



White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

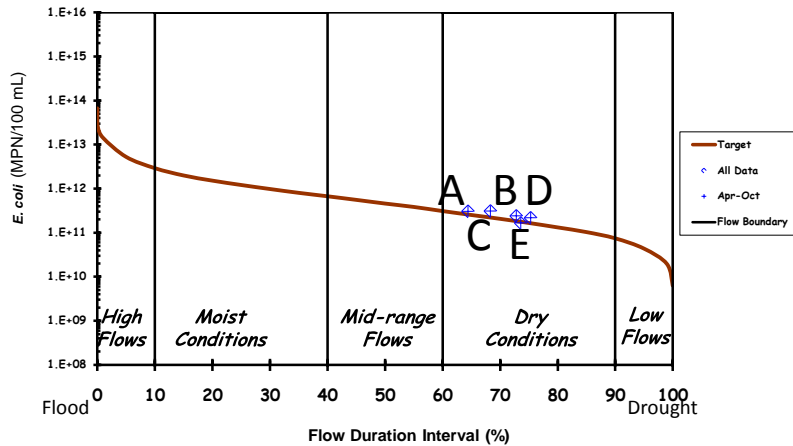
Drainage Area:

241 square miles

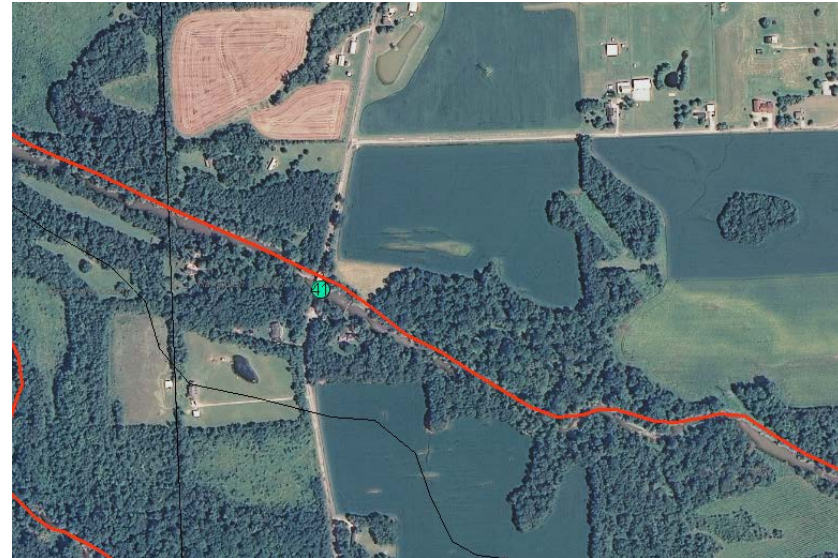
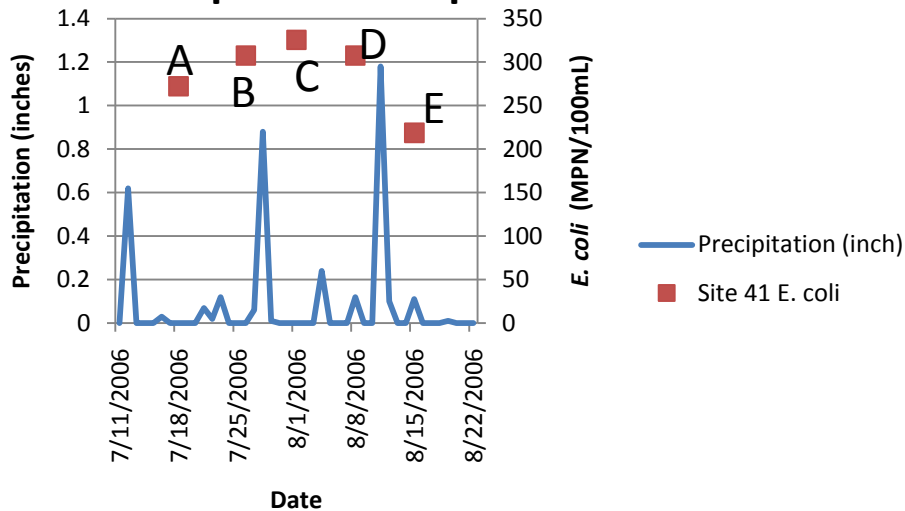
White River, West Fork at Oak Street

2006 Monitoring Data
Site 41: WWU010-0047

Load Duration Curve



Precipitation Graph



White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

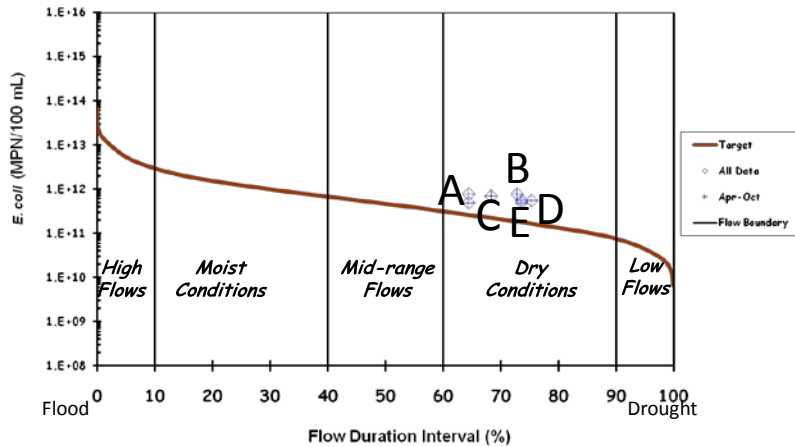
Drainage Area:

241 square miles

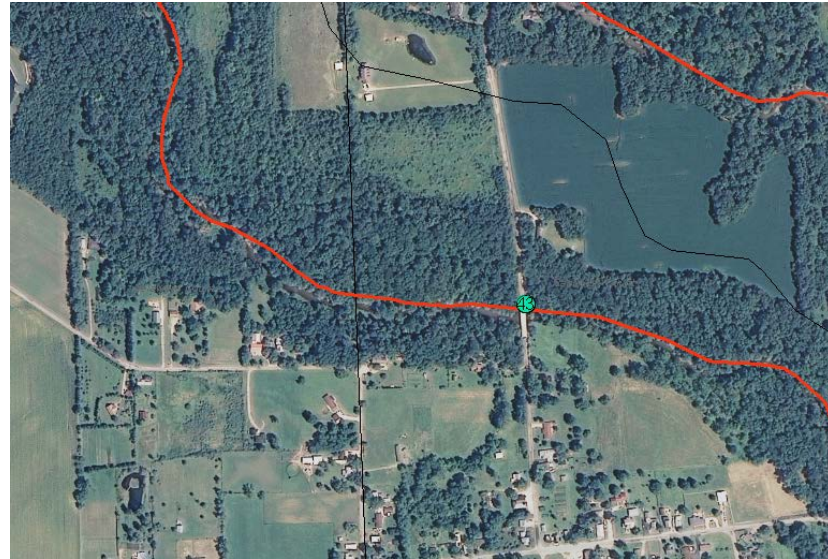
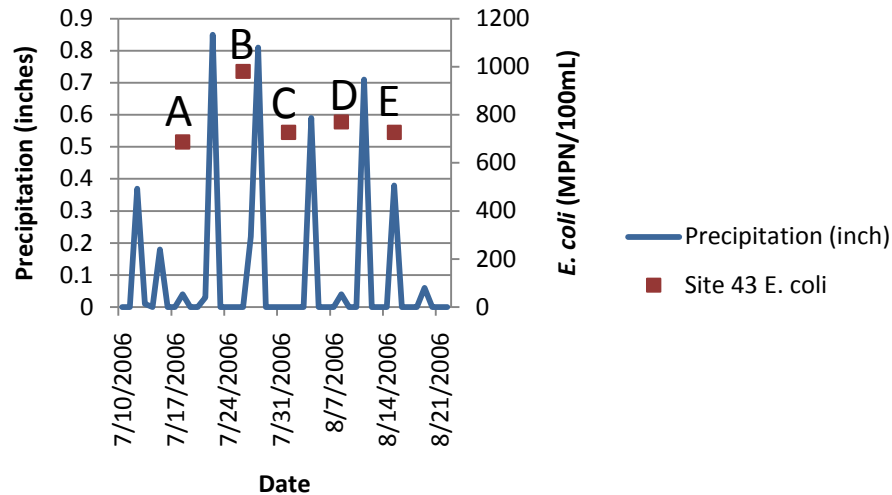
Stoney Creek at CR 1225 W

2006 Monitoring Data
Site 43: WWU010-0005

Load Duration Curve



Precipitation Graph



White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

Drainage Area:

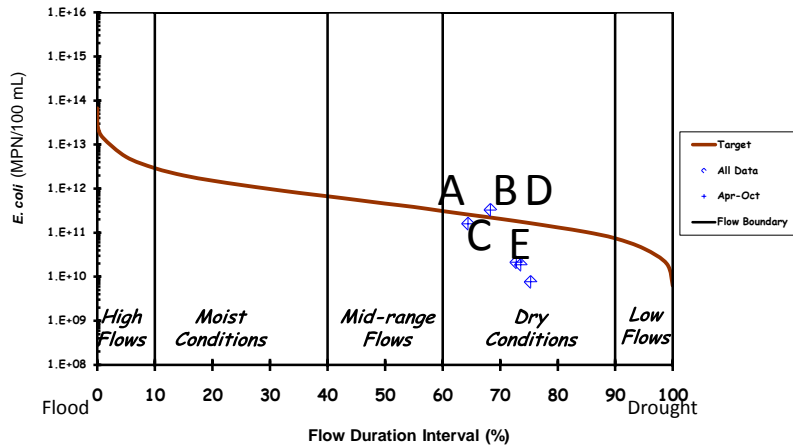
241 square miles

White River, West Fork at Smithfield Pike

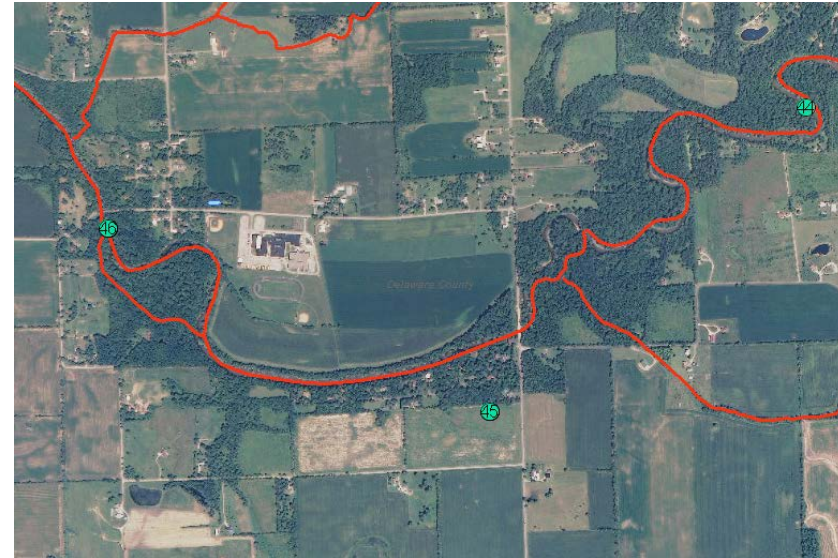
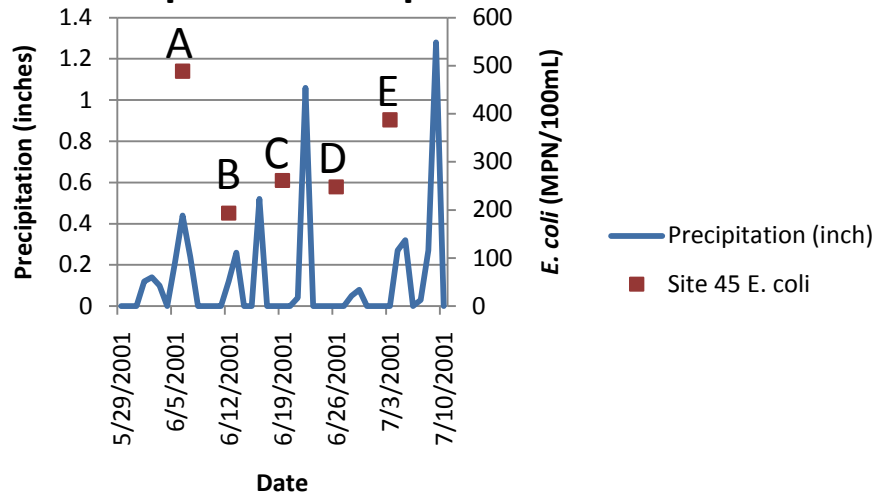
2006 Monitoring Data

Site 45: WWU010-0046

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

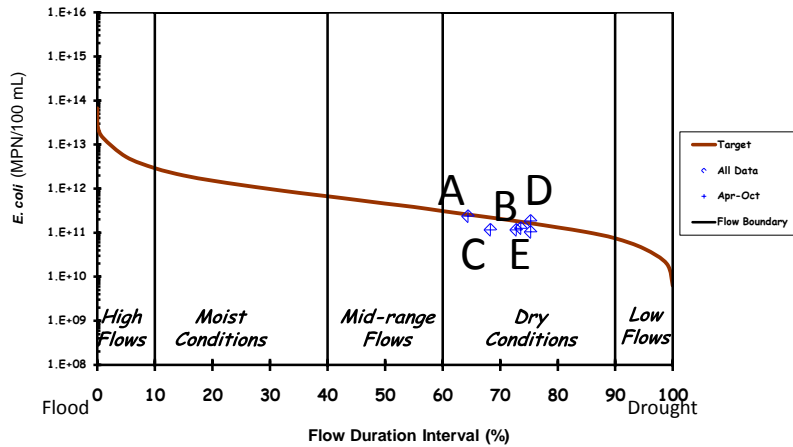
Drainage Area:

241 square miles

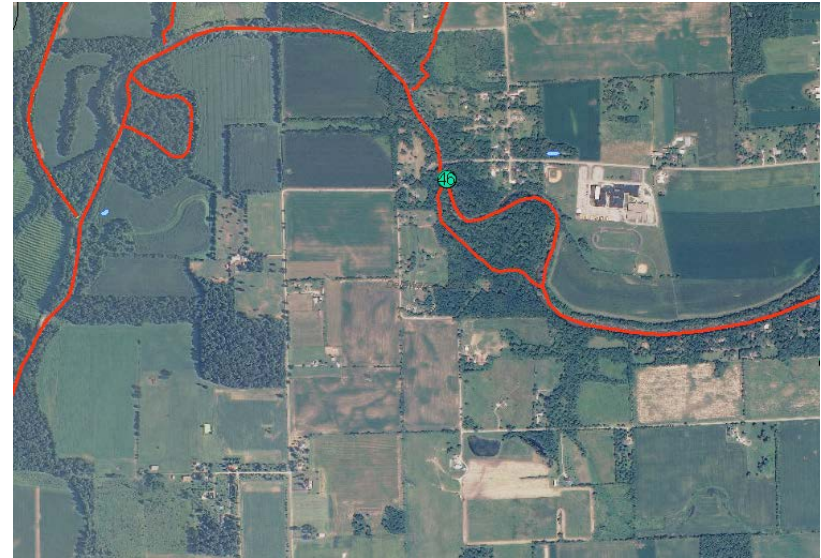
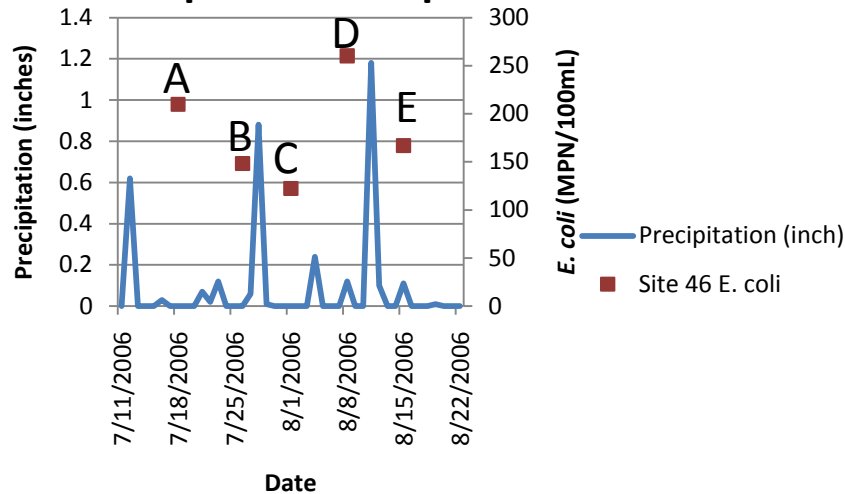
Mud Creek at Smithfield Pike

2006 Monitoring Data
Site 46: WWU010-0045

Load Duration Curve



Precipitation Graph



Upstream



Downstream

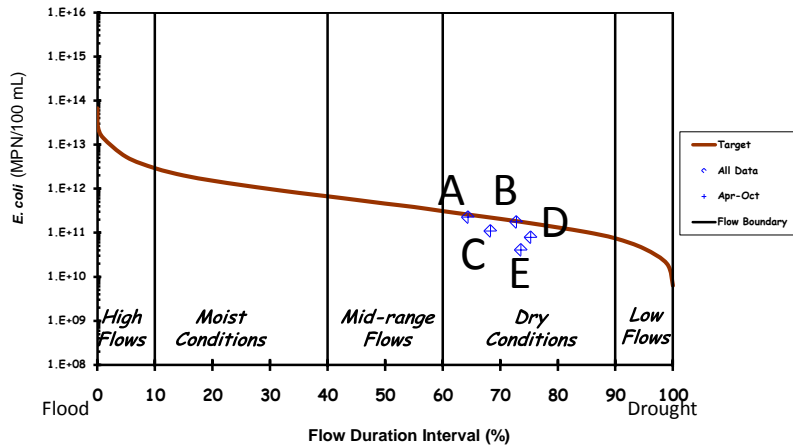
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

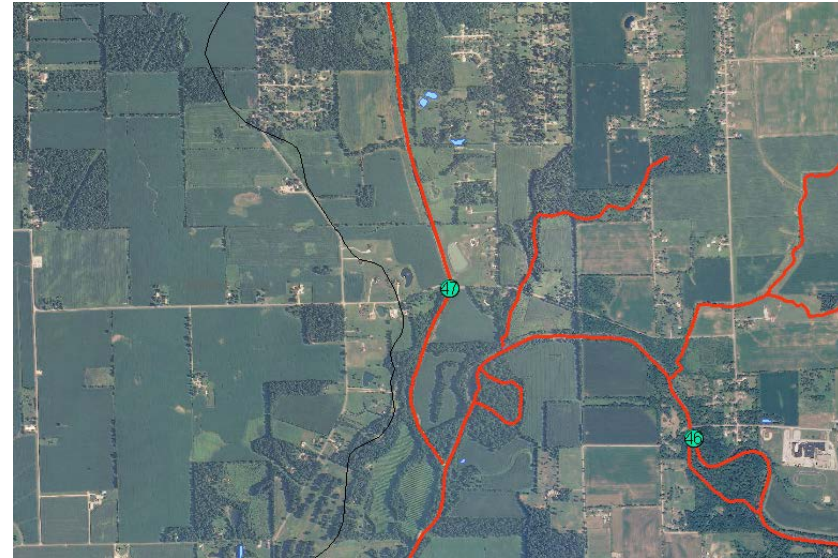
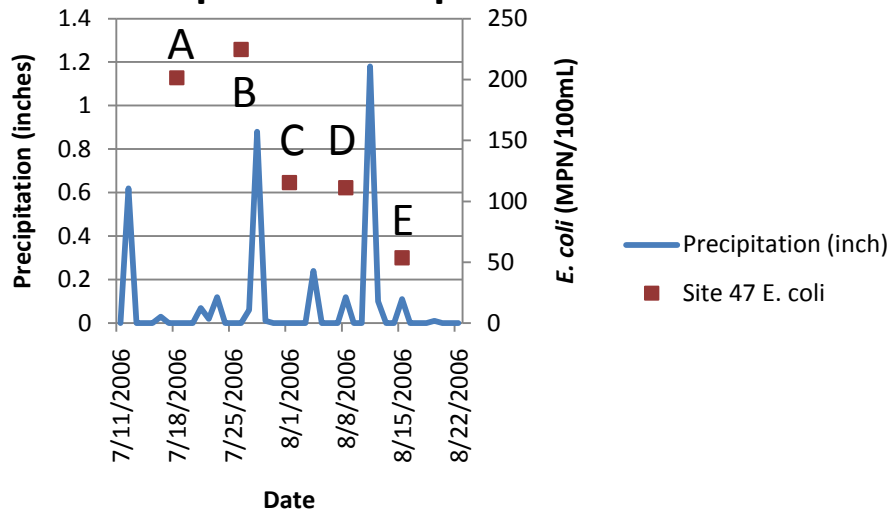
Mud Creek at Smithfield Pike

2006 Monitoring Data
Site 47: WWU010-0044

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

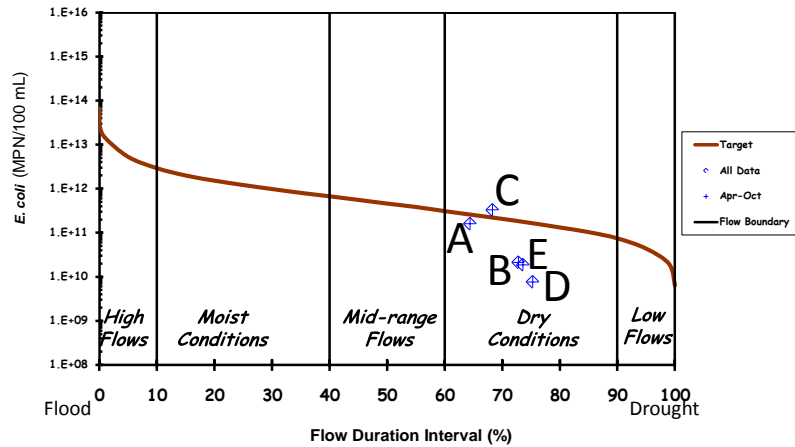
Drainage Area:

241 square miles

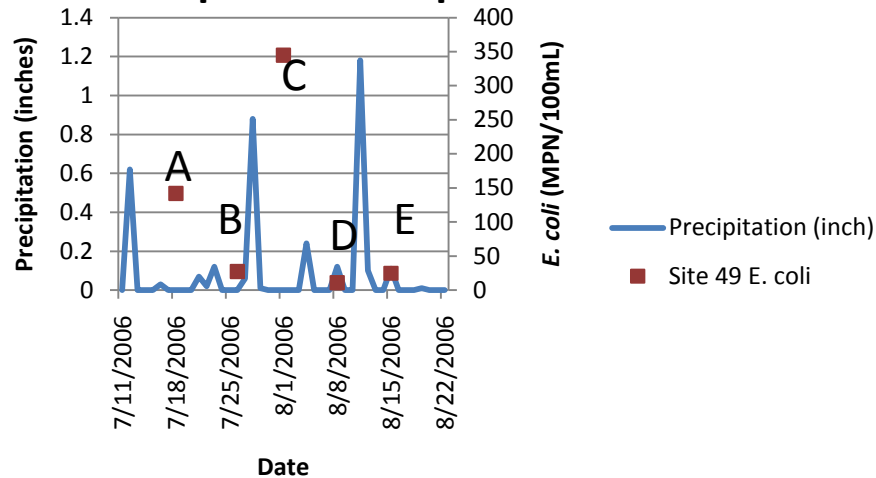
Prairie Creek at CR 450 E

2006 Monitoring Data
Site 49: WWU010-0046

Load Duration Curve



Precipitation Graph



Upstream



Downstream

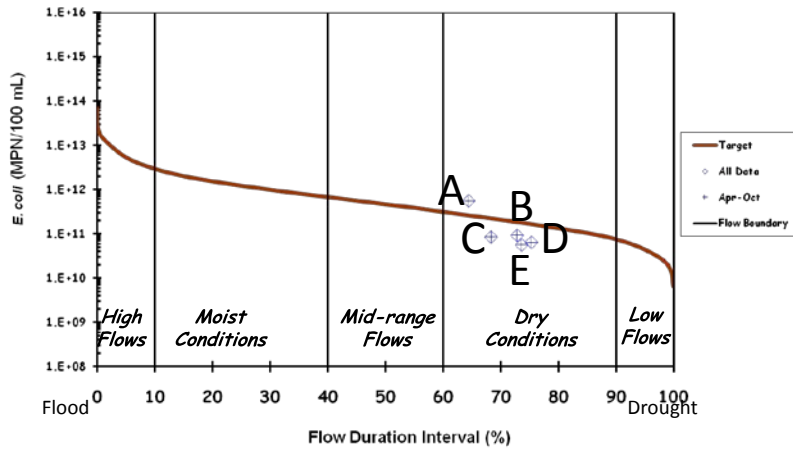
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

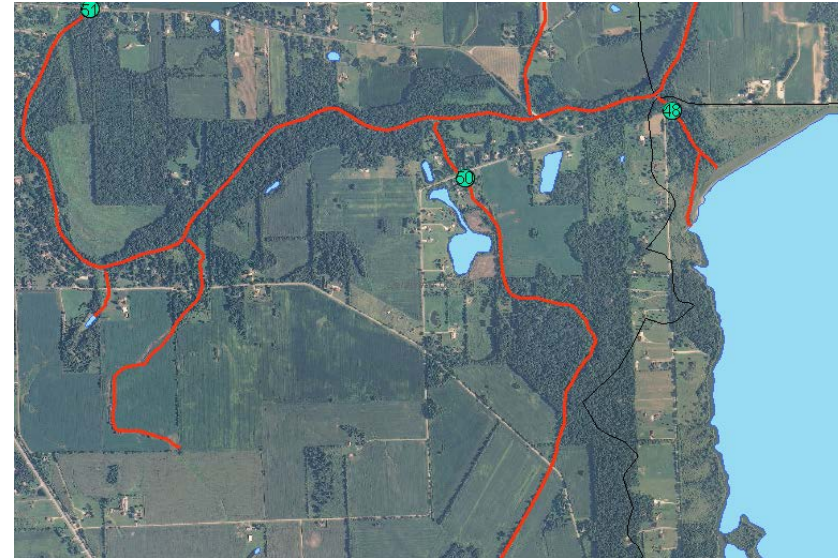
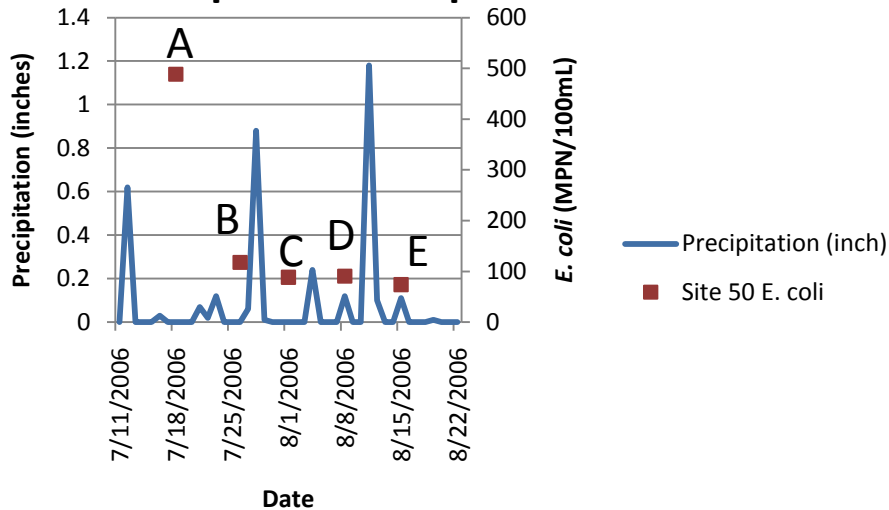
Medford Drain at CR 322 S

2006 Monitoring Data
Site 50: WWU010-0043

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

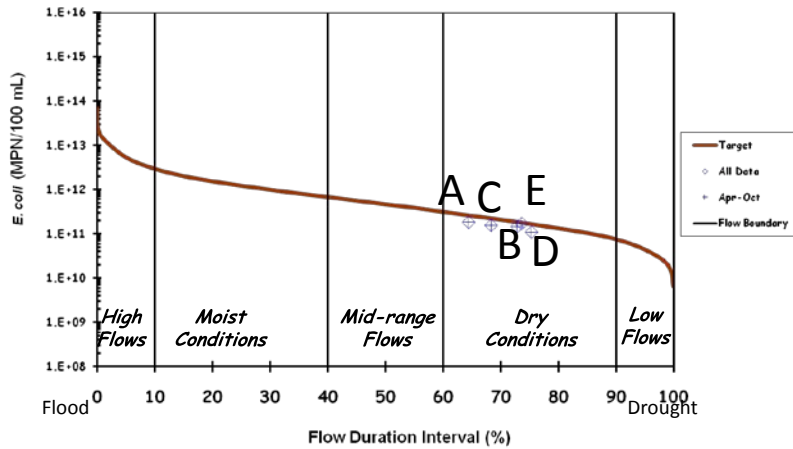
Drainage Area:
241 square miles

White River, West Fork at E Jackson St

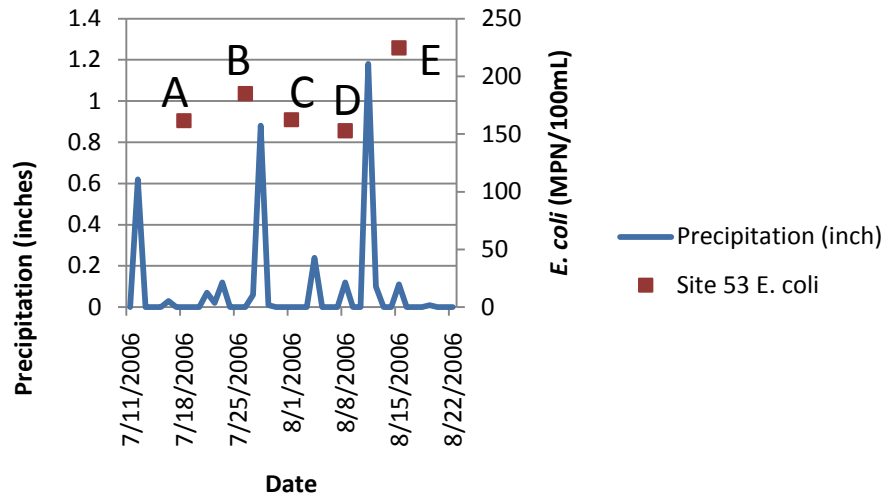
2006 Monitoring Data

Site 53: WWU010-0042

Load Duration Curve



Precipitation Graph



Upstream



Downstream

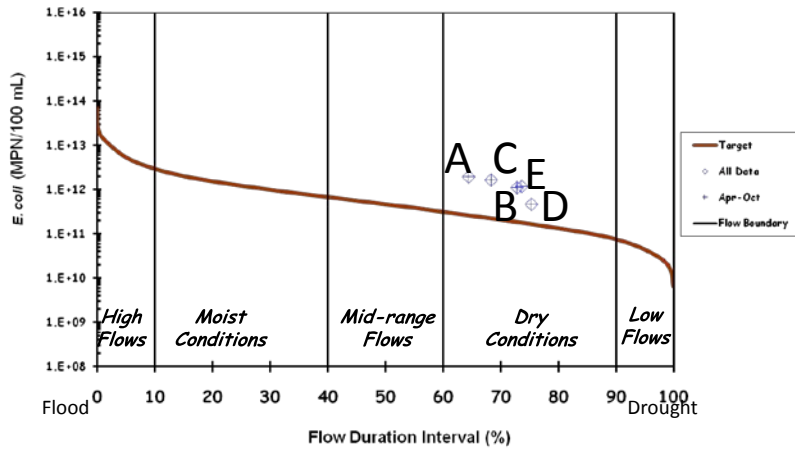
White River at Muncie, IN USGS Gage 03347000
 Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
 241 square miles

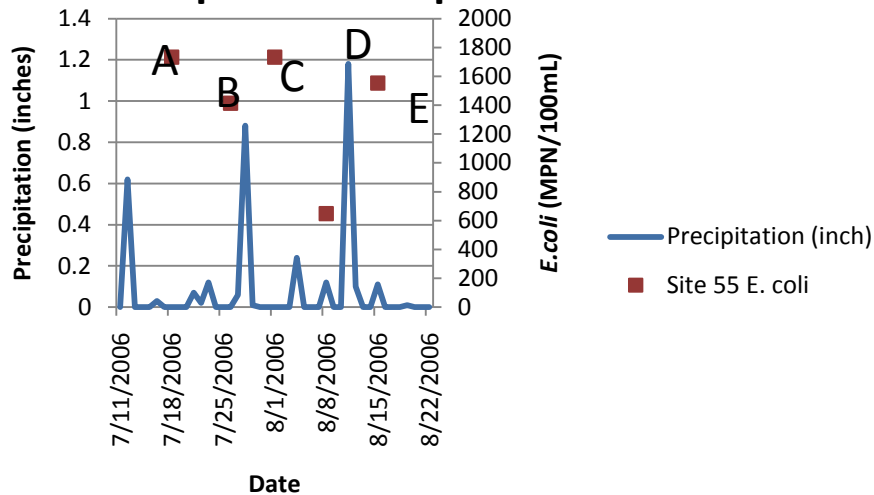
Muncie Creek at Highland Avenue

2006 Monitoring Data
Site 55: WWU010-0020

Load Duration Curve



Precipitation Graph



Upstream



Downstream

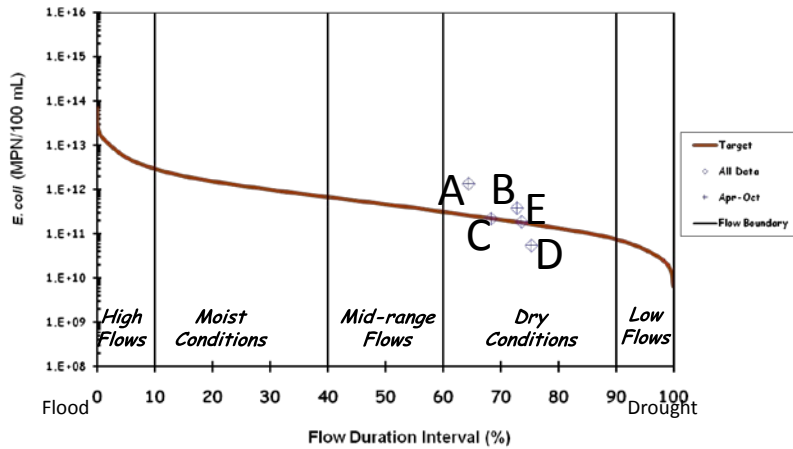
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

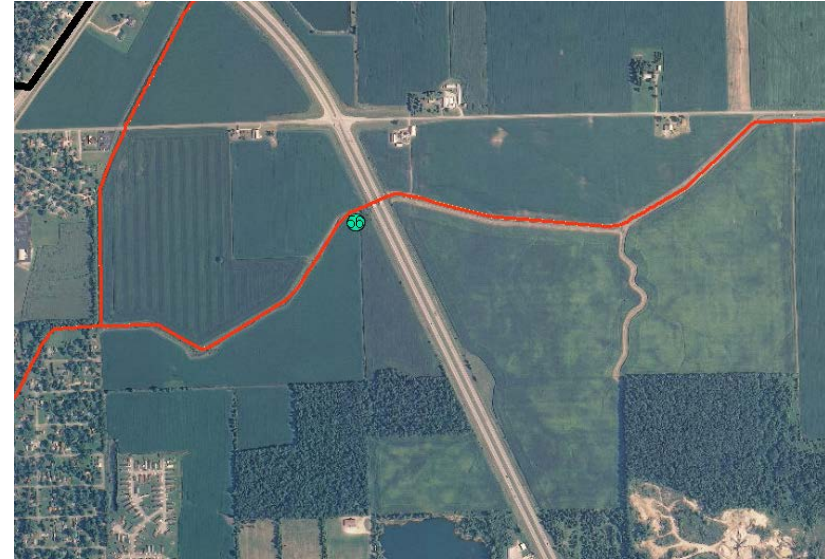
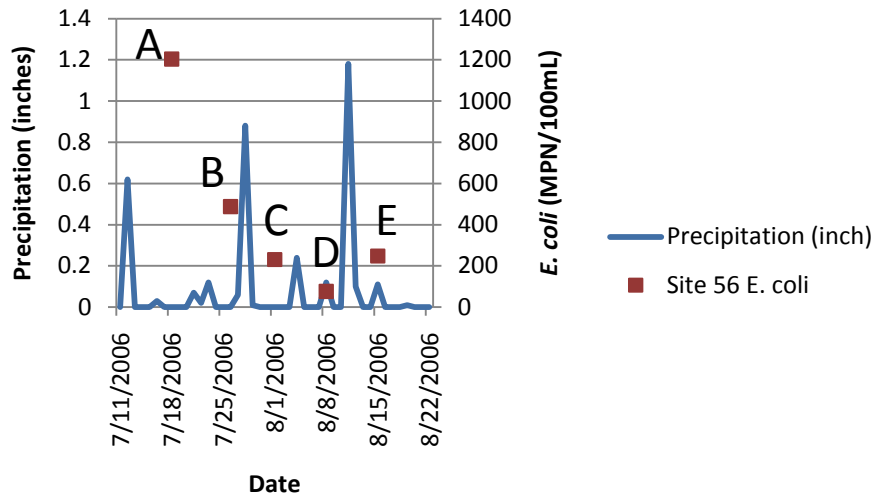
Muncie Creek at US 35

2006 Monitoring Data
Site 56: WWU010-0041

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

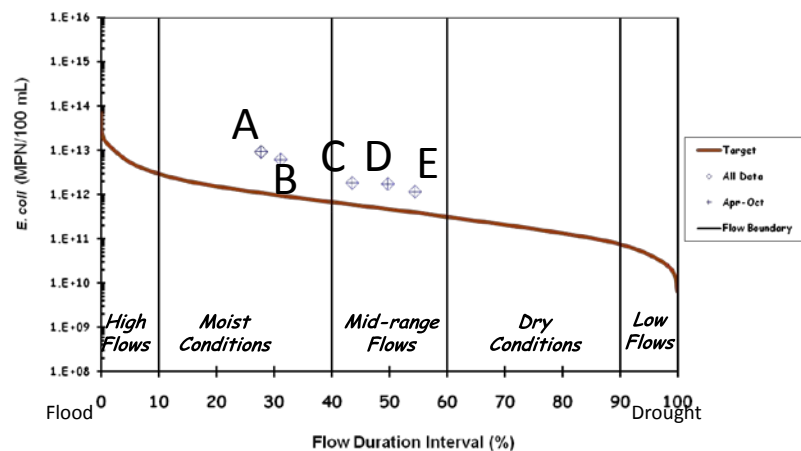
Drainage Area:
241 square miles

White River, West Fork at SR 32

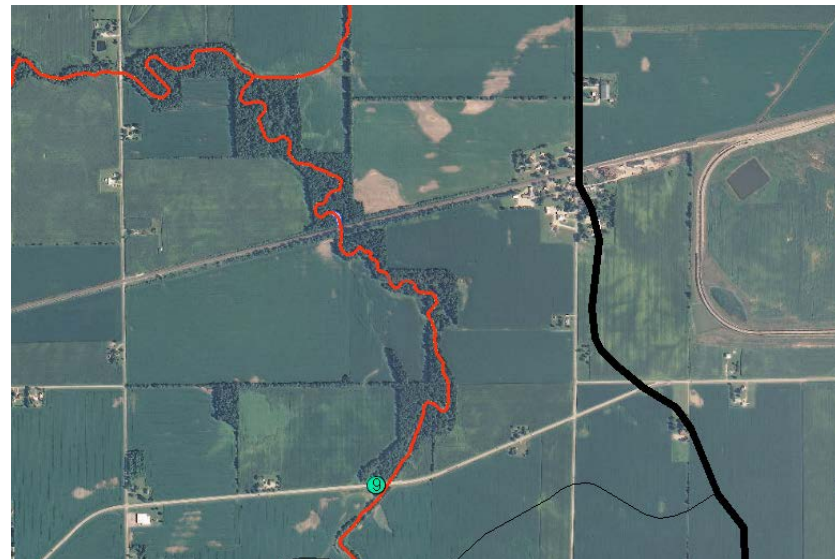
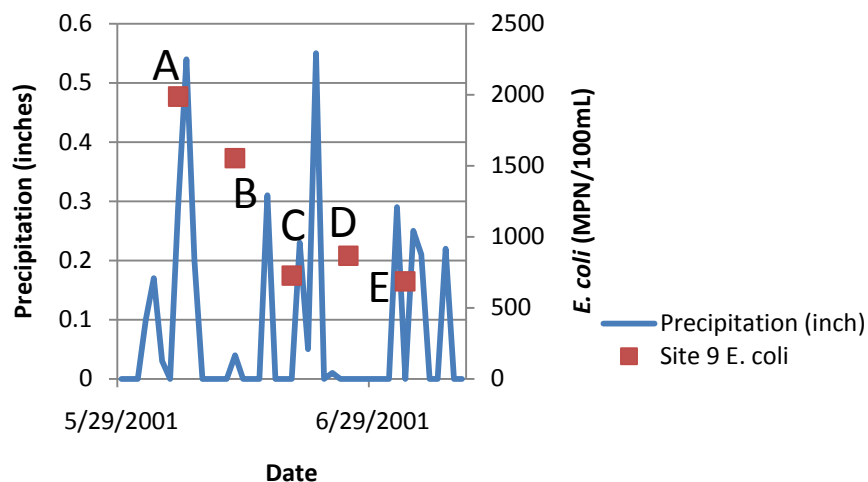
2001 Monitoring Data

Site 9: WWU010-0021

Load Duration Curve



Precipitation Graph



White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

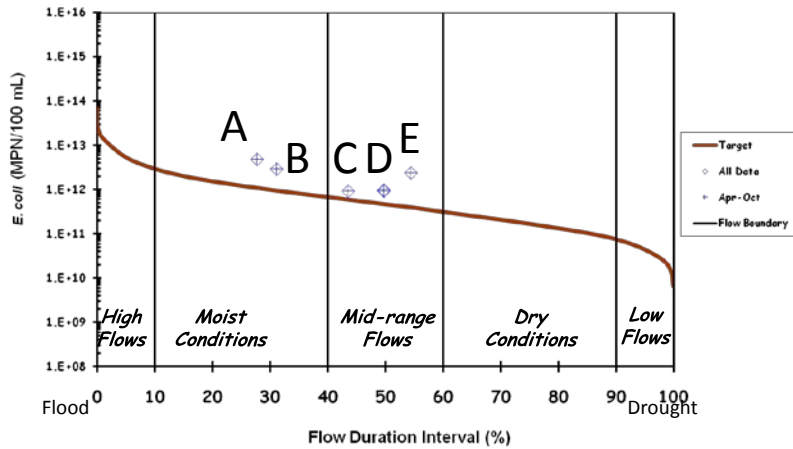
Drainage Area:
241 square miles

White River, West Fork at US 27 Bridge

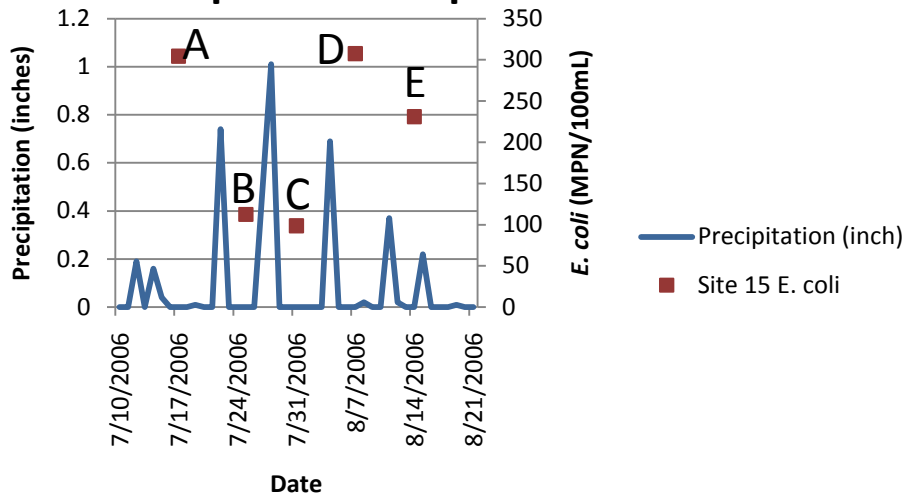
2001 Monitoring Data

Site 15: WWU010-0006

Load Duration Curve



Precipitation Graph



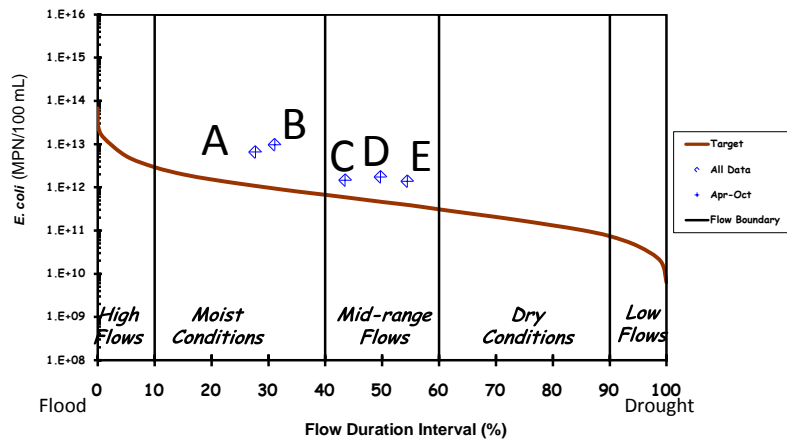
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

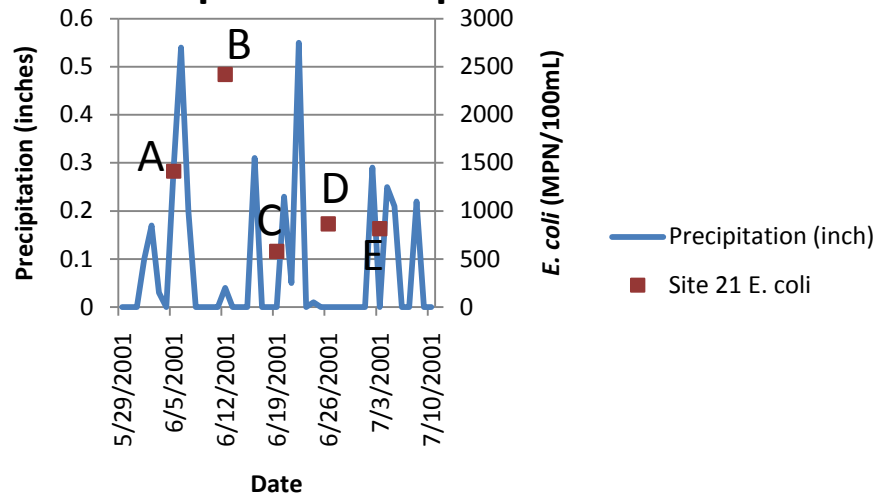
White River, West Fork at CR 200 W

2001 Monitoring Data
Site 21: WWU010-0027

Load Duration Curve



Precipitation Graph



Upstream



Downstream

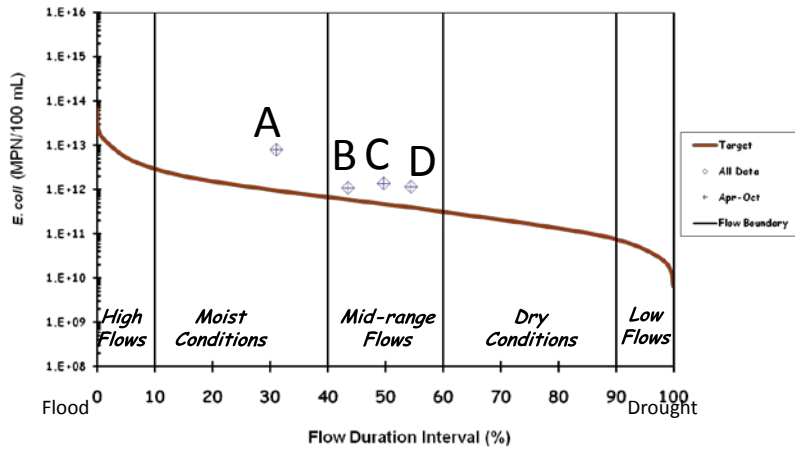
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

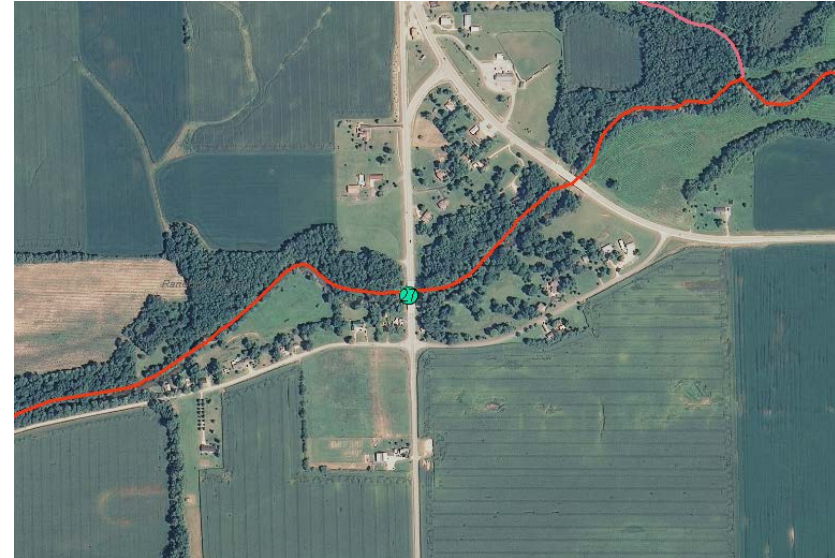
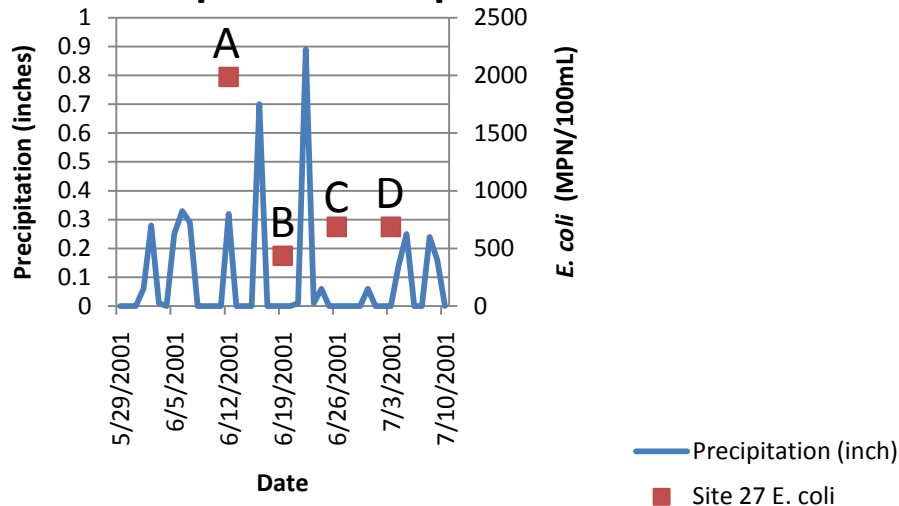
White River, West Fork at SR 1

2001 Monitoring Data
Site 27: WWU010-0031

Load Duration Curve



Precipitation Graph



White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

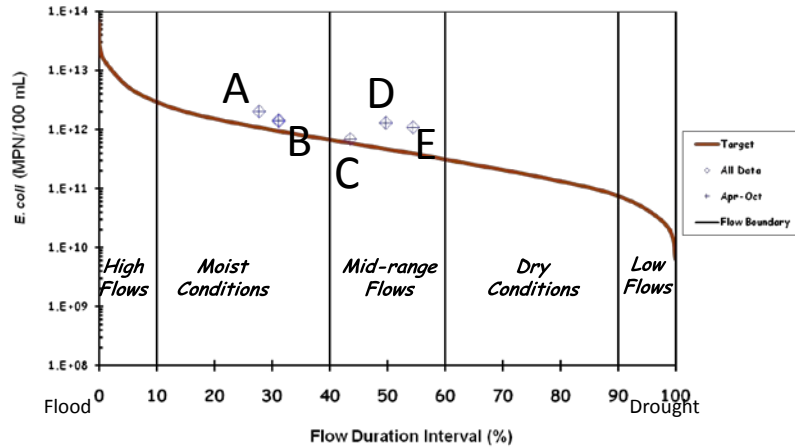
Drainage Area:

241 square miles

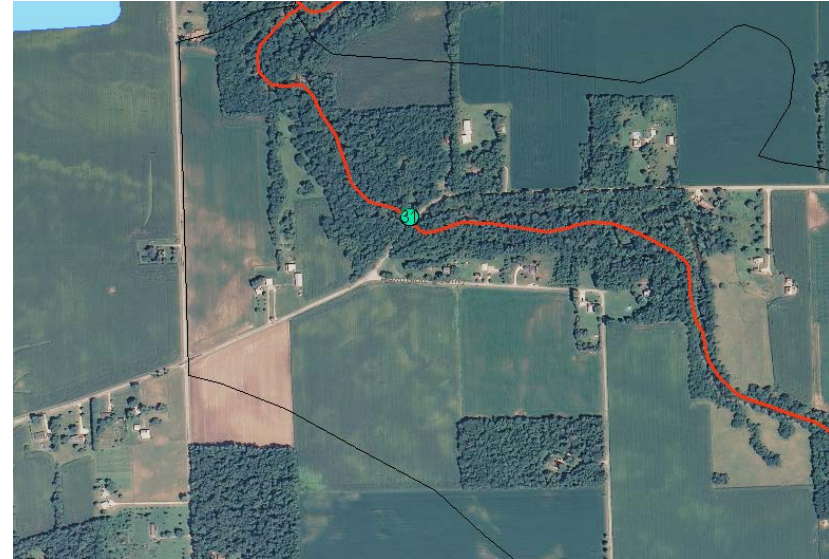
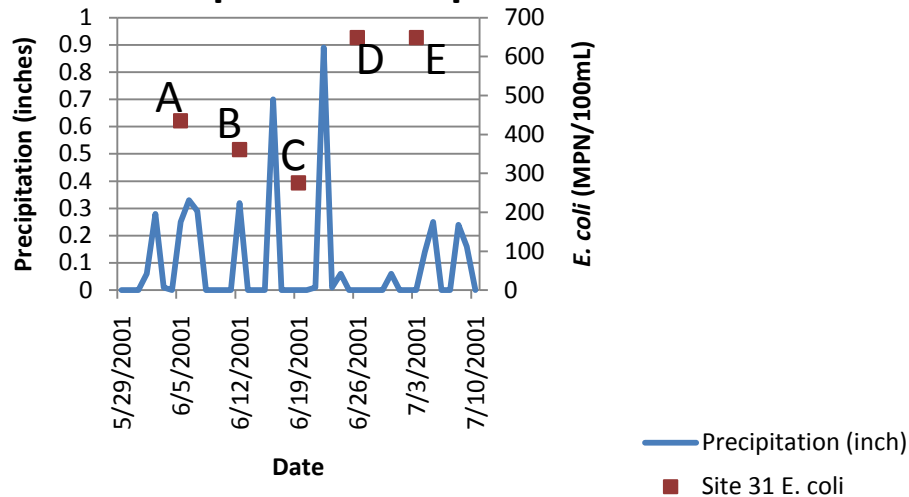
Cabin Creek at Windsor Pike

2001 Monitoring Data
Site 31: WWU010-0003

Load Duration Curve



Precipitation Graph



White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

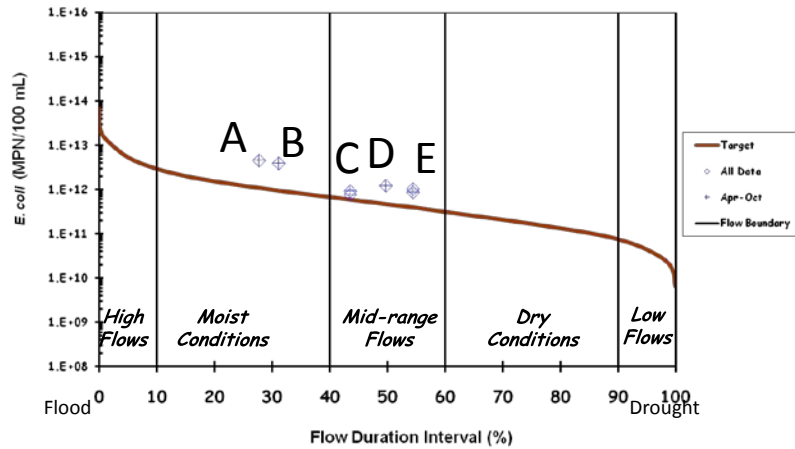
Drainage Area:

241 square miles

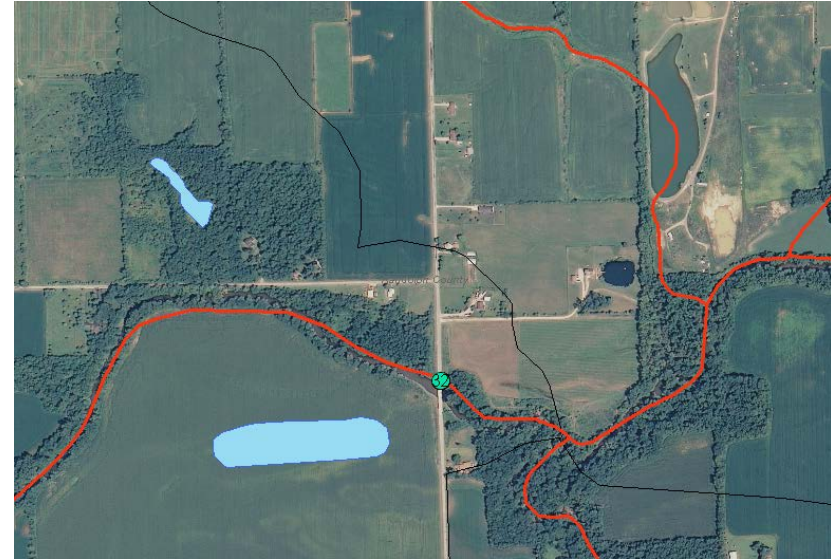
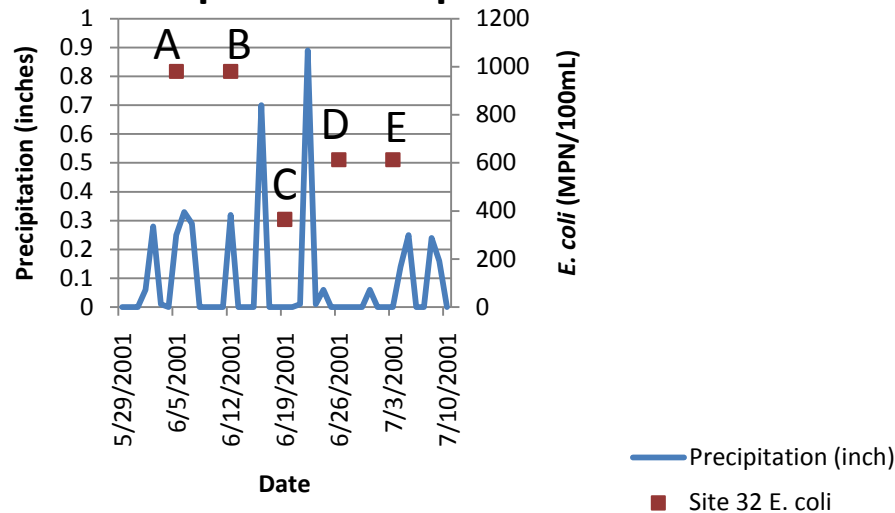
White River, West Fork at CR 1000 N

2001 Monitoring Data
Site 32: WWU010-0026

Load Duration Curve



Precipitation Graph



White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

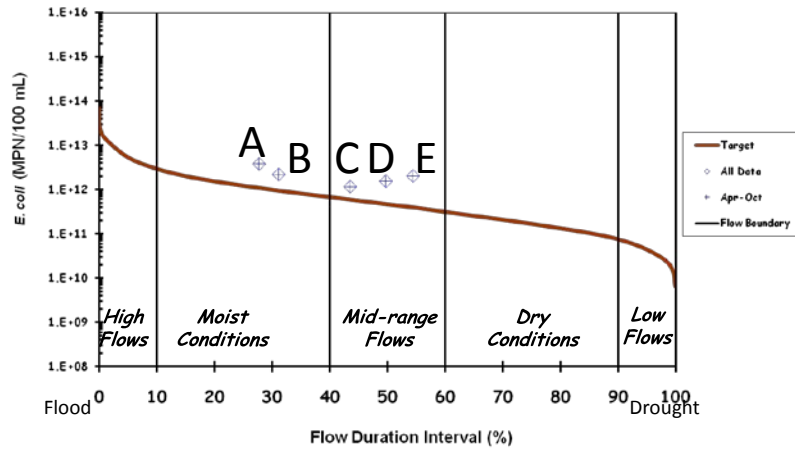
Drainage Area:

241 square miles

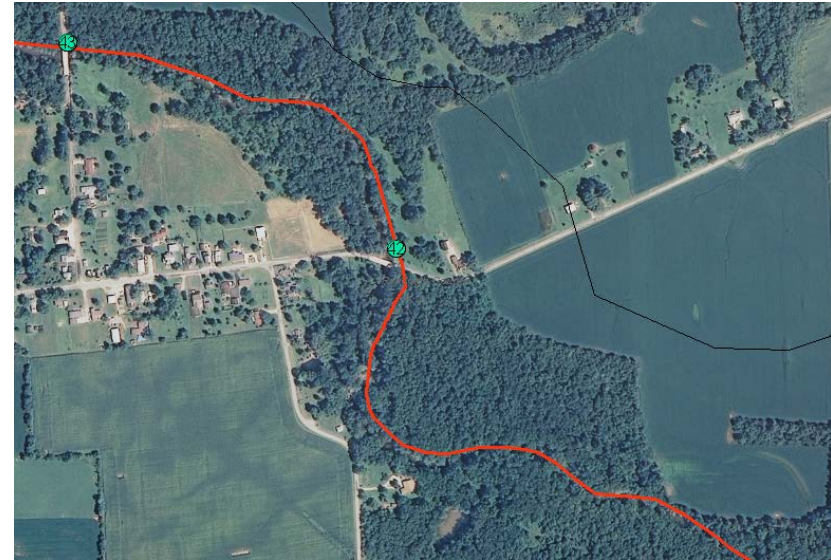
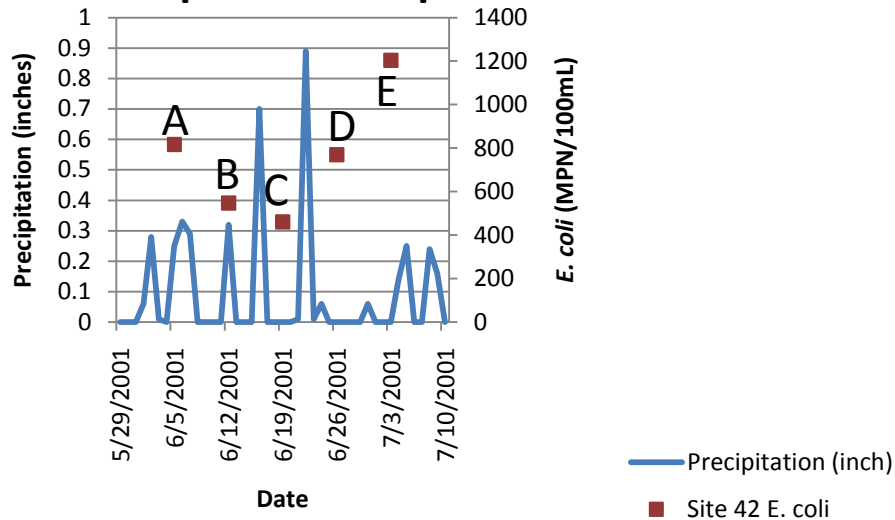
Little White River at Windsor Pike

2001 Monitoring Data
Site 42: WWU010-0025

Load Duration Curve



Precipitation Graph



White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

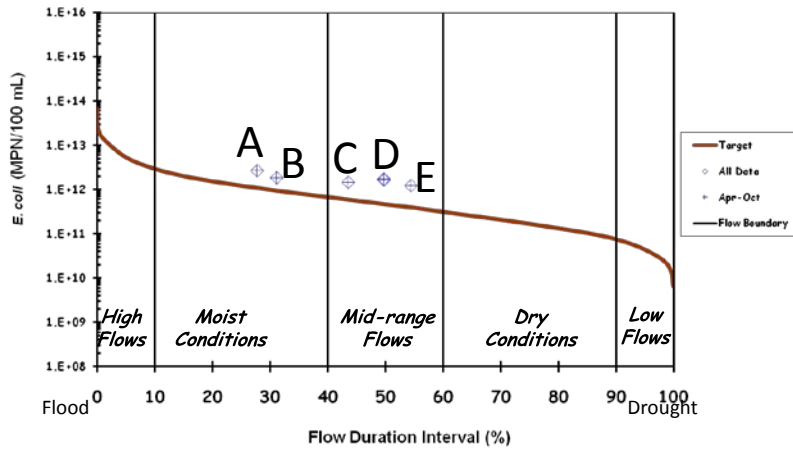
Drainage Area:

241 square miles

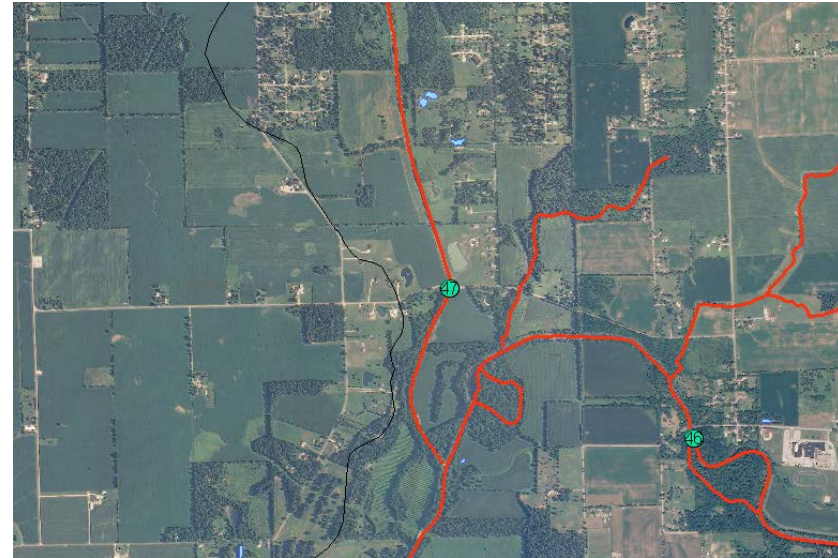
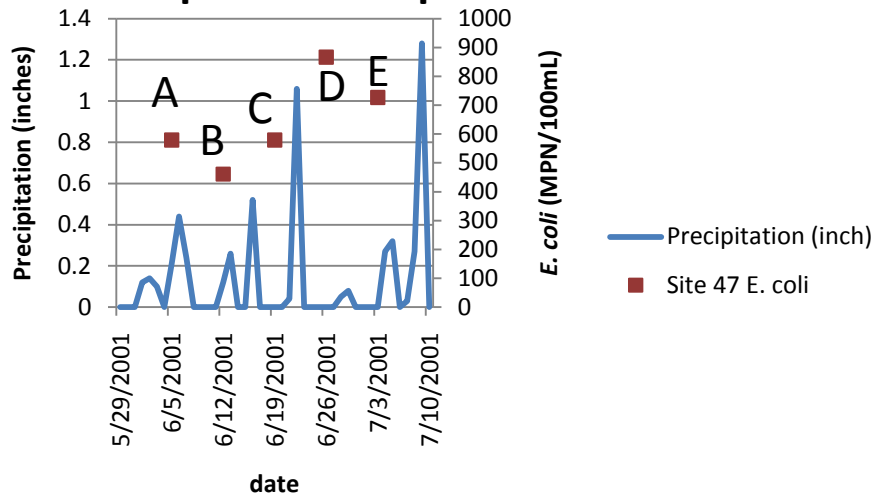
Mud Creek at CR 138 S

2001 Monitoring Data
Site 47: WWU010-0028

Load Duration Curve



Precipitation Graph



Upstream



Downstream

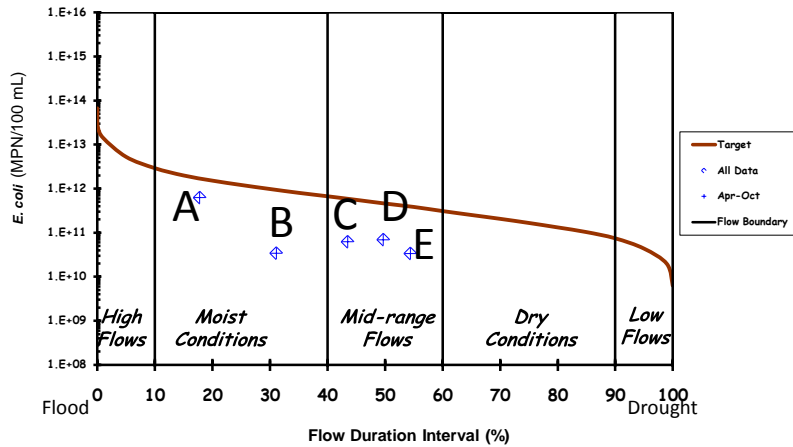
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

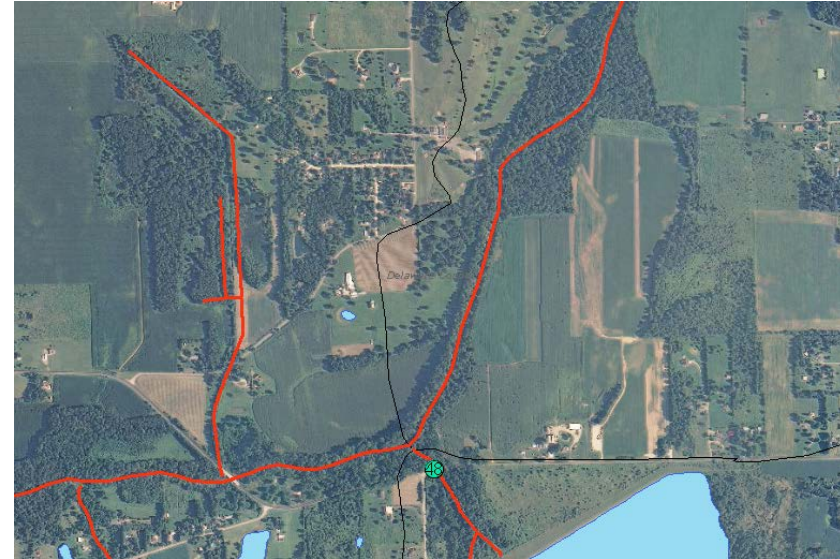
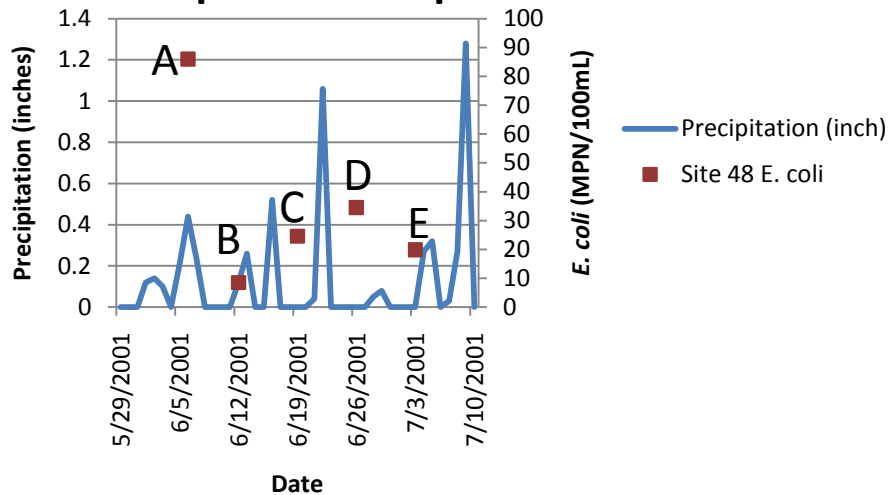
Prairie Creek Reservoir at CR 300 S

2001 Monitoring Data
Site 48: WWU010-0022

Load Duration Curve



Precipitation Graph



Upstream



Downstream

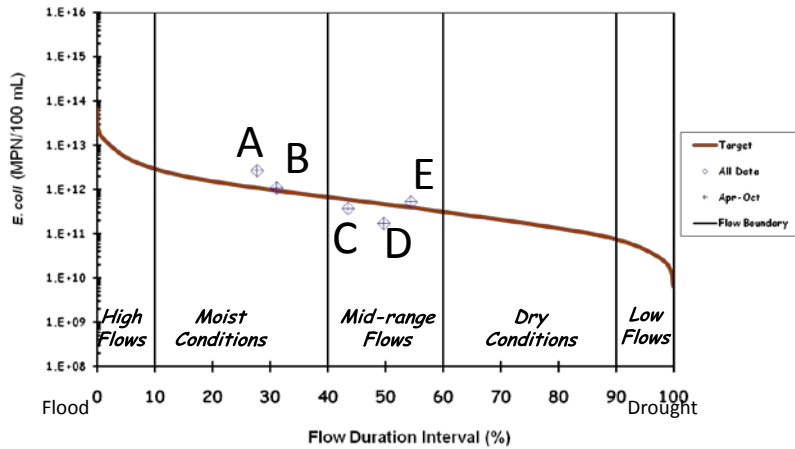
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

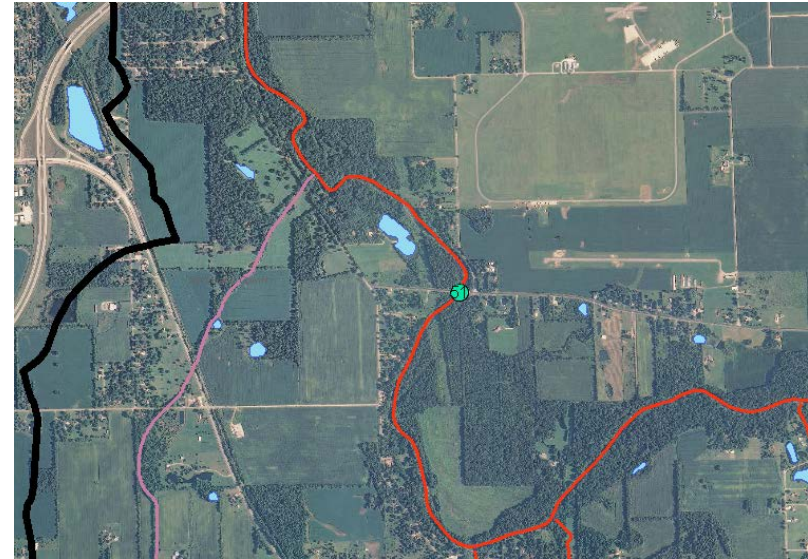
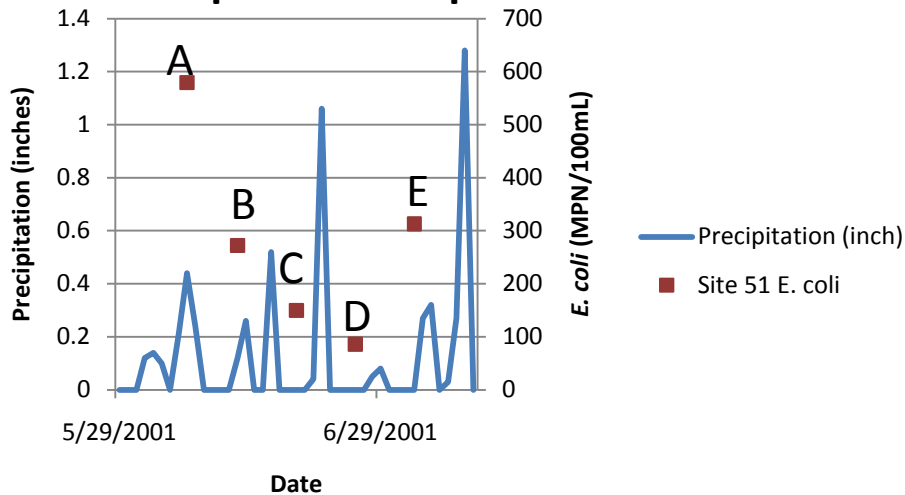
White River, West Fork at CR 275 S

2001 Monitoring Data
Site 51: WWU010-0024

Load Duration Curve



Precipitation Graph



Upstream



Downstream

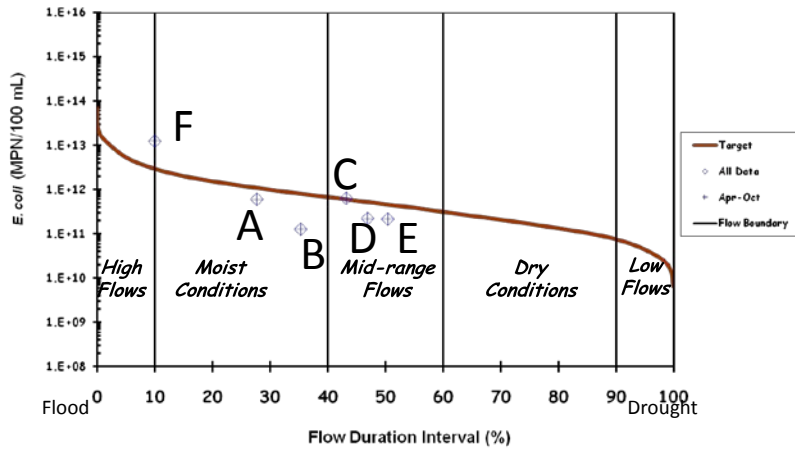
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

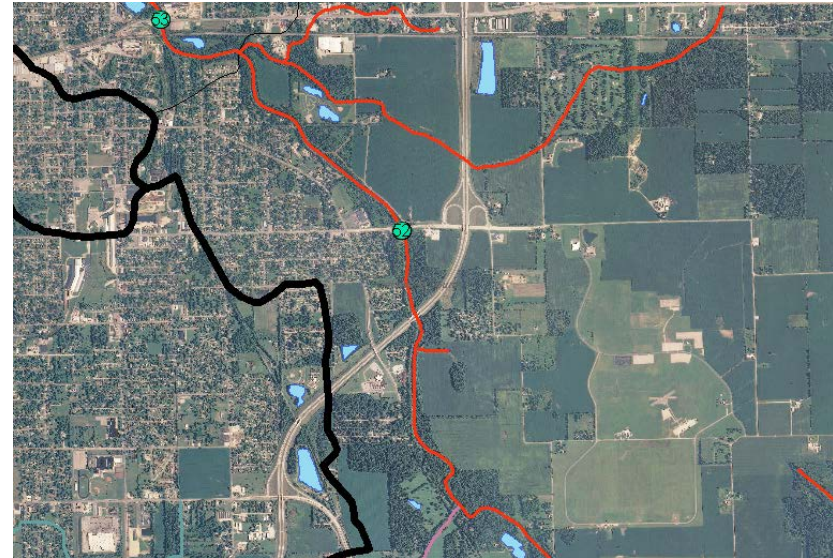
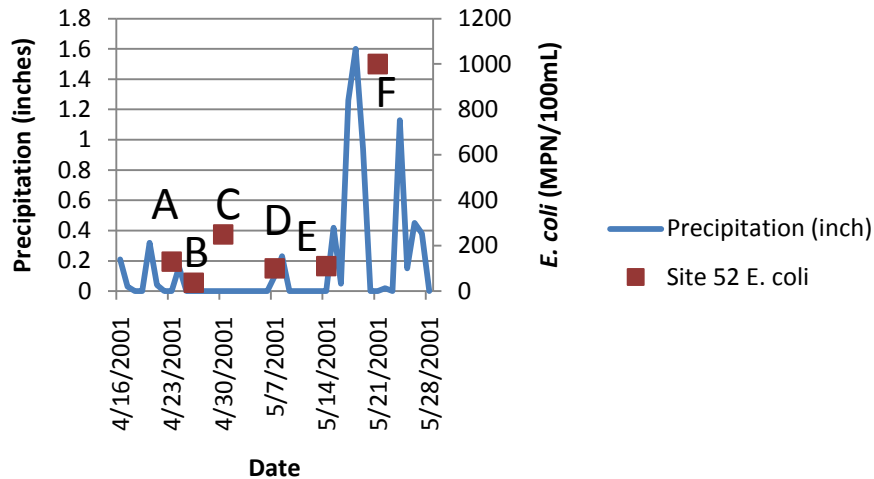
White River, West Fork at Memorial Drive

2001 Monitoring Data
Site 52: WWU010-0001

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000

Winchester, IN Precipitation Station – State Climate Office

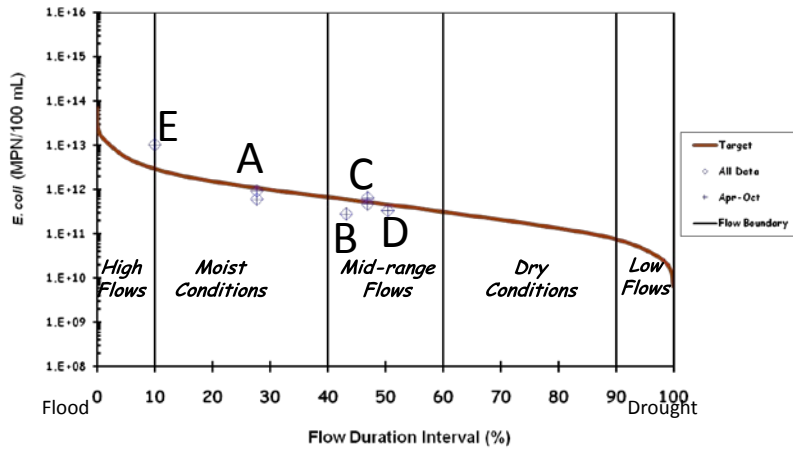
Drainage Area:

241 square miles

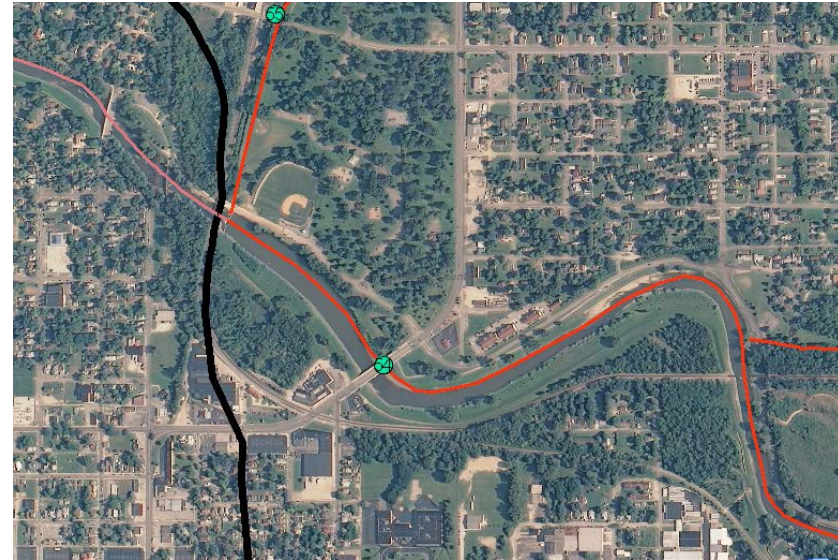
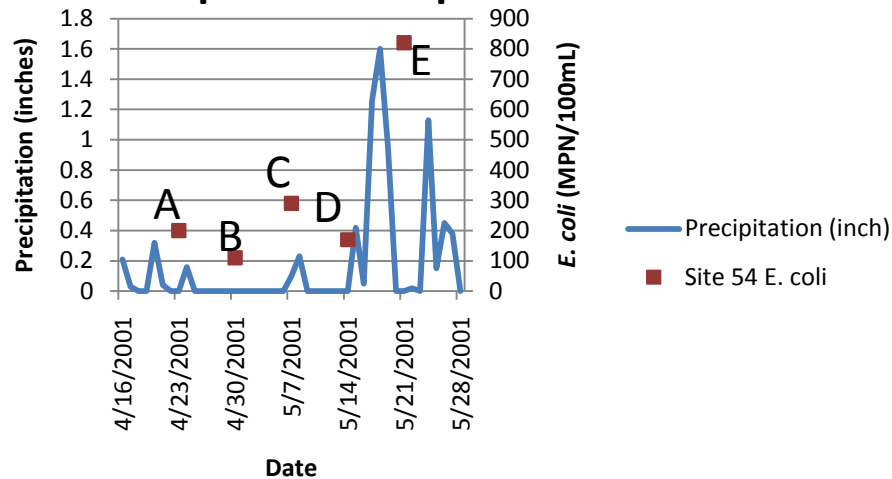
White River, West Fork at Broadway

2001 Monitoring Data
Site 54: WWU010-0019

Load Duration Curve



Precipitation Graph



Upstream



Downstream

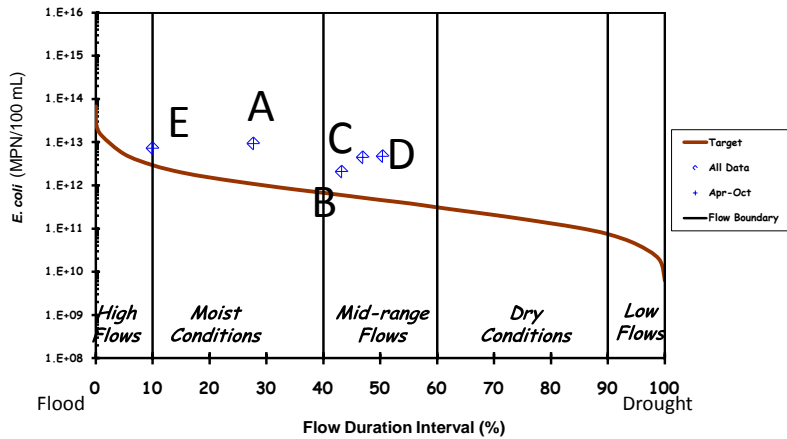
White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

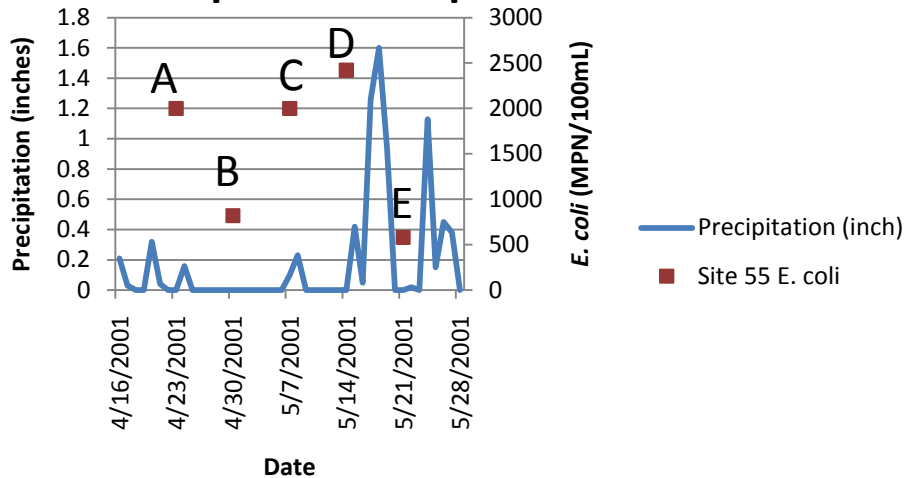
Muncie Creek at Highland Avenue

2001 Monitoring Data
Site 55: WWU010-0020

Load Duration Curve



Precipitation Graph



Upstream



Downstream

White River at Muncie, IN USGS Gage 03347000
Winchester, IN Precipitation Station – State Climate Office

Drainage Area:
241 square miles

Attachment F

Load Reductions for the Upper White River Headwaters Watershed TMDL

Load Reductions by Site:

Site Number	Waterbody Name	Site Description	Station Name	Geometric Mean	Reduction
1	West Fork White River	CR 500 S	WWU010-0082	693.77	82%
2	Colvin Ditch	CR 200E	WWU010-0081	2801.96	96%
3	Unnamed Tributary of West Fork White River	CR 300 S	WWU010-0080	1848.34	93%
4	West Fork White River	CR 200 S	WWU010-0079	1067.55	88%
5	Unnamed Tributary of West Fork White River	CR 300 E	WWU010-0078	373.26	67%
6	West Fork White River	East Base Road	WWU010-0076	315.66	60%
7	Owl Creek	CR 100 S	WWU010-0077	318.73	61%
8	Owl Creek	East Base Road	WWU010-0075	352.45	65%
9	West Fork White River	SR 32	WWU010-0074	458.71	73%
10	West Fork White River	CR 300 E	WWU010-0073	42.32	N/A
11	West Fork White River	CR 200 E	WWU010-0039	229.33	45%
12	Unnamed Tributary of West Fork White River	CR 100 N	WWU010-0072	971.19	87%
13	Peach Creek	East Base Road	WWU010-0070	2265.23	94%
14	West Fork White River	CR 100 E	WWU010-0071	131.15	5%
15	West Fork White River	US 27	WWU010-0066	188.85	34%
16	Salt Creek	CR 300 S	WWU010-0063	511.09	76%
17	Unnamed Tributary to Salt Creek	Base	WWU010-0064	36.65	N/A
18	Salt Creek	South Street	WWU010-0067	991.52	87%
19	Sugar Creek	CR 50 S	WWU010-0062	869.31	86%
20	Sugar Creek	Martin Street	WWU010-0061	748.01	83%
21	West Fork White River	CR 200 W	WWU010-0027	1069.91	88%
22	West Fork White River	CR 300 W	WWU010-0060	1069.91	88%
23	Eightmile Creek	CR 400 W	WWU010-0059	1179.84	89%
24	West Fork White River	CR 675 W	WWU010-0057	38.67	N/A
25	Sparrow Creek	CR 200 S	WWU010-0058	302.50	59%
27	West Fork White River	SR 1	WWU010-0031	799.04	84%
28	West Fork White River	CR 900 W	WWU010-0048	179.34	30%
29	Cabin Creek	CR 500 S	WWU010-0065	310.24	60%
30	Cabin Creek	CR 400 S	WWU010-0056	356.69	65%
31	Cabin Creek	Windsor	WWU010-0003	299.30	58%

Site Number	Waterbody Name	Site Description	Station Name	Geometric Mean	Reduction
32	West Fork White River	CR 1000 W	WWU010-0026	575.87	78%
33	Little White River	CR 600 S	WWU010-0055	386.58	68%
34	Poplar Run	CR 900 W	WWU010-0054	263.38	53%
35	Little White River	CR 1150 W	WWU010-0050	498.34	75%
36	Stoney Creek	CR 800 S	WWU010-0053	498.34	75%
37	Little Stoney Creek	CR 9875 E	WWU010-0037	171.06	27%
38	Little Stoney Creek	CR 775 E	WWU010-0052	732.69	83%
39	Stoney Creek	CR 700 S	WWU010-0051	525.91	76%
40	Stoney Creek	CR 200 S	WWU010-0049	216.62	42%
41	West Fork White River	CR 1250 E	WWU010-0047	283.59	56%
42	Little White River	Windsor	WWU010-0025	718.13	83%
45	West Fork White River	CR 700 E	WWU010-0023	298.58	58%
46	West Fork White River	CR 172 S	WWU010-0045	170.12	27%
47	Mud Creek	Smithfield	WWU010-0044	125.52	N/A
48	Prairie Creek Reservoir Outlet	Windsor	WWU010-0022	26.20	N/A
49	Prairie Creek	CR 461 E	WWU010-0046	51.31	N/A
50	Medford Drain	Windsor	WWU010-0043	127.76	2%
51	West Fork White River	Inlow Springs	WWU010-0024	229.43	46%
52	West Fork White River	Memorial	WWU010-0001	153.78	19%
53	West Fork White River	SR 32	WWU010-0042	175.57	29%
54	West Fork White River	Broadway	WWU010-0019	219.15	43%
55	Muncie Creek	Highland	WWU010-0020	1337.32	91%
56	Muncie Creek	US 25	WWU010-0041	303.62	59%

Load Reductions by AUID:

Site Numbers	WATERBODY_NAME	2012 AUID	Miles	2008 AUID	Sample Maximum (MPN/100mL)	Target	Total Reduction Needed	Segment Percentage of watershed	Segment Load Reduction
1, 2, 3, 4, 5, 6	West Fork White River	INW0111_01	23.45	INW0111_T1001	4352	235	4117	78.36%	3225.99
7, 8	Owl Creek	INW0111_02	6.48	INW0111_T1221	1986.3	235	1751.3	21.64%	379.02
9, 10, 11, 14, 15	West Fork White River	INW0112_01	11.95	INW0112_T1002	1986.3	235	1751.3	27.13%	475.05
12	Unnamed Tributary of West Fork White River	INW0112_T1003	3.28	INW0112_00	1986.3	235	1751.3	7.44%	130.25
13	Peach Creek	INW0112_T1004	7.37		2419.2	235	2184.2	16.72%	365.23
16, 17, 18	Salt Creek	INW0112_T1005	13.74	INW0113_00	2420	235	2185	31.20%	681.73
19, 20	Sugar Creek	INW0112_T1006	7.72		1732.9	235	1497.9	17.52%	262.37
21, 22	West Fork White River	INW0113_01	12.36	INW0114_T1004	307.6	235	72.6	71.51%	51.92
23	Eightmile Creek	INW0113_T1004	4.92	INW0114_00	1986.3	235	1751.3	28.49%	498.96
29, 30, 31	Cabin Creek	INW0114_01	33.01	INW0116_00	920.8	235	685.8	86.48%	593.11
24, 27, 28	West Fork White River	INW0115_01	8.01	INW0115_T1005	307.6	235	72.6	46.99%	34.11
25	Sparrow Creek	INW0115_T1006	7.16	INW0115_00	686.7	235	451.7	41.97%	189.57
33, 35	Little White River	INW0116_01	36.13	INW0118_00	1203.3	235	968.3	83.55%	808.98
34	Poplar Run	INW0116_T1001	6.54		816.4	235	581.4	15.12%	87.89
36, 39, 40, 52, 43	Stoney Creek	INW0117_01	32.50	INW0117_00	1732.9	235	1497.9	76.89%	1151.80
37, 38	Little Stoney Creek	INW0117_T1001	9.77		980.4	235	745.4	23.11%	172.23
48	Prairie Creek Reservoir Outlet	INW0118_01	0.52	NEW	86	235	-149	0.18%	N/A
49	Prairie Creek	INW0118_P1001	7.81	INW011B_00	142.1	235	-92.9	35.94%	N/A
32, 45, 41, 46	West Fork White River	INW0119_01	19.15	INW0119_T1006	272.3	235	37.3	71.37%	26.62
47	Mud Creek	INW0119_T1008	5.17	INW011A_00	866.4	235	631.4	19.26%	121.59
51, 52	West Fork White River	INW011A_01	12.46	INW011C_T1008	1000	235	765	4.40%	33.63
50	Medford Drain	INW011A_T1008	3.67	INW011C_00	488.4	235	253.4	18.90%	47.88
53	West Fork White River	INW011B_01	3.28	INW011D_T1009	890	235	655	31.84%	208.54
55, 56	Muncie Creek	INW011B_T1001	7.03	INW011D_00	1732.9	235	1497.9	68.16%	1020.98

Attachment G

Third Party Data for the Upper White River Headwaters Watershed TMDL

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The Water Quality of the White River

Chandra L. Barkes

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Anderson University
1100 E. 5th Street
Anderson, IN 46012

Abstract

From September 30, 1998 to March 14, 1999 water samples were collected biweekly from the White River at sites located near Imel (upstream) and Baxter (downstream) roads. They were tested for the parameters suggested in the Hoosier Riverwatch Volunteer Water Quality Monitoring Streams Manual that is produced by the Department of Natural Resources. From this data, a Water Quality Rating and Macroinvertebrate Pollution Tolerance Index was computed showing that the site near Imel road had a rating of 71.2 and an index of 18, indicating "good" water quality on both accounts. A rating of 69.1 and an index of 13 characterized the downstream site, placing it in the "medium" and "fair" water quality categories, respectively.

To the right, orange buoys warn of bottom sludge containing DDT, lead, and other metals- sludge too hazardous to be safely dredged. To the left alongside the white sand where sunbathers loit, four storm drains jut out of the ground, armed like bazookas into the breaking surf of the Santa Monica Bay. Behind them, still more ominous silhouettes: two power plants, one sewage-treatment facility, and a Chevron oil refinery. Twenty-five years ago the Environmental Protection Agency was entrusted with making these waters swimmable and fishable (Wood 1998)

Content 10
Grammar 49
Style 48
Eval'n 1 99
195

Mon. 9/24
2:30

In 1972 Congress enacted the Clean Water Act, mandating that the EPA safeguard America's bodies of water from pollutants such as those ^{described} ~~depicted~~ above. Since then, water quality issues have gained public recognition and remain a concern (Wood 1998).

Hoosier Riverwatch is a state-sponsored water quality monitoring program developed by the Department of Natural Resources (DNR). Volunteers are trained to monitor certain parameters of local lotic environments, thereby increasing public awareness of water quality concerns. The benefits of such a program are numerous. First, Hoosier Riverwatch provides an opportunity to check the validity of the data collected by the DNR. More sites are monitored and consequently, a more accurate description of the stream can be constructed. In addition, information is provided to local and state officials that may assist with future planning (Hippensteel 1997). Hoosier Riverwatch strives to improve stream stewardship ethics and encourages local action to improve and/or maintain watershed management. The volunteers acquire a sense of personal responsibility for the health of their river system and actively pursue ^{awareness} community support to uphold its maintenance. In the process, the local community is educated about the relationship between land use and water quality.

In this paper I will present and analyze the data obtained from the evaluation of the parameters discussed in the Hoosier Riverwatch Volunteer Water Quality Monitoring Streams Manual. From my results I will calculate a Water Quality Rating and Macroinvertebrate Pollution Tolerance Index that indicate the general health of the stream.

My water samples ^{were} ~~are~~ taken from two sites along the West Fork of the White River in Anderson, Indiana. The first site, upstream from the Anderson Wastewater Treatment Plant, is near Imel Road and has steep and severely eroded banks. The streambed consists of gravel and large rocks that create many riffles in the water. The water is approximately 15-20% shaded and moves with a velocity of 0.84 meters per second.

Sampling ^{was} ~~is~~ also performed at a site downstream of the wastewater treatment plant near Baxter Road. The streambed is composed largely of sand particles and has shading percentages similar to those found at the first site. Detritus and muck line the edge of the bed. The bank slope is moderate to steep and is moderately eroded and the surface flow rate is 0.30 m/s. Both sites are located in suburban areas.

Methods

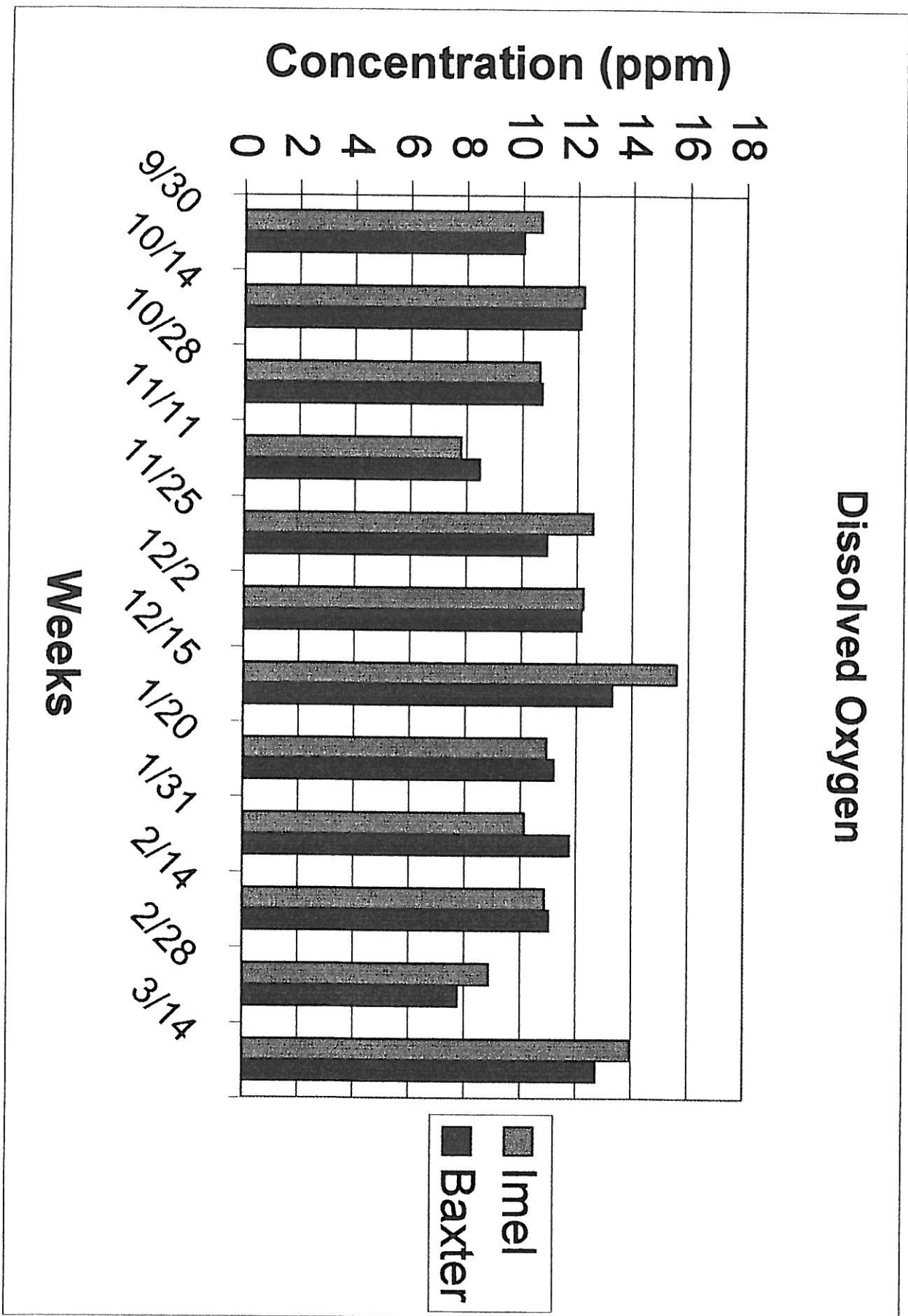
We collected samples biweekly from both locations mentioned above starting on September 30, 1998. The atmospheric temperature and surface temperature of the water were recorded using a standard Celsius thermometer. For each site five 70 ml water collection jars were filled following the procedure outlined in the LaMotte Freshwater Aquaculture Test Kit Model #AQ-2. One sample jar was fixed on-site; a second was incubated in the dark for five days before fixation. The method for fixation is found in the test kit referenced above. We followed the method for collecting macroinvertebrates suggested in the Water Quality Monitoring Streams Manual (36-37). The organisms were placed in 70% ethyl alcohol for later identification.

The pH of the samples was determined using a Fisher Scientific pH meter calibrated using a buffer with a pH of 7. The nitrate concentrations were found using

Ward's Instant Water Quality Test Kit, Catalogue #21W9013. Dissolved oxygen and biochemical oxygen demand concentrations were determined using LaMotte's Freshwater Aquaculture Test Kit, Model AQ-2. The phosphate concentration was analyzed using the ammonium molybdate method from *Laboratory Experiments in Environmental Chemistry* (1993) and the Varian Cary 1 UV-Vis Spectrometer. The phosphate standards used to establish a calibration curve were 0.1 ppm, 0.5 ppm, 1.0 ppm, and 5.0 ppm. To find the concentration of total solids, 25 ml of sample water was added to three 125 ml clean, dried, and weighed Erlenmeyer flasks. The water was boiled off and the flasks were dried and weighed.

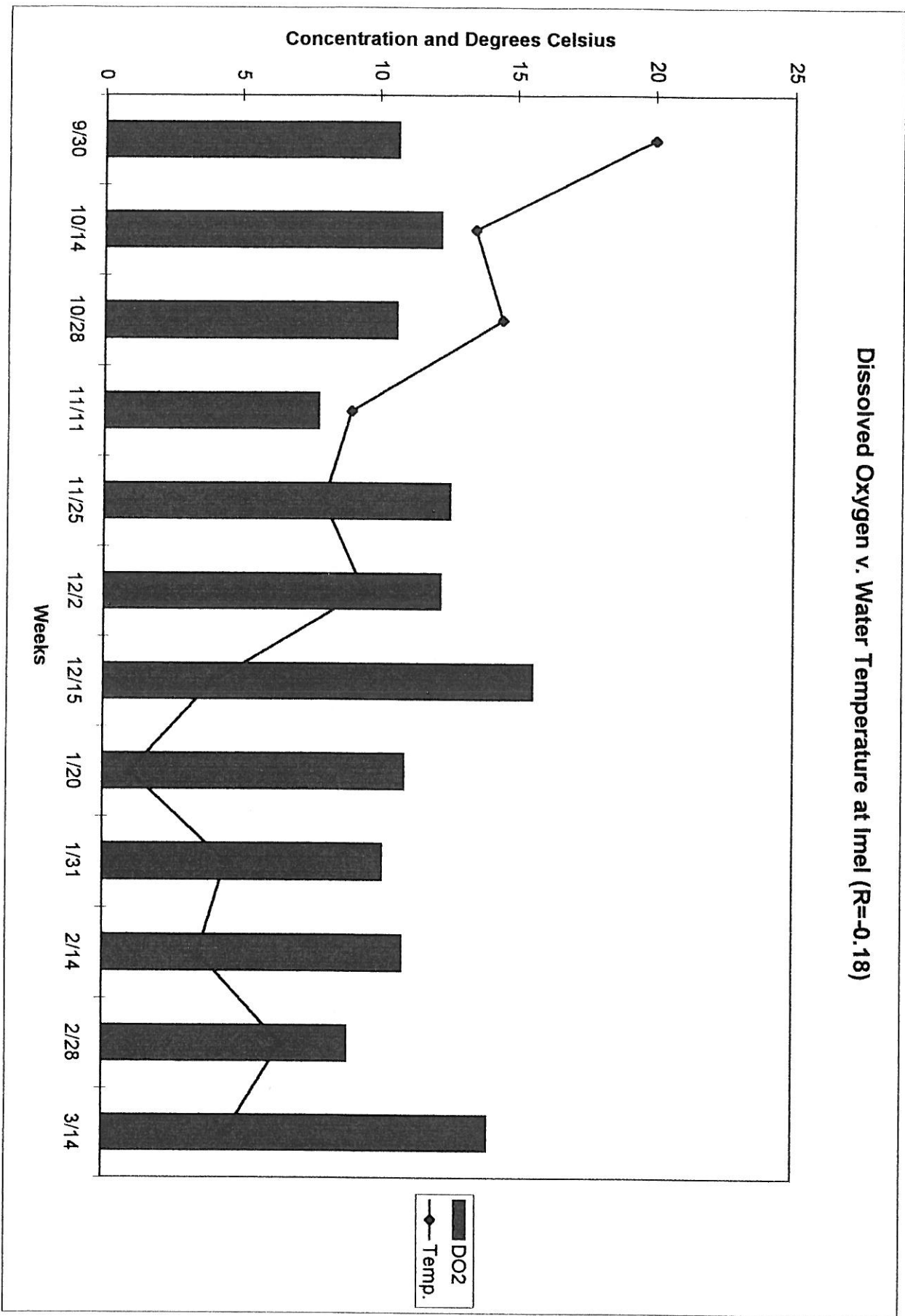
Data

The following ten graphs and six tables were derived from the information in Appendix A.



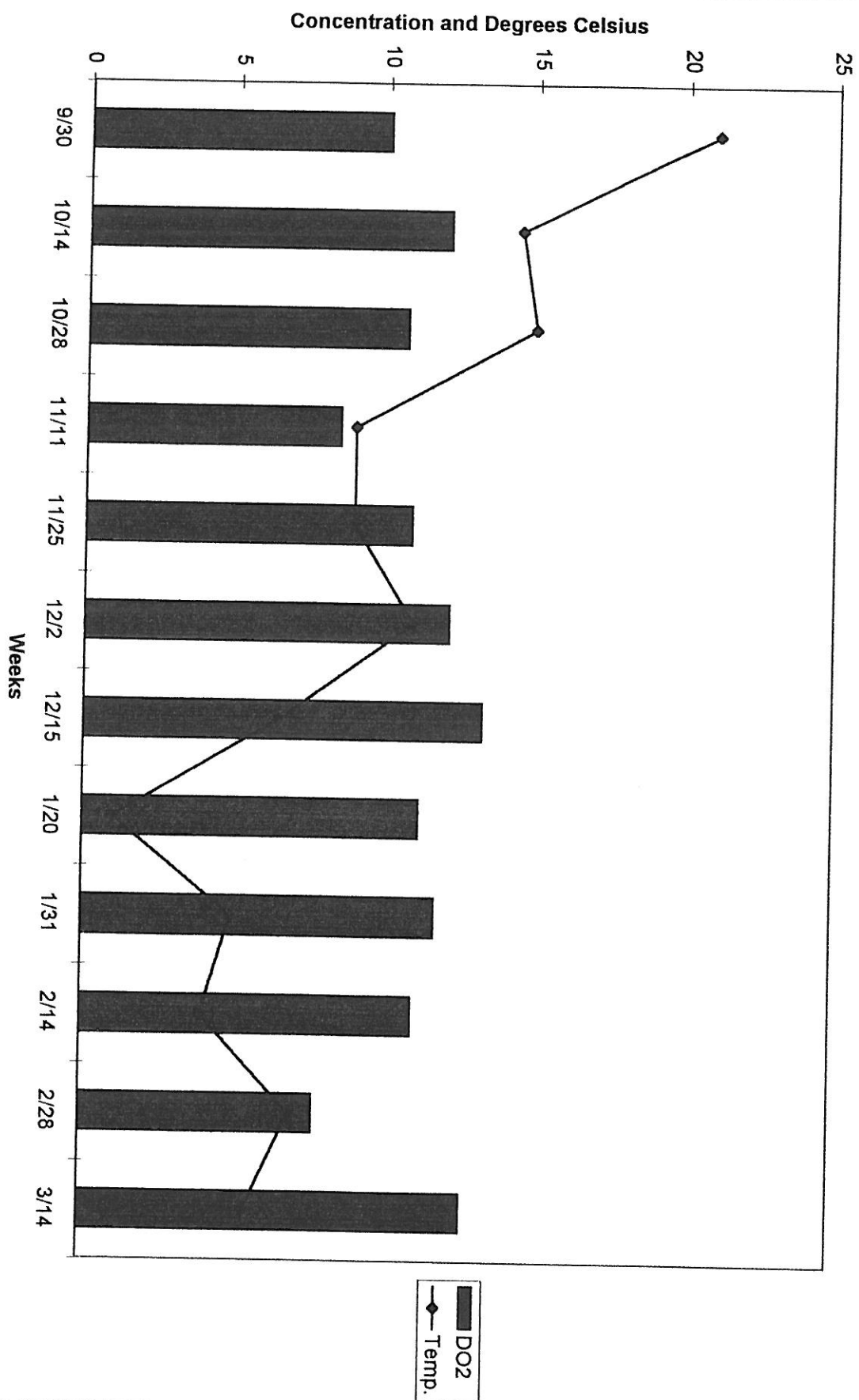
Graph 2

Dissolved Oxygen v. Water Temperature at Imel ($R=-0.18$)

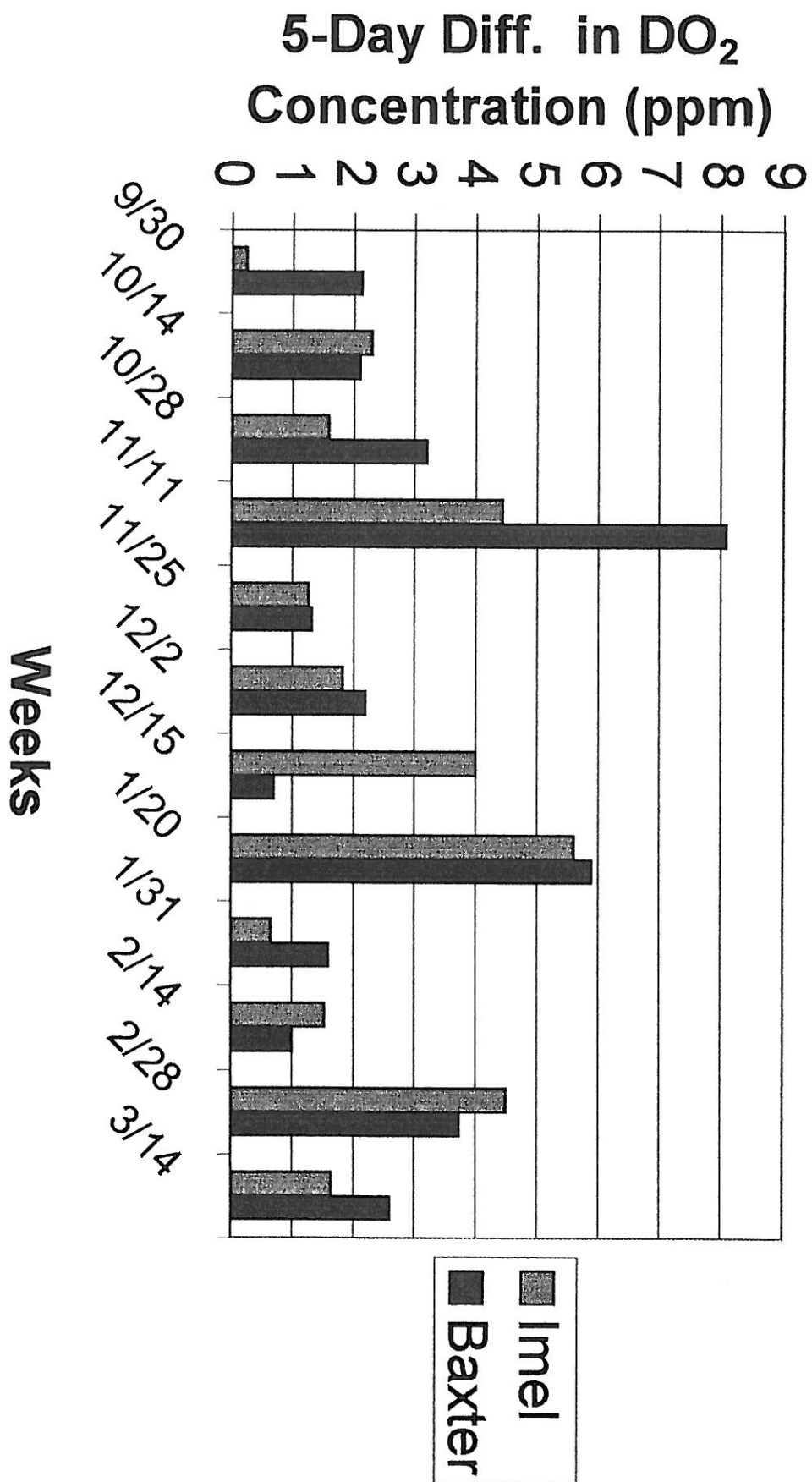


Graph 3

Dissolved Oxygen vs. Water Temperature at Baxter (R=-0.15)

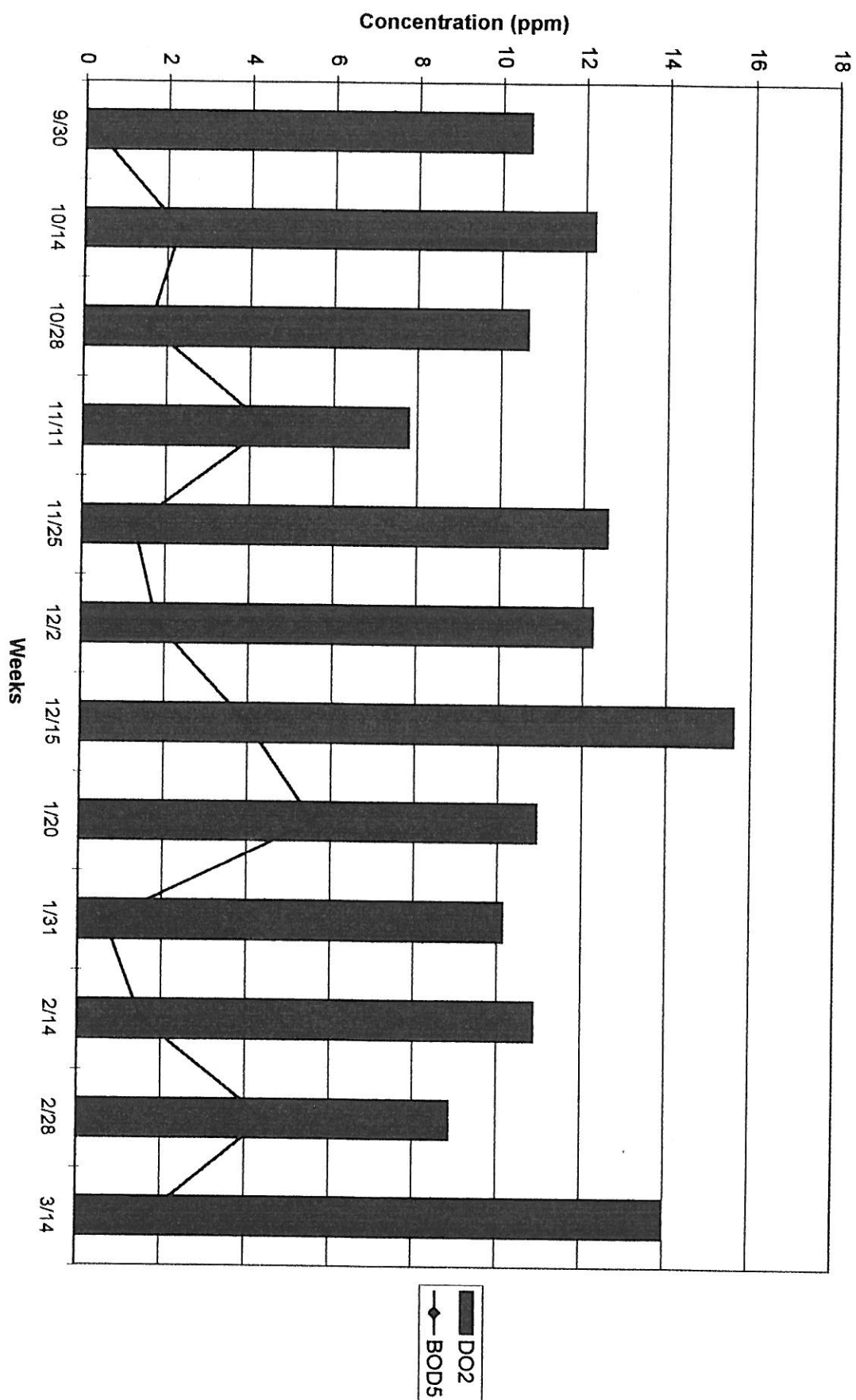


BOD₅

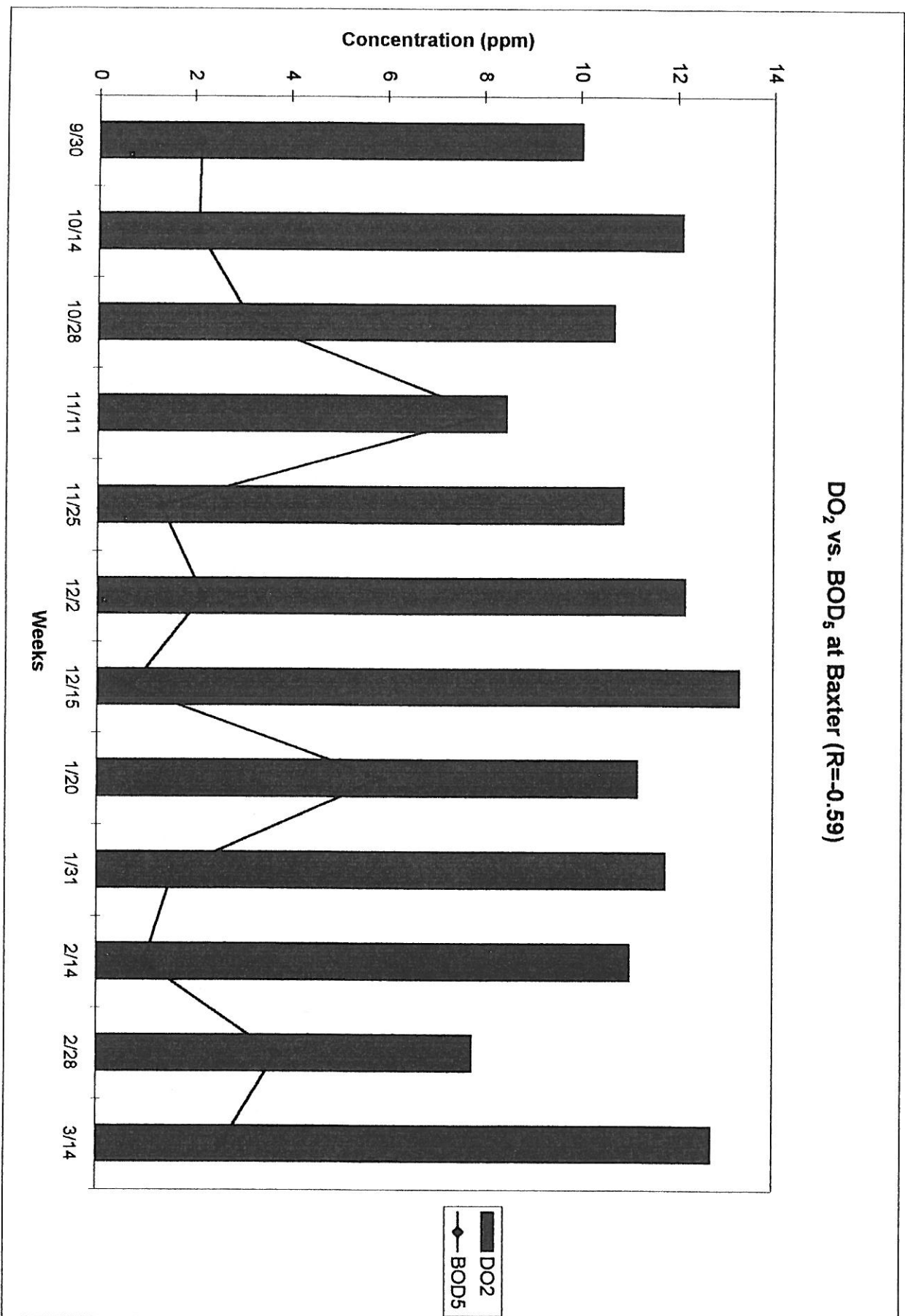


Graph 5

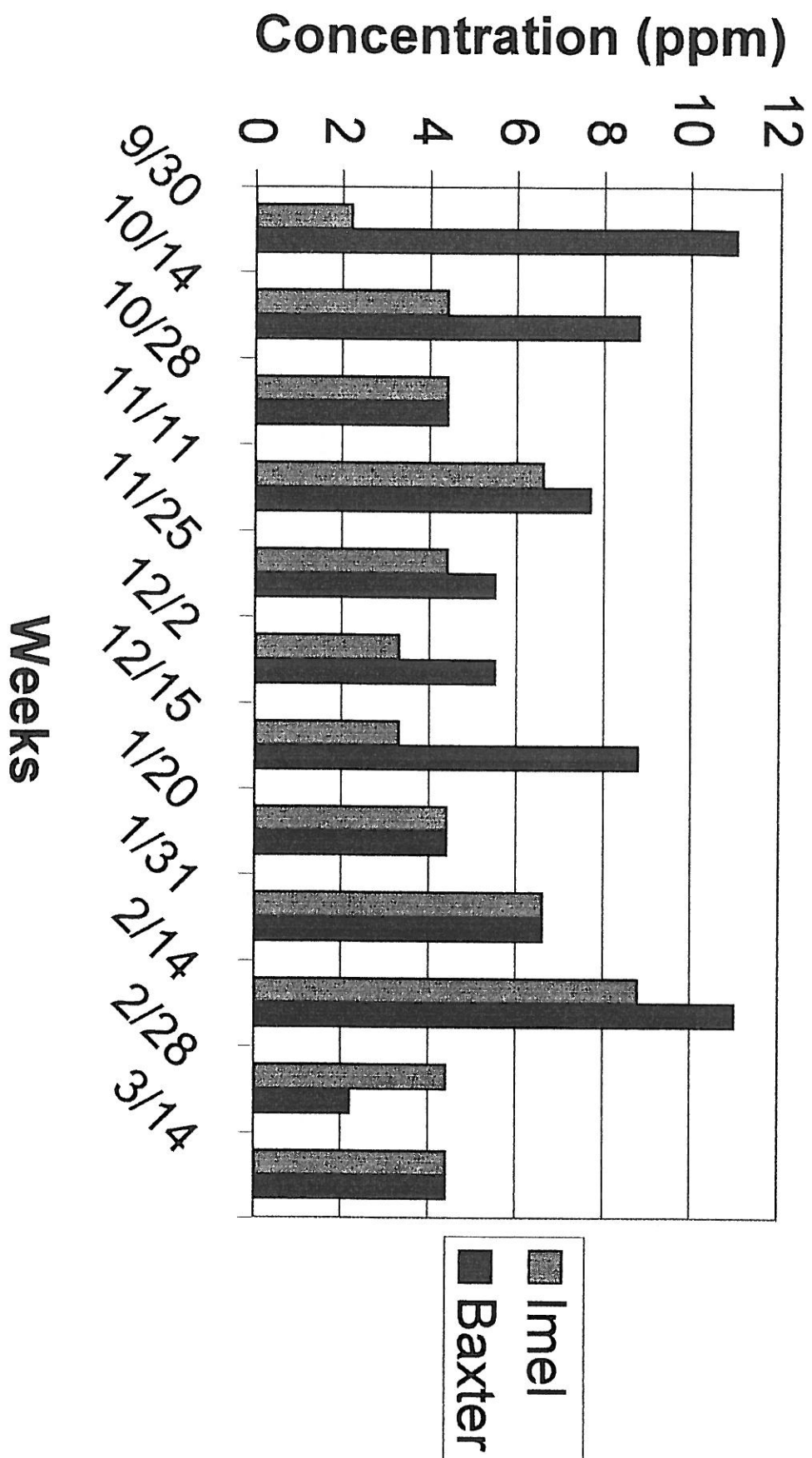
DO₂ vs. BOD₅ at Imel (R=-0.16)



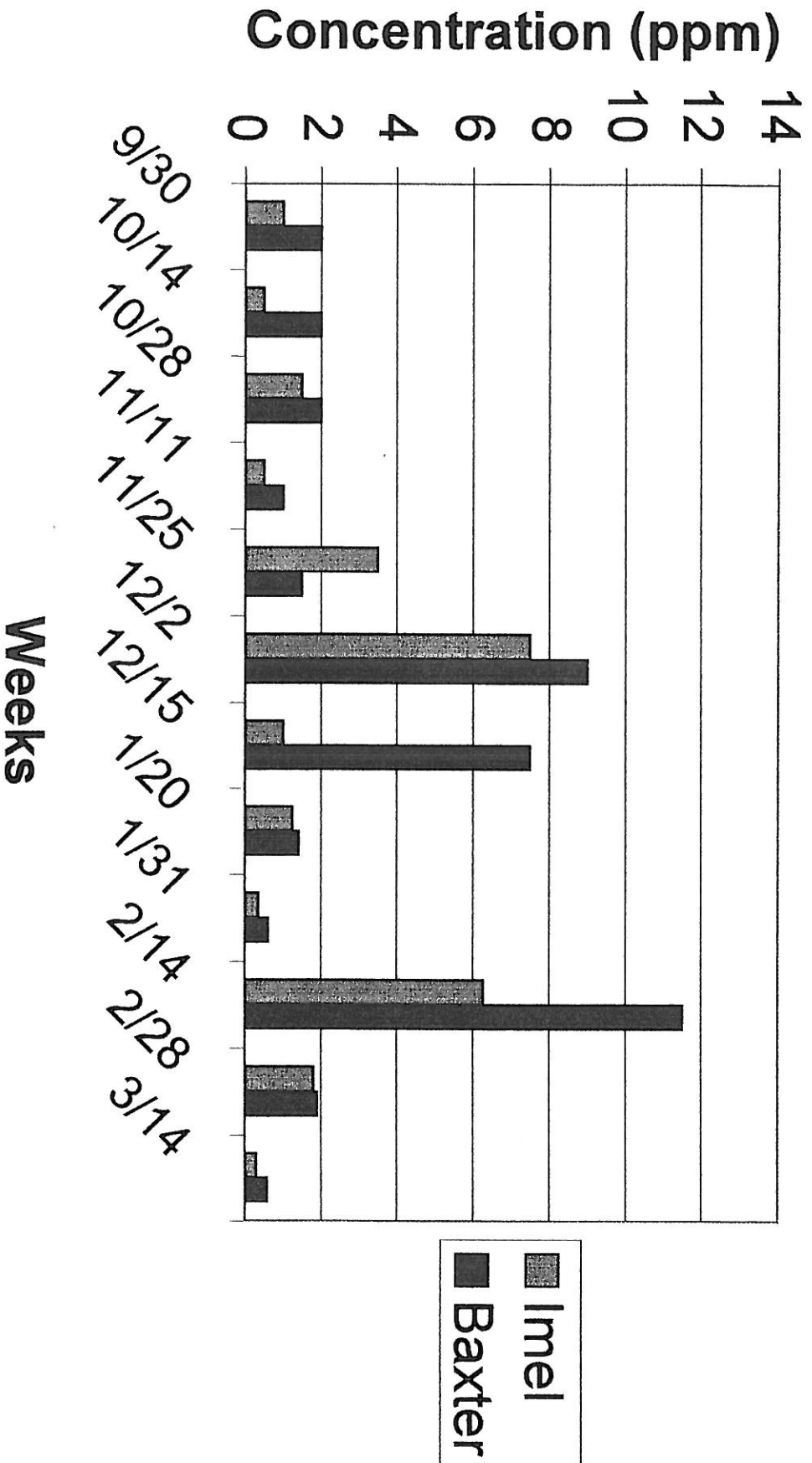
Graph 6



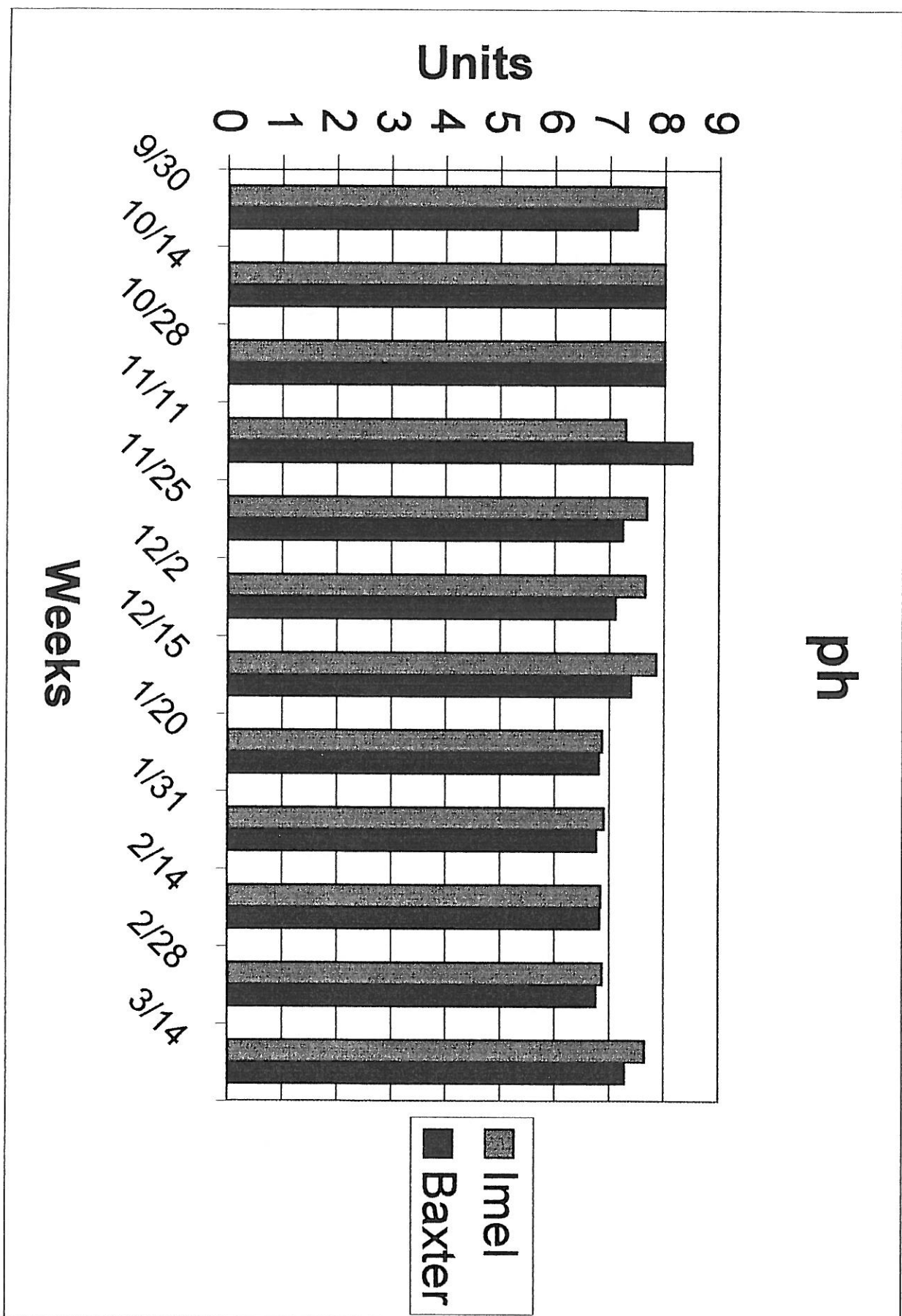
Nitrates



Phosphates



Graph 9



Total Solids

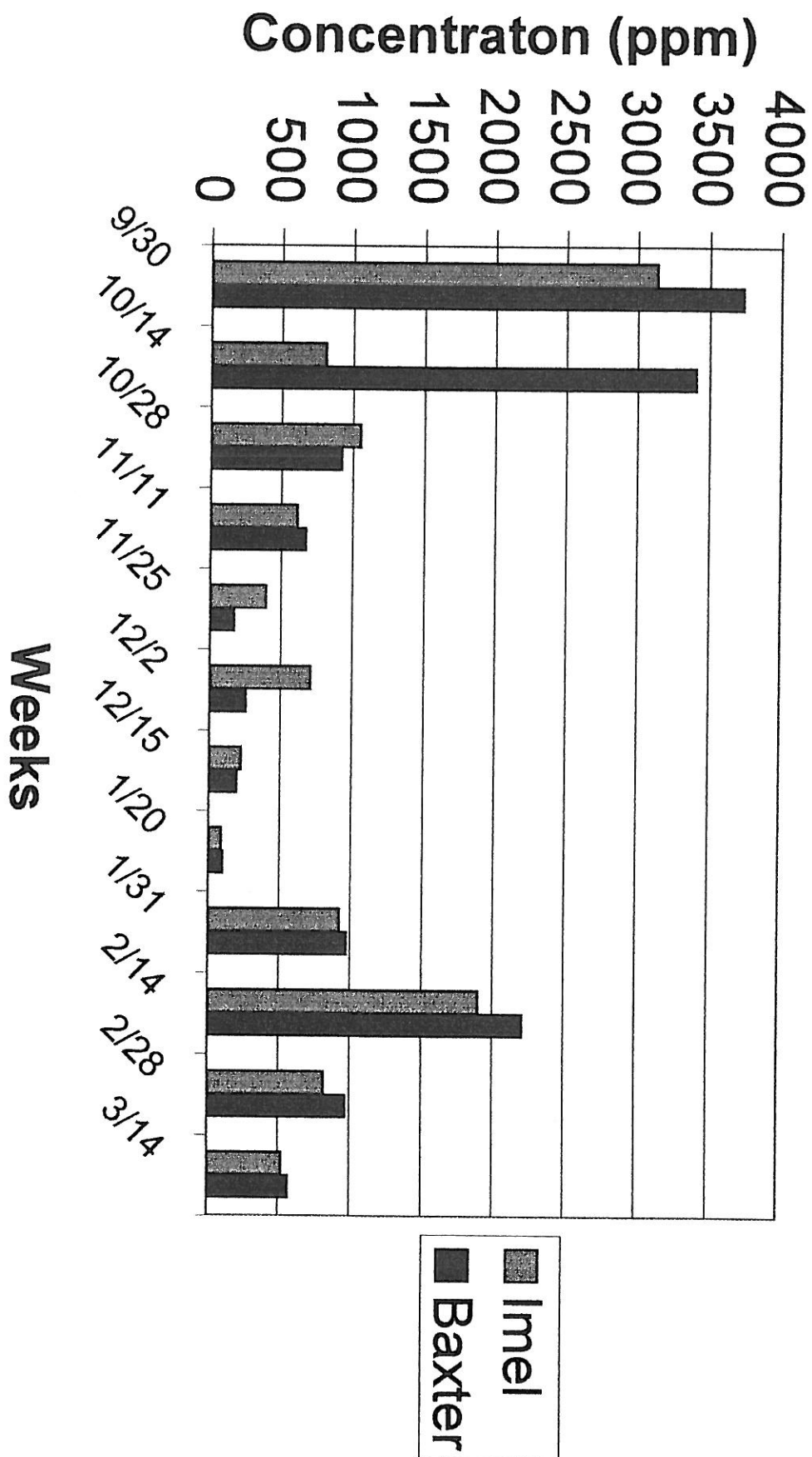


Table 1. WATER QUALITY RATING FOR IMEL

PARAMETER	MEAN RESULTS	UNITS	Q VALUE	WT FACTOR	TOTAL
Dissolved Oxygen	96	% saturation	97	X 0.17	= 16.5
Fecal Coliform	*	colonies/100 ml	*	X 0.16	= *
pH	7.5	ppm	93	X 0.11	= 10.2
BOD5	2.5	ppm	68	X 0.11	= 7.5
Water Temperature	0.14	Change in °C	94	X 0.10	= 9.4
Phosphates	2.1	ppm	26	X 0.10	= 2.6
Nitrates	4.8	ppm	65	X 0.10	= 6.5
Turbidity	*	NTU	*	X 0.08	= *
Total Solids	690	ppm	20	X 0.07	= 1.4

N=12

WATER QUALITY RATING	71.2
----------------------	------

Table 2. WATER QUALITY RATING FOR BAXTER

PARAMETER	MEAN RESULTS	UNITS	Q VALUE	WT FACTOR	TOTAL
Dissolved Oxygen	95	% saturation	98	X 0.17	= 16.7
Fecal Coliform	*	colonies/100 ml	*	X 0.16	= *
pH	7.4	ppm	93	X 0.11	= 10.2
BOD5	2.9	ppm	67	X 0.11	= 7.4
Water Temperature	0.93	Change in °C	91	X 0.10	= 9.1
Phosphates	3.4	ppm	19	X 0.10	= 1.9
Nitrates	6.7	ppm	58	X 0.10	= 5.8
Turbidity	*	NTU	*	X 0.08	= *
Total Solids	680	ppm	20	X 0.07	= 1.4

N=12

WATER QUALITY RATING	69.1
----------------------	------

RATING KEY	
Excellent	90-100%
Good	70-90%
Medium	50-70%
Bad	25-50%
Very Bad	0-25%

2, How

Table 3. MACROINVERTEBRATE COUNT (IMEL)

Group 1	AVERAGE Number	Group 2	AVERAGE Number	Group 3	AVERAGE Number	Group 4	AVERAGE Number
Stonefly Nymph	*	Damselfly Nymph	*	Grey Midge	*	Left-Handed snail	*
Mayfly Nymph	15	Dragonfly Nymph	*	Black Fly larvae	*	Aquatic Worms	*
Caddis Fly larvae	41	Sowbug	*	Planaria	*	Blood Midge	1.9
Dobsonfly larvae	*	Scud	*	Leech	*	Rat-Tailed Maggot	*
Riffle Beetle	*	Crane Fly larvae	*	Water Mite	2.4		
Water Penny	*	Clams/Mussels	7.5				
Right-handed snail	1.5						

Table 4. MACROINVERTEBRATE COUNT (BAXTER)

Group 1	AVERAGE Number	Group 2	AVERAGE Number	Group 3	AVERAGE Number	Group 4	AVERAGE Number
Stonefly Nymph	*	Damselfly Nymph	*	Grey Midge	*	Left-Handed snail	*
Mayfly Nymph	*	Dragonfly Nymph	*	Black Fly larvae	*	Aquatic Worms	0.50
Caddis Fly larvae	0.75	Sowbug	*	Planaria	*	Blood Midge	1.2
Dobsonfly larvae	*	Scud	*	Leech	*	Rat-Tailed Maggot	*
Riffle Beetle	*	Crane Fly larvae	*	Water Mite	*		
Water Penny	*	Clams/Mussels	1.3				
Right-handed snail	9.5						

Table 5. MACROINVERTEBRATE POLLUTION TOLERANCE
INDEX (IMEL)

	Group 1	Group 2	Group 3	Group 4
# OF TAXA	3	1	1	1
WEIGHTING FACTOR	X4	X3	X2	X1
TOTAL	12	3	2	1

Macroinvertebrate Index = 18

Table 6. MACROINVERTEBRATE POLLUTION TOLERANCE
INDEX (BAXTER)

	Group 1	Group 2	Group 3	Group 4
# OF TAXA	2	1	0	2
WEIGHTING FACTOR	X4	X3	X2	X1
TOTAL	8	3	0	2

Macroinvertebrate Index = 13

INDEX KEY	
Excellent	23 or more
Good	17-22
Fair	11-16
Poor	10 or less

DISCUSSION

The atmospheric temperature, water temperature, dissolved oxygen concentration, biochemical oxygen demand (BOD), nitrate concentration, phosphate concentration, pH, and total solids tests were surveyed at each site (Table 1). At both locations the dissolved oxygen concentrations fluctuated over time, but no major differences between the two sites were observed (Graph 1). Normally an increase would be expected with decreasing temperatures (Horne 1994); however, when dissolved oxygen concentration was plotted against the water temperature (Graphs 2 and 3), low correlation values of -0.18 and -0.15 resulted. Streams are dynamic systems; consequently, other variables such as turbulence and the BOD influence the dissolved oxygen concentration. These factors may account for the low correlation values.

The decrease in dissolved oxygen concentrations theoretically should coincide with increasing BOD. Correlation values for these parameters at Imel and Baxter were 0.16 and -0.59 , respectively (Graphs 5 and 6). *this isn't too bad!* High negative values were expected but not achieved. Again, other influences acting on the dissolved oxygen concentration may be the cause of the unsatisfactory correlation values. Large amounts of precipitation (snow or rain) received during the fourth, eighth, and eleventh week of sampling may account for the sharp increase in BOD occurring at each site (Graph 4). Large inputs of detritus accompany the inputs of water. As the detritus is broken down, oxygen is consumed.

The concentration of nitrates also fluctuates over time and appears to depend on the volume of runoff received. Eleven out of the 12 times we sampled, the nitrate concentration was higher at the Baxter location (Graph 7), reflecting the influence that

Imel has more turbulence, which probably mixes in more oxygen.

the ammonia towers impart. The towers at the wastewater treatment plant convert ammonia, a toxic by-product of metabolism (Fischer, Pers. Comm.), into nitrates, which are reintroduced into the system through the effluent that is located approximately 200 ^{downstream} ~~upstream~~ yards of the Baxter site.

A plot of phosphate concentration versus time (Graph 8) shows a fluctuation pattern that seems to coincide with the cycle of water input; however this relationship is not clearly defined because **biota recycling** may impact the phosphate concentration. *→ this means "runoff", right*

Phosphates are always more concentrated at Baxter than at Imel. This could be a result of the difference in sedimentation. Sediments that consist of larger rock particles provide more surface area for the water to contact because they cannot be tightly packed.

Phosphate is absorbed by these rock particles, thereby removing it from the water (Horne 1994). The streambed at Imel contains much larger rock particles than that of Baxter.

Phosphates could also be more concentrated at Baxter as a result of the wastewater treatment plant. The Environmental Protection Agency (EPA) specifies that the plant does not have to treat high concentrations of phosphates if there is no standing water within 40 miles because algal blooms are not considered a threat in running water. The plant receives multiple inputs of sewage; by not treating the phosphates it acts to concentrate them near Baxter by releasing them through the effluent.

The pH at both sites was found to be comparable (Graph 9). Since pH is dependent on the geological composition of the surrounding watershed and both sites share similar watersheds, pH values are expected to be similar. The pH values were neutral to slightly basic, which is normal for healthy river systems.

A new test method for analyzing the total solids concentration was employed after week four. The flasks were dried in an oven for 24 hours to eliminate all moisture, whereas previously they were weighed after drying with a paper towel. Another change was that the sample water bottles were shaken before each 25ml aliquot was removed. Therefore, the validity of the results obtained up to and including week four must be questioned. The spike seen on February 14th is consistent with spikes seen in the other graphs and can be assumed to correspond with an increase in runoff.

Water Quality Index

Using the Q-value charts given in the **Hoosier Riverwatch Water Quality Monitoring Streams Manual (22-30)**, the average value¹ for each parameter was converted to its corresponding Q-value and multiplied by its weighting factor. The Q-value totals were computed and divided by the total of the weighting factors. The resulting water quality indices were 71.2 for Imel and 69.1 for Baxter (Tables 1 and 2), corresponding to the “good” and “medium” categories of water quality (Hippensteel 1997). The indices are based on seven of the nine parameters suggested; however, the text clearly indicates that up to two parameters can be missing before unreliable results become a problem.

Pollution Tolerance Index

Table 3 shows that Caddis Fly Larvae and Mayfly Nymphs (common names), pollution intolerant organisms, are the most numerous macroinvertebrates found at the Imel site. Right-handed snails (pollution intolerant) and blood worms (pollution tolerant) dominate the Baxter site (Table 4). The vast difference in organisms found has to do

¹ It was not realized until after this research was completed and the ratings computed that the pH values should not be averaged because they are logarithmic

with the difference in substrate. The Imel site with its rocky bottom provides many more hiding places for the macroinvertebrates.

The macroinvertebrates were assorted according to pollution tolerance into four groups. The taxa for each group were counted and multiplied by its corresponding weighting factor. These numbers were summed to give the Macroinvertebrate Pollution Tolerance Index. An index of 18 indicates that the Imel location has “good” water quality and an index of 13 for the Baxter location corresponds to “fair” water quality (Hippensteel 1998). The Baxter site’s low rating may be due to the sandy substrate, which does not house many organisms.

CONCLUSION

Streams are dynamic systems and therefore many factors must be considered before determining their health. The data presented above indicates that the Imel site is in good health, having a water quality rating of 71.2 and a Pollution Tolerance Index of 18. The Baxter site is also in good condition overall, with a Water Quality Rating of 69.1 and a Pollution Tolerance Index of 13. It is shown that the substrate of the streambed has a great influence on many of the parameters monitored such as the macroinvertebrate count and phosphate levels. On average all of the results of the parameters surveyed seem to fall within the ranges that were considered healthy for river systems.

ACKNOWLEDGMENTS

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to the organization of the study, collection of the samples, and identification of the macroinvertebrates.

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APPENDIX A

Date	Site	DO ₂ (ppm)	BOD ₅ (ppm)	NO ₃ (ppm)	PO ₄ (ppm)	pH (units)	Solids (ppm)	Temp Change (°C)	Water Temp (°C)
30-Sep	Imel	10.7	0.2	2.2	1.00	8.0	3133.0	*	20.0
	Baxter	10.05	2.1	11.0	2.00	7.5	3733.0	*	21.0
14-Oct	Imel	12.2	2.3	4.4	0.50	8.0	805.0	*	13.5
	Baxter	12.1	2.1	8.8	2.00	8.0	3407.0	*	14.5
28-Oct	Imel	10.6	1.6	4.4	1.50	8.0	1049.0	*	14.5
	Baxter	10.7	3.2	4.4	2.00	8.0	919.0	*	15.0
11-Nov	Imel	7.8	4.4	6.6	0.50	7.3	611.0	*	9.0
	Baxter	8.5	8.1	7.7	1.00	8.5	673.0	*	9.0
25-Nov	Imel	12.6	1.3	4.4	3.50	7.7	395.3	*	8.0
	Baxter	10.9	1.3	5.5	1.50	7.3	167.0	*	9.0
2-Dec	Imel	12.2	1.8	3.3	7.50	7.7	710.0	0.50	9.5
	Baxter	12.2	2.2	5.5	9.00	7.1	255.7	1.50	11.0
15-Dec	Imel	15.6	4.0	3.3	1.00	7.9	224.0	0.00	4.0
	Baxter	13.3	0.7	8.8	7.50	7.4	195.0	2.00	6.5
20-Jan	Imel	10.9	5.6	4.4	1.24	6.9	91.3	0.50	1.0
	Baxter	11.2	5.9	4.4	1.41	6.8	99.7	0.50	1.0
31-Jan	Imel	10.1	0.7	6.6	0.36	6.9	924.0	0.00	4.5
	Baxter	11.8	1.6	6.6	0.60	6.8	972.0	0.50	5.0
14-Feb	Imel	10.9	1.53	8.8	6.27	6.9	1900.0	0.00	3.5
	Baxter	11.0	1.0	11.0	11.50	6.8	2212.0	0.50	4.0
28-Feb	Imel	8.9	4.5	4.4	1.80	6.9	818.7	0.00	6.5
	Baxter	7.8	3.7	2.2	1.91	6.8	966.7	0.50	7.0
14-Mar	Imel	14.0	1.6	4.4	0.29	7.7	520.0	0.00	4.5
	Baxter	12.7	2.6	4.4	0.58	7.3	568.0	1.00	5.5

The Water Quality of the White River

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Abstract

Last year, water quality tests were performed on the West Fork of the White River. It was concludes from these tests that the water was in "good" condition, overall, according to the report provided by Mrs. Chandra Ostrognai. In order to better determine the health of the river, similar tests were conducted biweekly on the river at sites located near Imel Road (upstream) and Joe Tipton's property (downstream) from October 22, 1999 to April 14, 2000. Due to the chemical spill, which was detected on December 15, 1999, the study was expanded to include a Simpson's Index and a Morisita's Index, in addition to the Macroinvertebrate Pollution Tolerance Index and the Water Quality Rating, which were discussed last semester. From the data gathered river was determined to have a water quality rating of 48.9 upstream and 51.6 downstream, suggesting a water quality of "bad" to "medium." Macroinvertebrate Pollution Tolerance Indices received values of 19 upstream and 18.7 downstream, which indicates "good" water quality.

*Only after the last tree has been cut down,
Only after the last River has been poisoned,
Only after the last fish has been caught,
Only then will you know that money cannot be eaten.*

-Cree Indian Prophecy-

In 1948, the United States Congress passed the Federal Water Pollution Control Act. While this act provided the beginning of water protection in the United States, the FWPCA was expanded in 1972. The expansion of the original act has greatly contributed to the improvement of surface water quality in the United States. This law gave the Environmental Protection Agency the power to set technology-based regulations for all contaminants in surface waters within the United States. This act was eventually amended by Congress to include the Clean Water Act of 1977. While its main focus was on toxic pollution, this act makes it illegal to contaminate waters with any pollutant from a point source without obtaining the necessary permit from the EPA. Many amendments have since been made to these original documents. (EPA 1)

The Indiana Department Of Natural Resources published the Hoosier Riverwatch Volunteer Water Quality: Monitoring Streams Manual. This booklet contains detailed descriptions of the many parameters that water quality is based on. Again, this is a volunteer program, which allows those citizens who share concern about the state's waterways to participate actively in its regulation.

Last year, Mrs. Chandra (Barkes) Ostrognai completed a similar project on the West Fork of the White River. Her research was based on the Hoosier Riverwatch Manual as an outline for her research. Mrs. Ostrognai concluded from her results that the water quality at the Imel site, upstream of the water treatment plant, was in "good" condition. The Baxter site, ^{immediately}downriver of the

water treatment plant, received a "good overall" rating, despite the fact that the Macroinvertebrate Index yielded a value placing it in the middle of the "fair" range. In contrast, the Water Quality Rating received a value placing it on the border of the "fair" to "good" level. There are many reasons that could possibly contribute to this slight discrepancy, including the following possibilities: contamination from the Madison County Water Treatment Plant, relative distances of the testing sites ^{from} to drainage sewers, out-dated chemicals, and physical differences in the characteristics of the sites tested. We feel that the incongruities are most likely due to differences in substrate, water speed, and water depth.

After we had already begun testing the many parameters of the river, it was reported that a chemical spill had occurred ^{upstream of} at the Madison County Water Treatment Plant. This created a nearly perfect experiment for our study, since we had pre-spill data, and would later be able to collect post-spill data. Reportedly, the spill killed over 117 tons of fish over a fifty-mile stretch downstream of the treatment plant. At present, the Guide Corporation is being prosecuted on nine charges for their activities related to this spill, which is claimed to be the worst environmental disaster in Indiana's history. ^{de la} (Bastide 2000)

It is my hypothesis that the quality of the West Fork of the White River is currently in "good" condition both upstream and downstream of the Madison County Water Treatment Plant. In order to ^{draw} make more accurate conclusions, a

few changes in experimental procedure have been made from the procedure used by Mrs. Ostrognai last year. It is our hope that these procedures will provide more accurate and reliable results, as well as provide valuable data on the results of the chemical spill that occurred in December 1999. These ^{included} changes testing at the Tipton site instead of Baxter, performing more accurate forms of testing, and restocking of outdated chemicals. In addition to the Macroinvertebrate Pollution Tolerance Index and Water Quality Rating, we also used Simpson's Index and Morisita's Index of Community Overlap to better assess the effects of the chemical spill at the treatment plant.

Imel, the site located about two and a half miles upstream from the Water Treatment Plant, will again be used in this study. The bank slope at this site is steep and severely eroded, revealing that the banks substrate consists mostly of silt. The actual riverbed consists mostly of gravel, combined with some rubble. The bed is U-shaped, and the water level varies greatly with rainfall. The surrounding area is used for residential housing. Shade covers approximately twenty percent of the water's surface, and the water moves at a velocity of .57 meters per second. (Barkes 1999)

The second site is now at Joe Tipton's place, about two miles downstream of the water treatment plant. Until this fall, the second testing site was directly off of Baxter St. The previously used Baxter site did not resemble the Imel site closely. A close resemblance is, however, necessary when making comparisons between two or more sites. Specifically, the Baxter

site had a silty substrate, ^{was} noticeably deeper, and flowed ^{more slowly} slower. It is thought that the low Macroinvertebrate count at this site was due to these differences.

The Tipton site resembles the Imel site in nearly every aspect except in bank characteristics. The slope of the bank is only a slight incline. The bank itself is covered in vegetation, and thus there is much less erosion taking place.

Methods

Testing began on October 22, 1999. Biweekly samples were taken until March 14, 2000. Two batteries of tests were completed in order to determine the quality of the water. The immediate chemical and physical properties of the water ^{are} are determined in the Water Quality Rating. The second type of testing involves collecting Benthic Macroinvertebrates to determine water quality. The Macroinvertebrate Pollution Tolerance Index, Simpson's Index, and Morisita's Index of Community Overlap were determined from the invertebrates samples collected.

Four of the chemical tests used to determine the Water Quality Rating ~~Were~~ were performed in accordance to the directions presented in the LaMotte Freshwater Aquaculture Test Kit Model #AQ-2. Tests performed using this kit include the following: water temperature, Dissolved Oxygen, Biodegradable Oxygen Demand, and pH. Other tests conducted at the site include measuring current flow and turbidity. Biodegradable Oxygen Demand, Fecal Coliforms, total solids, phosphate, and nitrate tests are performed in a lab setting.

The change in water temperature compares the temperature at the site to the temperature at a site approximately one mile upstream of the testing site. This test indicates any ~~temperature~~ ^{THERMAL} pollution that ~~would~~ ^{MIGHT} occur.

The pH is a measure of the hydrogen ion concentration at the site tested. The optimum value would be approximately 7.4. Water is ~~determined~~ ^{considered} as acidic if the pH is under 7, and basic if it is above seven.

Turbidity is a measure of the water's cloudiness. This year, we have been conducting these tests using a Turbidity tube. This measurement is taken by flooding the tube until a decal at the base of the tube is indecipherable. A reading of fifty centimeters or more is considered to be good.

The Dissolved Oxygen test measures the amount of gaseous oxygen that is present in a water sample. Adequate amounts of dissolved oxygen are extremely important to the health of the river. Organic matter requires a significant amount of this oxygen in order to break down completely.

Five days after the initial water tests are completed, it is necessary to perform a Biochemical Oxygen Demand test. This test follows the same procedure as the Dissolved Oxygen test, except that it is performed on a sample that has been kept in the dark since it was extracted from the river. This allows the organic matter to continue to decompose and use up oxygen, while eliminating any further production of ~~Oxygen~~ through the process of photosynthesis. The value received from the second test is subtracted from the

value of the initial Dissolved Oxygen Test to give the total Biochemical Oxygen demand over a five-day period. (Hippensteel)

Nitrate levels ~~are levels~~^{were} tested using an ion-selective electrode. Nitrate levels create a proportional voltage between the two posts of the electrode. Tests are performed on samples of known concentrations and a linear graph is constructed using these values. These voltage levels of the unknown samples may then be compared to the voltage levels of known samples and an appropriate concentration is determined (Venier).

Phosphate levels are determined using a UV-vis Spectrometer. The spectrometer measures the absorbance of the sample at a given wavelength. In much the same manner as the Nitrate tests, the known samples are tested and the results are recorded in a linear manner. The unknown samples are then tested and their results are plotted accordingly, revealing the concentration of the unknown samples (Wuerz 1993).

In order to determine the levels of fecal coliforms, a sample must be collected from the river and brought back to the lab. The sample is then plated on a Coliform selective plate and incubated for forty-eight hours at room temperature. After the incubation period, the *E. coli* colonies are counted. High levels of Fecal Coliforms are indicative of raw sewage contamination as well as the presence of infectious pathogens (Cunningham 438).

The Macroinvertebrate Index requires the sorting of organisms into one of four categories ranging from organisms of very high tolerance ^{to pollution} to very low tolerance. This provides a numerical value based on the number of orders present in each category. The Macroinvertebrate Index does not take into consideration the total number of individuals present.

Both Simpson's Index and Morisita's Index of Community Overlap use the same macroinvertebrate collection. While the specimens only needed to be classified to their orders for the Macroinvertebrate Pollution Tolerance Index, the new indices required classification of the specimens to at least the family level.

The Simpson's Index provides numerical values for dominance, which is the probability that two individuals randomly sampled from one site will be of the same family, and for diversity, which is the probability of an individual in the community encountering a member of another family (Simpson 1949). The actual equations are as follows:

Dominance

$$l = \frac{n_1(n_1-1)}{N(N-1)}$$

$$N(N-1)$$

l = Dominance

n_1 = # of individuals in a given family

N = Total # of individuals

Diversity

$$D = 1-l$$

D = Diversity

Total Solids are indicative of the level of erosion taking place directly upstream of the testing site. Evaporating the water from a beaker of the water sample and comparing this to the weight of the empty beaker complete this test. The resulting data is then converted to parts per million.

After the initial tests are completed, the results are used to determine an individualized q-value, which helps to ^{standardize} equalize the results received from the many parameters so that the results may be compared to each other.

Once the values have been ^{standardized} equalized, they are then multiplied by a weighing factor. This factor is used to determine the individual contribution to total water quality. After each of the contributions have been ^{computed} derived, the total of each factor is added together to determine the final total of the water quality rating.

The second type of testing requires the collection of Benthic Macroinvertebrates using the Kick Seine Method. These collections were used to determine the Macro ⁱⁿvertebrate Pollution Tolerance Index, Simpson's Index, and Morisita's Index of Community Overlap. A seine net is placed down ^{stream} of a three-foot by three-foot section, and the substrate is disturbed in order to remove the Benthic Macroinvertebrates from the substrate. The organisms are then caught in the ^{seine} Siene net. They are then removed and placed in a seventy percent mixture of ethyl alcohol to be stored for later identification and sorting.

Morisita's Index of Community Similarity is based on ~~the~~ Simpson's Index for dominance and diversity. It provides numerical data that refers to the probability that individuals randomly drawn from each of the two communities will be of the same family, relative to the probability of randomly selecting a pair of specimens of the same family from the second site. Values for this index range from zero, which indicates no similarity, to one, which indicates complete similarity. (Horn 1966)

Data

The data collected have been summarized in the following six charts and four graphs. It must be noted that due to unforeseen circumstances, values for Dissolved Oxygen and Biodegradable Oxygen Demand were discarded from October 22, 1999 through December 17, 1999. This was done after close examination of theoretically impossible data that occurred on these testing dates. It was later ascertained that the chemicals used to determine these parameters were outdated and therefore unreliable. Values for water quality ratings on the specified dates were derived according to the guidelines set in the Hoosier Riverwatch Manual.

Chart 3: Macroinvertebrate Pollution Tolerance Index: Upstream: Pre-spill

Upstream (Pre-spill)	10/22	11/5	11/22	12/3	12/17	1/14
Group One						
Mayfly (Heptageniidae)	48	37	16	7	13	18
(Ephemeraidae)						
(Baetidae)						
Caddisfly (Hydropsychidae)	141	209	40	54	12	106
Riffle Beetle (Elmidae)		6	1	1		
Rt. Handed Snails		1		9	2	
Dobsonfly (Corydalidae)			1			
Group Two						
Clam	1	13	4	12	13	3
Group Three						
Leech (Hirudinea)		7				
Grey Midges (Culicidae)		6				
Watermite (Hydrachnididae)	3					1
Black Fly (Simuliidae)						
Planaria						1
Group Four						
Bld. Worm (Chironomidae)			1		10	18
Other						
Lepidoptera (Pyralidae)	14	4				1
Coleoptera						
Nematomorpha						
Oligochaete						
Macroinvertebrate Pollution Tolerance Index	13	26	20	19	16	16

Chart 4: Macroinvertebrate Pollution Tolerance Index: Downstream: Pre-spill

Downstream (Prespill)	10/22	11/5	11/22	12/3	12/17	1/14
Group One						
Mayfly (Heptageniidae)	14	16	15	7	2	2
(Ephemeriidae)						
(Baetidae)						
Caddisfly (Hydropsychidae)	164	141	54	44	43	29
Riffle Beetle (Elmidae)	1	3				1
Rt. Handed Snails	13	12	4		19	4
Dobsonfly (Corydalidae)						
Group Two						
Clam	19	10	5	4	18	3
Sowbug		1				
Damselfly		1				
Group Three						
Leech (Hirudinea)						2
Grey Midges (Culicidae)	3	1				1
Watermite (Hydrachnididae)						
Black Fly (Simuliidae)		7				
Planaria						
Group Four						
Bld. Worm (Chironomidae)			6		4	
Other						
Lepidoptera (Pyralidae)	7			1		
Coleoptera				1	3	
Nematomorpha						
Oligochete						
Water Boatman (Hemiptera)					1	
Macroinvertebrate Pollution Tolerance Index	20	29	16	11	16	19

Chart 5: Macroinvertebrate Pollution Tolerance Index: Post-spill

Macroinvertebrates Post-spill	2/9 U	2/9 D	2/25 U	2/25 D	3/17 U	3/17 D	3/29U	3/29D
Group One								
Mayfly (Heptageniidae)	15				1			
(Ephemeridae)	23		5		13		4	1
(Baetidae)			6	5	5		9	2
Caddisfly (Hydropsychidae)	20		32	30	27	6	48	12
Riffle Beetle (Elmidae)	4		3		1			
Rt. Handed Snails				19	1	9		9
Dobsonfly (Corydalidae)								1
Group Two								
Clam	3		18	31	9	8	12	15
Group Three								
Leech (Hirudinea)				1		1		1
Grey Midges (Culicidae)	39		7	3		10	19	7
Watermite (Hydrachnididae)	1		1		1			
Black Fly (Simuliidae)			1			1		
Group Four								
Bld. Worm (Chironomidae)	5		1					
Other								
Lepidoptera (Pyralidae)	1				3	1	2	1
Coleoptera					4	4	3	6
Nematomorpha							1	
Oligochete							2	1
Macroinvertebrate Pollution Tolerance Index	20	18	26	19	21	17	13	23

Chart 6: Macroinvertebrate Pollution Tolerance Index: Averages

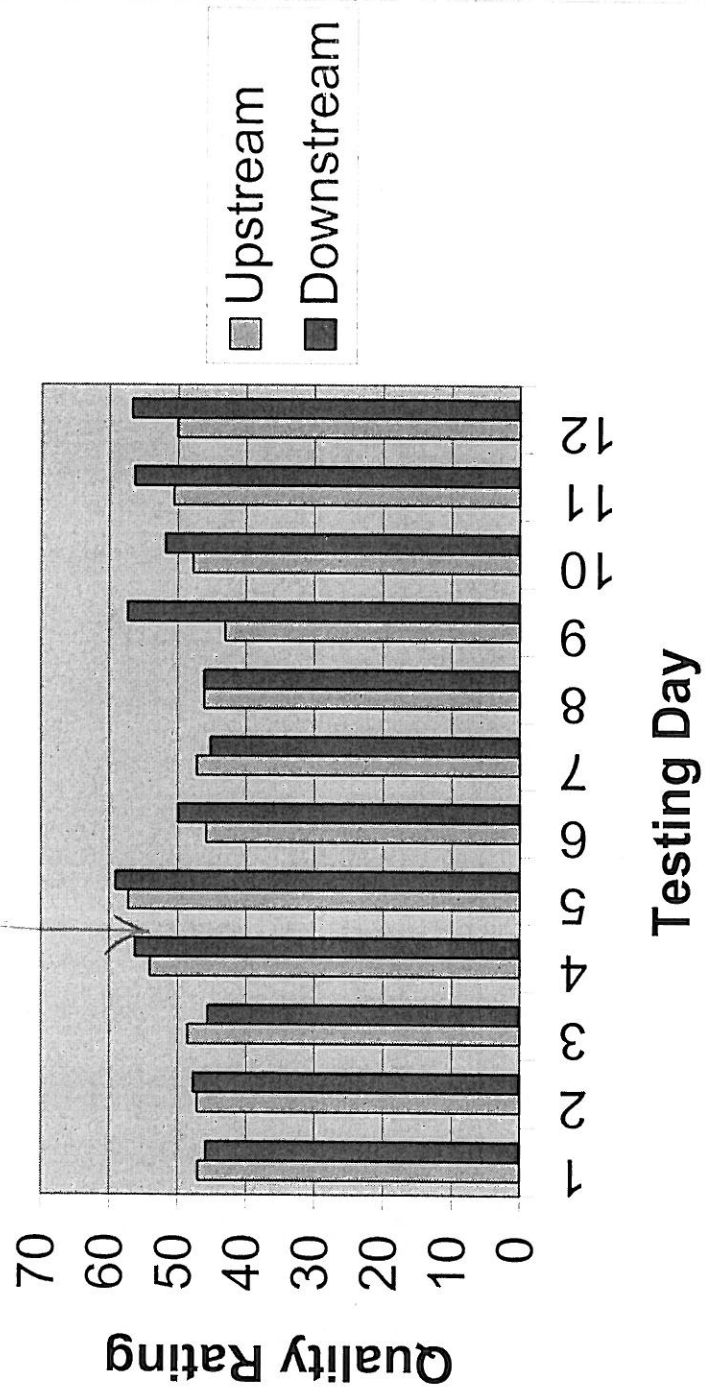
Pre-spill

	10/22	11/5	11/22	12/3	Avg.
Upstream (Imel)	13	26	20	19	19.5
Downstream	20	29	16	11	19

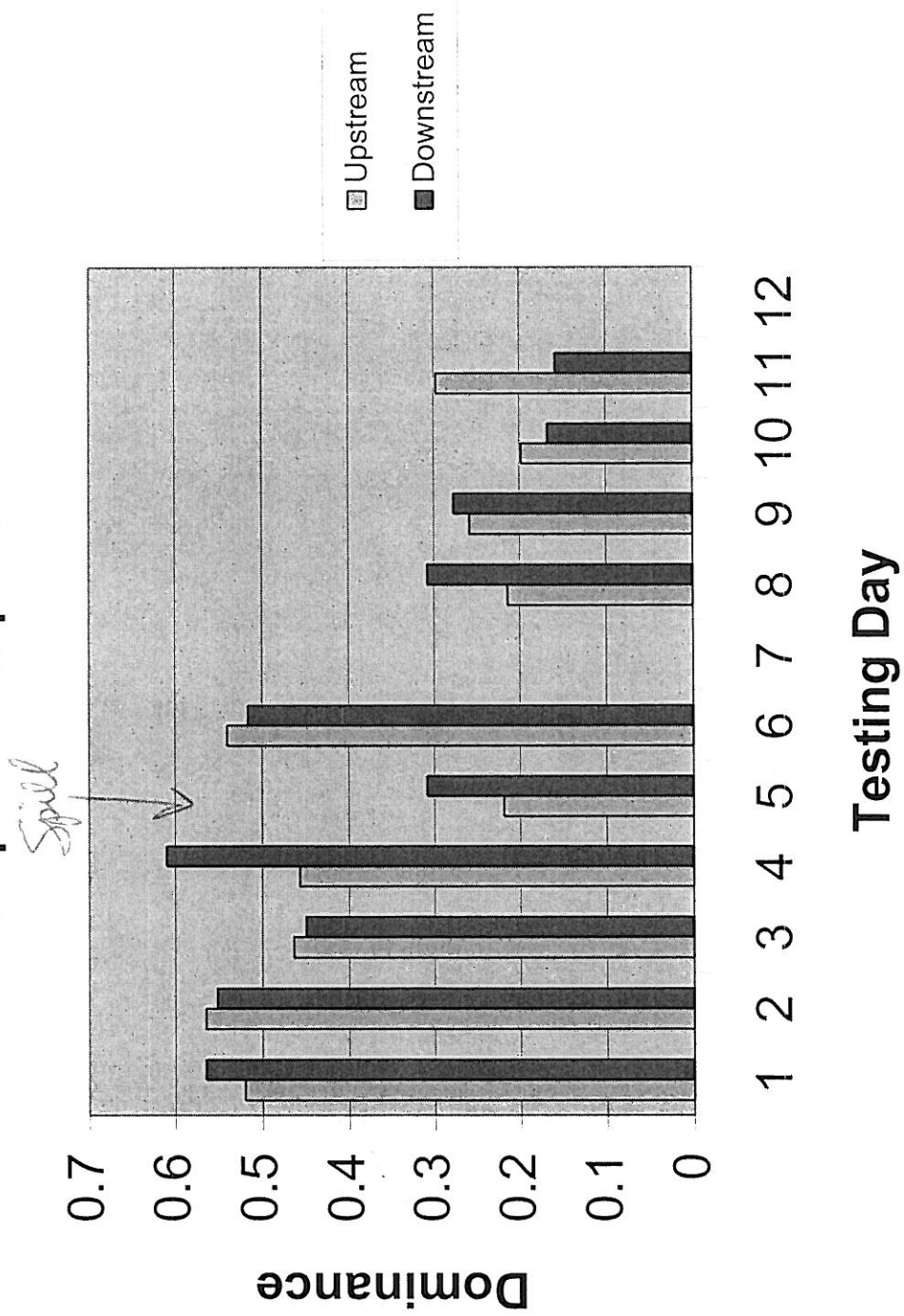
Post-spill

	12/17	1/14	1/28	2/9	2/25	3/17	3/29	Avg.
Upstream (Imel)	16	16	N/A	20	26	21	13	18.7
Downstream (Tipton)	16	19	N/A		19	17	23	18.7

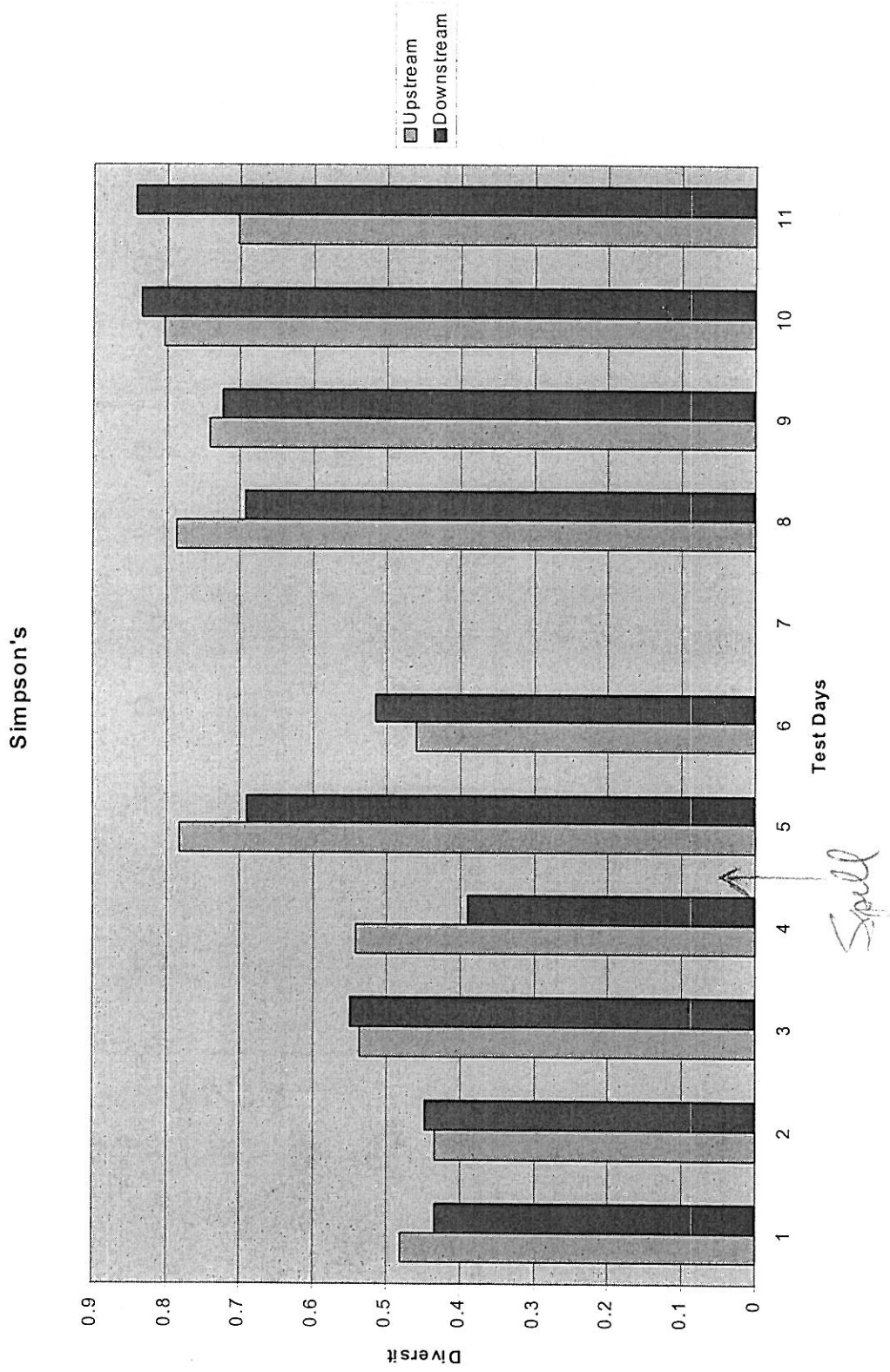
Graph 1: Water Quality Rating



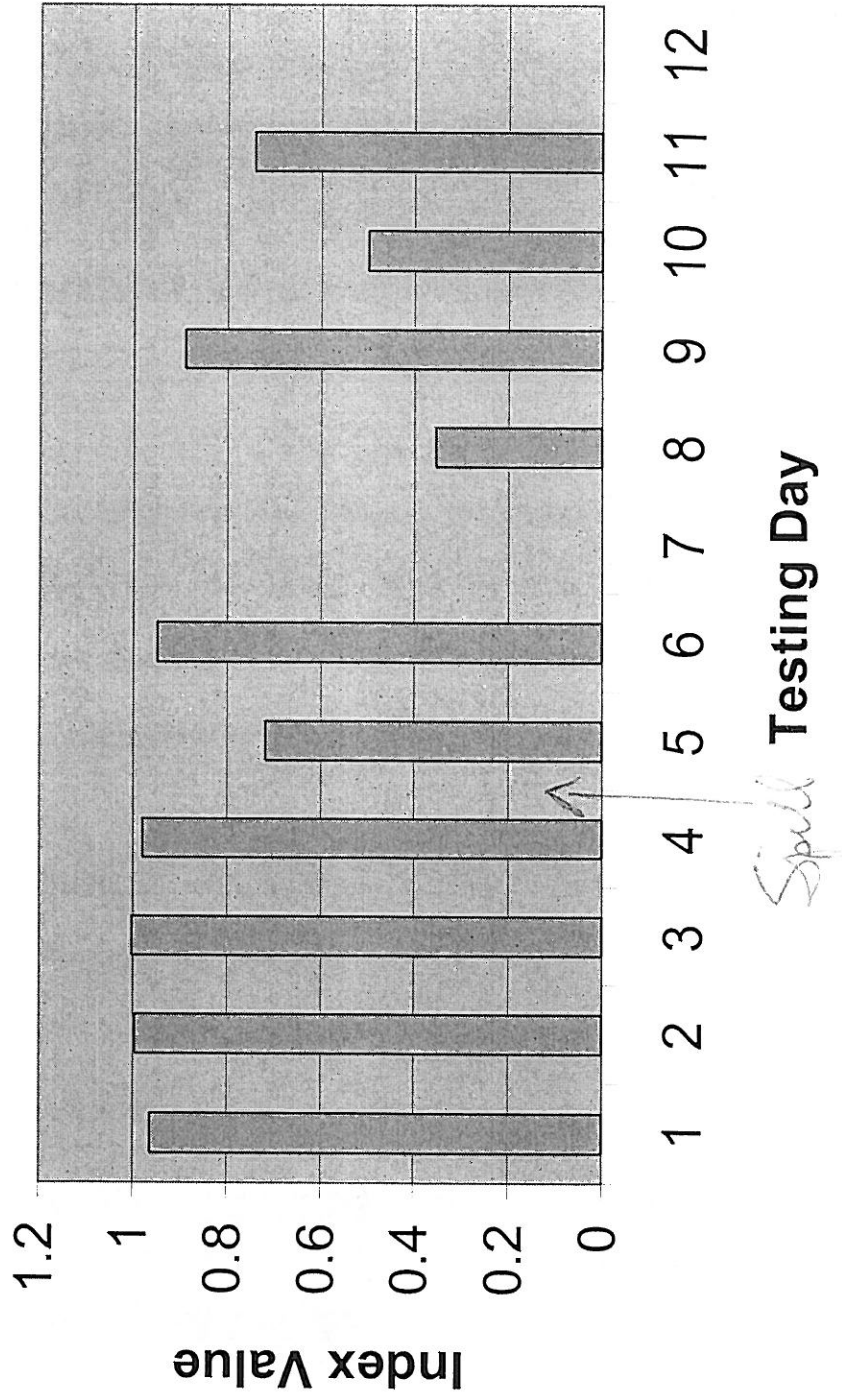
Graph 2: Simpson's Index



Graph 3: Simpson's Index: Diversity



Graph 4: Morisita's Index of Community Similarity



Discussion

The Water Quality Ratings were completed for each individual day tested. The average was taken from the Water Quality Ratings for each individual testing date. The Water Quality Rating yielded ^{mean} results of 49.6 upstream (Imel), and 51.55 downstream (Tipton). These values indicate river quality in the "bad" to "medium" range. The downstream data was further divided into pre-spill and post-spill categories. The average downstream pre-spill average was 48.9, and the post-spill average was 51.55. A t-test was run, however, the results showed there was no significant difference. ($p > ?$)

*last one
sto. from
year
ago.* These values are not consistent with the ^{mean} corresponding Macroinvertebrate Index, which recorded values of 71.2 upstream and 69.1 downstream (Barkes 1999). While the values are much lower this year, we believe them to be more accurate. Due to increased accessibility to testing equipment and methods, we were able to test all parameters outlined the Hoosier Riverwatch Manual, whereas they previously were not.

The Macroinvertebrate Pollution Tolerance Index suggested a much better prognosis of the river's water quality. Both the upstream average of 19 and the downstream average of 18.8, indicate values in the "good" range. *Bill's
data* Again, the downstream averages were broken into pre-spill and post-spill categories. The pre-spill data averaged 19, and the post-spill averaged 18.8. A t-test was run, and again, there proved to be no significant difference between

p > ?
the two sets of data. The results of this data are supported by last year's index at the Imel site, which scored in the "good" range (18). (Barkes 1999).

The Simpson's Index compares dominance and diversity. As is seen in Graph 2 and 3, dominance decreases noticeably after the spill and diversity increases. This is not an indication that the spill had any effect on the water quality, because the change is seen both upstream and downstream. In order to complete this index, it is desirable to classify the specimens to at least the family level. However, the original goal of the macroinvertebrate collection was to provide data for the Macroinvertebrate Pollution Tolerance Index, which only requires classification to the individual order of each specimen. This change really only affected the mayfly order of invertebrates. Since we gathered specimens from three different families within that specific order, the overlap index for all dates prior to this change would be significantly higher. *at least somewhat inflated*

Morisita's Index, which measures community overlap, decreases significantly after the fourth testing date. While this coincides with the date of the chemical spill, it *may be due in part to* is believed to be due to a change of classification among the invertebrate samples, as well as the classification problem mentioned previously. Upon examination of the data in Charts three through five, the decrease was determined to be a direct result of a decrease in the green caddisfly population. The decrease occurred on testing dates four through

twelve, and cannot be explained by the hatching season of green caddisflies.

When this is taken into consideration, the actual overlap is probably much better than the results indicate. If these conditions are indeed the cause of the decrease in overlap, there is little evidence to support any negative effects of the chemical spill on the ~~water quality~~. *invertebrate populations*

In fact, if it were not for the 117 tons of fish that have been reported killed as a result of the chemical contaminants (Bastide 2000), it is highly unlikely that the spill would have been detected. According to our data, the spill had little effect on the macroinvertebrate population. This should enable the river to recover in a more timely manner than otherwise expected.

** According to anecdotal evidence, wildlife in the riparian zone*

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The Water Quality of the White River

Sarah Ketchum and Frank Pianki

Abstract

Due to the government's increased involvement with the problem of water pollution, wastewater treatment has drastically improved the conditions of surface waters in the United States. In December of 1999, Guide Corporation in Anderson, Indiana is alleged to have killed thousands of fish and other aquatic organisms by releasing harmful chemicals. Throughout the winter and spring of 2001, biweekly collections of benthic macroinvertebrates from the White River upstream (Imel) and downstream (Tipton) of the spill were taken. Using these collections, a Pollution Tolerance Index, Simpson's Index of dominance, and Morisita's Index of Community Overlap were calculated (Simpson 1949). Based on the information gathered, the river appears to have fully recovered from the spill in December of 1999.

Introduction

→ Pollution is defined as "any foreign substance in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water" (Warren 1971). Because of the federal government's lack of involvement for the first half of the twentieth century, water conditions had become increasingly poor in the United States. It was not until 1956, when the Water Pollution Control Act was passed, that any federal actions were implemented in the fight for cleaner water (Warren 1971). This bill allowed pollution control programs to be enacted, and also provided for an increase in funds for states to create water protection plans and develop research projects (Warren 1971). In 1972 the U.S. Congress enacted the Clean Water Act, which mandated that the EPA protect America's bodies of water.

W, O
Pollution
Act
(Control)

Much of the progress made in water quality over the past quarter century has been due to the Clean Water Act and its aim to improve wastewater treatment (IDEM 2000). Wastewater treatment plants use biological and chemical processes to purify contaminated water flushed to their facilities through sewer lines from households, buildings, and industrial plants. There are three levels of wastewater treatment. Primary treatment of wastewater includes the removal of the insoluble matter from the water (Manahan 1991). Secondary waste treatment involves the biological oxidation of materials in the liquid sewage (Warren 1971). This treatment can be done by using either a trickling filter or by activated sludge. When using a trickling filter, the wastewater is passed over rocks covered with microorganisms, which then degrade the organic matter (Manahan 1991). When using the latter method, the wastewater is placed into a large tank containing microorganisms (Bunce 1994). The water is then aerated in order to keep alive the microorganisms, which in turn degrade the organic matter (Bunce 1994). Nitrification of the wastewater is considered a form of tertiary treatment. In this process, nitrifying bacteria oxidize ammonium ions to nitrates (Manahan 1991). Other forms of tertiary waste treatment, or advanced waste treatment, involve the removal of several contaminants from the secondary effluent (Manahan 1991). After the treatment procedure, the clean water is discharged into rivers and streams. In the state of Indiana, persons expelling treated water into a body of water must obtain a National Pollutant Discharge Elimination System permit from the Indiana Department of Environmental Management. This permit limits the types and amounts of contaminants one can release into the environment. Water pollution control has become an increasingly important

topic in the public realm, leading to the formation of many water management agencies whose goals are to protect and preserve valuable water supplies.

Hoosier Riverwatch, a state-funded water quality monitoring service, is responsible for creating public awareness in Indiana regarding water quality and other related issues. This program utilizes and trains volunteers to monitor Indiana's streams. According to the Hoosier Riverwatch Volunteers Water Quality Monitoring Streams Manual, the organization's goals include "educating the public, providing information regarding water quality, and encouraging local action in order to bring about improvement of watersheds" (Hippensteel 1997).

The White River Basin encompasses and drains 11,349 square miles of central and southern Indiana (Fenelon 1998). Three-fourths of the approximately 2.1 million people living in the White River Basin are concentrated in the northern region. The climate of the area is considered a humid continental climate and is characterized by well-defined winter and summer seasons accompanied by large annual temperature changes (Schnoebelen 1999). Approximately seventy percent of the land-use area is agricultural, especially for soybean and corn production in the northern, southwestern, and southeastern portions of the basin (Fenelon 1998).

In December of 1999 a suit was filed against Guide Corporation of Anderson for reportedly releasing more than 1.5 million gallons of toxic wastewater into the White River (Bremen 1). In Guide's plating plant, auto parts are coated with heavy metals such as copper, nickel, and chrome. After the initial plating, each part is rinsed with a high-pressure hose. The rinse water is then collected into large holding tanks for processing to remove the heavy metals. This water is treated with a product known as DMDK (sodium

dimethyldithiocarbamate) or HMP 2000. Sodium dimethyldithiocarbamate is a chemical that causes heavy metals to precipitate out of the water. This chemical actually “traps” the metal and keeps it from being dissolved in the water (Wallace pers. comm.).

According to the press release from the office of Governor Frank O’Bannon, the manufacturer and distributor of HMP 2000 had cautioned for years that the chemical was harmful to aquatic life and should not be discharged into the city sewer system (Bremen 2000). The oxidation of HMP 2000 allows another molecule of HMP 2000 to bind and ultimately form thiram (Wallace, pers. comm.). Guide was under an agreement with General Motors to clean and permanently close the plant’s plating and treatment facilities by December 31, 1999. Guide rescheduled the deadline for December 22, 1999, in order to allow enough time for shutdown before the plant’s two-week Christmas break.

Normally, Guide uses between twenty and thirty gallons of HMP for the treatment of 150,000 gallons of wastewater. This number is low enough to keep Guide within the allotted range of heavy metal discharge. Last December, however, due to the excessive amount of heavy metal contaminants in the water prior to early shutdown, Guide increased the amount of HMP to 1000 gallons to treat 155,000 gallons of wastewater (Bremen 2000). The sodium dimethyldithiocarbamate then formed tetramethylthiurum, also known as thiram. According to Guide’s logbooks, the company then discharged the thiram-laden water directly into the city’s wastewater treatment plant for approximately ten days (Bremen 2000). This wastewater destroyed the nitrifying bacteria at the Anderson wastewater plant, whose normal function is to oxidize ammonium ions into less harmful nitrates. Thus, the untreated water containing harmful contaminants dispersed into the White River. Because the nitrifying bacteria were destroyed, ammonia

levels spiked and were reported well above normal. Consequently, many dead fish were found downstream of the Waste Water Treatment plant. While scientists are still unsure exactly what killed the fish, many believe a combination of ammonia, thiram, and carbon disulfide were responsible. The Guide spill spanned a fifty-mile stretch from Baxter St., Anderson to Raymond St., Indianapolis. Within a month of the spill, a reported one hundred and seventeen tons of fish were killed (Bremen 2000). Currently, Guide Corporation is being prosecuted for connection with the spill.

In the research under consideration, samples of benthic macroinvertebrates from the White River were collected. Benthic macroinvertebrates can be seen with the naked eye, and spend at least part of their life in or on the bottom of a body of water. Because many of these macroinvertebrates have varying levels of tolerance to pollution, they may serve as indicators of water quality. When pollutants are present, pollution intolerant organisms will decrease, while pollution tolerant organisms will increase. Monitoring macroinvertebrates is desirable because they are fairly immobile and therefore easy to sample. In addition, they can provide continuous information regarding water quality. The Water Quality Index is calculated by separating collected organisms into different groups of taxa. Each taxa corresponds to a specific level of pollution tolerance. The number of taxa groups in each level is then totaled and multiplied by a specific number. The sum of all four pollution tolerance levels is assessed, and one final number is obtained. This number assigns the site a water quality value from poor to excellent. If the river has recovered from the 1999 spill, there should be no significant differences between Macroinvertebrate Water Quality Indices calculated for the sites upstream and downstream of where the spill occurred.

Materials and Methods

Collections were taken from two communities, known as the Imel site (located upstream of the water treatment plant), and the Tipton site (located downstream of the plant). The 1999 chemical spill occurred between these two testing locations. The Imel streambed consists of large rocks and gravel, and the bank is severely eroded. The streambed is U-shaped, and shade covers approximately twenty percent of the water's surface. Similarly, the Tipton streambed also consists of large rocks and gravel; however, there is little or no erosion at the testing site.

Throughout the winter and spring months, macroinvertebrate collections were taken approximately every other week using the Kick Seine Method. In this procedure, a three-foot by three-foot square made of PVC pipe weighed down with sand was laid in a flat area on the river bottom in a riffle. A seine net was placed directly downstream of the square so that organisms would be caught in the fine mesh. While two people held the seine firmly in place, another individual scrubbed all rocks 2 inches or more in diameter to release microorganisms. After a five-minute collection period, the area within the square was disturbed to ensure all organisms were gathered. Following this, the net was carefully lifted from the water and placed on dry land. The benthic macroinvertebrates were removed using tweezers and placed in jars with 70% ethyl alcohol and stored.

After returning to the lab, the macroinvertebrates were identified under a dissecting microscope. Each organism was placed in one of four categories based on its pollution tolerance. The higher the group number, the higher the pollution tolerance

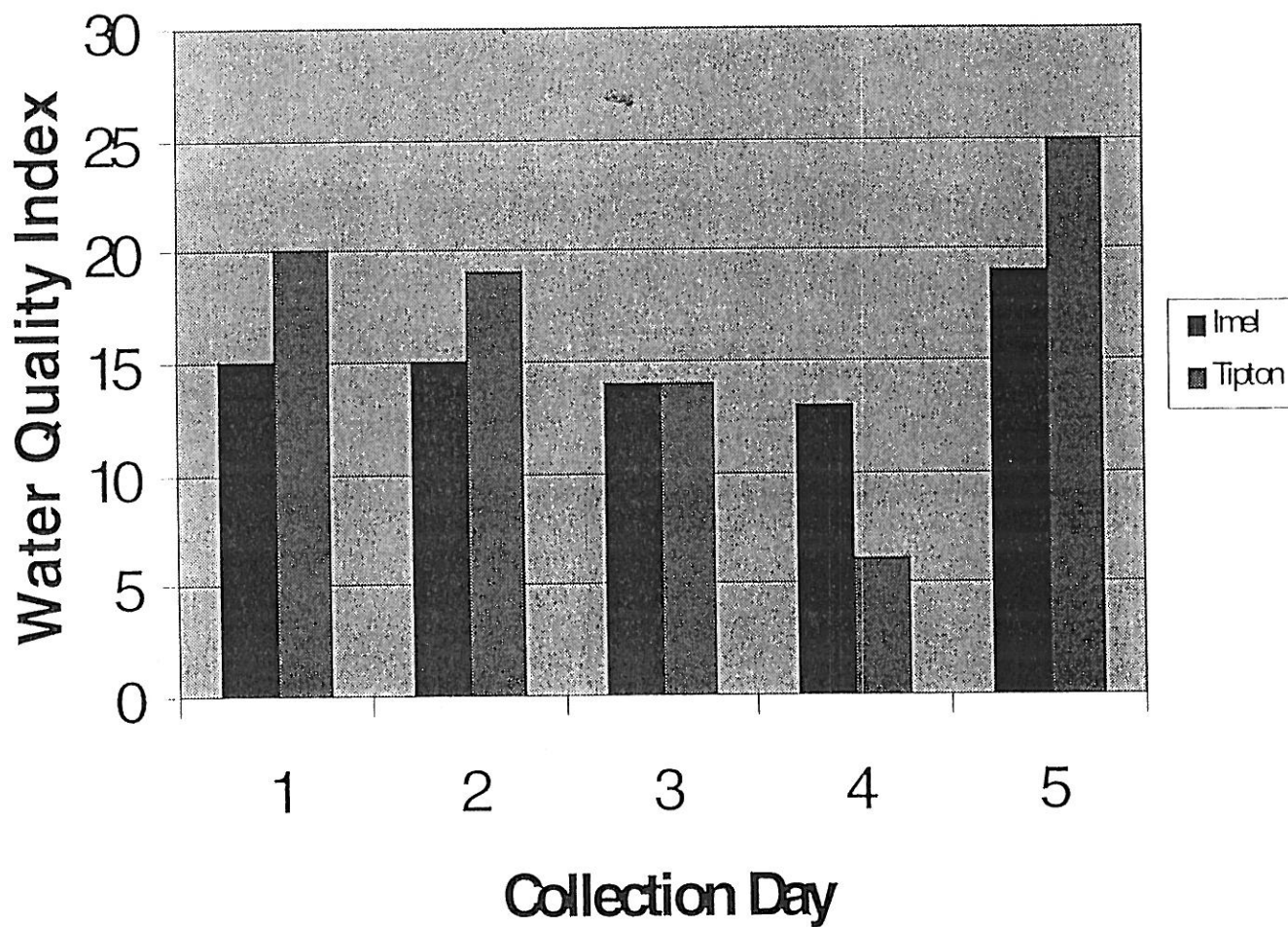
level. Using the Pollution Tolerance Index data sheet provided in the Hoosier River Watch Manual, a water quality index value, ranging from poor to excellent, was calculated. The Simpson's indices of dominance and diversity provide numerical values for community dominance and diversity (see appendix A for equations). Dominance refers to the probability that two individuals randomly sampled from one site will be of the same family (Simpson 1949). Diversity is the number of times one would have to take pairs of individuals at random from the entire aggregation to find a pair from the same species (Simpson 1949).

Using numerical values from the previous equations, Morisita's Index of Community Overlap was assessed (see appendix A for equations). This method provides a number that compares two communities and the probability that two randomly selected individuals from two different communities will be of the same species. The value may fall anywhere between zero, indicating no similarity, and one, indicating that the communities are identical (Horn 1966).

Results

Once the macroinvertebrates were identified, the Pollution Tolerance Index data form was completed. Results for the Imel site displayed values ranging from 13 to 19, with an average of 15.2. According to the form, the Imel community scored at the high end of the "fair" range. The water quality information was placed in Graph 1, and shows no notable fluctuation between testing days 1 and 5. Water quality values were similarly calculated for the Tipton community. The downstream values ranged from 6 to 20, with an average of 16.8, also placing the Tipton community at the high end of the "fair" range. Again, the information was placed in Graph 1, and no notable trend was observed. Based

Graph 1-Water Quality Index



Day 1=1/22, Day 2=2/5, Day 3=2/19, Day 4=3/19, Day 5=3/30

on this data, there was no significant difference between water qualities at the two sites (2-tailed dependent t-test, $\alpha=0.05$).

Dr. Keck
Tipton

Chart 1. t-Test Values based on Water Quality Index

Water Quality Values		
Date	Imel	Tipton
1/22/01	15	20
2/5/01	15	19
2/19/01	14	14
3/19/01	13	6
3/30/01	19	25
Average	15.2	16.8
t=.67		
P<0.05		

Chart 2. t-Test values based on Diversity

Diversity

Date	Imel	Tipton
1/22/01	0.55	0.63
2/5/01	0.63	0.6
2/19/01	0.67	0.65
3/19/01	0.8	0.6
3/30/01	0.84	0.8
Average	0.7	0.66
t=.934		
P<0.05		

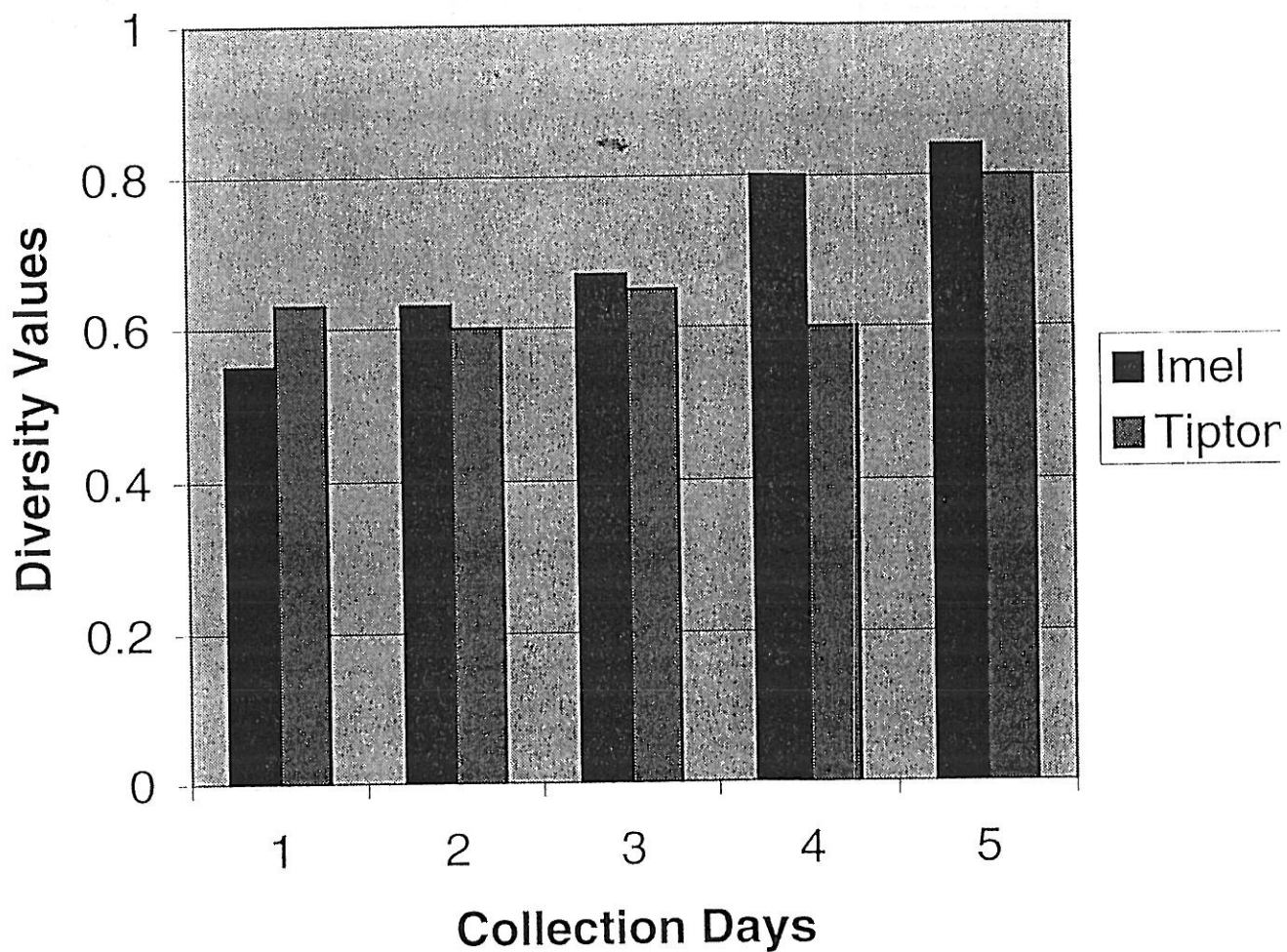
To calculate the dominance and diversity for each collection date, the macroinvertebrates were identified to the family level. First, the Simpson's Index was used to calculate dominance values. After this number was obtained, diversity was

1st growth - end of winter
2nd growth - end of spring
3rd growth - end of summer
4th growth - end of fall
5th growth - end of winter
6th growth - end of spring
7th growth - end of summer
8th growth - end of fall
9th growth - end of winter
10th growth - end of spring
11th growth - end of summer
12th growth - end of fall
13th growth - end of winter
14th growth - end of spring
15th growth - end of summer
16th growth - end of fall
17th growth - end of winter
18th growth - end of spring
19th growth - end of summer
20th growth - end of fall
21st growth - end of winter
22nd growth - end of spring
23rd growth - end of summer
24th growth - end of fall
25th growth - end of winter
26th growth - end of spring
27th growth - end of summer
28th growth - end of fall
29th growth - end of winter
30th growth - end of spring
31st growth - end of summer
32nd growth - end of fall
33rd growth - end of winter
34th growth - end of spring
35th growth - end of summer
36th growth - end of fall
37th growth - end of winter
38th growth - end of spring
39th growth - end of summer
40th growth - end of fall
41st growth - end of winter
42nd growth - end of spring
43rd growth - end of summer
44th growth - end of fall
45th growth - end of winter
46th growth - end of spring
47th growth - end of summer
48th growth - end of fall
49th growth - end of winter
50th growth - end of spring
51st growth - end of summer
52nd growth - end of fall
53rd growth - end of winter
54th growth - end of spring
55th growth - end of summer
56th growth - end of fall
57th growth - end of winter
58th growth - end of spring
59th growth - end of summer
60th growth - end of fall
61st growth - end of winter
62nd growth - end of spring
63rd growth - end of summer
64th growth - end of fall
65th growth - end of winter
66th growth - end of spring
67th growth - end of summer
68th growth - end of fall
69th growth - end of winter
70th growth - end of spring
71st growth - end of summer
72nd growth - end of fall
73rd growth - end of winter
74th growth - end of spring
75th growth - end of summer
76th growth - end of fall
77th growth - end of winter
78th growth - end of spring
79th growth - end of summer
80th growth - end of fall
81st growth - end of winter
82nd growth - end of spring
83rd growth - end of summer
84th growth - end of fall
85th growth - end of winter
86th growth - end of spring
87th growth - end of summer
88th growth - end of fall
89th growth - end of winter
90th growth - end of spring
91st growth - end of summer
92nd growth - end of fall
93rd growth - end of winter
94th growth - end of spring
95th growth - end of summer
96th growth - end of fall
97th growth - end of winter
98th growth - end of spring
99th growth - end of summer
100th growth - end of fall

calculated by subtracting one from the dominance value. Data ranged from .55 to .84, with an average of .70 at the Imel community. Similarly, the Tipton location had values from .60 to .80, and an average of .66. The diversity values for both sites were placed in Graph 2. The Imel site showed an increase in diversity, while the Tipton community stayed relatively constant. There was no significant difference in diversity between the Imel and Tipton communities (2-tailed dependent t-test, $\alpha=0.05$).

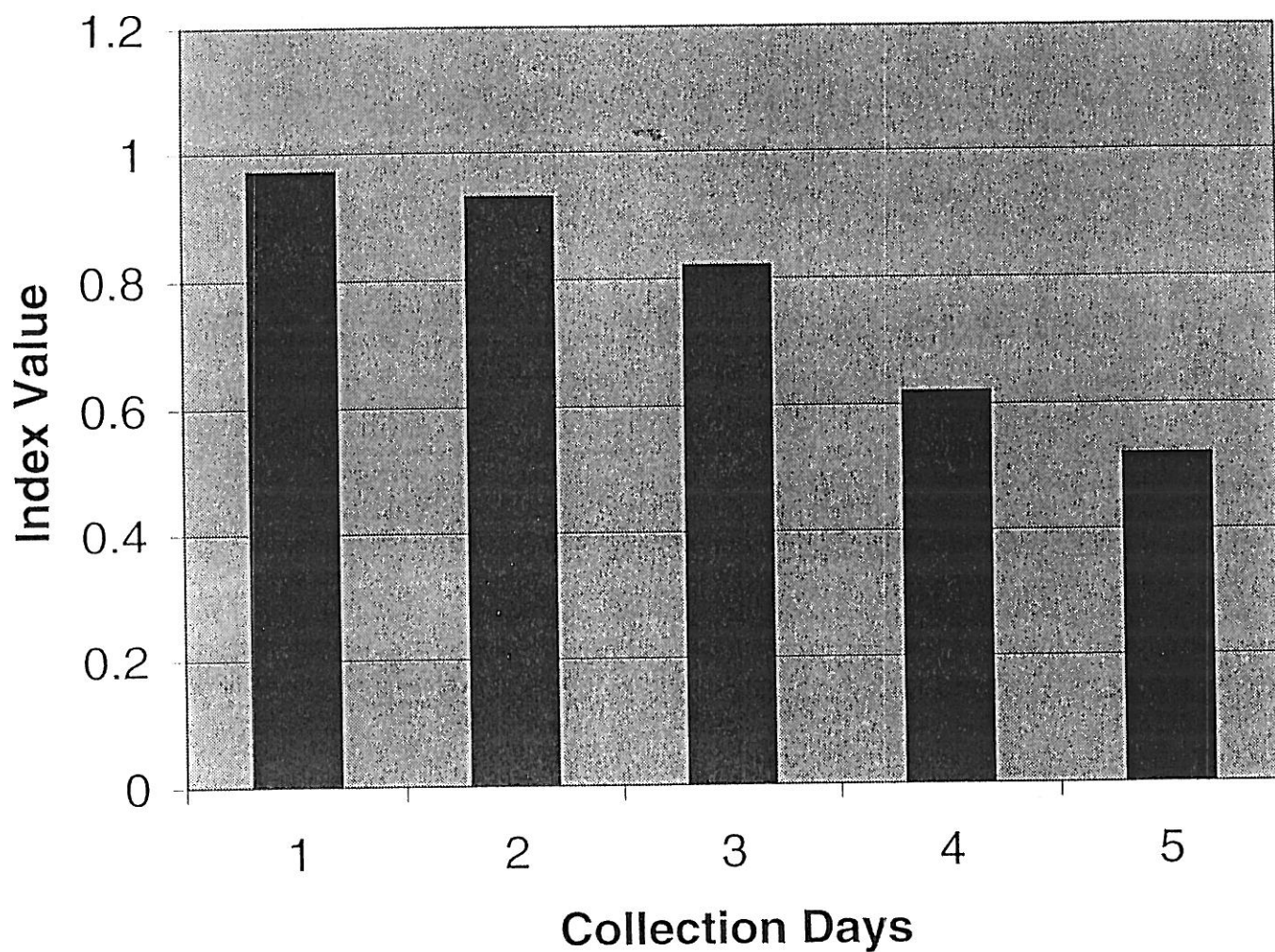
Morisita's Index of Overlap was computed for each collection date using numbers obtained from the Simpson's Index results. The values ranged from .52 to .97. This data was then placed in Graph 3 where a decreasing trend was noted.

Graph 2-Diversity



Day 1=1/22, Day 2=2/5, Day 3=2/19, Day 4=3/19, Day 5=3/30

Graph 3-Morisita's Index of Overlap



Day 1=1/22, Day 2=2/5, Day 3=2/19, Day 4=3/19, Day 5=3/30

Discussion

The Water Quality values based on macroinvertebrate collections indicate the White River has recovered from the spill that occurred two years ago. While it was originally thought the Imel site would be healthier, the data indicates that both sites are similar in respect to macroinvertebrate communities. Although previous sample dates are relatively consistent, the fourth day of collection at the Tipton site showed a sharp decrease in Water Quality. According to the logbook, a large amount of debris from a construction site was noted. In addition, water levels were extremely high, making sampling difficult. Graph 1 also showed an increase in water quality values on the fifth collection day at Tipton. Previous notes taken that day indicate that the water was clear and low. Because of these optimal conditions, collections were taken further from shore where there may have been larger diversity and abundance of organisms. Based on the values obtained, there seemed to be no difference in water quality and diversity between the two communities. Essentially, a collection taken from the Imel site could have been taken from the Tipton site.

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Appendix A

Dominance

$$l = n l (n l - 1) / N(N - 1)$$

l = Dominance

$n l$ = # of individuals in a given family

N = Total # of individuals

Diversity

$$D = 1/l$$

D = Diversity

Morisita's Index of Overlap

$$I_m = 2 \sum x_i y_i / (l_1 + l_2) N_1 N_2$$

I_m = Morisita's Index of Overlap

X_i = number of individuals in each family of community 1 (Imel)

Y_i = number of individuals in each family of community 2 (Tipton)

N_1 = number of individuals in community 1 (Imel)

N_2 = number of individuals in community 2 (Tipton)

Appendix B

Imel Site

Date	Water Temp.	Turbidity	Current Avg.	Water Quality Rating
1/22/01	1°	>50cm	34s	15
2/5/01	2.5°	>50cm	37s	15
2/19/01	2°	42cm	35s	14
3/19/01	6°	>50cm	34s	13
3/30/01	7°	>50cm	34s	19

Tipton Site

Date	Water Temp.	Turbidity	Current Avg.	Water Quality Rating
1/22/01	1°	>50cm	45.6s	20
2/5/01	2.5°	>50cm	29.3s	19
2/19/01	2.5°	>50cm	32.4s	14
3/19/01	6°	>50cm	31.3s	6
3/30/01	8°	>50cm	41.6s	25

Appendix C

Macroinvertebrates	1/22 I	1/22 T	2/5 I	2/5 T	2/19 I	2/19 T	3/19 I	3/19 T	3/30 I	3/30 T
Group one										
Mayfly(Heptageniidae)	1	8		1			1			5
(Potamanthidae)							1		5	
Caddisfly(Hydropsychidae)	11	17	6		8		2		13	7
Dobsonfly(Corydalidae)									1	
Riffle Beetle(Elmidae)		1			2	1			2	11
Water Penny(Psephenidae)										1
Rt. Handed Snail	4		1	5	1					2
Group two										
Damselfly(Lestidae)				2						
Clams/Mussels	20	5	16	3	24	2	4		22	4
Group three										
Gray midge(Chironomidae)	69	51	38	19	25	11	4	15		13
Planaria		1		2		3		8		
Leech(Hirudinea)						1		4		
Group four										
Lt. Handed Snail		6								
Aquatic Worms	1		3		1	1				
Blood Midge			1							

A - Very good report

“Biological, Chemical, and Physical Monitoring of the West Fork of the White River”

October 2 & 9, 2002

Wendy Klooster, Eghe Osemwota, and Ben O’Neal

Biology 3070—Dr. Daniel F. Ippolito

I. Introduction:

Water is a unique component of the ecosphere because, unlike the ground that it flows in, through, around, and on, it is not the sole property of any one entity. As a result, the care and protection of this priceless resource is a shared responsibility. The sustainable use of our nation’s rivers in particular is dependent on all those who call this country home, not only in the direct manner that we affect the water, but also in the indirect way that we interact with the persons and groups that have a direct effect on the river, such as industrial corporations and agricultural operations. One way that we as local citizens and scientists can do that is by monitoring and reporting on the quality of the water in surrounding areas.

The detrimental release of hazardous ammonia and chromium into the West Fork of the White River in December of 1999 has raised awareness among local residents in recent years concerning the need to monitor the ongoing quality of the river. There are many factors that play a role in the quality of the White River, but one of the largest local entities affecting the overall quality of surface water in the Anderson area is the wastewater treatment plant. The process of treatment at this site begins with the collection of water through an underground network of pipes stemming from homes, businesses and city streets. The Primary Dewey Street plant provides treatment of the raw wastewater main stream, upon which the primary effluent is then pumped to the Main Gene Gustin Way facility (see Image I) for secondary treatment by the activated sludge process. The sequence of unit operations includes bar screens, raw sewage pumping, grit removal, comminution, flow measurement, primary clarification and primary effluent pumping (www.cityofanderson.com/wpcu). A portion of the clean water is discharged

into the West Fork of the White River. The plant is limited in the types and amounts of contaminants it can release by the regulations of the Indiana Department of Environmental Management (IDEM). In spite of these legislative regulations, there is still a need for monitoring of the output of this plant by comparing the conditions of water upstream and downstream of the site.

Image I, "Aerial View of the Main Gene Gustin Way Wastewater Treatment Facility of Anderson, Indiana"



The Hoosier Riverwatch is a state-sponsored water quality monitoring initiative that addresses this and many more monitoring priorities by enlisting the help of local volunteers to accomplish the larger goals of "improving stream stewardship ethics, encouraging local action to improve watershed management, educating the local community about the relationship between land use and water quality, and providing information to state and local officials that will assist with future planning for Indiana's streams" (Hippensteel 1997). Dr. Daniel F. Ippolito and his Biology 3070 students have undertaken an annual study that is aimed at furthering the accomplishment of the final one of these tasks, particularly as it relates to the effect that the wastewater treatment plant has on the river. The lab involves trend monitoring through the testing of a number of the biological, chemical, and physical factors that affect and indicate the overall quality of the White River. Specifically, a water quality index value is obtained through

the sampling of the benthic macroinvertebrate population. Biological stream monitoring is dependent on the concept of different species having different reactions to varying amounts of pollution. The presence or absence of these indicator organisms serves as an indirect measure of the amount of pollution present in the water. In addition to their sensitivity to the changes in the river's overall "ecological integrity", benthic macroinvertebrates have numerous other advantages when it comes to the pursuit of indications of stream health (Hippensteel 1997). Their abundance and lack of mobility make them easy to sample. They offer an ongoing, continuous reflection of the river's physical and chemical conditions over time, and finally, they are a "critical part of the aquatic food web", which means the condition of their community reflects the stability and diversity of the larger aquatic food web (Hippensteel 1997).

This lab also includes the monitoring of two components of the water's chemical quality. The amount of total phosphate (PO_4) and the concentration of nitrate (NO_3) in the surface water serve as partial indicators of the river's chemical health. Both of these compounds are essential parts of any river's chemical makeup, but can become harmful at too great a concentration.

Treatment plants may or may not be required to remove ~~nitrogen~~ ^{PHOSPHATE} from their discharge. ^{depending on whether} Failure to ^{there is standing water} do so can result in an excess of nitrogen in the river water if not regulated. While nitrate ^{in the} surface water comes mostly from fertilizer runoff, it can also come from wastewater and ^{nearly} plant/animal decomposition. Excess nitrate concentrations can lead to accelerated algae growth, decreased plant and animal diversity, clogged water intakes, and contaminated drinking water, which is harmful to infants. Nitrate is odorless and tasteless, and therefore requires chemical testing to determine excess levels of greater than 10mg/L. The amount of phosphate needed for life is small, and excessive levels can easily develop. Phosphate contamination is derived from inorganic forms of Orthophosphates found in fertilizers, human and industrial waste, and soil

erosion. Excess phosphates can result in increased eutrophication of rivers through increased plant and algae growth, which in turn can cause decreased levels of dissolved oxygen (www.ga.usgs.gov).

Finally, this lab involved the measuring of physical components of the river including turbidity, temperature, and rate of flow. These values allow for a simple physical comparison of the two areas from year to year, but also when combined with measures of dissolved oxygen, fecal coliforms, pH, B.O.D. 5, total phosphate, nitrate, and total solids can yield an overall water quality value and rating (Hippensteel 1997).

II. Materials:

Kick seine, quadrat sampler (three foot by three foot frame PVC frame weighed down with sand, waders (chest and hip), two jars of 70% ethyl alcohol, tape measure, orange, stopwatch, thermometer, turbidity tube, forceps, dissecting microscopes, Ward's Instant Water Quality Nitrate Test Kit (1-5 ppm range, Cat# 21W9007), and LaMotte Low Range Phosphate in Water Test Kit (Model PAL, Code 3121-01).

Methods:

First, a "typical riffle" was located at the upstream Imel Road site. After wading into the water and approaching the experimental area from downstream, a three foot by three foot quadrat sampler was placed on the bottom of the stream. The kick seine was placed at the downstream side of the area, perpendicular to the flow of the water, but with a slight downstream angle. The net was held in place by two people, making certain that the bottom edge was lying firmly against the bed. The other students then picked up all of the rocks having an approximate diameter greater than two inches, and brushed them off by hand below the surface of the water, trying not to leave any organisms behind. The ground within the area was then stirred up by

digging and shuffling feet in the rocks and gravel. The seine was then pulled up carefully with a forward upstream motion, so as not to loose any of the organisms. It was then carried to shore and laid in a clear area free of debris. Leaves, rocks, and other debris were removed, examining them for organisms. Forceps were then used to carefully remove all organisms and place them in a glass jar containing 70% ethyl alcohol. The net was washed clean, and the procedure was repeated in a typical riffle at the downstream location owned by Jim Tipton. The jars were labeled according to the site of location, and returned to the lab. The contents of both jars were strained using a sieve, and examined using dissecting microscopes. The number and quantity of each species of organism for the two sites was observed and recorded in Table I. The pollution tolerance index values for each of the stream sites was calculated and recorded in Table I as well. The numerical values of dominance and diversity of the two communities was calculated using Simpson's indices and recorded in Table III. In addition, the diversity and dominance values were used to evaluate the level of community overlap using Morisita's Index, and the resulting value recorded in Table III. (See results section for equations and calculations)

On the same date at the same sites a hundred foot stretch of the river having seemingly the strongest flow was measured out. An ordinary orange, chosen for its buoyancy, was set in the water and timed as it traveled the hundred feet. This time over a hundred feet was then used to determine a rate of flow. The means of triplicate analyses for each of the two sites were calculated and recorded in Table II. A typical sample of water at each of the sites was collected in the turbidity tube and measured by visual analysis for level of turbidity, and the results recorded in Table II. A standard Celsius thermometer was then used to find the temperature of the water at each of the two sites, and the results also recorded in Table II.

The nitrate and phosphate tests were performed the following week on water gathered from the same two locations as were sampled for the macroinvertebrate tests. For these tests, a sample of water was collected in a simple jar from the shoreline of each location. Following the procedure outlined by aforementioned the kits, each sample was tested for concentrations of nitrates and phosphates, and the results recorded in Table II.

III. Results

Table I, "Type and Quantity of Benthic Macroinvertebrates Collected by Kick Seining, and Their Corresponding Pollution Tolerance Index Values and Totals"

Pollution Tolerance Group 1	Upstream: Imel Rd.	Downstream: Joe Tipton's
Mayfly nymph	11	11
Caddis fly larvae	105	7
Riffle Beetle	3	12
Right-handed snail	8	56
<i>(# Taxa)(weighting factor 4)</i>	16	16
Pollution Tolerance Group 2		
Damselfly nymph	1	4
clams/mussels	87	4
<i>(# Taxa)(weighting factor 3)</i>	6	6
Pollution Tolerance Group 3		
Grey Midge	12	
<i>(# Taxa)(weighting factor 2)</i>	2	0
Pollution Tolerance Group 4		
Left-handed snail		3
blood midge	1	1
<i>(# Taxa)(weighting factor 1)</i>	1	2
Total Taxa Rating	25 - Excellent	24 - Excellent

Table II, "Physical and Chemical Conditions of White River Water at Upstream (Imel Road) and Downstream Testing Sites (Tipton's)"

Condition	Upstream	Downstream
Turbidity	>55 cm	>55 cm
Water Temperature	22°C	21°C
Water Current	1.75 ft/sec	1.40 ft/sec
Phosphate	0.9 ppm (mg/L)	0.7 ppm
Nitrate	1.5 ppm	2.25 ppm

Table III, "Index Values of Dominance, Diversity, and Morisita's Overlap for the Upstream (Imel Road) and Downstream (Tipton's) Sites of the West Fork of the White River"

Value	Upstream	Downstream
Dominance Index	.332	.357
Diversity Index	.668	.643
Morisita's Index of Overlap	.211	.211

Calculations:

Dominance Indices:

$$l = \sum n_i(n_i - 1) / N(N - 1)$$

Upstream:

$$l = 11(10) + 105(104) + 3(2) + 8(7) + 1(0) + 87(86) + 12(11) + 1(0) / 238(237)$$

$$l = .332$$

Downstream:

$$l = 11(10) + 7(6) + 12(11) + 56(55) + 4(3) + 4(3) + 3(2) + 1(0) / 98(97)$$

$$l = .357$$

Diversity Indices:

$$D_s = 1 - l$$

Upstream:

$$D_s = 1 - .332$$

$$D_s = .668$$

Downstream:

$$D_s = 1 - .357$$

$$D_s = .643$$

Morisita's Indices of Overlap:

$$I_M = 2 \sum x_i y_i / (l_1 + l_2) N_1 N_2$$

Upstream/Downstream:

$$I_M = 2[(11)(11) + (105)(7) + (3)(12) + (8)(56) + (1)(4) + (87)(4) + (12)(0) + (0)(3) + (1)(1)] / (.332 + .357)(238)(98)$$

$$I_M = .211$$

IV. Discussion

The calculation of the benthic macroinvertebrate tolerance indices for both of the test sites yielded "excellent" results, with upstream having a value of 25, and downstream a value of 24. Neither site was especially lacking in pollution sensitive organisms, and both had abundant amounts of various others species as well. Therefore, it can be concluded that the water quality is not as bad as is often believed by the general public, and the water treatment plant does not cause a substantial difference in the quality of the water as determined by the state of the benthic

macroinvertebrate population, either for the better or worse. In looking at the makeup of the two communities, the upstream site (Imel Road) was found to have a dominance index value of .332, and a diversity index value of .668, while the downstream site (Tipton's) had values of .357 and .643 respectively. The relatively low dominance index values indicate a low probability that two individuals randomly sampled from one site will be of the same family (Simpson 1949). The diversity index values of .668 and .643 indicate moderate probability of interspecific encounter (Hurlburt 1971). As such, it can be concluded that the studied areas of the White River have desirable low levels of dominance, and acceptable levels of diversity. Increased practice of the method and of location and identification of specimens could likely improve the findings in terms of diversity.

Without multiple testing dates, the physical conditions of rate of flow and temperature do not allow for trend monitoring, or in depth comparison between the two sites. The turbidity values of greater than 55 centimeters for both sites do indicate a good level of water clarity, which in turn indicates a relatively acceptable low level of local erosion and siltation.

The phosphate tests yielded similar results for upstream and downstream, with values of 0.9 ppm and 0.7 ppm respectively. It is somewhat counterintuitive to have a higher phosphate count downstream of the treatment plant; however, this may be a result of simple indeterminate error. The nitrate test on the other hand revealed a greater concentration of nitrates downstream than upstream, with values of 2.25 ppm and 1.5 ppm respectively. This was the anticipated result after observing a large amount of algal growth at the downstream location. In light of the excess nitrates, it can be concluded that although it has not affected the river in relation to the benthic macroinvertebrates present, the water treatment plant has altered the natural chemical

The treatment plant doesn't treat for phosphates because there is no body of standing water within 40 miles downstream of the plant

state of the river to some degree, as is evident by the increased algal growth, and the difference in nitrate concentrations between sites of 0.75 ppm.

Considering these findings, this lab could certainly be considered a success. However, if time and funds allowed, it would certainly be beneficial to increase the level of testing in by sampling the benthic macroinvertebrates on at least three days, which would allow for the testing of the difference in the means of the dominance, diversity, and overlap index values for the two sites by means of a t-test. Triplicate analyses of the chemical conditions would also increase reliability of the findings. Finally, additional testing of the levels of dissolved oxygen, fecal coliforms, pH, B.O.D. 5, and total solids in addition with the phosphate and nitrate levels could yield an overall water quality value and rating (Hippensteel 1997).

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BIOL 3070
Dr. Ippolito
12-10-04

White River Sampling Lab

INTRODUCTION:

Students studied various elements of the White River in Anderson, IN on three separate dates: September 29, 2004; November 3, 2004; and November 17, 2004. The control site was located at Mounds Park and the experimental site was near Imel Road, which was located near a combined sewage overflow pipe. Data was collected through a variety of tests, including dissolved oxygen, nitrate nitrogen, ammonia nitrogen, pH, phosphorous, water temperature, current, turbidity, *E. coli*, and BOD5. Aquatic macro-invertebrates were also collected and analyzed from each site. Macro-invertebrates are very good indicators of water quality, because certain organisms will only survive in clear, unpolluted water. All the data was observed to determine where water quality was better.

MATERIALS & METHOD:

The control site was located in Mounds State Park. This site was chosen as a control site, because it was upstream from the sewage area. Water quality was expected to be higher at this site, therefore acting as a control. The Imel Road site, on the other hand, was located downstream from a combined sewer overflow pipe where water quality would be expected to be worse than at the Mounds site, making it the experimental site. After arriving at the site, students tested water temperature by placing a thermometer into the river. Students then tested the river's current velocity by checking the time that it

took an orange to travel 100 feet using a measuring tape and a stop watch. Next students tested turbidity by taking a water sample from the river and placing it into a turbidity tube. The water was then drained from the tube until the markings on the bottom of the tube could be seen clearly to determine the clarity of the water. Afterwards students tested pH by placing a strip of pH paper in the river. The strip was then compared with a scale to determine the river's pH. Next the students obtained more water samples of approximately 25ml to test for ammonia nitrogen, nitrate nitrogen, and dissolved oxygen. These samples were run through a series of steps to determine the results. The ammonia test kit was called CHEMets Ammonia Kit K-1510, produced by CHEMetrics, and had a code number of 0257-4. The Nitrate test was manufactured by Wards' and had a catalog number of 21W9007. The dissolved oxygen kit K-7512, was also made by CHEMetrics and had a code number of 0058-4. The BOD5 was prepared by taking a water sample (more than 50mls) from the river and placing the sample in a dark drawer in the lab for five days. This was done so that no photosynthesis would take place during that time. After the five days were over, a 25ml sample was tested, just as the dissolved oxygen was tested on the lab day, and the results were compared. In addition, students tested the amount of phosphorous in the water by taking a 10ml sample and using the phosphorous test kit made by LaMotte with the model PAL and a code number of 3121-01. The sample was then placed in the calibrator to determine its phosphorous content. Lastly, students tested *E. coli* concentration by taking a vial full of river water and placing it on ice until returning to the lab. Once at the lab, students mixed in 5ml of iced river water into Coliscan Easygel. Students then poured the mixture onto a specially treated Petri dish which was allowed to incubate for 24 hours to determine if *E. coli* were present.

These tests results are catalogued in Table 1 and Table 2. In addition to taking all these water samples, students also collected data on the aquatic macro-invertebrates that were found during the first and last sampling visits. Macro-invertebrate samples were not taken on the second sampling date because water levels were too high. The invertebrates were collected by placing a 3ft. by 3ft. PVC pipe quadrant in the water and then scrubbing off the rocks over 2 inches in diameter that were inside the quadrant. Any invertebrates that were on the rocks would get knocked off and would be collected in a small porous seine that was placed directly downstream from the quadrant. Students then picked off all the invertebrates from the seine with tweezers and placed them in alcohol until further testing could be done. When the students returned to the lab, they strained out the invertebrates and determined which organisms were found in that sample and how many were found. The students then compiled their data to determine the quality of the water sampled. These results can be found in Table 3 and Table 4.

RESULTS:

The tables below show the chemical and water tests that were run and the results collected on each of the three days at both the Mounds site and the Imel site.

Table 1. Water test results for the White River at the Mounds site.

MOUNDS SITE	9-29-04	11-3-04	11-17-04
Water temperature	17°C	12°C	9°C
pH	7 units	7 units	7 units
Ammonia Nitrogen	<1 ppm, cloudy	<1 ppm, cloudy	<1 ppm, cloudy
Nitrate Nitrogen	2.2 ppm	3.52 ppm	7.48 ppm
Dissolved Oxygen	10 ppm	8 ppm	9 ppm
BOD5	3 ppm	1 ppm	1 ppm
Phosphorous	1.0-1.5 ppm	.2 ppm	.3 ppm
Current	.6 m/sec	NA	1 m/sec
Turbidity	>55 cm	28 cm	>55 cm
<i>E. coli</i>	0 colonies/100 ml	20 colonies/100 ml	0 colonies/100 ml

Table 2. Water test results for the White River at the Imel Road site.

Imel Road	9-24-04	11-3-04	11-17-04
Water temperature	17.5°C	12°C	9°C
pH	7 units	7 units	7 units
Ammonia Nitrogen	<1 ppm, cloudy	<1 ppm, cloudy	<1 ppm, cloudy
Nitrate Nitrogen	1 ppm	3.52 ppm	4.4 ppm
Dissolved Oxygen	12 ppm	7 ppm	11 ppm
BOD5	5 ppm	<1 ppm	4 ppm
Phosphorous	1.0-1.5 ppm	.3 ppm	.3 ppm
Current	.47 m/sec	NA	.6 m/sec
Turbidity	>55 cm	36 cm	>55 cm
<i>E. coli</i>	40 colonies/100 ml	0 colonies/100 ml	0 colonies/100 ml

The following tables show the macro-invertebrates that were collected on two separate dates at both the Mounds site and the Imel site. The total number of taxa represented is shown, as well as the water quality.

Table 3. Macroinvertebrate count and water quality levels for the White River at the Mounds site.

Mounds Site Macroinvertebrates	9-24-04	11-17-04
Group 1	4 (taxa) x 4 (w.f.) = 16	6 (taxa) x 4 (w.f.) = 24
Caddis fly larvae	310	154
Mayfly	70	10
R.H. snail	4	1
Dobsonfly	1	1
Water penny	0	2
Riffle beetle	0	1
Group 2	1 (taxa) x 3 (w.f.) = 3	1 (taxa) x 3 (w.f.) = 3
Clam	17	9
Group 3	2 (taxa) x 2 (w.f.) = 4	3 (taxa) x 2 (w.f.) = 6
Grey midge	12	3
Planaria	8	4
Black fly larvae	0	2
Group 4	0	0
None found	0	0
Total Taxa Rating	23—excellent water quality	33—excellent water quality

Table 4. Macroinvertebrate count and water quality levels for the White River at the Imel Road site

Imel Road Macroinvertebrates	9-24-04	11-17-04
Group 1	5 (taxa) x 4 (w.f.) = 20	2 (taxa) x 4 (w.f.) = 8
Caddis fly larvae	128	37
Mayfly	47	15
Riffle beetle	1	0
R.H. snail	1	0
Stonefly nymph	2	0
Group 2	2 (taxa) x 4 (w.f.) = 8	1 (taxa) x 3 (w.f.) = 3
Damselfly nymph	2	0
Clam	42	3
Group 3	2 (taxa) x 2 (w.f.) = 4	2 (taxa) x 2 (w.f.) = 4
Grey midge	4	5
Water mite	3	7
Group 4	0	0
Total Taxa Rating	30—excellent water quality	15—fair water quality

DISCUSSION AND CONCLUSIONS:

The results indicate that in the first two samples dissolved oxygen decreased when temperature decreased. This data goes against what was expected to happen because colder water is expected to hold a greater amount of oxygen to be dissolved. The third sample did not follow this pattern (Charts 6&7). This could be because that sample was taken after a few days of rain and it was raining while samples were being collected. The dissolved oxygen concentrations at Imel were higher than at Mounds for the first and last samplings (Chart 3). It was predicted that Imel should have had a lower concentration because of its location near the sewage overflow. The bacteria from the overflow should have caused the water at Imel to have a higher oxygen demand, giving it a lower concentration.

The oxygen concentration after 5 days decreased proportionately when dissolved oxygen concentrations decreased. Imel had higher BOD5 than Mounds, which was to be

expected because of the combined sewage overflow adding in more compounds which use up more oxygen (Chart 4).

Nitrogen concentrations increased as the temperature decreased throughout the sampling. Nitrogen was higher at Mounds when compared to Imel in the first and last samplings. The second sampling produced equal amounts of Nitrogen concentrations (Chart 2). It was expected to be higher at Imel because of the sewage overflow which contains more nitrates.

Phosphorous concentrations were equal at Mounds and Imel for the first and last samples. It was slightly greater at Imel on the second sampling date (Chart 5). Again, this can be ^{attributed} contributed to the higher phosphate levels coming from the combined sewage overflow.

The fecal coliform results do not match the prediction that there should have been more colonies after the second and third samplings, especially at Imel because of heavy rains causing the combined sewage overflow to release greater amounts of bacteria (Tables 1&2).

The results from the count of macro-invertebrates show that both sites had excellent water quality on the first sampling. The third sample shows that Imel had a fair water quality reading (Tables 3&4). This could be predicted because of the rain causing the sewage overflow to pollute the water, decreasing the suitable living conditions for some macro-invertebrates. No macro-invertebrates were collected during the second sampling trip due to large amounts of rain raising river water levels.

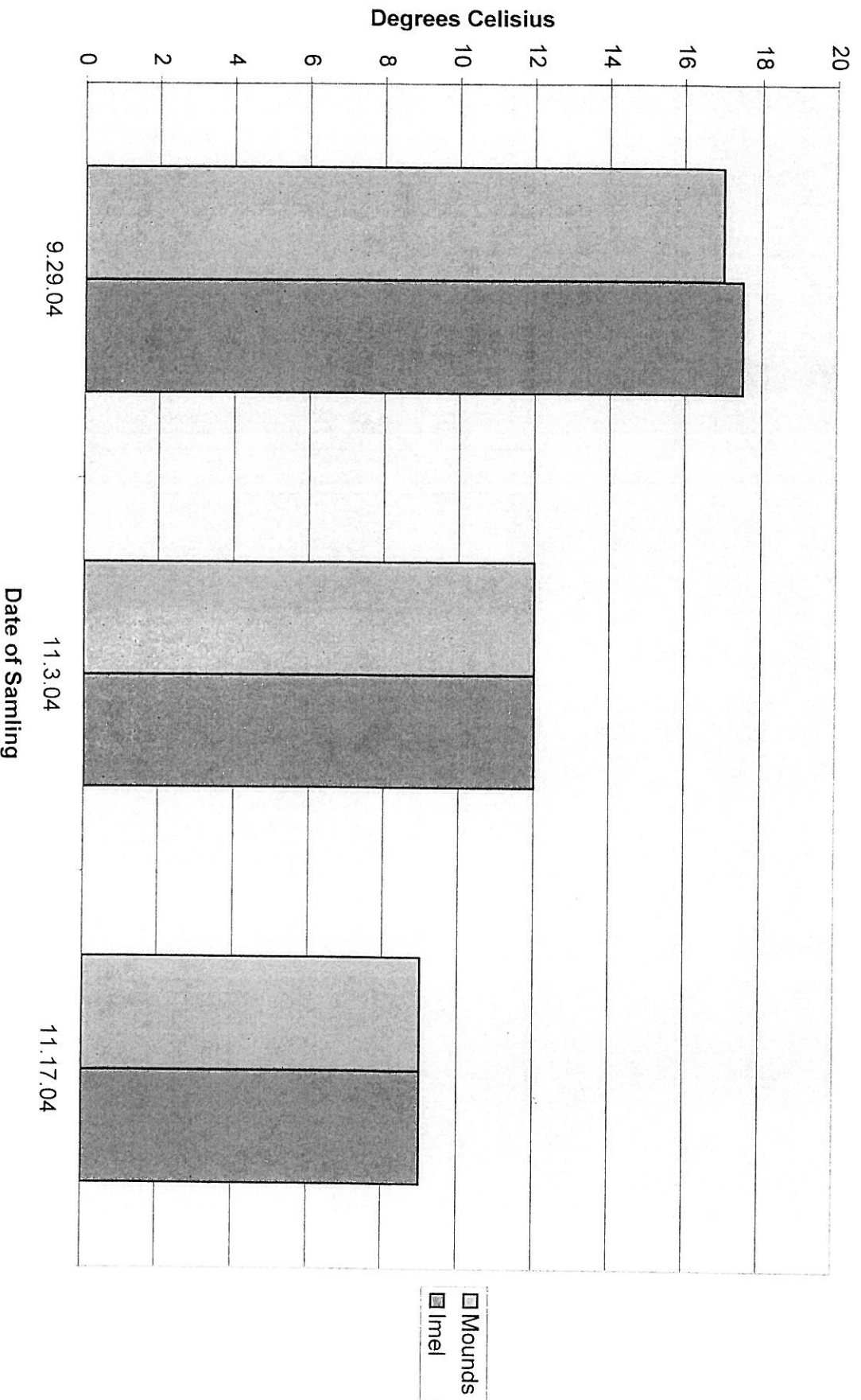
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Coliscan Easygel Colony Color Guide. Micrology Laboratories, LLC, Goshen, Indiana.

Chart1

Water Temperature



☐ Mounds
 ☐ Inlet

Chart2

Nitrate Nitrogen

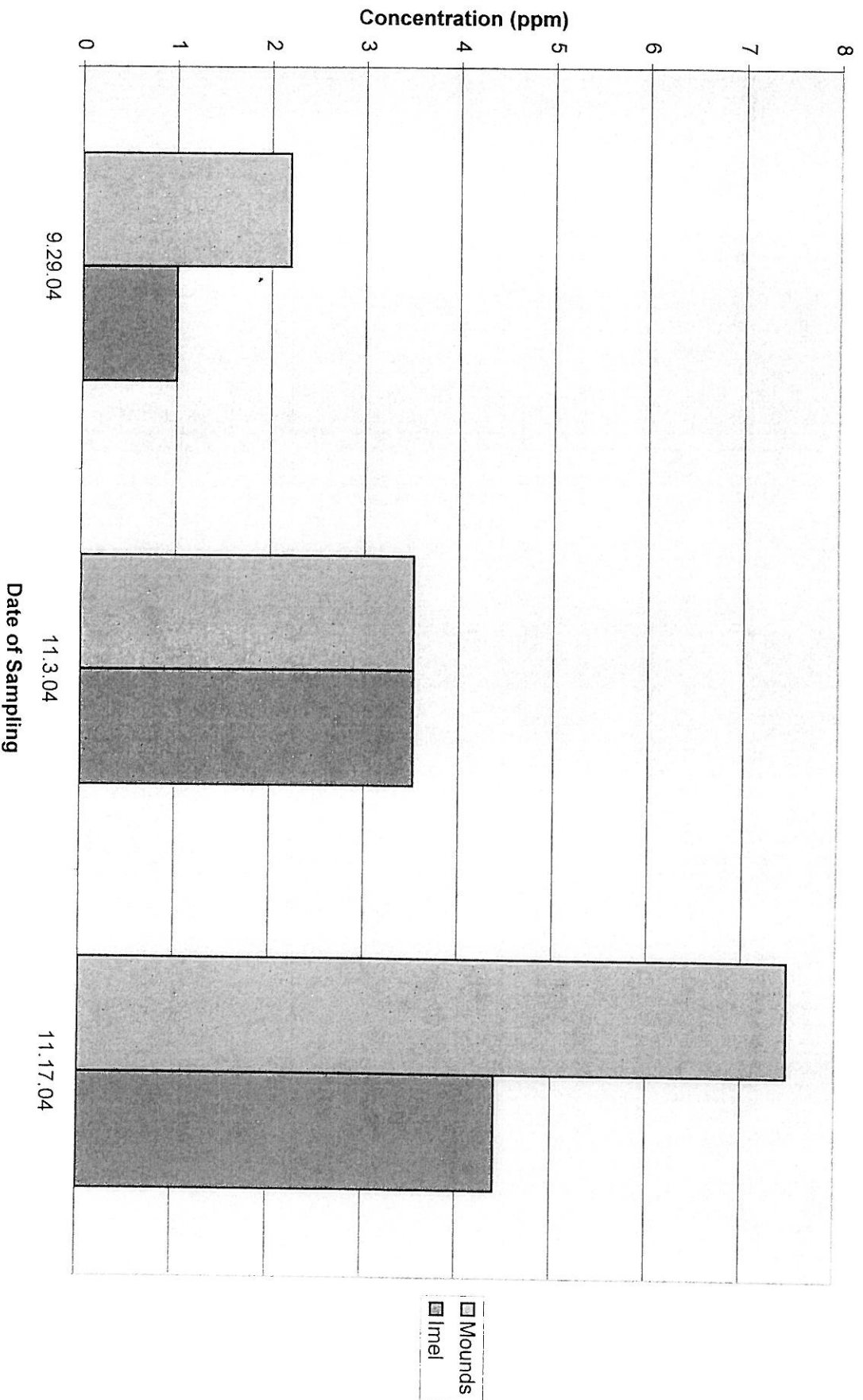


Chart3

Dissolved Oxygen

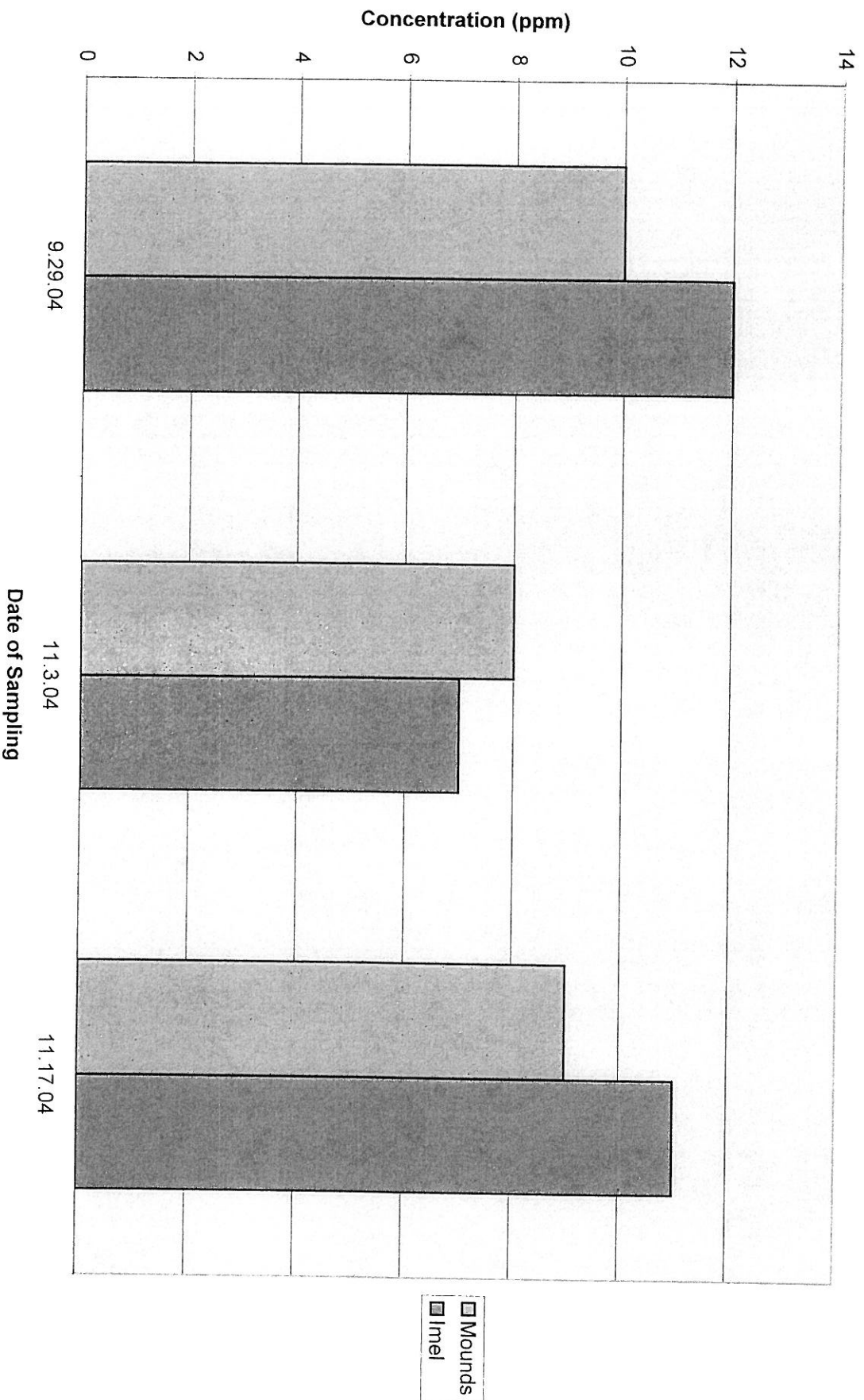


Chart4

BOD5

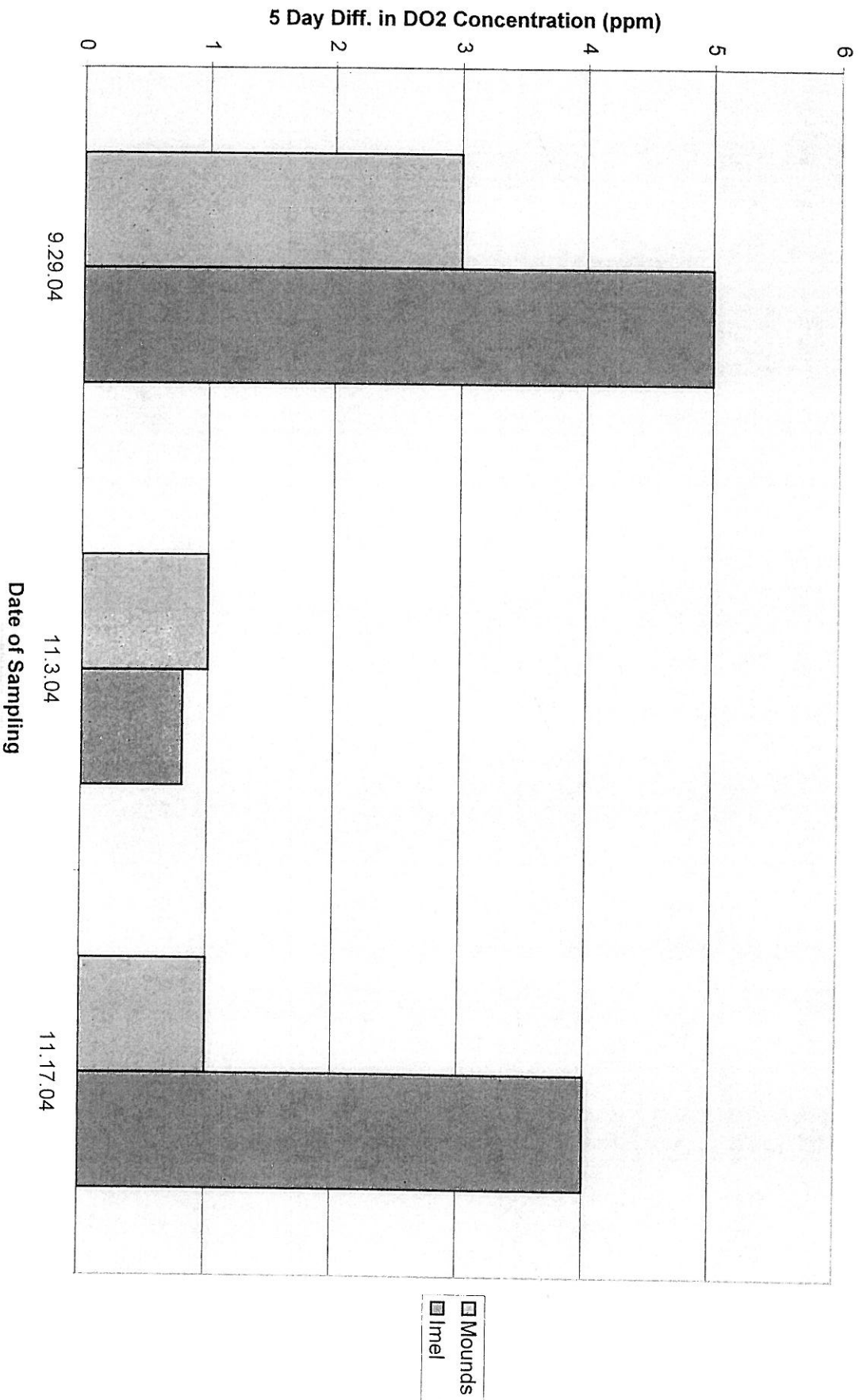


Chart5

Phosphorous

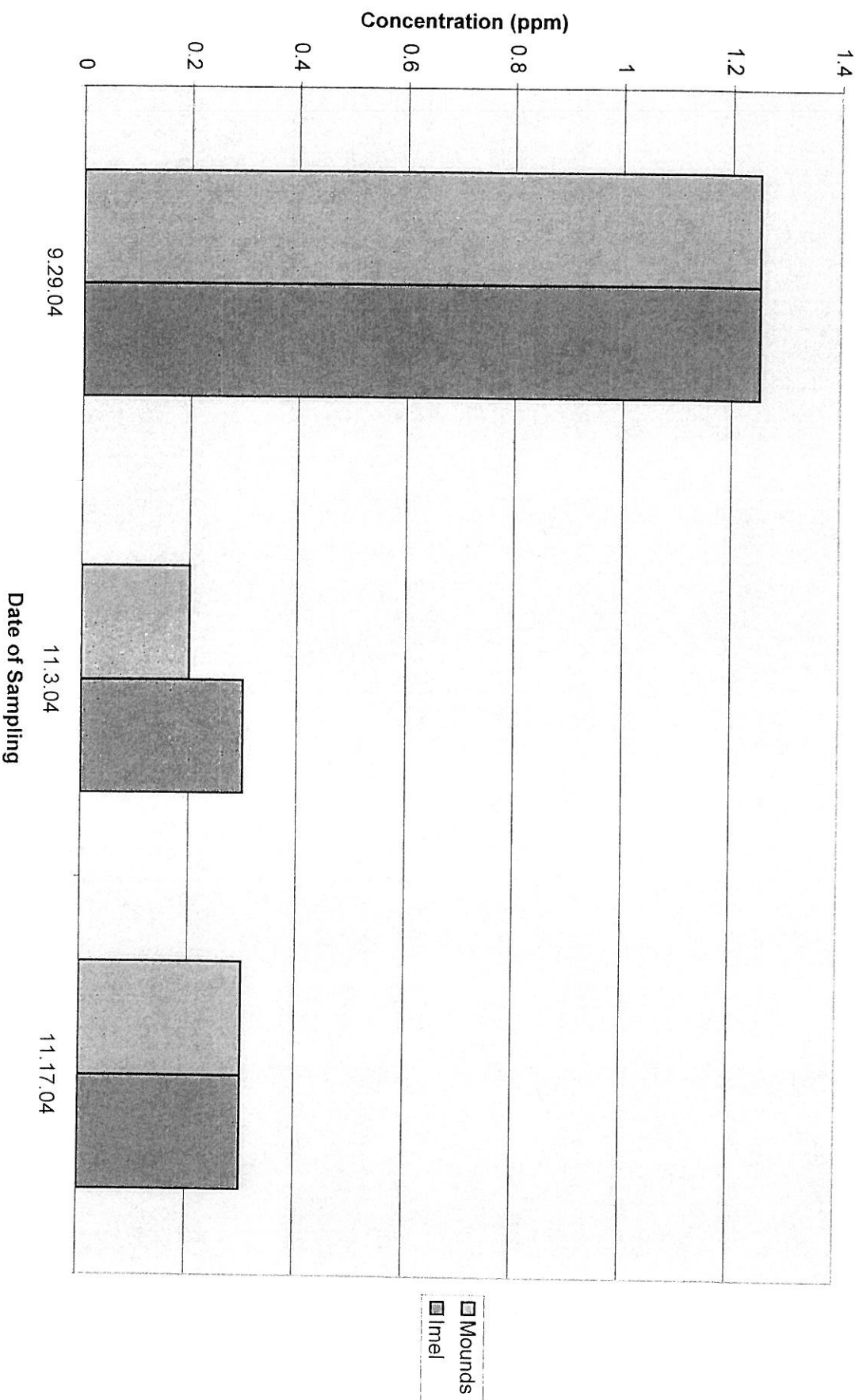


Chart6

Dissolved Oxygen vs. Water Temperature at Mounds

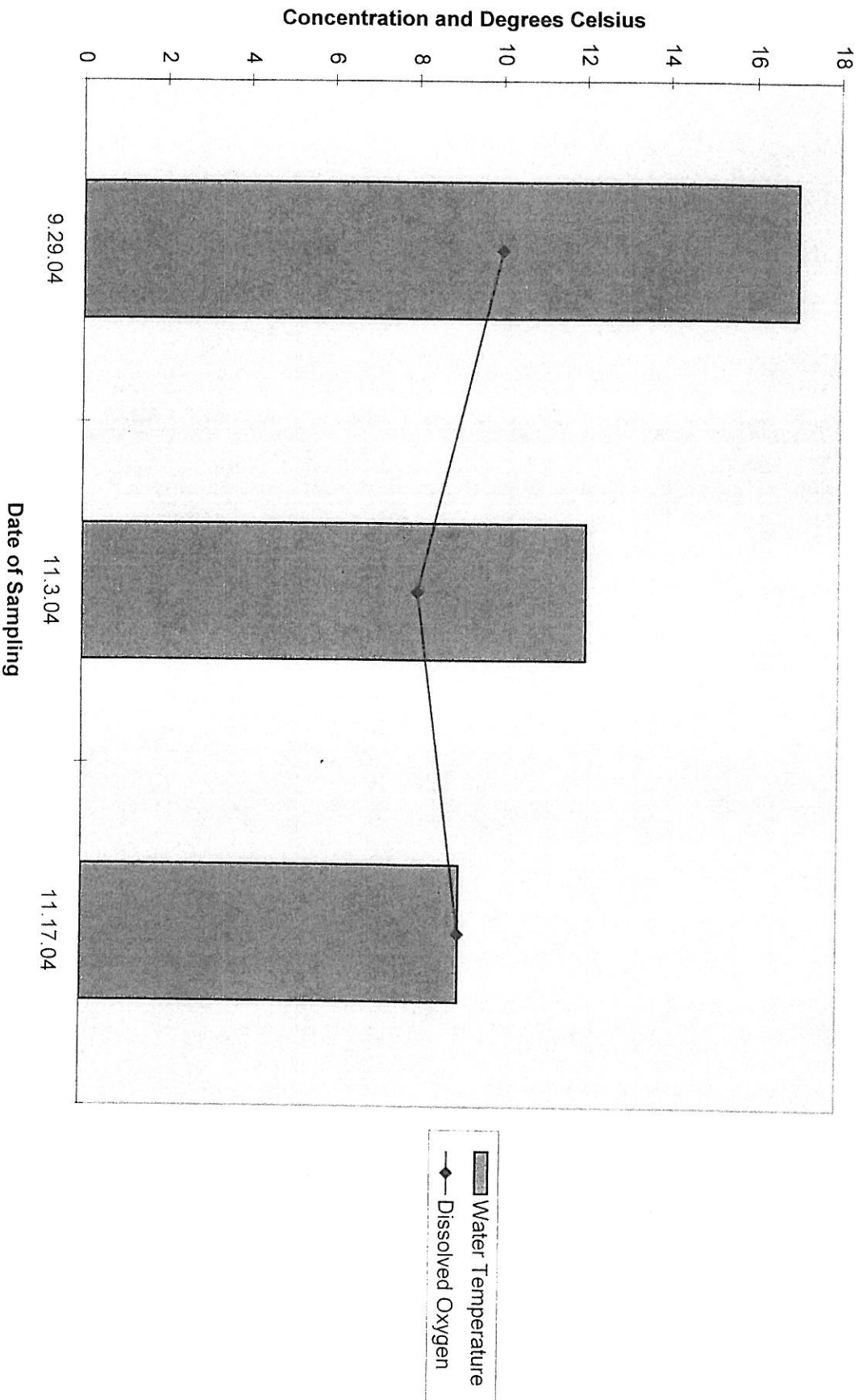


Chart7

Dissolved Oxygen vs. Water Temperature at Imel

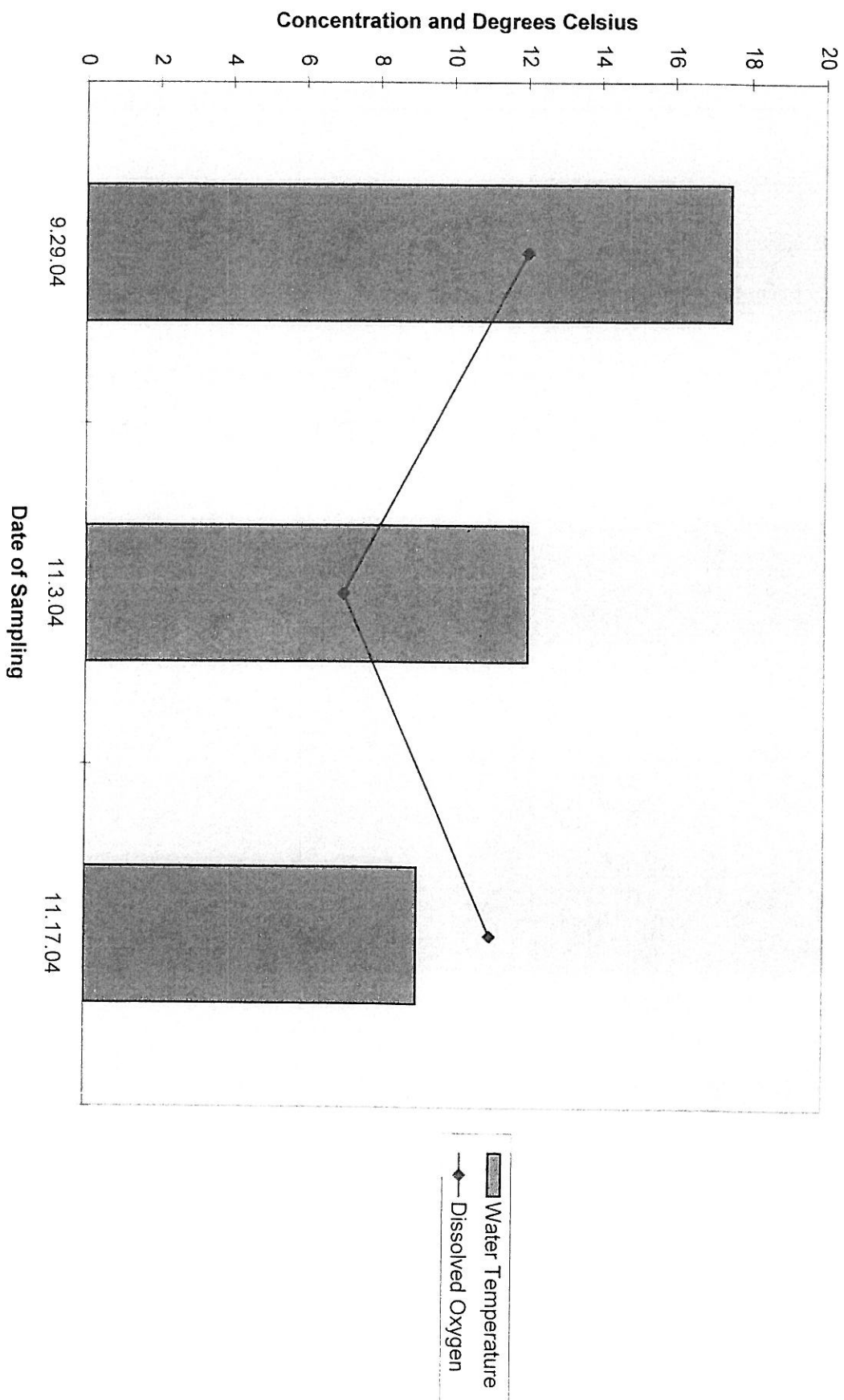


Chart8

Dissolved Oxygen vs. BOD5 at Mounds

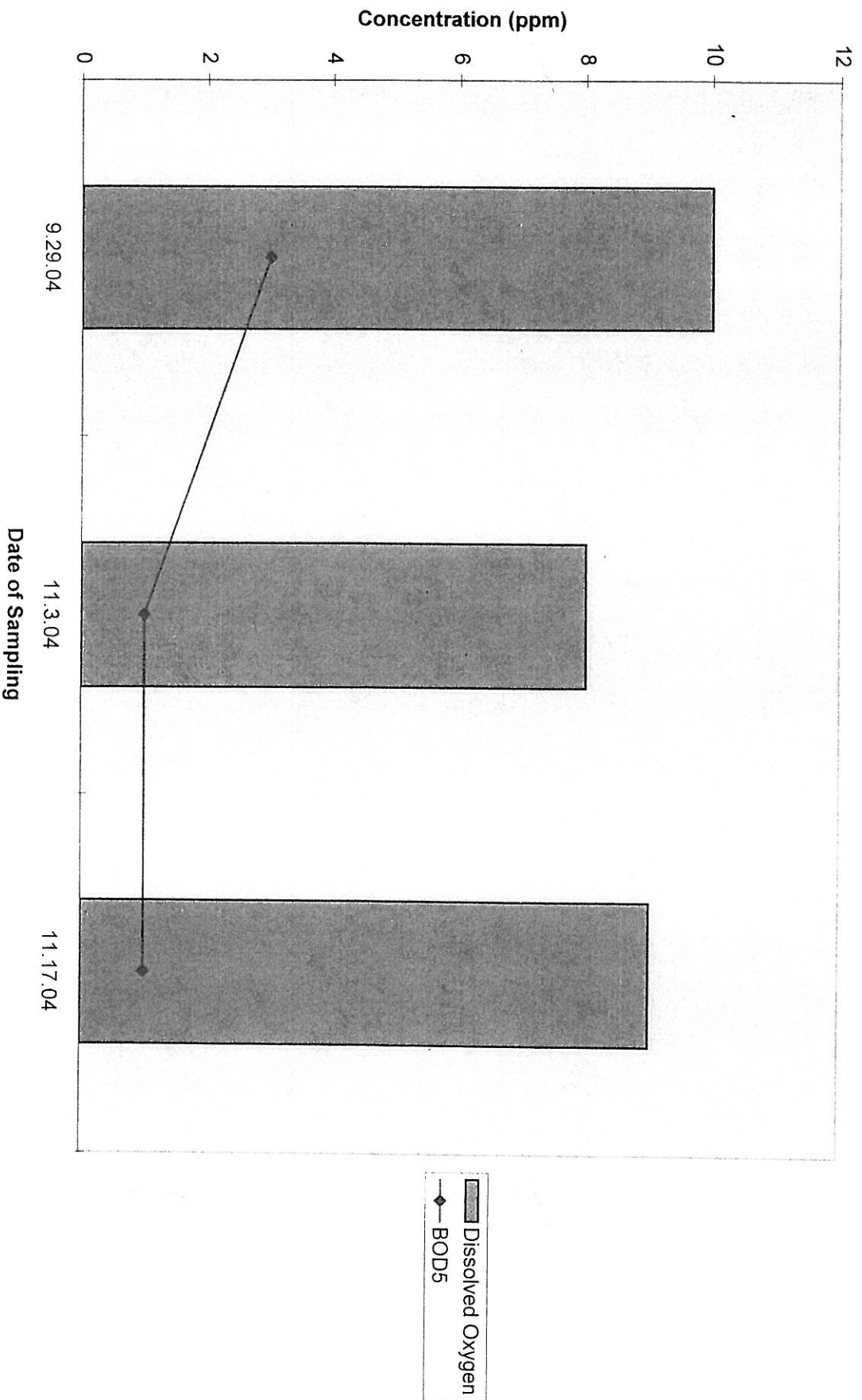
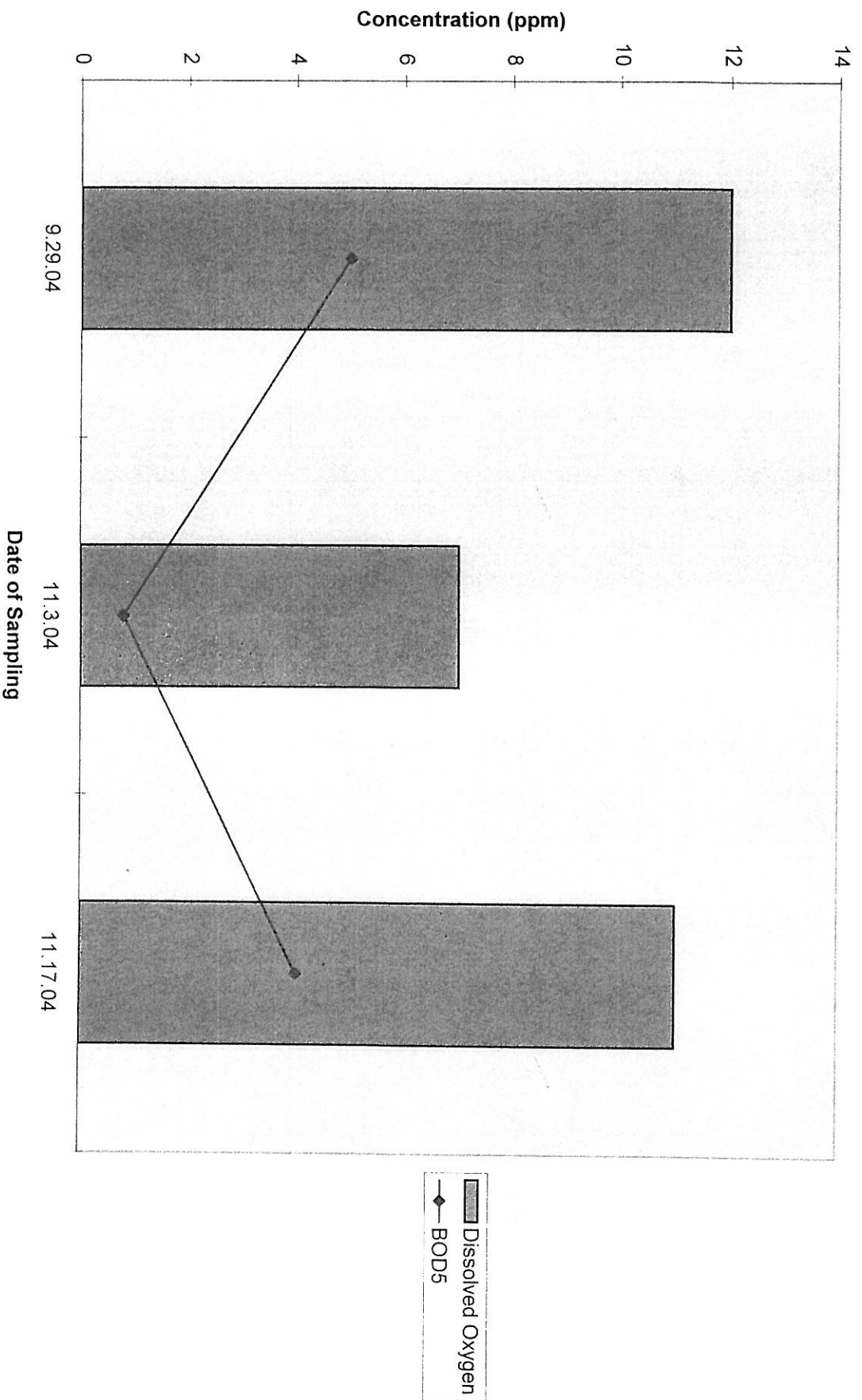


Chart9

Dissolved Oxygen vs. BOD5 at Imel



**The Water Quality of the White River:
Fecal Coliform Analysis**

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Abstract

From September 8, 2003 through April 16, 2004 benthic macroinvertebrates were collected along with various water quality samples biweekly from the White River at two allocated sites; one near a combined sewer (Imel) and the other upstream (Mounds) at a relatively pristine location. In December of 1999, Guide Corporation in Anderson, Indiana was found responsible for a massive fish kill by releasing chemicals which affected the processes of the main wastewater treatment center. Combined sewer overflows were a significant factor in this study because they are a source of fecal coliform contamination. Indicator organisms are also used to determine the water quality index for both sites using taxa score. The results will be compared with the original hypothesis that Imel Drive, downstream from a combined sewer, has a lower water quality rating, from biological and chemical tests, when compared to Mounds. Finally, the compiled data will then be analyzed and tentative conclusions will be drawn and discussed.

Introduction

In 1956 the U.S. government passed the Water Pollution Control Act which finally gave federal funds to states to implement pollution control programs along with the ability to start environmental research. Before this time, America's water supplies were in danger of becoming increasingly poor to the point where many sources would have become unsuitable for human use (Warren 1971). The Clean Water Act was enacted by Congress in 1972, which mandated the EPA to protect all bodies of water from pollutants including heavy metals and pesticides, as well as wastewater contaminants. From this time there has been much progress in the effort to ensure the

quality of how wastewater treatment plants operate (IDEM 2000). Even though this mandate has set in motion the effort for safeguarding America's waters. However water quality is still a major concern in many regions of the United States and has continued to gain support from the public as overall awareness of the issue increases (Barkes 1998). Constant monitoring of these water sources is the only way that public safety and the health of the environment can be ensured (Hippensteel 1997).

So what exactly defines "pollution"? According to the professor of biochemistry at Oxford University, Charles E. Warren, pollution is defined as, "any foreign substance in water which tends to degrade its quality so as to constitute a hazard or impair the usefulness of the water" (1971). An incident that happened in December of 1999 in Anderson Indiana is a great example of what can happen if pollution monitoring is not maintained. There was a massive fish kill that occurred in Madison County in the White River. An unknown pollutant had passed through the Anderson wastewater treatment plant and entered the river causing one of the worst environmental disasters in Indiana history (cityofanderson.gov). The Guide Corporation, an automotive parts manufacturer, was eventually found responsible for this incident. One of the plant's processes is to coat various automotive parts with heavy metals such as copper, nickel, and chrome (Bremen 2000). The parts were rinsed with water from a high pressure hose and filtered to remove the heavy metals from the water (cityofanderson.gov). Apparently due to employees' not following regulations, the contaminated water was filtered through a burlap cloth in an attempt to speed up the process, but this did not remove any of the heavy metals therein. The water was then sent to holding tanks, where it was treated with sodium dimethyldithiocarbamate or HMP 2000 (Piank 2001). When HMP is oxidized it breaks

down to form a compound known as thiram, which is highly toxic to fish (cityofanderson.gov). The wastewater containing thiram was eventually pumped into the city's wastewater treatment plant, where it destroyed the nitrifying bacteria whose normal function is to oxidize ammonium ions into less harmful nitrates. White foam was discovered flowing from Anderson's wastewater treatment facility soon after this incident and was indication of the contamination (cityofanderson.gov). A lawsuit was eventually filed against the Guide Corporation, and a 14 million dollar settlement was resolved for the killing of an estimated 4.6 million or one hundred and 17 tons of fish in the river downstream of the spill.

This should show the importance of river monitoring and why it is so vital to keep companies that use this water under observation. In Indiana, a state-sponsored water quality monitoring program called Hoosier Riverwatch was developed by the Department of Natural Resources in order to involve the public in helping prevent such a disaster from ever happening again. It is volunteer based and vital in order to constantly monitor the river community as well as increase public awareness of any concerns that might arise (Hippensteel 1997). The benefits of having such a program include: ensuring the validity of the data collected by the DNR, more area of the river can be monitored at one time and furthermore a more detailed and accurate description of the river can be constructed (Bares 1998).

This project is based on the techniques that are detailed in the Hoosier Riverwatch manual, in conjunction with the techniques outlined by Microbiology Laboratories at www.micrologylabs.com for detecting fecal coliforms. Benthic macroinvertebrates were collected from the White River and used as indicator organisms to assess the water

quality. The presence or absence of particular taxa is indicative of the existence of a certain environmental condition (Hippensteel 1997). Many benthic macroinvertebrates have varying levels of tolerance to pollution. Therefore depending on which taxa groups are found at a particular site, as well as the number of organisms in each tax group, the overall water quality index can be found for that site. As pollutants in the water increase, pollution intolerant species will decrease in number, while the pollution tolerant species will increase in number (Pianki 2001). The Water Quality Index, as described in the Hoosier Riverwatch guide, is calculated by separating the collected macroinvertebrates into different groups of taxa (Hippensteel 1997). The number of taxa in each group is then added and multiplied by a numerical constant. Once the four different pollution tolerance levels have been calculated, a final number is obtained which rates the water quality from poor to excellent. This data, along with a variety of water chemistry tests, as well as the total fecal coliform counts, will give a good overall value for water quality. It is hypothesized that from two sites on the White River, one near a combined sewer and one not, that total fecal coliforms will be higher at the CSO site and the overall water quality index will be less than that at the non-CSO site.

Materials and Methods

Monitoring and sampling began on September 8, 2003 and continued through April 16, 2003 on a biweekly basis. There was a break in the sampling for about 5 weeks in the months of December and January, however. Water sampling and macroinvertebrate collections were taken from two sites on the White River. One site (Imel) was located near a combined sewer overflow (CSO), and the other site (Mounds) was located further

upstream and was considered the control for this study, as it is a fairly pristine part of the river. Both of these sites have a U-shaped streambed with the substrate made up primarily of gravel and sand. The Imel site, however, has a significantly eroded river bank and has slightly less shade than the Mounds site.

A variety of physical and chemical tests were conducted at the sites using several different techniques. The surface temperature of the water was taken using a standard Celsius thermometer. Turbidity was tested using a turbidity tube that was marked off in milliliters. Finally, the river's water current speed was tested using an orange, a tape measure and the velocity equation ($r \times t = d$). The chemical tests included: dissolved oxygen, ammonia, nitrate, phosphate, the Biochemical Oxygen Demand or BOD₅ test as well as total fecal coliform count. The dissolved oxygen, BOD₅, ammonia, nitrate and phosphate tests were all done using LaMotte's Freshwater Aquaculture Test Kits, Model AQ-2, while the total fecal coliforms were counted using the method described by Micrology Laboratories: Detecting Waterborne Coliforms and *E. coli* with Coliscan Easygel.

Macroinvertebrates were collected at the same time the physical and chemical tests were taken. The method of collection followed the techniques described in the Hoosier Riverwatch Water Quality Monitoring Streams Manual. A three-foot by three-foot square made of PVC piping and weighed down with sand was used to mark the quadrant that would be sampled. It was placed in a suitable location, preferably a riffle. A seine net was placed directly downstream from the square so that the benthic invertebrates would be captured for counting. As the seine net was being held in place, rocks that measured 2 inches or more in diameter were scrubbed underwater to dislodge

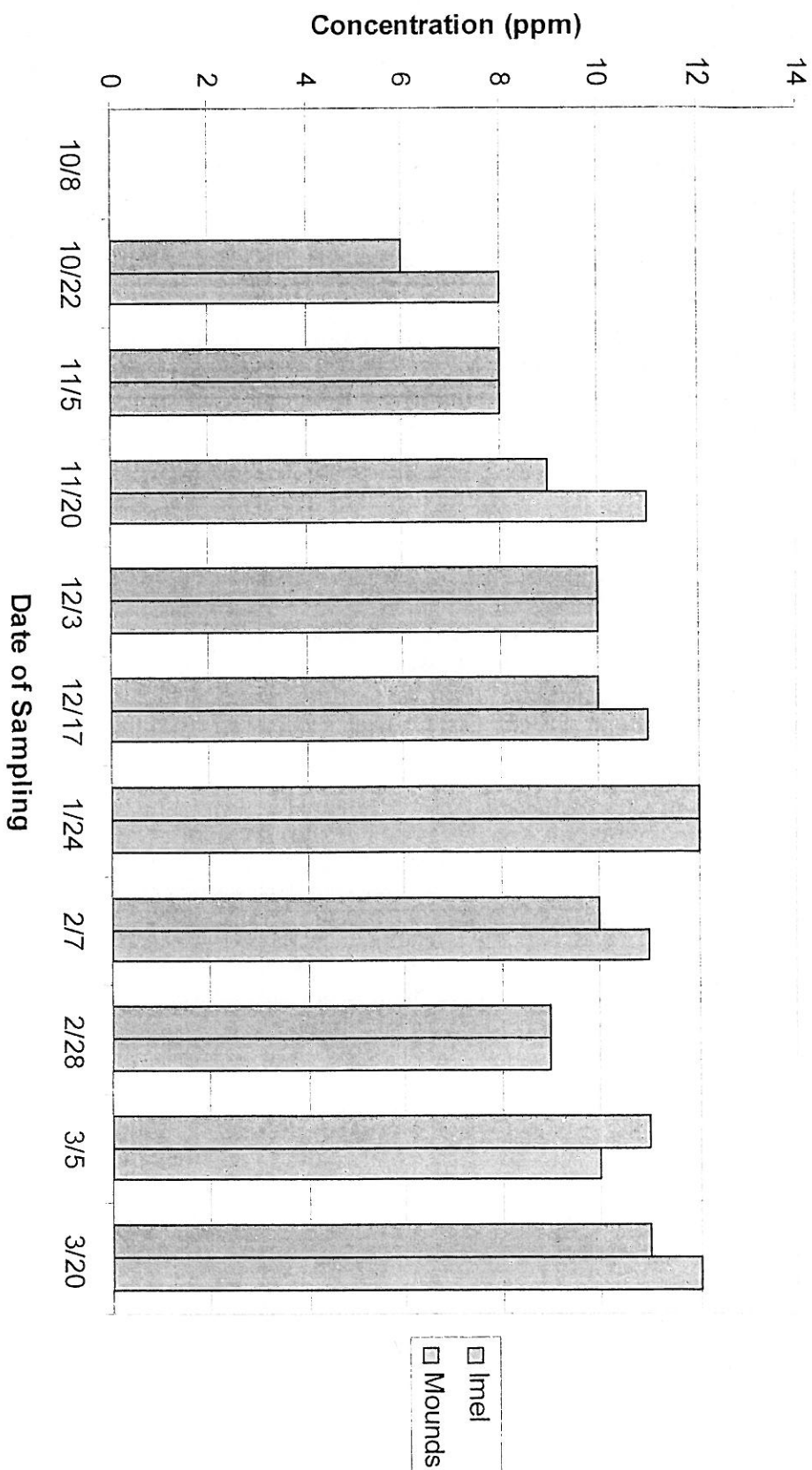
the benthic macroinvertebrates that might be attached. After about a 5-minute period the seine net was carefully lifted out of the water, carried to dry land and laid out in a sunny location. The benthic macroinvertebrates were removed using tweezers, placed in jars filled with 70% ethyl alcohol, and stored and labeled according to site. Once back in the lab, the macroinvertebrates were removed and identified according to their taxa group. Each organism was placed in one of four pollution tolerance categories, counted, and the data was compiled. To find statistical significance, a 2-tailed t-test was used by taking the average of all the numerical data collected over the sampling period of each test and compared with a p value 0.05.

Data

The following thirteen graphs and two tables were derived from the information in Appendix A and Appendix B.

Graph 1

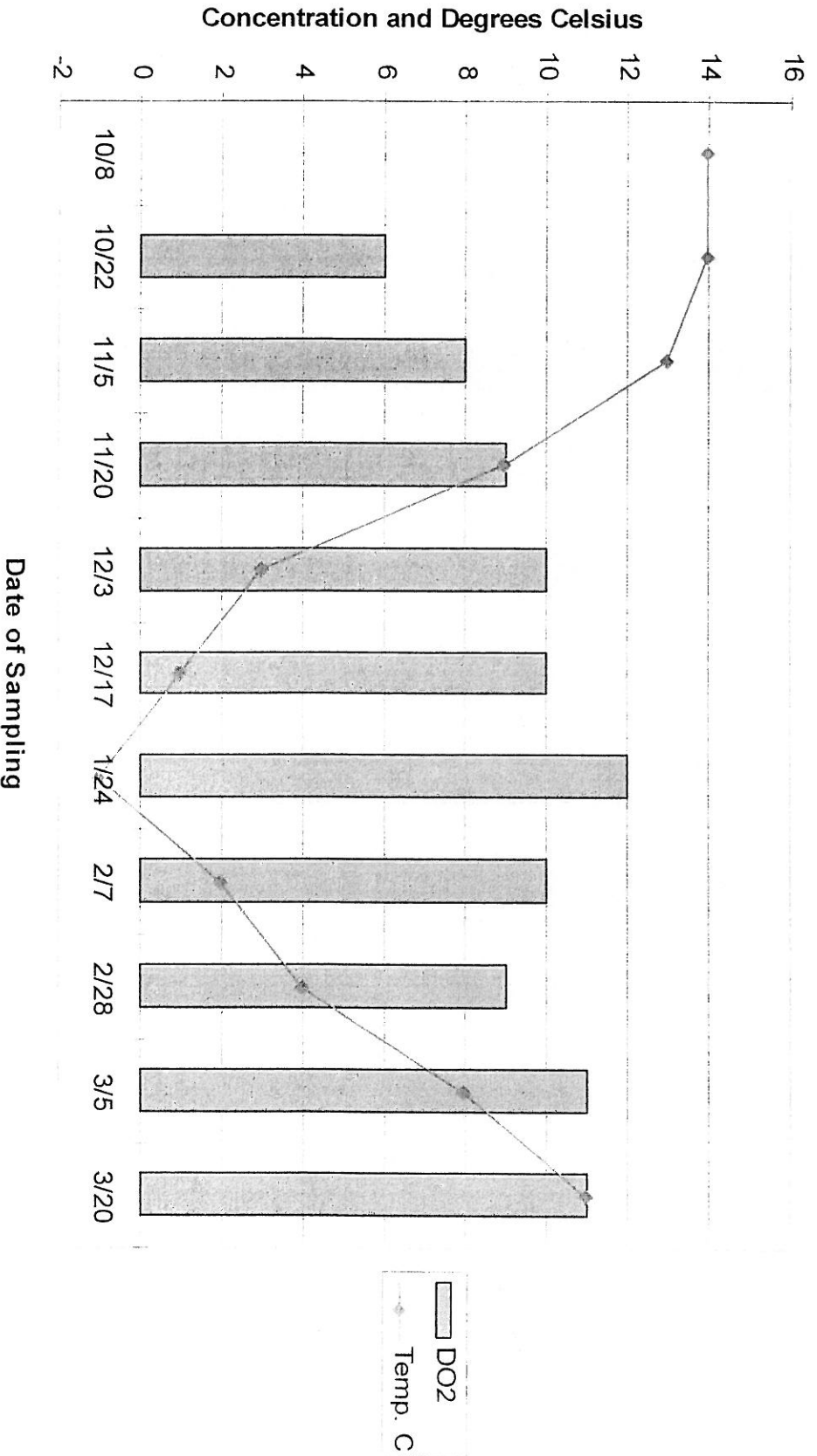
Dissolved Oxygen



t-Test: $p = 0.08$

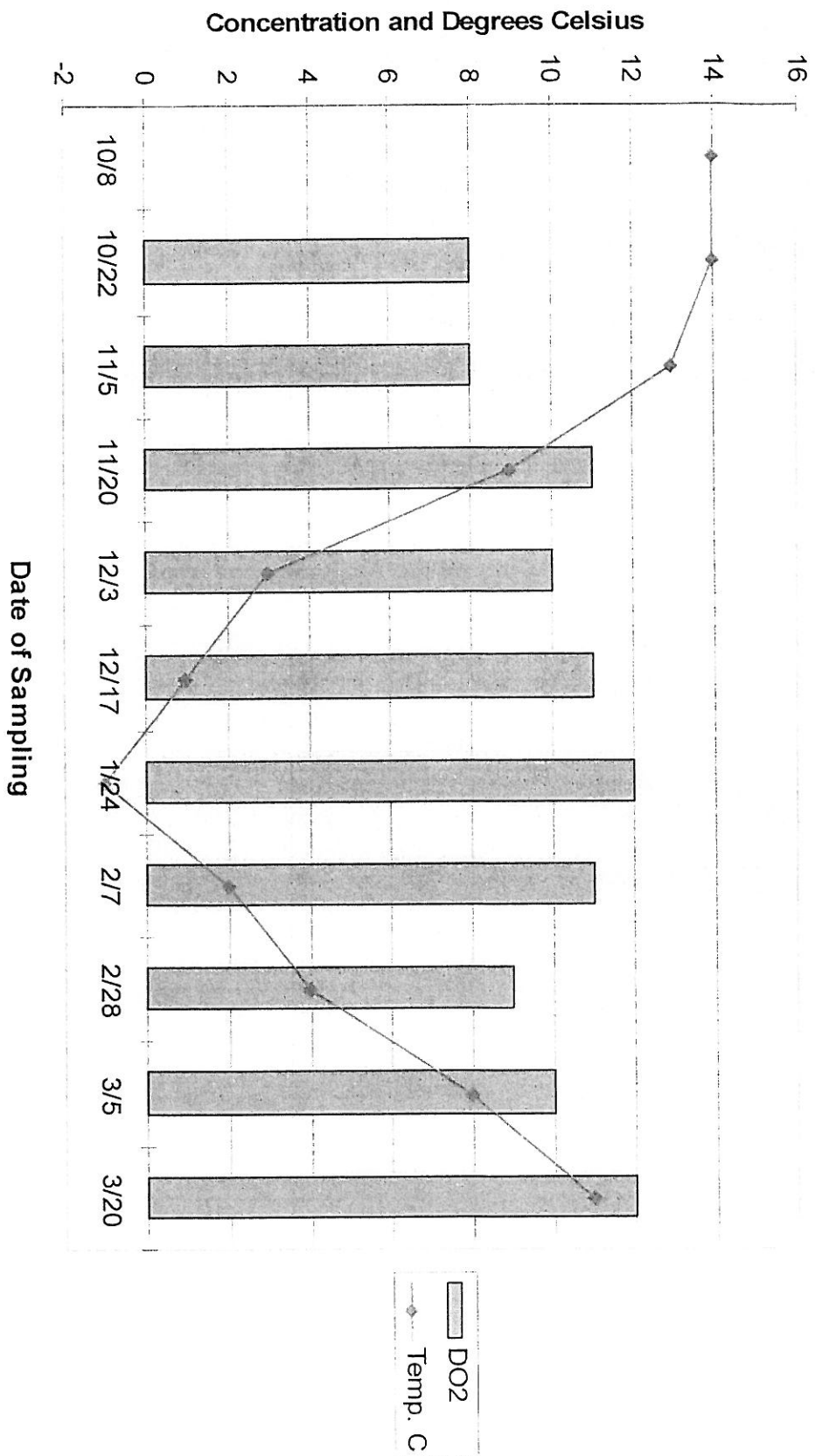
Graph 2

Dissolved Oxygen vs. Water Temperature at Imel



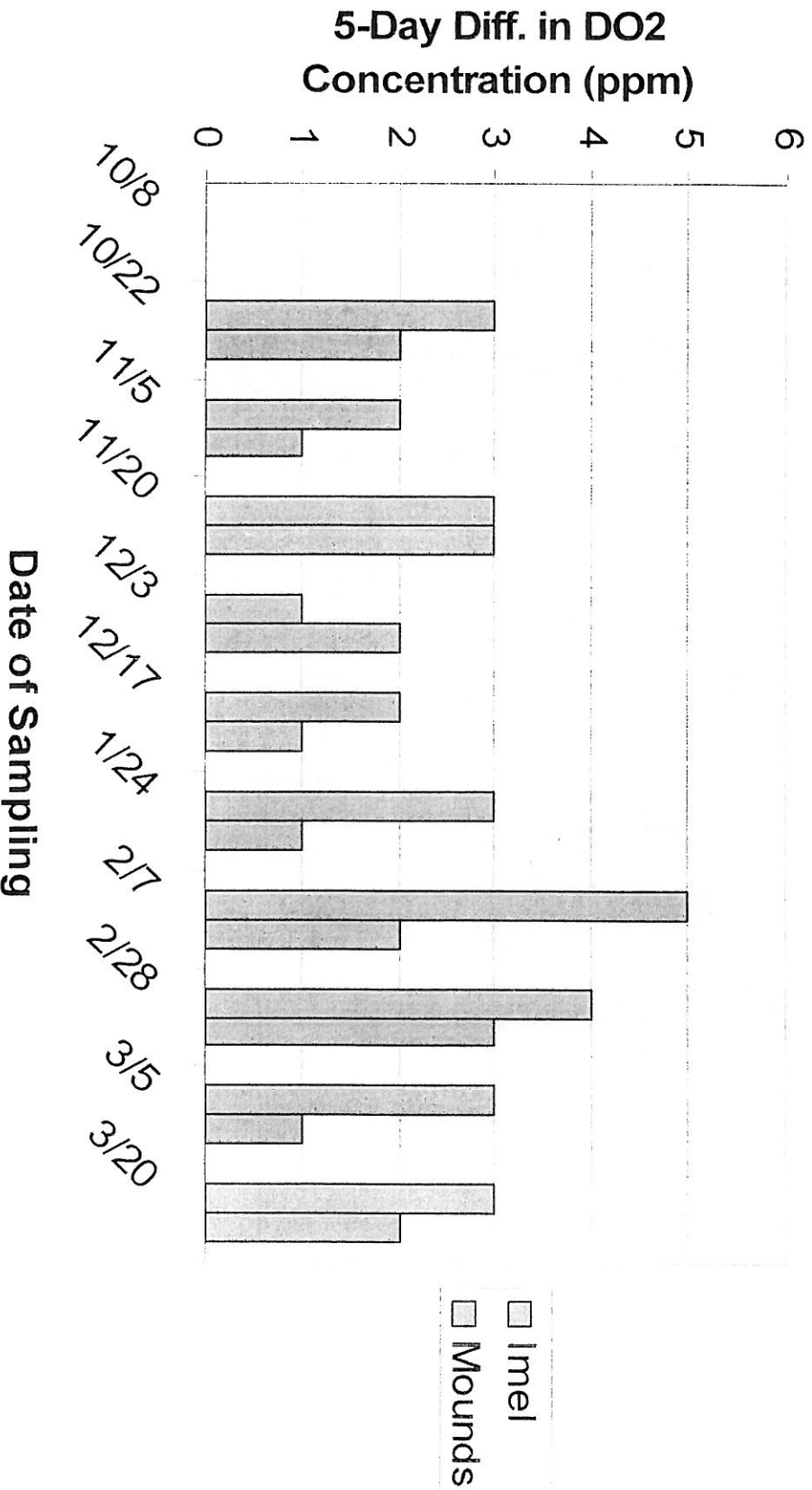
Graph 3

Dissolved Oxygen vs. Water Temperature at Mounds



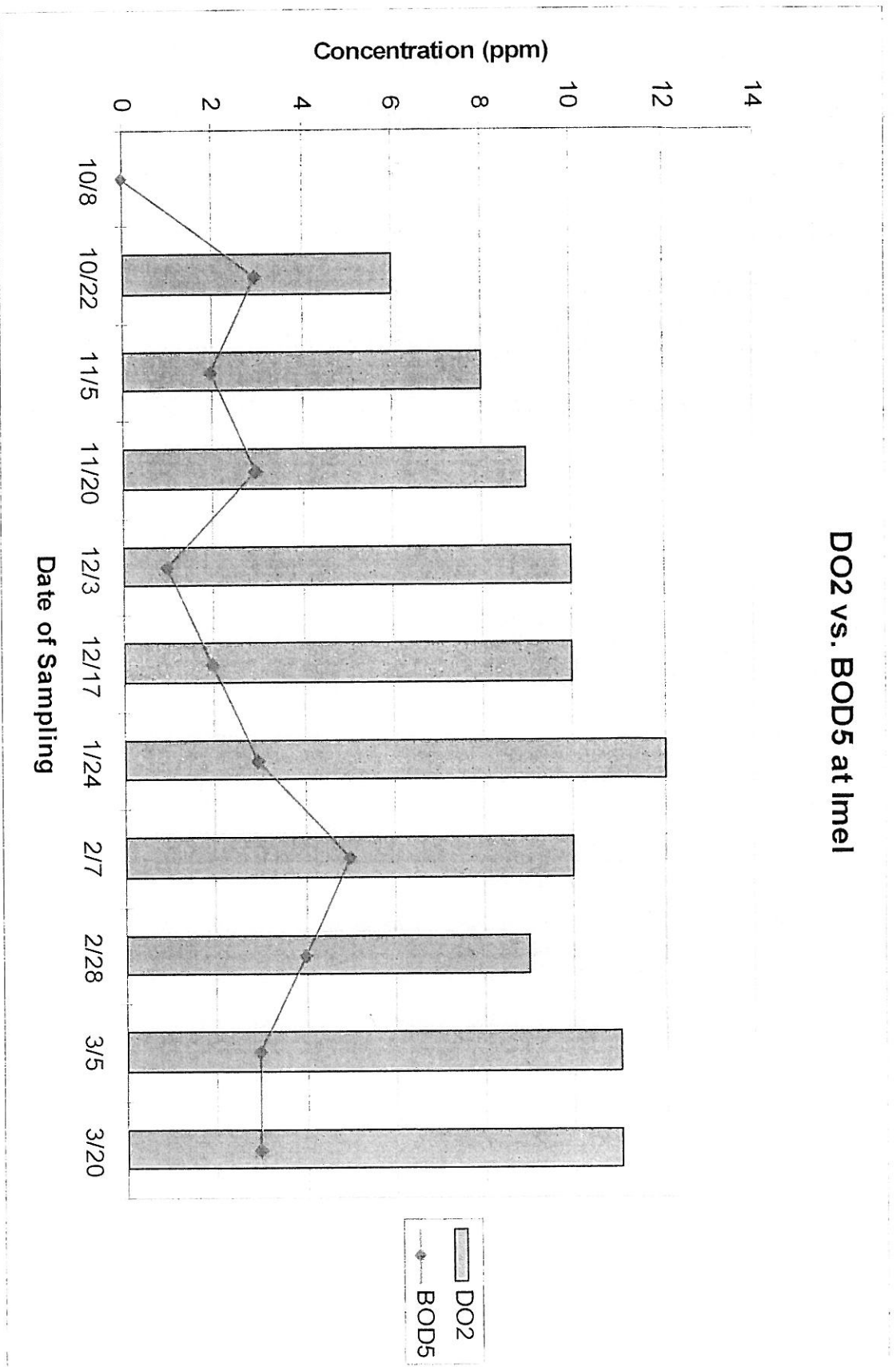
Graph 4

BOD5



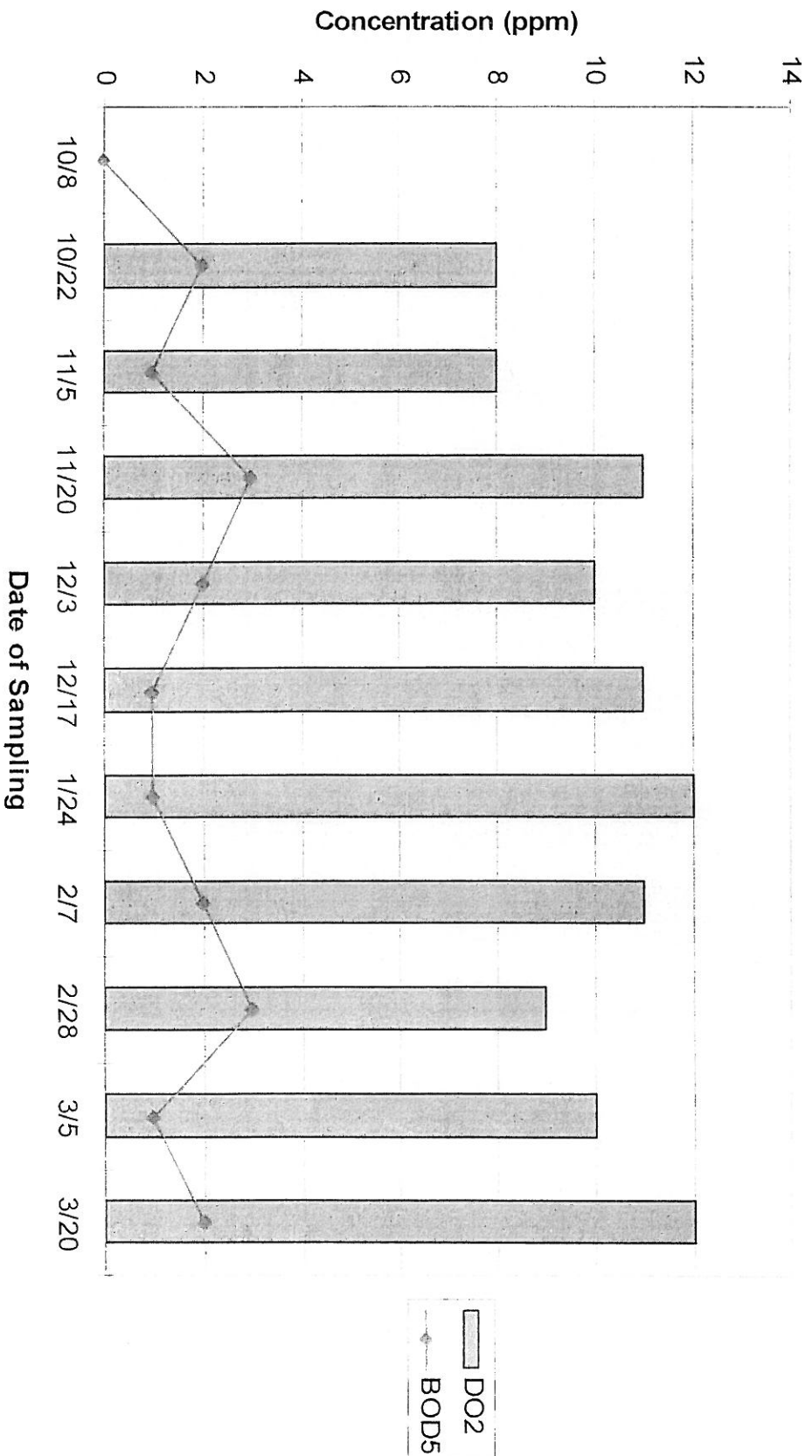
t-Test: $p = 0.01$

Graph 5



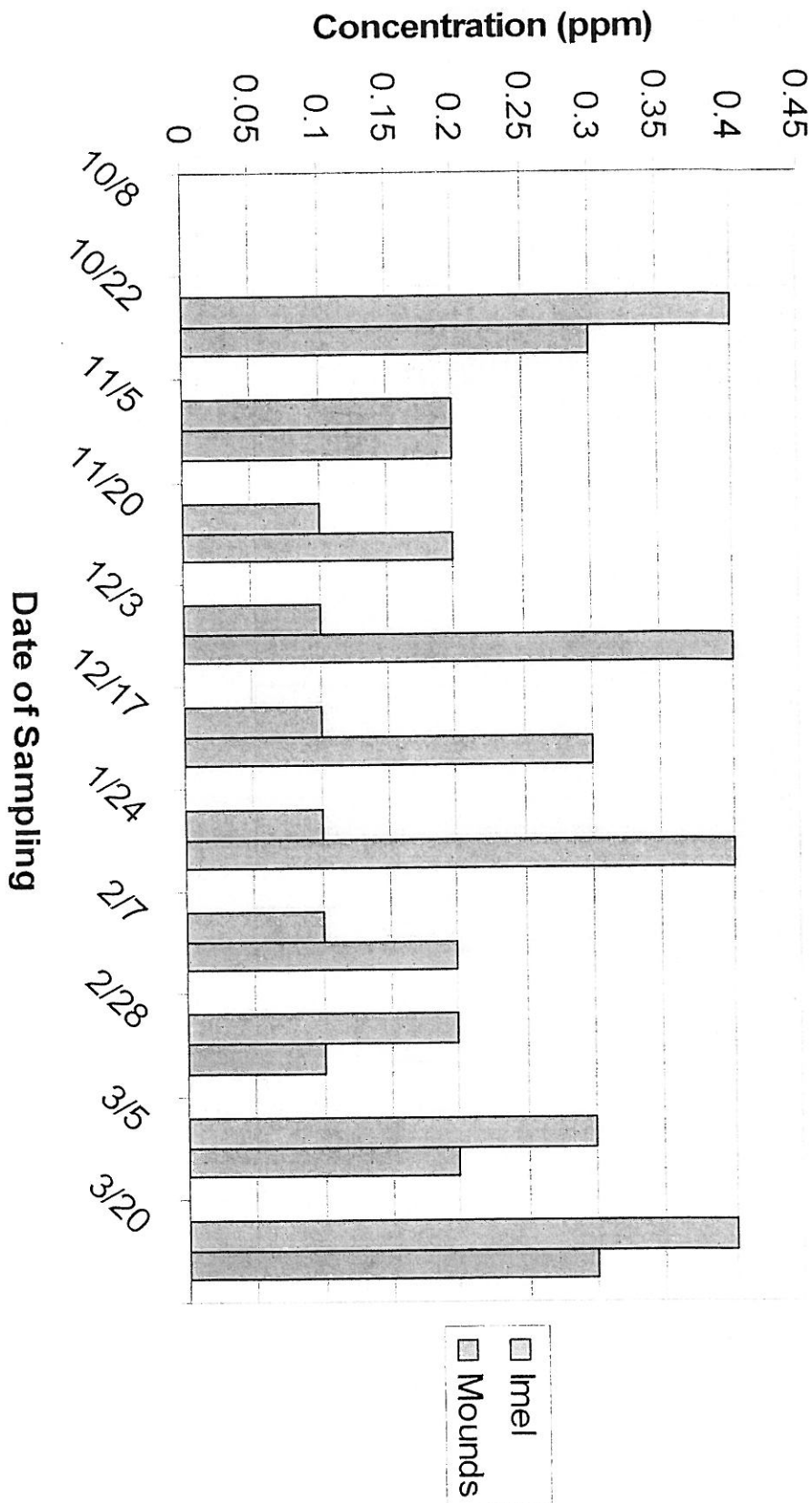
Graph 6

DO2 vs. BOD5 at Mounds



Graph 7

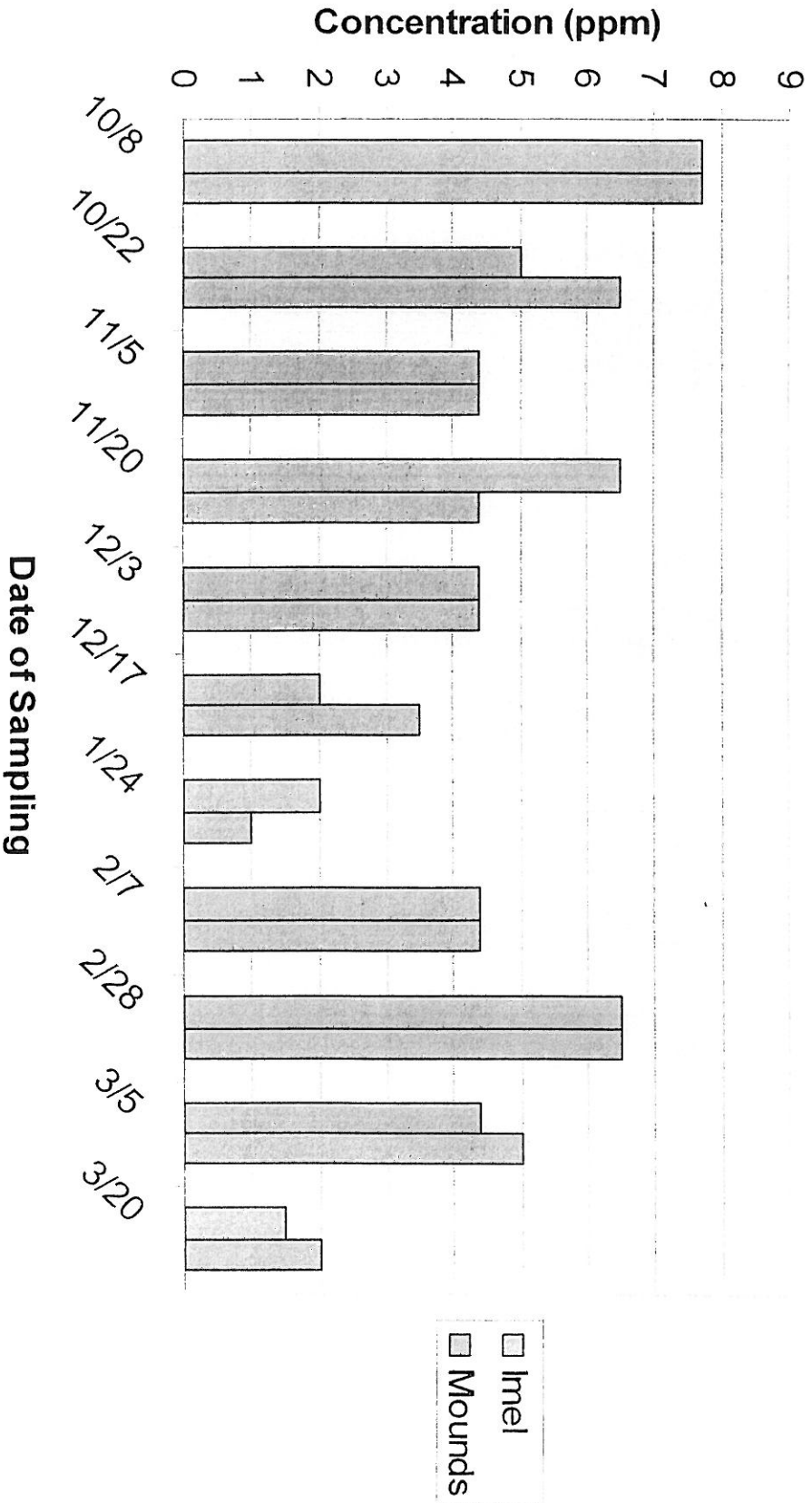
Ammonia Levels



t-Test: $p = 0.24$

Graph 8

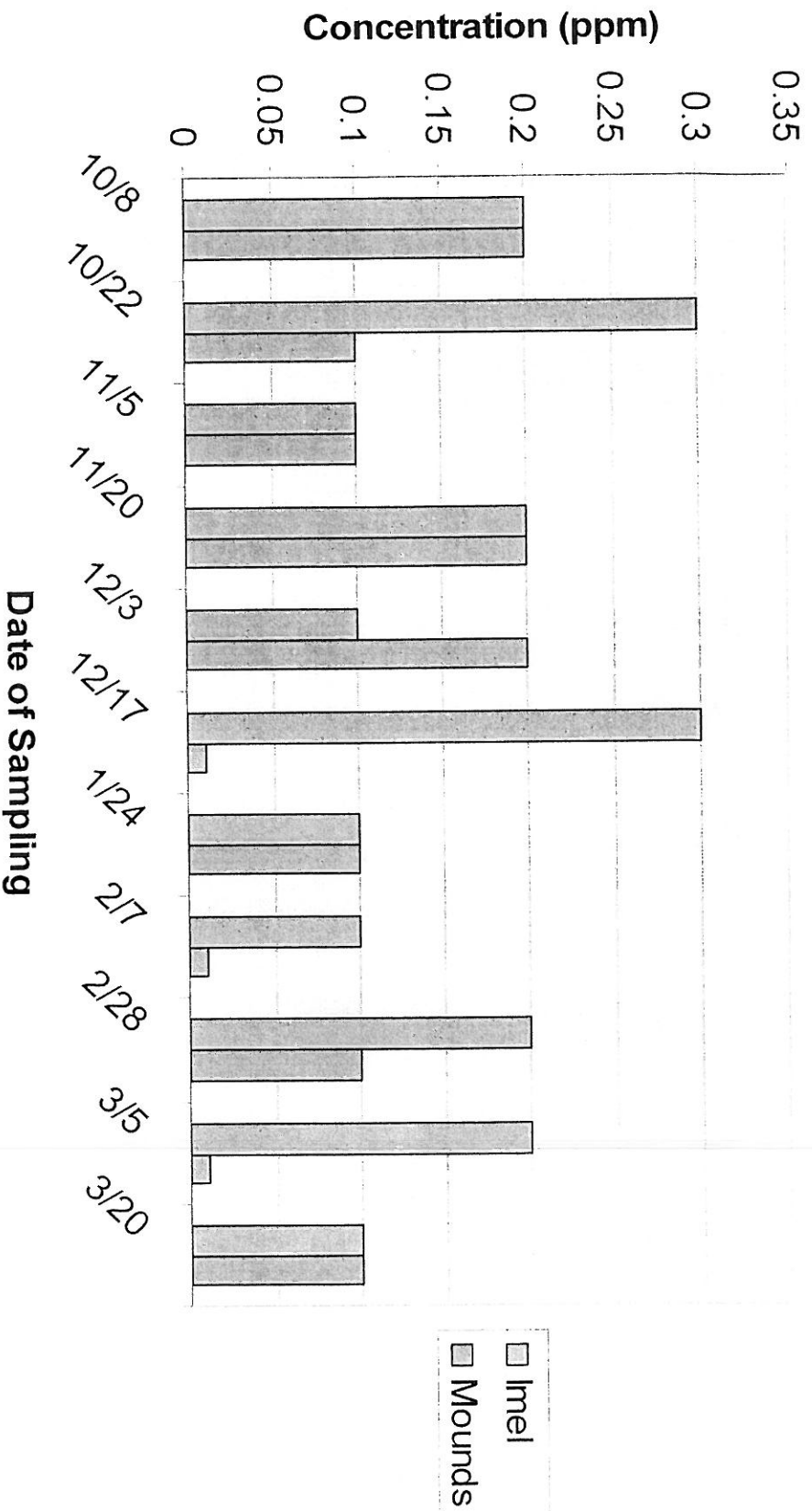
Nitrates



t-Test: $p = 0.77$

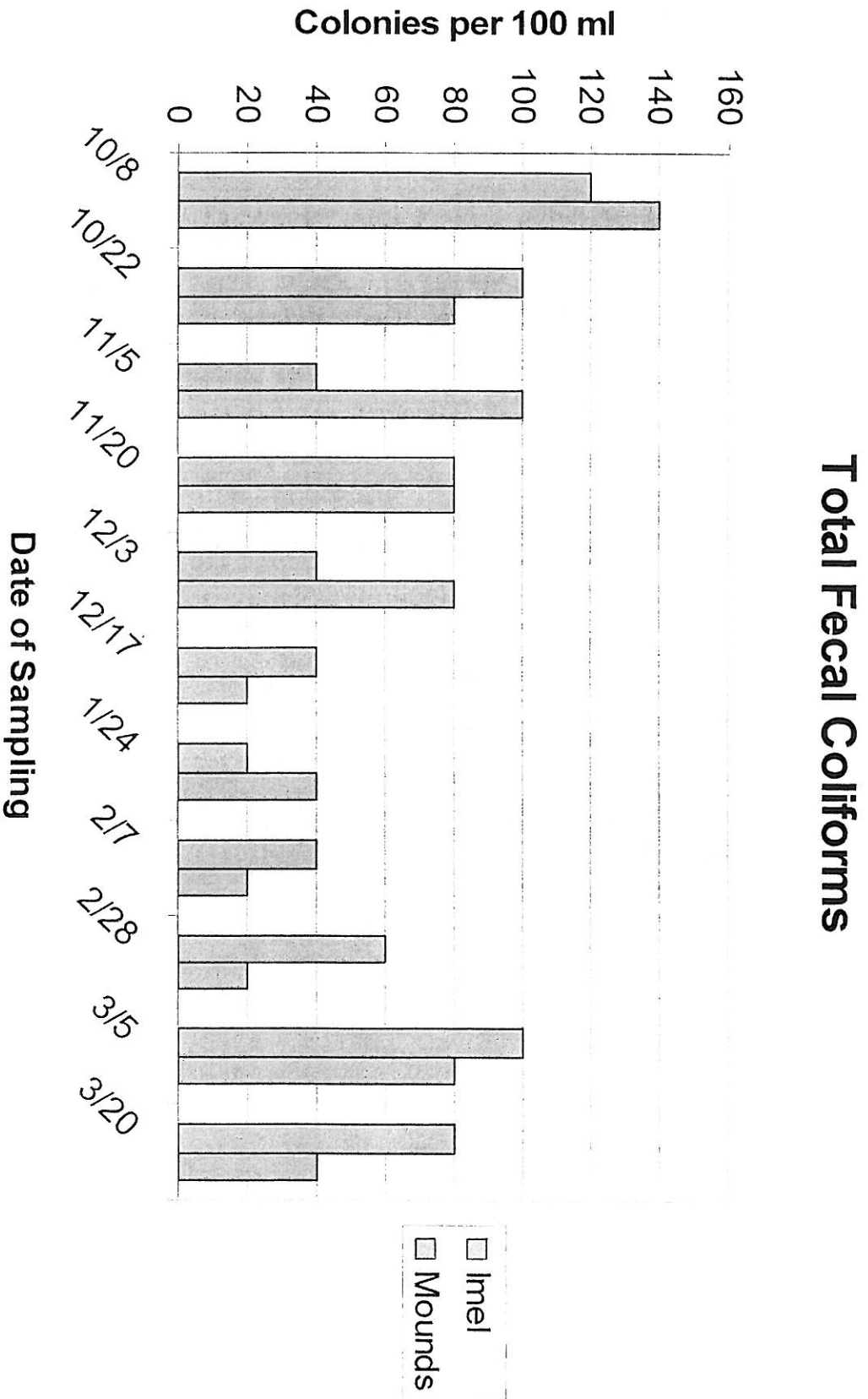
Graph 9

Phosphates



t-Test: $p = 0.07$

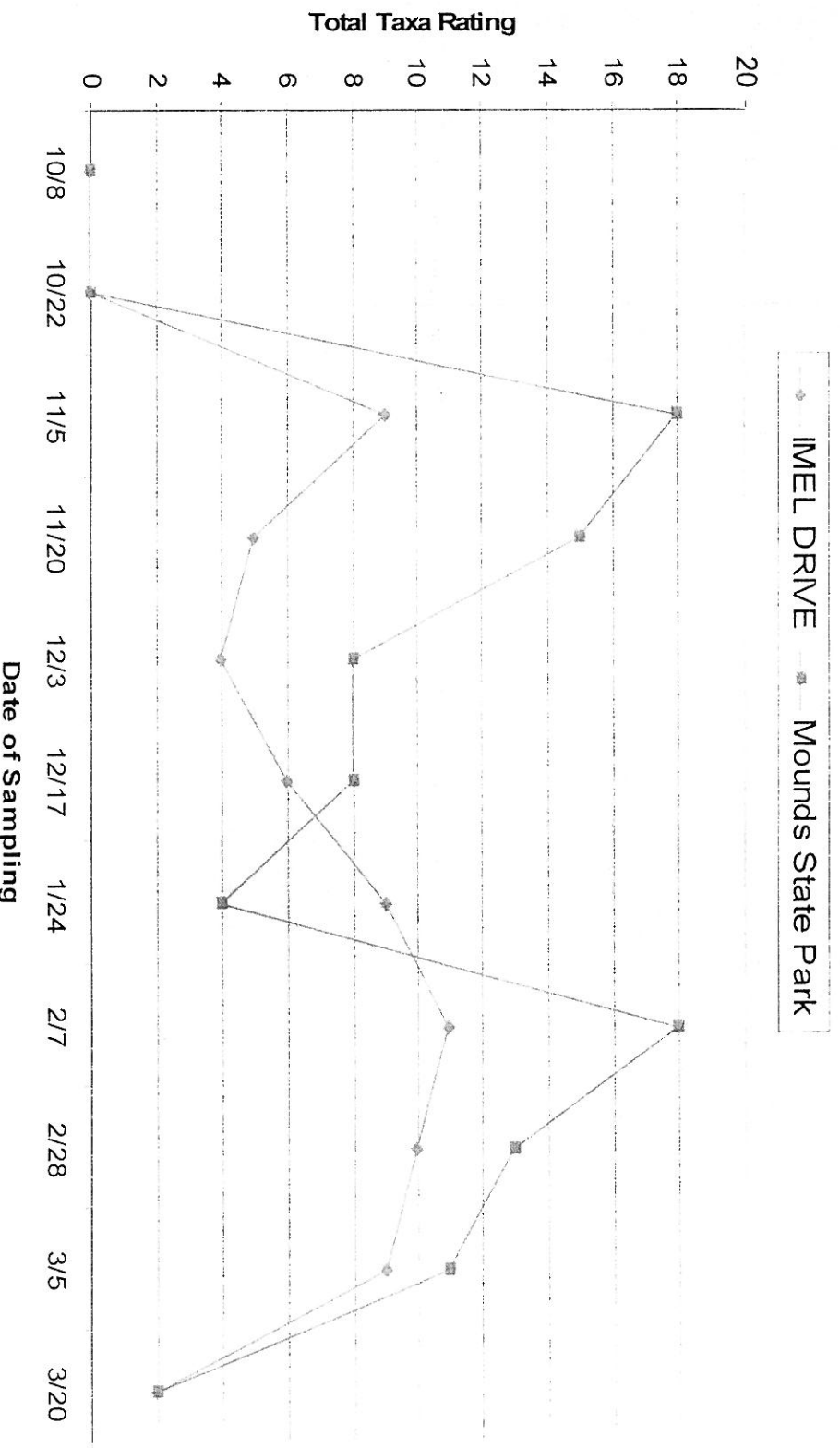
Graph 10



t-Test: $p = 0.86$

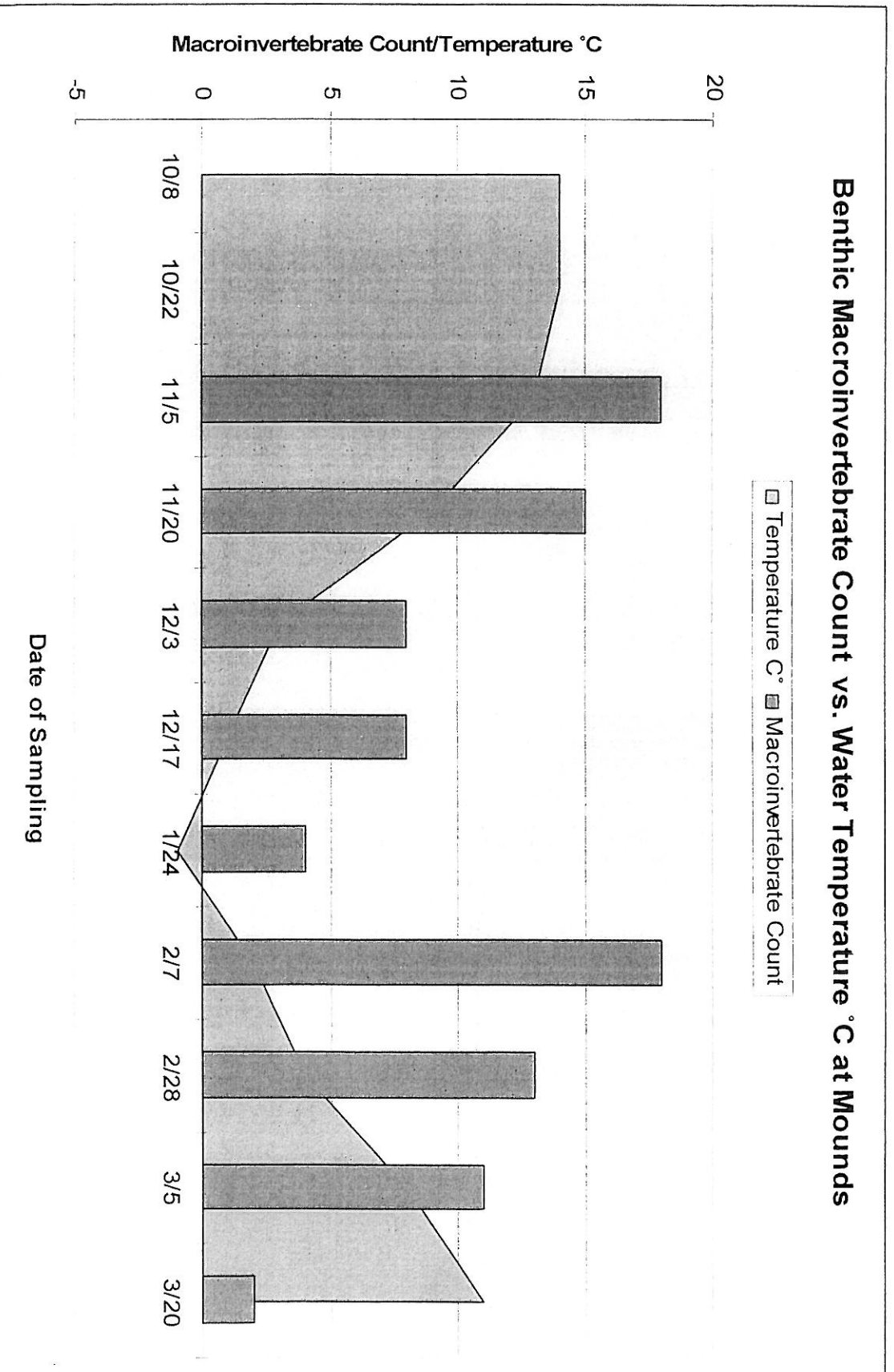
Graph 11

Water Quality in relation to Benthic Macroinvertebrate Count



t-Test results: $p = 0.02$

Graph 12



Graph 13

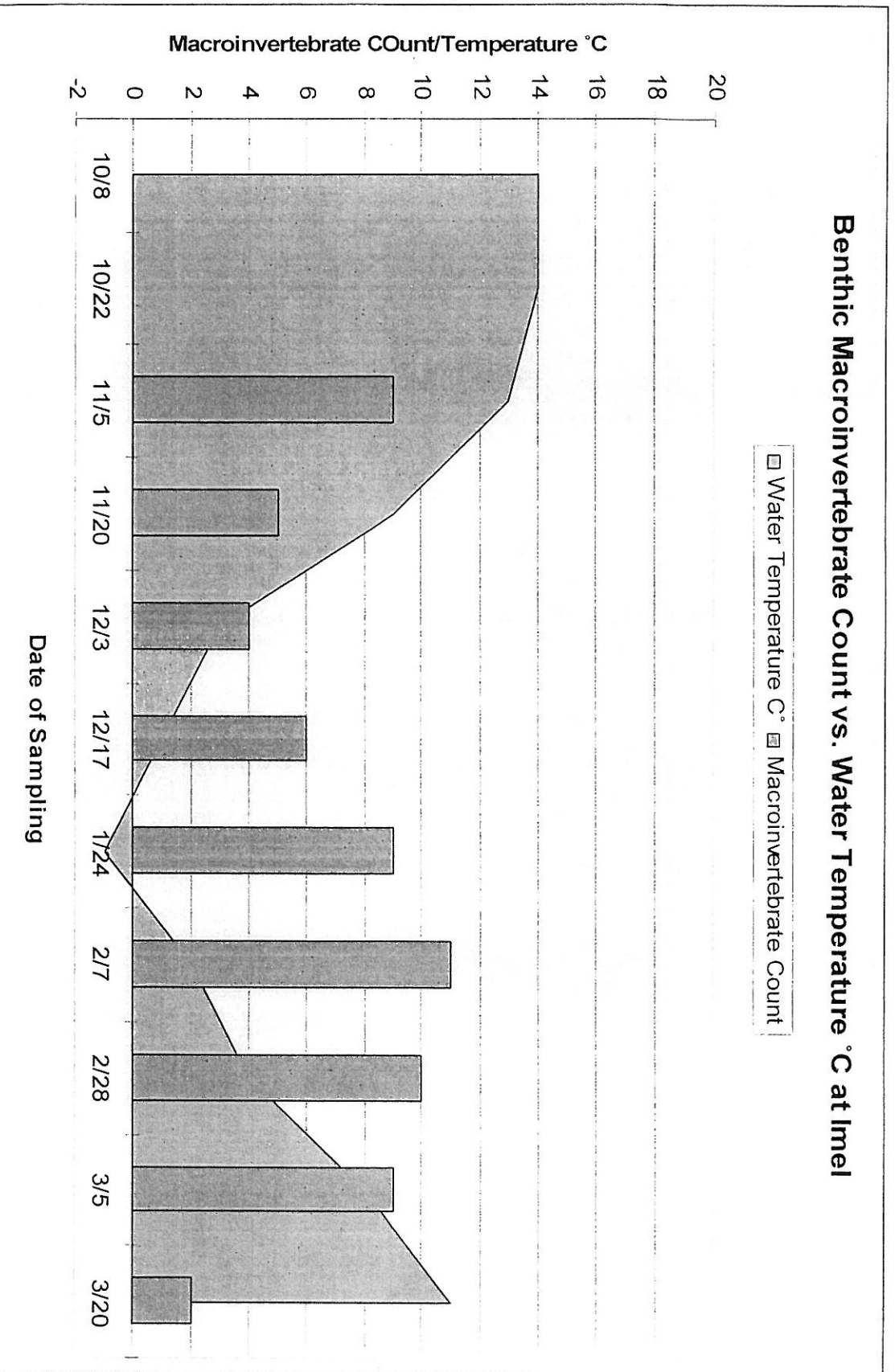


Table 2. MACROINVERTEBRATE COUNT AND POLLUTION TOLERANCE INDEX (MOUNDS)

Mounds State Park	8-Oct	22-Oct	5-Nov	20-Nov	3-Dec	17-Dec	24-Jan	7-Feb	28-Feb	5-Mar	20-Mar
Macroinvertebrates											
Group One											
Stonefly nymph	0	0	0	0	0	0	0	0	0	0	0
Mayfly nymph	0	0	3	2	0	1	0	2	1	1	0
Caddis fly larva	0	0	1	1	1	3	1	1	2	1	0
Dobsonfly	0	0	0	1	0	0	0	2	0	0	0
Rifle Beetle	0	0	1	0	0	0	0	0	0	0	0
Water Penny	0	0	0	0	0	0	0	0	0	0	0
Right-Handed Snail	0	0	1	0	0	0	0	0	0	0	0
Total # of Taxa:	0	0	4	3	1	2	1	3	2	2	0
Group Score (x4):	0	0	16	12	4	8	4	12	8	8	0
Group Two											
Damselfly nymph	0	0	0	0	0	0	0	1	1	0	0
Clams/Mussels	0	0	0	0	0	0	0	0	0	0	0
Total # of Taxa:	0	0	0	0	0	0	0	1	1	0	0
Group Score (x3):	0	0	0	0	0	0	0	3	3	0	0
Group Three											
Gray midge	0	0	6	1	2	0	0	3	17	6	5
Planaria	0	0	0	0	0	0	0	0	0	0	0
Leech	0	0	0	0	0	0	0	0	0	0	0
Total # of Taxa:	0	0	1	1	1	0	0	1	1	1	1
Group Score (x2):	0	0	2	2	2	0	0	2	2	2	2
Group Four											
Left-Handed Snail	0	0	0	0	0	0	0	0	0	0	0
Aquatic Worms	0	0	0	1	2	0	0	0	0	1	0
Blood Midge	0	0	0	0	1	0	0	1	0	0	0
Total # of Taxa:	0	0	0	1	2	0	0	1	0	1	0
Group Score (x1):	0	0	0	1	2	0	0	1	0	1	0
Total Taxa Rating:	0	0	18	15	8	8	4	18	13	11	2
Water Quality Index:	Poor	Poor	Good	Fair	Poor	Poor	Poor	Good	Fair	Fair	Poor

WATER QUALITY INDEX KEY:

23 or More	=	Excellent
17-22:	=	Good
11-16:	=	Fair
10 or Less	=	Poor

Table 1. MACROINVERTEBRATE COUNT AND POLLUTION TOLERANCE INDEX (IMEL)

IMEL DRIVE	8-Oct	22-Oct	5-Nov	20-Nov	3-Dec	17-Dec	24-Jan	7-Feb	28-Feb	5-Mar	20-Mar
Macroinvertebrates											
Group One											
Stonefly nymph	0	0	0	0	0	0	0	0	0	0	0
Mayfly nymph	0	0	0	0	0	0	0	0	0	0	0
Caddis fly larva	0	0	1	0	1	3	2	2	3	1	0
Dobsonfly	0	0	0	0	0	0	0	0	0	0	0
Riffle Beetle	0	0	0	0	0	0	0	0	0	0	0
Water Penny	0	0	0	0	0	0	0	0	0	0	0
Right-Handed Snail	0	0	0	0	0	0	0	0	0	0	0
Total # of Taxa:	0	0	1	0	1	1	1	1	1	1	0
Group Score (x4):	0	0	4	0	4	4	4	4	4	4	0
Group Two											
Damselfly nymph	0	0	0	1	0	0	2	2	9	3	0
Clams/Mussels	0	0	1	0	0	0	0	0	0	0	0
Total # of Taxa:	0	0	1	1	0	0	1	1	1	1	0
Group Score (x3):	0	0	3	3	0	0	3	3	3	3	0
Group Three											
Gray midge	0	0	1	3	0	2	1	3	29	11	2
Planaria	0	0	0	0	0	0	0	0	0	0	0
Leech	0	0	0	0	0	0	0	0	0	0	0
Total # of Taxa:	0	0	1	1	0	1	1	1	1	1	1
Group Score (x2):	0	0	2	2	0	2	2	2	2	2	2
Group Four											
Left-Handed Snail	0	0	0	0	0	0	0	0	0	0	0
Aquatic Worms	0	0	0	0	0	0	0	1	1	0	0
Blood Midge	0	0	0	0	0	0	0	1	0	0	0
Total # of Taxa:	0	0	0	0	0	0	0	2	1	0	0
Group Score (x1):	0	0	0	0	0	0	0	2	1	0	0
Total Taxa Rating:	0	0	9	5	4	6	9	11	10	9	2
Water Quality Index:	Poor	Poor	Poor	Poor	Poor	Poor	Poor	Fair	Poor	Poor	Poor

WATER QUALITY INDEX KEY:

23 or More	=	Excellent
17-22:	=	Good
11-16:	=	Fair
10 or Less	=	Poor

Discussion

Water temperature, dissolved oxygen concentration (DO_2), biological oxygen demand (BOD_5), ammonia concentration, nitrate concentration (NO_3), phosphate concentration (PO_4), turbidity, and total fecal coliforms were surveyed at each site (Appendix A and B). At both sites, dissolved oxygen concentration was plotted against water temperature and it was observed that as the water temperature decreased the dissolved oxygen concentration increased (Graphs 2 and 3). This was to be expected since at colder temperatures a greater amount of oxygen can be dissolved in water (Manahan 1991). Based on the t-value obtained, there seemed to be no significant difference between the two sites. However, it is important to note that the dissolved oxygen concentration was more frequently greater at Mounds than at Imel during sampling (Graph 1). The cause of this is most likely due to the CSO at Imel contributing more bacteria to the river through combined sewage and thus creating a higher biological oxygen demand at Imel.

BOD_5 concentrations were suspected to be higher at Imel due to the site being downstream from a CSO. Looking at graph 4 it can be seen that Imel did in fact have a higher BOD_5 than Mounds nine out of the ten times that it was sampled. After running a t-test on BOD_5 comparing the Mounds and Imel site, a significant difference of 0.01 was found (Graph 4). This suggests that the amount of oxygen in the water being utilized by bacteria to decompose organics is higher and that the CSO at Imel is suspect to this.

Ammonia and nitrate concentrations both fluctuated during the sampling period to a degree which a significant difference could not be found. The t-tests comparing both sites gave p-values of 0.24 for ammonia concentration and 0.77 for nitrate concentration,

far greater than the 0.05 standard needed to be significant (Graphs 7 and 8). For the ammonia test, levels spiked at both sites early in the fall and as the sampling times grew closer to spring. It could be suspected that this increase in concentration is a result of more rain during these months, especially a large flood that occurred in October, and thus a higher nutrient input. The three sampling periods where the ammonia concentration spiked at Mounds was most likely due to sampling error, as the levels at Imel were rather even and consistent during those periods (Graph7). Nitrate levels fluctuated sporadically throughout the sampling period with Imel having a slightly higher concentration than Mounds on average. Again, the fluctuations could have been due to sampling error as the color comparator is not analytical.

When comparing the phosphate concentrations at both sites it was observed that Imel did have a higher concentration more frequently than Mounds but was just short of being statistically significant with a p-value of 0.07 (Graph 9). Phosphates could have very well been influenced at Imel by the proximity of the CSO 60 meters upstream. Concentration levels were rather steady at mound, thus giving support that the CSO upstream from the Imel site is indeed having an effect on phosphate levels.

Total fecal coliform concentrations fluctuated greatly and ended up not resulting in a significant difference between Imel and Mounds. The t-test resulted in a p-value of 0.86, much too high to be statistically significant (Graph 10). Some important aspects of fecal coliform sampling must be addressed however. It is known that after a heavy rain the number of colonies per 100 ml can spike into the thousands and then recede back to normal levels after 48 hours. During my sampling times, it was never possible to sample right after a heavy rain and thus the total fecal coliform count was fairly low. In fact, it

never reached the State of Indiana's cutoff limit which is 235 colonies per 100 ml. The highest it reached was 140 colonies per 100 ml at mounds (Graph 10).

Calculating the water quality index using the method described in the Hoosier Riverwatch Water Quality Monitoring Streams Manual (57-58), it was found that Mounds did have a higher water quality index than Imel through a t-test comparison. The result came out to be a p-value of 0.02, which shows statistical significance (Graph 11). There are a couple important things to note about the results tables 1 and 2. At both sites, no macroinvertebrates were recovered the first two times during sampling. This can be attributed to the large flood that occurred during this period (Tables 1 and 2). It appeared that the macroinvertebrates were beginning to reestablish at both sites but then decreased as the temperature began to drop. Observing the trend monitoring of macroinvertebrates over time it is obvious that there was a greater number and a slightly greater diversity found at Mounds (Graph 11). With all of this in mind, that the substrate of both sites are similar and conditions relatively the same, it can be assumed that the CSO near Imel did have a negative affect upon the water quality rating through biological testing of benthic macroinvertebrates.

Conclusion

Rivers are very dynamic ecological systems and therefore have many variables that affect the health of river system. After analyzing the data above, the majority of the tests, biological as well as chemical, show that the experimental site (Imel) has an overall degraded water quality when compared to the control site (Mounds) and that the CSO is a detriment to the health of the Imel site. While some tests including the ammonia and

nitrate tests are too far from being significant that they can be somewhat disregarded. What can be considered valid conclusions of this research include the following: That a significant difference was found between Imel and Mounds in BOD₅ and the Water Quality Index through biological testing. That there was not a significant difference between the two sites in total fecal coliforms, ammonia or nitrate concentrations between the two sites. During or following a heavy rain, the bottom of the riverbed is scoured, thus removing benthic macroinvertebrates. That dissolved oxygen did not show significance, however favored Mounds and that phosphate concentrations also did not show significance but levels were higher at Imel. Finally, that even though not all tests confirmed that the CSO upstream from Imel decreased the water quality at that site, there is enough evidence to support that the overall water quality is better at Mounds than Imel. If this study were to be conducted again some improvements could be made to increase the accuracy and completeness of the results obtained. This study was conducted over a relatively short time span, thus if the sampling period was done throughout a yearly schedule a better chance of finding significance could be assumed. Also, it would be helpful to monitor CSO frequency and duration at the Imel site as those two factors greatly influence the chemical and biological tests. Finally, if it were possible to use more analytical means of data collection there would be less room for human error and greater statistical accuracy.

Acknowledgments

I would like to thank my advisor Dr. Daniel F. Ippolito for his guidance and advice on this project along with my committee board Dr. Blake B. Janutolo and Dr. Dale

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APPENDIX A

<u>IMEL DRIVE</u>	Water Temp (Celsius)	DO2 (ppm)	BOD5 (ppm)	Ammonia (ppm)	NO3 (ppm)	PO4 (ppm)	Turbidity	Fecal Coliforms	Total Fecal Coliforms/100mL
1st Reading 8-October	14	N/A	N/A	N/A	7.7	0.2	>55cm	6	120
2nd Reading 22-October	14	6	3	0.4	5	0.3	>55cm	5	100
3rd Reading 5-November	13	8	2	0.2	4.4	0.1	>60cm	2	40
4th Reading 20-November	9	9	3	0.1	6.5	0.2	>50cm	4	80
5th Reading 3-December	3	10	1	0.1	4.4	0.1	>60cm	2	40
6th Reading 17-December	1	10	2	<0.1	2	0.3	>60cm	2	40
7th Reading 24-January	-1	12	3	0.1	2	0.1	>60cm	1	20
8th Reading 7-February	2	10	5	0.1	4.4	0.1	>55cm	2	40
9th Reading 28-February	4	9	4	0.2	6.5	0.2	>55cm	3	60
10th Reading 5-March	8	11	3	0.3	4.4	0.2	>55cm	5	100
11th Reading 20-March	11	11	3	0.4	1.5	0.1	>60cm	4	80

APPENDIX B

<u>Mounds State Park</u>	Water Temp (Celsius)	DO2 (ppm)	BOD5 (ppm)	Ammonia (ppm)	NO3 (ppm)	PO4 (ppm)	Turbidity	Fecal Coliforms	Total Fecal Coliforms/100mL
1st Reading 8-October	14	N/A	N/A	N/A	7.7	0.2	>55cm	7	140
2nd Reading 22-October	14	8	2	0.3	6.5	0.1	>55cm	4	80
3rd Reading 5-November	13	8	1	0.2	4.4	0.1	>60cm	5	100
4th Reading 20-November	9	11	3	0.2	4.4	0.2	>55cm	4	80
5th Reading 3-December	3	10	2	0.4	4.4	0.2	>65cm	4	80
6th Reading 17-December	1	11	1	0.3	3.5	<0.1	>60cm	1	20
7th Reading 24-January	-1	12	1	0.4	1	0.1	>60cm	2	40
8th Reading 7-February	2	11	2	0.2	4.4	<0.1	>55cm	1	20
9th Reading 28-February	4	9	3	0.1	6.5	0.1	>50cm	1	20
10th Reading 5-March	8	10	1	0.2	5	<0.1	>55cm	4	80
11th Reading 20-March	11	12	2	0.3	2	0.1	>60cm	2	40

Very good report

Wendy Klooster
Biology 2070
3 May 2005

White River Lab Report

Introduction

“Water quality of a stream can be measured with physical, chemical, and biological information” (Washington State). One form of biological assessment is a sample of the benthic macroinvertebrate population. Benthic macroinvertebrates are organisms, often the larval, pupae, or nymph stage of flying insects, that lack a backbone (invertebrate), live on the bottom (benthos) of a river or other body of water, and are large enough (macro) to be seen with the naked eye (handout). They are a vital link in the local foodchains as “many invertebrates feed on algae and bacteria” and are then preyed upon by fish and other aquatic vertebrates (Maryland DNR). They are extremely valuable as bioindicators of water quality because they are easy to collect and identify, live in the water all or part of their lives, and vary in their degree of tolerance for pollution, allowing distinctions to be made between different tolerance indices (U.S. EPA). Furthermore, “because benthic organisms cannot easily escape by swimming away, as some fish can, we can be certain that samples reflect local conditions” (Gibbs). This method of water quality analysis is most effective and accurate in late spring, summer, and early fall since “in colder months, many species burrow deep within the mud or remain inactive on rock surfaces” (Maryland DNR). However by scraping off the rocks and stirring up the substrate it is possible to collect the majority of the organisms present.

The purpose of this particular study was to determine an approximate value for the water quality of the White River while practicing the laboratory methods of collection, examination, and identification. It also tied in to the lectures on water pollution and treatment.

Materials and Methods

The sampling location was a ten minute walk from the Anderson University campus, at Edgewater Park on the White River (in the West Fork of the White River watershed). The site is upstream from the local water treatment plant. Collection took place between two and four o'clock in the afternoon on April 18, 2005. The weather was clear, breezy, and warm. The riparian zone around the site is fairly open, with only a few large trees. Many geese live in the area and debris such as old tires ^{was} ~~were~~ observed near the site. The river itself is at least fifty feet wide at the site, and the sample was taken about one third from the bank where a sandbar allowed for easy access.

After wading into the water and approaching the experimental area from downstream, a quadrat sampler, which is a three foot by three foot square frame of PVC pipe filled with sand, was placed on the bottom of the stream. A kick seine (fine mesh net) was placed at the downstream side of the area, and held in place by one student and the professor, and the bottom edge was weighted down with rocks to keep it firmly against the ^{stream} ~~bed~~. Two other students then picked up all of the rocks having an approximate diameter greater than two inches, and brushed them off by hand below the surface of the water, trying not to leave any organisms behind. The ground within the area was then stirred up by digging and shuffling feet in the rocks and gravel. The seine was then pulled up carefully with a forward upstream motion, so as not to loose any of the organisms. It was carried to shore and laid in a clear area free of debris. Forceps were then

used to carefully remove all organisms and place them in a glass jar containing ethyl alcohol. The bloodworms were identified and noted at that time since their color would soon fade, making them indistinguishable from the gray midge larva². This process was repeated at a nearby location in the river due to the low number of organisms found in the first sample. The organisms found in the second sample were added to the same jar of ethyl alcohol and were counted together.

A thermometer was used to measure the temperature of the water near the sampling site as well as closer to the edge of the river. Standard pH paper was used to determine the pH of the area. A turbidity tube (long, narrow tube with a black and white patterned disc at the bottom) was used to determine the turbidity of the water. The turbidity is measured by the maximum depth of water at which the black and white in the pattern can be distinguished. The current speed was determined by stringing fifty feet of tape measure between two people standing parallel to the current and measuring the amount of time it took for an orange to float the length of the tape measure. This was performed three times and the average was calculated and converted to feet per second. A sample of water was also collected in a sterile container (making sure not to contaminate the sample) and placed in a cooler to take back to the lab for fecal coliform analysis. The sample was kept cool to prevent any organisms possibly present from multiplying and skewing the results. Back at the lab, a Petri dish of standard agar was inoculated with the sample and allowed to incubate for 24 hours at around 37°C. The Wednesday lab group also performed a dissolved oxygen test.

During the lab period the following week (4/25/05), the contents of the sample jar was strained using a sieve. A few organisms at a time were placed into a glass dish with a small amount of water and examined using dissecting microscopes. The type and quantity of each taxa

of organism collected was observed and recorded in Table 1. The total number of grey midge-like larva was counted and the number of bloodworms that had been recorded earlier was subtracted in order to determine the number or actual grey midge larva. Finally, the pollution tolerance index for each of the stream sites was calculated and recorded in Table 2.

Results

A total of four different types of organism were found, representing three of the four *pollution* *tolerance* ~~point~~ groups. Five mayfly nymphs were found for ~~point~~ group one, twenty-two grey midge larva and five water mites were found for ~~point~~ group three, and seven blood worm midge larva^a were found for ~~point~~ group four (see Table 1).

Table 1: Types and Numbers of Organisms Found

Organism	Number found	Point Group
Mayfly Nymph	5	1
Grey Midge	22	3
Water Mite	5	3
Blood Midge	7	4

The number of taxa found for each ~~point~~ group was multiplied by the appropriate weighting factor, and an overall water quality index value was obtained. An index higher than 23 indicates excellent water quality, 17-22 is good, 11-16 is fair, and 10 or less indicates poor water quality. The total value for water quality according to the observed taxa was nine, corresponding to a poor water quality index value (see Table 2).

Table 2: Number of Taxa per Point Group times Weighting Factor

Point Group	Number of Taxa	Weighting	Subtotal
1	1	x4	4
2	0	x3	0
3	2	x2	4
4	1	x1	1
Total			9
Index			poor

Two temperature readings were taken, one close to the bank and one nearer the actual collection site. The temperature reading was 21°C near the bank and 20°C closer to the middle. The turbidity was greater than 55cm of visibility, and the pH was 7. The average current speed was 54 seconds per 50 feet, or 0.90 feet per second. A fecal coliform test was performed on the water sample by inoculating a Petri dish of standard agar with the sample and incubating it. The results of the water quality tests are shown in table 3.

Table 3: Water Quality Tests and Results

Temperature	20 deg. C (in middle of river)
	21 deg. C (near bank)
Turbidity	> 55 cm
pH	7
Dissolved Oxygen	~ 11 mg/L
E. Coli	1 colony/ 5mL
	20 col./ 100mL
Current Speed	0.9 ft/sec.

Discussion and Conclusion

The water quality of the White River at Edgewater Park as determined by the macroinvertebrate survey was poor, which was unexpectedly low considering the other water quality tests indicated nothing particularly wrong. The pH was appropriate for sustaining aquatic life, the E. coli level was well below the 200 colony per 100mL limit for recreational use, and the turbidity was below the minimum possible reading (meaning maximum visibility) for the test

used. The water temperature was as expected for the time of year, and the current speed was just slightly slower than expected. The dissolved oxygen test run by the Wednesday lab group yielded a reading of 10 to 12 ppm, which is very good. However, the discrepancy between the results from the macroinvertebrate survey and the other water quality tests may be explained by heavy rains fairly recent prior to the sampling that could have scoured the river bottom and washed away the majority of benthic macroinvertebrates. The high water level as a result of the rains also prevented the samples from being taken in the actual middle of the river where more organisms may have been found. The data was also skewed by combining the organisms collected in two different samples. Furthermore, since the temperatures had not yet been consistently high, it is possible that some of the benthic macroinvertebrates were still burrowed down into the substrate, although they still may have been uncovered when the site was stirred up, so that is not likely to explain the low number of organisms found.

It would be interesting to compare these results with samples taken long enough after heavy rainfalls for benthic macroinvertebrates to recolonize the area. Much of the success of field work is dependent on temperature and weather conditions, and will therefore vary from year to year.

Literature Cited

Biological Monitoring Handout. Chapter 5: Benthic Macroinvertebrates, p. 34.

Gibbs, D. 1998. Using Benthic Macroinvertebrate Assemblages as indicators of Water Quality and Stream Health. Accessed on 5/2/2005 at <http://www.woodrow.org/teachers/esi/1998/r/pres/gibbsbenthic.htm>.

Maryland Department of Natural Resources. 2004. Freshwater Benthic Macroinvertebrates. Accessed on 5/2/2005 at <http://www.dnr.state.md.us/streams/pubs/freshwater.html>.

U.S. Environmental Protection Agency. 2005. Biological Indicators of Watershed Health. Accessed on 5/2/2005 at <http://www.epa.gov/bioindicators/html/invertebrate.html>.

Washington State Department of Ecology. 1998. Stream Biological Assessments (Benthic Macroinvertebrates) for Watershed Analysis. Accessed on 5/2/2005 at <http://www.ecy.wa.gov/pubs/98334.pdf>

POLLUTION TOLERANCE INDEX (PTI) DATA SHEET FOR MACROINVERTEBRATES

SITE INFORMATION

Date 04/18/05 Time 14:00 (am or pm) Watershed Name: West fork of White River
(Mo) (Da) (Yr)
Collector(s) Name Wendy Klooster Organization Name Humans & the Environ.
Stream/River Name White River Sampling Site # Edgewater Park
(if applicable)
Latitude/Longitude _____ GPS _____
(if applicable) (if applicable)
Nearest City/Town Anderson State IN

MACROINVERTEBRATE INDEX

PT GROUP 1	PT GROUP 2	PT GROUP 3	PT GROUP 4
Stonefly Nymph _____	Damselfly Nymph _____	Grey Midge <u>22</u>	Left-Handed
✓ Mayfly Nymph <u>5</u>	Dragonfly Nymph _____	Black Fly Larvae _____	Snail _____
✓ Caddis Fly Larvae _____	Sowbug _____	Planaria _____	Aquatic Worms _____
Dobsonfly Larvae _____	Scud _____	Leech _____	Blood Midge <u>7</u>
Riffle Beetle _____	Crane Fly Larvae _____	Water Mite <u>5</u>	Rat-Tailed
Water Penny _____	Clams/Mussels _____		Maggot _____
Right-Handed			
Snail _____			
# OF TAXA <u>1</u>	# OF TAXA <u>0</u>	# OF TAXA <u>2</u>	# OF TAXA <u>1</u>
Weighting X 4 <u>4</u>	X 3 <u>0</u>	X 2 <u>4</u>	X 1 <u>1</u>
Factor: <u>X 1</u>			

TOTAL TAXA RATING

9

WATER QUALITY INDEX VALUE

23 or More Excellent
17 - 22 Good
11 - 16 Fair
10 or Less Poor

WATER QUALITY INDEX VALUE

Poor

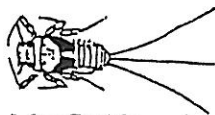
POLLUTION TOLERANCE GROUPS MACROINVERTEBRATE IDENTIFICATION

PT GROUP 1 - These organisms are generally considered to be intolerant of pollution.



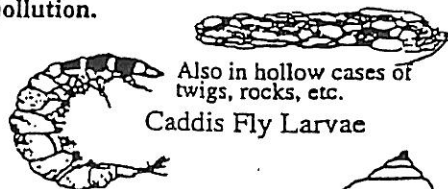
Two tails

Stonefly Nymph



Three tails

Mayfly Nymph



Also in hollow cases of
twigs, rocks, etc.
Caddis Fly Larvae

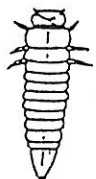
Large head and two large teeth



Dobsonfly Larvae



Adult



Small
beetle-like
head

Larvae
Riffle Beetle



Flat on rocks

Water Penny

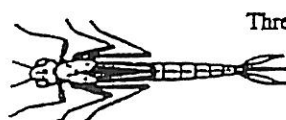


Mouth to right



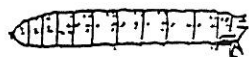
Right-Handed
Snail

PT GROUP 2 - These organisms are generally considered to be moderately intolerant to pollution.



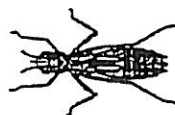
Three paddle-like
tails

Damselfly Nymph



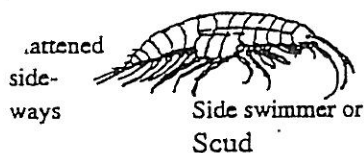
Disk with tubes

Crane Fly Larvae



No tails

Dragonfly Larvae

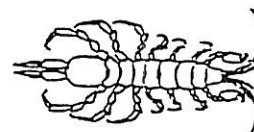


Flattened
side-
ways

Side swimmer or
Scud



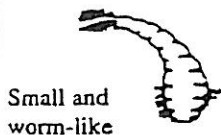
Clams/Mussels



Flattened
top to
bottom

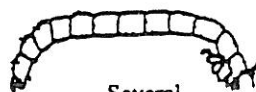
Aquatic Sowbug

PT GROUP 3 - These organisms are generally considered to be fairly tolerant to pollution.



Small and
worm-like

Black Fly Larvae



Several
tubes

Grey Midge Larvae



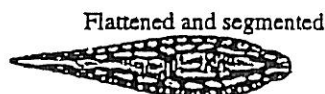
.1 to 1.2 in.

Planaria



.1 inch

Water Mite

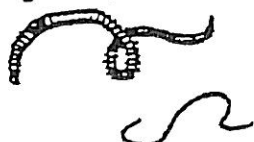


Flattened and segmented

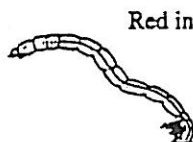
Leech

PT GROUP 4 - These organisms are generally considered to be very tolerant to pollution.

All segmented, some slender

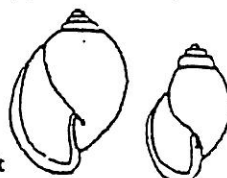


Aquatic Worms



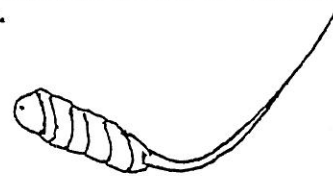
Red in color

Blood Worm
Midge Larvae



Mouth to left

Left-Handed
Snail



Rat-Tailed
Maggot

A Good job!

White River Water Quality Testing

Janelle Good

Ecology

December 11, 2006

I. Introduction

The purpose of this study was to determine the water quality of the Imel Road site of the West Fork of the White River through chemical and biological monitoring.

The White River is one the major rivers in Indiana. The mouth of the river is ^{or the source?} close to Winchester in Randolph County, IN and the river runs through 11 counties. The West Fork joins the East Fork close to Petersburg, IN and the White River eventually joins the Wabash River. The West Fork is approximately 356 river miles and drains 5,603 square miles of watershed in Indiana. The land in the West Fork White River Basin is a mix of row-crop agriculture, forests, and urban/industrial areas such as Anderson and Indianapolis. There are also limestone quarries, coal mines, and wetlands located throughout the basin (Stahl, 1998). Madison County is in the watershed of the West Fork of the White River. The site used in this study was off of Imel Road in Anderson, IN and is located downstream of a combined sewer overflow.

Water quality is usually tested through chemical and biological monitoring. For chemical monitoring a variety of parameters can be used, including temperature, pH, orthophosphate, nitrate, turbidity, hardness, current, *E. coli*, general coliforms, dissolved oxygen, and BOD₅. Temperature is an important indicator, as it affects dissolved oxygen levels, photosynthetic rates, and the metabolic rates of aquatic organisms. pH is also a valuable measurement, since aquatic organisms are sensitive to pH levels during reproduction. Most natural waters have a pH range of 5.0 to 8.5 units and the Indiana average is 8.0. Also, orthophosphate is a form of phosphate that is water soluble and is an indicator of the potential for algal blooms and eutrophication. There are no state standards in Indiana for orthophosphate. Additionally, nitrate is a main ingredient in fertilizers and can also lead to algal blooms and eutrophication. The Indiana average for

nitrate is 12.32 mg/L. Turbidity is a measure of the clarity of water. Turbid water has more suspended matter, which can be caused by erosion, runoff, algal blooms, or disturbances of bottom sediment. High turbidity can limit photosynthesis, increase water temperatures, decrease dissolved oxygen levels, and smother aquatic habitats. The Indiana average for turbidity is 36 NTUs (Hoosier Riverwatch). Another test completed was for hardness, which is a way to measure the amount of dissolved calcium and magnesium present in the water. Calcium is present in cell walls and the shells and bones of aquatic organisms. Magnesium is found in chlorophyll and is present in green plants. Limestone is also a natural source of hardness, as limestone is composed of calcium carbonate. A hardness measurement over 180 mg/L is considered very hard (Alabama Water Watch Program, 2002). Measuring current allows for an indication of how much energy organisms must exert to avoid being carried downstream. *E. coli* bacteria are found in feces of warm-blooded animals and some strains may cause human illness. High levels of *E. coli* can result from livestock manure runoff from fields, waterfowl waste, or human waste from combined sewer overflows or wastewater treatment systems. The Indiana average for *E. coli* is 645 colonies/100ml. General coliforms, on the other hand, are non-fecal bacteria and are of less concern than *E. coli*. Dissolved oxygen is the amount of oxygen present in the water. Most aquatic organisms and plants need oxygen for survival, therefore dissolved oxygen levels are important in assessing river health.

Turbulence, altitude, photosynthetic rates, amount of decaying organic material, and temperature all affect dissolved oxygen levels. Dissolved oxygen levels should be higher at colder temperatures since cold water can hold more dissolved oxygen than warm water. Saturation levels are based on a combination of the amount of dissolved oxygen (mg/L) in the water and water temperature. 80-125% saturation is excellent for most river animals.

Finally, BOD₅ is the biochemical oxygen demand and measures the amount of oxygen consumed by aerobic bacteria as they degrade organic waste over a period of five days. High BOD₅ levels indicate large amounts of organic matter due to pollution or excessive plant growth. 1-2 mg/L indicates good quality water with little organic waste and the Indiana average for BOD₅ is 1.5 mg/L (Hoosier Riverwatch).

Macro-invertebrates are often used for biological monitoring. Macro-invertebrates are organisms that lack a backbone and are large enough to be seen with the naked eye. Biological monitoring through macro-invertebrates ^{is based on} ~~stems from~~ the fact that various species react to water pollution differently. There are macro-invertebrates, such as mayflies and caddis flies, that have a low tolerance for pollution. Therefore, the presence of these macro-invertebrates in rivers indicates a low level of pollution. On the other hand, macro-invertebrates such as left-handed snails and blood midges have a high tolerance for pollution. The presence of these macro-invertebrates is an indirect way to measure pollution. In highly polluted rivers these macro-invertebrates increase in amount and variety, but they are also expected to live in unpolluted waters as well.

II. Materials & Methods

Students took samples on three different dates, 10/4/06, 11/1/06, and 11/15/06. On each date both chemical and biological monitoring tests were performed. For chemical monitoring a variety of tests were completed. Upon arrival at the site, temperature and pH were first measured and recorded. Temperature and pH were tested with a waterproof pH and temperature meter produced by Hanna Instruments (Model HI-98127). Several other chemical tests were then completed. Hardness was tested with the tablet version of the LaMotte hardness kit (Model PHT-DR-LT, Code 4482-DR-LT, Lot # 316731). Orthophosphate testing was completed with the CHEMets phosphate kit (K-

8510). Nitrate was tested with the Ward's nitrate kit (Catalog # 21W9007). *E. coli* and general coliforms were tested by transferring 5 mLs of water from a sterile pipette into an Easy-Gel Coliscan bottle (Lot # 3C146). The Easy-Gel bottle was stored on ice until transported back to the lab, where the contents of the Easy-Gel bottles were emptied into the bottom half of a sterile petri dish. After 45 minutes solidification occurred and the plates were incubated for approximately 40 hours at 37 °C. After approximately 40 hours the numbers of fecal and general coliforms were counted. Since the petri dish only contained 5 mls, the number of bacteria colonies per 100mls had to be calculated. Turbidity was tested with a turbidity tube. Current was tested by using a 100 foot measuring tape and an apple. 100 feet was measured out in the river and the number of seconds it took the apple to travel 100 feet in the water was recorded. These figures were later converted to meters/second. Dissolved oxygen and BOD₅ were tested with the LaMotte Fresh Water Aquaculture test kit (Model AQ-2, Code 3633-02). Dissolved oxygen was either completely tested on site or was only fixed on site and testing was completed back in the lab. BOD₅ samples were collected last and transferred back to the lab, where they were placed in a dark cabinet for five days. After five days the water was tested with the same method originally used to test dissolved oxygen. Each parameter was tested with three trials except turbidity and hardness, which were tested with one trial each. An average of the three trials was later calculated. Dissolved oxygen, *E. coli*, pH, BOD₅, nitrate, and turbidity averages were then used to calculate a water quality index rating by completing a worksheet supplied by Hoosier Riverwatch.

For biological monitoring, macro-invertebrates were collected and identified. Macro-invertebrates were collected with the kick seine sampling method (Hoosier Riverwatch). A quadrat made with PVC tube^{ing} was laid on the bottom of the river in an

area shallow enough for the students to reach the bottom with their hands. The seine net was stretched open directly downstream of the quadrat. Rocks inside the quadrat greater than two inches in diameter were then rubbed and any macro-invertebrates were removed and captured by the seine net. Lastly, the students stirred up the area inside the quadrat with their feet. The seine net was carefully removed from the river and the macro-invertebrates were picked off the net with tweezers and placed in a bottle of 70% ethanol. This method was repeated three times. Back at the lab the macro-invertebrates were identified with the aid of dissecting microscopes. Following the pollution tolerance index worksheet supplied by Hoosier Riverwatch, macro-invertebrates were placed into pollution tolerance group 1, 2, 3, or 4, and the number of taxa in each group was multiplied by a weighting factor. The results from all four groups were added together to achieve the pollution tolerance index rating. In addition, Simpson's index of dominance was calculated with the formula

$$1 = \frac{\sum x_i(x_i-1)}{N(N-1)}$$

where x_i is the number of macro-invertebrates in a given family and N is the total number of macro-invertebrates collected. Additionally, Simpson's index of diversity was calculated by subtracting the dominance rating from 1.

III. Results

Table 1-Variou Chemical Parameters as Collected on Three Sampling Trips to the White River

Parameter	1-10/4/06	2-11/1/06	3-11/15/06
Water Temperature (°C)	20.3	9.8	8.8
pH	8.4	8.4	8.3
Dissolved Oxygen (mg/L)	10.4	10.5	10.3
(% Saturation)	114%	91%	87%
BOD ₅ (mg/L)	1.1 (ACTUALLY 7 DAYS)	1.7	1.9
<i>E. coli</i> (colonies/100 mL)	40	40	6.7
General Coliforms (colonies/100 mL)	586.7	1,107	353.3
Orthophosphate (mg/L)	0.47	0.3	0.2
Nitrate (mg/L)	7.93	5.9	4.5
Turbidity (NTU)	<15	<15	<15
Hardness (mg/L)	430	330	400
Current (m/sec)	0.51	0.71	0.48
Water Quality Index Rating	62%	77%	78%

A water quality index rating between 50% and 69% is “medium” and a rating between 70% and 89% is “good”. Sample one resulted in a “medium” rating while samples two and three resulted in “good” ratings.

Figure 1-Temperature Measurements for Three Sampling Trips to the White River

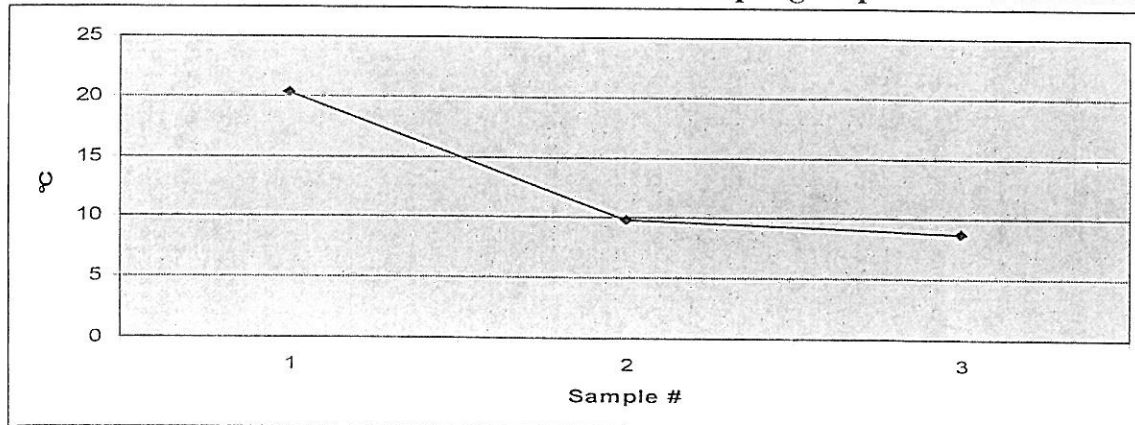


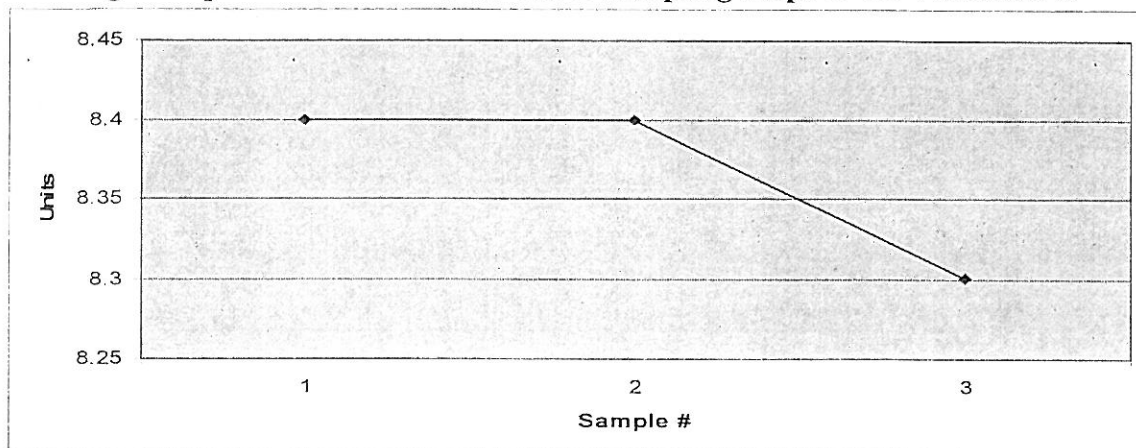
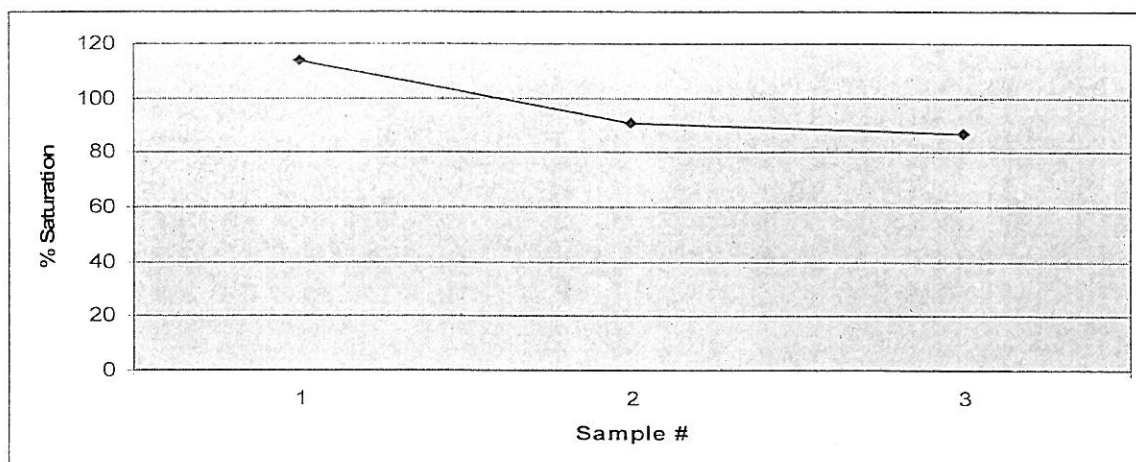
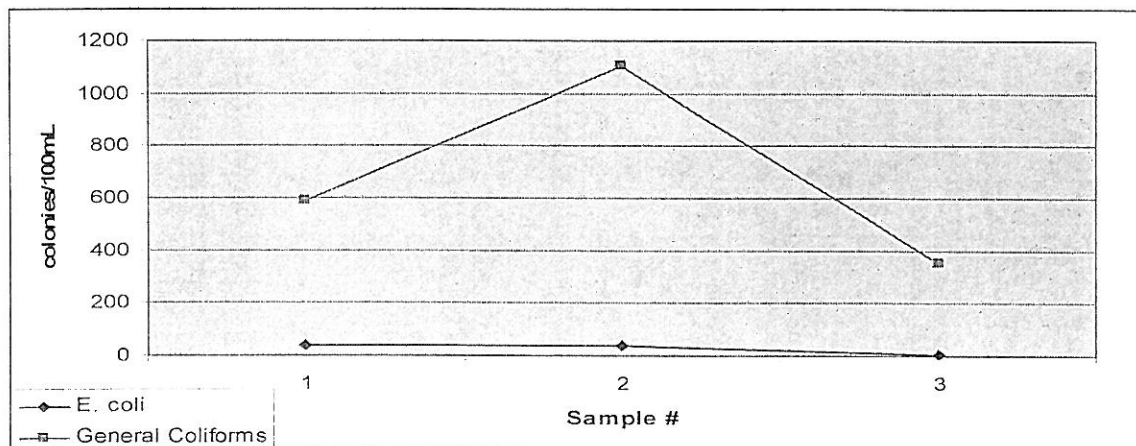
Figure 2-pH Measurements for Three Sampling Trips to the White River**Figure 3-Dissolved Oxygen Measurements for Three Sampling Trips to the White River****Figure 4-*E. coli* & General Coliforms Counts for Three Sampling Trips to the White River**

Figure 5-BOD₅, Nitrate, & Orthophosphate Measurements for Three Sampling Trips to the White River

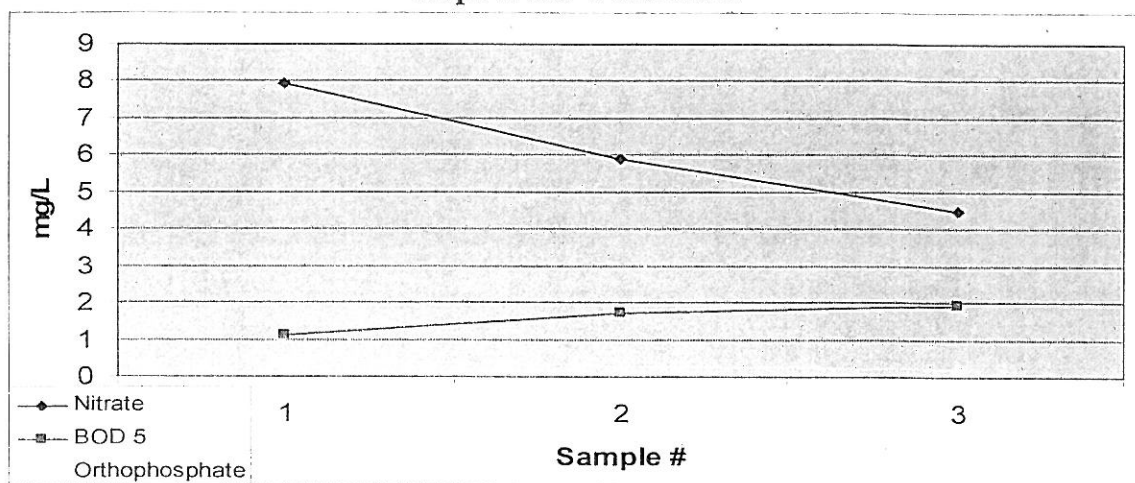


Figure 6-Hardness Measurements for Three Sampling Trips to the White River

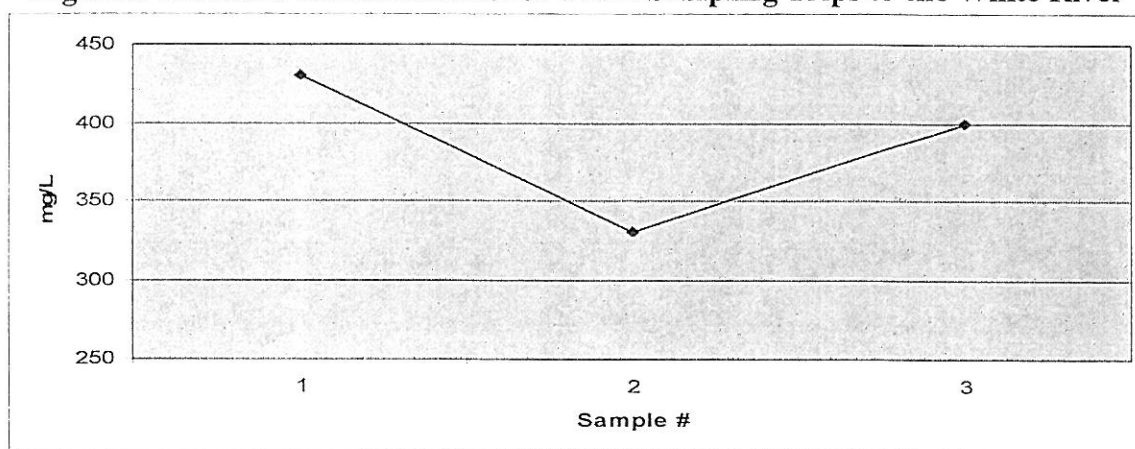


Figure 7-Current Measurements for Three Sampling Trips to the White River

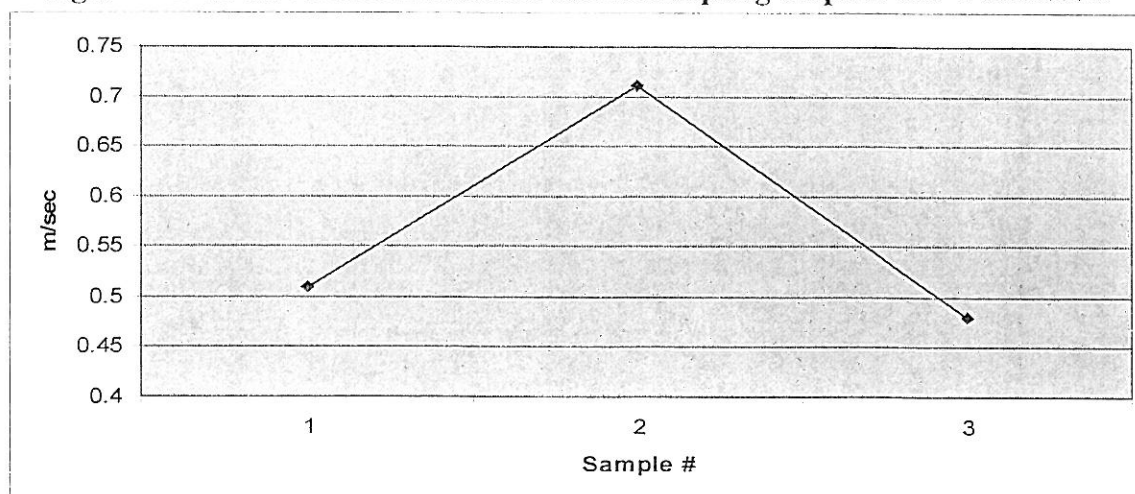


Table 2-Variou s Indicators of Macro-invertebrate Biological Monitoring on Three Sampling Trips to the White River

Indicators	1-10/04/06	2-11/1/06	3-11/15/06
Pollution Tolerance Index Rating	30	24	24
Simpson Index of Dominance	0.34	0.259	0.213
Simpson Index of Diversity	0.66	0.741	0.787

A pollution tolerance index rating of 23 or greater is considered “excellent.” All three samples achieved an “excellent” rating. The dominance index was between 0.20 and 0.40 and the diversity index was between 0.60 and 0.80 for all three samples. See Appendix A for a complete listing of macro-invertebrates and their pollution tolerance classification.

IV. Discussion & Conclusions

Interpreting the data above will allow for a conclusion on the water quality of the White River at the research site. As seen in Figure 1, water temperature decreased as expected as the climate progressed towards winter. The pH values were fairly constant over all three samples as displayed in Figure 2. The values are slightly higher than the Indiana average, but this can be accounted for by the presence of limestone quarries in the West Fork White River Basin, which would cause the water to be more alkaline. The dissolved oxygen in mg/L should have increased as the water temperature dropped. However, the dissolved oxygen readings in mg/L stayed approximately the same and the percent saturation levels decreased, as can be seen in Figure 3. This was an unexpected result, but there may have been a drop in photosynthetic activity and the sources of experimental error below concerning dissolved oxygen should be taken into account. In spite of the unexpected results the percent saturation levels remained between 80-125%,

*This is
"filler"*

which is considered excellent for most river organisms. The BOD₅ values, visible in Figure 5, increased over the sampling period. The first sample should only be lightly considered because the results were taken seven days after the water collection instead of five. This most likely contributed to the lower reading of the first sample. However, all three samples remained between 1-2 mg/L, which indicates clean water with little organic waste. The first sample was below the Indiana average of 1.5 mg/L and the second and third samples were slightly above. The *E. coli* values were expected to be higher than the results achieved due to the combined sewer overflow upstream of testing site and periods of rain 48 hours prior to all three samples. In addition, the values are lower than the Indiana average of 645 colonies/100ml. The decrease in *E. coli* in the third sample, visible in Figure 4 can be partially attributed to potentially less manure run-off as the ground froze and the agriculture season slowed down. The general coliform counts fluctuated, as can also be seen in Figure 4. This is not of great concern and may be attributed to the natural rise and fall of river bacteria. Figure 5 also shows that the orthophosphate levels decreased slightly over the samples. This may also be attributed to less phosphate from agricultural fertilizers entering the water over time. Nitrate levels also declined over the samples, as seen additionally in Figure 5. As nitrates are also a main component of agricultural fertilizers, and this decrease is expected as field runoff decreases. All the nitrate values were well below the Indiana average of 12.32 mg/L. Turbidity was <15 NTUs for all three samples. This indicates that there is not a large amount of suspended organic particles in the water. As discussed below, the turbidity readings should probably have been lower for these samples. However, the turbidity levels were lower than the Indiana average of 36 NTUs. Hardness measurements varied between 330 mg/L and 430 mg/L, as shown in Figure 6, and all three samples are

considered very hard. This indicates high levels of dissolved calcium and magnesium in the water. The high measurement of hardness can be accounted for by the limestone quarries, as limestone leads to high dissolved calcium levels. Finally, Figure 7 shows that current readings also fluctuated. The higher reading of 0.71 in sample two was most likely due to previously heavy rains and a swollen river.

Several sources of experimental error may have contributed to the lower chemical water quality index rating of the first sample. The BOD was read after seven days instead of after five days. This most likely led to a ^{higher} ~~lower~~ BOD value and a lower overall index rating. Also, the titrator tip was broken on the titrator that was used for the dissolved oxygen and BOD tests. In addition, three trials of nitrate, dissolved oxygen, and BOD were taken, but they were taken from the same sample of water instead of three separate water samples. Finally, unfamiliarity with techniques the first time testing may have led to unrecognized errors.

In addition, the use of a turbidity tube only allowed down to a reading of <15 NTUs. The maximum Q value with this measurement is 70. In our tests it was estimated that turbidity would be lower if there was a method for students to more accurately measure the turbidity lower than this point. A more accurate measurement in these samples would have likely resulted in lower turbidity values and higher Q values. Subsequently, the overall chemical water quality index rating would have increased.

The testing of the water quality through the chemical parameters yielded one medium rating and two good ratings. The sources of experiment error listed above suggest that the samples two and three were more accurate and should hold more weight than the first sample. Therefore, it can generally be concluded that the overall water quality as tested through chemical parameters is good.

The results of the biological monitoring, seen in Table 2, yielded pollution tolerance index ratings of 30, 24, and 24. These are all “excellent” ratings. In addition, the range of the Simpson’s dominance index between 0.20 and 0.40 and the range of Simpson’s diversity index between 0.60 and 0.80 indicates a good level of species diversity at the testing site. It can therefore be concluded that results of the biological monitoring are between “good” and “excellent.”

Overall, the combination of chemical and biological monitoring indicates that the water quality at the Imel test site of the West Fork of the White River is between “good” and “excellent.”

V. References

- Alabama Water Watch Program. 2002. Water Chemistry Monitoring.
- Hoosier Riverwatch. Volunteer Stream Monitoring Training Manual.
- Stahl, J. R. 1998. A Preliminary Appraisal of the Biological Integrity of Indiana Streams in the West Fork White River Watershed Using Fish Tissue Contamination Assessment. Indiana Department of Environmental Management.

Appendix A

Macroinvertebrates	Sample 1-10/4/06	Sample 2-11/1/06	Sample 3-11/15/06
Group 1	5 (taxa) x 4 (w.f.)=20	4 (taxa) x 4 (w.f.)=16	4 (taxa) x 4 (w.f.)=16
Mayfly Nymph	33	22	58
Baetidae		12	44
Ephemeraidae		10	14
Caddis Fly Larvae	208	66	91
Hydropsychidae		52	57
Hydroptilidae		14	34
Riffle Beetle	10	0	0
Water Penny	3	31	27
Right-Handed Snail	1	105	100
Group 2	2 (taxa) x 3 (w.f.)=6	2 (taxa) x 3 (w.f.)=6	2 (taxa) x 3 (w.f.)=6
Damselfly Nymph	3	0	2
Dragonfly Nymph	1	1	0
Clam	0	8	1
Group 3	1 (taxa) x 2 (w.f.)=2	0 (taxa) x 2(w.f.)=0	1 (taxa) x 2 (w.f.)=2
Midges	2	0	1
Group 4	2 (taxa) x 1 (w.f.)=2	2 (taxa) x 1 (w.f.)=2	0 (taxa) x 1 (w.f.)=0
Aquatic Worms	6	0	0
Blood Midge	1	3	0
Left-handed snail	0	4	0
Total Taxa Rating	30	24	24

Aquatic Ecology:
Comparative study of two creeks in an urban and a rural area in central Indiana.

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Abstract

This project investigates the ecology of two creeks in central Indiana. Lilly Creek, located in a rural setting, and Big Duck Creek, located in an urban setting outside Elwood IN, were tested in order to compare their water quality parameters to Indiana's state standards. These parameters included physical, chemical, and biological tests. *anthesis* Monthly samples were taken beginning November 29, 2005 and ending in April 2006. The results have been compared to similar samples taken by the DNR at the same sites. Now, at the end of the second semester 2006, the water quality of the two creeks have been characterized and documented, and appropriate comparisons have been drawn.

Final draft

grammar

style

content

total

Sponsor evaluation

45

43

89

177 / 200

99 / 100

Introduction

The Department of Natural Resources (DNR) is a state agency that monitors water quality, protects the environment, improves water quality, safeguards human health, and protects receiving waters. Beginning February 2, 2205^{HVH?} the DNR began testing nine different sites to help improve water quality in Central Indiana. This project was called the NPDES Storm Water Phase II. Its overall goal is to improve water quality in accordance with the 1972 Clean Water Act (as amended in 1987). The NPDES is a federally mandated, unfunded program that requires certain cities, towns, counties, and additional entities to create a plan to deal with storm water in order to protect the environment, protect human health, and protect surrounding waters. Many volunteers who cooperate with the DNR are trained to monitor parameters of certain aquatic environments. With the help of these volunteers, the DNR is able to keep the public aware of water^{quality} concerns. One of the main concerns in Indiana is the burning of coal. Mercury is a very toxic heavy metal bi-product from the burning of coal that is deposited into many of the^{surface} water systems in Indiana. There are other pollutants as well, such as

pesticides from farm run-off, but these are not as big a concern as mercury. Mercury is a main concern because of the lasting effect ^{can it last?} and how hard it is to clean up. Because of pollution such as this, there are sites all over Indiana that are monitored monthly to obtain an accurate and updated reading on aquatic pollution. These readings allow for a detailed description of different bodies of water. One of the readings that ^{who are they?} they take to determine water quality is the collecting of aquatic macroinvertebrates. These organisms are indicators of ^{the quality of water} the quality of water. Once data is collected, it is given to local and state officials who perform watershed assessment program. These tests and others will go on until and accurate conclusion of water quality has been drawn. ^{what does this mean?}

The Madison County Storm water executive summary, put on by the RQAW Corporation, published the Understanding the Impact NPDES Storm Water Phase II. This booklet not only contains detailed descriptions of many parameters that define water quality, but also how they parallel two sites: ^{site} one (Lilly Creek) and ^{site} nine (Big Duck Creek) that this research is being drawn from.

This research will examine two sites: Lilly Creek and Big Duck Creek. The ^{being tested} ~~standing~~ hypothesis is that Lilly Creek will have a higher water quality than Big Duck Creek, because Big Duck Creek is located right outside the township of Elwood, IN. The results will be compared to results from the DNR and to Indiana state water quality standards. A water quality index based on macroinvertebrate populations will also be computed.

Materials and Methods

Water samples were taken from two sites that are also being tested by the DNR. The first site, Lilly Creek ^{on the is} ~~(site one)~~ is located on the included geographical location map.

is near State route nine. Lilly Creek, located in a rural setting, has a creek bottom that is very soft with few aquatic macrophytes. Big Duck Creek, (site 9) on the other hand, is located in the outskirts of Elwood, IN. The streambed is composed of gravel and large rocks (this allows for riffles in the water). The flow of the water is faster and the turbidity/visibility is low compared to Lilly Creek. *→ which is low + which is high? remember that they are opposites*

Water samples were collected once a month from both Lilly Creek and Big Duck Creek starting in November 2005. Three major categories of water quality parameters were tested: physical, chemical, and biological. The physical parameters tested were temperature, pH, and turbidity. Chemical parameters include dissolved oxygen, Biochemical Oxygen Demand (BOD), orthophosphate, nitrate, and ammonia. Lastly, the biological parameters under examination were populations of benthic macro invertebrates and *E.coli* concentrations. At each site, six 70 ml water collection jars were filled. Dissolved oxygen, temperature, pH, and turbidity were tested on site, while all other tests were taken back ⁱⁿ to the lab ~~and performed there to be measured~~. *OMIT NEEDLESS WORDS* Once back in the lab Ammonia Nitrogen, BOD5 (which is set in the dark for five days before conclusions can be drawn), orthophosphate, and nitrate were tested. Most of the tests taken were done with colorimetric tests. Macroinvertebrates were collected on site and they were placed in 70% ethyl alcohol for later identification.

Temperature [?] allows us to determine water's ability to hold dissolved oxygen, which is inversely proportional to temperature. Temperature was tested using a model temperature and pH probe. Temperatures higher than Indiana state standards might be indicative of thermal pollution.

pH is a ~~tested for is a~~ measure of the hydrogen ion concentration in a solution.

Most bodies of water fall within the range of 6 to 9; eight is the optimum pH, which is slightly basic. Waters tend to be basic due to the presence of carbonate and bicarbonate. If the range of pH is not in the norm, one could conclude that there is industrial waste or acidic precipitation.

Turbidity indicates the amount of suspended solids and is inversely proportional to ~~its~~ visibility; the greater the turbidity, the murkier the water. Turbidity was measured using a turbidity tube model.

Dissolved Oxygen measures the amount of gaseous oxygen dissolved in an aqueous solution. Running water is aerated by turbulence, and can hold oxygen in inverse proportion to its temperature. Five mg/l is considered to be the minimum concentration required for desirable aquatic life. *What equipment did we use?*

Five days after the first water tests are taken, a Biochemical Oxygen Demand ^{test} is taken. This test is done along the same lines as the Dissolved Oxygen ^{test}, except that is performed on samples ^{that} have been kept in the dark since they were taken from ~~its~~ ^{their} sampling site. The reason for this is to prevent organic matter from continuing to decompose and thus use up oxygen. Once the results are received from this test it is subtracted from the value of the initial Dissolved Oxygen Test. The results give total Biochemical Oxygen demand over a five-day period.

Nitrate was tested using a colorimetric test. Nitrate is produced by the oxidation of ammonia by nitrifying bacteria. Most green plants take in nitrate nitrogen. It usually occurs in small concentrations in unpolluted fresh waters. If there is too much nitrate in a water system it can cause algal blooms that suffocate the fish and choke out plant life.

Ammonia nitrogen is also tested with a colorimetric test. This is actually one of the first tests done during field research. It is an examination of organic nitrogen compounds. Ammonia enters the water systems from different sources, such as industrial wastes, sewage effluents, and fertilizers. Ammonia is a natural biological degradation product of the excretion and decay of dead organisms. Ammonia is also used for plant growth, but in high concentrations is poisonous to animals. *not much*

Phosphate on the other hand, also tested with a colorimetric test, is an important nutrient for plants. Phosphates are used in many private water systems, industrial detergent formulations, fertilizers, and certain agricultural areas. If there is too much of this it, like nitrogen, can lead to algae blooms.

The last parameter that was taken is a biological one. *Escherichia coli* (*E. coli*) are bacteria found naturally in the intestines of warm-blooded animals, including humans. High levels of *E. coli* are a good indication that there has been some fecal contamination. The test that is used to determine this is a Coligen Easygel.

The kick seine method was used to determine the Macroinvertebrate Pollution Tolerance Index. On site, where good riffles are present, a seine net down was placed *on the substrate*. This is downstream from a three-foot by three-foot *PVC quadrat* ~~section~~. Once this is in place, the substrate is picked up, kicked, and shaken to allow the benthic macroinvertebrates to separate themselves from the substrate. These organisms are caught in the seine net and once on shore they are removed and placed into the seventy percent *solution* ~~mixture~~ of ethyl alcohol. Once back in the lab, they ~~will be~~ *were* stored for identification and sorting.

Macroinvertebrates are sorted according to an index that puts them into four categories depending on how tolerant or intolerant they are to pollution. After they are placed into

why all caps?

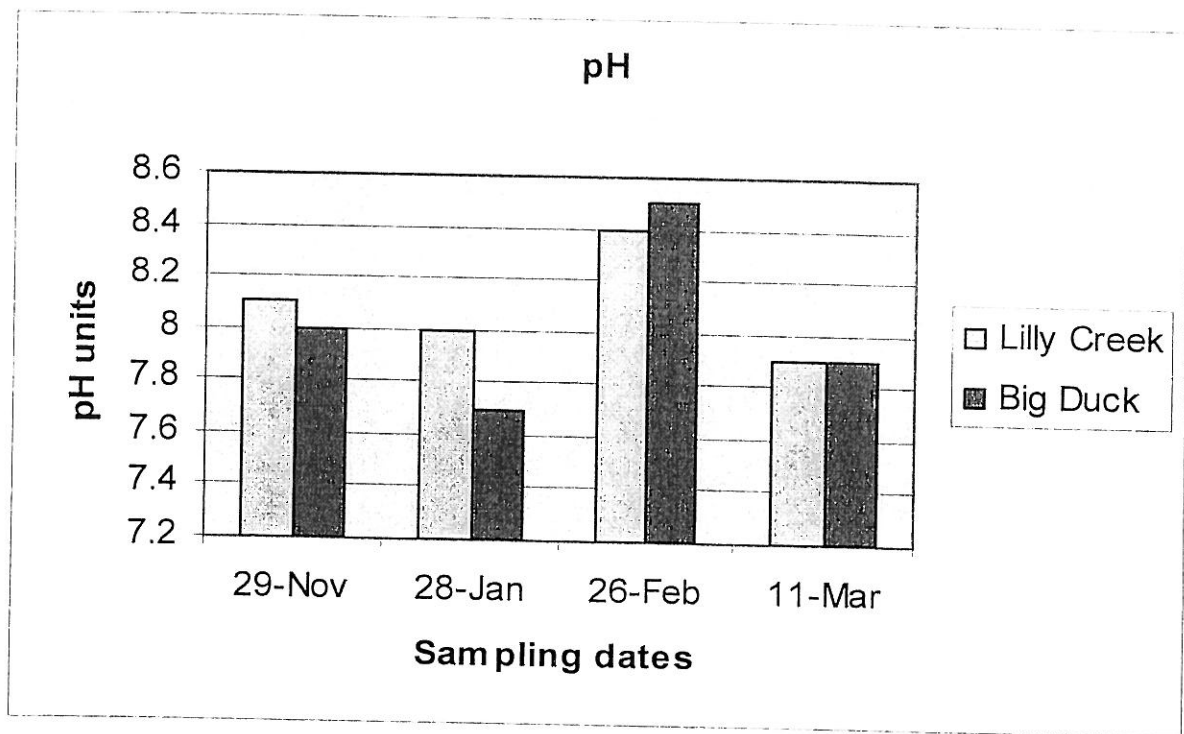
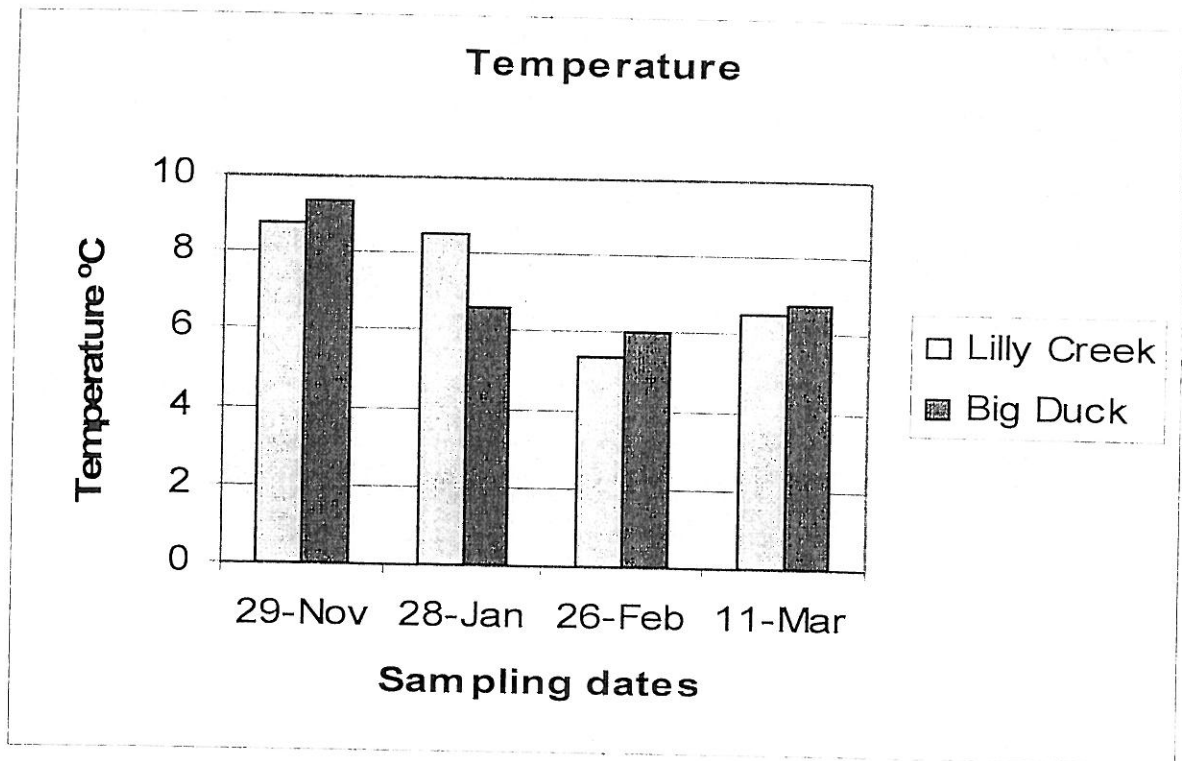
these categories a numerical value is established based on the number of TAXA present in each one. It is important to note that macroinvertebrates are organisms that indicate water quality.

Results

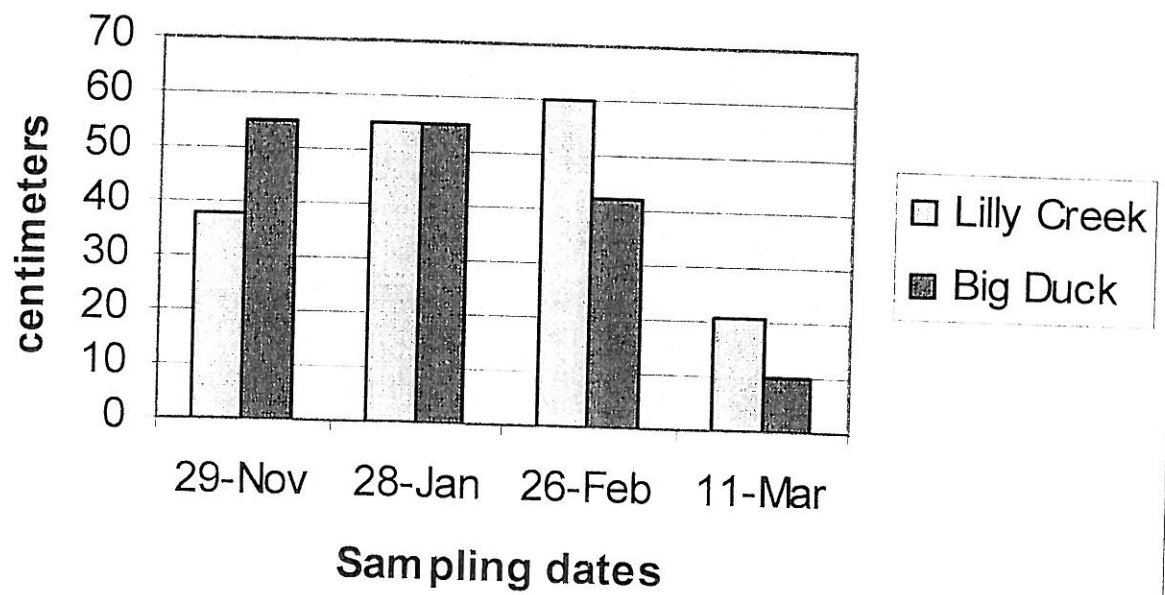
being tested was

The research was completed in April 2006. The hypothesis ~~still stood~~ that Rural Lilly creek would have higher water quality than Big Duck Creek because Big Duck Creek is located outside of the Elwood Township. Though, at the end of all the research, it was found that there was no significant difference between the two creeks. This means that the hypothesis was not supported. T-tests were run comparing the two creeks for every one of the parameters *and failed to show any significant differences at the .05 confidence level*. This means that any observed difference between the creeks was most likely due to chance. Looking at all the tests that were run, on the included *was* graphs, it ~~is~~ determined that only orthophosphate and nitrate-nitrogen exceeded the Indiana state standards, *which suggests* ~~This means that contamination could be suggestive of fertilizer run-off.~~ All other test stayed below state standards. Also, the macroinvertebrate index showed a water quality index of "Fair" for both creeks. Looking at the results, experimental error was taken into account as well. To more accurately assess water quality, it would have been necessary to sample year round. During this research samples were only taken four times, once each month. There were also only a limited number of test replicates, leaving room for greater error. Lastly, some of the timing was not precise when reading time-sensitive lab test.

Physical Parameters

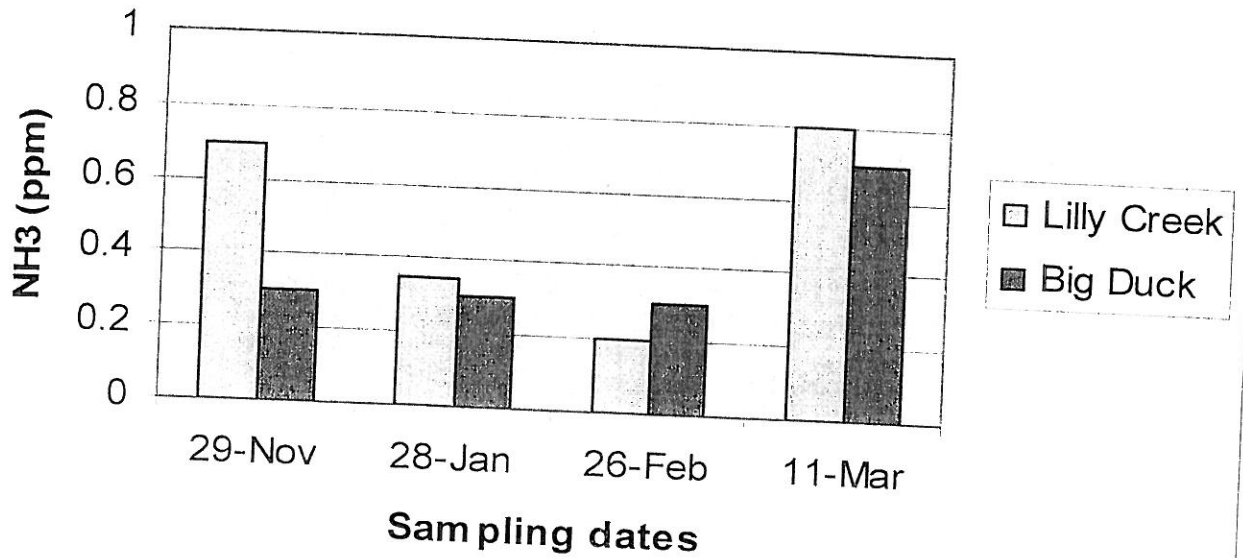


Turbidity

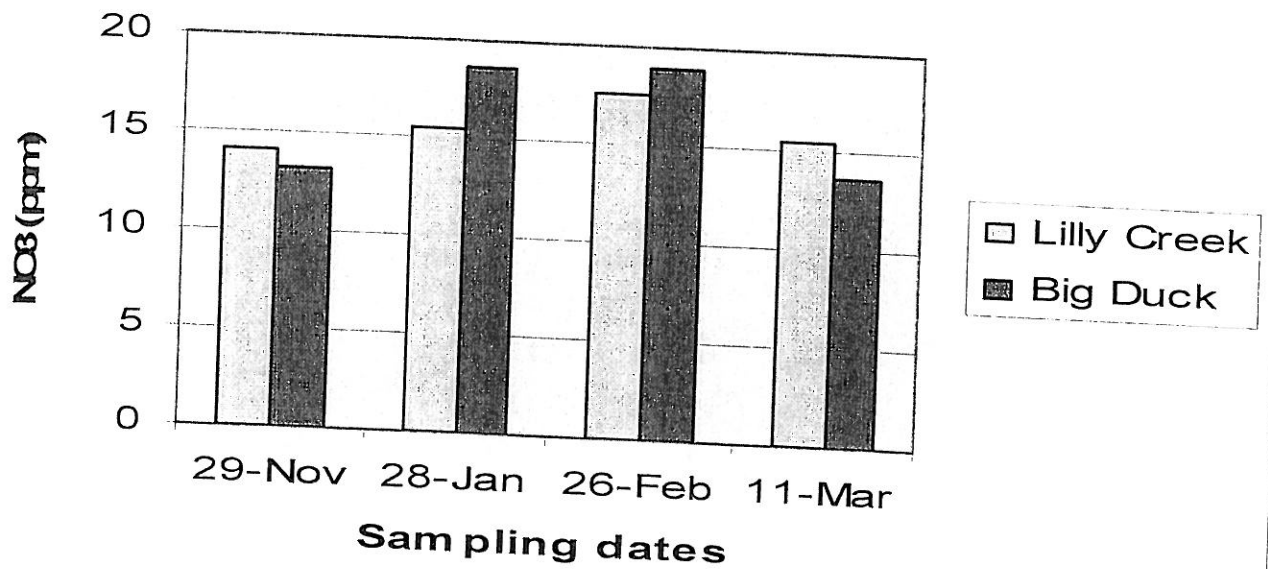


Chemical Parameters

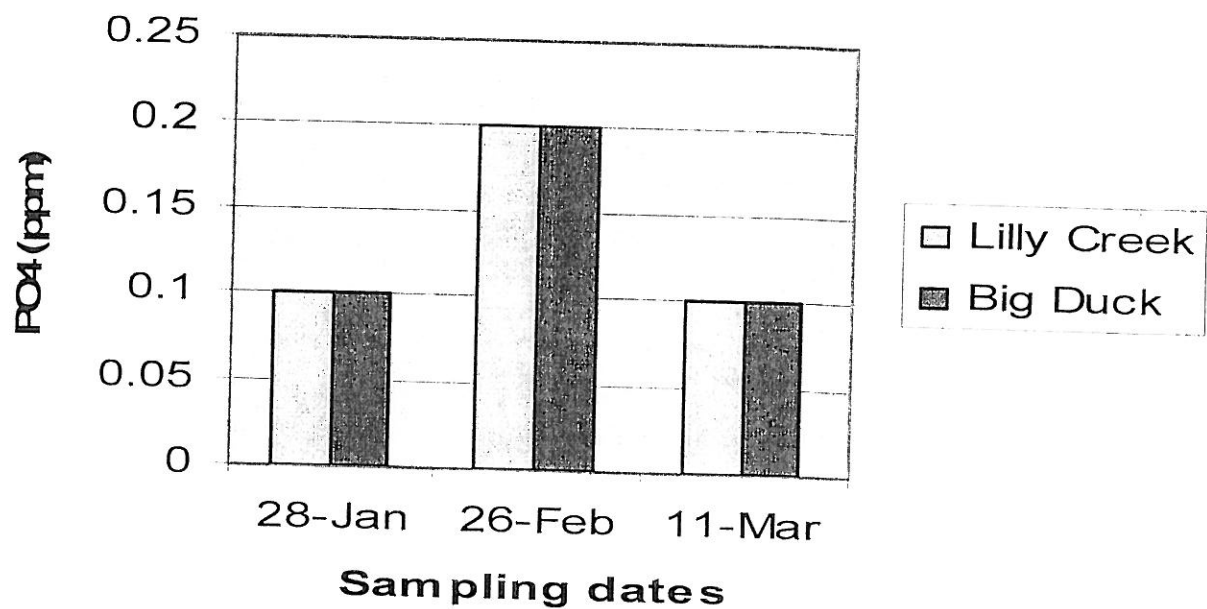
Ammonia concentration (ppm)



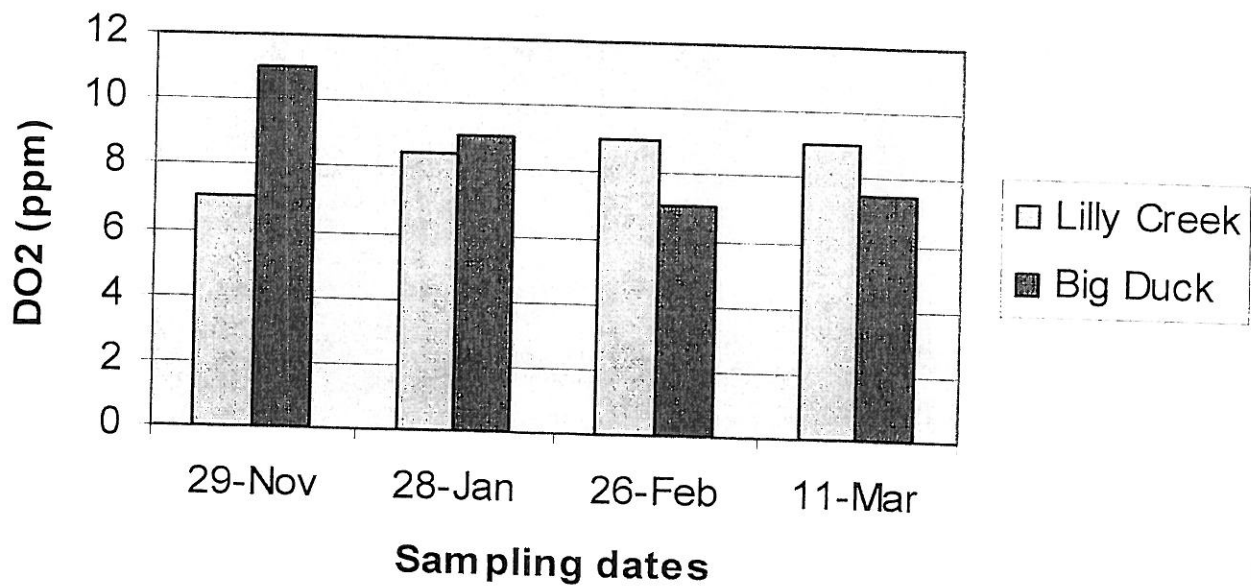
Nitrate concentration (ppm)



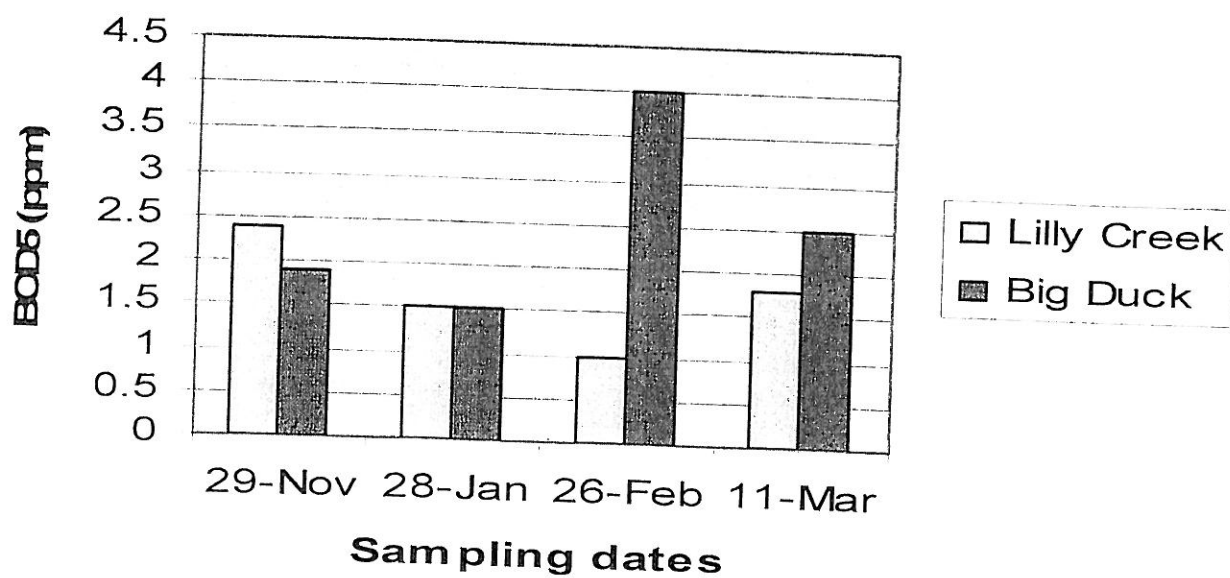
Orthophosphate concentration (ppm)



Dissolved oxygen concentration (ppm)

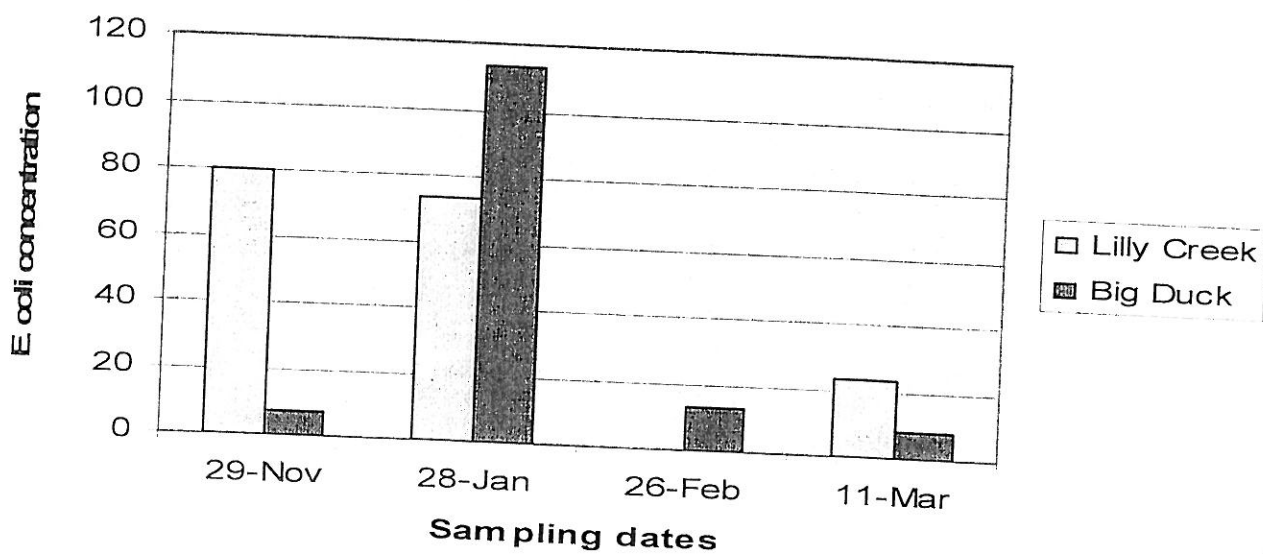


Biochemical Oxygen Demand (BOD5)



Biological Parameters

E. coli concentration colonies per 100 ml

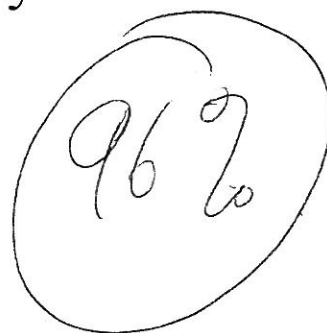


Water Quality Index				
	Date		Lilly Creek	BIG DUCK
	11/29/05		11	13
	1/28/06		12	11
	2/26/06		11	12
	3/11/06		10	10
	Average		11	11.5

White River Water Quality Lab

Eryn Britt

3 December 2007



Introduction:

Genesis 2 calls humans to be stewards of the world. In order for Christians to accomplish this task, they must first be aware of the environment around them and the condition in which it is (DeWitt). One of the major elements of the environment that is continuously at risk for pollution is water. Water is constantly being used in varying aspects of everyday life and is vital for an organism's survival. Therefore, a clean water supply is very important. Some sources of pollution include direct sources, such as chemicals being dumped into the water, or indirect sources such as contaminants from soils and atmosphere via acid rainwater (soest.hawaii.edu). Water can be easily studied for pollution through chemical and biological techniques. Chemically it could be measured through the pH, dissolved oxygen levels, and turbidity.

It can be measured biologically by observing the amount of benthic macroinvertebrates in a certain area. A benthic macroinvertebrate is an organism that lacks a backbone, lives at least some of its life on or in the ~~bottom of the water~~ ^{substrate}, and can be seen by the naked eye. They can be very small (less than ½ inch) or as large as 10 inches (Hoosier River Watch). They are considered to be fairly good indicators of pollution because they are “sensitive to changes in the stream's overall ecological integrity”, they are easy to sample, and are relatively immobile (Hoosier River Watch). They can be classified into four different categories: intolerant, moderately intolerant, fairly tolerant, and very tolerant. Some of the organisms such as mayflies and Caddis flies are very sensitive to pollution and are very good indicators of the absence of pollutants. If these are absent, ~~then~~ ^{that} will be an indicator that there is a lot of pollution.

The hypothesis for this lab is that there will be few organisms that are sensitive to pollution; therefore, the water quality of the White River will not be very good.

Materials and Methods

Materials used were: dichotomous keys, dissecting microscopes, Petri dishes, and tweezers.

Due to excessive rain and flooding, the samples were unable to be collected directly by the Honors class. The samples used were collected by a Biology ²²¹⁰~~1000~~ class at Edgewater Park at the West Fork of the White River by the kick seine method.

The macroinvertebrates collected had to be classified in order to determine the water quality. A few organisms were taken from the larger sample that had been stored in alcohol. They were extracted using tweezers and placed in the Petri dishes. The Petri dish was placed under the dissecting microscope. The dichotomous key was used to classify each organism by answering the question and following the chart until it ended at the specific organism. Each organism was recorded in its proper pollution tolerance category.

The number of taxa from each pollution tolerance group was totaled for the entire class. In order to account for a difference in importance of groups, a weighing factor was included in the calculations. The number of taxa in each group was multiplied ~~X~~ by its weighing factor. Pollution group one had a weighing factor of four, group two had a weighing factor of three, group three had a factor of two, and group four had a factor of one. These values were then added together and compared to the following Water Quality Index chart.

<u>WATER QUALITY INDEX VALUE</u>	
23 or more	Excellent
17-22	Good
11-16	Fair
10 or less	Poor

Results

Table 1. Number of Collected Macroinvertebrates in Each PT Group and Total Number of Taxa in Each Group

PT Group 1		PT Group 2		PT Group 3		PT Group 4	
Organism	Number	Organism	Number	Organism	Number	Organism	Number
Stonefly Nymph	0	Damselfly Nymph	0	Grey Midge	2	Left-handed Snail	0
Mayfly Nymph	34	Dragonfly Nymph	0	Black Fly Larvae	0	Aquatic Worms	2
Caddis Fly Larvae	11	Sowbug	0	Planaria	0	Blood Midge	1
Dobson Fly Larvae	0	Scud	0	Leech	0	Rat-tailed maggot	0
Riffle Beetle	0	Crane Fly Larvae	0	Water Mite	0		
Water Penny	2	Clams/Mussels	0				
Right-handed Snails	35						
Total No. of Taxa	4	Total No. of Taxa	0	Total No. of Taxa	1	Total No. of Taxa	2

Table 1. shows the number of taxa represented in each group. There were four taxa in pollution group (PG) one (the most intolerant of pollution), zero in PG two, one in PG three, and two in PG four.

Calculations

$$(4 \times 4) + (0 \times 3) + (1 \times 2) + (2 \times 1) = 20$$

The calculations for the number of taxa multiplied by the weighing factor equaled **20**.

Table 2. Various Data concerning the Water Pollution Level

Water Temperature	17.1 C
pH	8.2
Dissolved Oxygen	8ppm
<i>Visibility</i> Turbidity	>60 cm
Current Velocity	.138 m/s
General Observations: The day was overcast. It had rained all morning but cleared up by midday.	
Date: October 16 th , 2007	Time of Day: 1:30pm

Table 2. includes various data also collected that helped to measure the water quality.

Conclusion

The result of a 20 on the water quality index showed that the water quality in ^{the} White River was considered good. This ^{failed to support} ~~disproved~~ the hypothesis that the water quality was poor. Because of trash along the banks and past chemical spills, many people held the perception that the river was polluted, which helped to explain the hypothesis. The other chemical measurements also led to the conclusion that the water quality was good.

The pH was within the range of most natural waters. The slightly basic pH was because of the presence of bicarbonate and carbonate. The Indiana average for pH ^{is} ~~was~~ 8, the State Standard range ^{is} ~~was~~ from 6 to 9, and the typical range ^{is} ~~was~~ between 7.2 and 8.8, so 8.3 was well within the normal range. 5 mg/L ^{is} ~~was~~ the required minimum concentration of dissolved oxygen for aquatic life. The most ^{desirable} ~~wanted~~ range ^{is} ~~was~~ from 8-15 mg/L, so the measurement of 8ppm was within the normal range but lower than the state average, which ^{is} ~~was~~ 9.8 mg/L. A turbidity of less than 15 was well within the typical range (0-173 NTU's) and much better than the Indiana average of 36 NTU's.

The only source of error in the classification portion of the lab was misidentification of the organisms. This could be avoided by better microscopes and samples of the possible macroinvertebrates. It could also be improved if more samples were collected because there would be a larger number of organisms.

Resources

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Kelly Frye

Biology 2210

Dr. Ippolito

October 16, 2008

White River Pollutant Tests

Introduction

The study of benthic macroinvertebrates to measure the water quality of a river or stream is not a new choice. In fact, aquatic macroinvertebrates are rivaled only by algae in their usefulness to assess such quality, explained in the chapter "The use of aquatic invertebrates as biological indicators of ecological integrity of the Klip River System" of *The Ecological Integrity of the Klip River System*. The text continues by explaining that macroinvertebrate taxa "have differential tolerances towards changes in the environment" (p. 1) and therefore, the presence or absence of any group can indicate the presence of pollution. The literature surrounding this concept seems rather similar; very few pieces of dissension exist, although rivers across the globe produce reports using this survey of macroinvertebrates.

The United States Environment Protection Agency corroborates this view by explaining why macroinvertebrates—in addition to oxygen levels—indicate good levels of watershed health. The macroinvertebrates, the EPA asserts, "live in the water for all or most of their lives," prove easy to use in laboratory situations, cannot escape easily, and are deeply affected by environmental conditions (2007). Other literature regarding this topic tends to agree with the EPA's stance. No large holes in the review of literature appear to exist.

In 1999, the Anderson Waste Water Treatment Plant in Anderson, Indiana heavily

polluted the West Fork of the White River. ~~Fisheries~~ biologists Robert Ball and Kevin Hoffman examined the polluted state of the river in their 2006 journal *Recovery of the West Fork White River*. While the area surrounding the White River is relatively small, the literature surrounding the spill is adequate, coming mainly from environmentalists and colleges surrounding the river. While the Ball and Hoffman piece focuses mainly on the rehabilitation of fish species in the area, it brought to attention the idea of lasting pollution in the White River. Material regarding the state of pollution relates mainly to the fish population, and not necessarily the overall pollution level. In addition, pollution levels were recommended to be checked in 2012. For this reason, our research on the White River becomes particularly pertinent. It falls during a period in which the river's pollution level is not being closely monitored, and it assesses the river's health based on its aquatic invertebrates—not necessarily fish species. By utilizing this new perspective, one may gain a deeper understanding of the recovery of the White River.

Materials and Methods

The experiment took place on October 7, 2008, at approximately 2:30 p.m. The site of the tests was directly in Edgewater Park, off of E 10th Street in Anderson, Indiana. The quadrat was set up directly in the stream, in a shallow portion roughly a few meters out. There is a natural shoreline between Rayl Street and the marsh approximately 100 meters to its right; the area directly out of the shoreline was where the experiment occurred—likely for its easy accessibility. The site itself was fairly shallow with a mild current. There was considerably vegetation on the sides of the river, but it was not so wet as to be considered swampland. A few trees lined the edge of the watershed (the far side consisted of a low-density wooded area), but generally speaking, the river was surrounded by the open meadow of Edgewater Park.

In order to collect specimens, the researchers used a homemade quadrat constructed from

PVC piping and a basic net and performed the Kick Seine Sampling Method. The quadrat measured three feet by three feet. Two individuals stood holding the structure, while others gently brushed off algae, debris, and small invertebrates from large rocks (perhaps the size of a bottle cap and larger) inside the quadrat. The netting was held so that the materials brushed off went with the current into the net. After an adequate time was spent on one area, the quadrat was lifted from the water and taken to the flat shoreline. There, the researchers removed small invertebrates from the netting using tweezers. The invertebrates were preserved in a glass jar of alcohol solution. → 2"

The recorded pH level came from Hydrion pH paper. The paper was dipped into the river water, and its color corresponded to a particular pH level. This method was used because the more advanced equipment was not working properly.

The temperature and dissolved oxygen data came from using a YSI 200 EcoSense Dissolved Oxygen Probe. The readings for both dissolved oxygen and temperature came from using this apparatus in the stream near the quadrat area. The temperature was taken by placing the apparatus at least four inches below the surface and waiting for approximately two minutes. The surface velocity of the current was found by measuring the time it took for an apple to travel a distance of 50 feet. The distance was measured beforehand, and another individual held a stopwatch to time the experiment. This was repeated twice, and then the data was averaged.

In the lab, the invertebrates discovered were examined under stereoscopic microscopes and classified according to the 1996 publication of Pollution Tolerance Macroinvertebrates (provided by the Hoosier Riverwatch—Department of Natural Resources).

Results

Tables should be numbered 4

Quantity and Types of Macroinvertebrates Identified

Group 1 Finds	Group 2 Finds	Group 3 Finds	Group 4 Finds
Right-handed snail-13 Mayfly nymph-17 Water penny beetle-3 Caddis fly-2	Clam-3 Scud -1	Water mite-2 Midge larvae-2	Blood midge-1
Total specimen: 30 Number of taxa: 4 Weighted: 16	Total specimen: 4 Number of taxa: 2 Weighted: 3	Total specimen: 4 Number of taxa: 2 Weighted: 4	Total specimen: 1 Number of taxa: 1 Weighted: 1

Total: 27, excellent indication

Other River Data

- Insufficient Title

Temperature	16.6 ° Celsius
Dissolved oxygen level	15.2 mg/L
pH level	~8 units
Average surface velocity	.2 m/sec
Turbidity	Clear

The first table measures the quantity of aquatic invertebrates found according to type. The pollution index group is also included simply to identify types of invertebrates in each group. The first group is intolerant to pollution, the second somewhat intolerant, the third somewhat tolerant, and the fourth tolerant. The number following the taxa name is the quantity of those specimens found. Each category must be weighted (Group 1 has a weight of x4 since it is more difficult for these invertebrates to survive in most sites than Group 4, which has a weighting of x1) by the number of different taxa in a given group, and then add these sums together. The final number corresponds to a water quality index. In our situation, the total was

What about group 2+3

27, indicating a healthy river.

Other data collected included the temperature, dissolved oxygen, pH level, and average surface velocity. The average surface velocity was found by taking the median of three surface velocities in a 50 foot stretch of the stream (77 seconds per stretch, 71 seconds per stretch, and 74 seconds per stretch).

Discussion and Conclusion

The collected data overwhelmingly indicates a healthy river. The dissolved oxygen level is expected to be between 8-15 mg/L in a healthy river, so the data was at the upper limit of healthy. Typically, pH levels should be between 5-8.5 units, and since the data confirmed roughly 8 units, the pH level is also considered normal.

As for the taxa experiment, the White River sample scored a 28, which is an excellent indicator of water quality. This means the damage done by the Anderson Waste Water Treatment Plant was somewhat recovered and the river is generally clean enough to support some natural aquatic life. This was an unexpected find, although optimistic. It is possible that this data was skewed by the questionable find of a scud, but even without the scud, the river scored a 24 (which is still excellent). Perhaps a lengthier process or one done by more experienced individuals would yield a more accurate result. It also seems significant that the process of the determining the river quality score does not include the quantity of the invertebrates found. Surely the quantity of the invertebrates indicates some level of the health of the river.

Literature Cited

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You should
still tell me,
in words, the temp,
pH, DO₂, etc

Should
match!

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good The use of aquatic invertebrates as biological indicators of ecological integrity of the Klip River System. *The Ecological Integrity of the Klip River System*, Retrieved Oct 10 2008, from http://64.233.169.104/search?q=cache:x-zewGE2dckJ:etd.rau.ac.za/theses/available/etd-05102005113926/restricted/CHAPTER5Invertebrates_.pdf+aquatic+invertebrates+as+indicators&l=en&ct=clnk&cd=7&gl=us

*Table Titles are
insufficient.*



BIOL 1000 – Stream Sampling Data

1. Date: 10/7/08 Time of day: 2:30
2. Water Temperature: 16.6 °C
3. pH: 8 units
4. Dissolved oxygen: 15.2 ppm or mg/L
5. Current (surface velocity): m/sec
 - a. 77 secs
 - b. 71 secs
 - c. 74 secs

BIOL 1000 - Stream Sampling Water Quality Parameters

- 1. Temperature:** water's ability to hold dissolved oxygen is inversely proportional to temperature; to measure temperature, place the thermometer at least four inches below the surface, and leave it in the water, swirling gently for approximately 2 minutes or until the reading stabilizes.
- 2. pH:** this test measures the hydrogen ion concentration of liquids or substances (acidic or basic). The pH of most natural waters falls within the range of 5 to 8.5. The majority of natural waters are slightly basic due to the presence of carbonate and bicarbonate. A departure from the norm for a given body of water could be caused by the addition of strongly acidic or basic industrial wastes, or by acidic precipitation. The likelihood of mercury becoming methylated and entering the food chain increases as pH decreases. The typical range is 7.2 to 8.8; the Indiana average is 8.0, and the State Standard is between 6 and 9.
- 3. Dissolved oxygen:** DO analysis measures the amount of gaseous oxygen dissolved in an aqueous solution. Running water is aerated primarily by turbulence, and can hold oxygen in inverse proportion to its temperature. Five mg/L (5 ppm) DO is usually considered the *minimum* concentration required for desirable aquatic life, such as game fishes. The *desirable* range is 8-15 mg/L. The Indiana average is 9.8 mg/L; the State Water Quality Standard is: avg > 5mg/L, not < 4 mg/L.
- 4. Current (surface velocity):** we will measure this by observing how long it takes a floating object such as an apple or an orange to drift a distance of 100 ft. with the current. We will take the average of three readings and convert to m/sec.

**POLLUTION TOLERANCE INDEX (PTI)
DATA SHEET FOR MACROINVERTEBRATES**

SITE INFORMATION

Date 10 / 7 / 08 Time 2 : 30 (am or pm) Watershed Name: Edgewater
(Mo) (Da) (Yr)

Collector(s) Name Kelly Faye Organization Name Biology 2210

Stream/River Name White River Sampling Site # _____
(if applicable)

Latitude/Longitude _____ GPS _____
(if applicable) (if applicable)

Nearest City/Town Anderson State IN

MACROINVERTEBRATE INDEX

PT GROUP 1	PT GROUP 2	PT GROUP 3	PT GROUP 4
Stonefly Nymph _____	Damselfly Nymph _____	Grey Midge <u>2</u>	Left-Handed
Mayfly Nymph <u>17</u>	Dragonfly Nymph _____	Black Fly Larvae _____	Snail _____
Caddis Fly Larvae <u>2</u>	Sowbug _____	Planaria _____	Aquatic Worms _____
Dobsonfly Larvae _____	Scud <u>1</u>	Leech _____	Blood Midge <u>1</u>
Riffle Beetle _____	Crane Fly Larvae _____	Water Mite <u>2</u>	Rat-Tailed
Water Penny <u>3</u>	Clams/Mussels <u>3</u>		Maggot _____
Right- Handed			
Snail <u>13</u>			
# OF TAXA <u>4</u>	# OF TAXA <u>2</u>	# OF TAXA <u>2</u>	# OF TAXA <u>1</u>

Weighting X 4 16 X 3 3 X 2 4
X 1 1 Factor:

TOTAL TAXA RATING

27

WATER QUALITY INDEX VALUE

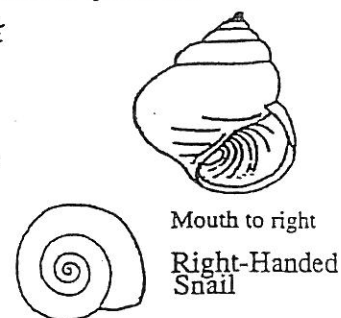
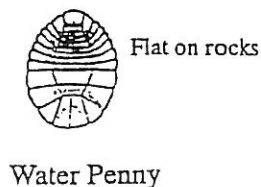
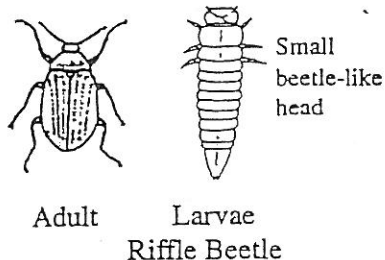
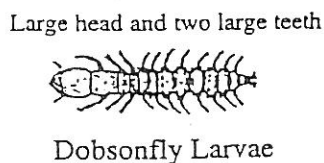
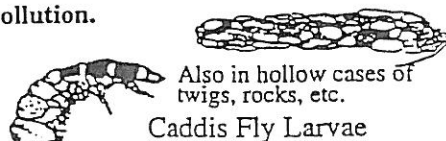
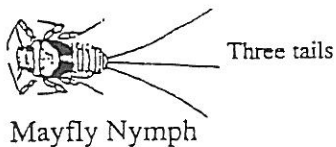
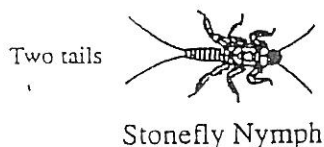
23 or More Excellent
17 - 22 Good
11 - 16 Fair
10 or Less Poor

WATER QUALITY INDEX VALUE

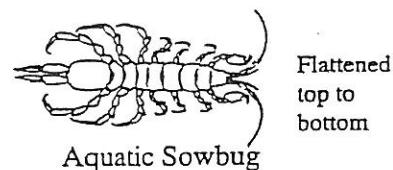
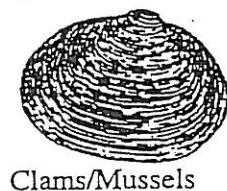
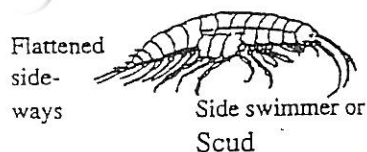
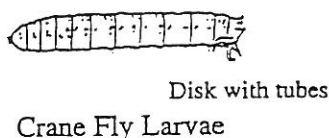
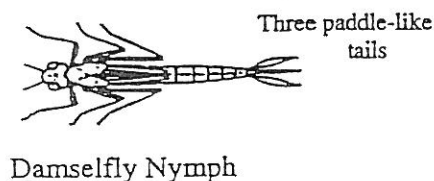
27

POLLUTION TOLERANCE GROUPS MACROINVERTEBRATE IDENTIFICATION

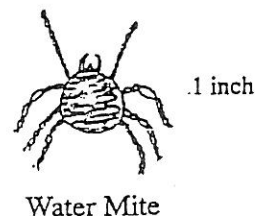
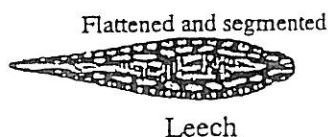
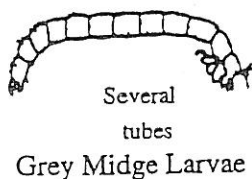
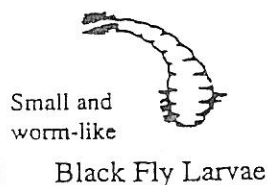
PT GROUP 1 - These organisms are generally considered to be intolerant of pollution.



PT GROUP 2 - These organisms are generally considered to be moderately intolerant to pollution.

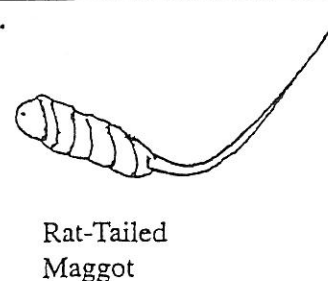
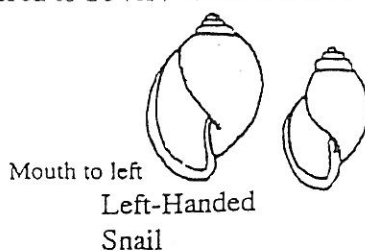
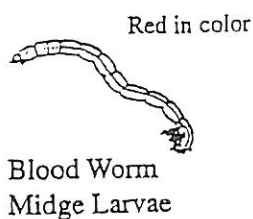
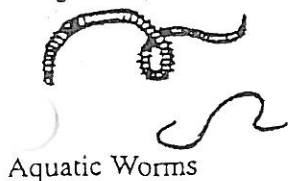


PT GROUP 3 - These organisms are generally considered to be fairly tolerant to pollution.



PT GROUP 4 - These organisms are generally considered to be very tolerant to pollution.

All segmented, some slender



Andrew Moore

Anderson University Biology 3070-Ecology

Instructor: Dr. Ippolito

White River Lab Report

26 February, 26 March, 23 April 2009

A

✓+

Very good report

Introduction

Water quality of a river can be analyzed using two different methods; Biological or Chemical Monitoring. Biological Monitoring observes the number and species of benthic macroinvertebrate organisms present in the habitat during the study by collection sampling methods and identification. Derived from these observations, a Pollution Tolerance Index Rating and a measure of community dominance and diversity serve as indicators of stream quality. High levels of Diversity indicate a highly complex community with a great variety of species interactions, which many ecologists think are important factors in community stability (Brower, Zar and VonEnde, 1997). The macroinvertebrate population is also easy to study due to its relative immobility and can provide a continuous indicator of stream quality for the researcher (Hoosier Riverwatch, 2008). Because the macroinvertebrate organisms can be classified according to their pollution tolerance, the presence of specific taxa can function as a reliable water pollution assessment tool. For example, if a stream is found to have many macroinvertebrates that are known to be intolerant to pollution, it can be expected that very low levels of pollution are present. On the contrary, if the stream's only macroinvertebrate inhabitants are organisms known to be very tolerant to pollution, researchers can come to the confident conclusion that pollutants are present in the water in substantial amount. Although Biological

macroinvertebrate samples were transferred into a jar containing alcohol instead of water, and the net was rinsed off in the river before a new sample was collected. The number of Blood Midges collected was recorded at the sampling site because the red color was often lost in the alcohol jar before identification in the lab. The rest of the samples were later identified in the laboratory using a Meiji EMT dissection microscope and the Taxonomic Key to Benthic Macroinvertebrates provided by the Hoosier Riverwatch program training manual (Hoosier Riverwatch, 2008). The numbers of each species were recorded and classified according to their Pollution Tolerance (Hoosier Riverwatch, 2008). This data can be referenced in Table 1.1. The Pollution Tolerance Index Rating was then determined for each Biological Monitoring data set in Tables 1.2, 1.3 and 1.4. The PTI ratings for each sampling date can also be referenced in graph form in Figure 1.2. Biological Monitoring data was also analyzed to arrive at values for Simpson's Index of Dominance and Diversity. Calculations and results for the Simpson Index can be referenced in Equation 1.1, Equation 1.2, Sample Calculations and Figure 1.3.

The Chemical Monitoring was performed on the same dates and location as the Biological Monitoring. Three samples were collected for each chemical/physical test and the resulting average was used for the WQI value calculations. Records of the three samples can be referenced in Table 2.1. Dissolved Oxygen (DO) values were recorded three times in each trial for both percent saturation and parts per million (mg/L, ppm). These values were obtained using a YSI EcoSense DO200 meter serial #JC 05069 and by submerging the probe underwater and allowing the readings to stabilize before recording. The YSI EcoSense DO200 was used to collect air temperature (°C) at the site for each sampling date. The YSI EcoSense DO200 also collected water temperatures (°C) three times at the site for all three sampling dates and 1 mile upstream during the last sampling date. The YSI EcoSense DO200 was calibrated by the class

observed using a 60cm long clear plastic tube capped at the bottom with a painted disk containing four quadrants alternately painted black and white. The transparency tube was filled with water in the river until the painted quadrants at the bottom of the tube could barely be seen when looking vertically through the water from the top of the tube. Transparency values were converted to Nephelometer Turbidity Units (NTUs) using the conversion chart in the *Volunteer Stream Monitoring Training Manual* provided by the Indiana DNR (Hoosier Riverwatch, 2008). Transparency values were recorded in all three sampling dates. Water Hardness was analyzed in the second and third sampling dates (Feb 26 and March 23,) using the LaMotte Tablet Version Hardness Kit Model PHT-DR-LT, code 4482-DR-LT and the instructions provided within the kit. Current speed was also recorded on each sampling date by measuring a 10 meter length parallel with the current and recorded the elapsed time it took a ping-pong ball to travel the set distance. This trial was performed three times on each sampling date.

Results

Using the Kick-Seine collection method and outlined in the previous section, the following results were obtained for Biological Monitoring and identified in the laboratory using a Meiji EMT dissecting microscope. Original Data Sheets are attached at the end of this report.

Table 1.2

Pollution Tolerance Index Calculations and Results for 26 February 2009 using data from Table 1.1

Pollution Tolerance Group (Description)	# of TAXA	Weighting Factors	Index Value for Group (# of taxa multiplied by Weighting Factor)
PT Group 1 <i>Intolerant</i>	5	4	20
PT Group 2 <i>Moderately Intolerant</i>	3	3	9
PT Group 3 <i>Fairly Tolerant</i>	1	2	2
PT Group 4 <i>Very Tolerant</i>	2	1	2
Pollution Tolerance Index Rating (Σ Index Values)			33 (Excellent)

Table 1.3

Pollution Tolerance Index Calculations and Results for 26 March 2009 using data from Table 1.1

Pollution Tolerance Group (Description)	# of TAXA	Weighting Factors	Index Value for Group (# of taxa multiplied by Weighting Factor)
PT Group 1 <i>Intolerant</i>	6	4	24
PT Group 2 <i>Moderately Intolerant</i>	1	3	3
PT Group 3 <i>Fairly Tolerant</i>	2	2	4
PT Group 4 <i>Very Tolerant</i>	1	1	1
Pollution Tolerance Index Rating (Σ Index Values)			33 (Excellent)

Table 1.5-

Pollution Tolerance Index Rating and Corresponding Water Quality Scale

PTI Value	Corresponding Quality
23 or more	Excellent
17-22	Good
11-16	Fair
10 or less	Poor

Equation 1.1- Simpson's Index of Dominance (l) (Brower, Zar and VonEnde, 1997).

Where quantity l is a measure of Dominance, n_i is abundance of species i , and N is total number of individuals

$$l = \frac{\sum n_i(n_i - 1)}{N(N-1)}$$

Equation 1.2-Simpson's Index of Diversity (D_s) (Brower, Zar and VonEnde, 1997).

$$D_s = 1 - \frac{\sum n_i(n_i - 1)}{N(N - 1)}$$

Sample Calculation for Dominance using Equation 1.1 and 26 February 2009 Data from Table 1.1

$$l = \frac{10(9)+12(11)+18(17)+2(1)+3(2)+38(37)+35(34)+2(1)+29(28)+4(3)}{148(147)} = \frac{3958}{21756} = .182$$

Sample Calculations for 26 February 2009 Diversity (D_s) using Equation 1.2 and 26 February 2009 Data from Table 1.1

$$D_s = 1 - \frac{10(9)+12(11)+18(17)+2(1)+3(2)+38(37)+35(34)+2(1)+29(28)+4(3)}{148(147)} = .818$$

Table 2.2

Water Quality Index (WQI) Calculations and Results using 26 February 2009 Chemical Monitoring Data from Table 2.1 (* uncertainty in value due to experimental error)

Indicator	Test Results	Q-Value	Weighting Factor	Calculation
Dissolved Oxygen	107.5 % saturation	96.5	.18	17.37
<i>E. Coli</i>	27 colonies/100mL	61	.17	10.37
pH	9.4 units	36	.12	4.32
BOD ₅	3.9 mg/L	59	.12	7.08
*H ₂ O temp change	0°C	93	.11	10.23
Turbidity	<15 NTU's	70	.09	6.3
Totals			.79	55.67
Water Quality Index (WQI)				$55.67/.79 = 70.47$

Table 2.3

Water Quality Index (WQI) Calculations and Results Using 26 March 2009 Chemical Monitoring Data from Table 2.1 (* uncertainty in value due to experimental error)

Indicator	Test Results	Q-Value	Weighting Factor	Calculation
Dissolved Oxygen	140.8% saturation	50	.18	9
<i>E. Coli</i>	27 colonies/100mL	61	.17	10.37
pH	9.0 units	47	.12	5.64
*BOD ₅	6.2 mg/L	50	.12	6
*H ₂ O temp change	0°C	93	.11	10.23
Turbidity	<15 NTU's	70	.09	6.3
Totals			.79	47.54
Water Quality Index (WQI)				$47.54/.79 = 60.18$

Table 2.4

Water Quality Index (WQI) Calculations and Results using 23 April 2009 Chemical Monitoring Data from Table 2.1 (* uncertainty in value due to experimental error)

Indicator	Test Results	Q-Value	Weighting Factor	Calculation
Dissolved Oxygen	129.2% saturation	85	.18	15.3
<i>E. Coli</i>	47 colonies/100mL	54	.17	9.18
pH	8.7 units	59	.12	7.08
H ₂ O temp change	0°C	93	.11	10.23
Turbidity	<15 NTU's	70	.09	6.3
Totals			.67	48.09
Water Quality Index (WQI)				$48.09/.67 = 70.47$

numbers of each species collected varied greatly between the three trials as depicted in Figure 1.1. The different types and numbers of taxa in each PT group collected in the Biological Monitoring macroinvertebrate sampling also varied between each trial even though the same site and methods were used. This suggests that the sampling method was not completely accurate or adequate or that the variety of species collected was due to population change in response to differing environmental conditions for each sampling trial. There were significant changes in environmental conditions between the three trials, such as water and air temperature, seasonal changes and weather impacts. These changes represent more than one variable when combined with time, so no further insight on the impact of the varying environmental conditions can be determined at this time without continuing the study to gather a wider range of data points. The Biological Monitoring results were the best indicator for water quality in this study, because they represent the continuous stream quality and the correct procedure was followed without discrepancy for all three trials.

The Chemical Monitoring data can function as another method of studying water quality at a specific moment, however multiple problems arose with the acquisition of indicators for the WQI rating. In order for the WQI rating to be reliable, six different indicators must be completed. None of the WQI ratings illustrated in Figure 2 were calculated with six completed indicator test values. Any of the indicator tests that were omitted are marked with an asterisk* to indicate uncertainty from experimental error. In the first sampling, 26 February 2009, six chemical indicator tests were entered into the WQI calculations, but the temperature change one mile upstream from the site was assumed to be zero and was not actually recorded. This assumption was made due to time constraints and the conclusion that no known sources of thermopollution exist within one mile of the site. The resulting calculation of 70.47 (good water quality) is supported by the excellent results from the Biological Monitoring PTI, however cannot be considered to be completely accurate. The second sampling and WQI calculation, 26 March 2009, was also performed under the same temperature change assumption. However if the WQI is calculated without the Q-value from the temp change for the second sampling, the result is 54.87, a value

understanding other data gathered in this experiment. As mentioned earlier, current speed as a function of rainfall and water level may be useful in understanding Biological Monitoring data as it is affected by environmental change, however more research would be required to isolate this variable for study. Transparency and Turbidity results were found to be better in each sampling set than the Indiana average of 36 NTU (Hoosier Riverwatch, 2008), however a longer tube for measuring Transparency could be utilized in the future to gather more accurate data. Hardness was also analyzed in the last two sampling dates, however no applicable standards for comparison were found, as the acceptable range of concentration varies greatly depending on geological features.

Water quality of the White River at the sampling site was determined to be of good-excellent quality with some certainty. Although experimental errors prohibited the Chemical Monitoring WQI from being considered valid, the Biological Monitoring data and PTI rating provided a reliable quality study for the site. The community shows excellent diversity and predicts stability in relation to the diversity-stability hypothesis. Pollution was determined to be very low according to the PTI ratings, and the consistency of these PTI results also supports the conclusion of a stable community. Future research could be performed to further study the relationship between the effects of the changing environment on the Biological and Chemical monitoring data. Also, future trials with consistent Chemical Monitoring WQI tests would be useful to serve as a reliable reference for the Biological Monitoring data.

References

Brower, J. E., Zar, J. H., & Von Ende, C (1997). *Field and Laboratory Methods for General Ecology*. New York: McGraw Hill-Science Engineering.

Indiana Department of Natural Resources. (2008). *Volunteer stream monitoring training manual* (Spring 2008, 8th Edition). Indianapolis, Indiana: IDNR Division of Fish and Wildlife.

Appendix B

- 1) Chemical Monitoring Work Sheet
- 2) Chemical Monitoring Data Sheet (WQI)
- 3) Biological Monitoring Data Sheet
- 4) Citizens Qualitative Habitat Evaluation Index
- 5) Turbidity Q-Value
- 6) Temperature Change Q-Value and Nitrate Q-Value
- 7) pH Q-Value and BOD5 Q-Value
- 8) DO₂ Q-Value and *E coli* Q Value

Date

Chemical Monitoring Work Sheet

Air Temp °C

Time

Stream Name
and Site ID

Water Temp °C

Lat °N

Current Weather ☐ Clear/Sunny ☐ Overcast ☐ Showers ☐ Rain (Steady) ☐ Storm (Heavy)Worst Weather in Past 48 hrs ☐ Clear/Sunny ☐ Overcast ☐ Showers ☐ Rain (Steady) ☐ Storm (Heavy)

Long °W

	Units	Sample 1	Sample 2	Sample 3	Average
Dissolved Oxygen (DO)	% Saturation				
	mg/L				
Avg DO (original)	mg/L				
— DO after 5 days					
BOD 5-day (difference)					
E. Coli Bacteria (purple/blue-violet colonies)	colonies/ 100 mL				
General Coliforms (pink/magenta colonies)	colonies/ 100 mL				
pH	units				
Temp at Your Site	°C				
— Upstream (1 mi) Temp					
Temperature Change					
Orthophosphate	mg/L				
Total Phosphate (add acid and boil for 30 min)	mg/L				
Nitrate (NO ₃) (after multiply by 4.4)	mg/L				
Nitrite (NO ₂) (after multiply by 3.3)	mg/L				
Transparency (from Tube)	cm				
Turbidity (from chart – use in database entry)	NTU				
Ammonia Nitrogen	mg/L				
Other _____					
Other _____					
Other _____					
Other _____					

3

Stream/River Name _____ Site ID _____

☐ OtherDiversity
Index

Date:

Citizens Qualitative Habitat Evaluation Index

 4
 CQHEI Total

Vol ID:

Site ID:

River and Watershed:

I. Substrate (Bottom Type)

Score:

a) Size

☐ 14 pt
 Mostly Large
 (Fist Size or Bigger)

☐ 6 pt
 Mostly Small (Smaller
 Than Fingernail, but Still
 Coarse, or Bedrock)

☐ 10 pt
 Mostly Medium
 (Smaller than Fist, but
 Bigger than Fingernail)

☐ 0 pt
 Mostly Very Fine (Not
 Coarse, Sometimes
 Greasy or Mucky)

b) "Smothering"

☐ NO 5 pt
 Are Fist Size and Larger
 Pieces Smothered By
 Sands/Sills?

☐ YES 0 pt
 Symptoms: Hard to Move
 Large Pieces, Often
 Black on Bottom with Few
 Insects

c) "Siltting"

☐ NO 5 pt
 Are Silts and Clays
 Distributed Throughout
 Stream?

☐ YES 0 pt
 Symptoms: Light Kicking
 of Bottom Results in
 Substantial Clouding of
 Stream for More than a
 Minute or Two

II. Fish Cover (Hiding Places) - Add 2 Points For Each One Present

Score:

☐ 2 pt
 Underwater Tree
 Roots (Large)

☐ 2 pt
 Boulders

☐ 2 pt
 Downed Trees,
 Logs, Branches

☐ 2 pt
 Water Plants

☐ 2 pt
 Undercut Banks

☐ 2 pt
 Underwater Tree
 Rootlets (Fine)

☐ 2 pt
 Backwaters,
 Oxbows or Side
 Channels

☐ 2 pt
 Shallow, Slow
 Areas for
 Small Fish

☐ 2 pt
 Deep Areas
 (Chest Deep)

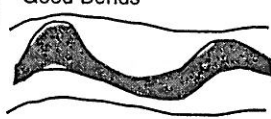
☐ 2 pt
 Shrubs, Small Trees
 that Hang Close
 Over the Bank

III. Stream Shape and Human Alterations

Score:

a) "Curviness" or "Sinuosity" of Channel

☐ 8 pt
 2 or More
 Good Bends

☐ 6 pt
 1 or 2
 Good Bends

☐ 3 pt
 Mostly Straight
 Some "Wiggle"

☐ 0 pt
 Very Straight


b) How Natural Is The Site?

☐ 12 pt
 Mostly Natural

☐ 6 pt
 Many Man-made
 Changes, but still some
 natural conditions left
 (e.g., trees, meanders)

☐ 9 pt
 A Few Minor
 Man-made Changes
 (e.g., a bridge, some
 streambank changes)

☐ 0 pt
 Heavy, Man-made
 Changes (e.g., leveed
 or channelized)

IV. Stream Forests & Wetlands (Riparian Area) & Erosion

Score:

a) Width of
Riparian Forest &
Wetland - Mostly:
☐ 8 pt
 Wide (Can't Throw
 A Rock Through/
 Across It)

☐ 5 pt
 Narrow (Can Throw
 A Rock Through/
 Across It)

☐ 0 pt
 None

b) Land Use - Mostly:

☐ 5 pt
 Forest/Wetland

☐ 4 pt
 Shrubs

☐ 3 pt
 Overgrown
 Fields

☐ 2 pt
 Fenced Pasture

☐ 2 pt
 Park (Grass)

☐ 2 pt
 Conservation
 Tillage

☐ 1 pt
 Suburban

☐ 1 pt
 Row Crop

☐ 0 pt
 Open Pasture

☐ 0 pt
 Urban/
 Industrial
c) Bank Erosion -
Typically:
☐ 4 pt
 Stable Hard or Well-
 Vegetated Banks

☐ 2 pt
 Combination of Stable
 and Eroding Banks

☐ 0 pt
 Raw, Collapsing
 Banks
d) How Much of
Stream is Shaded?
☐ 3 pt
 Mostly

☐ 2 pt
 Partly

☐ 0 pt
 None

V. Depth & Velocity

Score:

a) Deepest Pool is At Least:

☐ 8 pt
 Chest Deep

☐ 4 pt
 Knee Deep

☐ 6 pt
 Waist Deep

☐ 0 pt
 Ankle Deep

b) Check ALL The Flow Types That You See (Add Points):

☐ 2 pt
 Very Fast: Hard to
 Stand in the Current

☐ 3 pt
 Fast: Quickly Takes
 Objects Downstream

☐ 1 pt
 Moderate: Slowly Takes
 Objects Downstream

☐ 1 pt
 Slow: Flow
 Nearly Absent

☐ 0 pt
 None

VI. Riffles/Runs (Areas Where Current is Fast/Turbulent, Surface May Be Broken)

Score:

a) Riffles/Runs Are:

☐ 8 pt
 Knee Deep or
 Deeper & Fast

☐ 6 pt
 Ankle/Calf
 Deep & Fast

☐ 4 pt
 Ankle Deep or
 Less & Slow

☐ 0 pt
 Do Not Exist

b) Riffle/Run Substrates Are:

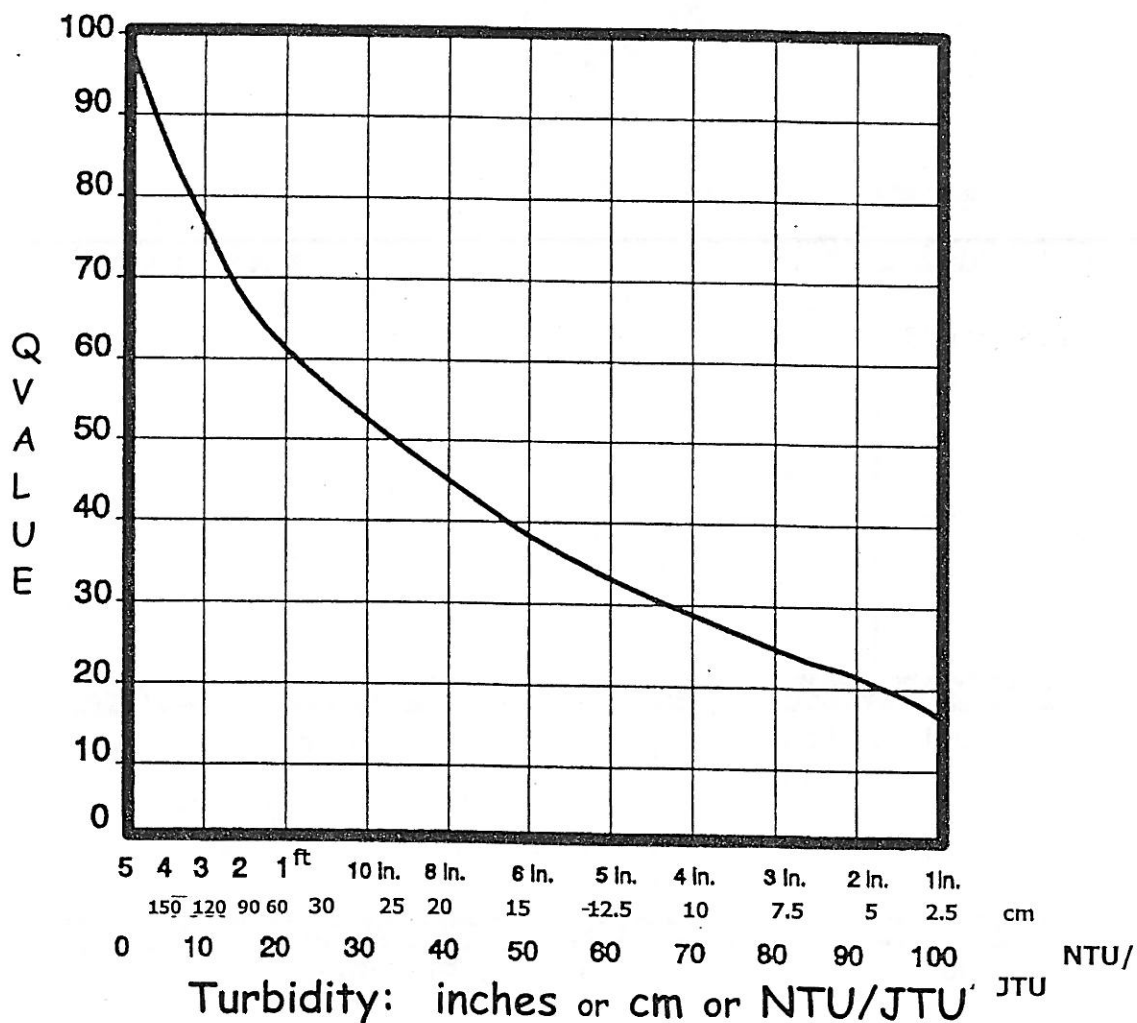
☐ 7 pt
 Fist Size or Larger

☐ 4 pt
 Smaller Than Fist Size,
 but Larger Than
 Fingernail

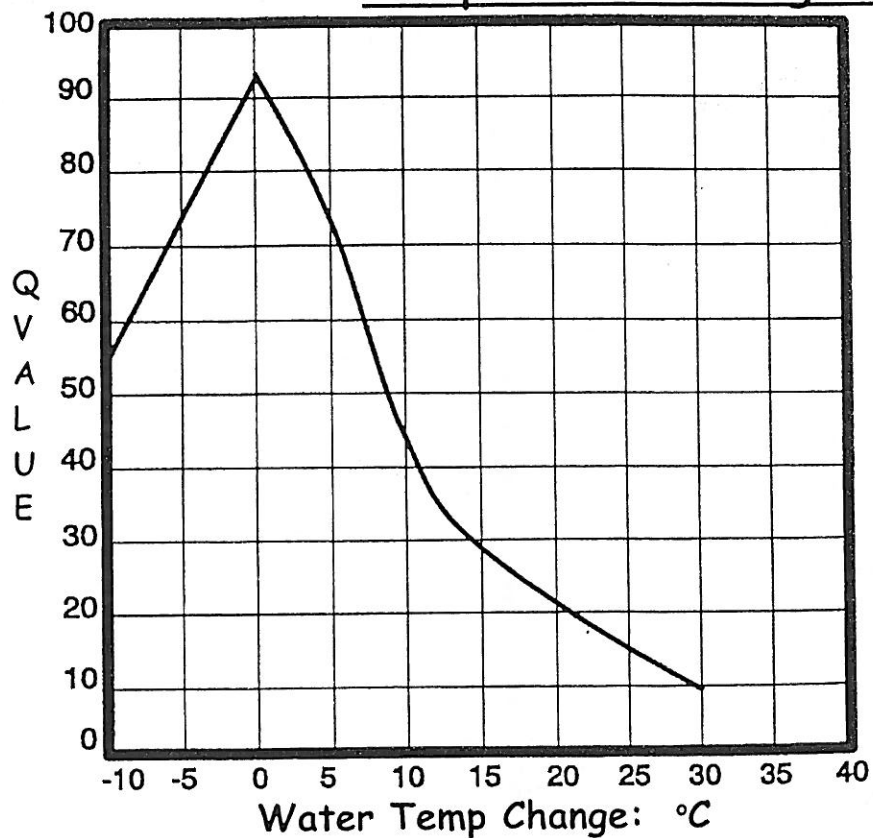
☐ 0 pt
 Smaller Than Your
 Fingernails or Do Not Exist

Turbidity Q-Values

Transparency (cm)	Turbidity (NTU)	Q-Value
Reading from Tube	Use in Database	
150	0	97
120	5	84
90	10	76
>60 (turb tube)	<15 (turb tube)	70
60	15	68
30	20	62
27.5	25	57
25	30	53
22.5	35	48
20	40	45
15	50	39
12.5	60	34
10	70	28
7.5	80	25
5	90	22
2.5	100	17
<2.5	>100	5

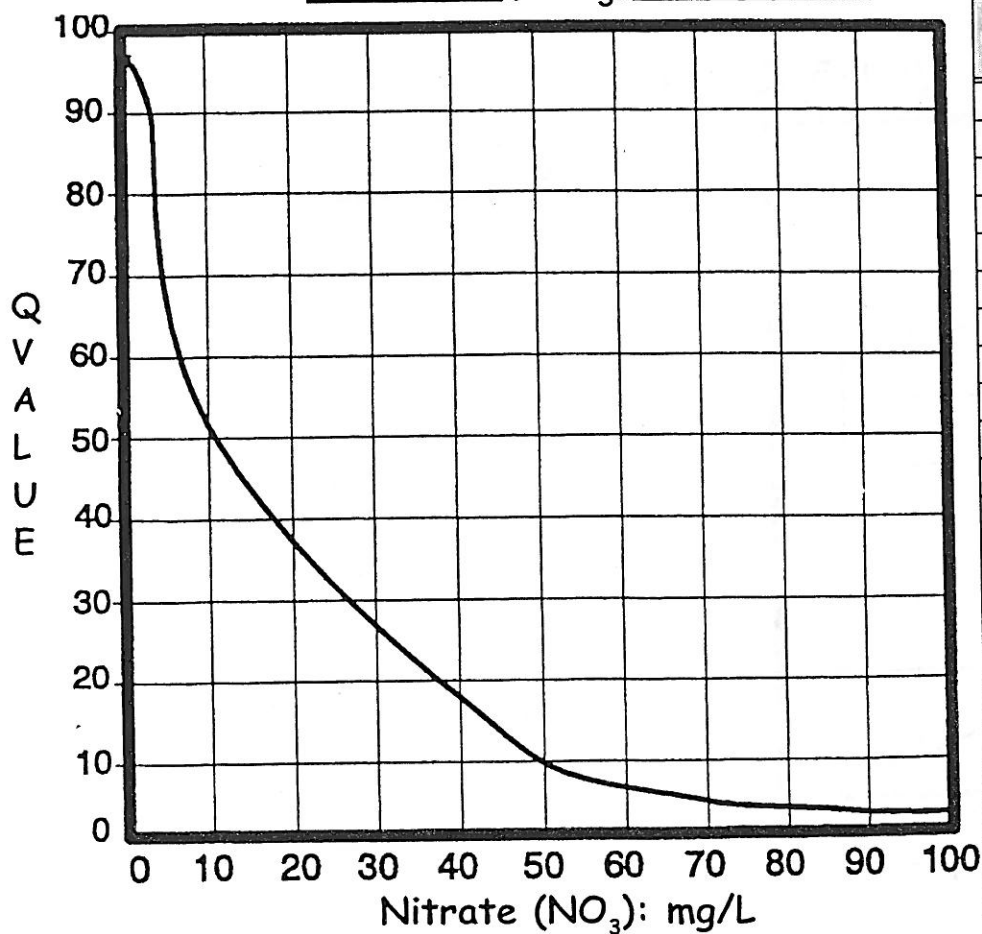


Temperature Change Q-Values



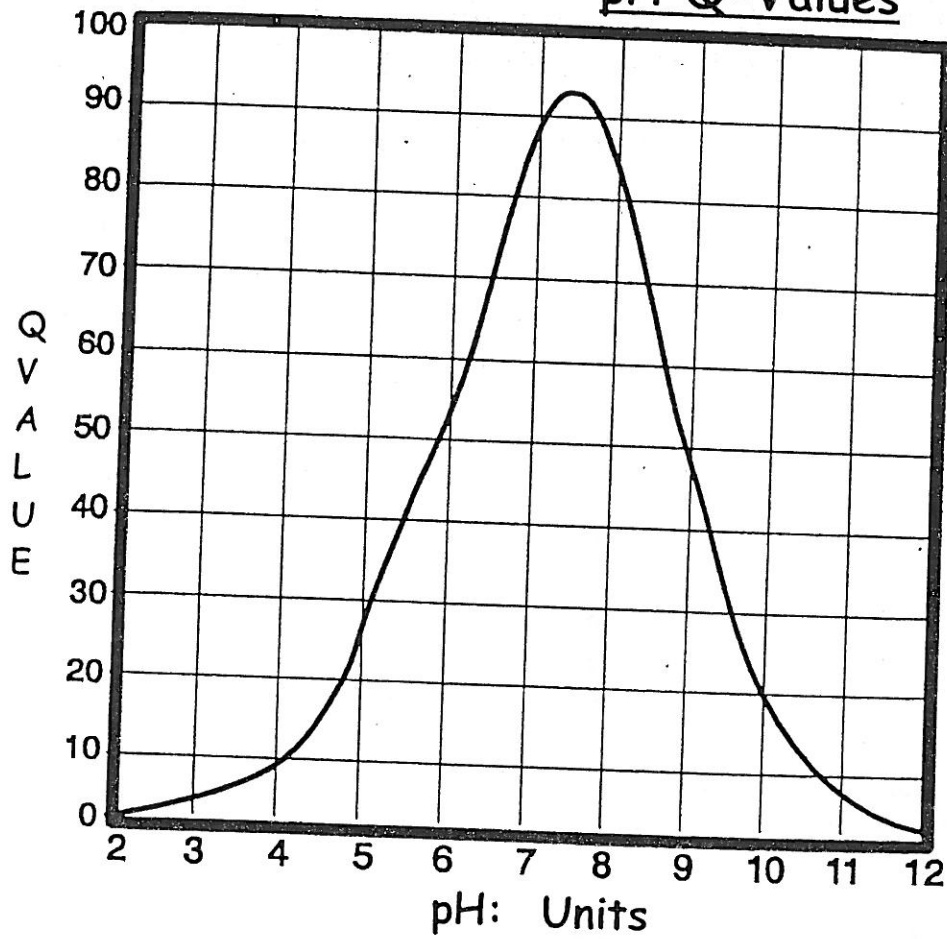
Change in Temp. (°C)	Q-Value
-10	56
-7.5	63
-5	73
-2.5	85
-1	90
0	93 (max)
1	89
2.5	85
5	72
7.5	57
10	44
12.5	36
15	28
17.5	23
20	21
22.5	18
25	15
27.5	12
30	10

Nitrate (NO₃) Q-Values



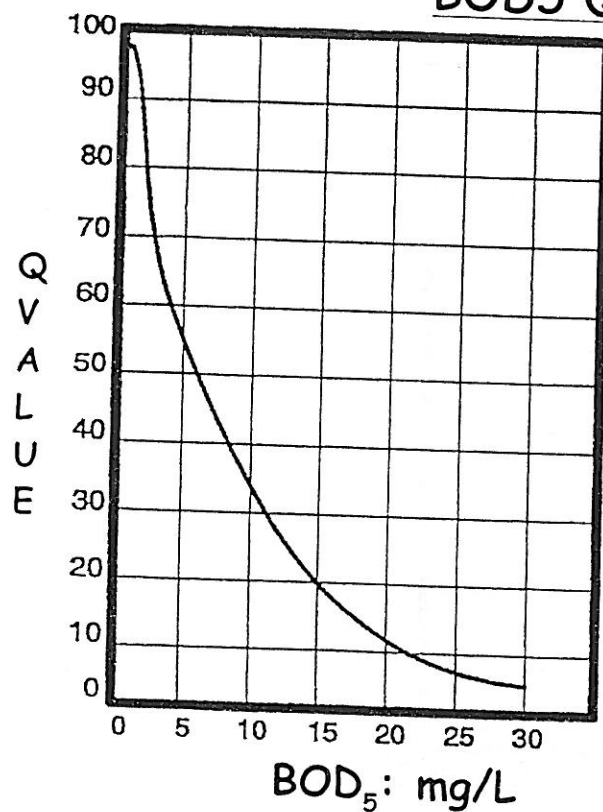
Nitrate-N (mg/L NO ₃ -N)	Q-Value
0	98
0.25	97
0.5	96
0.75	95
1	94
1.5	92
2	90
3	85
4	70
5	65
10	51
15	43
20	37
30	24
40	17
50	10
60	7
70	5
80	4
90	3
100	2
>100	1

pH Q-Values



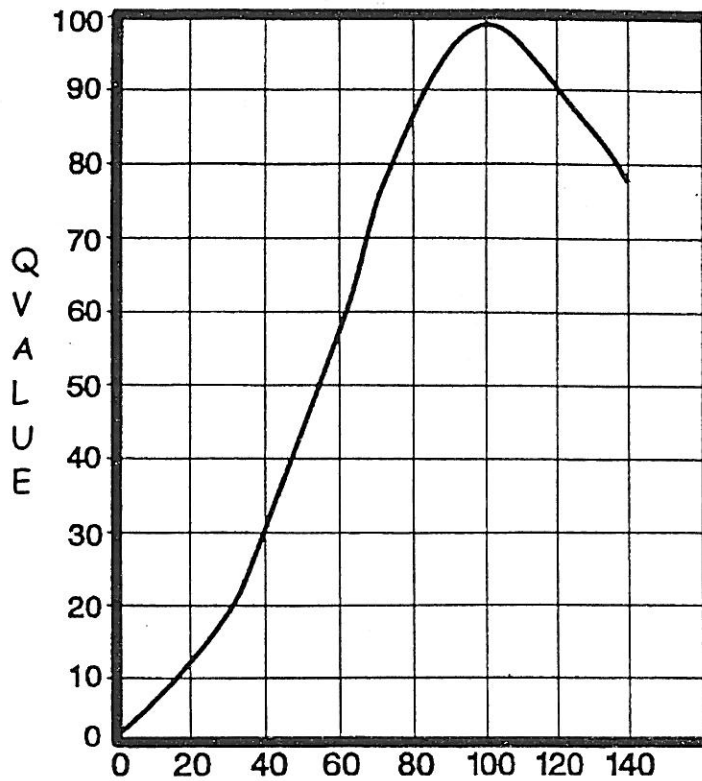
pH (units)	Q-Value
<2	0
2	2
3	4
4	8
5	24
6	55
7	90
7.2	92
7.5	93 (max)
7.7	90
8	82
8.5	67
9	47
10	19
11	7
12	2
>12	0

BOD5 Q-Values



BOD 5 (mg/L DO)	Q-Value
0	96
1	92
2	80
2.5	73
3	66
4	58
5	55
7.5	44
8	40
10	33
12.5	26
15	20
17.5	16
20	14
22.5	10
25	8
27.5	6
30	5
>30	2

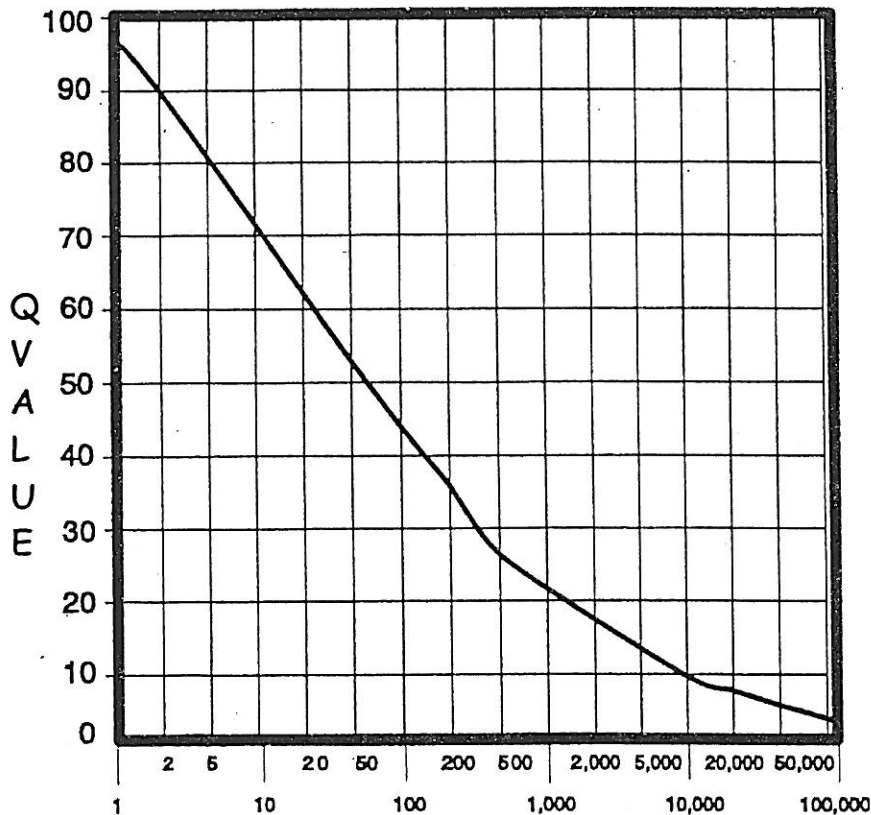
Dissolved Oxygen Q-Values



Dissolved Oxygen: % Saturation

DO (% Saturation)	Q-Value
0	0
10	8
20	13
30	20
40	30
50	43
60	56
70	77
80	88
85	92
90	95
95	97.5
100	99
105	98
110	95
120	90
130	85
140	78
>140	50

E. coli Q-Values



E-coli: colonies/100 mL

E.Coli (colonies/100mL)	Q-Value
0-1	98
2	89
5	80
10	71
20	63
50	53
100	45
200	37
500	27
1,000	22
2,000	18
5,000	13
10,000	10
20,000	8
50,000	5
100,000	3
>100,000	2

Friend or Foe?

A Study of the Effects of The Lapel Publicly Owned Treatment Works on Stony Creek

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Three sites were sampled and evaluated over a period of seven months (August 30, 2009 thru April 3, 2010) to determine the effect of the Lapel wastewater treatment works on Stony Creek in Madison/Hamilton County. The plant has had a history of violations due to equipment failure, causing the dumping of raw sewage into Stony Creek. However, in 2001 the entire operation was converted to UV treatment and all bypass overflows were eliminated. The research shows that, while there is a significant drop in the Pollution Tolerance Index Rating at the wastewater discharge, there is excellent overall recovery downstream.

Introduction

The purpose of this investigation is to assess the effectiveness of the changes made to the Lapel Publicly Owned Treatment Works (POTW). The Lapel POTW is located on Highway 13 near the intersection of Highway 13 and Highway 32 in Lapel, in Madison County (Indiana). The treated water is discharged into Stony Creek. According to the fact finding of Cause No. B-2093, filed by the Commissioner of the Indiana Department of Environmental Management (IDEM), the town of Lapel began operating its public treatment works in 1979, and it had a history of problems with inflow and infiltration into the collection system causing bypassing of raw, untreated sewage into Stony Creek: "A record review of documents related to the Lapel POTW indicates that bypasses of treatment occurred at the POTW in 1996 during 13 days in January, 5 days in February, 12 days in March, 11 days in April, 25 days in May, 26 days in June, 5 days in July, 2 days in August, 6 days in September, and 9 days in October, all of which were in violation of Part II.A.1, Part II.A.7, and the requirements pertaining to sanitary system bypasses or overflows." The same fact-finding indicated that in February 1997 a "Warning of Noncompliance" was sent to the Madison County Commissioners regarding the unincorporated community of Fishersburg, which is located just across Highway 32 from Lapel. The letter indicated that "unpermitted discharges of raw sewage were entering Stony Creek due to failing septic systems in Fishersburg." An agreement between IDEM and the Town of Lapel resulted in a two-phase plan for solving the problems. Phase I, to be completed by December 30, 2000,

involved upgrading the collection system. Phase II, to be completed by March 30, 2004, involved expansion of the wastewater treatment plant to include Fishersburg (State of Indiana, 1997).

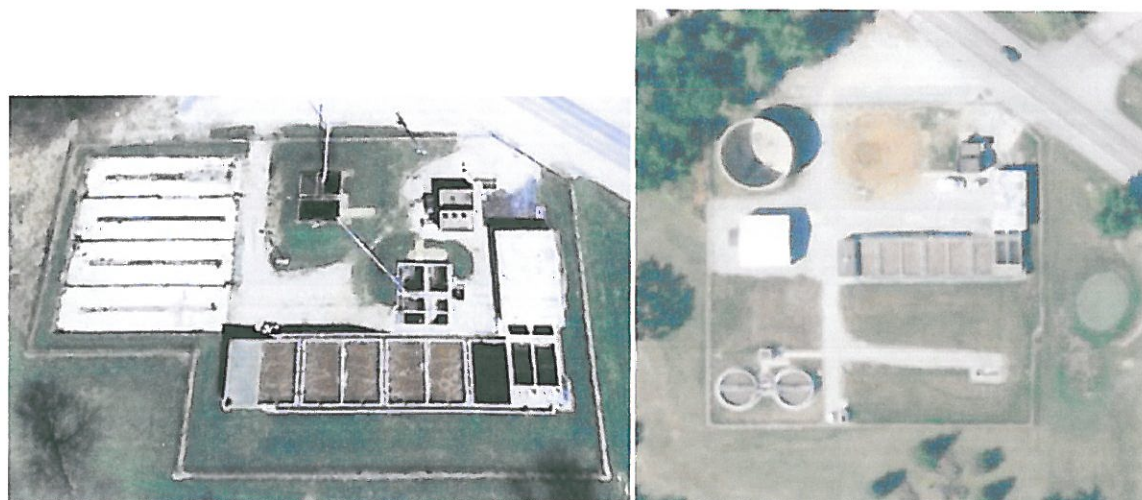


Figure 1. Old Waste Treatment Plant

Upgraded Waste Treatment Plant

According to C. J. Taylor, the operations manager at the Lapel POTW, the Town of Lapel spent \$1.5 million on the upgrades of the facility, which processes nearly 300,000 gallons of waste daily. Figure 1 shows aerial views of the Lapel Public Treatment Works before and after the upgrades. A 500,000-gallon receiving tank was installed to hold excess inflow, such as during storms, until it can be treated. Bypass overflows and combined sewer overflows were eliminated from the system and four new lift stations were installed. The updated plant has variable frequency pumps to compensate for flow changes. As raw sewage is pumped in, it goes through a hydro-sieve where solids are removed. The raw sewage is then pumped into aeration tanks where it is processed by facultative bacteria, protozoans, and other single-celled organisms. The tanks are maintained with the correct amount of air and food. The mixture is called “mixed liquor.” After the sewage has been treated in the aeration tanks, the liquid is pumped to the clarifiers and the solids are pumped to drying tanks. New clarifiers were installed in the

upgraded plant. These are pressure washed and cleaned weekly. The clarified water is then pumped to the disinfection system. Before the upgrade, the disinfection was accomplished using chlorine, which is toxic to fish even at low concentrations. Now disinfection is achieved using Ultraviolet (UV) light. The clarified water is passed through eight bulb banks containing four bulbs each. Employees of the treatment facility test the water that has been disinfected for *E. coli* before it is released into Stony Creek (Taylor, Pers. Comm.). UV disinfection is a physical process that does not require chemicals and therefore does not have the toxic side effects of chlorine. “UV is effective in killing most bacteria, viruses, spores and cysts” (EPA, 1999). However, IDEM does not require disinfection during winter months, so the UV bulbs are turned off October 31st through April 1st. There is some question as to whether this allows for “preloading” of the waterways with *E. coli* before the recreational season.

Stony Creek is a first to third order stream; it originates at Bloomer in Madison County, and flows through the north end of Lapel and into Hamilton County, where it drains into the White River at Noblesville. The Stony Creek watershed covers a drainage area of approximately 57 square miles and empties into the Upper White River watershed, which flows into the Wabash. The Wabash flows into the Mississippi, a tenth order stream, and finally into the Gulf of Mexico.

The effectiveness of the wastewater treatment by the Lapel POTW was determined by examining the water quality of the receiving stream, Stony Creek. Water quality depends on several factors, including chemical variables, biotic factors, energy sources, habitat structure, and flow.

An important biotic factor is the presence of benthic macroinvertebrates. Benthic macroinvertebrates are animals that live on the bottom, usually attached to the substrate. They are

large enough to be seen with the naked eye and lack a backbone. Since these organisms are not very mobile, they are good indicators of overall water quality because they reflect environmental stresses through changes in their number and diversity. The absence or presence of such indicator organisms is an indirect measure of pollution. Pollution sensitive organisms decrease in number and pollution tolerant organisms increase in number and variety as a stream becomes polluted. The organisms are grouped according to their ability to tolerate pollution. Group One macroinvertebrates are intolerant of pollution and include stonefly nymphs, mayfly nymphs, caddis fly larvae, Dobson fly larvae, riffle beetles, water pennies, and right-handed snails (which breathe through gills). Group Two organisms, which are moderately intolerant, include damselfly nymphs, dragonfly nymphs, sow bugs, scuds, crane fly larvae, crayfish, clams, and mussels. Group Three organisms are fairly tolerant and include midges, black fly larvae, *Planaria*, and leeches. Group Four organisms are very tolerant of pollution and include left-handed snails (which breathe with crude lungs), aquatic worms, blood midges, and rat-tailed maggots (Hoosier Riverwatch, 2008).

Other indications of water quality used for this assessment include DO₂ (dissolved oxygen), O₂ saturation, BOD₅ (biochemical oxygen demand), pH, hardness, turbidity, nitrate levels, current velocity, habitat evaluation, temperature, and fecal coliforms.

The water's ability to hold dissolved oxygen is inversely proportional to temperature, i.e., colder water holds more dissolved oxygen, while warmer water holds less dissolved oxygen. More dissolved oxygen supports greater macroinvertebrate diversity. BOD₅ is a measure of the amount of oxygen used by aerobic bacteria as they break down organic material over five days. High BOD₅ levels are detrimental to the stream because the oxygen used by microorganisms is then not available for fish and macroinvertebrates.

The pH is a measure of the hydrogen ion concentration in the water. The optimal pH range for most organisms is 6.5 to 8.2. Many factors affect the pH, including temperature, algae blooms, rainwater, soil erosion, and the presence of limestone. Lower pH levels can increase the solubility of some heavy metals such as copper and aluminum, allowing them to dissolve into the water and become toxic to aquatic organisms. The hardness measurement reflects the amount of calcium and magnesium present in the stream. Harder water buffers or raises the pH, while softer water lowers the pH. Many kinds of macroinvertebrates are able to live in moderately hard water (Voshell, 2002).

Turbidity is a measure of the relative clarity of the water, which is an indication of the presence or absence of suspended solids, such as clay, silt, organic and inorganic matter, and algae. Turbidity is affected by several factors, including nitrate levels and stream velocity. Increased turbidity results in increased temperature due to light being reflected off suspended particles, which in turn lowers the DO₂ level. Suspended solids can result in clogged gills, lower growth rates, and decreased resistance to disease, and they may also prevent egg and larva development (fivecreeks.org, 2005).

Sewage is the number one source of nitrates in Indiana's surface water (Hoosier Riverwatch, 2008). Some other sources are runoff from agricultural fields and golf courses. Elevated nitrate levels result in algae blooms, which increase the amount of biomass. When the biomass degrades, the process uses up oxygen that is needed by other aquatic organisms.

E. coli is a fecal coliform bacterium found in the feces of warm-blooded animals and humans. It is naturally present in the digestive tract but are rare or absent in unpolluted water. The presence of *E. coli* in the water is an indication of fecal contamination and can be dangerous to human health. For this reason, the "US EPA has determined that *E. coli* bacteria counts

above 235 colonies [colony forming units (CFUs)] per 100 mL indicate that more than eight people out of 1,000 who come into contact with the water may become sick” (Hoosier Riverwatch, 2008, p. 53).

Stream velocity and habitat structure are important in helping determine the type of macroinvertebrates one can expect to find in a particular aquatic environment. Fast moving water, like after a storm, disrupts the community structure and increases sediment levels, while slower than normal rates increase water temperature, lower oxygen levels, and allow waste to accumulate, which helps stimulate algae growth. The type of substrate, presence of shade and hiding places for fish, depth, and number of riffles present in a stream influence the diversity of the macroinvertebrates that can thrive in the stream.

Methods & Materials

Sampling of Stony Creek began on August 30, 2009, with samples taken approximately every two weeks through April 3, 2010. Three sites were chosen for sampling based on their proximity to the POTW discharge pipe, which was located at Latitude 40.071044 and Longitude 85.857146. The first site located at Latitude 40.071553 and Longitude 85.856566, upstream from the POTW discharge pipe, was used as a control site. The second site was at the discharge pipe and the area approximately fifty feet downstream from site one. The third site, located approximately one mile downstream of Site Two, at Latitude 40.066906 and Longitude 85.873926, was used to gauge the stream’s recovery from the discharge.

Site One, located upstream from the discharge pipe, runs under the bridge at Highway 13. The site was mostly shaded and had a wide riparian zone except at the sides of the bridge. There was a beaver dam approximately three hundred feet upstream from the site. There was a drain tile coming into the site next to the road. The pipe was only for storm water and did not contain

any combined sewer overflow as stated by the operations manager at the POTW. The substrate consisted mostly of large rocks (fist size or larger) with some smaller rocks. There was a large amount of algae attached to the rocks but no aquatic macrophytes growing in the water. The stream was mostly straight but has a curve upstream from the bridge. The stream was approximately ten to twelve feet wide and ankle-to knee-deep with many riffles and deeper, slower areas.

Site Two, located at the discharge pipe, was mostly shaded and had a densely vegetated wide riparian zone. The substrate consisted mostly of large rocks (fist size or larger) with some smaller rocks. There was a large amount of algae attached to the rocks but no aquatic macrophytes growing in the water. The stream was straight with no curves. The stream was approximately ten to twelve feet wide and ankle-to knee-deep with many riffles and deeper, slower areas.

Site Three, located approximately one mile downstream from the discharge pipe, was located just past an area in the creek that had been dammed on either side of a small island in the creek to form a pond in the creek. The site was mostly shaded with a forested area on one side of the creek, while the other side had a row of trees at the edge of the creek on the edge of a grassy field with several trees. The substrate consisted mostly of large rocks (fist size or larger) with some smaller rocks. There was a moderate amount of algae attached to the rocks but no aquatic macrophytes growing in the water. The stream was mostly straight but has a curve upstream between the dams and the site. The stream was approximately ten to twelve feet wide and ankle-to mid-calf deep with many riffles.

The following procedures were performed at each site during each sampling day. Three samplings were made in the same manner for each water quality test. Transparency and turbidity

were measured using the Carolina 120 cm transparency tube. This test was done first to prevent disturbance of the substrate from influencing the results. The drain at the bottom of the tube was closed and the tube was filled to the top with water. The water was allowed to settle and a reading was done by draining the water until the pattern at the bottom of the tube could be seen by looking down through the water column from the top of the tube. Dissolved oxygen, O₂ saturation, and temperature were measured using a YSI EcoSense DO 200 meter. The probe was placed into the water just above the streambed and gently swirled until the temperature stabilized. BOD₅ is determined by collecting water in dark bottles to prevent photosynthesis. The bottles were submerged in the center of the stream at approximately six inches below the surface. No air was allowed into the bottles as they were capped under the water. After five days, the BOD was measured with the EcoSense DO Meter and results were recorded. The HI98108 probe by Hanna was used to measure pH. The probe was placed into the water up to the designated line and the pH was allowed to stabilize before taking the reading. The *E. coli* coliform test was done by collecting three separate samples of water, 5 mL each, with a sterile pipette, and placing the water in three separate bottles of Coliscan easy gel, produced by Micrology Labs. The samples were labeled and placed in a cooler until returning to the lab, at which time they were poured into special petri dishes and allowed to harden for approximately forty-five minutes. After the gels were set, the dishes were turned over and placed into the incubator at approximately 37° C. At twenty-four and forty eight hours, the coliforms were counted and averages were calculated. Water hardness was tested with the LaMotte Hardness kit Model PHT-DR-LT code 4482-DR-LT according to the instructions in the kit. Nitrate levels were tested using the LaMotte Nitrate kit Model NCL code 3615 according to the instructions in the kit. Stream velocity was determined using a measuring tape, small balls, and a stopwatch.

One person stood in the middle of the stream and held the measuring tape while another person went downstream thirty feet and stood in the middle of the stream. The upstream person placed each ball in the water while the person downstream timed how long it took each ball to travel downstream. The readings were converted to feet per second.

Dissolved Oxygen, *E. coli*, pH, BOD₅, water temperature change, nitrate levels, and turbidity were used to determine the Water Quality Index (WQI). The WQI is a way to analyze the results of the tests and assign a rating to the monitoring session. This rating can be used to track changes to the site over time. The WQI used in the study was from the Hoosier Riverwatch manual. Each result was assigned a Quality-value (Q-value) from a chart provided by water quality experts and was weighted according to its level of importance to overall water quality. Copies of the Q-value charts and WQI worksheets are provided in Appendix B.

Benthic macroinvertebrates were collected by the following method. A riffle was found and approached from downstream. A one-meter square PVC quadrat was placed in the streambed. A meter-wide kick seine net was placed downstream so that the bottom of the net was pressed against the streambed. The bottom of the net was tucked in under the quadrat and fist sized rocks were placed on the bottom of the net to hold it in place. The net was held perpendicular to the flow at a slight downstream angle. All stones inside the quadrat two inches or more in diameter were held below the surface of the water in front of the net and wiped, allowing any organisms from the rock's surface to be washed into the net. After all rocks larger than two inches had been wiped, the substrate inside the sampling area was vigorously kicked until the entire sampling area had been disturbed. With a forward upstream scooping motion, the net was carefully removed from the water. The kick seine net was carried to a table where the live organisms were removed from the net with tweezers and placed in a glass jar containing

70% ethanol. Only one sampling of benthic macroinvertebrates was taken at each site during each sampling day. In the lab, all of the preserved macroinvertebrates were identified with the use of a Meiji EMZ binocular microscope and a dichotomous key for macroinvertebrates.

A worksheet provided by the Hoosier Riverwatch was used to determine the Pollution Tolerance Index (PTI) rating. The number of taxa from each group was added together and a weighting factor was applied to determine the PTI (Appendix B3).

Results

Samples were collected on the following dates, 1 – 8/30/09, 2 – 9/19/09, 3 – 10/2/09, 4 – 10/18/09, 5 – 10/31/09, 6 – 11/14/09, 7 – 11/28/09, 8 – 12/12/2009, 9 – 12/28/2009, 10 – 1/9/2010, 11 – 1/23/2010, 12 – 2/8/2010, 13 – 2/24/2010, 14 – 3/19/2010, 15 – 4/2/2010, 16 – 4/5/2010. Sample days are numbered according to the date of collection. Table 1A (Appendix A) shows the typical range of values for Indiana waterways, and the Indiana average for each test. Tables 2A, 3A and 4A (Appendix A) show the results of the water quality tests performed at each site. The average WQI for Site One was 74, which is a “good” rating. The average WQI for Site Two was 70, which is a “good” rating. The average WQI for Site Three is 70, which is a “good” rating (WQI Appendix B2). Figure 2 shows a comparison of the WQI at each site over the monitoring period. Table 1 shows a comparison of DO₂, *E. coli*, BOD₅, and WQI between Site One, the control site, and Site Three, the recovery site, using t-value, and P value.

Tables 5A, 6A and 7A (Appendix A) show the macroinvertebrates that were found at each site and the PTI for each sampling day. The average PTI for Site One was 22, a “good” rating, Site Two was 15, a “fair” rating, and Site Three was 28, an “excellent” rating (PTI worksheet Appendix B2). Figure 3 shows a comparison of the distribution of the

macroinvertebrates collected at each site. Table 2 shows a comparison of the Simpson's Diversity for Site One, the control site, and Site Three, the recovery site, using t-values and P values. Table 8A (Appendix A) gives the Simpson's Diversity Index for each site on the given sample days, while Figure 4 shows a comparison of the PTIs and the Simpson's Diversity Indexes at each site. The average Simpson's Diversity Index for Site One was 0.68, and the averages for Sites Two and Three were 0.60 and 0.67 respectively. Finally, Figure 6 shows a comparison of *E. coli* CFUs/100 mL to water temperature for each sample day.



Figure 2. This graph shows a comparison of the WQI for each site for each sampling day. Most of the WQIs fall around 70 for all three sites.

Date	Site 1 DO ₂	Site 3 DO ₂	Site 1 <i>E. coli</i>	Site 3 <i>E. coli</i>	Site 1 BOD ₅	Site 3 BOD ₅	Site 1 WQI	Site 3 WQI
08/30/09	6.82	7.37	633.3	386.7	6.66	7.26	67.82	69.56
09/19/09	7.56	8.97	73.3	126.7	7.31	8.64	73.94	68.71
10/02/09	7.30	7.67	0	100	7.14	7.37	81.22	70.64
10/18/09	8.34	10.50	126.7	193.3	7.31	9.42	71.69	69.74
10/31/09	6.40	7.77	213.3	126.7	6.25	7.35	66.85	72.43
11/14/09	9.57	13.09	266.7	440	9.02	12.1	72.92	68.76
11/28/09	8.40	12.86	316	506.7	4.42	9.36	72.35	70.83
12/12/09	12.36	12.77	113.3	280	7.5	8.19	76.12	73.71
12/28/09	11.98	11.70	300	633.3	7.2	6.93	73.11	73.39
01/09/10	11.07	12.83	80	320	5.18	6.7	77.26	73.04
01/23/10	10.75	11.05	346.7	560	5.73	6.37	72.27	72.24
02/08/10	12.94	13.11	13.3	100	7.87	8.31	82.06	76.63
02/24/10	13.89	14.09	73.3	460	8.39	8.9	78.70	69.45
03/19/10	12.31	12.17	46.7	1220	7.04	7.28	77.28	71.46
04/02/10	15.63	15.51	6.7	373.3	10.95	10.89	69.00	58.62
04/05/10	13.93	15.47	13.3	333.3	10.08	11.44	73.07	58.64
Mean	10.58	11.68	163.91	385.00	7.38	8.53	74.10	69.87
Standard Deviation	2.87	2.61	172.53	278.53	1.68	1.73	4.42	4.86
t-value	3.25		2.91		3.50		3.29	
P value	0.0054		0.0107		0.0032		0.0050	

Table 1. This table shows a comparison of the three main parameters, DO₂, *E. coli*, and BOD₅, at the control site and the recovery site. Also shown are the t-value and P value comparisons (Pers. Comm., Griffith).

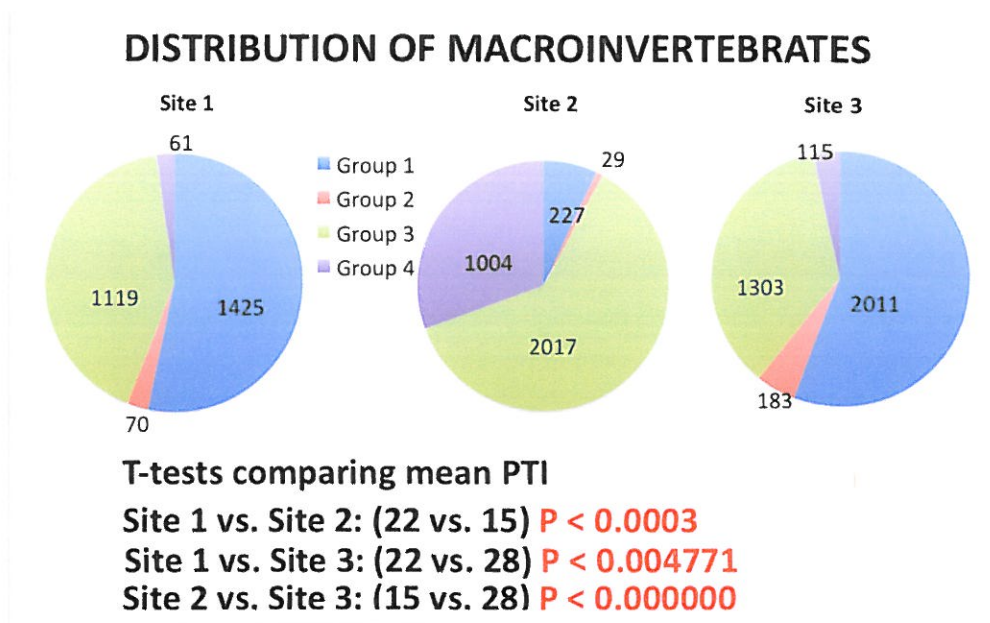


Figure 3. These pie charts show the distribution of the macroinvertebrate populations that were collected. Sites One and Three were very similar, with more than half of their population in the Group One category, while Site Two had the majority of its population in the Group Three category. Also shown in this figure is a pair-wise comparison of t-tests for Site One vs. Site Two, Site One vs. Site Three, and Site Two vs. Site Three.

Date	Site 1 Simpson's Diversity Index	Site 3 Simpson's Diversity Index
08/30/09	0.75	0.52
09/19/09	0.69	0.70
10/02/09	0.67	0.41
10/18/09	0.77	0.80
10/31/09	0.56	0.70
11/14/09	0.42	0.71
11/28/09	0.83	0.83
12/12/09	0.65	0.59
12/28/09	0.71	0.85
01/09/10	0.68	0.73
01/23/10	0.71	0.71
02/08/10	0.72	0.50
02/24/10	0.75	0.69
03/19/10	0.65	0.82
04/02/10	0.62	0.53
04/05/10	0.65	0.62
Mean	0.68	0.67
Standard Deviation	0.09	0.13
t-value	0.20	
P value	0.8447	

Table 2. This table shows a comparison of Simpson's Diversity Indexes for Site 1, the control, and Site Three, the recovery site. The t-value and P value along with the mean and standard deviation are also shown. The means for Site One and Site Three are nearly identical and the P value shows no significant difference between the two sites.

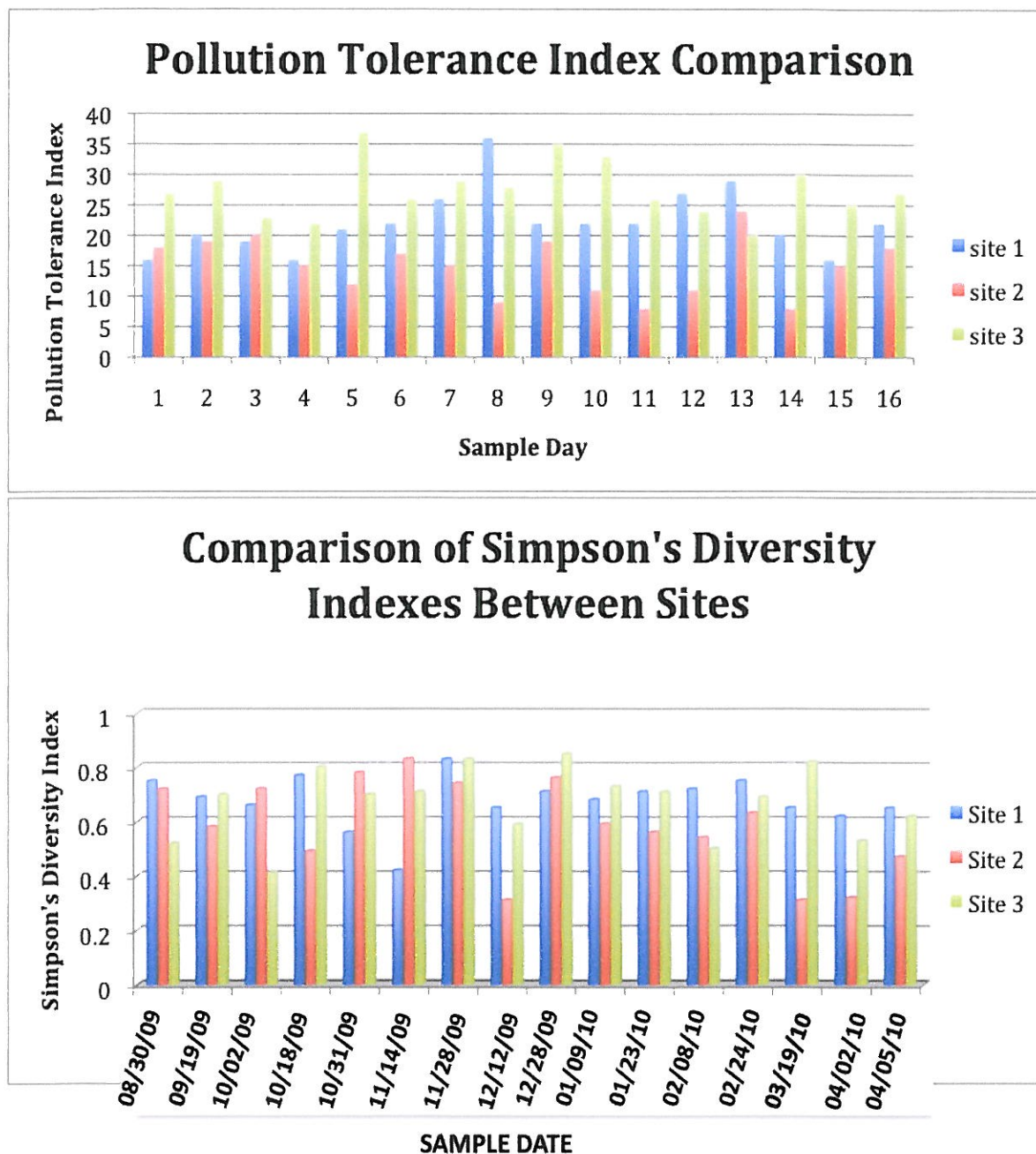


Figure 4. The decline and recovery of the macroinvertebrate populations can be seen in these charts, which show a comparison of the three sites for the PTI and Simpson's Diversity Index. The green bars are representative of Site Three. With the exception of day 13, the green bar is always higher than the red bar.

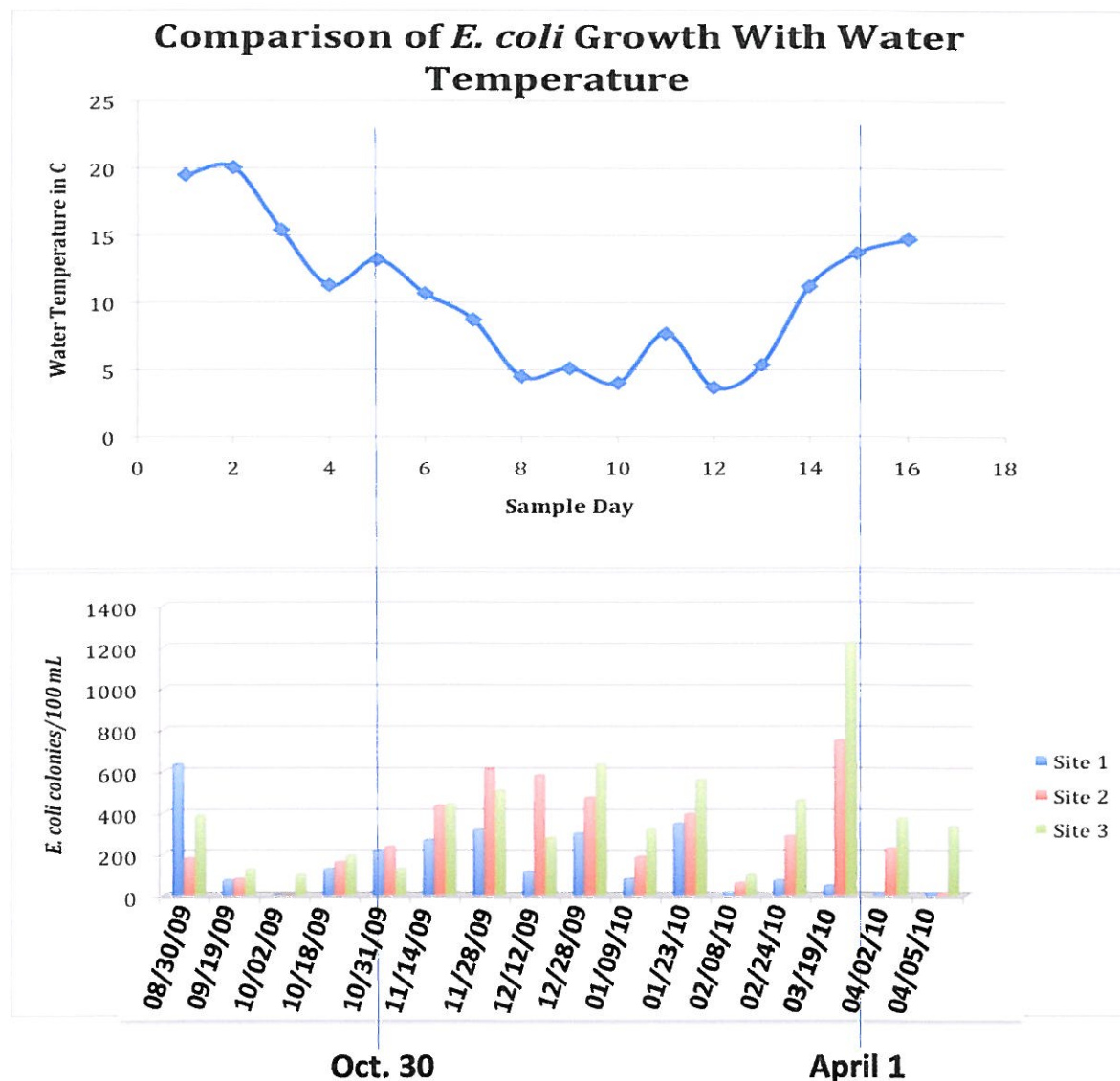


Figure 6. The line graph (in blue) shows the water temperature on each sampling day while the bar graph shows the *E. coli* levels on the corresponding day.

Discussion

While the study sites were chosen for their proximity to the discharge pipe of the Lapel POTW, it is important to note that they are very similar in habitat structure. However, there are some environmental factors between Site Two and Site Three that may affect the results. Immediately downstream from Site Two there is a golf course. At the next intersection, there is a gravel pit that is no longer in use but is filling up and spilling into Stony Creek. There are several homes along the creek downstream from the gravel pit, and finally there is a pond in the

creek with a maximum depth of approximately four feet around two hundred yards upstream from Site Three, which is held at a fairly consistent depth with dams on either side of an island in the creek. The pond is home to several large carp, some bluegill, snapping turtles, soft shell turtles, painted turtles, muskrats, beaver, occasional otters, Kingfisher, a pair of Canadian geese, Mallard ducks, and Wood ducks. It is also frequented by several Great Blue Herons. Consequently, higher *E. coli* levels were expected at Site Three due to mammals defecating in the creek.

A comparison of the mean DO₂ of Site One with Site Three revealed a higher DO₂ at the recovery site, and the t-test indicates that it was significantly higher. Moreover, the *E. coli* counts were almost twice as high at the recovery site. Finally, the BOD₅ was significantly higher at Site Three (Table 1).

As previously stated, IDEM allows the Ultraviolet disinfection to be turned off during the period between October 30th and April 1st. The logic is that there will be lower *E. coli* levels in the colder temperatures and no recreation will take place in the creek during the colder weather. While it is possibly true that most people will not jump into the creek during the winter, I have personally witnessed some people taking a plunge in January. I have also witnessed children playing in the water coming from the discharge pipe and under the bridges during the time when the UV disinfection was off. The results of the research, seen in Figure 6, do not support the assumption that *E. coli* do not grow in cold water. Recall that water with *E. coli* counts above 235 CFUs/100mL is considered unsafe for human recreation (Hoosier Riverwatch, 2008, p. 53). Before the UV disinfection was turned off, the *E. coli* counts at Site Two (the discharge site), averaged 105 CFUs/100mL and did not rise above 200. However, during the time the UV disinfection was off, the *E. coli* counts at Site Two rose to an average of 400 CFUs/100mL with a spike of 747 on March 19th, when the water temperature went up to 11.2°C. On April 2nd after the UV was turned on, the *E. coli* count dropped to 227 CFUs, and by April 5th the count was down to 7.3 CFUs/100mL. Two conclusions can be drawn from these results; first, the cold is not effective in controlling the *E. coli*, and second, the UV is very effective in controlling the *E. coli* levels in the discharge water.

Over the research period, more than 9,500 macroinvertebrates were collected. Pie charts were used to show the distribution of macroinvertebrates at each site. Sites One and Three had a

very similar distribution, with greater than 50% falling into Group One, and very few in Group Four. Conversely, Site Two had its largest population in Group Three and its second largest population in Group Four. A t-test showed that the PTI declined significantly at Site Two. However, the comparison of Sites One and Three showed that Site Three was actually significantly better than Site One. Most importantly, when comparing Sites Two and Three, the PTI went from 15 at Site Two to 28 at Site Three, which is a very significant improvement (Figure 3). The PTI comparison in Figure 4 shows that with the exception of day thirteen, there was recovery of the macroinvertebrate population at Site Three. However, there were no discernible trends in the Simpson's Diversity Indexes. Most of the WQIs fall around 70 for all three sites. The PTI seems to be a better tool in pinpointing the decline and recovery of the system.

In conclusion, although the discharge from the Lapel POTW has an adverse effect on the macroinvertebrate population in the immediate vicinity, the overall water quality at the discharge site is good. The recovery of the macroinvertebrate population downstream is excellent. I therefore conclude that the Lapel Treatment Works is a "Friend, Not a Foe" to Stony Creek and those who live downstream.

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Appendix A

Test	Typical Range for Indiana	Indiana Average
DO ₂	5.4 to 14.2 mg/L	9.8 mg/L
Water Temp. Change	1.1° C to 2.8° C	N/A
<i>E. coli</i>	133 to 1,157 colonies/100 mL	645 colonies/100 mL
pH	7.2 to 8.8	8.0
BOD ₅	0 to 6.3 mg/L	1.5 mg/L
Nitrate (NO ₃ ⁻)	0 to 36.08 mg/L	12.32 mg/L
Turbidity	0 to 173 NTU's	36 NTU

Table 1A. This table shows the typical ranges and Indiana Averages for most of the tests used in this study. The numbers were set forth by the U.S. Geological Survey and were obtained from the Hoosier Riverwatch manual.

Day	Turbidity	Site Temp	Temp Change	% O ₂ Sat	DO ₂	BOD ₅	pH	NO ₃ ⁻	Hardness	<i>E. Coli</i>	Velocity feet/sec.	WQI
1	10	18.87	.47	73.3	6.82	6.66	7.77	0	377.3	633.3	.41	67.82
2	10	19.47	1.87	82.1	7.56	7.31	8	0	401.7	73.3	.26	73.94
3	10.3	15.4	2.1	72.6	7.3	7.14	7.8	0	394	0	.55	81.22
4	5	10.5	3.5	74.5	8.34	7.31	7.4	0	366.3	126.7	.55	71.69
5	14.3	12.7	.2	60.6	6.4	6.25	7.1	0	348	213.3	1.88	66.85
6	5	9.87	.77	84.7	9.57	9.02	7.57	0	428.7	266.7	.7	72.92
7	5	7.73	2.23	70.2	8.4	4.42	7.6	0	394.7	316	.91	72.35
8	5	3.13	-.07	91.5	12.36	7.5	7.17	.88	370	113.3	1.53	76.12
9	5	4.07	-.03	93.2	11.98	7.2	7.33	1.17	234	300	2.74	73.11
10	5	2.77	-.13	82.7	11.07	5.18	7.93	.15	373	80	1.79	77.26
11	10	7.53	.13	89.9	10.75	5.73	7.47	2.64	267.3	346.7	2.09	72.27
12	5	3.6	-.2	97.9	12.94	7.87	7.3	.88	351	13.3	1.02	82.06
13	10	5.23	-.64	109.5	13.89	8.39	7.63	3.52	265.3	73.3	3.33	78.7
14	10	11.3	-.4	112.4	12.31	7.04	7.5	1.47	238	46.7	3.03	77.28
15	8	13.5	-.36	150.2	15.63	10.95	7.77	4.4	278.7	6.7	2.74	69
16	5	14.2	-.3	135.7	13.93	10.08	7.7	4.4	294.7	13.3	2.44	73.07

Table 2A. This table shows the averages of the three readings for each day's samplings of the chemical monitoring test at **Site One**. The average WQI rating is 74, which is a "good" rating. (Appendix B2).

Day	Turbidity	Site Temp	Temp Change	% O ₂ Sat	DO ₂	BOD ₅	pH	NO ₃ ⁻	Hardness	<i>E. Coli</i>	Velocity feet/sec.	WQI
1	10	18.4	-.47	78.8	7.37	7.26	8	1.76	391.7	386.7	.54	69.56
2	10	19.4	-.06	97.6	8.97	8.64	8.63	4.4	434.7	126.7	.68	68.71
3	10.3	14.33	-.67	75.3	7.67	7.37	7.97	1.76	336	100	.39	70.64
4	10	8.93	-1.57	91.1	10.5	9.42	8.2	1.76	411.3	193.3	.39	69.74
5	10	13.13	.63	74.1	7.77	7.35	7.6	0	362.7	126.7	1.82	72.43
6	5	11.03	1.93	118	13.07	12.1	7.93	1.47	442.3	440	.89	68.76
7	5	8.37	.64	109.6	12.9	9.36	7.9	.73	392	506.7	.86	70.83
8	5	4	.87	95.6	12.77	8.19	7.8	.88	376	280	1.92	73.71
9	5	4.73	.63	90.8	11.7	6.93	7.43	1.32	343.3	633.3	1.77	73.39
10	5	2.97	.07	95.1	12.83	6.7	8.33	.88	375.3	320	1.46	73.04
11	10	7.9	.37	92.9	11.05	6.37	7.53	2.64	268.7	560	3.22	72.24
12	5	3.7	.1	99.4	13.11	8.31	7.57	.88	349.7	100	1.3	76.63
13	12	5.23	0	111	14.09	8.9	7.63	3.52	277.3	460	3.75	69.45
14	10	11.1	-.2	111	12.17	7.28	7.67	1.32	264	1220	2.65	71.46
15	8	14.03	.53	150.7	15.51	10.89	7.97	4.4	302	373.3	2.84	58.62
16	5	15.83	1.63	156.5	15.47	11.44	8.03	4.4	310	333.3	2.29	58.64

Table 4A. This table shows the averages of the three readings for each day's samplings of the chemical monitoring test at **Site Three**. The average WQI rating is 70, which is a "good" rating. (Appendix B2).

Macro-invertebrates Site 1	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16
GROUP I																
Stonefly Nymph							1	5			1	2	48	2		
Mayfly Nymph								1					1			1
Caddis Fly Larvae	28	50	90	10	6	253	1	111	102	57	46	35	13	15	24	32
Dobsonfly Larvae																
Riffle Beetle		22	93	18	44	30	10	56	51	24	46	69	7	5	3	11
Water Penny																
Right Handed Snail								2								
GROUP II																
Damselfly Nymph																
Dragonfly Nymph		1														
Sowbug										1						
Scud																
Crane Fly Larvae	7	4	11		1	1		4	7	5	3	1			3	1
Clams Mussels					2	1	1	2	1	3	3	3	1		1	
Crayfish			1				1									
GROUP III																
Midge Larvae	6	4		2	5	30	4	3	32	91	77	62	39	47	36	178
Black Fly Larvae	15	25	32	2		7	3	12	26	13	12	11	10	2	125	79
Planaria	29	2	1	13	2	13	1	3	2			1	1		10	37
Leech					3			1					3	6		
GROUP IV																
Left Handed Snail						1			3	2			3	1	1	1
Aquatic Worms	1		1	1		1	1	1					2	2		
Blood Midge				4	4		7	10	2						11	
Rat tailed Maggot																
PTI	16	20	19	16	21	22	26	36	22	22	22	27	29	20	16	22

Table 5A. The macroinvertebrates found at **Site One** are listed in the table, grouped according to their pollution tolerance. Group 1 is the least tolerant while Group IV is the most tolerant. The PTI is shown at the bottom of each sampling day. The average PTI for Site One is 22, a “good,” almost excellent, rating (PTI worksheet Appendix B).

Macro-invertebrates Site 2	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16
GROUP I																
Stonefly Nymph												2				
Mayfly Nymph																
Caddis Fly Larvae	4	2	5	13		8			54			3				1
Dobsonfly Larvae																
Riffle Beetle		11	3	44	6	7	6		35			1	21		1	
Water Penny																
Right Handed Snail																
GROUP II																
Damselfly Nymph																
Dragonfly Nymph																
Sowbug																
Scud																
Crane Fly Larvae		3	2					1	1	1						
Clams Mussels	5	1			3	1	1					3			1	4
Crayfish	1															1
GROUP III																
Midge Larvae	34	46	25	2		5	23	2	21	4	4	4	58	8	7	128
Black Fly Larvae	1		4	1		3	17		11	4	2		3			26
Planaria	16	10	7		3		14	30	8	68	128	188	1	350	283	463
Leech													2	2	1	
GROUP IV																
Left Handed Snail			1	1	4	1	2	14	10	11	11	11		32	54	37
Aquatic Worms	3	1	1	1	2							1				
Blood Midge	10		2	2	12	3	67	220	89	95	119	143	9	32	2	1
Rat tailed Maggot																
PTI	18	19	20	15	12	17	15	9	19	11	8	11	24	8	15	18

Table 6A. The macroinvertebrates found at **Site Two** are listed in the table, grouped according to their pollution tolerance. Group 1 is the least tolerant while Group IV is the most tolerant. The PTI is shown at the bottom of each sampling day. The average PTI for Site Two is 15, a “fair” rating (PTI worksheet Appendix B).

Macro-invertebrates Site 3	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9	Day 10	Day 11	Day 12	Day 13	Day 14	Day 15	Day 16
GROUP I																
Stonefly Nymph							3		1							
Mayfly Nymph	6	6	7	10	15	4	15	7	22	1	1		2	2	9	39
Caddis Fly Larvae	367	50	112	1	100	35	6	46	6	42	27	13	4	29	6	4
Dobsonfly Larvae																
Riffle Beetle	116	67	338	8	149	76	23	6	9	96	61	27	2	14	7	2
Water Penny			2									1		7		
Right Handed Snail		3								1						
GROUP II																
Damselfly Nymph	2	2		4		1			3					1		2
Dragonfly Nymph							1									
Sowbug					1				10							1
Scud				1	3				11							
Crane Fly Larvae					13	1		5		2	1	1				
Clams Mussels	3	17	2		24	3	2	3	5		2	5	4	15	9	3
Crayfish		7		2	3			2		2	1				2	1
GROUP III																
Midge Larvae	8	4			7	40	25	160	35	29	76	124	16	44	74	14
Black Fly Larvae	1		2		2	8	1	16	10	11	7	4		16	1	
Planaria	47	1	2		3		5			3				1	1	
Leech					1			1	1	1			1			
GROUP IV																
Left Handed Snail	3				5				1	2		1	1			
Aquatic Worms	2									2				1		1
Blood Midge	5			4	4	4	18	17		20	12	4		7	1	
Rat tailed Maggot																
PTI	27	29	23	22	37	26	29	28	35	33	26	24	20	30	25	27

Table 7A. The macroinvertebrates found at **Site Three** are listed in the table, grouped according to their pollution tolerance. Group 1 is the least tolerant while Group IV is the most tolerant. The PTI is shown at the bottom of each sampling day. The average PTI for Site Three is 28, an “excellent” rating (PTI worksheet Appendix B).

Sample Day	Site 1	Site 2	Site 3
(1) 08/30/09	0.75	0.72	0.52
(2) 09/19/09	0.69	0.58	0.70
(3) 10/02/09	0.66	0.72	0.41
(4) 10/18/09	0.77	0.49	0.80
(5) 10/31/09	0.56	0.78	0.70
(6) 11/14/09	0.42	0.83	0.71
(7) 11/28/09	0.83	0.74	0.83
(8) 12/12/09	0.65	0.31	0.59
(9) 12/28/09	0.71	0.76	0.85
(10) 01/09/10	0.68	0.59	0.73
(11) 01/23/10	0.71	0.56	0.71
(12) 02/08/10	0.72	0.54	0.50
(13) 02/24/10	0.75	0.63	0.69
(14) 03/19/10	0.65	0.31	0.82
(15) 04/02/10	0.62	0.32	0.53
(16) 04/05/10	0.65	0.47	0.62
Average	0.68	0.60	0.67

Table 8A. This table shows the Simpson’s Diversity Indexes for each site on each sampling day. The average Simpson’s Diversity Index for each site shows a reasonably high degree of species diversity.

Hoosier Riverwatch Data

chemid	valid	siteid	orgid	adults	kids	dox	DOsat	EColi	general	pH	BOD	Temp	Temp_celsius	ortho	TP	NO3	nitrite	Turb	waterindex	domethod	ecolimethod	generalmethod	phmethod	bodmethod	orthomethod	tempmethod
156	172	142	154	8	0	11.7	115	100		7.8	3	0			1	1		60	69.88	LaMotte	Coliscan EASYGEL		Hach (pH pen)	LaMotte		Armored Thermometer
1121	372	443	284	3	0	14.33	99.67			7.43		-0.2	1.67		0	0.15		6	93.59	Hach	Coliscan EASYGEL		Hach (pH pen)	Hach		Armored Thermometer
1703	372	443	284	10	0	24.5	140.01			7.8		0	38		1.5	0.1		37.67	66.15	Hach	Coliscan EASYGEL		Hach (pH pen)	Hach		Armored Thermometer
1771	372	443	284	4	0	3.2	35			8.07		0.3	20.33			0.03		4.33		Hach	Coliscan EASYGEL		Hach (pH pen)	Hach		Armored Thermometer
1882	372	443	284	3	0	8.67	80			7.9		-2	28.5		0	0.15		60	81.8							/
3318	693	989	420	5	0	9	76			8	3	0	8	0.05		2.2	0.2475	15.01	81.78	DO_Chemetrics	None	None	pH_WWTest Strips	BOD_Chemetrics	Ortho_Chemetrics	Temp_Meter
3319	693	989	420	3	0	6	72			8	0.5	2	25		0	8.8		15.01	79.95	DO_Chemetrics	None	None	pH_WWTest Strips	BOD_Chemetrics	None	Temp_Armored Thermometer
3405	693	989	420	2	0	8	80			7	3	0	15	1.5		2.2		15.01	79.97	DO_Chemetrics	None	None	pH_WWTest Strips	BOD_Chemetrics	Ortho_Chemetrics	Temp_Armored Thermometer
3609	693	989	420	4	0	8	76			7.5	2	2	15	0		22		55	70.36	DO_Chemetrics	None	None	pH_WWTest Strips	BOD_Chemetrics	Ortho_Chemetrics	Temp_Armored Thermometer
4231	693	989	420	1	0	11	90			8.5	10	0	7	0.1		1.1		15.01	77.19	DO_Chemetrics	None	None	pH_WWTest Strips	BOD_Chemetrics	Ortho_Chemetrics	Temp_Armored Thermometer
4232	693	989	420	2	0	9	80			8	6	0.5	19.5	1.5		2.2		15.01	78.82	DO_Chemetrics	None	None	pH_WWTest Strips	BOD_Chemetrics	Ortho_Chemetrics	Temp_Armored Thermometer
2967	697	380	174	1	20	10.75	128			8.5	3		18		0.15	0		60	77.38	DO_LaMotte	None	None	pH_LaMotte	BOD_LaMotte	None	Temp_Armored Thermometer
3113	697	380	174	1	12	10	92			7.5		0	12.5		0.05	22	0.2475	20	82	DO_Chemetrics	None	None	pH_WWTest Strips	None	None	Temp_Armored Thermometer
3642	697	380	174	1	13	4	40	8000		8					0	2.2		21	55	DO_Chemetrics	ecoli_Coliscan Easygel	None	pH_WWTest Strips	None	None	None
3387	730	1043	429	1	0	6	65			8.5	1	0	20	0.1		2.2		18	77.49	DO_Chemetrics	None	None	pH_WWTest Strips	BOD_Chemetrics	Ortho_Chemetrics	Temp_Armored Thermometer
3401	730	1043	429	1	0	9	72	233		7	0	1	6	0.15		8.8	0	15.01	70.19	DO_Chemetrics	ecoli_Coliscan Easygel	None	pH_WWTest Strips	BOD_Chemetrics	Ortho_Chemetrics	Temp_Armored Thermometer
3630	812	1152	357	2	4	8.5	97			7.67		-3	18	0.12		0	0	15.01		DO_Hach	None	None	pH_WWTest Strips	None	Ortho_Chemetrics	Temp_Armored Thermometer
3631	812	1152	357	1	0	11	72			6			1	2		1.1	0	70		DO_Chemetrics	None	None	pH_WWTest Strips	None	Ortho_Chemetrics	Temp_Armored Thermometer
4279	812	1152	357	2	1	7	80			8.25	1	-4	19	0.1		0	0	15.01	82.08	DO_Chemetrics	None	None	pH_WWTest Strips	BOD_Chemetrics	Ortho_Chemetrics	Temp_Armored Thermometer
4556	812	1152	357	1	2	5.75	70	0			2	0	20	0.35		9	0	70	72.92	DO_Hach	ecoli_Coliscan Easygel	None	None	BOD_Hach	Ortho_Hach	Temp_Armored Thermometer
4557	812	1152	357	1	0			0		7.6			7	0.15		34	0			None	ecoli_Coliscan Easygel	None	pH_Other	None	Ortho_Hach	Temp_Armored Thermometer
4558	812	1152	357	1	0			50		7.7				0.15		13.5	0			None	ecoli_Coliscan Easygel	None	pH_Other	None	Ortho_Hach	None
4559	812	1152	357	1	0								8	0.3		18	0			None	None	None	None	None	Ortho_Hach	Temp_Armored Thermometer
4560	812	1152	357	1	0	7.7	85						18	0.05		2				DO_Hach	None	None	None	None	Ortho_Hach	Temp_Armored Thermometer
4194	269	316	221	2	16	0	1			6		1	24			20		15.01		DO_LaMotte	None	None	pH_Other	None	None	Temp_Armored Thermometer
US Geo Survey data"	1.5	8:30 AM	Clear/Sunny	Showers	10/4/2007	N/A	N/A	N/A	N/A	Upper White 05120201	Marion	White River														

Hoosier Riverwatch Data

chemid	tpmethod	no2method	no3method	turbmethod	comments	sitetime	timesample	weather	pweather	dmy	add1	add2	add3	add4	wsname	county	rivername
156	Other		LaMotte	Turbidity Tube			2:00 PM	Clear/Sunny	Clear/Sunny	10/22/2000	N/A	N/A	N/A	N/A	Upper White 05120201	Delaware	White River
1121	Hach		Hach	Turbidity Tube		1	01:00pm	Overcast	Overcast	11/17/2002	Orthophosphate equals2mg/L,Hach	N/A	N/A	N/A	Upper White 05120201	Delaware	White River
1703	Hach		Hach	Turbidity Tube		1	02:00pm	Clear/Sunny	Showers	9/6/2003	N/A	N/A	N/A	N/A	Upper White 05120201	Delaware	White River
1771	Hach		Hach	Turbidity Tube		1	2:15 PM	Clear/Sunny	Clear/Sunny	2/29/2004	Ammonia Nitrate equals.05mg/L	N/A	N/A	N/A	Upper White 05120201	Delaware	White River
1882	,			,		1	1:00 PM	Clear/Sunny	Showers	5/1/2004	N/A	N/A	N/A	N/A	Upper White 05120201	Delaware	White River
3318	None	Nitrite_Test Strips	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube	1st time test results	3	8:00 AM	Clear/Sunny	Overcast	10/21/2005	N/A	N/A	N/A	N/A	Upper White 05120201	Delaware	White River
3319	Phosphate Spectrophotometer	None	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube		3	3:00 PM	Clear/Sunny	Overcast	6/28/2006	N/A	N/A	N/A	N/A	Upper White 05120201	Delaware	White River
3405	None	Nitrite_Test Strips	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube	high water	1	4:00 PM	Overcast	Stormy	10/18/2006	N/A	N/A	N/A	N/A	Upper White 05120201	Delaware	White River
3609	None	None	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube	no rainfall for 3 weeks@water level very low	2	9:00 AM	Clear/Sunny	Clear/Sunny	5/19/2007	N/A	N/A	N/A	N/A	Upper White 05120201	Delaware	White River
4231	None	None	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube		0.5	12:00 PM	Clear/Sunny	Clear/Sunny	10/30/2007	N/A	N/A	N/A	N/A	Upper White 05120201	Delaware	White River
4232	None	None	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube		1	128:00 AM	Clear/Sunny	Clear/Sunny	7/12/2007	N/A	N/A	N/A	N/A	Upper White 05120201	Delaware	White River
2967	Phosphate LaMotte	None	Nitrate_LaMotte	Turbidity_60 cm Turbidity Tube		1.5	9:00 AM	Clear/Sunny	Overcast	9/22/2005	N/A	N/A	N/A	N/A	Upper White 05120201	Randolph	White River
3113	Phosphate_Hach	Nitrite_Test Strips	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube	Trench from field drainage to river has been dug within last 2 months.	1	10:00 AM	Clear/Sunny	Clear/Sunny	5/22/2006	N/A	N/A	N/A	N/A	Upper White 05120201	Randolph	White River
3642	Phosphate_LaMotte	None	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube		1	8:30 AM	Overcast	Storms	5/3/2007	N/A	N/A	N/A	N/A	Upper White 05120201	Randolph	White River
3387	None	None	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube		1	10:00 AM	Clear/Sunny	Clear/Sunny	8/23/2006	N/A	N/A	N/A	N/A	Upper White 05120201	Randolph	White River
3401	None	Nitrite_Test Strips	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube		1	3:00 PM	Clear/Sunny	Clear/Sunny	11/21/2006	N/A	N/A	N/A	N/A	Upper White 05120201	Randolph	White River
3630	None	Nitrite_Test Strips	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube	Two days earlier we'd had 1 1/2 inches of rain in several hours. Creek was no longer high. Upstream temp. is about 1 1/2 miles away.	2.5	10:00 AM	Clear/Sunny	Rain	5/30/2007	Ammonia Nitrogen equals0 mg/L, LaMotte Kit	N/A	N/A	N/A	Upper White 05120201	Randolph	Cabin Creek
3631	None	Nitrite_Test Strips	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube	We had had rain plus melting snow. The water level was very high.	1	3:00 PM	Overcast	Rain	2/25/2007	N/A	N/A	N/A	N/A	Upper White 05120201	Randolph	Cabin Creek
4279	None	Nitrite_Test Strips	Nitrate_Test Strips	Turbidity_60 cm Turbidity Tube		2.5	9:30 AM	Overcast	Showers	8/25/2007	Ammonia Nitrogen equals0 mg/l, LaMotte Kit	N/A	N/A	N/A	Upper White 05120201	Randolph	Cabin Creek
4556	None	Nitrite_Hach	Nitrate_Hach	Turbidity_60 cm Turbidity Tube	Water was higher than usual and muddy. There is a lot of new sedimentation from spring flooding.	1.5	11:00 AM	Clear/Sunny	Rain	7/13/2008	Ammonia Nitrogen equals0 mg/l, Hach Colorimeter	N/A	N/A	N/A	Upper White 05120201	Randolph	Cabin Creek
4557	None	Nitrite_Hach	Nitrate_Hach	None		1	011:14 PM	Overcast	Overcast	11/17/2007	Ammonia Nitrogen equals0.0 mg/l, Hach Colorimeter	N/A	N/A	N/A	Upper White 05120201	Randolph	Cabin Creek
4558	None	Nitrite_Hach	Nitrate_Hach	None	2 inches of sleet and snow on the 12th, beginning to melt today	1	1:09 PM	Overcast	Overcast	2/15/2008	Ammonia Nitrogen equals0.0 mg/l, Hach Colorimeter	N/A	N/A	N/A	Upper White 05120201	Randolph	Cabin Creek
4559	None	Nitrite_Hach	Nitrate_Hach	None		1	5:30 PM	Clear/Sunny	Showers	3/16/2008	Ammonia Nitrogen equals0.0 mg/l, Hach Colorimeter	N/A	N/A	N/A	Upper White 05120201	Randolph	Cabin Creek
4560	None	None	Nitrate_Hach	None	creek is low	1	6:04 PM	Clear/Sunny	Clear/Sunny	8/17/2008	Ammonia Nitrogen equals0.0 Hach Colorimeter	N/A	N/A	N/A	Upper White 05120201	Randolph	Cabin Creek
4194	None	None	Nitrate_LaMotte	Turbidity_60 cm Turbidity Tube	River was on a clear" rise of .15" over the last 12 hours as per												
US Geo Survey data"																	

Attachment H

The Catchment and Segmentation Processes

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The Segmentation Process

It has been found that assessment unit IDs (AUIDs) that apply to an entire 14-digit hydrologic unit code (HUC) do not accurately represent the stream impairments within a watershed. As such, IDEM needed a process that allowed for systematically splitting AUIDs that applied to an entire 14-digit HUC into representative stream reaches. As such, IDEM has developed a process that uses available tools.

When determining whether segmentation is needed, IDEM examines various types of information, including:

- Hydrology
- Landuse
- National Pollution Discharge Elimination System (NPDES) Facility locations and outfalls
- Confined Feeding Operations (CFO)/Concentrated Animal Feeding Operations (CAFO) locations
- Aerial Photography
- Topographic maps

The segmentation process is guided in large part by the hydrology of a system. This is because the mechanisms of large streams and rivers are very different from those of small streams and tributary systems, making it logical to segment these into separate AUIDs. Varying land uses within a watershed are also considered because rural development is expected to have different impacts on a stream than urban areas, which in turn, have different impacts to a stream segment than forested areas. The presence of a NPDES facility also has the potential to impact water quality depending on the type of facility and whether the facility is operating efficiently. While CFO/CAFO facilities are not allowed by their permits to discharge, the presence of such a facility within five miles of a stream located in a heavily row-cropped area indicates the potential for impacts resulting from land application of animal wastes. Aerial photography is particularly important in determining appropriate segmentation within a watershed because it provides very recent and accurate information about the presence and thickness of riparian buffers, the presence and spatial extent of rural development, and the types of land use practices in the watershed, all of which help to determine where we might expect to see differences in water quality resulting from one/more of these factors. All of these factors are considered when determining whether segmentation should occur and where it should occur along the stream reach due to the potential impacts these factors can have on stream water quality.

The goal of the segmentation process is to identify streams and stream reaches that are representative for the purposes of assessment. In practice, this process leads to grouping tributary streams into smaller catchment basins of similar hydrology, land use, and other characteristics such that all tributaries within the catchment basin can be expected to have similar potential impacts. Catchment basins, as defined by the aforementioned factors, are typically very small which significantly reduces the

variability in the water quality we might expect from one stream or stream reach to another. Given this, all tributaries within a catchment basin are assigned a single AUID. Grouping tributary systems into smaller catchment basins also allows for better characterization of the larger watershed. Variability within the larger watershed will be accounted for by the differing AUIDs assigned to the different catchment basins.

Currently, IDEM's segmentation is occurring simultaneously with the addition of high resolution segments (at the 1:24,000 scale) to Indiana's Reach Index. High resolution indexing is part of the process of revising and updating Indiana's Reach Index to take advantage of higher resolution geospatial data now available. A significantly higher number of first and second order streams appear at this scale than were previously indexed at the 1:100K scale. Therefore, the small catchment approach is also appropriate for the high resolution indexing process because it accounts for differences in hydrology resulting from stream size. It is anticipated that when Indiana's high resolution reach index is completed, the need to split segments using the segmentation process will be virtually eliminated.

The Reassessment Process

Reassessment occurs when new data become available. New data are examined to determine the representativeness of the sample point.

When completing a reassessment of the watershed with new data, IDEM also examines:

1. Whether the AUID(s) are currently on the 303(d) list.
 - a. If so, for what parameters?
 - b. What are the locations of the samples that put the AUID(s) on the list?
 - c. What is the magnitude of impairment between the sites?
2. Whether a TMDL has been completed for these AUID(s), if so, for what parameters.
3. The notes taken by staff that sampled the site
4. Hydrology
5. Land use
6. National Pollution Discharge Elimination System (NPDES) Facility locations and outfalls
7. Confined Feeding Operations (CFO)/Concentrated Animal Feeding Operations (CAFO) locations
8. Aerial Photography

The information from the above factors aids in identifying the extent of the impairment. The parameters listed above are utilized to determine potential impacts to stream segments. Understanding potential impacts helps identify the similarities between a stream reach and its tributaries and thus aids in the determination of the extent of an impairment. Based on the new data and the above factors, the AUID(s) will be assessed as impaired, not impaired, or not assessed for a particular parameter. All AUIDs within the watershed will be examined to determine applicability of the data to each AUID. AUIDs will receive the same assessment if it is determined that the data are applicable.

Sometimes segmentation is necessary in order to accurately apply new data. As sampling is an on-going effort, it is necessary to perform reassessments on areas where the reach indexing effort at high resolution (1:24,000) has not yet been completed. In these situations, the segmentation process is followed and tributary systems of similar characteristics will be grouped into catchment basins with one AUID and the applicability of the assessment to each AUID will be examined.

Attachment I

Emergency Response Incident Reports for CFOs and CAFOs in the Upper White River Headwaters Watershed

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INCIDENT REPORT

State Form 13490 (R4/1-04)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
EMERGENCY RESPONSE SECTION

Incident Number: 2010-08-035

County: Randolph

Priority Level: 2

ER Staff: Mike Sutton

Spill Type: Spill

SARA Title III Release: No

Referred To: AG AND SOLID WASTE

NOTE: - For Department Use Only.

- To report Spills and Environmental Emergencies in Indiana 24 Hours a day
call **888-233-7745**

Incident Date/Time: 08/05/2010 11:30:00	Notification Date/Time: 08/05/2010 11:30:00
---	---

Source Information		Reporter Information	
Source Name: BUENA VISTA - MAXWELL FARM		Reporter Name: PRIVATE CITIZEN	
Contact Name: JOE BALDWIN		Contact Name: CURTIS RAMER	
Street Address: 3725 WEST 400 SOUTH		Street Address:	
City/State/ZIP: WINCHESTER, IN 47394		City/State/ZIP: WINCHESTER, IN 47394	
Mailing Address:		Mailing Address:	
City/State/ZIP: ,		City/State/ZIP: ,	
Office Phone	Mobile Phone (765)546-1387	Office Phone	Mobile Phone (765)967-0292
Fax	Pager	Fax	Pager

Source Type: Agricultural	Reported By: Private Citizen
Circumstances: Miscellaneous	Environmental Consequence: Undetermined

Investigation Performed By: ERS - Field Response
--

Spill Location Information	
Location: 3725 WEST 400 SOUTH	
City/State/ZIP: WINCHESTER, IN 47394	Affected Area: WATER
Incident/Area Description: COMPOST MATERIAL RELEASE	
Water Affected? Yes	Receiving Water: STORM DITCH ON PROPERTY
Public Drinking Water Intake:	

Material Information	
Material Name: COMPOST MATERIAL	Quantity:
Other Information:	

IDEM Personnel	
Name/Agency: David Kizer/Compliance/Response Br.	Date / Time: 08/05/2010 21:02:38
Comments: CONSULTED	Telephone:(317)232-8857
Name/Agency: Randy Jones/Compliance/Response Br.	Date / Time: 08/05/2010 20:56:27
Comments: REFERRED AND CONSULTED	Telephone:(317)234-6924

IDEM Personnel

Name/Agency: Randall Tauer/

Date / Time: 08/05/2010 21:02:46

Comments: INFORMED

Telephone: (317)232-8587

Comments / Addendum

The IDEM Spill Line received a call from a private citizen informing that a door and roof of a compost building was completely blown down during a storm on 8/4/2010. According to the reporter the heavy rains caused a stream of compost material to enter the ditch on the west end of the property. That ditch flows into a 20 inch county tile and then on into Mortar Creek. OSC Sutton responded to the property and could not find anyone from Buena Vista at the facility. OSC Sutton did see the damaged building and potential for runoff to the ditch on the west end of the property. OSC Sutton went to the Ramer residence and met with Curtis Ramer who was able to show OSC Sutton the location of the tile stand pipe where the material may have left the property and entered the county tile. OSC Sutton performed several ammonia-nitrogen field tests in the ditch and found the fluid directly down hill of the compost building in the ditch to read above 8ppm. Downstream in the ditch indicated a quick drop off in ammonia-nitrogen levels with readings at the stand pipe (discharge into the county tile) to be 0 to 1ppm. It did not appear any material was leaving the site at this time. OSC Sutton informed Mr. Ramer that a referral of this information would be made to the Ag and Solid Waste Section, as well as to the IDEM Ag Liaison.

OSC Sutton was able to contact Joe Baldwin with Buena Vista. OSC Sutton informed him of the findings on site and suggested the pool of impacted fluid be removed quickly. Also, OSC Sutton suggested they be prepared in case of heavy rains that may cause additional compost material to flow away from the building and into the ditch. Mr. Baldwin stated they would pump the fluid before the end of the night and work on building better containment.

OSC Sutton referred information to Randy Jones in Ag and Solid Waste and Andy Tauer who is the Ag Liaison.



INCIDENT REPORT

State Form 13490 (R4/1-04)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
EMERGENCY RESPONSE SECTION

Incident Number: 2002-09-179

County: Delaware

Priority Level: 3

ER Staff: Dorel Hunt

Spill Type: Spill

SARA Title III Release: No

Referred To: AgSW

NOTE: - For Department Use Only.

- To report Spills and Environmental Emergencies in Indiana 24 Hours a day
call **888-233-7745**

Incident Date/Time: 09/25/2002 11:46:36	Notification Date/Time: 09/25/2002 11:46:36
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Source Information		Reporter Information	
Source Name: Seldom Rest Farms		Reporter Name: ANONYMOUS	
Contact Name: Whitehead		Contact Name:	
Street Address: CR 650 South		Street Address:	
City/State/ZIP: Muncie, IN		City/State/ZIP: , IN	
Mailing Address:		Mailing Address:	
City/State/ZIP: ,		City/State/ZIP: ,	
Office Phone	Mobile Phone	Office Phone	Mobile Phone
Fax	Pager	Fax	Pager

Source Type: Agricultural	Reported By: Private Citizen
Circumstances: Unknown	Environmental Consequence: Undetermined

Investigation Performed By: Ag & Solid Waste Referral

Spill Location Information	
Location: CR 650 South	
City/State/ZIP: Muncie, IN	Affected Area: swail toward road
Incident/Area Description: 1/2 mile east of SR 35 on N side of road	
Water Affected? No	Receiving Water:
Public Drinking Water Intake:	

Material Information	
Material Name: hog waste	Quantity:
Other Information: no estimate given	

IDEM Personnel	
Name/Agency: Angelynn Lee/Compliance/Response Br.	Date / Time: 09/25/2002 11:57:33
Comments: sent e mail	Telephone:(317)233-5553
Name/Agency: Randy Jones/Compliance/Response Br.	Date / Time: 09/25/2002 11:46:37
Comments: advised by staff. Rany had been there couple of weeks ago, would followup	Telephone:(317)234-6924

Comments / Addendum

Staff recd a call from an anonymous male who shared that the hog farm known as Seldom Rest Farms owned by the Whitehead family located on CR 650 South, about 1/2 mile east of US 35 has what appears to be sewage - later confirmed to be hog manure out by the road standing in puddles. Caller advised that this area drains into creek that goes to Prairie Creek Reservoir. Also stated he called it to the attention of Berry Banks w the Red Tail Conservancy District. Caller stated some "EPA" guy was out couple of weeks ago but checked the creek not were this material is. Caller said he has noticed this material for many weeks. Sees it when he rides his bike. Staff contacted Ag SW inspector Randy Jones. Confirmed he was the "EPA" guy, had checked the discharge area to creek w field test kit and did not detect anything. Jones will follow up again. !



INCIDENT REPORT

State Form 13490 (R4/1-04)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
EMERGENCY RESPONSE SECTION

Incident Number: 2007-03-031

County: Randolph

Priority Level: 3

ER Staff: Lavern Beauchamp

Spill Type: Other

SARA Title III Release: No

Referred To: AgWASTE

NOTE: - For Department Use Only.

- To report Spills and Environmental Emergencies in Indiana 24 Hours a day
call **888-233-7745**

Incident Date/Time: 03/06/2007 08:00:40	Notification Date/Time: 03/06/2007 08:28:40
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Source Information		Reporter Information	
Source Name: UNION GO DAIRY		Reporter Name: PRIVATE CITIZEN	
Contact Name:		Contact Name: WENDY CARPENTER	
Street Address:		Street Address: 5305 W 500TH ST	
City/State/ZIP: ,		City/State/ZIP: MODOC, IN 47358	
Mailing Address:		Mailing Address:	
City/State/ZIP: ,		City/State/ZIP: ,	
Office Phone	Mobile Phone	Office Phone (765)853-5294	Mobile Phone
Fax	Pager	Fax	Pager

Source Type: Commercial	Reported By: Private Citizen
Circumstances: Unknown	Environmental Consequence: Minimal - Log Only

Investigation Performed By: Other

Spill Location Information	
Location: 300 W	
City/State/ZIP: WINCHESTER, IN 47394	Affected Area: ROAD WAY
Incident/Area Description: ROAD WAY	
Water Affected? No	Receiving Water:
Public Drinking Water Intake:	

Material Information	
Material Name: COW WASTE	Quantity:
Other Information:	

Comments / Addendum

03/06/2007 08:28: Wendy Carpenter called in to report that Union Go Dairy has cow waste for about 1/2 mile on the road. I talked with Randy Jones in the AgWaste section and he had me to referre this to Ryan Westerfeld.



INCIDENT REPORT

State Form 13490 (R4/1-04)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
EMERGENCY RESPONSE SECTION

Incident Number: 2007-04-012

County: Randolph

Priority Level: 1

ER Staff: Mike Sutton

Spill Type: Spill

SARA Title III Release: No

Referred To: AG AND SOLID WASTE

NOTE: - For Department Use Only.

- To report Spills and Environmental Emergencies in Indiana 24 Hours a day
call **888-233-7745**

Incident Date/Time: 04/03/2007 09:42:15	Notification Date/Time: 04/03/2007 09:42:15
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Source Information		Reporter Information	
Source Name: UNION GO DAIRY		Reporter Name: PRIVATE CITIZEN	
Contact Name: TONY GOLTSTEIN		Contact Name: WENDY CARPENTER	
Street Address: 3518 S 300 W		Street Address: 5305 W 500 S	
City/State/ZIP: WINCHESTER, IN 47394		City/State/ZIP: MODOC, IN 47358	
Mailing Address:		Mailing Address:	
City/State/ZIP: ,		City/State/ZIP: ,	
Office Phone (765)584-4363	Mobile Phone	Office Phone (765)853-5294	Mobile Phone
Fax	Pager	Fax	Pager

Source Type: Commercial	Reported By: Private Citizen
Circumstances: Unknown	Environmental Consequence: Water Quality Violation

Investigation Performed By: ERS Staff

Spill Location Information	
Location: FIELD EAST OF 3518 S 300 W	
City/State/ZIP: WINCHESTER, IN 47394	Affected Area: SPARROW CREEK
Incident/Area Description: MANURE IN SPARROW CREEK	
Water Affected? Yes	Receiving Water: SPARROW CREEK
Public Drinking Water Intake:	

Material Information	
Material Name: COW WASTE	Quantity:
Other Information: UNKNOWN AMOUNT	

Notification/Contacts	
Name/Agency: AI Groth / SUBCONTRACTOR OF RP	Date/Time: 04/03/2007 00:00:00
Comments: CONTACTED SPILL LINE AND ASSISTED IN CLEANUP	Telephone: (765)546-1884 X

Notification/Contacts**Name/Agency:** Bruce Leas / LEAS DRAGLINING**Date/Time:** 04/03/2007 00:00:00**Comments:** ASSISTED IN CLEANUP**Telephone:** (260)433-1027 X**Name/Agency:** DWAYNE FORD / DNR CO**Date/Time:** 04/03/2007 00:00:00**Comments:** RESPONDED**Telephone:** (765)729-3764 X**IDEM Personnel****Name/Agency:** Randy Jones/Compliance/Response Br.**Date / Time:** 04/09/2007 13:37:17**Comments:** CONSULTED AND REFERRED**Telephone:** (317)234-6924

Comments / Addendum

The IDEM Spill Line was notified of a release of manure into Sparrow Creek in Randolph County. OSC Sutton responded to the incident and found the responsible party to be Union Go Dairy, and also found they had began removing manure from the creek. The creek had a dam placed at the furthest down stream location where manure had been noticed and removal had begun at that location. OSC Sutton confirmed the placement of the dam was at a good location (1/4 mile west of 400 West just south of 200 South) with performing field screening activities on both sides of the dam. One additional dam had been built in between the downstream dam and the source location (just south of 300 South), and removal occurred at that location as well. Manure had been applied to a field, which is located across the street from the RP on the east side of 300 West, the previous night and manure migrated to the field tile and on into Sparrow Creek. The field tile was blocked off and manure removed from the tile prior to opening it back up. All manure and water was applied to surrounding fields with a buffer zone around known field tiles. Weather conditions played a large role in the cleanup process. The RP along with Al Groth (subcontractor of the RP and owner of the fields in which manure was applied) and Leas Draglining worked swiftly to remove as much impacted water as possible prior to heavy rains coming in. The removal activities occurred at a quicker rate than the creek travelled. A majority of the manure was removed before the heavy rains washed out our cleanup activities.

OSC Sutton did collect samples for laboratory analysis. Samples were collected at the outfall of the field tiles located at the property just north of the Union Go Dairy property, the bridge at 300 South, the bridge at 400 West, and an upstream sample was collected from a tile that ties into the impacted tile prior to the outfall. The field screening results for those samples collected are located in the Addendum section of this report.

4/4/2007

Sparrow Creek was rechecked and no evidence of impacts were noted.

Field screening results are as follows:

Outfall:

Ammonia-Nitrogen 4-5ppm

DO 9.1 mg/L

300 South:

Ammonia-Nitrogen 2ppm

DO 8.7 mg/L

400 West:

Ammonia-Nitrogen 4ppm

DO 8.8 mg/L

Upstream:

Ammonia- Nitrogen 0ppm

DO 9.5 mg/L



INCIDENT REPORT

State Form 13490 (R4/1-04)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
EMERGENCY RESPONSE SECTION

Incident Number: 2008-07-165

County: Randolph

Priority Level: 2

ER Staff: David Cage

Spill Type: Spill

SARA Title III Release: No

Referred To: AG & SOLID WASTE

NOTE: - For Department Use Only.

- To report Spills and Environmental Emergencies in Indiana 24 Hours a day
call **888-233-7745**

Incident Date/Time: 07/18/2008 17:30:43	Notification Date/Time: 07/21/2008 10:28:43
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Source Information		Reporter Information	
Source Name: UNION GO DAIRY		Reporter Name: PRIVATE CITIZEN	
Contact Name: TONY GOLTSTEIN		Contact Name:	
Street Address: 3518 S 300 W		Street Address: 103 HOPPING CT	
City/State/ZIP: WINCHESTER, IN 47394		City/State/ZIP: Harrison, OH 45030	
Mailing Address:		Mailing Address:	
City/State/ZIP: ,		City/State/ZIP: ,	
Office Phone (765)584-8626	Mobile Phone	Office Phone	Mobile Phone
Fax	Pager	Fax	Pager

Source Type: Agricultural	Reported By: Private Citizen
Circumstances: Miscellaneous	Environmental Consequence: Undetermined

Investigation Performed By: ERS - Field Response
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Spill Location Information	
Location: 1194 S 300 W	
City/State/ZIP: WINCHESTER, IN 47394	Affected Area: 8 MILE CREEK
Incident/Area Description: 8 MILE CREEK	
Water Affected? Yes	Receiving Water: 8 MILE CREEK*
Public Drinking Water Intake:	

Material Information	
Material Name: ANIMAL WASTE	Quantity:
Other Information:	

Notification/Contacts	
Name/Agency: DISPATCH / DNR N REGION	Date/Time: 07/21/2008 14:33:00
Comments: FYI	Telephone: (765)473-9722 X

IDEM Personnel**Name/Agency:** Randy Jones/Compliance/Response Br.**Date / Time:** 07/21/2008 15:00:00**Comments:** LEFT VOICE MAIL**Telephone:** (317)234-6924**Name/Agency:** Rose Beauchamp-Hamblen/Compliance/Response Br.**Date / Time:** 07/21/2008 10:28:00**Comments:** Took initial call.**Telephone:** (317)308-3038

Comments / Addendum

Received a call from dispatch regarding an animal waste spill which occurred on 7/18/2008 in a field S of 1194 S CR 300 W near Winchester, Randolph Co IN. Complainant indicated that Union Go Dairy was land applying in the field and animal waste was entering 8 Mile Creek. OSC Cage responded to the area and checked 8 Mile Creek at SR 32 1/2 M W of CR 500 W. Live fish were noted in the stream and Ammonia/Nitrogen (A/N) were 0 ppm. OSC then went S on CR 500 W 900 ft S of Base Rd and live fish were observed and A/N readings were 0 ppm. Creek was then checked on CR 50 S and again at CR 400 W. Upstream from the alleged release on CR 300 W and 8 Mile Creek, creek was checked A/N and result was 0 ppm and water was clear. OSC went to Union Go Dairy located at 3518 S CR 300 W and met with Rob Tummers. OSC asked if the dairy had a release from land application on the 18th at 1194 S CR 300 W. Mr. Tummers indicated that they did have a release to 8 Mile Creek on 7/18/2008. Mr. Tummers showed OSC where the release had occurred. Mr. Tummers stated that they had plugged the field tile to 8 Mile Creek prior to starting the land application. Mr. Tummers indicated that the County had recently replaced the last 20-30 ft of pipe leading into 8 Mile Creek. When the area was checked by Union Go Dairy employees, they realized that the hydraulic pressure behind the plug had reached a point where waste was being forced out of the tile at the upstream side of the replacement pipe. Union Go stopped the land application and cut the field tile at the end of the applied field. Union Go then went to 8 Mile Creek, took out the plug and moved it to the cut field tile location. OSC checked the creek at the outlet for A/N (result 0ppm) and water was clear. Mr. Tummers indicated that the owner of Union Go Dairy, Tony Goltstein, was en route to our location. Mr. Goltstein arrived and OSC asked if the release had been reported to IDEM or DNR. Mr. Goltstein stated that since the creek was only reading 3 ppm that he was not required to report. OSC asked where he got the 3 ppm limit and Mr. Goltstein stated that the information was provided by his consultant. OSC informed Mr. Goltstein that it would be advisable to contact IDEM and allow the State to determine impact to water bodies. Mr. Goltstein also indicated that IDEM Ag and Solid Waste had visited the facility the week prior. OSC notified DNR and IDEM Ag and Solid Waste.



INCIDENT REPORT

State Form 13490 (R4/1-04)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
EMERGENCY RESPONSE SECTION

Incident Number: 2010-04-118

County: Randolph

Priority Level: 3

ER Staff: Greg Carter

Spill Type: Other

SARA Title III Release: No

Referred To:

NOTE: - For Department Use Only.

- To report Spills and Environmental Emergencies in Indiana 24 Hours a day
call **888-233-7745**

Incident Date/Time: 04/14/2010 10:30:33	Notification Date/Time: 04/14/2010 13:31:33
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Source Information		Reporter Information	
Source Name: UNION GO DAIRY Contact Name:		Reporter Name: INDIANA DEPARTMENT OF ENVIRONMENTAL MGN Contact Name: CHARLES GRADY	
Street Address: 3518 S 300 W City/State/ZIP: WINCHESTER, IN 47394		Street Address: 100 N SENATE AVE City/State/ZIP: INDIANAPOLIS, IN 46206	
Mailing Address: City/State/ZIP: ,		Mailing Address: City/State/ZIP: ,	
Office Phone	Mobile Phone	Office Phone (317)234-6965	Mobile Phone
Fax	Pager	Fax	Pager

Source Type: Agricultural Circumstances: Miscellaneous	Reported By: State Government Agency Environmental Consequence: Undetermined
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Investigation Performed By: ERS Staff

Spill Location Information	
Location: 3518 S 300 W	
City/State/ZIP: WINCHESTER, IN 47394	Affected Area: UNKNOWN
Incident/Area Description: UNKNOWN	
Water Affected? Yes	Receiving Water: **WATER
Public Drinking Water Intake:	

Material Information	
Material Name: MANURE	Quantity:
Other Information:	

Notification/Contacts	
Name/Agency: ALAN HUTCHISON / 7655461831	Date/Time: 04/14/2010 13:53:28
Comments:	Telephone: ()- X

Notification/Contacts

Name/Agency: CO GARRNER / DNR
Comments: MET ON SITE/DISCUSSED

Date/Time: 04/15/2010 13:00:20
Telephone: ()- X

IDEM Personnel

Name/Agency: Amy Hartsock/Admin
Comments: NOTIFIED/DISCUSSED

Date / Time: 04/15/2010 12:59:35
Telephone: (317)233-4927

Name/Agency: William Myers/Underground Storage Tank Compl
Comments: RESPONDED TO FACILITY

Date / Time: 04/15/2010 12:48:11
Telephone: (317)308-3037

Name/Agency: Charles Grady/Compliance/Response Br.
Comments: NOTIFIED

Date / Time: 04/15/2010 12:59:17
Telephone: (317)234-6965

Name/Agency: Max Michael/Compliance/Response Br.
Comments: DISCUSSED

Date / Time: 04/15/2010 13:00:00
Telephone: (317)308-3049

Comments / Addendum

The spill line received a call from a private citizen stating the dairy had a manure spill to the creek. OSC Myers was closest to the facility and responded. OSC met with the neighbor who called in the complaint. OSC was taken to the neighbors pasture where the neighbor stated the water running out of the 20" tile was black. This was found around 8:00 am. OSC observed clear water flowing from the tile, but the area where the tile dumped into was black in the bottom the creek. OSC performed a field screen at the 20" tile outfall and had a result of 1 ppm ammonia/nitrogen. OSC shared the result with the property owner and explained the result could be naturally occurring. OSC went on to explain he would speak with the facility owner. OSC then met with the RP, and the contractor land applying liquid manure for the RP. OSC explained that there was nothing found, but it did appear there may have been an issue early in the day. OSC asked the RP to continue monitoring all tile where the land application was taking place.