

**OWQ- WATERSHED ASSESSMENT & PLANNING BRANCH
IDEM/OWQ/WAPB/WM
VIRTUAL FILE CABINET INDEX FORM**

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HUC Code: 05120108 Middle Wabash-Little Vermilion

Site #: _____

Route Name: _____

Document Control # _____

Analysis Set # _____

County: _____

Cross Reference ID: _____

Comments: Macroinvertebrate Community Assessment MHAB Report;
05120109 Vermillion, 05120110 Sugar, 05120111 Middle
Wabash-Busseron, 05120113 Lower Wabash

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OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
W_V-13-0011	INRB16-003	MHAB	AB25446	160725401	7/25/16	Parke
Stream Name		Location		HUC 12		HUC1014
South Fork Little Raccoon Creek		CR 900 E		051201081301		05120108180030
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4407633.06	494024.77	55	15.055	23.306	65	

Taxon	Count	Notes	HBI Tolerance
3357 (BRANCHIOBELLIIDAE)	18		6
2156 (Corbicula fluminea)	2		6
8996 (Orconectes)	2	2MI	4
3049 (Stenacron interpunctatum)	1		7
3066 (Baetis intercalaris)	4		3
3071 (Baetis flavistiga)	2	Slide 0365.1	3
3183 (Caenis)	2		3
3188 (Caenis atpensis)	10		
3109 (Isonychia)	1		2
3230 (Aeshna umbrosa)	1		
3245 (Buyeria vinosa)	4		4
3448 (Somatochlora)	1		1
7027 (Iletaerina americana)	1		
7026 (Calopteryx maculata)	1		
3549 (Enallagma divagans)	2		
7132 (Rhagovelia orlanderi)	1		
3600 (Pellodytes duodecimpunctatus)	1	1A	
3946 (Cyphon)	4	4L	
3960 (Helichus basalis)	1	1F	
7317 (Stenomus sexineata)	1	1F; Slide 0365.2	
9268 (Stenomus grossa)	4	4A; Slide 0365.3	
7299 (Dubiraphia quadricornata)	2	2A	3
7300 (Dubiraphia vittata)	3	3A; Slide 0365.4; 256.2 um	
3267 (Chimarra obscura)	1		4
3432 (Cheumatopsyche)	23		3
8980 (Hydropsyche batteni grp)	4		
9182 (Ceratopsyche a hedra)	1		3
9319 (Ceratopsyche "checkerboard" grp)	1		
8885 (Pycnopsyche)	2		3
8925 (Nectopsyche diarina)	3		3
7642 (Erioptera)	3	Slide 0365.5	
9285 (Pupula (Yamatotipula))	1		
7814 (Simulium)	1		5
7926 (Tanyptodinae (Subfamily))	1		
9261 (Triene nanitrixyia grp.)	1		
8099 (Cryptochironomus)	1		5
9286 (Microtendipes pedellus grp)	1		
9165 (Saetheria tyus)	1		4
8238 (Rhyotanytarsus)	1		3
9238 (Polypecilum (Urosipodilum) favum)	3		

Type	Value	Metric Score
Total Taxa:	40	3
Total No. Individuals:	118	1
EPT Taxa:	13	5
% Orthocladinae + Tanytarsini of Chironomidae:	11.11	5
% Non-insects excluding Astacidae:	16.95	5
Diptera Taxa:	10	3
% Intolerant (0-3):	35.50	5
% Tolerant (6-10):	0	5
% Predators FFG 1:	9.32	1
% Shredders + Scrapers FFG 1:	5.08	1
% Collector-Filterers FFG 1:	24.58	1
% Sprawlers:	2.54	1
mIBI Metric Score:		36

Supplemental Metrics

	HBI
	4
Shannon-Weaver Index	4.46
Shannon Equitability	0.48
% Dominant 3 Taxon	43.22
% Chironomidae	7.63



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WLV-C9-00C1	INRB16-006	MHAB	AS25447	160713303	7/13/16	Fountain
Stream Name		Location		HUC 12	HUC14	
Graham Creek		Mug Creek Road		051201080901	05120108110020	
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4441863.82	470018.86	55	5.65	8.881	50	

Taxon	Count	Notes	HBI Tolerance
1552 (Tubificidae with bifid setae and no hair setae)	3		
2181 (Sphaerium)	11		6
1083 (ACARI)	6		4
9036 (Caecidotea)	5		8
8996 (Orconectes)	2	1M, 1F	4
3048 (Stenacron)	1		3
3183 (Caenis)	3		3
3188 (Caenis atipennis)	5		
3245 (Boyeria vinosa)	1		4
9287 (Gomphus (Gomphus))	1		
9095 (Argia fumipennis)	1		
7189 (Sigara)	1		
7186 (P. macrorixana)	2	1M, 1F	4
3946 (Cyphon)	5	5L	
7296 (Dusiraphia)	4	4L	5
7299 (Dusiraphia quadrinotata)	1	1A	3
7298 (Dusiraphia minima)	16	16A: 350um; Slide 0378.1	
7304 (Optioservus fastidius)	1	1A	2
7295 (Ancyronyx variegatus)	3	3A	4
7321 (Macronychus gabratus)	1	1A	3
8326 (Oenotus)	1		3
7583 (Dicranota)	1		3
7984 (Procladius)	2		7
7926 (Tanytarsinae (Subfamily))	2		
8083 (Chironomini (Tribe))	14		
8086 (Chironomus)	2		8
8099 (Cryptochironomus)	6		5
8104 (Cryptotendipes)	7		4
8112 (Dicrotendipes)	1		6
8228 (Cladotanytarsus)	10		4
8235 (Paratanytarsus)	1		4
8241 (Tanytarsus)	8		4
9241 (Polypedilum (Polypedilum) illinoense grp.)	1		
8320 (Chrysops)	2		5

Type	Value	Metric Score
Total Taxa:	31	3
Total No. Individuals:	131	3
EPT Taxa:	2	3
% Orthocladinae + Tanytarsini of Chironomidae:	35.19	3
% Non-Insects excluding Assecta:	19.08	3
Diptera Taxa:	13	3
% Intolerant (0-3):	6.87	1
% Tolerant (6-10):	6.34	5
% Predators FFG 1:	11.45	1
% Shredders + Scrapers FFG 1:	6.34	1
% Collector-Filterers FFG 1:	14.5	3
% Sprawlers:	6.87	5
mIBI Metric Score:		34

Supplemental Metrics

HBI	4.75
Shannon-Weaver Index	4.5
Shannon Equitability	0.48
% Dominant 3 Taxon	31.3
% Chironomidae	41.22



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WLV-15-0001	INRB16-007	MHAB	A325445	160725404	7/25/16	Parke
Stream Name		Location		HUC 12	HUCTO14	
Leatherwood Creek		10 O'clock Road		051201081502	05120108190040	
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4407400.18	474543.83	55	15.898	17.492	61	

Taxon	Count	Notes	HBI Tolerance
2252 (Physella)	1		8
2181 (Sphaerium)	2		6
9050 (Hyalella)	1		
8996 (Orconectes)	1	1MII	4
3025 (Maccaffertium vicarium)	2		2
9129 (Acorpenna)	1		4
3388 (Pseudocloeon propinquus)	1	Slide 0367.1	1
3066 (Baetis intercalaris)	2		3
3188 (Caenis latipennis)	16		
3109 (Ischnychia)	3		2
3175 (Tricorythodes)	9		3
3245 (Boyeria vinosa)	6		4
3054 (Gomphus)	1		5
7027 (Metaerina americana)	3		
7026 (Gompteryx maculata)	4		
3600 (Peltodytes duodecimpunctatus)	2	2A	
9110 (Laccophilus maculosus)	1	1A	8
3687 (Laccophilus proximus)	1	1A	
3851 (Berosus peregrinus)	1	1A	6
3948 (Cyphon)	1	1L	
3959 (Helichus lithophilus)	1	1A	
3960 (Helichus basalis)	1	1A	
3962 (Helichus striatus)	1	1A	2
7309 (Stenelmis crenata)	3	3A; Slide 0367.2	5
7299 (D. biraphia quadrinotata)	4	4A; Slide 0367.4	3
7298 (D. biraphia minima)	6	6A; Slide 0367.3	
7295 (Ancyronyx variegatus)	3	3A	4
7321 (Macronychus gabratus)	1	1A	3
3267 (Chimarra obscura)	1		4
3003 (Chimarra aterrima)	1		2
1057 (HYDROPSYCHILAE)	1		4
3432 (Cheumatopsyche)	9		3
8980 (Hydropsyche batten grp)	12		
9182 (Ceratopsyche alhedra)	1		3
9319 (Ceratopsyche "checkerboard" grp)	4		
8927 (Oecelis avara)	3		
8923 (Nectopsyche diarina)	2		3
8952 (Helicopsyche borealis)	2		3
7926 (Tanypocinae (Subfamily))	2		
8083 (Chironomini (Tribe))	1		
8238 (Rheotanytarsus)	2		3
8241 (Tanytarsus)	3		4

Type	Value	Metric Score
Total Taxa:	42	5
Total No. Individuals:	123	1
EPT Taxa:	17	5
% Orthocladiinae + Tanytarsini of Chironomidae:	62.5	1
% Non-insects excluding Astacidae:	3.25	5
Diptera Taxa:	4	1
% Intolerant (0-3):	32.62	5
% Tolerant (8-10):	1.63	5
% Predators FFG 1:	14.63	1
% Shredders + Scrapers FFG 1:	9.76	1
% Collector-Filterers FFG 1:	17.89	3
% Sprawlers:	0	1
mIBI Metric Score:		34

Supplemental Metrics

HBI	3.52
Shannon-Weaver Index	4.8
Shannon Equitability	0.51
% Dominant 3 Taxon	30.08
% Chironomidae	6.5



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WLV-04-0002	INRB16-021	MHAB	AB25453	160712304	7/12/16	Warren

Stream Name	Location	HUC 12	HUCT014
Big Pine Creek	CR 50 W	051201080410	05120108060010

Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score
4468911.44	472630.11	55	8.761	295.941	77

Taxon	Count	Notes	HBI Tolerance
1357 (BRANCHIOBELLELLIDAE)	1		6
2215 (Eimia)	1		8
1092 (PISIDIIDAE)	1		6
2181 (Sphaerium)	5		4
8997 (Orconectes propinquus)	3	SMII	2
1251 (ISOTOMIDAE)	1		4
1017 (HEPTAGENIIDAE)	2		4
9156 (Maccaffertium)	1		2
9090 (Maccaffertium mediopuncta)	2	Slides 0374.1 & 0374.2	4
1012 (BAETIDAE)	2		4
9128 (Acentrella)	1		3
3066 (Bactis intercalaris)	1		3
3071 (Baetis flavistriga)	1		3
3074 (Centropilum)	1		4
3355 (Pseudis)	1		2
3188 (Caenis latipennis)	2		3
3109 (Isurynychia)	5		4
3175 (Tricorythodes)	1		4
3245 (Boyeria vinosa)	3		2
3397 (Macronia)	1		4
7027 (Hetaerina americana)	2		4
3528 (Dineutus)	3	3A	6
3851 (Berosus peregrinus)	3	3A	4
3946 (Cyphon)	1	1L	4
3959 (Helichus lithophilus)	1	1A	5
7068 (GIMIDAE)	1	1L	5
7307 (Stenelmis)	3	3L	2
9266 (Stenelmis grossa)	2	2A; Slide 0374.4	2
7298 (Dubiraphia minima)	2	2A; Slide 0374.3, 340um	3
7301 (Optioservus fastiditus)	1	1A	3
7371 (Macronychus glabratus)	4	4A	2
7324 (Lutrochus laticeps)	1	1A	4
3799 (Corydalis cornutus)	1		4
3267 (Chironomus obscura)	5		4
1057 (HYDROPSYCHIIDAE)	1		3
3432 (Cheumatopsyche)	41		4
3479 (Hydropsyche dicantha)	16		3
3431 (Ceratopsyche sparna)	3		3
9319 (Ceratopsyche "checkerboard" grp)	56		4
1054 (HYDROPTILIDAE)	2		3
3050 (Hydroptila)	2		7
7452 (Tipula)	1		2
7548 (Antocha)	1		2

Type	Value	Metric Score
Total Taxa:	60	5
Total No. Individuals:	258	5
EPT Taxa:	20	5
% Orthocladinae + Tanytarsini of Chironomidae:	72.06	5
% Non-insects excluding Astacidae:	3.1	1
Diptera Taxa:	19	3
% Intolerant (0-3):	29.07	5
% Tolerant (8-10):	0.78	1
% Predators FFG 1:	6.2	1
% Shredders + Scrapers FFG 1:	5.81	1
% Collector-Filterers FFG 1:	31.4	3
% Sprawlers:	3.88	3
mIBI Metric Score:		40

Supplemental Metrics

Metric	Value
HBI	3.81
Shannon-Weaver Index	4.61
Shannon Equitability	0.49
% Dominant 3 Taxon	43.8
% Chironomidae	26.36



**OWQ/WAPB Macroinvertebrate Community Assessment
MHAB Report**

Taxon	Count	Notes	HBI Tolerance
7984 (Procladius)	1		7
7926 (Tanyptodinae (Subfamily))	2		
8083 (Chironomini (Tribe))	1		
8012 (Cardiocladius)	2		5
9100 (Tvetonia)	6		5
8086 (Chironomus)	1		8
8099 (Cryptochironomus)	1		5
8112 (Dicrotendipes)	5		6
9296 (Microtendipes pedellus grp.)	1		
8192 (Polypodilum flavum)	5		
8228 (Gladotanytarsus)	7		4
8238 (Rheotanytarsus)	8		3
9093 (Stempellinella)	1		3
8241 (Tanytarsus)	15	1P	4
8981 (Cricotopus/Orthocladius)	10		
9241 (Polypodilum (Polypodilum illinoense grp.))	2		
8397 (Hemerodromia)	1		



**OWQ/WAPB Macroinvertebrate Community Assessment
MHAB Report**

<i>Site Name</i>	<i>EPA ID</i>	<i>Macro Sample Type</i>	<i>Sample #</i>	<i>Macro Event #</i>	<i>Sample Date</i>	<i>County</i>
WLV-07-0006	INRB16-022	MHAB	AB25454	160713301	7/13/16	Fountain
<i>Stream Name</i>		<i>Location</i>		<i>HUC 12</i>	<i>HUCTD14</i>	
North Fork Coal Creek		SR 311		051201080703	05120108100020	
<i>Northing</i>	<i>Easting</i>	<i>Ecoregion</i>	<i>Gradient</i>	<i>Drainage Area</i>	<i>QHEI Score</i>	
4447965.76	486962.01	55	8.217	35.869	59	

<i>Taxon</i>	<i>Count</i>	<i>Notes</i>	<i>HBI Tolerance</i>
1260 (NEMATODA)	1		6
1552 (Tubificidae with hind chetae and no hair chetae)	2		
1357 (BRANCHIOBELLELLIDAE)	1		6
1207 (VIVIPARIDAE)	1		6
2252 (Physella)	4		8
2215 (Elimia)	3		
2181 (Sphaerium)	3		6
1083 (ACARI)	10		4
8996 (Orconectes)	3	ZMII. 1F	4
9090 (Maccaffertium mediopuncta)	1		2
3066 (Baetis intercalaris)	3		3
3183 (Caenis)	4		3
3188 (Caenis latipennis)	1		
3189 (Caenis punctata)	4	Slide 0352.1	
3197 (Ephemera)	1		3
3109 (Isorychnia)	13		2
3175 (Tricorythodes)	3		3
3245 (Boyeria vinosa)	2		4
3397 (Macromia)	1		2
7027 (Heteracrina americana)	7		
7031 (Ischnura verticalis)	1		
7032 (Argia moesta)	2		
1041 (CORIXIDAE)	2		5
7201 (Trichocorixa calva)	1	1F	4
7118 (Trepobates inermis)	1		
7130 (Rhagovelia)	1		
7132 (Rhagovelia oriander)	1		
9290 (Gerridae (Gerrinae))	2		
3600 (Peltodytes ducodocimpunctatus)	3	3A	
3604 (Peltodytes sexmaculatus)	1	1A	
3605 (Peltodytes edentulus)	4	4A	6
3776 (Uvarus)	1	1A	
3816 (Berosus)	1	1L	7
3851 (Berosus peregrinus)	2	2A	6
3872 (Tropisternus)	1	1L	
3946 (Cyphor)	3	3L	
3960 (Ilelchus basalis)	1	1A	
7309 (Stenelmis crenata)	1	1A; Slide 0352.3	5
7296 (Dubiraphia)	8	8L	5
7298 (Dubiraphia minima)	9	9A; Slide 0352.2; 320um	
7295 (Ancyronyx variegatus)	2	2A	4
3132 (Cheumatopsyche)	3		3
3487 (Hydropsyche simulans)	1		2

<i>Type</i>	<i>Value</i>	<i>Metric Score</i>
Total Taxa:	72	5
Total No. Individuals:	226	3
EPT Taxa:	13	5
% Orthocladinae + Tanytarsini of Chironomidae:	13.89	5
% Non-insects excluding Astacidae:	15.49	5
Diptera Taxa:	26	5
% Intolerant (0-3):	14.6	1
% Tolerant (8-10):	8.41	5
% Predators FFG 1:	10.62	1
% Shredders + Scrapers FFG 1:	16.37	3
% Collector-Filterers FFG 1:	9.73	5
% Sprawlers:	2.21	1
mIBI Metric Score:		44

Supplemental Metrics

	<i>HBI</i>	4.65
<i>Shannon-Weaver Index</i>		5.51
<i>Shannon Equitability</i>		0.59
<i>% Dominant 3 Taxon</i>		20.35
<i>% Chironomidae</i>		31.86



**OWQ/WAPB Macroinvertebrate Community Assessment
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Taxon	Count	Notes	HBI Tolerance
8980 (Hydropsyche betteni grp)	5		
8919 (Ceratopsyche "checkerboard" grp)	1		
3000 (Hydroptila)	1		3
7732 (Anopheles)	1		
9111 (Ceratopogon)	1		
8984 (Bezzia/Palpomyia)	1		
7970 (Clinotanypus pinguis)	1		8
7984 (Procladius)	1		7
7992 (Tanypus neopunctipennis)	1		5
7926 (Tanypodinae (Subfamily))	1		
8083 (Chironomini (Tribe))	12		
9248 (Ablabesmyia (Ablabesmyia) mallochii grp.)	2		
9261 (Thienemannimyia grp.)	2		
9100 (Tvetenia)	1		5
8085 (Chironomus)	3		8
8099 (Cryptochironomus)	2		5
8104 (Cryptotendipes)	3		4
8296 (Microtendipes pedellus grp)	2		
8168 (Paratendipes albimanus)	9		4
8228 (Cladulanylarsus)	4		4
8235 (Paratanytarsus)	2		4
8238 (Rheotanylarsus)	2		3
8221 (Stempellina)	1		
8238 (Polypedilum (Urosipedilum) flavum)	4		
9241 (Polypedilum (Polypedilum) illinoense grp.)	19		
8320 (Chrysops)	1		5
8355 (Tabanus)	1		5
8397 (Hemerodromia)	1		
8560 (SCIOMYZIDAE)	1		



**OWQ/WAPB Macroinvertebrate Community Assessment
MHAB Report**

<i>Site Name</i>	<i>EPA ID</i>	<i>Macro Sample Type</i>	<i>Sample #</i>	<i>Macro Event #</i>	<i>Sample Date</i>	<i>County</i>
WLV-12-0004	INRB16 026	MHAB	AB25457	160727103	7/27/16	Montgomery
<i>Stream Name</i>		<i>Location</i>		<i>HUC 12</i>	<i>HUC014</i>	
Big Raccoon Creek		SR 234		051201081202	05120108160020	
<i>Northing</i>	<i>Easting</i>	<i>Ecoregion</i>	<i>Gradient</i>	<i>Drainage Area</i>	<i>QHEI Score</i>	
4118569.23	518713.69	55	6.692	16.356	72	

Taxon	Count	Notes	HBI Tolerance
1084 (TURBELLARIA)	4		4
1507 (Nais variabilis)	2		10
2156 (Corbicula fluminea)	4		6
1083 (ACARI)	1		4
3050 (Ilyalella)	1		
3056 (Crangonyx)	3		6
8996 (Orconectes)	1	1F	4
1110 (EPHEMEROPTERA)	1		
1017 (HEPTAGENIIDAE)	1		1
3025 (Maccaffertium vicarium)	1		2
3066 (Baetis intercalaris)	7		3
3183 (Caenis)	2		3
3188 (Caenis latipennis)	3		
3175 (Tricorythodes)	2		3
7027 (Ilytaerina americana)	11		
3549 (Enallagma divagans)	1		
1041 (CORIXIDAE)	1		5
7130 (Rhagovelia)	1		
7131 (Rhagovelia obesa)	1		
3600 (Peltodytes duodecimpunctatus)	7	7A	
3846 (Berosus)	1	1L	7
3851 (Berosus peregrinus)	8	8A	6
3858 (Laccobius)	1	1A	2
3871 (Sporchopsis tessellata)	1	1A	
3876 (T. blatchleyi modestus)	1	1A	
9135 (Tropisternus affinis)	1	1A	
3946 (Cyphon)	9	9L	
3959 (Holichus lithophilus)	2	2A	
7307 (Stenelmis)	7	7L	5
7309 (Stenelmis crenata)	2	2A; Slides 0379.1 & 0379.2	5
7317 (Stenelmis sexlineata)	4	4A	
7298 (Dubiraphia minima)	6	6A; Slide 0379.3	
3267 (Chimarra obscura)	18		4
1057 (HYDROPSYCHIDAE)	10		4
3432 (Cheumatopsyche)	32		3
8980 (Hydropsyche betteni grp)	21		
9319 (Ceratopsyche "checkerboard" grp)	9		
3000 (Hydroptila)	5		5
8923 (Noctopsyche diarina)	1		5
1053 (POLYCENTROPODIDAE)	1		0
3311 (Neureclipsis)	1		3
7548 (Antocha)	2		2

Type	Value	Metric Score
Total Taxa:	61	5
Total No. Individuals:	242	3
EPT Taxa:	16	5
% Orthocladinae + Tanytarsini of Chironomidae:	52.78	1
% Non-insects excluding Astacidae:	6.2	5
Diptera Taxa:	20	5
% Intolerant (0-3):	26.86	3
% Tolerant (8-10):	0.83	5
% Predators FFG 1:	7.44	1
% Shredders + Scrapers FFG 1:	14.46	3
% Collector-Filterers FFG 1:	34.71	
% Sprawlers:	0.83	1
mIBI Metric Score:		38

Supplemental Metrics

HBI	4.04
Shannon-Weaver Index	5.1
Shannon Equitability	0.55
% Dominant 3 Taxon	29.34
% Chironomidae	14.88



OWQ/WAPB Macroinvertebrate Community Assessment
MHAB Report

Taxon	Count	Notes	HBI Tolerance
7510 (Limonia)	1		6
9265 (Tipula (Yamatotipula))	2		
7814 (Simulium)	4		5
9250 (Ablabesmyia (Ablabesmyia) rhamphae grp.)	2		
9261 (Thionomannimyia grp.)	2		
8037 (Eukiefferiella)	1		
9100 (Tvetenia)	1		5
8104 (Cryptotendipes)	1		4
8112 (Dicrotendipes)	2		6
9296 (Microtendipes pedellus grp)	2		
8172 (Phaenopsoctra)	2		7
8192 (Polypedilum flavum)	2		
8228 (Cladotanytarsus)	1		4
8235 (Paratanytarsus)	1		4
8238 (Rheotanytarsus)	10	1P	3
9093 (Stempellinea)	1		3
8241 (Tanytarsus)	4		4
9241 (Polypedilum (Polypedilum) illinoense grp.)	4		
8355 (Tabanus)	1		5



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WBJ-06 0003	INRB16 027	MHAB	AB25458	160713401	7/13/16	Vigo
Stream Name		Location		HUC 12	HUOTO14	
Spring Creek		Spring Creek Road		051201110601	05120111030010	
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4382121.09	470890.59	72	12.43	12.112	65	

Taxon	Count	Notes	HBI Tolerance
10107 (Chordodes morgani)	1		
1357 (BRANCHIOBELLELLIDAE)	5		6
9002 (Orconectes virilis)	1	1MI	6
3020 (Stenonema femoratum)	1		3
3027 (Heptagonia elegantula)	4		2
3049 (Stenacron interpunctatum)	2		7
7010 (Acerpenna macdunnoughi)	3		1
3388 (Pseudocloaca propinquus)	26	Slide 0372.1	1
3066 (Baetis intercalaris)	2		3
3365 (Proclleon)	1		
3183 (Caenis)	2		3
3188 (Caenis latipennis)	12		
3245 (Boyeria vinosa)	2		4
3116 (Progomphus obscurus)	7		
3448 (Somatochlora)	1		1
7057 (Perlesia)	1		4
3738 (Heterosternuta wickhami)	1	1A	
3970 (Hydrocanthus iricolor)	1	1A	
3858 (Laccobius)	1	1A	2
3861 (Anacaena)	1	1A	
3879 (Encochrus)	1	1I	
3946 (Cyphor)	12	12L	
3960 (Helichus basalis)	1	1A	
7300 (Dubiraphia vittata)	2	2A: Slide 0372.2, 256 um	
3432 (Chaumatopsyche)	1		3
8980 (Hydropsyche belleni grp)	3		
9319 (Ceratopsyche "checkerboard" grp)	2		
7814 (Simulium)	1		5
7964 (Labrundinia pilosella)	1		3
7926 (Tanypodinae (Subfamily))	1		
8083 (Chironomini (Tribe))	2		
8011 (Brillia flavifrons)	1		
8192 (Polypedium flavum)	2		
9165 (Saetheria tylus)	4		4
8228 (Cladotanytarsus)	3		4
8235 (Paratanytarsus)	1		4
8238 (Rhectanytarsus)	1		3
9241 (Polypodium (Polypedium) illinoense grp.)	16		
8397 (Hemerodromia)	1		

Type	Value	Metric Score
Total Taxa:	39	3
Total No. Individuals:	141	3
EPT Taxa:	13	5
% Orthocladiinae + Tanytarsini of Chironomidae:	16.75	5
% Non-insects excluding Astacidae:	4.26	5
Diptera Taxa:	12	3
% Intolerant (0-3):	37.59	5
% Tolerant (8-10):	0	5
% Predators FFG 1:	9.93	1
% Shredders + Scrapers FFG 1:	11.35	3
% Collector-Filterers FFG 1:	9.22	5
% Sprawlers:	0.71	1
mIBI Metric Score:		44

Supplemental Metrics

HBI	2.64
Shannon-Weaver Index	4.39
Shannon Equitability	0.47
% Dominant 3 Taxon	35.3
% Chironomidae	22.7



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WSU-05-0001	INRB16-029	MHAB	AB25460	160802102	8/2/16	Parke
Stream Name		Location		HUC 12	HUCTION14	
Sugar Mill Creek		Thomas Road		051201100503	05120110060050	
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4421655.75	482171.44	55	8.597	58.023	75	

Taxon	Count	Notes	HBI Tolerance
1396 (LUMBRICULIDAE)	1		5
1433 (Limnodrilus cervix)	1	PL 840 um	10
9050 (Hyalella)	1		
8996 (Orconectes)	1	1F	4
1017 (HEPTAGENIIDAE)	1		4
3025 (Maccaffertium vicarium)	1		2
3049 (Stenacron interpunctatum)	2		7
3066 (Bactis intercalaris)	1		3
3071 (Bactis avistriga)	1		3
3183 (Caenis)	4		3
3188 (Caenis latipennis)	3		
3245 (Bayeria vinosa)	1		4
3054 (Gomphus)	1		5
3448 (Somatochlora)	1		
3546 (Enallagma)	1		9
7230 (Neoplea striola)	5		
7118 (Trepobates inermis)	1		
3600 (Poltodytes diodocimpunctatus)	1	1A	
3872 (Tropisternus)	2	2L	
3946 (Cyphon)	4	4L	
3959 (Helichus lithophilus)	3	3A	
3960 (Helichus basalis)	1	1A	
7298 (Dubiraphia minima)	2	2A	
7304 (Oplioservus fastiditus)	1	1A	2
3794 (Chauliodes pectinicornis)	1		
3432 (Chumatopsyche)	2		3
9319 (Ceratopsyche "checkerboard" grp)	3		
8112 (Dicrotendipes)	1		6
8168 (Paratendipes albimanus)	4		4
8172 (Phaenopsoctra)	1		7
9165 (Sacthoria tylos)	1		4
8228 (Cladotanytarsus)	1		4
9109 (Sublettea cofimari)	1		2
9277 (Polypedilum (Tripodura) scalaonum grp)	1		
9241 (Polypedilum (Polypedilum) illinoense grp.)	1		

Type	Value	Metric Score
Total Taxa:	35	3
Total No. Individuals:	58	1
EPT Taxa:	9	3
% Orthoclaadiinae + Tanytarsini of Chironomidae:	18.18	5
% Non-Insects excluding Asplachidae:	5.17	5
Diptera Taxa:	8	3
% Intolerant (0-3):	20.69	3
% Tolerant (6-10):	3.45	5
% Predators FFG 1:	6.9	1
% Shredders + Scrapers FFG 1:	12.07	3
% Collector-Filterers FFG 1:	3.45	5
% Sprawlers:	0	1
mIBI Metric Score:		38

Supplemental Metrics

	HBI
Shannon-Weaver Index	4.86
Shannon Equitability	0.62
% Dominant 3 Taxon	22.41
% Chironomidae	18.97



**OWQ/WAPB Macroinvertebrate Community Assessment
MHAB Report**

<i>Site Name</i>	<i>EPA ID</i>	<i>Macro Sample Type</i>	<i>Sample #</i>	<i>Macro Event #</i>	<i>Sample Date</i>	<i>County</i>
WSU-06-0014	ENRB16-030	MIIA3	AB25461	160727102	7/27/16	Montgomery
<i>Stream Name</i>		<i>Location</i>		<i>HUC 12</i>	<i>HUC1014</i>	
Sugar Creek		CR 225 W		051201100604	05120110050010	
<i>Northing</i>	<i>Easting</i>	<i>Ecoregion</i>	<i>Gradient</i>	<i>Drainage Area</i>	<i>QHEI Score</i>	
4432385.01	505182.81	55	3.776	521.768	69	

Taxon	Count	Notes	HBI Tolerance
1233 (ERPOBDELLIDAE)	1		
2156 (Corbicula fluminea)	1		6
3018 (Maccaffertium pu chellum)	2		2
6090 (Maccaffertium mediopuncta)	3	Slide 0368.1	2
3044 (Nixe)	1		3
3049 (Stenacron interpunctatum)	1		7
1012 (BAETIDAE)	3	Damaged	4
3388 (Pseudoclocon propinquus)	1	Slide 0368.2	1
3189 (Caenis punctata)	1	Slide 0368.3	
3109 (Isonychia)	1		2
3175 (Tricorythodes)	11		3
9286 (Gomphus (Gomphurus))	1		
3549 (Enallagma civagans)	1		
3871 (Sperchopsis tessellata)	1	1A	
3946 (Cyphor)	7	7L	
3959 (Ilelchus lithophilus)	2	2A	
7307 (Stenelmis)	1	1L	5
7317 (Stenelmis sexlineata)	3	3A	
9266 (Stenelmis grossa)	5	5A; Slide 0368.4	
7296 (Dubiraphia)	1	1F	5
7321 (Macronychus glabratus)	2	2A	3
3432 (Cheumatopsyche)	10		3
3476 (Hydropsyche bidens)	1		3
3487 (Hydropsyche simulans)	4		2
9319 (Ceratopsyche "checkerboard" grp)	12		
1054 (HYDROPTILIDAE)	1		4
3000 (Hydropila)	1		3
8923 (Noctopsyche darina)	1		3
7548 (Antocha)	1		2
7814 (Simulium)	10	1F	5
9261 (Thienemannimyia grp.)	1		
8006 (Orthocladiinae (Subfamily))	2		
9100 (Isonychia)	5		5
8112 (Dicrotendipes)	2		6
8192 (Polypedilum flavum)	2		
8278 (Cladotanytarsus)	4		4
8238 (Rheotanytarsus)	29	1P	3
9277 (Polypedilum (Tripodura) scalaonum grp)	2		
9241 (Polypedilum (Polypedilum) illinoense grp.)	11		

Type	Value	Metric Score
Total Taxa:	39	3
Total No. Individuals:	149	3
EPT Taxa:	16	5
% Orthocladiinae + Tanytarsini of Chironomidae:	68.97	1
% Non-insects excluding Astacidae:	1.34	5
Diptera Taxa:	11	3
% Intolerant (0-3):	45.64	5
% Tolerant (8-10):	0	5
% Predators FFG 1:	1.34	1
% Shredders + Scrapers FFG 1:	10.74	3
% Collector-Filterers FFG 1:	34.23	1
% Sprawlers:	3.36	3
mIBI Metric Score:		38

Supplemental Metrics

	HBI	3.43
Shannon-Weaver Index		4.44
Shannon Equitability		0.18
% Dominant 3 Taxon		34.9
% Chironomidae		38.93



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	BPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WSU-06-0010	INRB16-035	MHAB	A325461	160801102	8/1/16	Parke
Stream Name		Location		HUC 12	HUOTO14	
Sugar Creek		CR 550 W		051201100609	05120110030090	
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4111090.99	169314.2	72	1.236	810.667	51	

Taxon	Count	Notes	HBI Tolerance
1017 (HEPTAGENIIDAE)	3		4
9156 (Maccallfortium)	5		
3024 (Maccallfortium terrinatum)	-	Slide 0377.1	2
3036 (Leucrocara)	-		2
3044 (Nixa)	-		3
1012 (BAETIIDAE)	4		4
3383 (Pseudocloeon ephippialus)	2	Slide 0377.3	
3066 (Baetis intercalaris)	6	Slide 0377.1	3
3074 (Centroptilum)	-		3
3079 (Paracloeodes minutus)	5	Slide 0377.2	
3099 (Isonychia)	26		2
3075 (Isonychia)	64		3
1026 (COENAGRIONIDAE)	-		9
7202 (Trichocricia kanza)	-	1F	4
7132 (Rhagovelia oriander)	2	1M, 1F	
3959 (Helichus lithophilus)	-	1A	
7314 (Stenelmis musgravel)	2	2A	5
7317 (Stenelmis sexlineata)	8	8A	
7321 (Macronychus glabratus)	2	1A, 1L	3
3789 (Corydalis cornutus)	2		2
1057 (HYDROPSYCHIDAE)	2		4
3432 (Cheumatopsyche)	16		3
3476 (Hydropsyche bidens)	-		3
3487 (Hydropsyche simulans)	3		2
9319 (Ceratopsyche "checkerboard" grp)	4		
3000 (Hydroptila)	1		3
7814 (Simulium)	19		5
1077 (CERATOPOGONIDAE)	3		6
7964 (Labrundinia pilosella)	1		3
7926 (Tanypodinae (Subfamily))	1		
8083 (Chironomini (Tribe))	7		
8227 (Tanytarsini (Tribe))	1		
9261 (Thienemannimyia grp.)	1		
9100 (Ivetenia)	2	1P	5
8102 (Dicrotendipes)	1		6
8126 (Glyptotendipes)	1		6
8192 (Polypedilum flavum)	3		
9091 (Robackia demajerei)	5		
9165 (Saetheria tylus)	8		4
8228 (Cladotanytarsus)	1		4
8238 (Rheotanytarsus)	32	3P	3
8241 (Tanytarsus)	4		4
9241 (Polypedilum (Polypedilum) illinoense grp.)	3		

Type	Value	Metric Score
Total Taxa:	43	5
Total No. Individuals:	258	5
EPT Taxa:	18	5
% Orthocladiinae + Tanytarsini of Chironomidae:	56.34	1
% Non-insects excluding Astacidae:	0	5
Diptera Taxa:	17	5
% Intolerant (0-3):	61.74	5
% Tolerant (8-10):	0.39	5
% Predators FFG 1:	3.1	1
% Shredders + Scrapers FFG 1:	2.33	1
% Collector-Filterers FFG 1:	39.15	1
% Sprawlers:	1.94	1
mIBI Metric Score:		40

Supplemental Metrics

	HBI	Score
	3.27	
Shannon-Weaver Index		4.17
Shannon Equitability		0.15
% Dominant 3 Taxon		47.29
% Chironomidae		27.52



**OWQ/WAPB Macroinvertebrate Community Assessment
MHAB Report**

<i>Site Name</i>	<i>EPA ID</i>	<i>Macro Sample Type</i>	<i>Sample #</i>	<i>Macro Event #</i>	<i>Sample Date</i>	<i>County</i>
WBU-03-0001	INRB16-039	MHAB	AB25466	160727402	7/27/16	Vermillion
<i>Stream Name</i>		<i>Location</i>		<i>HUC 12</i>	<i>HUC014</i>	
Tributary of Brauillotts Creek		SR 163		051201110303	05120111020040	
<i>Northing</i>	<i>Easting</i>	<i>Ecoregion</i>	<i>Gradient</i>	<i>Drainage Area</i>	<i>QHEI Score</i>	
4390141.7	460873.58	51	27.564	3.544	59	

Taxon	Count	Notes	HBI Tolerance
1207 (VIVIPARIDAE)	1		6
1089 (Holisoma)	1		6
2252 (Physella)	24		8
8997 (Orconectes propinquus)	2	1MII, 1F	4
3020 (Stenonema femoratum)	7		3
3049 (Stenacron interpunctatum)	1		7
3081 (Callibaetis)	1		6
3183 (Caenis)	3		3
3188 (Caenis latipennis)	19		
3245 (Boyeria vinosa)	2		4
3248 (Basiaeschna janata)	2		6
3321 (Libellula)	1		9
3448 (Somatochlora)	4		1
7026 (Calopteryx maculata)	1		
7026 (COENAGRIONIDAE)	3		9
7031 (Ischnura verticalis)	7		
3546 (Enallagma)	1		9
7217 (Raratra buenoi)	1		
7099 (Aquarius remigis)	1	1F	
3600 (Peltodytes duodecimpunctatus)	23	23A	
3789 (Liodessus flavicollis)	1	1A	6
3946 (Cyphon)	3	3_	
7309 (Stenelmis crenata)	2	4A; Slide 0375.1	5
3003 (Chimarra atarrima)	2		2
3432 (Cheumatopsyche)	16		3
8980 (Hydropsyche beileri grp)	2		
9319 (Ceralopsyche "checkerboard" grp)	4		
9285 (Tipula (Yamatotipula))	6		
7723 (Dixella)	1		
7964 (Labrundinia pilosella)	1		3
7926 (Tanypodinae (Subfamily))	1		
8083 (Chironomini (Tribe))	2	1P	
0248 (Ablabesmyia (Ablabesmyia) mallochii grp.)	2		
8099 (Cryptochironomus)	1		5
8112 (Dicrotendipes)	4		6
9296 (Microtendipes pedellus grp)	1		
8168 (Paratendipes albimanus)	1		4
8228 (Clacotanytarsus)	1		4
8235 (Paratanytarsus)	1		4
8241 (Tanytarsus)	1		4
9277 (Polypedilum (Tripodura) scalacnum grp)	2		

Type	Value	Metric Score
Total Taxa:	43	5
Total No. Individuals:	166	3
EPT Taxa:	9	5
% Orthocladiinae + Tanytarsini of Chironomidae:	16.67	5
% Non-insects excluding Astacidae:	15.66	5
Diptera Taxa:	16	5
% Intolerant (0-3):	21.08	3
% Tolerant (8-10):	17.47	3
% Predators FFG 1:	14.46	1
% Shredders + Scrapers FFG 1:	19.88	3
% Collector-Filterers FFG 1:	12.65	3
% Sprawlers:	1.2	1
mIBI Metric Score:		42

Supplemental Metrics

HBI	5.16
Shannon-Weaver Index	4.47
Shannon Equitability	0.48
% Dominant 3 Taxon	39.76
% Chironomidae	10.81



OWQ/WAPB Macroinvertebrate Community Assessment
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Taxon	Count	Notes	HBI Tolerance
8397 (Hemerodromia)	1		
8560 (SCIOMYZIDAE)	1		



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WSU-01-0009	INR016-040	MI IAB	AB25467	160711402	7/11/16	Boone
Stream Name		Location		HUC 12		HUC1014
Mud Creek		CR 400 E		051201100103		05120110010060
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4445131.33	551430.59	55	9.387	21.347	57	

Taxon	Count	Notes	HBI Tolerance
1084 (TURBELLARIA)	4		4
2252 (Physella)	1		8
2156 (Corbicula fluminea)	6		6
2181 (Sphaerium)	3		6
1083 (ACARI)	5		4
9050 (Hyalella)	10		
8996 (Orconectes)	2	2F	4
3388 (Pseudocloeon propinquus)	1	Slide 0383.2	1
3071 (Bactis flavistriga)	5		3
3074 (Centropilum)	1		3
3188 (Caenis latipennis)	1		
3245 (Boyeria vinosa)	1		4
1022 (CALOPTERYGIDAE)	1		5
3540 (Ischnura)	1		9
7189 (Sigara)	1		
7186 (Palmacorixa nana)	1		4
7217 (Ranatra buenoi)	1		
3600 (Peltodytes duodecimpunctatus)	4	4A	
3851 (Borosus peregrinus)	1	1A	6
3946 (Cyphon)	4	4L	
7309 (Stenelmis crenata)	10	10A; Slide 0389.1	5
7296 (Dubiraphia)	1	1F	5
3432 (Cheumatopsyche)	5		3
8980 (Hydropsyche betteni grp)	10		
3000 (Hydroptila)	1		3
7452 (Tipula)	1		7
7732 (Anopheles)	1		
7814 (Simulium)	2		5
8083 (Chironomini (Tribe))	2		
8112 (Dicrotendipes)	2		6
9296 (Microtendipes pedellus grp)	1		
8192 (Polypedilum flavum)	2		
9165 (Saetheria tylus)	2		4
8228 (Cladotanytarsus)	1		7
8241 (Tanytarsus)	2	1P	2
9277 (Polypedilum (Tripodura) sculaenum grp)	1		
9241 (Polypedilum (Polypedilum) illinoense grp.)	8		

Type	Value	Metric Score
Total Taxa:	37	3
Total No. Individuals:	106	1
EPT Taxa:	7	3
% Orthoclaadiinae + Tanytarsini of Chironomidae:	11.29	5
% Non-insects excluding Astacidae:	27.36	3
Diptera Taxa:	12	3
% Intolerant (0-3):	12.26	1
% Tolerant (8-10):	1.89	5
% Predators FFG 1:	4.72	1
% Shredders + Scrapers FFG 1:	16.98	3
% Collector-Filterers FFG 1:	17.92	3
% Sprawlers:	0	1

mIBI Metric Score: 32

Supplemental Metrics

HBI	4.58
Shannon-Weaver Index	4.68
Shannon Equitability	0.5
% Dominant 3 Taxon	28.3
% Chironomidae	19.81



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WLV-01-0081	INRB16-042	MHAB	AB25465	160712302	7/12/16	Tipecanoe
Stream Name		Location		HUC 12	HUCT014	
Wea Creek		CR 100 E		051201080103	05120108020030	
Northing	Easting	Ecoregion	Gradient	Drainage Area	OHEI Score	
4458643.42	610188.76	55	7.473	48.133	58	

Taxon	Count	Notes	HBI Tolerance
1435 (<i>Limnodrilus hoffmeisteri</i>)	4	PL-375um	10
2252 (<i>Physella</i>)	1		8
2181 (<i>Sphaerium</i>)	13		6
1083 (ACAR)	15		4
8996 (<i>Orconectes</i>)	4	2MII, 2F	4
1017 (HEPTAGENIIDAE)	3	Damaged	4
9090 (<i>Maccaffertium mediopuncta</i>)	2	Slide 0355.3	2
3044 (<i>Nixe</i>)	2		3
3049 (<i>Sternacron interpunctatum</i>)	8		7
3066 (<i>Baetis intercalaris</i>)	2		3
3183 (<i>Caenis</i>)	-		3
3175 (<i>Tricorythodes</i>)	-		3
3245 (<i>Boyeria vinosa</i>)	-		4
9287 (<i>Gomphus</i> (<i>Gomphus</i>))	-		-
1022 (CALOPTERYGIDAE)	2		5
1026 (COENAGRIONIDAE)	-		9
3568 (<i>Argia</i>)	-		5
9095 (<i>Argia fumipennis</i>)	1		-
3572 (<i>Argia tibialis</i>)	1		-
7120 (<i>Trepobates pictus</i>)	1		-
3946 (<i>Cyphon</i>)	1	1L	-
7309 (<i>Stenelmis crenata</i>)	6	6A; Slide 0355.1	5
7317 (<i>Stenelmis sexlineata</i>)	1	1A; Slide 0355.2	-
7299 (<i>Dubiraphia quadrinotata</i>)	1	1F	3
9326 (<i>Dubiraphia minima</i> grp)	2	2F	-
7303 (<i>Optioservus</i>)	2	2L	4
7296 (<i>Ancyronyx variegatus</i>)	3	3A	4
7321 (<i>Macronychus glabratus</i>)	14	14A	3
7325 (HETEROCERIDAE)	1	Sub aquatic	-
3432 (<i>Cheumatopsyche</i>)	16		3
9319 (<i>Ceratopsyche</i> "checkerboard" grp)	13		-
9248 (<i>Ablabesmyia</i> (<i>Ablabesmyia</i>) <i>mallochii</i> grp.)	1		-
8099 (<i>Cryptochironomus</i>)	2		5
8104 (<i>Cryptotendipes</i>)	2		4
9296 (<i>Microtendipes pedellus</i> grp)	1		-
8235 (<i>Paratanytarsus</i>)	2		4
9241 (<i>Polypedilum</i> (<i>Polypedilum</i>) <i>illinoense</i> grp.)	4		-
8320 (<i>Chrysops</i>)	1		5
5397 (<i>Hemerodromia</i>)	3		-

Type	Value	Metric Score
Total Taxa:	39	3
Total No. Individuals:	138	3
EPT Taxa:	9	5
% Orthoclaadiinae + Tanytarsini of Chironomidae:	16.67	5
% Non-insects excluding Astacidae:	21.74	3
Diptera Taxa:	8	3
% Intolerant (0-3):	28.26	3
% Tolerant (8-10):	2.17	5
% Predators FFG 1:	6.52	1
% Shredders + Scrapers FFG 1:	10.14	3
% Collector-Filterers FFG 1:	21.01	1
% Sprawlers:	3.62	3
mIBI Metric Score:		38

Supplemental Metrics

Metric	Value
HBI	4.34
Shannon-Weaver Index	4.5
Shannon Equitability	0.48
% Dominant 3 Taxon	32.61
% Chironomidae	8.7



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

<i>Site Name</i>	<i>EPA ID</i>	<i>Macro Sample Type</i>	<i>Sample #</i>	<i>Macro Event #</i>	<i>Sample Date</i>	<i>County</i>
WLV 16 0003	INRB16 045	MHAB	AB25471	160802103	8/21/16	Fountain
<i>Stream Name</i>		<i>Location</i>		<i>HUC 12</i>		<i>HUC014</i>
Mill Creek		CR 1120 S		051201081601		05120108120020
<i>Northing</i>	<i>Easting</i>	<i>Ecoregion</i>	<i>Gradient</i>	<i>Drainage Area</i>	<i>QHEI Score</i>	
4421141.87	471333.01	55	12.084	19.66	78	

Taxon	Count	Notes	HBI Tolerance
8896 (Orconectes)	1		4
1017 (HEPTAGENIDAE)	2		4
3020 (Stenonema femoratum)	1		3
3049 (Stenacron interpunctatum)	1		7
9129 (Acorponna)	1		4
3388 (Pseudocopeia propinquus)	2	Slide 0366.3	1
3066 (Baetis intercalaris)	5		3
3071 (Baetis flavistigma)	1		3
3365 (Procladius)	1		1
3188 (Caenis latipennis)	18		1
3245 (Boyeria vinosa)	1		4
7026 (Caoptoryx maculata)	1		1
3546 (Enallagma)	3		9
3549 (Enallagma divagans)	1		1
7120 (Tropobates pictus)	1		1
3871 (Sperchopsis tessellata)	1	1A	1
3946 (Cyphon)	3	3L	1
7307 (Stenelmis)	5	5L	5
7309 (Stenelmis crenata)	3	3A; Slide 0366.1	5
7317 (Stenelmis soxlineata)	8	8A	1
7296 (Dubiraphia)	2	2L	5
7298 (Dubiraphia minima)	2	2A; Slide 0366.2	1
3267 (Chimarra obscura)	4		4
3432 (Chaumatopsyche)	12		3
8980 (Hydropsyche bettens grp)	3		1
9319 (Ceratopsyche "checkerboard" grp)	4		1
7926 (Tanyptodinae (Subfamily))	1		1
9261 (Thionemannimyia grp.)	1		1
8168 (Paratendipes albimanus)	2		4
8211 (Slictochironomus)	1		4
8228 (Cladotanytarsus)	2		4
8235 (Paratanytarsus)	2		4
8238 (Rhoctanytarsus)	1		3
9278 (Polypedilum (Tripodura) halterale-simulans grp)	-		-
9241 (Polypedilum (Polypedilum) illinoense grp.)	-		-
9257 (Cricotopus (Cricotopus))	-		-
8355 (Tabanus)	-		5

Type	Value	Metric Score
Total Taxa:	37	3
Total No. Individuals:	104	1
EPT Taxa:	13	5
% Orthocladiinae + Tanytarsini of Chironomidae:	38.46	3
% Non-insects excluding Astacidae:	0	5
Diptera Taxa:	11	3
% Intolerant (0-3):	21.78	3
% Tolerant (8-10):	2.97	5
% Predators FFG 1:	8.91	1
% Shredders + Scrapers FFG 1:	11.88	3
% Collector-Filterers FFG 1:	16.83	3
% Sprawlers:	0	1

mIBI Metric Score: 36

Supplemental Metrics

HBI	4.06
Shannon-Weaver Index	1.54
Shannon Equitability	0.49
% Dominant 3 Taxon	37.62
% Chironomidae	12.87



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

<i>Site Name</i>	<i>EPA ID</i>	<i>Macro Sample Type</i>	<i>Sample #</i>	<i>Macro Event #</i>	<i>Sample Date</i>	<i>County</i>
WLV-17-0005	INRB16-046	MHAB	AB25472	160802101	8/2/16	Montgomery
<i>Stream Name</i>		<i>Location</i>		<i>HUC 12</i>	<i>HUC014</i>	
Cornstalk Creek		Cornstalk Creek Road		051201081204	05120108160050	
<i>Northing</i>	<i>Easting</i>	<i>Ecoregion</i>	<i>Gradient</i>	<i>Drainage Area</i>	<i>QHEI Score</i>	
4414615.6	612504.55	55	14.068	19.101	71	

Taxon	Count	Notes	HBI Tolerance
9050 (Hyalella)	1		
8996 (Orconectes)	1	1P	4
9090 (Maccaffertium mediopuncta)	1	Slide 0382.1	2
3049 (Stenacron interpunctatum)	2		7
3066 (Baetis intercalaris)	5		3
3183 (Caenis)	1		3
3188 (Caenis latipennis)	8		
3245 (Boyeria vinosa)	5		4
3397 (Macromia)	1		2
7026 (Calopteryx maculata)	2		
3568 (Argia)	2		5
3572 (Argia tibialis)	1		
3946 (Cyphon)	2	2L	
3959 (Helichus lithophilus)	6	6A	
3960 (Helichus basalis)	2	2A	
7293 (Psephenus herricki)	1	1L	4
7307 (Stenelmis)	1	1L	5
7309 (Stenelmis crenata)	3	3A, Slide 0382.4	5
7317 (Stenelmis sexlineata)	1	1A	
7298 (Dubiraphia minima)	19	19A, Slides 0382.2 & 0382.3	
7295 (Ancyronyx variegatus)	2	2A	2
7321 (Macrorychus glabratus)	3	3A	3
3267 (Chimarra obscura)	8		2
3432 (Chaumatopsyche)	19		3
8980 (Hydropsyche betteni grp)	5		
8941 (Triaenodes ignilis)	-		
7664 (Ormosia)	-		
7723 (Dixella)	-		
9153 (Tribelos)	1		5
7926 (Tanypodinae (Subfamily))	1		
8017 (Corynoneura)	1		4
8086 (Chironomus)	1	1P	8
8099 (Cryptochironomus)	1		5
8238 (Rheotanytarsus)	1		3
9093 (Stenopellirella)	1		3
9241 (Polypedilum (Polypedilum) illinoense grp.)	1		
8397 (Heimerodromia)	2		

	Type	Value	Metric Score
Total Taxa:		37	3
Total No. Individuals:		115	1
EPT Taxa:		9	5
% Orthocladiinae + Tanytarsini of Chironomidae:		37.5	3
% Non-insects excluding Astacidae:		0.87	5
Diptera Taxa:		11	3
% Intolerant (0-3):		27.83	3
% Tolerant (8-10):		0.87	5
% Predators FFG 1:		11.3	1
% Shredders + Scrapers FFG 1:		6.96	1
% Collector-Filterers FFG 1:		24.35	1
% Sprawlers:		4.35	3
mIBI Metric Score:			34

Supplemental Metrics

	HBI	Score
	3.74	
Shannon-Weaver Index		4.38
Shannon Equitability		0.17
% Dominant 3 Taxon		40
% Chironomidae		6.96



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WLV-06-0004	INRB16-050	MHAB	AB25476	160713302	7/13/16	Fountain
Stream Name		Location		HUC 12		HUC014
Big Shawnee Creek		CR 70 W		051201080602		05120108070030
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4455288.57	476262.95	55	19.09	62.212	88	

Taxon	Count	Notes	HBI Tolerance
10107 (Chordodes morgani)	1		
2252 (Physella)	14		8
2215 (Elimia)	2		
1083 (ACARI)	5		4
8997 (Orconectes propinquus)	2		4
1251 (ISOTOMIDAE)	1		
3025 (Maccaffertium vicarium)	7		2
9090 (Maccaffertium mediopuncta)	1		2
3065 (Baetis)	1		3
3071 (Baetis flavistriga)	8		3
3207 (Ephoron)	22		2
3109 (Isonychia)	28		2
3054 (Gomphus)	1		5
7057 (Perlesta)	1		4
1041 (CORIXIDAE)	1		5
3677 (Hydrovatus pustulatus)	1	1A	
7307 (Stenelmis)	1	1L	5
7299 (Dubiraphia quadrinotata)	1	1A	3
7298 (Dubiraphia minima)	4	4A; Slide 0361.1	
3799 (Corydalus cornutus)	1		2
3003 (Chimarra aterima)	8		2
3432 (Chomatopsyche)	15		3
3423 (Hydropsyche)	3	Immature	4
8980 (Hydropsyche betteni grp)	5		
3431 (Ceratopsyche spama)	35		3
9319 (Ceratopsyche "checkerboard" grp)	16		
1054 (HYDROPTILIDAE)	1		4
7548 (Antocha)	5		2
9295 (Tipula (Nippolipula))	1		
7964 (Labrundinia pilosella)	1		3
7926 (Tanypodinae (Subfamily))	1		
9261 (Thienemannimyia grp.)	4		
8008 (Orthocladiinae (Subfamily))	5		
8058 (Parakiefferiella)	2		5
8060 (Parametrioctenemus)	2		3
8086 (Chironomus)	1		8
5228 (Cladotanytarsus)	2		4
8238 (Rheotanytarsus)	8		3
8241 (Tanytarsus)	3		4
9260 (Cricotopus (Cricotopus))	4		
Orthocladus (Orthocladus)			
9240 (Polypedilum (Polypedilum fallax grp.)	2		
8355 (Tabanus)	1		5

Type	Value	Metric Score
Total Taxa:	44	5
Total No. Individuals:	235	3
EPT Taxa:	14	5
% Orthocladiinae + Tanytarsini of Chironomidae:	62.86	1
% Non-insects excluding Astacidae:	9.36	5
Diptera Taxa:	17	5
% Intolerant (0-3):	60.85	5
% Tolerant (8-10):	6.38	5
% Predators FFG 1:	3.4	1
% Shredders + Scrapers FFG 1:	10.21	3
% Collector-Filterers FFG 1:	27.66	1
% Sprawlers:	2.98	1
mIBI Metric Score:		40

Supplemental Metrics

	HBI	
	3.18	
Shannon-Weaver Index		1.54
Shannon Equitability		0.49
% Dominant 3 Taxon		36.17
% Chironomidae		14.89



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MHAB Report

Taxon	Count	Notes	HBI Tolerance
8397 (Heimerodromia)	3		
9298 (Nocplasta)	4		



**OWQ/WAPB Macroinvertebrate Community Assessment
MHAB Report**

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WLV-04-0006	INRB16-053	MHAB	AB25479	160712303	7/12/16	Benton
Stream Name		Location		HUC 12	HUC014	
Big Pine Creek		CR 850 E		051201080404	05120108040010	
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4495399.33	485910.52	54	1.338	62.117	50	

Taxon	Count	Notes	HBI Tolerance
1233 (ERPOBDELLIDAE)	1		
2252 (Physella)	5		8
2156 (Corbicula fluminea)	25		6
2181 (Sphaeriurn)	4		6
1083 (ACARI)	1		4
9050 (Hyalella)	2		
8997 (Orconectes propinquus)	2	2MI	4
3066 (Baetis intercalaris)	2		3
3071 (Baetis flavistriga)	3	Slide 0384.1	3
3183 (Caenis)	2		3
3188 (Caenis latipennis)	3		
9286 (Gomphus (Gomphurus))	1		
9287 (Gomphus (Gomphus))	1		
3569 (Argia apicalis)	1		
104 (CORIXIDAE)	3		5
7186 (Palmacorixa nana)	3	2M 1F	4
7112 (Rheumatobates palosi)	1	M	
3591 (Haliphus borealis)	1	1A	5
3600 (Peltodytes duodecimpunctatus)	13	13A	
3605 (Peltodytes edentulus)	3	3A	6
3851 (Barosus peregrinus)	3	3A	6
3946 (Cyphon)	4	4L	
7307 (Stenelmis)	2	2	5
7309 (Stenelmis crenata)	4	4A; Slide 0384.2	5
7296 (Dubiraphia)	8	8L	5
7300 (Dubiraphia vittata)	25	25A; Slides 0384.3 & 0384.5	
7298 (Dubiraphia minima)	14	14A; Slide 0384.4	
7303 (Optioservus)	1	1L	4
1057 (HYDROPSYCHIDAE)	1		4
3432 (Cheumatopsyche)	10		3
8980 (Hydropsyche betteni grp)	4		
9319 (Ceratopsyche "checkerboard" grp)	4		
9285 (Tipula (Yamatotipula))	1		
7814 (Simulium)	1		5
7893 (Probezzia)	3		
7984 (Procladius)	1		7
8083 (Chironomini (Tribe))	2		
9261 (Thienemanniomyia grp.)	1		
8086 (Chironomus)	2		8
8099 (Cryptochironomus)	5		5
8104 (Cryptotendipes)	5		4
8112 (Dicrotendipes)	3		6

Type	Value	Metric Score
Total Taxa:	54	5
Total No. Individuals:	222	3
EPT Taxa:	8	3
% Orthocladiinae + Tanytarsini of Chironomidae:	18.97	5
% Non-Insects excluding Astacidae:	17.12	5
Diptera Taxa:	22	5
% Intolerant (0-3):	7.66	1
% Tolerant (8-10):	3.15	5
% Predators FFG 1:	6.31	1
% Shredders + Scrapers FFG 1:	13.96	3
% Collector-Filterers FFG 1:	20.27	1
% Sprawlers:	2.7	1
mIBI Metric Score:		38

Supplemental Metrics

HBI	5.12
Shannon-Weaver Index	5.09
Shannon Equitability	0.54
% Dominant 3 Taxon	28.83
% Chironomidae	26.13



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Taxon	Count	Notes	HBI Tolerance
8172 (Phaenopsectra)	8		7
8192 (Polypedilum flavum)	7		
9166 (Saetheria tylos)	1		2
8211 (Stictochironomus)	3		4
8228 (Cladotanytarsus)	5		4
8235 (Paralanytarsus)	2		4
8241 (Tanytarsus)	4		2
9260 (Cricotopus (Cricotopus) /Orthocladius (Orthocladius))	3		
9277 (Polypedilum (Tripodura) scalaeum grp.)	1		
9241 (Polypedilum (Polypedilum) illinoense grp.)	3		
9257 (Cricotopus (Cricotopus))	2		
8560 (SCIOMYZIDAE)	2		



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WSU-04-0003	INRB16-054	MHAB	AB25480	160727101	7/27/16	Montgomery
Stream Name		Location		HUC 12		HUC1014
Honey Crock		SR 17		051201100406		05120110020070
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4439918.3	519826.93	55	19.867	3.663	62	

Taxon	Count	Notes	HBI Tolerance
1083 (ACARI)	2		4
9050 (Hyalella)	1		
3049 (Stenacron interpunctatum)	2		7
3071 (Baetis flavistriga)	1		3
3183 (Caenis)	5		3
3188 (Caenis latipennis)	9		
3245 (Boyeria vinosa)	2		4
7026 (Calopteryx maculata)	3		
7120 (Trepobates pictus)	1		
7099 (Acuarius remigis)	2		
7122 (Microvelia)	1		
3946 (Cyphon)	2	2I	
7307 (Stenelmis)	10	10L	5
7309 (Stenelmis crenata)	10	10A; Slide 0370.1	5
7317 (Stenelmis sexlineata)	2	2A	
7296 (Dubiraphia)	1	1L	5
7299 (Dubiraphia quadrinotata)	9	9A; Slide 0370.3	3
7298 (Dubiraphia minima)	4	4A; Slide 0370.2	
7303 (Optioservus)	5	5L	4
7304 (Optioservus fastidilus)	6	6A	2
7295 (Ancyronyx variegatus)	1	1A	4
7321 (Macronychus glabratus)	4	4A	3
3003 (Chimarra alternata)	1		2
1057 (HYDROPSYCHIDAE)	2		4
3432 (Chumatopsyche)	2		3
8980 (Hydropsyche beltini grp)	11		
8685 (Pycnopsyche)	1		3
7610 (Hexatoma)	1		2
7723 (Dixella)	2		
7814 (Simulium)	2		5
7998 (Diamesa)	1		8
8083 (Chironomini (Tribe))	1		
8261 (Thienemannimyia grp.)	2		
8168 (Paratendipes albimanus)	2		2
8235 (Paratanytarsus)	2		4
8241 (Tanytarsus)	3		4
8238 (Polypedilum (Uresipedilum) flavum)	2		
8240 (Polypedilum (Polypedilum) fallax grp.)	1		
8241 (Polypedilum (Polypedilum) illinoense grp.)	3		

Type	Value	Metric Score
Total Taxa:	39	3
Total No. Individuals:	122	1
EPT Taxa:	9	5
% Orthocladiinae + Tanytarsini of Chironomidae:	29.41	3
% Non-insects excluding Astacidae:	2.46	5
Diptera Taxa:	12	3
% Intolerant (0-3):	24.59	3
% Tolerant (8-10):	0.82	5
% Predators FFG 1:	8.2	1
% Shredders + Scrapers FFG 1:	27.87	5
% Collector-Filterers FFG 1:	8.2	5
% Sprawlers:	0.82	1
mIBI Metric Score:		40

Supplemental Metrics

HBI	3.93
Shannon-Weaver Index	4.81
Shannon Equitability	0.51
% Dominant 3 Taxon	25.41
% Chironomidae	13.93



**OWQ/WAPB Macroinvertebrate Community Assessment
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<i>Site Name</i>	<i>EPA ID</i>	<i>Macro Sample Type</i>	<i>Sample #</i>	<i>Macro Event #</i>	<i>Sample Date</i>	<i>County</i>
WBU-04-0005	INRB16-055	MHAB	AB25481	160713402	7/13/16	Vigo
<i>Stream Name</i>		<i>Location</i>		<i>HUC 12</i>	<i>HUC014</i>	
North Branch Otter Creek		Hayne Road		051201110403	05120111030050	
<i>Northing</i>	<i>Easting</i>	<i>Ecoregion</i>	<i>Gradient</i>	<i>Drainage Area</i>	<i>QHEI Score</i>	
4377457.69	475380.82	72	5.41	37.94	66	

<i>Taxon</i>	<i>Count</i>	<i>Notes</i>	<i>HBI Tolerance</i>
2156 (<i>Corbicula fluminea</i>)	1		6
1083 (<i>ACARI</i>)	2		4
8996 (<i>Orconectes</i>)	2	2F	4
9156 (<i>Maccaffertium</i>)	2		
3066 (<i>Baetis intercalaris</i>)	4		3
3183 (<i>Caenis</i>)	1		3
3188 (<i>Caenis latipennis</i>)	5		
3109 (<i>Isonychia</i>)	1		2
3175 (<i>Ticorythodes</i>)	8		3
3245 (<i>Boyeria vinosa</i>)	10		4
3116 (<i>Progomphus obscurus</i>)	1		
9286 (<i>Gomphus (Gomphurus)</i>)	2		
3397 (<i>Macromia</i>)	1		2
1022 (<i>CALOPTERYGIDAE</i>)	1		5
1026 (<i>COENAGRIONIDAE</i>)	1		9
7116 (<i>Metrobates hesperius</i>)	1		
7122 (<i>Microvelia</i>)	1		
3861 (<i>Anacaena</i>)	1	1A	
3959 (<i>Helichus lithophilus</i>)	7	7A	
3960 (<i>Helichus basalis</i>)	1	1A	
7309 (<i>Stenelmis crenata</i>)	1	1A; Slide 0362.2	5
7298 (<i>Dubiraphia minima</i>)	1	1A; Slide 0362.1; 400um	
7295 (<i>Ancyronyx variegatus</i>)	4	4A	4
7321 (<i>Macronychus glabratus</i>)	9	9A	3
3432 (<i>Cheumatopsyche</i>)	10		3
8980 (<i>Hydropsyche betterii</i> grp)	6		
9319 (<i>Ceratopsyche "checkerboard"</i> grp)	5		
3000 (<i>Hydroptila</i>)	1		3
3311 (<i>Neuroclipsis</i>)	1		3
7814 (<i>Simulium</i>)	3		5
8083 (<i>Chironominae (Tribe)</i>)	2		
9248 (<i>Ablabesmyia (Ablabesmyia) mallochii</i> grp.)	2		
9261 (<i>Thienemanniomyia</i> grp.)	1		
9165 (<i>Saethoria tylus</i>)	1		4
8238 (<i>Rhectanytarsus</i>)	3		3
9238 (<i>Polypedilum (Jresipedilum) flavum</i>)	2		
9241 (<i>Polypedilum (Polypedilum) illinoense</i> grp.)	2		

<i>Type</i>	<i>Value</i>	<i>Metric Score</i>
Total Taxa:	37	3
Total No. Individuals:	107	1
EPT Taxa:	11	5
% Orthocladiinae + Tanytarsini of Chironomidae:	23.08	5
% Non-insects excluding Astacidae:	2.8	5
Diptera Taxa:	8	3
% Intolerant (0-3):	36.45	5
% Tolerant (8-10):	0.93	5
% Predators FFG 1:	14.02	1
% Shredders + Scrapers FFG 1:	1.87	1
% Collector-Filterers FFG 1:	17.76	3
% Sprawlers:	0	1
mIBI Metric Score:		38

Supplemental Metrics

HBI	3.55
Shannon-Weaver Index	4.7
Shannon Equitability	0.5
% Dominant 3 Taxon	27.1
% Chironomidae	12.15



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

<i>Site Name</i>	<i>EPA ID</i>	<i>Macro Sample Type</i>	<i>Sample #</i>	<i>Macro Event #</i>	<i>Sample Date</i>	<i>County</i>
WSU-01-0010	INR316-056	MHAB	AB25482	160801101	8/1/16	Boone
<i>Stream Name</i>		<i>Location</i>		<i>HUC 12</i>	<i>HUC14</i>	
Sugar Creek		Frankfort Road		051201100107	05120110010110	
<i>Northing</i>	<i>Easting</i>	<i>Ecoregion</i>	<i>Gradient</i>	<i>Drainage Area</i>	<i>QHEI Score</i>	
4443953.42	536593.14	55	3.984	158.962	74	

Taxon	Count	Notes	HBI Tolerance
1092 (PISIDIIDAE)	1		8
9050 (Hyalella)	19		4
8996 (Oconectes)	1	1F	4
1017 (HEPTAGENIIDAE)	6		4
3018 (Moccafertium pulchellum)	6		2
9090 (Moccafertium mediopuncta)	2		2
3044 (Nixe)	6		3
3049 (Stenacron interpunctatum)	2		7
3381 (Pseudocloeon dardanus)	3	Slide 0354.1	2
3063 (Heterocloeon)	2	Slide 0354.2	3
3066 (Baelis intercalaris)	6		3
3071 (Bactis flavistriga)	2		3
3183 (Caenis)	3		3
3188 (Caenis latipennis)	2		
3189 (Caenis punctata)	2	Slide 0354.5	
3109 (Isonychia)	4		2
3175 (Tricorythodes)	7		3
3245 (Boyeria vinosa)	1		4
3397 (Macromia)	2		2
7027 (Heteracrina americana)	2		
3546 (Enallagma)	5		9
3549 (Enallagma civagans)	1		
7132 (Rhagovelia orianda)	1		
3871 (Sperchopsis tessellata)	1	1A	
3946 (Cyphon)	2	2L	
3959 (Helichus lithophilus)	9	9A	
7309 (Stenelmis cronata)	14	14A; Slide 0354.5	5
7317 (Stenelmis sexlineata)	2	2A	
9266 (Stenelmis grossa)	3	3A; Slide 0354.6	
7298 (Dubiraphia minima)	11	11A; Slide 0354.4	
7295 (Ancyronyx variegatus)	12	12A	4
7321 (Macronychus glabratus)	3	3A	3
3267 (Chimarra obscura)	3		4
1057 (HYDROPSYCHIDAE)	4		4
3432 (Cheumatopsyche)	26		3
3480 (Hydropsyche frisoni)	1		2
9319 (Ceratopsyche "checkerboard" grp)	12		
9274 (Nectopsyche exquisita-candida)	2		
7814 (Simulium)	1	1P	5
8083 (Chironomini (Tribe))	2		
9250 (Ablabesmyia (Ablabesmyia) rhamprae grp.)	2		
8006 (Orthocladiinae (Subfamily))	1		

Type	Value	Metric Score
Total Taxa:	50	5
Total No. Individuals:	231	3
EPT Taxa:	20	5
% Orthocladiinae + Tanytarsini of Chironomidae:	13.16	5
% Non-insects excluding Asplacidae:	8.66	5
Diptera Taxa:	12	3
% Intolerant (0-3):	32.9	5
% Tolerant (8-10):	2.6	5
% Predators FFG 1:	5.19	1
% Shredders + Scrapers FFG 1:	14.29	3
% Collector-Filterers FFG 1:	18.18	3
% Sprawlers:	0.43	1
mIBI Metric Score:		44

Supplemental Metrics

HBI	3.7
Shannon-Weaver Index	4.9
Shannon Equitability	0.52
% Dominant 3 Taxon	29.44
% Chironomidae	16.45



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Taxon	Count	Notes	HBI Tolerance
9284 (Iribelos jucundus)	2		
8099 (Cryptochironomus)	1		5
8172 (Phaenopsectra)	1		7
8235 (Paratanytarsus)	1		4
8238 (Rheotanytarsus)	3		3
9238 (Polypedilum (Uresipedilum) flavum)	2		
9241 (Polypedilum (Polypedilum) illinoense grp.)	23		
8320 (Chrysops)	1		5