



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-14-0003	18T-001	MHAB	AB31592	180814501	8/14/18	Martin
Stream Name		Location		HUC 12		HUCTO14
East Fork White River		CR 3 (Abel Hill Rd)		051202081407		05120208140040
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4265879.53	515887.76	71	0.835	5168.449	51	

TAXON	COUNT	NOTES	HBI Tolerance
1426 (<i>Branchiura sowerbyi</i>)	1		6
2252 (<i>Physella</i>)	2		8
1083 (<i>ACARI</i>)	1		4
3381 (<i>Pseudocloeon dardanus</i>)	2	G18-079.1,2 (labrum +labial palps and right mandible)	2
3175 (<i>Tricorythodes</i>)	1		3
9352 (<i>Stenogomphus</i>)	1	small instar	
3568 (<i>Argia</i>)	2	most gills broken; vert small premental setae	5
7032 (<i>Argia moesta</i>)	1		
7111 (<i>Rheumatobates</i>)	7	at least 2 species; males, females, + nymphs	
7117 (<i>Trepobates</i>)	1		
3872 (<i>Tropisternus</i>)	1	larva	
7321 (<i>Macronychus glabratus</i>)	1	female	3
3476 (<i>Hydropsyche bidens</i>)	2		3
3487 (<i>Hydropsyche simulans</i>)	1		2
9224 (<i>Nectopsyche exquisita-candida</i>)	4		
8083 (<i>Chironomini (Tribe)</i>)	1		
8126 (<i>Glyptotendipes</i>)	15		6
9241 (<i>Polypedilum (Polypedilum) illinoense</i> grp.)	1		

Type	Value	Metric Score
Total Taxa:	18	1
Total No. Individuals:	45	1
EPT Taxa:	5	1
% Orthocladiinae + Tanytarsini of Chironomidae:	0	5
% Non-insects excluding Astacidae:	8.89	5
Diptera Taxa:	3	1
% Intolerant (0-3):	15.56	1
% Tolerant (8-10):	4.44	5
% Predators FFG 1:	24.44	3
% Shredders + Scrapers FFG 1:	4.44	1
% Collector-Filterers FFG 1:	33.33	1
% Sprawlers:	0	1
mIBI Metric Score:		26

Supplemental Metrics

	HBI	
	5.14	
Shannon-Weaver Index		2.35
Shannon Equitability		0.81
% Dominant 3 Taxon		57.78
% Chironomidae		37.78

Residuals

Identifier	Date	Count	%PSE



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0007	18T-004	MHAB	AB31595	180717503	7/17/18	Davies
Stream Name		Location		HUC 12		HUCTO14
Slate Creek		CR 1250 E		051202081503		05120208170030
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4262682.82	505810.71	71	4.577	17.403	48	

TAXON	COUNT	NOTES	HBI Tolerance
1426 (Branchiura sowerbyi)	1		6
1089 (Helisoma)	1		6
2252 (Physella)	4		8
1083 (ACARI)	6		4
9001 (Orconectes immunis)	1	FEMALE	
3049 (Stenacron interpunctatum)	2	SLIDE R18-039.2	7
3083 (Callibaetis floridanus)	2	SLIDE R18-039.3; 16 DENTICLES IN CLAW	
3188 (Caenis latipennis)	22		
3189 (Caenis punctata)	2	SLIDE R18-039.4	
1020 (LIBELLULIDAE)	1	SMALL INSTAR	9
3542 (Ischnura posita)	5		
3549 (Enallagma divagans)	16		
3552 (Enallagma signatum)	2		
9095 (Argia fumipennis)	5		
3600 (Peltodytes duodecimpunctatus)	3	3A	
3604 (Peltodytes sexmaculatus)	1	1A	
7296 (Dubiraphia)	1	FEMALE	5
7300 (Dubiraphia vittata)	1	MALE SLIDE R18-039.1	
7984 (Procladius)	1		7
7991 (Tanypus)	1		9
8082 (Chironominae (Subfamily))	1	PUPA	
9284 (Tribelos jucundus)	3		
8099 (Cryptochironomus)	1		5
8112 (Dicrotendipes)	4		6
8241 (Tanytarsus)	1		4
9278 (Polypedilum (Tripodura) halterale-simulans grp)	6		
9241 (Polypedilum (Polypedilum) illinoense grp.)	1		

Type	Value	Metric Score
Total Taxa:	27	3
Total No. Individuals:	95	1
EPT Taxa:	4	3
% Orthocladiinae + Tanytarsini of Chironomidae:	5.26	5
% Non-insects excluding Astacidae:	13.68	5
Diptera Taxa:	9	3
% Intolerant (0-3):	0	1
% Tolerant (8-10):	6.32	5
% Predators FFG 1:	33.68	3
% Shredders + Scrapers FFG 1:	5.26	1
% Collector-Filterers FFG 1:	1.05	5
% Sprawlers:	3.16	3
mIBI Metric Score:		38

Supplemental Metrics

	HBI	
	6.04	
Shannon-Weaver Index		2.73
Shannon Equitability		0.83
% Dominant 3 Taxon		46.32
% Chironomidae		20

Residuals

Identifier	Date	Count	%PSE



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0008	18T-002	MHAB	AB31593	180717501	7/17/18	Martin
Stream Name		Location		HUC 12		HUCTO14
Slate Creek		CR 22		051202081503		05120208170030
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4265434.39	508319.05	71	14.167	4.006	39	

TAXON	COUNT	NOTES	HBI Tolerance
1089 (Helisoma)	4		6
2252 (Physella)	13		8
3188 (Caenis latipennis)	2		
3549 (Enallagma divagans)	5		
3872 (Tropisternus)	1	Hydrophilid larvae	
3432 (Cheumatopsyche)	3		3
9261 (Thienemannimyia grp.)	2		
8099 (Cryptochironomus)	1		5
8112 (Dicrotendipes)	19		6
8211 (Stictochironomus)	7		4
9241 (Polypedilum (Polypedilum) illinoense grp.)	5		

Type	Value	Metric Score
Total Taxa:	11	1
Total No. Individuals:	62	1
EPT Taxa:	2	3
% Orthocladiinae + Tanytarsini of Chironomidae:	0	5
% Non-insects excluding Astacidae:	27.42	3
Diptera Taxa:	5	1
% Intolerant (0-3):	4.84	1
% Tolerant (8-10):	20.97	3
% Predators FFG 1:	9.68	1
% Shredders + Scrapers FFG 1:	27.42	5
% Collector-Filterers FFG 1:	4.84	5
% Sprawlers:	1.61	1
mIBI Metric Score:		30

Residuals

Identifier	Date	Count	%PSE

Supplemental Metrics

	HBI	6.04
Shannon-Weaver Index		2.02
Shannon Equitability		0.84
% Dominant 3 Taxon		62.9
% Chironomidae		54.84



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0009	18T-010	MHAB	AB31601	180723504	7/23/18	Daviess
Stream Name		Location		HUC 12	HUOTO14	
Sugar Cr		CR 900 S		051202081504	05120208170040	
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4264066.91	502090.59	72	4.96	17.048	63	

TAXON	COUNT	NOTES	HBI Tolerance
1357 (BRANCHIOBDELLIDAE)	1		6
9001 (Orconectes immunis)	1	1MI	
3020 (Stenonema femoratum)	3		3
3049 (Stenacron interpunctatum)	4		7
7011 (Acerpenna pygmaea)	1		2
3066 (Baetis intercalaris)	8		3
3183 (Caenis)	3		3
3188 (Caenis latipennis)	21		
3109 (Isonychia)	1		2
3248 (Basiaeschna janata)	1		6
3546 (Enallagma)	2		9
9095 (Argia fumipennis)	1		
3572 (Argia tibialis)	2		
3598 (Peltodytes)	1	1L	7
3851 (Berosus peregrinus)	2	2A	6
3959 (Helichus lithophilus)	2	2A	
9266 (Stenelmis grossa)	6	6A; SLIDES T18-054.1, T18-054.2	
3432 (Cheumatopsyche)	47		3
8980 (Hydropsyche betteni grp)	2		
3430 (Ceratopsyche slossonae)	4		2
3000 (Hydroptila)	3		3
7984 (Procladius)	1		7
7926 (Tanypodinae (Subfamily))	2		
8083 (Chironomini (Tribe))	1		
9248 (Ablabesmyia (Ablabesmyia) mallochi grp.)	2		
9261 (Thienemannimyia grp.)	1		
8086 (Chironomus)	7		8
8099 (Cryptochironomus)	1		5
8112 (Dicrotendipes)	23		6
8211 (Stictochironomus)	1		4
8228 (Cladotanytarsus)	1		4
8235 (Paratanytarsus)	1		4
8241 (Tanytarsus)	15		4
9277 (Polypedilum (Tripodura) scalaenum grp)	1		
9278 (Polypedilum (Tripodura) halterale-simulans grp)	1		
9238 (Polypedilum (Uresipedilum) flavum)	2		
9241 (Polypedilum (Polypedilum) illinoense grp.)	3		

Type	Value	Metric Score
Total Taxa:	37	3
Total No. Individuals:	179	3
EPT Taxa:	11	5
% Orthocladiinae + Tanytarsini of Chironomidae:	26.98	3
% Non-insects excluding Astacidae:	1.12	5
Diptera Taxa:	16	5
% Intolerant (0-3):	39.11	5
% Tolerant (8-10):	5.03	5
% Predators FFG 1:	5.59	1
% Shredders + Scrapers FFG 1:	3.35	1
% Collector-Filterers FFG 1:	35.2	1
% Sprawlers:	1.12	1
mIBI Metric Score:		38

Supplemental Metrics

	HBI	Value
	HBI	4.27
Shannon-Weaver Index		2.76
Shannon Equitability		0.76
% Dominant 3 Taxon		50.84
% Chironomidae		35.2



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Residuals

Identifier	Date	Count	%PSE
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Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0010	18T-007	MHAB	AB31598	180815501	8/15/18	Dubois
Stream Name		Location		HUC 12		HUCTO14
East Fork White River		CR 1100 E		051202081504		05120208170040
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4261570.58	502286.22	72	0.486	5596.653	46	

TAXON	COUNT	NOTES	HBI Tolerance
1501 (Nais bretscheri)	1		6
2252 (Physella)	1		8
3081 (Callibaetis)	1		6
9347 (Procloeon viridoculare)	1	mouth parts on slide G18-101.1	
3202 (Hexagenia)	1	early instar	4
3175 (Tricorythodes)	10		3
1021 (GOMPHIDAE)	1	small instars	1
3129 (Stylurus)	2		4
3397 (Macromia)	3		2
3551 (Enallagma exsulans)	1		
3568 (Argia)	3	no w/no gills	5
3569 (Argia apicalis)	2	no lateral gills	
1041 (CORIXIDAE)	2	early instars	5
7111 (Rheumatobates)	3	females + nymphs	
7112 (Rheumatobates palosi)	1	male	
7131 (Rhagovelia obesa)	1	female	
3637 (Thermonectus basillaris)	1		
9326 (Dubiraphia minima grp)	1	female	
7295 (Ancyronyx variegatus)	1		4
8920 (Nectopsyche)	1	small instar	2
9224 (Nectopsyche exquisita-candida)	6	one with >10 metasternal setae	
1053 (POLYCENTROPODIDAE)	1	anal claws damaged + inconspicuous	6
8083 (Chironomini (Tribe))	2	2 in alcohol	
9248 (Ablabesmyia (Ablabesmyia) mallochi grp.)	1		
8126 (Glyptotendipes)	21		6
8157 (Parachironomus)	1		4
8192 (Polypedilum flavum)	1		
9241 (Polypedilum (Polypedilum) illinoense grp.)	2		

Type	Value	Metric Score
Total Taxa:	28	3
Total No. Individuals:	73	1
EPT Taxa:	7	3
% Orthocladiinae + Tanytarsini of Chironomidae:	0	5
% Non-insects excluding Astacidae:	2.74	5
Diptera Taxa:	6	1
% Intolerant (0-3):	20.55	3
% Tolerant (8-10):	1.37	5
% Predators FFG 1:	26.03	3
% Shredders + Scrapers FFG 1:	2.74	1
% Collector-Filterers FFG 1:	30.14	1
% Sprawlers:	1.37	1
mIBI Metric Score:		32

Supplemental Metrics

	HBI	
	4.72	
Shannon-Weaver Index		2.72
Shannon Equitability		0.82
% Dominant 3 Taxon		50.68
% Chironomidae		38.36

Residuals

Identifier	Date	Count	%PSE
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OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0011	18T-005	MHAB	AB31596	180718506	7/18/18	Dubois
Stream Name		Location		HUC 12		HUCTO14
Mill Creek		N Portersville Rd		051202081501		05120208170020
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4255150.17	503729.29	72	5.227	4.329	43	

TAXON	COUNT	NOTES	HBI Tolerance
1233 (ERPOBDELLIDAE)	1		
1206 (PLANORBIDAE)	3	imm	6
1089 (Helisoma)	12		6
2252 (Physella)	12		8
2156 (Corbicula fluminea)	2		6
3188 (Caenis latipennis)	14		
7031 (Ischnura verticalis)	7		
3549 (Enallagma divagans)	15		
3568 (Argia)	1		5
9095 (Argia fumipennis)	1		
7984 (Procladius)	11		7
7926 (Tanypodinae (Subfamily))	1	pupa	
8083 (Chironomini (Tribe))	1		
8099 (Cryptochironomus)	3		5
8112 (Dicrotendipes)	7		6
8211 (Stictochironomus)	20		4
8241 (Tanytarsus)	2		4

Type	Value	Metric Score
Total Taxa:	17	1
Total No. Individuals:	113	1
EPT Taxa:	1	1
% Orthocladiinae + Tanytarsini of Chironomidae:	4.44	5
% Non-insects excluding Astacidae:	26.55	3
Diptera Taxa:	7	3
% Intolerant (0-3):	0	1
% Tolerant (8-10):	10.62	5
% Predators FFG 1:	35.4	3
% Shredders + Scrapers FFG 1:	23.89	5
% Collector-Filterers FFG 1:	3.54	5
% Sprawlers:	12.39	5
mIBI Metric Score:		38

Residuals

Identifier	Date	Count	%PSE

Supplemental Metrics

HBI	5.82
Shannon-Weaver Index	2.43
Shannon Equitability	0.86
% Dominant 3 Taxon	43.36
% Chironomidae	39.82



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0012	18T-006	MHAB	AB31597	180723503	7/23/18	Dubois
Stream Name		Location		HUC 12		HUCTO14
Mill Creek		CR 700 N		051202081501		05120208170020
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4259209.22	504078.21	72	9.95	18.362	52	

TAXON	COUNT	NOTES	HBI Tolerance
2252 (Physella)	5		8
1083 (ACARI)	1		4
9036 (Caecidotea)	1		8
3049 (Stenacron interpunctatum)	3	slide R18-079.1	7
7011 (Acerpenna pygmaea)	8		2
3066 (Baetis intercalaris)	5		3
3083 (Callibaetis floridanus)	2		
3188 (Caenis latipennis)	12		
1021 (GOMPHIDAE)	1	no wingpads	1
1020 (LIBELLULIDAE)	2	small instarts	9
3542 (Ischnura posita)	1		
3549 (Enallagma divagans)	13		
3569 (Argia apicalis)	1		
1041 (CORIXIDAE)	2	NO WING PADS (SMALL INSTAR)	5
7202 (Trichocorixa kanza)	3	1M, 2F	4
7229 (Neoplea)	1		
3600 (Peltodytes duodecimpunctatus)	9	9A	
3851 (Berosus peregrinus)	7		6
3872 (Tropisternus)	1	1L	
1096 (SCIRTIDAE)	1		5
3959 (Helichus lithophilus)	1		
7295 (Ancyronyx variegatus)	5		4
3432 (Cheumatopsyche)	29		3
3487 (Hydropsyche simulans)	17		2
7984 (Procladius)	13		7
8083 (Chironomini (Tribe))	1	pupa	
9261 (Thienemannimyia grp.)	1		
9284 (Tribelos jucundus)	3		
8086 (Chironomus)	17		8
8099 (Cryptochironomus)	1		5
8112 (Dicrotendipes)	4		6
8185 (Polypedilum illinoense)	2		7
8192 (Polypedilum flavum)	3		
8235 (Paratanytarsus)	5		4
8241 (Tanytarsus)	8	7L, 1P	4

Type	Value	Metric Score
Total Taxa:	35	3
Total No. Individuals:	189	3
EPT Taxa:	7	3
% Orthocladiinae + Tanytarsini of Chironomidae:	22.41	5
% Non-insects excluding Astacidae:	3.7	5
Diptera Taxa:	11	3
% Intolerant (0-3):	31.75	3
% Tolerant (8-10):	13.23	3
% Predators FFG 1:	19.05	3
% Shredders + Scrapers FFG 1:	6.88	1
% Collector-Filterers FFG 1:	19.58	3
% Sprawlers:	7.41	5
mIBI Metric Score:		40

Supplemental Metrics

	HBI	
	4.68	
Shannon-Weaver Index		3.05
Shannon Equitability		0.86
% Dominant 3 Taxon		33.33
% Chironomidae		30.69

Residuals

Identifier	Date	Count	%PSE



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OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0013	18T-011	MHAB	AB31602	180718505	7/18/18	Dubois
Stream Name		Location		HUC 12		HUCTO14
Birch Creek		CR 460 N		051202081506		05120208170050
Northing	Eastng	Ecoregion	Gradient	Drainage Area	QHEI Score	
4255338.36	498317.85	72	3.792	5.169	41	

TAXON	COUNT	NOTES	HBI Tolerance
1084 (TURBELLARIA)	2		4
1426 (Branchiura sowerbyi)	1		6
1552 (Tubificidae with bifid chetae and no hair chetae)	1		
1233 (ERPOBDELLIDAE)	1		
2252 (Physella)	10		8
1083 (ACARI)	1		4
9031 (Lirceus)	21		8
7011 (Acerpenna pygmaea)	1		2
3066 (Baetis intercalaris)	2		3
3188 (Caenis latipennis)	2		
3549 (Enallagma divagans)	3		
7201 (Trichocorixa calva)	1	female	4
7202 (Trichocorixa kanza)	6	4 males + 2 females	4
3600 (Peltodytes duodecimpunctatus)	1		
3809 (Gyrinus)	1	female	4
3863 (Paracymus)	2		
3432 (Cheumatopsyche)	20		3
8980 (Hydropsyche betteni grp)	1		
7814 (Simulium)	3		5
7984 (Procladius)	3		7
7926 (Tanypodinae (Subfamily))	6	5 larvae + 1 pupa	
8227 (Tanytarsini (Tribe))	1	pupa	
9248 (Ablabesmyia (Ablabesmyia) mallochi grp.)	5		
9261 (Thienemannimyia grp.)	4		
8006 (Orthocladiinae (Subfamily))	5	2 larvae + 3 pupae	
8086 (Chironomus)	2		8
8099 (Cryptochironomus)	4		5
8112 (Dicrotendipes)	11		6
9335 (Paratendipes albimanus grp)	1		
8179 (Polypedilum)	1		
8211 (Stictochironomus)	7		4
8235 (Paratanytarsus)	1		4
8241 (Tanytarsus)	1		4
9241 (Polypedilum (Polypedilum) illinoense grp.)	8		
9344 (Cricotopus (Cricotopus) bicinctus)	14		

Type	Value	Metric Score
Total Taxa:	35	3
Total No. Individuals:	154	3
EPT Taxa:	5	3
% Orthocladiinae + Tanytarsini of Chironomidae:	29.73	3
% Non-insects excluding Astacidae:	24.03	3
Diptera Taxa:	17	5
% Intolerant (0-3):	14.94	1
% Tolerant (8-10):	21.43	3
% Predators FFG 1:	16.23	1
% Shredders + Scrapers FFG 1:	7.14	1
% Collector-Filterers FFG 1:	16.23	3
% Sprawlers:	4.55	3
mIBI Metric Score:		32

Supplemental Metrics

	HBI	
	5.51	
Shannon-Weaver Index		3.05
Shannon Equitability		0.86
% Dominant 3 Taxon		35.71
% Chironomidae		48.05



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Residuals

Identifier	Date	Count	%PSE
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OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0014	18T-012	MHAB	AB31603	180718503	7/18/18	Dubois
Stream Name		Location		HUC 12		HUCTO14
Birch Creek		W Portersville Rd		051202081506		05120208170050
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4260150.99	498220.42	72	11.933	12.798	62	

TAXON	COUNT	NOTES	HBI Tolerance
1085 (TUBIFICIDAE)	2	No hair chetae	10
1234 (GLOSSIPHONIIDAE)	1		
2156 (Corbicula fluminea)	1		6
8996 (Orconectes)	1		4
3049 (Stenacron interpunctatum)	1	mouth parts on G18-067.2	7
3066 (Baetis intercalaris)	10		3
3188 (Caenis latipennis)	1		
1020 (LIBELLULIDAE)	1	early instar	9
3397 (Macromia)	2		2
7027 (Hetaerina americana)	1		
3549 (Enallagma divagans)	10	one without gills	
3568 (Argia)	4	gills under-developed	5
7295 (Ancyronyx variegatus)	12		4
3432 (Cheumatopsyche)	3		3
3000 (Hydroptila)	1		3
3311 (Neureclipsis)	1	proleg + claw on G18-067.1	3
9261 (Thienemannimyia grp.)	1		
8086 (Chironomus)	1		8
8099 (Cryptochironomus)	1		5
8172 (Phaenopsectra)	1		7
8211 (Stictochironomus)	4		4
8241 (Tanytarsus)	1		4
9277 (Polypedilum (Tripodura) scalaenum grp)	1		
9238 (Polypedilum (Uresipedilum) flavum)	1		
9241 (Polypedilum (Polypedilum) illinoense grp.)	4		

Type	Value	Metric Score
Total Taxa:	25	3
Total No. Individuals:	67	1
EPT Taxa:	6	3
% Orthocladiinae + Tanytarsini of Chironomidae:	6.67	5
% Non-insects excluding Astacidae:	7.46	5
Diptera Taxa:	9	3
% Intolerant (0-3):	25.37	3
% Tolerant (8-10):	5.97	5
% Predators FFG 1:	29.85	3
% Shredders + Scrapers FFG 1:	2.99	1
% Collector-Filterers FFG 1:	8.96	5
% Sprawlers:	1.49	1
mIBI Metric Score:		38

Supplemental Metrics

	HBI	Value
	HBI	4.32
Shannon-Weaver Index		2.73
Shannon Equitability		0.85
% Dominant 3 Taxon		47.76
% Chironomidae		22.39

Residuals

Identifier	Date	Count	%PSE
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OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0014	18T-012	MHAB	AB31611	180718504	7/18/18	Dubois
Stream Name		Location		HUC 12	HUOTO14	
Birch Creek		W Portersville Rd		051202081506	05120208170050	
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4260150.99	498220.42	72	11.933	12.798	62	

TAXON	COUNT	NOTES	HBI Tolerance
1396 (LUMBRICULIDAE)	2		5
1498 (Nais)	1		8
2252 (Physella)	1		8
2156 (Corbicula fluminea)	5		6
7011 (Acerpenna pygmaea)	2		2
3066 (Baetis intercalaris)	16		3
3188 (Caenis latipennis)	1		
3397 (Macromia)	1		2
3549 (Enallagma divagans)	2		
3568 (Argia)	1		5
3851 (Berosus peregrinus)	2	females	6
3959 (Helichus lithophilus)	1		
7300 (Dubiraphia vittata)	1	phallus=275um, G15-070	
7295 (Ancyronyx variegatus)	6		4
3432 (Cheumatopsyche)	8		3
9154 (Hydropsyche venularis)	2		3
9218 (Ablabesmyia monilis/rhamp)	1		
7984 (Procladius)	1		7
8083 (Chironomini (Tribe))	1		
8227 (Tanytarsini (Tribe))	2		
9261 (Thienemannimyia grp.)	2		
8099 (Cryptochironomus)	2		5
8211 (Stictochironomus)	2		4
8228 (Cladotanytarsus)	1		4
8235 (Paratanytarsus)	1		4
9238 (Polypedilum (Uresipedilum) flavum)	4		
9241 (Polypedilum (Polypedilum) illinoense grp.)	2		

Type	Value	Metric Score
Total Taxa:	27	3
Total No. Individuals:	71	1
EPT Taxa:	5	3
% Orthocladiinae + Tanytarsini of Chironomidae:	21.05	5
% Non-insects excluding Astacidae:	12.68	5
Diptera Taxa:	11	3
% Intolerant (0-3):	40.85	5
% Tolerant (8-10):	2.82	5
% Predators FFG 1:	9.86	1
% Shredders + Scrapers FFG 1:	4.23	1
% Collector-Filterers FFG 1:	21.13	1
% Sprawlers:	4.23	3
mIBI Metric Score:		36

Supplemental Metrics

HBI	3.96
Shannon-Weaver Index	2.87
Shannon Equitability	0.87
% Dominant 3 Taxon	42.25
% Chironomidae	26.76

Residuals

Identifier	Date	Count	%PSE
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OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0015	18T-014	MHAB	AB31605	180718502	7/18/18	Pike
Stream Name		Location		HUC 12		HUCTO14
Bear Creek		CR 550 N		051202081508		05120208170070
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4261611.82	491229.85	72	8.251	5.005	50	

TAXON	COUNT	NOTES	HBI Tolerance
1265 (Prostoma)	1		
1089 (Helisoma)	1		6
2252 (Physella)	2		8
7011 (Acerpenna pygmaea)	2	G18-114.1	2
3066 (Baetis intercalaris)	9	G18-114.2; pigement pattern faint	3
7026 (Calopteryx maculata)	3		
3549 (Enallagma divagans)	2		
3959 (Helichus lithophilus)	1		
7300 (Dubiraphia vittata)	2	males; phallus~255um; G18-114.3	
7295 (Ancyronyx variegatus)	9		4
3432 (Cheumatopsyche)	14		3
7814 (Simulium)	1		5
9153 (Tribelos)	1		5
9261 (Thienemannimyia grp.)	2		
8099 (Cryptochironomus)	2		5
8112 (Dicrotendipes)	1		6
8179 (Polypedilum)	1		
8235 (Paratanytarsus)	1		4
9238 (Polypedilum (Uresipedilum) flavum)	4		
9241 (Polypedilum (Polypedilum) illinoense grp.)	6		

Type	Value	Metric Score
Total Taxa:	20	1
Total No. Individuals:	65	1
EPT Taxa:	3	1
% Orthocladiinae + Tanytarsini of Chironomidae:	5.56	5
% Non-insects excluding Astacidae:	6.15	5
Diptera Taxa:	9	3
% Intolerant (0-3):	38.46	5
% Tolerant (8-10):	3.08	5
% Predators FFG 1:	10.77	1
% Shredders + Scrapers FFG 1:	6.15	1
% Collector-Filterers FFG 1:	23.08	1
% Sprawlers:	3.08	3
mIBI Metric Score:		32

Supplemental Metrics

	HBI	Value
	HBI	3.74
Shannon-Weaver Index		2.57
Shannon Equitability		0.86
% Dominant 3 Taxon		49.23
% Chironomidae		27.69

Residuals

Identifier	Date	Count	%PSE



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0016	18T-015	MHAB	AB31606	180718501	7/18/18	Pike
Stream Name		Location		HUC 12		HUCTO14
Beech Creek		CR 550 N		051202081508		05120208170070
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4261593.27	488749.1	72	13.793	2.998	41	

TAXON	COUNT	NOTES	HBI Tolerance
2252 (Physella)	1		8
1083 (ACARI)	3		4
9036 (Caecidotea)	8		8
3049 (Stenacron interpunctatum)	3	G18-109	7
3188 (Caenis latipennis)	1		
3542 (Ischnura posita)	1		
3546 (Enallagma)	1	gill pattern indistinct	9
3549 (Enallagma divagans)	5		
3551 (Enallagma exsulans)	1		
3568 (Argia)	2	no gills	5
7201 (Trichocorixa calva)	2	males	4
7208 (Belostoma flumineum)	1	male with eggs	4
3872 (Tropisternus)	1	larva	
7295 (Ancyronyx variegatus)	5		4
7984 (Procladius)	1		7
9284 (Tribelos jucundus)	1		
8086 (Chironomus)	7		8
8099 (Cryptochironomus)	1		5
8112 (Dicrotendipes)	13		6
8126 (Glyptotendipes)	1		6
8235 (Paratanytarsus)	1		4
8241 (Tanytarsus)	1		4
9277 (Polypedilum (Tripodura) scalaenum grp)	1		
9278 (Polypedilum (Tripodura) halterale-simulans grp)	1		
9241 (Polypedilum (Polypedilum) illinoense grp.)	11		

Type	Value	Metric Score
Total Taxa:	25	3
Total No. Individuals:	74	1
EPT Taxa:	2	3
% Orthocladiinae + Tanytarsini of Chironomidae:	5.13	5
% Non-insects excluding Astacidae:	16.22	5
Diptera Taxa:	11	3
% Intolerant (0-3):	0	1
% Tolerant (8-10):	22.97	3
% Predators FFG 1:	20.27	3
% Shredders + Scrapers FFG 1:	1.35	1
% Collector-Filterers FFG 1:	2.7	5
% Sprawlers:	2.7	1
mIBI Metric Score:		34

Supplemental Metrics

	HBI	
	6.2	
Shannon-Weaver Index		2.74
Shannon Equitability		0.85
% Dominant 3 Taxon		43.24
% Chironomidae		52.7

Residuals

Identifier	Date	Count	%PSE



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0017	18T-017	MHAB	AB31608	180719501	7/19/18	Pike
Stream Name		Location		HUC 12		HUCTO14
Mud Creek		CR 725 N		051202081509		05120208170090
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4264335.12	480843.57	72	8.425	16.587	51	

TAXON	COUNT	NOTES	HBI Tolerance
2252 (Physella)	1		8
8996 (Orconectes)	1		4
7011 (Acerpenna pygmaea)	6	G18-105.2	2
3066 (Baetis intercalaris)	11		3
9347 (Proclleon viridoculare)	2	G18-105.1	
3188 (Caenis latipennis)	23		
3248 (Basiaeschna janata)	1		6
3397 (Macromia)	5		2
3546 (Enallagma)	1	no gills	9
3568 (Argia)	3		5
1041 (CORIXIDAE)	2	nymphs	5
7201 (Trichocorixa calva)	1	male	4
7111 (Rheumatobates)	1	female	
7307 (Stenelmis)	1	female	5
9266 (Stenelmis grossa)	1	male; G18-105.3	
1057 (HYDROPSYCHIDAE)	1	very small instar	4
3432 (Cheumatopsyche)	5		3
3477 (Hydropsyche cuanis)	1		
9154 (Hydropsyche venularis)	1		3
7732 (Anopheles)	1		
7814 (Simulium)	1		5
1073 (CHIRONOMIDAE(all other))	1	lost voucher	6
7964 (Labrundinia pilosella)	1		3
7984 (Procladius)	3		7
8227 (Tanytarsini (Tribe))	1		
9248 (Ablabesmyia (Ablabesmyia) mallochi grp.)	1		
8006 (Orthocladiinae (Subfamily))	1		
8099 (Cryptochironomus)	2		5
8104 (Cryptotendipes)	1		4
8112 (Dicrotendipes)	7		6
8126 (Glyptotendipes)	1		6
8206 (Stenochironomus)	1		4
8235 (Paratanytarsus)	1		4
8241 (Tanytarsus)	6		4
9238 (Polypedilum (Uresipedilum) flavum)	2		
9241 (Polypedilum (Polypedilum) illinoense grp.)	1		

Type	Value	Metric Score
Total Taxa:	36	3
Total No. Individuals:	100	1
EPT Taxa:	8	5
% Orthocladiinae + Tanytarsini of Chironomidae:	30	3
% Non-insects excluding Astacidae:	2	5
Diptera Taxa:	17	5
% Intolerant (0-3):	29	3
% Tolerant (8-10):	2	5
% Predators FFG 1:	20	3
% Shredders + Scrapers FFG 1:	3	1
% Collector-Filterers FFG 1:	17	3
% Sprawlers:	5	3
mIBI Metric Score:		40

Supplemental Metrics

	HBI	Value
	HBI	4.11
Shannon-Weaver Index		2.99
Shannon Equitability		0.83
% Dominant 3 Taxon		41
% Chironomidae		30

Residuals



OWQ/WAPB Macroinvertebrate Community Assessment
MHAB Report

Identifier	Date	Count	%PSE
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OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0018	18T-008	MHAB	AB31599	180724501	7/24/18	Davies
Stream Name		Location		HUC 12		HUCTO14
Sugar Cr		CR 600 S		051202081504		05120208170040
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4268784.01	503457.7	72	13.396	6.348	56	

TAXON	COUNT	NOTES	HBI Tolerance
1426 (Branchiura sowerbyi)	1		6
1552 (Tubificidae with bifid chetae and no hair chetae)	1		
2252 (Physella)	3		8
1083 (ACARI)	1		4
9036 (Caecidotea)	6		8
9001 (Orconectes immunis)	1	1M	
3020 (Stenonema femoratum)	1		3
3049 (Stenacron interpunctatum)	1	slide R18-067.1	7
3188 (Caenis latipennis)	28		
3448 (Somatochlora)	3		1
7026 (Calopteryx maculata)	2		
3600 (Peltodytes duodecimpunctatus)	1		
3872 (Tropisternus)	1	1L	
3879 (Enochrus)	1	1L	
3432 (Cheumatopsyche)	15		3
1054 (HYDROPTILIDAE)	2	pupa stage - Hydroptila (?)	4
9117 (CRAMBIDAE)	1	1L	
7732 (Anopheles)	1		
9248 (Ablabesmyia (Ablabesmyia) mallochi grp.)	1		
8086 (Chironomus)	2		8
8099 (Cryptochironomus)	1		5
8112 (Dicrotendipes)	2		6
8211 (Stictochironomus)	19		4
9238 (Polypedilum (Uresipedilum) flavum)	1		
9241 (Polypedilum (Polypedilum) illinoense grp.)	2		
8274 (Stratiomys)	1		

Type	Value	Metric Score
Total Taxa:	26	3
Total No. Individuals:	99	1
EPT Taxa:	5	3
% Orthocladiinae + Tanytarsini of Chironomidae:	0	5
% Non-insects excluding Astacidae:	13.13	5
Diptera Taxa:	9	3
% Intolerant (0-3):	19.19	3
% Tolerant (8-10):	11.11	5
% Predators FFG 1:	6.06	1
% Shredders + Scrapers FFG 1:	5.05	1
% Collector-Filterers FFG 1:	17.17	3
% Sprawlers:	2.02	1
mIBI Metric Score:		34

Supplemental Metrics

	HBI	
	4.51	
Shannon-Weaver Index		2.43
Shannon Equitability		0.75
% Dominant 3 Taxon		62.63
% Chironomidae		28.28

Residuals

Identifier	Date	Count	%PSE
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OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0020	18T-018	MHAB	AB31609	180813501	8/13/18	Pike
Stream Name		Location		HUC 12		HUCTO14
East Fork White River		SR 57		051202081509		05120208170090
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4265623.37	480556.14	72	1.031	5740.802	54	

TAXON	COUNT	NOTES	HBI Tolerance
1426 (Branchiura sowerbyi)	1		6
2252 (Physella)	1		8
8996 (Orconectes)	2		4
1251 (ISOTOMIDAE)	1		
3381 (Pseudocloeon dardanus)	2	mouth parts on G18-081.2 and G18-081.3	2
9347 (Proclaeon viridoculare)	4	mouth parts on G18-081.1	
3202 (Hexagenia)	5		4
3175 (Tricorythodes)	1		3
1021 (GOMPHIDAE)	4	multiple instars	1
3129 (Stylurus)	2		4
9352 (Stenogomphus)	6	*check genus	
3569 (Argia apicalis)	2		
1041 (CORIXIDAE)	12	nymphs	5
7202 (Trichocorixa kanza)	1	male	4
3799 (Corydalus cornutus)	1		2
1073 (CHIRONOMIDAE(all other))	1		6
8083 (Chironomini (Tribe))	74	1 pupa (in alcohol) + 74 slide mounted larvae- including many planctonic instars	
8086 (Chironomus)	2		8
8126 (Glyptotendipes)	121		6
8179 (Polypedilum)	1		
8238 (Rheotanytarsus)	4		3
9278 (Polypedilum (Tripodura halterale-simulans grp)	2		
9238 (Polypedilum (Uresipedilum) flavum)	1		
9241 (Polypedilum (Polypedilum) illinoense grp.)	9		

Type	Value	Metric Score
Total Taxa:	24	3
Total No. Individuals:	260	5
EPT Taxa:	4	1
% Orthocladiinae + Tanytarsini of Chironomidae:	1.86	5
% Non-insects excluding Astacidae:	1.54	5
Diptera Taxa:	9	3
% Intolerant (0-3):	4.62	1
% Tolerant (8-10):	1.15	5
% Predators FFG 1:	6.92	1
% Shredders + Scrapers FFG 1:	0.77	1
% Collector-Filterers FFG 1:	48.46	1
% Sprawlers:	0	1
mIBI Metric Score:		32

Supplemental Metrics

	HBI	
	5.54	
Shannon-Weaver Index		1.74
Shannon Equitability		0.55
% Dominant 3 Taxon		79.62
% Chironomidae		82.69

Residuals

Identifier	Date	Count	%PSE
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OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0021	18T-003	MHAB	AB31594	180717502	7/17/18	Daviess
Stream Name		Location		HUC 12		HUCTO14
Tributary of Slate Creek		CR 800 S		051202081503		05120208170030
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4265684.18	505881.64	71	4.554	2.742	38	

TAXON	COUNT	NOTES	HBI Tolerance
2252 (Physella)	13		8
9001 (Orconectes immunis)	1		
3020 (Stenonema femoratum)	1		3
3049 (Stenacron interpunctatum)	4	slide R18-036.2	7
3083 (Callibaetis floridanus)	5	slide R18-036.1	
3188 (Caenis latipennis)	28		
1020 (LIBELLULIDAE)	2	very small instars	9
3549 (Enallagma divagans)	17		
9095 (Argia fumipennis)	2		
1039 (BELOSTOMATIDAE)	1	small instar	
7106 (Limnopus)	1		
3600 (Peltodytes duodecimpunctatus)	16	16A	
3604 (Peltodytes sexmaculatus)	3	3A	
7295 (Ancyronyx variegatus)	1	1A	4
7984 (Procladius)	1		7
7926 (Tanypodinae (Subfamily))	1	pupa	
8099 (Cryptochironomus)	1		5
8112 (Dicrotendipes)	2		6
8211 (Stictochironomus)	28		4
9277 (Polypedilum (Tripodura) scalaenum grp)	1	can't see antennae	

Type	Value	Metric Score
Total Taxa:	20	1
Total No. Individuals:	129	3
EPT Taxa:	4	5
% Orthocladiinae + Tanytarsini of Chironomidae:	0	5
% Non-insects excluding Astacidae:	10.85	5
Diptera Taxa:	6	1
% Intolerant (0-3):	0.78	1
% Tolerant (8-10):	11.63	5
% Predators FFG 1:	20.16	3
% Shredders + Scrapers FFG 1:	10.08	3
% Collector-Filterers FFG 1:	0	5
% Sprawlers:	1.55	1
mIBI Metric Score:		38

Supplemental Metrics

Residuals

Identifier	Date	Count	%PSE

Metric	HBI
HBI	5.53
Shannon-Weaver Index	2.27
Shannon Equitability	0.76
% Dominant 3 Taxon	56.59
% Chironomidae	26.36



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL-15-0022	18T-009	MHAB	AB31600	180723505	7/23/18	Davies
Stream Name		Location		HUC 12		HUCTO14
West Fork Sugar Creek		CR 700 S		051202081504		05120208170040
Northing	Eastng	Ecoregion	Gradient	Drainage Area	QHEI Score	
4267310.17	500631.8	72	9.747	4.949	44	

TAXON	COUNT	NOTES	HBI Tolerance
1396 (LUMBRICULIDAE)	1		5
2252 (Physella)	3		8
1083 (ACARI)	3		4
9036 (Caecidotea)	1		8
9050 (Hyalella)	1		
8996 (Orconectes)	1	1F	4
3020 (Stenonema femoratum)	1		3
3376 (Pseudocentoptiloides)	1	slide R18-035.5	
3188 (Caenis latipennis)	31		
3206 (Hexagenia limbata)	1		3
3245 (Boyeria vinosa)	7		4
3118 (Progomphus)	1		
7026 (Calopteryx maculata)	2		
3549 (Enallagma divagans)	2		
3552 (Enallagma signatum)	1		
3572 (Argia tibialis)	7		
3600 (Peltodytes duodecimpunctatus)	1		
3891 (Cymbiodyta vindicata)	1	1A	
7308 (Stenelmis bicarinata)	5	4F, 1M slide R18-035.6	5
7309 (Stenelmis crenata)	9	6M, 3F; slide R18-035.1,2,4	5
7296 (Dubiraphia)	5	4F, 1L	5
7300 (Dubiraphia vittata)	4	PE 2.3mm, genitalia 270um, slide R18-034.3	
7984 (Procladius)	1		7
8112 (Dicrotendipes)	2		6
8168 (Paratendipes albimanus)	1		4
8211 (Stictochironomus)	12		4
8235 (Paratanytarsus)	1		4
8241 (Tanytarsus)	1		4

Type	Value	Metric Score
Total Taxa:	28	3
Total No. Individuals:	107	1
EPT Taxa:	4	5
% Orthocladiinae + Tanytarsini of Chironomidae:	11.11	5
% Non-insects excluding Astacidae:	9.35	5
Diptera Taxa:	6	1
% Intolerant (0-3):	1.87	1
% Tolerant (8-10):	3.74	5
% Predators FFG 1:	19.63	3
% Shredders + Scrapers FFG 1:	15.89	3
% Collector-Filterers FFG 1:	0.93	5
% Sprawlers:	0.93	1
mIBI Metric Score:		38

Supplemental Metrics

	HBI	
	4.75	
Shannon-Weaver Index		2.66
Shannon Equitability		0.8
% Dominant 3 Taxon		48.6
% Chironomidae		16.82

Residuals

Identifier	Date	Count	%PSE



OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL170-0008	18T-016	MHAB	AB31607	180723501	7/23/18	Davies

Stream Name	Location	HUC 12	HUOTO14
Aikman Creek	Alex Hill Rd	051202081507	05120208170080

Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score
4269179.76	485423.55	72	4.05	27.02	44

TAXON	COUNT	NOTES	HBI Tolerance
1085 (TUBIFICIDAE)	1	with no hair chetae	10
1426 (Branchiura sowerbyi)	2		6
1234 (GLOSSIPHONIIDAE)	3	two species	
1208 (ANCYLIDAE)	1	no shell	6
1087 (Ferrissia)	1		6
2156 (Corbicula fluminea)	1		6
2181 (Sphaerium)	2	one is tiny	6
8996 (Orconectes)	4		4
3049 (Stenacron interpunctatum)	12	mouth parts on slide G18-062.1	7
9347 (Procloeon viridoculare)	1		
3188 (Caenis latipennis)	22		
1021 (GOMPHIDAE)	1	small instar	1
3397 (Macromia)	1		2
3549 (Enallagma divagans)	1		
3568 (Argia)	1	small instar	5
3572 (Argia tibialis)	6		
1096 (SCIRTIDAE)	4	larvae	5
7309 (Stenelmis crenata)	4	females	5
7300 (Dubiraphia vittata)	1	phallus~275um long; see G18-062.2; one male + one female	
7295 (Ancyronyx variegatus)	1		4
7984 (Procladius)	8		7
8083 (Chironomini (Tribe))	1		
8227 (Tanytarsini (Tribe))	1		
9248 (Ablabesmyia (Ablabesmyia) mallochi grp.)	5		
9284 (Tribelos jucundus)	11		
8086 (Chironomus)	3		8
8099 (Cryptochironomus)	1		5
8104 (Cryptotendipes)	1		4
8112 (Dicrotendipes)	4		6
8168 (Paratendipes albimanus)	1		4
8241 (Tanytarsus)	1		4
9277 (Polypedilum (Tripodura) scalaenum grp)	1		
9278 (Polypedilum (Tripodura) halterale-simulans grp)	1		
9241 (Polypedilum (Polypedilum) illinoense grp.)	3		

Type	Value	Metric Score
Total Taxa:	34	3
Total No. Individuals:	112	1
EPT Taxa:	3	1
% Orthocladiinae + Tanytarsini of Chironomidae:	4.76	5
% Non-insects excluding Astacidae:	13.39	5
Diptera Taxa:	14	5
% Intolerant (0-3):	1.79	1
% Tolerant (8-10):	3.57	5
% Predators FFG 1:	18.75	3
% Shredders + Scrapers FFG 1:	8.93	1
% Collector-Filterers FFG 1:	4.46	5
% Sprawlers:	8.04	5
mIBI Metric Score:		40

Supplemental Metrics

HBI	5.91
Shannon-Weaver Index	2.98
Shannon Equitability	0.85
% Dominant 3 Taxon	40.18
% Chironomidae	37.5



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Residuals

Identifier	Date	Count	%PSE
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OWQ/WAPB Macroinvertebrate Community Assessment MHAB Report

Site Name	EPA ID	Macro Sample Type	Sample #	Macro Event #	Sample Date	County
WEL170-0008	18T-016	MHAB	AB31612	180723502	7/23/18	Daviess
Stream Name		Location		HUC 12	HUOTO14	
Aikman Creek		Alex Hill Rd		051202081507	05120208170080	
Northing	Easting	Ecoregion	Gradient	Drainage Area	QHEI Score	
4269179.76	485423.55	72	4.05	27.02	44	

TAXON	COUNT	NOTES	HBI Tolerance
1086 (OLIGOCHAETA)	1		8
1396 (LUMBRICULIDAE)	1		5
1233 (ERPOBDELLIDAE)	3		
1090 (Physa)	1		8
2156 (Corbicula fluminea)	3		6
1083 (ACARI)	1		4
8996 (Orconectes)	5	2MII, 3F	4
3049 (Stenacron interpunctatum)	12		7
3183 (Caenis)	11		3
3188 (Caenis latipennis)	34		
3099 (Hagenius brevistylus)	1		1
3397 (Macromia)	1		2
3572 (Argia tibialis)	7		
7201 (Trichocorixa calva)	1	1F	4
3890 (Cymbiodyta)	1	1A	
1096 (SCIRTIDAE)	3	3L	5
7307 (Stenelmis)	3	2F, 1L	5
7300 (Dubiraphia vittata)	5	5A; SLIDE T18-064.1, 275um	
7295 (Ancyronyx variegatus)	2	2A	4
8083 (Chironomini (Tribe))	3	1 PUPA	
9248 (Ablabesmyia (Ablabesmyia) mallochi grp.)	3		
9284 (Tribelos jucundus)	5		
8099 (Cryptochironomus)	2		5
8104 (Cryptotendipes)	2		4
8112 (Dicrotendipes)	4		6
8235 (Paratanytarsus)	1		4
8241 (Tanytarsus)	1		4
9277 (Polypedilum (Tripodura) scalaenum grp)	1		
9278 (Polypedilum (Tripodura) halterale-simulans grp)	1		
9241 (Polypedilum (Polypedilum) illinoense grp.)	3		

Type	Value	Metric Score
Total Taxa:	30	3
Total No. Individuals:	122	1
EPT Taxa:	3	1
% Orthocladiinae + Tanytarsini of Chironomidae:	7.69	5
% Non-insects excluding Astacidae:	12.3	5
Diptera Taxa:	11	3
% Intolerant (0-3):	10.66	1
% Tolerant (8-10):	1.64	5
% Predators FFG 1:	12.3	1
% Shredders + Scrapers FFG 1:	5.74	1
% Collector-Filterers FFG 1:	3.28	5
% Sprawlers:	1.64	1
mIBI Metric Score:		32

Supplemental Metrics

	HBI	Value
	HBI	4.91
Shannon-Weaver Index		2.78
Shannon Equitability		0.82
% Dominant 3 Taxon		46.72
% Chironomidae		21.31

Residuals

Identifier	Date	Count	%PSE