



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190040 **LSite:** WBU-18-0004
Site: Maria Creek **Location:** N Old 41 **County:** Knox
Latitude: 38.773466 **Longitude:** -87.472764 **IASNat Region:** 8 **Topo:** H-49 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 90.629 **Gradient (ft/mile):** 3.217

Sample Information

SampleNumber: AB42669 **EventID:** 20T001 **Sample MediumCollected:** Fish Community + Water
SampleDate: 07/07/2020 **SurveyCrewChief:** RAC **SampleTime:** 12:31:00 PM **HydroLabNumber:** P5
WaterFlowType: Run **WaterAppearance:** Murky **SkyConditions:** 2 - Scattered **AirTemperature:** 6 - > 86
WindDirection: 27 - West (270 degrees) **WindStrength:** 1 - Light
DissolvedO2 (mg/l): 6.39 **pH:** 7.84 **WaterTemp(°C):** 27.8 **SpecificConductivity (µS/cm):** 630 **Turbidity (NTU):** 8.08
SpecialNotes:

ElectrofishingEquipment: Canoe **Voltage:** 200 **Avg.StreamWidth(m):** 13 **DistanceFished (m):** 195
SecondsFished: 1448 **WaterDepthAvg (m):** .4 **WaterDepthMax (m):** 2 **TimeAtSite:** 03:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments: w/MLES

Habitat Information

TotalScore (max100): 66 **SubstrateScore (max20):** 10 **InstreamCover Score (max20):** 13 **ChannelMorphologyScore (max20):** 15
RiparianZoneBankErosion Score(max10): 9 **Pool/GlideQualityScore(max12):** 10 **Riffle/RunQualityScore(max8):** 3
GradientScore (max10): 6 **%Pool:** 35 **%Riffle:** 15 **%Run:** 50 **%Glide:** 0 **CanopyCover PctOpen:** 30%-<55%
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

	<u>Actual</u>	<u>Metric</u>
	<u>Observation</u>	<u>Score</u>
SpeciesCount:	24	5
SunfishSpeciesCount:	5	5
MinnowSpeciesCount:	8	5
SuckerSpeciesCount:	0	1
SensitiveSpeciesCount:	5	5

Calibration Used:

	<u>Actual</u>	<u>Metric</u>
	<u>Observation</u>	<u>Score</u>
%TolerantIndividuals:	12.93	5
%OmnivoreIndividuals:	18.37	3
%InsectivoreIndividuals:	74.15	5
%CarnivoreIndividuals:	6.8	1
Total # of Individuals (CPUE):	147	3
%SimpleLithophilicInd.:	29.25	5
%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	48
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SampleNumber: AB42669

EventID: 20T001

LSite: WBU-18-0004

County: Knox

StreamName: Maria Creek

LocationDescription: N Old 41

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluegill	2					
Bluntnose Minnow	9					
Bullhead Minnow	1					
Channel Catfish	5					
Creek Chub	1					
Dusky Darter	15					
Emerald Shiner	7					
Gizzard Shad	3					
Green Sunfish	1					
Johnny Darter	3					
Longear Sunfish	11					
Mississippi Silvery Minnow	15					
Mud Darter	10					
Orangespotted Sunfish	1					
Pirate Perch	2					
Redear Sunfish	1					
Sand Shiner	13					
Slough Darter	11					
Smallmouth Bass	1					
Spotfin Shiner	24					
Spotted Bass	3					
Spotted Gar	1					
Suckermouth Minnow	6					
Western Mosquitofish	1					



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Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190040 **LSite:** WBU-18-0006
Site: Cotton Branch **Location:** E Springtown Road **County:** Knox
Latitude: 38.804843 **Longitude:** -87.436835 **IASNat Region:** 7A **Topo:** H-49 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 3.133 **Gradient (ft/mile):** 9.645

Sample Information

SampleNumber: AB42670 **EventID:** 20T003 **Sample MediumCollected:** Fish Community + Water
SampleDate: 07/08/2020 **SurveyCrewChief:** RAC **SampleTime:** 11:40:00 AM **HydroLabNumber:** P5
WaterFlowType: Run **WaterAppearance:** Clear **SkyConditions:** 2 - Scattered **AirTemperature:** 6 - > 86
WindDirection: 27 - West (270 degrees) **WindStrength:** 2 - Mod./Light
DissolvedO2 (mg/l): 7.87 **pH:** 8.04 **WaterTemp(°C):** 20.8 **SpecificConductivity (µS/cm):** 558 **Turbidity (NTU):** 5.27
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 200 **Avg.StreamWidth(m):** 3 **DistanceFished (m):** 50
SecondsFished: 199 **WaterDepthAvg (m):** .3 **WaterDepthMax (m):** 1.1 **TimeAtSite:** 01:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments:

Habitat Information

TotalScore (max100): 65 **SubstrateScore (max20):** 10 **InstreamCover Score (max20):** 13 **ChannelMorphologyScore (max20):** 14
RiparianZoneBankErosion Score(max10): 9 **Pool/GlideQualityScore(max12):** 11 **Riffle/RunQualityScore(max8):** 2
GradientScore (max10): 6 **%Pool:** 50 **%Riffle:** 10 **%Run:** 40 **%Glide:** **CanopyCover PctOpen:** 10%-<30%
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	11	5	%TolerantIndividuals:	45.95	3
SunfishSpeciesCount:	2	3	%OmnivoreIndividuals:	10.81	5
MinnnowSpeciesCount:	6	5	%InsectivoreIndividuals:	54.05	5
SuckerSpeciesCount:	1	1	%PioneerIndividuals:	54.05	3
SensitiveSpeciesCount:	2	5	Total # of Individuals (CPUE):	37	1
			%SimpleLithophilicInd.:	5.41	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	42
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SampleNumber: AB42670

EventID: 20T003

LSite: WBU-18-0006

County: Knox

StreamName: Cotton Branch

LocationDescription: E Springtown Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluntnose Minnow	2					
Creek Chub	13					
Green Sunfish	1					
Johnny Darter	2					
Longear Sunfish	5					
Mississippi Silvery Minnow	1					
Sand Shiner	1					
Silverjaw Minnow	2					
Slough Darter	4					
Spotfin Shiner	5					
White Sucker	1					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190040 **LSite:** WBU-18-0007
Site: Maria Creek **Location:** N Perry Road **County:** Knox
Latitude: 38.811320 **Longitude:** -87.417867 **IASNat Region:** 7A **Topo:** H-49 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 78.969 **Gradient (ft/mile):** 1.971

Sample Information

SampleNumber: AB42671 **EventID:** 20T004 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/22/2020 **SurveyCrewChief:** KJC **SampleTime:** 01:36:00 PM **HydroLabNumber:** P8
WaterFlowType: Glide **WaterAppearance:** Clear **SkyConditions:** 2 - Scattered **AirTemperature:** 6 - > 86
WindDirection: 27 - West (270 degrees) **WindStrength:** 0 - Calm
DissolvedO2 (mg/l): 13.44 **pH:** 8.24 **WaterTemp(°C):** 26.4 **SpecificConductivity (µS/cm):** 797 **Turbidity (NTU):** 5.49
SpecialNotes:

ElectrofishingEquipment: Canoe **Voltage:** 185 **Avg.StreamWidth(m):** 11 **DistanceFished (m):** 165
SecondsFished: 538 **WaterDepthAvg (m):** .3 **WaterDepthMax (m):** .6 **TimeAtSite:** 02:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments: MLES in canoe

Habitat Information

TotalScore (max100): 30 **SubstrateScore (max20):** 9 **InstreamCover Score (max20):** 4 **ChannelMorphologyScore (max20):** 6
RiparianZoneBankErosion Score(max10): 3 **Pool/GlideQualityScore(max12):** 4 **Riffle/RunQualityScore(max8):** 0
GradientScore (max10): 4 **%Pool:** 0 **%Riffle:** 0 **%Run:** 0 **%Glide:** 100 **CanopyCover PctOpen:** 55%-<85%
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	12	3	%TolerantIndividuals:	19.05	1
SunfishSpeciesCount:	2	3	%OmnivoreIndividuals:	4.76	1
MinnnowSpeciesCount:	3	1	%InsectivoreIndividuals:	78.57	1
SuckerSpeciesCount:	0	1	%CarnivoreIndividuals:	16.67	1
SensitiveSpeciesCount:	2	1	Total # of Individuals (CPUE):	42	1
			%SimpleLithophilicInd.:	0	1
			%Ind.withDELT:	0	1

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	16
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SampleNumber: AB42671

EventID: 20T004

LSite: WBU-18-0007

County: Knox

StreamName: Maria Creek

LocationDescription: N Perry Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	2					
Bluegill	2					
Bluntnose Minnow	2					
Channel Catfish	5					
Longear Sunfish	20					
Mud Darter	1					
Sand Shiner	1					
Spotfin Shiner	3					
Spotted Bass	1					
Spotted Gar	1					
Western Mosquitofish	3					
Yellow Bullhead	1					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190020 **LSite:** WBU-18-0008
Site: Maria Creek **Location:** N Risley Road **County:** Knox
Latitude: 38.822774 **Longitude:** -87.391656 **IASNat Region:** 7A **Topo:** H-49 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 49.206 **Gradient (ft/mile):** 1.971

Sample Information

SampleNumber: AB42672 **EventID:** 20T005 **Sample MediumCollected:** Fish Community + Water
SampleDate: 08/18/2020 **SurveyCrewChief:** KRW **SampleTime:** 10:30:00 AM **HydroLabNumber:** P5
WaterFlowType: Run **WaterAppearance:** Murky **SkyConditions:** 3 - Partly **AirTemperature:** 5 - 76-85
WindDirection: 27 - West (270 degrees) **WindStrength:** 1 - Light
DissolvedO2 (mg/l): 5.86 **pH:** 7.72 **WaterTemp(°C):** 23.6 **SpecificConductivity (µS/cm):** 548 **Turbidity (NTU):** 43.9
SpecialNotes: Site always very turbid.

ElectrofishingEquipment: Canoe **Voltage:** 265 **Avg.StreamWidth(m):** 11 **DistanceFished (m):** 165
SecondsFished: 950 **WaterDepthAvg (m):** .7 **WaterDepthMax (m):** 1 **TimeAtSite:** 02:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments: w/MLES

Habitat Information

TotalScore (max100): 32 **SubstrateScore (max20):** 6 **InstreamCover Score (max20):** 6 **ChannelMorphologyScore (max20):** 7
RiparianZoneBankErosion Score(max10): 3 **Pool/GlideQualityScore(max12):** 6 **Riffle/RunQualityScore(max8):** 0
GradientScore (max10): 4 **%Pool:** 40 **%Riffle:** 0 **%Run:** 60 **%Glide:** 0 **CanopyCover PctOpen:** 55%<85%
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	21	5	%TolerantIndividuals:	21.62	5
SunfishSpeciesCount:	3	3	%OmnivoreIndividuals:	15.14	3
MinnnowSpeciesCount:	5	3	%InsectivoreIndividuals:	80.54	5
SuckerSpeciesCount:	4	5	%CarnivoreIndividuals:	4.32	1
SensitiveSpeciesCount:	6	5	Total # of Individuals (CPUE):	185	3
			%SimpleLithophilicInd.:	1.62	1
			%Ind.withDELT:	1.08	3

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	42
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SampleNumber: AB42672

EventID: 20T005

LSite: WBU-18-0008

County: Knox

StreamName: Maria Creek

LocationDescription: N Risley Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	2					
Bluegill	22					
Bluntnose Minnow	19					
Brook Silverside	4					
Common Carp	2					
Emerald Shiner	28					
Gizzard Shad	5					
Golden Redhorse	1		1			
Green Sunfish	8					
Greenside Darter	1					
Johnny Darter	1					
Longear Sunfish	49					
Longnose Gar	1					
Quillback	1	1				
River Carpsucker	1					
Sand Shiner	2					
Shortnose Gar	3					
Silver Redhorse	2					
Spotfin Shiner	28					
Spotted Bass	4					
Western Mosquitofish	1					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190020 **LSite:** WBU-18-0009
Site: Tilley Ditch **Location:** E Pepmeir Road **County:** Knox
Latitude: 38.835159 **Longitude:** -87.363200 **IASNat Region:** 7B **Topo:** H-50 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 9.299 **Gradient (ft/mile):** 4.379

Sample Information

SampleNumber: AB42673 **EventID:** 20T006 **Sample MediumCollected:** Fish Community + Water
SampleDate: 07/08/2020 **SurveyCrewChief:** RAC **SampleTime:** 09:50:00 AM **HydroLabNumber:** P5
WaterFlowType: Pool **WaterAppearance:** Clear **SkyConditions:** 1 - Clear **AirTemperature:** 6 - > 86
WindDirection: 27 - West (270 degrees) **WindStrength:** 0 - Calm
DissolvedO2 (mg/l): 8.22 **pH:** 7.75 **WaterTemp(°C):** 22.1 **SpecificConductivity (µS/cm):** 558 **Turbidity (NTU):** 6.43
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 200 **Avg.StreamWidth(m):** 3 **DistanceFished (m):** 50
SecondsFished: 397 **WaterDepthAvg (m):** .4 **WaterDepthMax (m):** .7 **TimeAtSite:** 01:30
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments:

Habitat Information

TotalScore (max100): 38 **SubstrateScore (max20):** 12 **InstreamCover Score (max20):** 8 **ChannelMorphologyScore (max20):** 8
RiparianZoneBankErosion Score(max10): 5 **Pool/GlideQualityScore(max12):** 5 **Riffle/RunQualityScore(max8):** 0
GradientScore (max10): 0 **%Pool:** 40 **%Riffle:** **%Run:** 60 **%Glide:** **CanopyCover >85%-PctOpen:** Open
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	14	5	%TolerantIndividuals:	36.21	3
SunfishSpeciesCount:	2	3	%OmnivoreIndividuals:	39.66	1
MinnowSpeciesCount:	5	5	%InsectivoreIndividuals:	55.17	5
SuckerSpeciesCount:	1	1	%PioneerIndividuals:	39.66	3
SensitiveSpeciesCount:	2	5	Total # of Individuals (CPUE):	58	1
			%SimpleLithophilicInd.:	20.69	5
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	42
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SampleNumber: AB42673

EventID: 20T006

LSite: WBU-18-0009

County: Knox

StreamName: Tilley Ditch

LocationDescription: E Pepmeir Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	2					
Bluntnose Minnow	11					
Central Stoneroller	3					
Emerald Shiner	1					
Green Sunfish	2					
Greenside Darter	2					
Johnny Darter	7					
Longear Sunfish	11					
Mississippi Silvery Minnow	7					
Pirate Perch	2					
Spotfin Shiner	1					
Tadpole Madtom	1					
White Sucker	5					
Yellow Bullhead	3					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190020 **LSite:** WBU-18-0010
Site: Tributary of Maria Creek **Location:** County Road 700 E, Lane Road **County:** Knox
Latitude: 38.854910 **Longitude:** -87.334256 **IASNat Region:** 7B **Topo:** H-50 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 2.623 **Gradient (ft/mile):** 9.923

Sample Information

SampleNumber: AB42674 **EventID:** 20T007 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/22/2020 **SurveyCrewChief:** KJC **SampleTime:** 10:54:00 AM **HydroLabNumber:** P8
WaterFlowType: Glide **WaterAppearance:** Clear **SkyConditions:** 2 - Scattered **AirTemperature:** 6 - > 86
WindDirection: 27 - West (270 degrees) **WindStrength:** 2 - Mod./Light
DissolvedO2 (mg/l): 14.62 **pH:** 8.25 **WaterTemp(°C):** 23.9 **SpecificConductivity (µS/cm):** 638 **Turbidity (NTU):** 5.41
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 150 **Avg.StreamWidth(m):** 3 **DistanceFished (m):** 50
SecondsFished: 298 **WaterDepthAvg (m):** .2 **WaterDepthMax (m):** .5 **TimeAtSite:** 01:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments:

Habitat Information

TotalScore (max100): 46 **SubstrateScore (max20):** 11 **InstreamCover Score (max20):** 8 **ChannelMorphologyScore (max20):** 10
RiparianZoneBankErosion Score(max10): 3 **Pool/GlideQualityScore(max12):** 6 **Riffle/RunQualityScore(max8):** 2
GradientScore (max10): 6 **%Pool:** 10 **%Riffle:** 10 **%Run:** 10 **%Glide:** 70 **CanopyCover PctOpen:** 55%-<85%
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	13	5	%TolerantIndividuals:	43.4	3
SunfishSpeciesCount:	3	3	%OmnivoreIndividuals:	28.77	3
MinnnowSpeciesCount:	7	5	%InsectivoreIndividuals:	27.83	3
SuckerSpeciesCount:	0	1	%PioneerIndividuals:	78.3	1
SensitiveSpeciesCount:	1	5	Total # of Individuals (CPUE):	212	5
			%SimpleLithophilicInd.:	3.77	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	40
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SampleNumber: AB42674

EventID: 20T007

LSite: WBU-18-0010

County: Knox

StreamName: Tributary of Maria Creek

LocationDescription: County Road 700 E, Lane Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	16					
Bluegill	1					
Bluntnose Minnow	59					
Central Stoneroller	66					
Creek Chub	26					
Green Sunfish	2					
Johnny Darter	5					
Longear Sunfish	13					
Mississippi Silvery Minnow	2					
Redfin Shiner	3					
Silverjaw Minnow	8					
Suckermouth Minnow	6					
Yellow Bullhead	5					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190020 **LSite:** WBU-18-0011
Site: Tributary of Maria Creek **Location:** County Road 900 N, E Lower Freelandville Road **County:** Knox
Latitude: 38.858259 **Longitude:** -87.360084 **IASNat Region:** 7B **Topo:** H-50 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 3.055 **Gradient (ft/mile):** 12.542

Sample Information

SampleNumber: AB42675 **EventID:** 20T008 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/22/2020 **SurveyCrewChief:** KJC **SampleTime:** 12:01:00 PM **HydroLabNumber:** P8
WaterFlowType: Pool **WaterAppearance:** Clear **SkyConditions:** 2 - Scattered **AirTemperature:** 6 - > 86
WindDirection: 27 - West (270 degrees) **WindStrength:** 2 - Mod./Light
DissolvedO2 (mg/l): 9.01 **pH:** 7.94 **WaterTemp(°C):** 22.7 **SpecificConductivity (µS/cm):** 556 **Turbidity (NTU):** 7.72
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 150 **Avg.StreamWidth(m):** 3 **DistanceFished (m):** 50
SecondsFished: 318 **WaterDepthAvg (m):** .25 **WaterDepthMax (m):** .5 **TimeAtSite:** 01:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments:

Habitat Information

TotalScore (max100): 33 **SubstrateScore (max20):** 6 **InstreamCover Score (max20):** 5 **ChannelMorphologyScore (max20):** 8
RiparianZoneBankErosion Score(max10): 2 **Pool/GlideQualityScore(max12):** 4 **Riffle/RunQualityScore(max8):** 0
GradientScore (max10): 8 **%Pool:** 0 **%Riffle:** 0 **%Run:** 0 **%Glide:** 100 **CanopyCover PctOpen:** >85%-Open
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	10	5	%TolerantIndividuals:	21.51	5
SunfishSpeciesCount:	2	3	%OmnivoreIndividuals:	45.16	1
MinnowSpeciesCount:	5	5	%InsectivoreIndividuals:	39.78	3
SuckerSpeciesCount:	1	1	%PioneerIndividuals:	20.43	5
SensitiveSpeciesCount:	1	5	Total # of Individuals (CPUE):	93	1
			%SimpleLithophilicInd.:	39.78	5
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	44
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SampleNumber: AB42675

EventID: 20T008

LSite: WBU-18-0011

County: Knox

StreamName: Tributary of Maria Creek

LocationDescription: County Road 900 N, E Lower Freelandville Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bluegill	1					
Bluntnose Minnow	5					
Central Stoneroller	13					
Creek Chub	1					
Longear Sunfish	29					
Mississippi Silvery Minnow	28					
Pirate Perch	1					
Spotfin Shiner	1					
White Sucker	9					
Yellow Bullhead	5					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190020 **LSite:** WBU-18-0013
Site: Maria Creek **Location:** County Road 900 N **County:** Knox
Latitude: 38.858568 **Longitude:** -87.353384 **IASNat Region:** 7B **Topo:** H-50 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 30.791 **Gradient (ft/mile):** 3.885

Sample Information

SampleNumber: AB42676 **EventID:** 20T009 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/23/2020 **SurveyCrewChief:** KRW **SampleTime:** 11:34:00 AM **HydroLabNumber:** P5
WaterFlowType: Pool **WaterAppearance:** Clear **SkyConditions:** 3 - Partly **AirTemperature:** 5 - 76-85
WindDirection: 27 - West (270 degrees) **WindStrength:** 1 - Light
DissolvedO2 (mg/l): 9.98 **pH:** 8.23 **WaterTemp(°C):** 23.9 **SpecificConductivity (µS/cm):** 714 **Turbidity (NTU):** 10.4
SpecialNotes:

ElectrofishingEquipment: Canoe **Voltage:** 230 **Avg.StreamWidth(m):** 5 **DistanceFished (m):** 75
SecondsFished: 1000 **WaterDepthAvg (m):** .5 **WaterDepthMax (m):** 1.2 **TimeAtSite:** 03:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments: w/MLES

Habitat Information

TotalScore (max100): 43 **SubstrateScore (max20):** 7 **InstreamCover Score (max20):** 10 **ChannelMorphologyScore (max20):** 9
RiparianZoneBankErosion Score(max10): 3 **Pool/GlideQualityScore(max12):** 8 **Riffle/RunQualityScore(max8):** 0
GradientScore (max10): 6 **%Pool:** 20 **%Riffle:** 0 **%Run:** 80 **%Glide:** 0 **CanopyCover PctOpen:** >85%-Open
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used:

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	23	5	%TolerantIndividuals:	28.17	3
SunfishSpeciesCount:	4	5	%OmnivoreIndividuals:	18.78	3
MinnnowSpeciesCount:	4	3	%InsectivoreIndividuals:	77	5
SuckerSpeciesCount:	5	5	%CarnivoreIndividuals:	2.82	1
SensitiveSpeciesCount:	4	5	Total # of Individuals (CPUE):	213	5
			%SimpleLithophilicInd.:	7.04	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	46
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SampleNumber: AB42676

EventID: 20T009

LSite: WBU-18-0013

County: Knox

StreamName: Maria Creek

LocationDescription: County Road 900 N

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Bigmouth Buffalo	1					
Blackstripe Topminnow	6					
Bluegill	23					
Bluntnose Minnow	32					
Central Stoneroller	3					
Channel Catfish	2					
Emerald Shiner	2					
Freshwater Drum	1					
Gizzard Shad	1					
Green Sunfish	15					
Greenside Darter	1					
Johnny Darter	9					
Logperch	1					
Longear Sunfish	64					
Shorthead Redhorse	1					
Smallmouth Buffalo	1					
Spotfin Shiner	31					
Spotted Bass	3					
Spotted Sucker	6					
Tadpole Madtom	1					
Warmouth	1					
Western Mosquitofish	1					
White Sucker	7					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190030 **LSite:** WBU190-0001
Site: Marsh Creek **Location:** E Springtown Road **County:** Knox
Latitude: 38.828463 **Longitude:** -87.399871 **IASNat Region:** 7A **Topo:** H-49 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 23.57 **Gradient (ft/mile):** 2.96

Sample Information

SampleNumber: AB42677 **EventID:** 20T010 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/22/2020 **SurveyCrewChief:** KAG **SampleTime:** 11:00:00 AM **HydroLabNumber:** P6
WaterFlowType: Glide **WaterAppearance:** Clear **SkyConditions:** 2 - Scattered **AirTemperature:** 5 - 76-85
WindDirection: 9 - East (90 degrees) **WindStrength:** 1 - Light
DissolvedO2 (mg/l): 10.01 **pH:** 8.06 **WaterTemp(°C):** 22.6 **SpecificConductivity (µS/cm):** 1055 **Turbidity (NTU):** 4.33
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 210 **Avg.StreamWidth(m):** 5 **DistanceFished (m):** 75
SecondsFished: 510 **WaterDepthAvg (m):** .2 **WaterDepthMax (m):** .5 **TimeAtSite:** 00:45
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments: High Conductivity

Habitat Information

TotalScore (max100): 38 **SubstrateScore (max20):** 14 **InstreamCover Score (max20):** 7 **ChannelMorphologyScore (max20):** 5
RiparianZoneBankErosion Score(max10): 3 **Pool/GlideQualityScore(max12):** 5 **Riffle/RunQualityScore(max8):** 0
GradientScore (max10): 4 **%Pool:** 20 **%Riffle:** 0 **%Run:** 0 **%Glide:** 80 **CanopyCover PctOpen:** >85%-Open
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	10	3	%TolerantIndividuals:	29.03	1
SunfishSpeciesCount:	2	3	%OmnivoreIndividuals:	29.03	1
MinnnowSpeciesCount:	5	3	%InsectivoreIndividuals:	61.29	1
SuckerSpeciesCount:	0	1	%CarnivoreIndividuals:	0	1
SensitiveSpeciesCount:	3	3	Total # of Individuals (CPUE):	31	1
			%SimpleLithophilicInd.:	9.68	1
			%Ind.withDELT:	0	1

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	20
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SampleNumber: AB42677

EventID: 20T010

LSite: WBU190-0001

County: Knox

StreamName: Marsh Creek

LocationDescription: E Springtown Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	1					
Bluntnose Minnow	7					
Central Stoneroller	3					
Dusky Darter	1					
Green Sunfish	1					
Longear Sunfish	5					
Mississippi Silvery Minnow	2					
Sand Shiner	1					
Spotfin Shiner	9					
Yellow Bullhead	1					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190030 **LSite:** WBU-18-0012
Site: Marsh Creek **Location:** E Hunley Road **County:** Knox
Latitude: 38.854119 **Longitude:** -87.400627 **IASNat Region:** 7A **Topo:** H-49 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 20.805 **Gradient (ft/mile):** 3.392

Sample Information

SampleNumber: AB42678 **EventID:** 20T011 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/22/2020 **SurveyCrewChief:** KAG **SampleTime:** 12:20:00 PM **HydroLabNumber:** P6
WaterFlowType: Glide **WaterAppearance:** Clear **SkyConditions:** 2 - Scattered **AirTemperature:** 5 - 76-85
WindDirection: 9 - East (90 degrees) **WindStrength:** 3 - Moderate
DissolvedO2 (mg/l): 11.1 **pH:** 8.15 **WaterTemp(°C):** 26.3 **SpecificConductivity (µS/cm):** 1148 **Turbidity (NTU):** 4.26
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 200 **Avg.StreamWidth(m):** 4 **DistanceFished (m):** 60
SecondsFished: 448 **WaterDepthAvg (m):** .2 **WaterDepthMax (m):** .25 **TimeAtSite:** 01:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments: High Conductivity

Habitat Information

TotalScore (max100): 45 **SubstrateScore (max20):** 14 **InstreamCover Score (max20):** 10 **ChannelMorphologyScore (max20):** 9
RiparianZoneBankErosion Score(max10): 3 **Pool/GlideQualityScore(max12):** 3 **Riffle/RunQualityScore(max8):** 0
GradientScore (max10): 6 **%Pool:** 20 **%Riffle:** 0 **%Run:** 0 **%Glide:** 80 **CanopyCover PctOpen:** >85%-Open
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	10	3	%TolerantIndividuals:	26.19	1
SunfishSpeciesCount:	2	3	%OmnivoreIndividuals:	19.05	1
MinnnowSpeciesCount:	3	3	%InsectivoreIndividuals:	78.57	1
SuckerSpeciesCount:	0	1	%CarnivoreIndividuals:	2.38	1
SensitiveSpeciesCount:	2	3	Total # of Individuals (CPUE):	42	1
			%SimpleLithophilicInd.:	0	1
			%Ind.withDELT:	2.38	1

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	20
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SampleNumber: AB42678

EventID: 20T011

LSite: WBU-18-0012

County: Knox

StreamName: Marsh Creek

LocationDescription: E Hunley Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	6					
Bluegill	3					
Bluntnose Minnow	8					
Channel Catfish	1					
Greenside Darter	2					
Johnny Darter	2					
Longear Sunfish	15					
Silverjaw Minnow	1					
Spotfin Shiner	2					
Yellow Bullhead	2			1		



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190030 **LSite:** WBU-18-0015
Site: Marsh Creek **Location:** E Moody Road **County:** Knox
Latitude: 38.894577 **Longitude:** -87.422060 **IASNat Region:** 7A **Topo:** H-26 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 12.234 **Gradient (ft/mile):** 2.932

Sample Information

SampleNumber: AB42679 **EventID:** 20T012 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/23/2020 **SurveyCrewChief:** KAG **SampleTime:** 12:10:00 PM **HydroLabNumber:** P6
WaterFlowType: Glide **WaterAppearance:** Clear **SkyConditions:** 3 - Partly **AirTemperature:** 4 - 61-75
WindDirection: 0 - North (0 degrees) **WindStrength:** 3 - Moderate
DissolvedO2 (mg/l): 9.45 **pH:** 7.98 **WaterTemp(°C):** 24 **SpecificConductivity (µS/cm):** 1240 **Turbidity (NTU):** 6.09
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 200 **Avg.StreamWidth(m):** 6 **DistanceFished (m):** 90
SecondsFished: 478 **WaterDepthAvg (m):** .1 **WaterDepthMax (m):** .5 **TimeAtSite:** 01:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments:

Habitat Information

TotalScore (max100): 37 **SubstrateScore (max20):** 9 **InstreamCover Score (max20):** 8 **ChannelMorphologyScore (max20):** 8
RiparianZoneBankErosion Score(max10): 4 **Pool/GlideQualityScore(max12):** 4 **Riffle/RunQualityScore(max8):** 0
GradientScore (max10): 4 **%Pool:** 20 **%Riffle:** 0 **%Run:** 0 **%Glide:** 80 **CanopyCover PctOpen:** >85%-Open
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	11	5	%TolerantIndividuals:	20.69	5
SunfishSpeciesCount:	4	5	%OmnivoreIndividuals:	8.62	5
MinnnowSpeciesCount:	3	3	%InsectivoreIndividuals:	86.21	5
SuckerSpeciesCount:	0	1	%PioneerIndividuals:	13.79	5
SensitiveSpeciesCount:	2	3	Total # of Individuals (CPUE):	58	1
			%SimpleLithophilicInd.:	1.72	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	44
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SampleNumber: AB42679

EventID: 20T012

LSite: WBU-18-0015

County: Knox

StreamName: Marsh Creek

LocationDescription: E Moody Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	2					
Bluegill	11					
Bluntnose Minnow	4					
Green Sunfish	4					
Longear Sunfish	29					
Mississippi Silvery Minnow	1					
Orangespotted Sunfish	1					
Sand Shiner	1					
Shortnose Gar	3					
Western Mosquitofish	1					
Yellow Bullhead	1					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190030 **LSite:** WBU-18-0016
Site: Marsh Creek **Location:** S County Road 50 E **County:** Sullivan
Latitude: 38.922848 **Longitude:** -87.403759 **IASNat Region:** 7A **Topo:** H-26 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 8.376 **Gradient (ft/mile):** 5.502

Sample Information

SampleNumber: AB42680 **EventID:** 20T013 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/23/2020 **SurveyCrewChief:** KAG **SampleTime:** 11:00:00 AM **HydroLabNumber:** P6
WaterFlowType: Glide **WaterAppearance:** Clear **SkyConditions:** 3 - Partly **AirTemperature:** 4 - 61-75
WindDirection: 0 - North (0 degrees) **WindStrength:** 3 - Moderate
DissolvedO2 (mg/l): 9.07 **pH:** 7.87 **WaterTemp(°C):** 22.8 **SpecificConductivity (µS/cm):** 1686 **Turbidity (NTU):** 4.34
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 200 **Avg.StreamWidth(m):** 4 **DistanceFished (m):** 60
SecondsFished: 528 **WaterDepthAvg (m):** .2 **WaterDepthMax (m):** .5 **TimeAtSite:** 00:45
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments:

Habitat Information

TotalScore (max100): 50 **SubstrateScore (max20):** 11 **InstreamCover Score (max20):** 13 **ChannelMorphologyScore (max20):** 10
RiparianZoneBankErosion Score(max10): 5 **Pool/GlideQualityScore(max12):** 5 **Riffle/RunQualityScore(max8):** 0
GradientScore (max10): 6 **%Pool:** 10 **%Riffle:** 0 **%Run:** 0 **%Glide:** 90 **CanopyCover PctOpen:** 55%<-85%
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	11	5	%TolerantIndividuals:	43.75	3
SunfishSpeciesCount:	3	3	%OmnivoreIndividuals:	14.06	5
MinnnowSpeciesCount:	5	5	%InsectivoreIndividuals:	82.81	5
SuckerSpeciesCount:	0	1	%PioneerIndividuals:	37.5	3
SensitiveSpeciesCount:	2	5	Total # of Individuals (CPUE):	64	1
			%SimpleLithophilicInd.:	7.81	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	42
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SampleNumber: AB42680

EventID: 20T013

LSite: WBU-18-0016

County: Sullivan

StreamName: Marsh Creek

LocationDescription: S County Road 50 E

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	2					
Bluegill	1					
Bluntnose Minnow	4					
Creek Chub	1					
Green Sunfish	19					
Longear Sunfish	25					
Mississippi Silvery Minnow	5					
Redfin Pickerel	1					
Sand Shiner	1					
Spotfin Shiner	1					
Yellow Bullhead	4					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190030 **LSite:** WBU-18-0017
Site: Marsh Creek **Location:** S County Road 5 SE **County:** Sullivan
Latitude: 38.935544 **Longitude:** -87.382966 **IASNat Region:** 7A **Topo:** H-26 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 3.624 **Gradient (ft/mile):** 7.445

Sample Information

SampleNumber: AB42681 **EventID:** 20T014 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/23/2020 **SurveyCrewChief:** KAG **SampleTime:** 10:05:00 AM **HydroLabNumber:** P6
WaterFlowType: Glide **WaterAppearance:** Brown **SkyConditions:** 4 - Cloudy **AirTemperature:** 4 - 61-75
WindDirection: 0 - North (0 degrees) **WindStrength:** 3 - Moderate
DissolvedO2 (mg/l): 6.48 **pH:** 7.38 **WaterTemp(°C):** 20.6 **SpecificConductivity (µS/cm):** 478.5 **Turbidity (NTU):** 8.34
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 220 **Avg.StreamWidth(m):** 2 **DistanceFished (m):** 50
SecondsFished: 326 **WaterDepthAvg (m):** .1 **WaterDepthMax (m):** .15 **TimeAtSite:** 00:45
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments:

Habitat Information

TotalScore (max100): 33 **SubstrateScore (max20):** 7 **InstreamCover Score (max20):** 7 **ChannelMorphologyScore (max20):** 8
RiparianZoneBankErosion Score(max10): 5 **Pool/GlideQualityScore(max12):** 0 **Riffle/RunQualityScore(max8):** 0
GradientScore (max10): 6 **%Pool:** 20 **%Riffle:** 0 **%Run:** 0 **%Glide:** 80 **CanopyCover PctOpen:** <10%-Closed
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	7	5	%TolerantIndividuals:	55.56	1
SunfishSpeciesCount:	1	1	%OmnivoreIndividuals:	16.67	1
MinnowSpeciesCount:	4	5	%InsectivoreIndividuals:	50	1
SuckerSpeciesCount:	0	1	%PioneerIndividuals:	72.22	1
SensitiveSpeciesCount:	0	1	Total # of Individuals (CPUE):	18	1
			%SimpleLithophilicInd.:	0	1
			%Ind.withDELT:	0	1

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	20
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SampleNumber: AB42681

EventID: 20T014

LSite: WBU-18-0017

County: Sullivan

StreamName: Marsh Creek

LocationDescription: S County Road 5 SE

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	2					
Bluntnose Minnow	3					
Creek Chub	6					
Green Sunfish	1					
Johnny Darter	2					
Silverjaw Minnow	1					
Spotfin Shiner	3					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190010 **LSite:** WBU-18-0014
Site: Tributary of Maria Creek **Location:** Freelandville Road **County:** Knox
Latitude: 38.881029 **Longitude:** -87.352830 **IASNat Region:** 7B **Topo:** H-27 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 2.96 **Gradient (ft/mile):** 7.362

Sample Information

SampleNumber: AB42682 **EventID:** 20T015 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/22/2020 **SurveyCrewChief:** KAG **SampleTime:** 01:35:00 PM **HydroLabNumber:** P6
WaterFlowType: Glide **WaterAppearance:** Murky **SkyConditions:** 3 - Partly **AirTemperature:** 5 - 76-85
WindDirection: 9 - East (90 degrees) **WindStrength:** 2 - Mod./Light
DissolvedO2 (mg/l): 11.82 **pH:** 8.2 **WaterTemp(°C):** 25 **SpecificConductivity (µS/cm):** 481.1 **Turbidity (NTU):** 5.67
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 225 **Avg.StreamWidth(m):** 2 **DistanceFished (m):** 50
SecondsFished: 495 **WaterDepthAvg (m):** .2 **WaterDepthMax (m):** .3 **TimeAtSite:** 01:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments:

Habitat Information

TotalScore (max100): 37 **SubstrateScore (max20):** 10 **InstreamCover Score (max20):** 5 **ChannelMorphologyScore (max20):** 8
RiparianZoneBankErosion Score(max10): 4 **Pool/GlideQualityScore(max12):** 4 **Riffle/RunQualityScore(max8):** 0
GradientScore (max10): 6 **%Pool:** 10 **%Riffle:** 0 **%Run:** 0 **%Glide:** 90 **CanopyCover PctOpen:** >85%-Open
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	8	5	%TolerantIndividuals:	63.16	1
SunfishSpeciesCount:	1	1	%OmnivoreIndividuals:	31.58	1
MinnowSpeciesCount:	4	5	%InsectivoreIndividuals:	21.05	1
SuckerSpeciesCount:	1	1	%PioneerIndividuals:	57.89	1
SensitiveSpeciesCount:	0	1	Total # of Individuals (CPUE):	19	1
			%SimpleLithophilicInd.:	21.05	1
			%Ind.withDELT:	0	1

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	20
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SampleNumber: AB42682

EventID: 20T015

LSite: WBU-18-0014

County: Knox

StreamName: Tributary of Maria Creek

LocationDescription: Freelandville Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	1					
Bluegill	1					
Bluntnose Minnow	2					
Central Stoneroller	2					
Creek Chub	7					
Mississippi Silvery Minnow	1					
Pirate Perch	2					
White Sucker	3					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190010 **LSite:** WBU190-0002
Site: Maria Creek **Location:** CR 1050 N/Freelandville Road **County:** Knox
Latitude: 38.881727 **Longitude:** -87.346680 **IASNat Region:** 7B **Topo:** H-27 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 17.468 **Gradient (ft/mile):** 5.282

Sample Information

SampleNumber: AB42683 **EventID:** 20T016 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/22/2020 **SurveyCrewChief:** KAG **SampleTime:** 02:50:00 PM **HydroLabNumber:** P6
WaterFlowType: Glide **WaterAppearance:** Clear **SkyConditions:** 1 - Clear **AirTemperature:** 6 - > 86
WindDirection: 9 - East (90 degrees) **WindStrength:** 2 - Mod./Light
DissolvedO2 (mg/l): 17.14 **pH:** 8.69 **WaterTemp(°C):** 28.1 **SpecificConductivity (µS/cm):** 761 **Turbidity (NTU):** 8.12
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 210 **Avg.StreamWidth(m):** 4 **DistanceFished (m):** 60
SecondsFished: 495 **WaterDepthAvg (m):** .2 **WaterDepthMax (m):** .25 **TimeAtSite:** 00:45
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments:

Habitat Information

TotalScore (max100): 52 **SubstrateScore (max20):** 14 **InstreamCover Score (max20):** 14 **ChannelMorphologyScore (max20):** 9
RiparianZoneBankErosion Score(max10): 5 **Pool/GlideQualityScore(max12):** 4 **Riffle/RunQualityScore(max8):** 0
GradientScore (max10): 6 **%Pool:** 10 **%Riffle:** 0 **%Run:** 90 **%Glide:** 0 **CanopyCover PctOpen:** >85%-Open
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	8	3	%TolerantIndividuals:	38.46	3
SunfishSpeciesCount:	3	3	%OmnivoreIndividuals:	2.56	5
MinnnowSpeciesCount:	3	3	%InsectivoreIndividuals:	97.44	5
SuckerSpeciesCount:	0	1	%PioneerIndividuals:	15.38	5
SensitiveSpeciesCount:	2	3	Total # of Individuals (CPUE):	39	1
			%SimpleLithophilicInd.:	0	1
			%Ind.withDELT:	5.13	1

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	34
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SampleNumber: AB42683

EventID: 20T016

LSite: WBU190-0002

County: Knox

StreamName: Maria Creek

LocationDescription: CR 1050 N/Freelandville Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	4					
Bluegill	5					
Bluntnose Minnow	1					
Green Sunfish	5					
Longear Sunfish	12					
Sand Shiner	1					
Spotfin Shiner	2					
Yellow Bullhead	9	1	1			



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190010 **LSite:** WBU-18-0018
Site: Tributary of Maria Creek **Location:** County Road 700 E, Lane Road **County:** Knox
Latitude: 38.870452 **Longitude:** -87.334043 **IASNat Region:** 7B **Topo:** H-50 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 4.37 **Gradient (ft/mile):** 6.761

Sample Information

SampleNumber: AB42684 **EventID:** 20T017 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/22/2020 **SurveyCrewChief:** KRW **SampleTime:** 02:24:00 PM **HydroLabNumber:** P5
WaterFlowType: Run **WaterAppearance:** Clear **SkyConditions:** 2 - Scattered **AirTemperature:** 6 - > 86
WindDirection: 27 - West (270 degrees) **WindStrength:** 1 - Light
DissolvedO2 (mg/l): 14.6 **pH:** 8.54 **WaterTemp(°C):** 27.9 **SpecificConductivity (µS/cm):** 506 **Turbidity (NTU):** 5.46
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 200 **Avg.StreamWidth(m):** 5 **DistanceFished (m):** 75
SecondsFished: 373 **WaterDepthAvg (m):** .3 **WaterDepthMax (m):** .5 **TimeAtSite:** 01:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments:

Habitat Information

TotalScore (max100): 41 **SubstrateScore (max20):** 6 **InstreamCover Score (max20):** 8 **ChannelMorphologyScore (max20):** 11
RiparianZoneBankErosion Score(max10): 4 **Pool/GlideQualityScore(max12):** 4 **Riffle/RunQualityScore(max8):** 2
GradientScore (max10): 6 **%Pool:** 10 **%Riffle:** 20 **%Run:** 70 **%Glide:** 0 **CanopyCover PctOpen:** 10%-<30%
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	14	5	%TolerantIndividuals:	52.54	1
SunfishSpeciesCount:	2	3	%OmnivoreIndividuals:	40.11	1
MinnnowSpeciesCount:	8	5	%InsectivoreIndividuals:	25.99	3
SuckerSpeciesCount:	0	1	%PioneerIndividuals:	81.36	1
SensitiveSpeciesCount:	2	5	Total # of Individuals (CPUE):	177	3
			%SimpleLithophilicInd.:	3.95	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	34
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SampleNumber: AB42684

EventID: 20T017

LSite: WBU-18-0018

County: Knox

StreamName: Tributary of Maria Creek

LocationDescription: County Road 700 E, Lane Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	5					
Bluntnose Minnow	64					
Central Stoneroller	39					
Creek Chub	21					
Green Sunfish	4					
Johnny Darter	1					
Longear Sunfish	7					
Mississippi Silvery Minnow	7					
Pirate Perch	1					
Redfin Shiner	1					
Sand Shiner	7					
Silverjaw Minnow	15					
Spotfin Shiner	1					
Yellow Bullhead	4					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190010 **LSite:** WBU-18-0019
Site: Maria Creek **Location:** E County Road 1050 S **County:** Sullivan
Latitude: 38.924364 **Longitude:** -87.333119 **IASNat Region:** 7B **Topo:** H-27 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 10.192 **Gradient (ft/mile):** 8.775

Sample Information

SampleNumber: AB42685 **EventID:** 20T018 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/22/2020 **SurveyCrewChief:** KRW **SampleTime:** 12:11:00 PM **HydroLabNumber:** P5
WaterFlowType: Run **WaterAppearance:** Clear **SkyConditions:** 1 - Clear **AirTemperature:** 5 - 76-85
WindDirection: 27 - West (270 degrees) **WindStrength:** 1 - Light
DissolvedO2 (mg/l): 8.89 **pH:** 8.22 **WaterTemp(°C):** 24.3 **SpecificConductivity (µS/cm):** 968 **Turbidity (NTU):** 10.1
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 200 **Avg.StreamWidth(m):** 5 **DistanceFished (m):** 75
SecondsFished: 460 **WaterDepthAvg (m):** .3 **WaterDepthMax (m):** .7 **TimeAtSite:** 01:15
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments: 250 volts for sunfish/pool

Habitat Information

TotalScore (max100): 45 **SubstrateScore (max20):** 6 **InstreamCover Score (max20):** 10 **ChannelMorphologyScore (max20):** 11
RiparianZoneBankErosion Score(max10): 3 **Pool/GlideQualityScore(max12):** 3 **Riffle/RunQualityScore(max8):** 2
GradientScore (max10): 10 **%Pool:** 15 **%Riffle:** 25 **%Run:** 60 **%Glide:** **CanopyCover PctOpen:** <10%-Closed
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	15	5	%TolerantIndividuals:	31.71	3
SunfishSpeciesCount:	3	3	%OmnivoreIndividuals:	21.95	3
MinnnowSpeciesCount:	8	5	%InsectivoreIndividuals:	42.28	3
SuckerSpeciesCount:	0	1	%PioneerIndividuals:	61.79	3
SensitiveSpeciesCount:	2	3	Total # of Individuals (CPUE):	123	3
			%SimpleLithophilicInd.:	17.89	3
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	40
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SampleNumber: AB42685

EventID: 20T018

LSite: WBU-18-0019

County: Sullivan

StreamName: Maria Creek

LocationDescription: E County Road 1050 S

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	2					
Bluegill	1					
Bluntnose Minnow	8					
Central Stoneroller	19					
Creek Chub	25					
Green Sunfish	4					
Johnny Darter	13					
Longear Sunfish	16					
Mississippi Silvery Minnow	19					
Sand Shiner	1					
Silverjaw Minnow	7					
Slough Darter	2					
Spotfin Shiner	1					
Suckermouth Minnow	3					
Yellow Bullhead	2					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190010 **LSite:** WBU-18-0020
Site: Maria Creek **Location:** E County Road 975 S **County:** Sullivan
Latitude: 38.935575 **Longitude:** -87.323211 **IASNat Region:** 7B **Topo:** H-27 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 7.331 **Gradient (ft/mile):** 7.687

Sample Information

SampleNumber: AB42686 **EventID:** 20T019 **Sample MediumCollected:** Fish Community + Water
SampleDate: 06/22/2020 **SurveyCrewChief:** KRW **SampleTime:** 10:42:00 AM **HydroLabNumber:** P5
WaterFlowType: Run **WaterAppearance:** Clear **SkyConditions:** 1 - Clear **AirTemperature:** 5 - 76-85
WindDirection: 27 - West (270 degrees) **WindStrength:** 1 - Light
DissolvedO2 (mg/l): 7.12 **pH:** 8.02 **WaterTemp(°C):** 24.6 **SpecificConductivity (µS/cm):** 997 **Turbidity (NTU):** 11.5
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 200 **Avg.StreamWidth(m):** 4 **DistanceFished (m):** 60
SecondsFished: 493 **WaterDepthAvg (m):** .4 **WaterDepthMax (m):** 1 **TimeAtSite:** 01:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments: 250 volts for deeper pools

Habitat Information

TotalScore (max100): 58 **SubstrateScore (max20):** 6 **InstreamCover Score (max20):** 15 **ChannelMorphologyScore (max20):** 17
RiparianZoneBankErosion Score(max10): 5 **Pool/GlideQualityScore(max12):** 7 **Riffle/RunQualityScore(max8):** 2
GradientScore (max10): 6 **%Pool:** 70 **%Riffle:** 10 **%Run:** 20 **%Glide:** 0 **CanopyCover PctOpen:** 10%-<30%
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	15	5	%TolerantIndividuals:	26.42	3
SunfishSpeciesCount:	3	3	%OmnivoreIndividuals:	14.15	5
MinnnowSpeciesCount:	7	5	%InsectivoreIndividuals:	68.87	5
SuckerSpeciesCount:	1	1	%PioneerIndividuals:	29.25	5
SensitiveSpeciesCount:	2	5	Total # of Individuals (CPUE):	106	3
			%SimpleLithophilicInd.:	11.32	3
			%Ind.withDELT:	0.94	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	48
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SampleNumber: AB42686

EventID: 20T019

LSite: WBU-18-0020

County: Sullivan

StreamName: Maria Creek

LocationDescription: E County Road 975 S

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	4					
Bluegill	9					
Bluntnose Minnow	5					
Central Stoneroller	6					
Creek Chub	8					
Green Sunfish	2					
Johnny Darter	6					
Largemouth Bass	4	1				
Longear Sunfish	39					
Sand Shiner	1					
Silverjaw Minnow	4					
Spotfin Shiner	3					
Suckermouth Minnow	2					
White Sucker	10					
Yellow Bullhead	3					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190010 **LSite:** WBU-18-0019
Site: Maria Creek **Location:** E County Road 1050 S **County:** Sullivan
Latitude: 38.924364 **Longitude:** -87.333119 **IASNat Region:** 7B **Topo:** H-27 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 10.192 **Gradient (ft/mile):** 8.775

Sample Information

SampleNumber: AB43431 **EventID:** 20T018.5 **Sample MediumCollected:** Fish Community + Water
SampleDate: 08/18/2020 **SurveyCrewChief:** KRW **SampleTime:** 01:14:00 PM **HydroLabNumber:** P5
WaterFlowType: Run **WaterAppearance:** Clear **SkyConditions:** 4 - Cloudy **AirTemperature:** 5 - 76-85
WindDirection: 27 - West (270 degrees) **WindStrength:** 1 - Light
DissolvedO2 (mg/l): 8.45 **pH:** 8.09 **WaterTemp(°C):** 23.6 **SpecificConductivity (µS/cm):** 735 **Turbidity (NTU):** 12.9
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 200 **Avg.StreamWidth(m):** 5 **DistanceFished (m):** 75
SecondsFished: 561 **WaterDepthAvg (m):** .3 **WaterDepthMax (m):** .5 **TimeAtSite:** 01:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments:

Habitat Information

TotalScore (max100): 46 **SubstrateScore (max20):** 10 **InstreamCover Score (max20):** 8 **ChannelMorphologyScore (max20):** 9
RiparianZoneBankErosion Score(max10): 2 **Pool/GlideQualityScore(max12):** 6 **Riffle/RunQualityScore(max8):** 1
GradientScore (max10): 10 **%Pool:** 50 **%Riffle:** 10 **%Run:** 30 **%Glide:** 10 **CanopyCover PctOpen:** 55%<-85%
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	14	5	%TolerantIndividuals:	34.85	3
SunfishSpeciesCount:	3	3	%OmnivoreIndividuals:	6.06	5
MinnnowSpeciesCount:	7	5	%InsectivoreIndividuals:	46.97	3
SuckerSpeciesCount:	0	1	%PioneerIndividuals:	77.27	1
SensitiveSpeciesCount:	1	1	Total # of Individuals (CPUE):	132	3
			%SimpleLithophilicInd.:	4.55	1
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	36
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SampleNumber: AB43431

EventID: 20T018.5

LSite: WBU-18-0019

County: Sullivan

StreamName: Maria Creek

LocationDescription: E County Road 1050 S

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	3					
Bluegill	4					
Bluntnose Minnow	4					
Central Stoneroller	26					
Creek Chub	36					
Green Sunfish	2					
Johnny Darter	25					
Longear Sunfish	8					
Mississippi Silvery Minnow	4					
Silverjaw Minnow	9					
Slough Darter	3					
Spotfin Shiner	2					
Suckermouth Minnow	2					
Yellow Bullhead	4					



Indiana Department of Environmental Management Fish Community Assessments

Site Information

SubBasin: Middle Wabash-Busseron **14 digit HUC:** 05120111190020 **LSite:** WBU-18-0009
Site: Tilley Ditch **Location:** E Pepmeir Road **County:** Knox
Latitude: 38.835159 **Longitude:** -87.363200 **IASNat Region:** 7B **Topo:** H-50 **Segment:** 52
Ecoregion: Interior River Lowland **Drainage Area (sq.miles):** 9.299 **Gradient (ft/mile):** 4.379

Sample Information

SampleNumber: AB43849 **EventID:** 20T006.5 **Sample MediumCollected:** Fish Community + Water
SampleDate: 08/20/2020 **SurveyCrewChief:** KRW **SampleTime:** 09:55:00 AM **HydroLabNumber:** P5
WaterFlowType: Run **WaterAppearance:** Clear **SkyConditions:** 1 - Clear **AirTemperature:** 4 - 61-75
WindDirection: 27 - West (270 degrees) **WindStrength:** 1 - Light
DissolvedO2 (mg/l): 7.39 **pH:** 7.6 **WaterTemp(°C):** 16.7 **SpecificConductivity (µS/cm):** 531 **Turbidity (NTU):** 7.64
SpecialNotes:

ElectrofishingEquipment: Backpack **Voltage:** 200 **Avg.StreamWidth(m):** 3 **DistanceFished (m):** 50
SecondsFished: 336 **WaterDepthAvg (m):** .4 **WaterDepthMax (m):** .6 **TimeAtSite:** 01:00
BridgeInReach: **ReachRepresentative:** **WhyReachNotRepresentative:**
SpecialComments: MLES backpack

Habitat Information

TotalScore (max100): 51 **SubstrateScore (max20):** 12 **InstreamCover Score (max20):** 10 **ChannelMorphologyScore (max20):** 10
RiparianZoneBankErosion Score(max10): 5 **Pool/GlideQualityScore(max12):** 5 **Riffle/RunQualityScore(max8):** 3
GradientScore (max10): 6 **%Pool:** 10 **%Riffle:** 5 **%Run:** 85 **%Glide:** **CanopyCover PctOpen:** >85%-Open
SubjectiveRating: **AestheticRating:** **NOTES:** "NEW RECORD"

Fish Community Index of Biotic Integrity (IBI) Information

Calibration Used: Interior River Lowland

	<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>		<u>Actual</u> <u>Observation</u>	<u>Metric</u> <u>Score</u>
SpeciesCount:	17	5	%TolerantIndividuals:	10.04	5
SunfishSpeciesCount:	1	1	%OmnivoreIndividuals:	28.03	3
MinnowSpeciesCount:	9	5	%InsectivoreIndividuals:	66.53	5
SuckerSpeciesCount:	0	1	%PioneerIndividuals:	19.67	5
SensitiveSpeciesCount:	3	5	Total # of Individuals (CPUE):	239	5
			%SimpleLithophilicInd.:	24.69	5
			%Ind.withDELT:	0	5

Metrics are dependent on Ecoregion and Drainage Area.
 Metrics can score a 0, 1, 3, or 5 depending on calibration.

Total IBI Score (min 0, max 60)	50
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SampleNumber: AB43849

EventID: 20T006.5

LSite: WBU-18-0009

County: Knox

StreamName: Tilley Ditch

LocationDescription: E Pepmeir Road

Common Name	Individual Fish Count	Deformities	Eroded Fins	Lesions	Tumors	Multiple Anomalies
Blackstripe Topminnow	4					
Bluntnose Minnow	14					
Brook Silverside	13					
Central Stoneroller	9					
Creek Chub	4					
Emerald Shiner	16					
Johnny Darter	13					
Longear Sunfish	75					
Mississippi Silvery Minnow	53					
Pirate Perch	2					
Sand Shiner	8					
Silverjaw Minnow	7					
Slough Darter	3					
Spotfin Shiner	4					
Suckermouth Minnow	6					
Western Mosquitofish	2					
Yellow Bullhead	6					