State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: **Bold** fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
SHEBOYGAN RIVER	50700		20101110-60-02

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
South End of Kohler Stables Service Drive	15N	23E	31	SW	NW

SWIMS Station ID	SWIMS Station Name	Database Key
603378	SHEBOYGAN RIVER - (2B) BETWEEN RIVERBEND AND ROLLER MILLS	39278120

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.72541	87.79817	Terrain Navigator	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 1 of 2
3	4	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[X] Clear [ ] Turbid [ ] Stained	7.09	13.62	112.7	8.65	—	—

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
766	5	0.97	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.61	0.50	25.0

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): 40 Gravel (2 - 64 mm dia.): 30

Sand: 20 Clay: ____ Silt: 10 Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
20	10

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: **Bold** fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
SHEBOYGAN RIVER	50700		20101110-60-02

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
South End of Kohler Stables Service Drive	15N	23E	31	SW	NW

SWIMS Station ID	SWIMS Station Name	Database Key
603378	SHEBOYGAN RIVER - (2B) BETWEEN RIVERBEND AND ROLLER MILLS	39278120

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.72541	87.79817	Terrain Navigator	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 2 of 2
3	4	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[X] Clear [ ] Turbid [ ] Stained	7.09	13.62	112.7	8.65	—	—

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
766	5	0.97	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.61	0.50	25.0

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): 40 Gravel (2 - 64 mm dia.): 30

Sand: 20 Clay: ____ Silt: 10 Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
20	10

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Downstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: Bold fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
ONION RIVER	51200		20101103-60-04

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
15 meters upstream of Ourtown Road	14N	22E	11	SE	NE

SWIMS Station ID	SWIMS Station Name	Database Key
603480	ONION RIVER - OURTOWN ROAD	39285041

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.69667	-87.82086	SWIMS Database	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	ONION RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 1 of 2
5	8.0	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[X] Clear [ ] Turbid [ ] Stained	7.57	14.78	126.9	8.67	—	470.3

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
734.9	4	4.61	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.52	0.25	15.0

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): 10 Rubble (65 - 260 mm dia.): 60 Gravel (2 - 64 mm dia.): 20

Sand: 10 Clay: ____ Silt: ____ Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
10	20

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

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Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
ONION RIVER	51200		20101103-60-04

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
15 meters upstream of Ourtown Road	14N	22E	11	SE	NE

SWIMS Station ID	SWIMS Station Name	Database Key
603480	ONION RIVER - OURTOWN ROAD	39285041

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.69667	-87.82086	SWIMS Database	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	ONION RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 2 of 2
5	8.0	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[X] Clear [ ] Turbid [ ] Stained	7.57	14.78	126.9	8.67	—	470.3

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
734.9	4	4.61	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.52	0.25	15.0

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): 10 Rubble (65 - 260 mm dia.): 60 Gravel (2 - 64 mm dia.): 20

Sand: 10 Clay: ____ Silt: ____ Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
10	20

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Downstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

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Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
SHEBOYGAN RIVER	50700		20101110-60-04

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
Upstream of Onion River Confluence	15N	22E	36	NW	SE

SWIMS Station ID	SWIMS Station Name	Database Key
603434	SHEBOYGAN RIVER - TECUMSEH REACH, LDB, ACROSS FROM SEDIM	39277970

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.723717	-87.80483	SWIMS Database	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [ ] Riffle
- [X] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 1 of 1
60	8	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[ ] Clear [ ] Turbid [X] Stained	7.27	13.64	113.3	8.70	—	—

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
769	5	0.97	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.27	0.60	15.0

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): 40 Gravel (2 - 64 mm dia.): 30

Sand: 20 Clay: ____ Silt: 10 Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
30	50

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

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Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
SHEBOYGAN RIVER	50700		20101110-60-03

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
Upstream of Walderhaus Dam.	15N	23E	30	SE	SE

SWIMS Station ID	SWIMS Station Name	Database Key
10031888	SHEBOYGAN RIVER - BETWEEN WALDERHAUS AND RIVERBEND DAM	S9278066

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.734417	-87.78287	SWIMS Database	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [ ] Riffle
- [X] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 1 of 1
5	8	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[X] Clear [ ] Turbid [ ] Stained	7.27	13.49	112.1	8.63	—	—

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
768	5	0.97	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.07	1.5	25.0

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): 10 Gravel (2 - 64 mm dia.): 30

Sand: 20 Clay: ____ Silt: 20 Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: 20 Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
90	10

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: **Bold** fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
SHEBOYGAN RIVER	50700		20101110-60-01

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
Upstream of Weedens Creek Confluence	15N	23E	32	SW	SW

SWIMS Station ID	SWIMS Station Name	Database Key
10031887	SHEBOYGAN RIVER - UPSTREAM OF WEEDENS CREEK CONFLUENCE	39278171

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.72520	87.77555	Terrain Navigator	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. / of
8	10	1	1 / 1

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[X] Clear [ ] Turbid [ ] Stained	6.63	12.73	104.2	8.51	—	—

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
768	5	0.97	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.32	0.60	20.0

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): 30 Gravel (2 - 64 mm dia.): 40

Sand: 20 Clay: ____ Silt: 10 Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
30	10

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: **Bold** fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
SHEBOYGAN RIVER	50700		20101028-60-06

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
- Adjacent to Kohler Municipal Garage	15N	23E	32	NW	NE

SWIMS Station ID	SWIMS Station Name	Database Key
10011269	SHEBOYGAN RIVER - SHEBOYGAN RIVER BELOW KOHLER DAMS	39286025

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.73098	87.76952	Terrain Navigator	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. ___ of ___
10	15	1	1 of 1

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[ ] Clear [ ] Turbid [X] Stained	8.82	11.39	100.9	—	—	452.8

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
708	5	1.49	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.38	0.50	20.0

Composition of Substrate Sampled (Percent):

Bedrock: ___ Boulders (261 mm - 4.1 m dia.): ___ Rubble (65 - 260 mm dia.): 30 Gravel (2 - 64 mm dia.): 30

Sand: 30 Clay: ___ Silt: 10 Muck: ___ Overhanging Vegetation: ___

Aquatic Macrophytes: ___ Leaf Snags: ___ Course Woody Debris: ___ Other (___): ___

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
70	10

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: Bold fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
SHEBOYGAN RIVER	50700		20101028-60-02

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
State Highway 28 @ Esslingen Park	15N	23E	28	SE	NW

SWIMS Station ID	SWIMS Station Name	Database Key
603095	SHEBOYGAN RIVER AT STH 28 SHEBOYGAN-ESSLINGEN PARK	39292441

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.740273	-87.75094	SWIMS Database	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. / of
10	15	1	1 of 1

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[ ] Clear [ ] Turbid [X] Stained	8.99	10.91	97.1	—	—	447.4

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
699.6	5	0.86	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.61	0.40	20.0

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): 40 Gravel (2 - 64 mm dia.): 30

Sand: 20 Clay: ____ Silt: 10 Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
20	10

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: **Bold** fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
SHEBOYGAN RIVER	50700		20101028-60-01

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
Upstream of New Jersey Avenue	15N	23E	27	NE	NW

SWIMS Station ID	SWIMS Station Name	Database Key
10031829	SHEBOYGAN RIVER UPSTREAM OF NEW JERSEY AVE	39292463

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.74337	87.73385	Terrain Navigator	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 1 of 1
8	10	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[ ] Clear [X] Turbid [ ] Stained	9.01	10.7	95.3	—	—	447.4

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
699.2	5	0.52	[ ] Slow (< 0.15 m/s) [X] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
	0.30	20.0

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): 30 Gravel (2 - 64 mm dia.): 50

Sand: 20 Clay: ____ Silt: ____ Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
20	10

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: Bold fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
Unnamed Tributary	50740		20101028-60-03

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
30 meters upstream of Sheboygan River Confluence	15N	23E	28	SW	NE

SWIMS Station ID	SWIMS Station Name	Database Key
10031891	WILLOW CREEK - UPSTREAM OF CONFLUENCE WITH SBEBOYGAN R	39286559

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.74105	-87.74696	SWIMS Database	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 1 of 1
5	5	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[X] Clear [ ] Turbid [ ] Stained	7.88	10.75	93.2	—	—	699.0

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
1092	2	3.59	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.20	0.20	6.0

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): 20 Gravel (2 - 64 mm dia.): 50

Sand: 20 Clay: ____ Silt: 10 Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
20	80

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: Bold fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
UNNAMED Tributary	50740		20101028-60-04

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
30 meters upstream of Greendale Road	15N	23E	28	NW	NW

SWIMS Station ID	SWIMS Station Name	Database Key
10009340	WILLOW CREEK AT GREENDALE ROAD	39286538

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.74423	-87.75937	SWIMS Database	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 1 of 1
5	5	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[X] Clear [ ] Turbid [ ] Stained	8.49	11.39	100.2	—	—	6666.7

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
1041	1	9.08	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.42	0.20	2.5

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): 50 Gravel (2 - 64 mm dia.): 30

Sand: 20 Clay: ____ Silt: ____ Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
10	70

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: **Bold** fields must be completed.

Station Summary

Waterbody Name	**Waterbody ID Code**	Site Mile	**Sample ID (YYYYMMDD-CY-FD)**
Unnamed Tributary	50740		20101018-60-05

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
Upstream of Wood Lake Road	15N	23E	19	SE	SE

SWIMS Station ID	SWIMS Station Name	**Database Key**
10021113	WILLOW CREEK - UPSTREAM OF WOODLAKE ROAD	39286271

Latitude	**Longitude**	**Latitude - Longitude Determination Method Used**	**Datum Used**
43.750134	-87.78274	SWIMS Database	WGS 84

Basin (WMU)	**Watershed Name**	**County**
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	**Project Name**
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [ ] Riffle
- [X] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	**Estimated Area Sampled (m^2)**	**Number of Samples in Composite**	**Replicate No.** 1 **of** 1
5	8	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	**Water Temp. (C)**	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[X] Clear [ ] Turbid [ ] Stained	8.10	6.41	55.9	—	—	739.4

Conductivity (umhos/cm)	**Stream Order**	**Stream Gradient (m/km)**	**Estimated Stream Velocity (m/s)**
1154	1	3.71	[X] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	**Average Stream Depth (m)**	**Average Stream Width (m)**
—	0.15	2.5

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): ____ Gravel (2 - 64 mm dia.): 10

Sand: 50 Clay: ____ Silt: 10 Muck: 10 Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: 20 Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	**Canopy Cover at Sample Site (%)**
80	70

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: **Bold** fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
ONION RIVER	51200		20101103-60-02

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
15 meters upstream of Risseeuw Road	13N	22E	9	SE	SW

SWIMS Station ID	SWIMS Station Name	Database Key
10031890	ONION RIVER - UPSTREAM OF RISSEEUW ROAD	39285267

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.60161	-87.87305	SWIMS Database	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	ONION RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [ ] Riffle
- [X] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 1 of 1
10	10	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[X] Clear [ ] Turbid [ ] Stained	6.63	13.60	113.7	7.81	—	434.6

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
678.1	3	1.16	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.24	0.50	10.0

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): 20 Gravel (2 - 64 mm dia.): 20

Sand: 40 Clay: ____ Silt: 20 Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
90	10

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: **Bold** fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
ONION RIVER	51200		20101103-60-03

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
10 meters downstream of CTHY A	13N	22E	2	NW	SW

SWIMS Station ID	SWIMS Station Name	Database Key
10031889	ONION RIVER - UPSTREAM OF CTHY A	39285111

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.62282	-87.83698	SWIMS Database	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	ONION RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [ ] Riffle
- [X] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 1 of 1
10.0	8.0	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[X] Clear [ ] Turbid [ ] Stained	6.71	13.74	115.4	8.41	—	465.2

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
726.9	4	0.71	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.16	0.40	12.0

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): 20 Gravel (2 - 64 mm dia.): 30

Sand: 40 Clay: ____ Silt: 10 Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
70	0

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: **Bold** fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
WEEDENS CREEK	50800		20101028-60-07

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
10 meters upstream of CTHY A	14N	23E	8	NW	SW

SWIMS Station ID	SWIMS Station Name	Database Key
10031564	WEEDENS CREEK - UPSTREAM OF CTHY A	39285961

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.694317	-87.77714	SWIMS Database	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 1 of 1
5	5	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[X] Clear [ ] Turbid [ ] Stained	6.93	10.55	89.3	—	—	674.7

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
1053	3	2.33	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.11	0.10	1.5

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): ____ Gravel (2 - 64 mm dia.): 20

Sand: 40 Clay: ____ Silt: 20 Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: 20 Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
30	40

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	

State of Wisconsin

Macroinvertebrate Field Data Report

Form 3200-081 (R 9/00)

Instructions: **Bold** fields must be completed.

Station Summary

Waterbody Name	Waterbody ID Code	Site Mile	Sample ID (YYYYMMDD-CY-FD)
WEEDENS CREEK	50800		20101028-60-08

Sampling Location	Township	Range	Section	1/4 - 1/4	1/4
40 meters upstream of STH 28	14N	23E	5	NE	NW

SWIMS Station ID	SWIMS Station Name	Database Key
10015600	WEEDENS CREEK UPSTREAM OF STH 28	39285831

Latitude	Longitude	Latitude - Longitude Determination Method Used	Datum Used
43.717075	-87.77284	SWIMS Database	WGS 84

Basin (WMU)	Watershed Name	County
SHEBOYGAN	SHEBOYGAN RIVER	SHEBOYGAN

Sample and Site Descriptors

Sample Collector (Last Name, First)	Project Name
JOHN MASTERSON	SHEBOYGAN AOC PATHWAY TO DELISTING HABITAT BUI'S - SUR

Sampling Device

- [X] Kick Net
- [ ] Surber Sampler
- [ ] Eckman
- [ ] Ponar
- [ ] Artificial Substrate
- [ ] Hess Sampler
- [ ] Other: _____

Habitat Sampled

- [X] Riffle
- [ ] Run
- [ ] Pool
- [ ] Microhabitat
- [ ] Shoreline Composite
- [ ] Proportionally-Sampled Habitat
- [ ] Littoral Zone
- [ ] Profundal Zone
- [ ] Wetland

Total Sampling Time (min)	Estimated Area Sampled (m^2)	Number of Samples in Composite	Replicate No. 1 of 1
5	5	1	

Reason For Sampling

- [ ] Least Impacted Reference
- [ ] Baseline
- [X] Impact / Treatment Site
- [ ] Control Site
- [ ] Trend
- [ ] Other: _____

Water Color	Water Temp. (C)	D.O. (mg/l)	D.O. (% sat.)	pH (su)	Turbidity (NTUs)	TDS (mg/l)
[ ] Clear [X] Turbid [ ] Stained	7.85	10.60	91.9	—	—	576.0

Conductivity (umhos/cm)	Stream Order	Stream Gradient (m/km)	Estimated Stream Velocity (m/s)
901.2	3	7.23	[ ] Slow (< 0.15 m/s) [ ] Moderate (0.15 m/s - 0.5 m/s) [ ] Fast (> 0.5 m/s)

Measured Velocity (mps)	Average Stream Depth (m)	Average Stream Width (m)
0.23	0.20	2.5

Composition of Substrate Sampled (Percent):

Bedrock: ____ Boulders (261 mm - 4.1 m dia.): ____ Rubble (65 - 260 mm dia.): 30 Gravel (2 - 64 mm dia.): 40

Sand: 20 Clay: ____ Silt: 10 Muck: ____ Overhanging Vegetation: ____

Aquatic Macrophytes: ____ Leaf Snags: ____ Course Woody Debris: ____ Other (____): ____

Embeddedness of Substrate at Sample Site (%)	Canopy Cover at Sample Site (%)
20	10

Stream and Watershed Descriptors

N = Not a problem
U = Present, but uncertain as to degree of impact
P = Present, and probably creating a problem
Blank = Uncertain

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			**Chemical**		
Macrophytes			Chlorine		
Filamentous Algae			Organic Toxics		
Planktonic Algae			Inorganic Toxics		
Diatoms / Periphyton			Nutrients		
Slimes			Dissolved Oxygen		
Iron Bacteria			Other - Specify:		
Exotics - Specify:			**Sources of Stream Impacts**		
Other - Specify:			Urban NPS		
Physical			Construction Erosion		
Sludge			Point Source - Specify:		
Thermal			Cropland Erosion		
Turbidity			Pasturing		
Sedimentation / Channel Aggradation			Bank Erosion		
Hydraulic Scour / Channel Incision			Barnyard Run-Off		
Bank Erosion			Tile Drainage - Organic Soils		
Upstream Channelization			Tile Drainage - Mineral Soils		
Local Channelization			Septic Systems		
Low Flow			Tributary(s)		
Upstream Impoundment			Springs		
Dow nstream Impoundment			Wetland Drainage		
Other - Specify:			Other - Specify:		

Comments

Special Instructions for Laboratory

For Lab Use Only		
Sample Sorter	Taxonomist	Estimated Percent of Sample Sorted
Date Processed	Specimens Saved	