#### **General Project Information**

 

 Project ID:
 GLRI\_00E00489-0

 Name:
 Sheboygan AOC Pathway to Delisting Habitat BUI's - Survey and Assessment

 Type:
 Great Lakes Restoration Initiative

 Subtype:
 Toxics and Areas of Concern

 Statu:
 ACTIVE

 Start Date:
 10/01/2010

 End Date:
 12/31/2099

 Purpose:
 The lower Sheboygan River and Harbor were designated a Great Lakes Area of Concern (AOC) in 1985 by the International Joint Commission (IJC). This AOC encompasses the lower river downstream from the Sheboygan Falls Dam including the entire harbor and nearshore area of Lake Michigan. In the Sheboygan River, it is suspected that high levels of nutrients, solids, and toxic chemicals along with land use changes have contributed to the degradation of animal and plant populations and the reduction in fish and wildlife habitat and populations. Two of the Nine Beneficial Use Impairments (BUIs) identified for the Sheboygan River and Harbor AOC include: - degradation of fish and wildlife populations - loss of fish and wildlife habitat

**Objective:** This project is intended to support the development of delisting strategies and a fish and wildlife population and habitat restoration plan to address the ¿fish and wildlife population¿ and ¿fish and wildlife habitat¿ beneficial use impairments for the Sheboygan River and Harbor Area of Concern. This project includes a rapid ecological assessment using historical and current data, as well as conducting new field surveys, as needed, to fill data gaps or update data needed for the assessment. This project is part of an overall collaboration with the Sheboygan River Basin Partnership who is also seeking a grant from the Great Lakes Restoration Initiative under the same project name.

#### Comments: \$202,181

Time Line: Funds are anticipated to be available July 1, 2010. DNR Project is to be completed by July 1, 2012.

July 2010 to April 2011. DNR Review of historical and current data. This will help guide DNR field survey work and contribute to the development of the ecological assessment.

January 2011 to October 2011. DNR Field Surveys - initial findings available by January 1, 2012. Final ecological assessment report will be completed by June 30, 2012.

January 2012 to December 2012. Work with SRBP Fish & Wildlife Technical Advisory Committee to develop fish and wildlife habitat and population BUI delisting strategies and restoration plan. Plan to be finalized by SRBP in December of 2012.--NOTE: THIS PART OF THE PROJECT WAS NOT FUNDED.

**Outcome:** The end goal is for all of the Great Lakes Areas of Concern to be restored and protected so that they can be ¿delisted,¿ or removed from the list of 43 AOCs within the Great Lakes. This proposal is intended to support a comprehensive restoration planning project with the Sheboygan River Basin Partnership (SRBP). The information supplied and collected by DNR staff will be used to develop a strategy for delisting the fish and wildlife beneficial use impairments (BUI¿s) in the Sheboygan River and Harbor AOC. The data from the field surveys will be finalized within an ecological assessment report for the Sheboygan AOC. Outputs include field survey data reports and an ecological assessment report for the Area of Concern. This information will be used to further refine specific delisting targets for fish and wildlife habitat and populations along with development of a comprehensive AOC fish and wildlife habitat restoration plan.

#### People

Name	Role	Status	Start Date	End Date	Organization	Comments
BEYLER, SUSAN M	TEAM_MEMBER	ACTIVE	06/09/2011		Wisconsin DNR	
Boyle, Owen	TEAM_MEMBER	ACTIVE	06/09/2011		WDNR	
Clark, Andy	TEAM_MEMBER	ACTIVE	06/09/2011		WDNR	
DINSMORE, DONALEA	COORDINATOR	ACTIVE	12/20/2010		Wisconsin DNR	
EGGOLD, BRADLEY T	TEAM_MEMBER	ACTIVE	06/09/2011		Wisconsin DNR	

Name	Role Stat	us Start Date	End Date	Organization	Comments
HRON, STACY L	COORDINATOR ACT	IVE 10/01/2010	12/31/2099	Wisconsin DNR	
Katsma, Dale	TEAM_MEMBER ACT	VE 06/08/2011		WDNR	
LAST, LAUREL L	COORDINATOR ACT	IVE 10/01/2010	12/31/2099	Wisconsin DNR	
MASTERSON, JOHN P	PROJECT_LEAE ACT	VE 10/01/2010	12/31/2099	Wisconsin DNR	
MILLER, DUSTIN P	TEAM_MEMBER ACT	VE 06/09/2011		Wisconsin DNR	
MOTL, TRAVIS M	TEAM_MEMBER ACT	VE 06/09/2011		Wisconsin DNR	
PAPPAS, VICTOR C	PROJECT_LEAE ACT	VE 10/01/2010	12/31/2099	Wisconsin DNR	
Redell, Dave	TEAM_MEMBER ACT	VE 06/09/2011		WDNR	
SEARLE, GREGORY S	COORDINATOR ACT	VE 10/01/2010	12/31/2099	Wisconsin DNR	
Sparrow-Lien, Missy	TEAM_MEMBER ACT	VE 06/09/2011			

**Project Statuses** 

Date	Reported By	Status	Comments
12/21/2010	DONALEA DINSMORE	Active	Interim approval for Wintering Bird Survey field work granted - Donalea Dinsmore
12/31/2010	LAUREL LAST	Progress: 0-25% Cor	Project is underway. Please see project status details.
03/31/2011	LAUREL LAST	Progress: 0-25% Cor	Project is underway. Wintering bird surveys completed. Wadable macroinvertebrate samples collected and at lab for analysis. Northern pike surveys initiated. Contractors hired for herptile and breeding bird surveys. Survey protocols and QAPP almost complete. QAPP requires some minor adjustments. Problems Encountered: EPA's desire for expedited delisting affected the scope and objectives of this project.
06/30/2011	LAUREL LAST	Progress: 25-50% Cc	Project is underway. Wintering bird surveys completed. Wadable macroinvertebrate samples collected and at lab for analysis. Northern pike surveys completed. Fish community, herptile, breeding bird, bat, natural community/rare plant/invasive plant, and kingfisher nest surveys initiated. QAPP almost completerequires some minor adjustments for approval. Problems Encountered: High Sheboygan River flow made northern pike netting difficult. Shallow depths and rocks in upper portion of AOC made bat survey difficult and dangerous (will not be canoeing that section again).
09/30/2011	LAUREL LAST	Progress: 50-75% C(	Project is underway. All field work is complete except for mussel surveys and mink trapping efforts by professional mink trapper. Herptile survey final reports complete. All other segments of project require at least some data analysis and interpretation before the information is incorporated into the final project report. QAPP has been submitted to EPA, review comments received, and response submitted to EPAawaiting final QAPP approval. Problems encountered: Small mammal survey could not trap all the species plannedâ€"had to modify sampling design.
12/31/2011	LAUREL LAST	Progress: 50-75% Cc	Project is underway. Mussel surveys and report are complete. About 28 days of mink trapping completed. The only field work remaining is some additional trapping for mink and weasels. No small mammal or mink samples have been sent to the lab for analysis yet. Additional data entry, analysis, and report writing occurred this quarter, but more needs to be done before information is incorporated into the final (Ecological Assessment) report. QAPP has been approved by EPA and distributed. Problems encountered: Mink trapping was made more difficult by

Date	Reported By	Status	<b>Comments</b> fluctuating water levels and high numbers of raccoons. Also, Rich Staffen will be taking over Christina Isenring's roles in this project,
_			since she has taken another position.
Project S	Status Detail		
-	g Timeframe (Q1) (Q2) (Q3 expended this reporting per		Answer Q5 Dollars spent: Fish: \$389.63 (supplies/fringe). Macroinvertebrates and Fish Habitat: \$15.50 (mileage). Mussels: \$3,000 for mussel assessment (contract awarded Q4). Small Mammals and Mink: \$653.33 (mostly vehicle miles w/ some trapping supplies). All other segments of project: \$0 spent.
	racts or subgrants awarded Project Plan) status:	I this reporting period:	LTE hours used: Fish: 24 LTE hours. Wildlife (mostly Small Mammals and Mink): 88 LTE hours (about \$1,133). QAPP and Project QA: 11.25 LTE hours. Total hours to date = 378.75 out of 200 hours set aside from Watershed LTE hours. Went over budgeted watershed LTE hours, so used another funding source for remaining project QA work. All other segments of project: 0 LTE hours used. All segments of project: 0 subcontracts awarded this quarter. Note that a mink trapper performed work for the Small Mammals and Mink segment of the project for no pay. QAPP Status: Received final QAPP approval from EPA and distributed final QAPP. Conducted fourth quarterly project update meeting (combined with Sheboygan AOC TAC meeting). Entered fourth quarterly report into SWIMS database.
			<ul> <li>Still remaining: Complete remaining quarterly meetings and reports and perform QA/QC support and reporting as needed.</li> <li>QA activities:</li> <li>Corrective Actions: Sampling design for Mink survey will be modified somewhat due to field conditions. Mink trapping was made more difficult by fluctuating water levels and high numbers of raccoons, and only 3 mink were captured. LTE time will be put into trapping weasels and possibly additional mink in order to provide more samples for contaminants analysis.</li> </ul>
period: 6. Number	rvices and/or products purc of jobs created this reportir complished this reporting p	ng period:	<ul> <li>All other segments of project: Only routine QA activities (data review and verification). No problems encountered that required corrective actions.</li> <li>Small Mammals and mink: Minimal trapping supplies.</li> <li>All Other Segments: No local services or products purchased.</li> <li>All Segments: No jobs created.</li> <li>Fish: Started fisheries report.</li> <li>Macroinvertebrates and Fish Habitat: Submitted last macroinvertebrate sample for analysis. Entered all available data into appropriate</li> </ul>

#### Answer

databases and started data analyses.

--Herptiles: None (contract complete.)

--Breeding Birds: Began analysis of breeding bird survey data (DNR). --Mussels: Completed mussel surveys and submitted final report (contractor).

--Bats: WI Bat Monitoring Program (bat ecologists) reviewed and processed bat data.

--Natural community/rare plant/invasive plants: Started data analysis for natural community/rare plant/invasive plant surveys.

--Wintering Birds: No work performed.

--Kingfisher Nests: Began data analysis and summary of Belted Kingfisher nest monitoring.

--Small Mammals and Mink: Began mink trapping (26 days of trapping, including 17 days in AOC area and 24 days in control area). Made landowner contacts and secured access for trapping, provided assistance and information to volunteer mink trapper, and coordinated mink carcass collection with mink trapper. Input data from small mammal trapping and began data summaries.

--Ecological Assessment Report: No work performed.

#### Problems Encountered:

Mink trapping was made more difficult by fluctuating water levels and high numbers of raccoons, especially in the AOC (Kohler) area. Christina Isenring, the Natural Community / Rare Plant / Invasive Plant Survey Project Leader and Ecological Assessment Team Leader, has taken another position and is no longer involved with this project. Rich Staffen, who was already on the project team, has taken over these roles.

8. Work goals for coming reporting period:

--Fish: Prepare final fisheries report.

--Macroinvertebrates and Fish Habitat: Receive lab results for final (nonwadeable) macroinvertebrate sample. Prepare final report(s) for macroinvertebrates and fish habitat.

--Herptiles: None (contract complete).

--Breeding Birds: Complete analysis of breeding bird survey data (DNR).

--Mussels: None (contract complete).

--Bats: WI Bat Monitoring Program (bat ecologists) to interpret bat data for Ecological Assessment report (no separate report).

--Natural community/rare plant/invasive plants: Complete data analysis for natural community/rare plant/invasive plant surveys (data interpretation in Ecological Assessment report).

--Wintering Birds: Complete data summary/report for wintering bird surveys.

--Kingfisher Nests: Complete data analysis and summary of Belted Kingfisher nest monitoring.

--Small Mammals and Mink: Complete data summary/report for Small Mammal Collection. Complete Mink/Weasel trapping efforts and summarize data. Send all samples to WSLH for contaminants analysis. --Ecological Assessment Report: Establish working group (Ecological Assessment Team); gather and review historical data, recent data, and reports from new surveys; write draft report; have working group and Technical Advisory Committee (TAC) review draft report; and then write and submit final report.

Action

#### Action

**Comprehensive Planning Studies** 

**Detailed Description** . This project is intended to support the development of delisting strategies and a fish and wildlife population and habitat restoration plan to address the ¿fish and wildlife population; and ¿fish and wildlife habitat¿ beneficial use impairments for the Sheboygan River and Harbor Area of Concern. This project includes a rapid ecological assessment using historical and current data, as well as conducting new field surveys, as needed, to fill data gaps or update data needed for the assessment.

Start End Date Status \*\*\*\*\*\*\* 12/31/2099

PROPOSED

#### **Monitoring Stations**

603480		
	Onion River - Ourtown Road	
10031889	Onion River - Upstream of CTHY A	
10031890	Onion River - Upstream of Risseeuw Road	
603378	Sheboygan River - (2b) Between Riverbend And Roller Mills Dams, 50' Upstream Kohler Carehouse, 8'Off Rdb	
10031888	Sheboygan River - Between Walderhaus and Riverbend Dams	
10011269	Sheboygan River - Sheboygan River Below Kohler Dams	
603434	Sheboygan River - Tecumseh Reach, Ldb, Across From Sediment Area 4	
10031887	Sheboygan River - Upstream of Weedens Creek Confluence	
10031829	Sheboygan River Upstream of New Jersey Ave	
603002	Sheboygan River at 8th Street	
603095	Sheboygan River at Sth 28 Sheboygan-Esslingen Park	
10031886	Storm Water Pond - At SW Corner of South Taylor Drive and County Highway PP Intersection	
10031564	Weedens Creek - Upstream of CTHY A	
10015600	Weedens Creek Upstream Of Sth 28	
10031891	Willow Creek - Upstream of Confluence with Sheboygan River	
10021113	Willow Creek - Upstream of Woodlake Road	
10009340	Willow Creek At Greendale Road	

#### **Assessment Units**

WBIC	Segment	Local Name	Official Name
50700	1	Sheboygan River	Sheboygan River
50740	2	Willow Creek	Unnamed
50800	1	Weeden'S Creek	Weedens Creek
50950	1	Unnamed Trib To Sheboygan River	Unnamed

### Lab Account Codes

Description

Account Code

**End Date** 

Start Date

Form Code	Form Name			
Methods				
Method Code		Description		
Fieldwork Ever	nts			
Start Date	Status	Field ID	Station ID	Station Name
10/11/2010	COMPLETE	20101110-60-04	603434	Sheboygan River - Tecumseh Reach, Ldb, Across From Sediment Area 4
10/18/2010	COMPLETE	20101018-60-05	10021113	Willow Creek - Upstream of Woodlake Road
10/28/2010	COMPLETE	20101028-60-01	10031829	Sheboygan River Upstream of New Jersey Ave
10/28/2010	COMPLETE	20101028-60-02	603095	Sheboygan River at Sth 28 Sheboygan-Esslingen Park
10/28/2010	COMPLETE	20101028-60-03	10031891	Willow Creek - Upstream of Confluence with Sheboygan River
10/28/2010	COMPLETE	20101028-60-04	10009340	Willow Creek At Greendale Road
10/28/2010	COMPLETE	20101028-60-06	10011269	Sheboygan River - Sheboygan River Below Kohler Dams
10/28/2010	COMPLETE	20101028-60-07	10031564	Weedens Creek - Upstream of CTHY A
10/28/2010	COMPLETE	20101028-60-08	10015600	Weedens Creek Upstream Of Sth 28
11/03/2010	COMPLETE	20101103-60-02	10031890	Onion River - Upstream of Risseeuw Road
11/03/2010	COMPLETE	20101103-60-03	10031889	Onion River - Upstream of CTHY A
11/03/2010	COMPLETE	20101103-60-04	603480	Onion River - Ourtown Road
11/10/2010	COMPLETE	20101110-60-01	10031887	Sheboygan River - Upstream of Weedens Creek Confluence
11/10/2010	COMPLETE	20101110-60-02	603378	Sheboygan River - (2b) Between Riverbend And Roller Mills Dams, 50' Upstream Kohler Carehouse, 8'Off Rdb
11/10/2010	COMPLETE	20101110-60-03	10031888	Sheboygan River - Between Walderhaus and Riverbend Dams
07/15/2011 10:10	RECEIVED	20110826-60-01	603002	Sheboygan River at 8th Street

#### Documents

Title	Description	Author	Published	Comments
2011 DNR Point Count Results and Summary Sheet - Breeding Birds	Breeding Bird Suvey Data - Not to be Shared without a sharing agreement	Jeff Baughmann	09/01/2011	
2011 DNR Point Count Surveys - Narrative Report Breeding Birds	2011 Breeding Bird Report of Point Counts - Not to be shared without sharing agreement	Jeff Baughmann	09/01/2011	
2011 Sheboygan River AOC Herptile Survey and Habitat Assessment	Final report for 2011 herptile surveys near Sheboygan River AOC. This version includes Introduction and Methods.	Jason Dare	01/05/2012	
2011 Sheboygan River AOC Herptile Survey and Habitat Assessment	Herpitile Assessment in Sheboygan River AOC	Jason Dare	09/01/2011	
AOC Herp Map 2011	2011 Herpitile Survey - map of survey units	Jason Dare	09/01/2011	
Appendix to QAPP for Sheboygan AOC Pathway to Delisting Habitat BUIs Project, Part 1	Part 1 (Appendices A and B) of Appendix to QAPP Version 1.1 for Sheboygan AOC Pathway to Delisting Habitat BUI'sSurvey and Assessment Project	Laurel Last	07/20/2011	
Appendix to QAPP for Sheboygan AOC Pathway to Delisting Habitat BUIs	Part 2 (Appendices C through F) of Appendix to QAPP Version 1.1 for Sheboygan AOC Pathway to Delisting	Laurel Last	07/20/2011	

Title	Description	Author	Published	Comments
Project, Part 2	Habitat BUI'sSurvey and Assessment Project			
BBS Priority Sites	-	Jeff Baughmann	09/01/2011	
Bird species codes for Sheboygan AOC 2010-11 winter bird survey	Bird species codes for 2010-2011 winter bird survey of Sheboygan River AOC (from Wisconsin Society for Ornithology)	Dustin Miller	01/07/2011	
Macroinvertibrate QAPP	Sampling plan for macroinvertibrates - incomplete QAPP	Last, Laurel	10/01/2010	
Onion River upstream of Cty A 2011 fish community survey data sheet	Field data sheet for 6/28/2011 fish community survey upstream of County Hwy A on Onion River (Site #11 of Sheboygan River AOC fish assessment).	Travis Motl ,	06/28/2011	
Onion River upstream of Ourtown Rd 2011 fish community survey data sheet	Field data sheet for 8/04/2011 fish community survey upstream of Ourtown Rd on Onion River (Site #10 of Sheboygan River AOC fish assessment).	Travis Motl	08/04/2011	
Onion River upstream of Risseeuw Rd 2011 fish community survey data sheet	Field data sheet for 6/28/2011 fish community survey upstream of Risseeuw Rd on Onion River (Site #12 of Sheboygan River AOC fish assessment).	Travis Motl	06/28/2011	
QAPP for Sheboygan AOC Pathway to Delisting Habitat BUIs Survey and Assessment	Quality Assurance Project Planfor Sheboygan AOC Pathway to Delisting Habitat BUIsSurvey and Assessmen Project Version 1.0	Laurel Last t	03/01/2011	This version of the QAPP is complete and approved by Vic Pappas and Laurel Last. It is not yet approved by Donalea Dinsmore, and may be modified before final approval. Appendices are not included.
QAPP for Sheboygan AOC Pathway to Delisting Habitat BUIsSurvey and Assessment Version 1.1	Official QAPP signed by EPA for Sheboygan AOC Pathway to Delisting Habitat BUI'sSurvey and Assessment Project. Appendices saved separately.	Laurel Last	11/15/2011	
Qualitative Unionid Mussel Surveys and Habitat Assessment of the Sheboygan River AOC	Final report for the August-October 2011 mussel surveys of the Sheboygan River AOC.	Jason Dare	01/05/2012	
SWIMS Project Summary Q3	SWIMS Project Summary Report including status details for Q3 (April - June 2011).	SWIMS	07/12/2011	
SWIMS Project Summary for Q2	SWIMS Project Summary Report including project status details for Q2 (January - March 2011).	SWIMS	07/12/2011	
SWIMS Project Summary for Q4	SWIMS 4th qtr project report for Sheboygan AOC Pathway to Delisting Habitat BUIs project.	SWIMS	10/17/2011	
SWIMS Project Summary for Q4 amended	SWIMS-generated 4th quarter report for Sheboygan AOC Pathway to Delisting assessment project amended report.	SWIMS	12/21/2011	
Schuchardt Property Herptile Inventory	2011 Herptile Survey	Jason Dare	09/01/2011	
Sheboygan AOC 2010-11	Results from 2010-2011 winter bird	Dustin Miller	10/06/2011	

Title	Description	Author	Published	Comments
winter bird survey results	survey of Sheboygan River AOC.			
Sheboygan AOC 2010-11 winter bird survey week 1 data sheets	Field data sheets for Week 1 of 2010- 2011 winter bird survey of Sheboygan River AOC.	Dustin Miller	12/20/2010	
Sheboygan AOC 2010-11 winter bird survey week 2 data sheets	Field data sheets for Week 2 of 2010- 2011 winter bird survey of Sheboygan River AOC.	Dustin Miller	01/05/2011	
Sheboygan AOC 2010-11 winter bird survey week 3 data sheets	Field data sheets for Week 3 of 2010- 2011 winter bird survey of Sheboygan River AOC.		01/25/2011	
Sheboygan AOC 2010-11 winter bird survey week 4 data sheets	Field data sheets for Week 4 of 2010- 2011 winter bird survey of Sheboygan River AOC.	Dustin Miller	02/09/2011	
Sheboygan AOC 2010-11 winter bird survey week 5 data sheets	Field data sheets for Week 5 of 2010- 2011 winter bird survey of Sheboygan River AOC.	Dustin Miller	02/23/2011	
Sheboygan AOC 2010-11 winter bird survey week 6 data sheets	Field data sheets for Week 6 of 2010- 2011 winter bird survey of Sheboygan River AOC.	Dustin Miller	03/10/2011	
Sheboygan AOC 2010-11 winter bird survey week 7 data sheets	Field data sheets for Week 7 of 2010- 2011 winter bird survey of Sheboygan River AOC.	Dustin Miller	03/25/2011	
Sheboygan AOC 2011 Black Wolf Run floodplain forest natural community report 1	Natural Community Database Summary Report for 2011 survey of Sheboygan River AOC Black Wolf Run	NHI Database	11/18/2011	
Sheboygan AOC 2011 Black Wolf Run floodplain forest natural community report 2	site floodplain forest community (1). Natural Community Database Summary Report for 2011 survey of Sheboygan River AOC Black Wolf Run	NHI database	11/18/2011	
Sheboygan AOC 2011 Black Wolf Run hardwood swamp natural community report	site floodplain forest community (2). Natural Community Database Summary Report for 2011 survey of Sheboygan River AOC Black Wolf Run	NHI database	11/18/2011	
Sheboygan AOC 2011 Black Wolf Run natural community site evaluation	site hardwood swamp community. NHI Natural Community Site Evaluation for 2011 survey of Sheboygan River AOC Black Wolf Run	NHI database	11/18/2011	
Sheboygan AOC 2011 Black Wolf Run natural community survey field data sheets	site. Field data sheets for 2011 Natural community / Rare plant / Invasive plan survey of Sheboygan River AOC Black Wolf Run site. This includes WI NHI Site Summary form and WI NHI Natural Community forms and associated plant lists with abundance codes.		07/07/2011	
Sheboygan AOC 2011 Black Wolf Run northern mesic forest natural community report 1	Natural Community Database Summary Report for 2011 survey of Sheboygan River AOC Black Wolf Run site northern mesic forest natural	NHI database	11/18/2011	
Sheboygan AOC 2011 Black Wolf Run northern mesic forest natural community report 2	community (1). Natural Community Database Summary Report for 2011 survey of Sheboygan River AOC Black Wolf Run site northern mesic forest natural	NHI database	11/18/2011	
Sheboygan AOC 2011 Black	community (2). Natural Community Database	NHI database	11/18/2011	

Title	Description	Author	Published	Comments
Wolf Run northern mesic	Summary Report for 2011 survey of			
forest natural community	Sheboygan River AOC Black Wolf Run site northern mesic forest natural			
report 3	community (3).			
Sheboygan AOC 2011 Black	Natural Community Database	NHI database	11/18/2011	
Wolf Run northern mesic	Summary Report for 2011 survey of			
forest natural community	Sheboygan River AOC Black Wolf Run			
report 4	site northern mesic forest natural			
Sheboygan AOC 2011 Black	community (4). Natural Community Database	NHI database	11/18/2011	
Wolf Run northern mesic	Summary Report for 2011 survey of	In a database	11/10/2011	
forest natural community	Sheboygan River AOC Black Wolf Run			
report 5	site northern mesic forest natural			
Sheboygan AOC 2011 Black	community (5). Natural Community Database	NHI database	11/18/2011	
Wolf Run unassigned	Summary Report for 2011 survey of	INI II UAIADASE	11/10/2011	
natural community report	Sheboygan River AOC Black Wolf Run			
	site unassigned natural community.			
Sheboygan AOC 2011	NHI Natural Community Site	NHI database	11/18/2011	
Kiwanis Park natural community site evaluation	Evaluation for 2011 survey of Sheboygan River AOC Kiwanis Park			
community site evaluation	site.			
Sheboygan AOC 2011	Field data sheets for 2011 Natural	Andy Clark	05/24/2011	
Kiwanis Park natural	community / Rare plant / Invasive plant	t		
community survey field data sheets	survey of Sheboygan River AOC Kiwanis Park site. This includes WI			
sneets	NHI Site Summary form and WI NHI			
	Natural Community form and			
	associated plant list with abundance			
0h ah auman 400 0044	codes.		44/40/0044	
Sheboygan AOC 2011 Kiwanis Park unassigned	Natural Community Database Summary Report for 2011 survey of	NHI database	11/18/2011	
natural community report	Sheboygan River AOC Kiwanis Park			
5 1	site unassigned natural community.			
Sheboygan AOC 2011	Natural Community Database	NHI database	11/18/2011	
Schuchardt Property emergent marsh natural	Summary Report for 2011 survey of Sheboygan River AOC Schuchardt			
community report	Property site emergent marsh natural			
community report	community.			
Sheboygan AOC 2011	Natural Community Database	NHI database	11/18/2011	
Schuchardt Property	Summary Report for 2011 survey of			
floodplain forest natural community report 1	Sheboygan River AOC Schuchardt Property site floodplain forest natural			
community report 1	community (1).			
Sheboygan AOC 2011	Natural Community Database	NHI database	11/18/2011	
Schuchardt Property	Summary Report for 2011 survey of			
floodplain forest natural community report 2	Sheboygan River AOC Schuchardt Property site floodplain forest natural			
community report 2	community (2).			
Sheboygan AOC 2011	NHI Natural Community Site	NHI database	11/18/2011	
Schuchardt Property natural	Evaluation for 2011 survey of			
community site evaluation	Sheboygan River AOC Schuchardt			
Sheboygan AOC 2011	Property site. Field data sheets for 2011 Natural	Andy Clark	07/13/2011	
Schuchardt Property natural	community / Rare plant / Invasive plant	-	01/10/2011	
community survey field data	survey of Sheboygan River AOC			
sheets	Schuchardt Property site. This			

Title	Description	Author	Published	Comments
	includes WI NHI Site Summary form and WI NHI Natural Community forms			
	and associated plant lists with abundance codes.			
Sheboygan AOC 2011	Natural Community Database	NHI database	11/18/2011	
Schuchardt Property southern dry forest natural	Summary Report for 2011 survey of Sheboygan River AOC Schuchardt			
community report	Property site southern dry forest			
Sheboygan AOC 2011	natural community. Natural Community Database	NHI database	11/18/2011	
Schuchardt Property southern sedge meadow	Summary Report for 2011 survey of Sheboygan River AOC Schuchardt			
natural community report	Property site southern sedge meadow	v		
Sheboygan AOC 2011	natural community. NHI Natural Community Site	NHI database	11/18/2011	
Taylor Drive natural community site evaluation	Evaluation for 2011 survey of Sheboygan River AOC Taylor Drive			
-	site.			
Sheboygan AOC 2011 Taylor Drive natural	Field data sheets for 2011 Natural community / Rare plant / Invasive plan	Andy Clark t	05/24/2011	
community survey field data sheets	survey of Sheboygan River AOC Taylor Drive site. This includes WI NHI Site	r		
3116613	Summary form and WI NHI Natural			
	Community form and associated plan list with abundance codes.	t		
Sheboygan AOC 2011	Natural Community Database	NHI database	11/18/2011	
Taylor Drive unassigned natural community report	Summary Report for 2011 survey of Sheboygan River AOC Taylor Drive			
Sheboygan AOC 2011 UW	site unassigned natural community. Natural Community Database	NHI database	11/18/2011	
Sheboygan floodplain forest	Summary Report for 2011 survey of			
natural community report	Sheboygan River AOC UW Sheboygar site floodplain forest natural	1		
Sheboygan AOC 2011 UW	community. NHI Natural Community Site	NHI database	11/18/2011	
Sheboygan natural	Evaluation for 2011 survey of			
community site evaluation	Sheboygan River AOC UW Sheboygar site.	٦		
Sheboygan AOC 2011 UW Sheboygan natural	Field data sheets for 2011 Natural community / Rare plant / Invasive plan	Andy Clark t	05/24/2011	
community survey field data	survey of Sheboygan River AOC UW			
sheets	Sheboygan site. This includes WI NH Site Summary form and WI NHI	1		
	Natural Community forms and associated plant lists with abundance	3		
	codes.			
Sheboygan AOC 2011 UW Sheboygan northern mesic	Natural Community Database Summary Report for 2011 survey of	NHI database	11/18/2011	
forest natural community report	Sheboygan River AOC UW Sheboygar site northern mesic forest natural	1		
	community.			
Sheboygan AOC 2011 Willow (Wildwood) Island	Natural Community Database Summary Report for 2011 survey of	NHI database	11/18/2011	
floodplain forest natural community report	Sheboygan River AOC Willow (Wildwood) Island site floodplain			
	forest natural community.			
Sheboygan AOC 2011	NHI Natural Community Site	NHI database	11/18/2011	

Title	Description	Author	Published	Comments
Willow (Wildwood) Island natural community site evaluation Sheboygan AOC 2011 Willow (Wildwood) Island natural community survey field data sheets	Evaluation for 2011 survey of Sheboygan River AOC Willow (Wildwood) Island site. Field data sheets for 2011 Natural community / Rare plant / Invasive plan survey of Sheboygan River AOC Willow (Wildwood) Island site. This includes WI NHI Site Summary form and WI NHI Natural Community forms and associated plant lists with		07/12/2011	
Sheboygan AOC 2011 kingfisher nest survey data sheets	abundance codes. Field data sheets for kingfisher nest surveys conducted in 2011 along Sheboygan River AOC.	Dustin Miller	07/12/2011	
Sheboygan AOC 2011 northern pike spawning survey data sheets	Field data sheets for 3/29 – 4/13/2011 northern pike spawning survey (fyke netting) upstream of Taylor Drive in Sheboygan River AOC.	Travis Motl	04/13/2011	
Sheboygan AOC 2011 small mammal survey data summary	Site GPS coordinates and species summary for 2011 small mammal survey of Sheboygan River AOC.	Dustin Miller	10/04/2011	
Sheboygan AOC 2011 small mammal survey week 1 data sheets	Field data sheets for Week 1 of 2011 small mammal survey of Sheboygan River AOC.	Dustin Miller	08/05/2011	
Sheboygan AOC 2011 small mammal survey week 2 data sheets	Field data sheets for Week 2 of 2011 small mammal survey of Sheboygan River AOC.	Dustin Miller	08/12/2011	
Sheboygan AOC 2011 small mammal survey week 3 data sheets	Field data sheets for Week 3 of 2011 small mammal survey of Sheboygan River AOC.	Dustin Miller	08/17/2011	
Sheboygan AOC 2011 small mammal survey week 4 data sheets	Field data sheets for Week 4 of 2011 small mammal survey of Sheboygan River AOC.	Dustin Miller	08/26/2011	
Sheboygan AOC 2011 small mammal survey week 5 data sheets	Field data sheets for Week 5 of 2011 small mammal survey of Sheboygan River AOC.	Dustin Miller	09/02/2011	
Sheboygan AOC 2011 small mammal survey week 6 data sheets	Field data sheets for Week 6 of 2011 small mammal survey of Sheboygan River AOC.	Dustin Miller	09/09/2011	
Sheboygan AOC 2011 small mammal survey week 7 data sheets	Field data sheets for Week 7 of 2011 small mammal survey of Sheboygan River AOC.	Dustin Miller	09/16/2011	
Sheboygan AOC 2011 small mammal survey week 8 data sheets	Field data sheets for Week 8 of 2011 small mammal survey of Sheboygan River AOC.	Dustin Miller	09/23/2011	
Sheboygan AOC 2011 small mammal survey week 9 data sheets	Field data sheets for Week 9 of 2011 small mammal survey of Sheboygan River AOC.	Dustin Miller	09/29/2011	
Sheboygan AOC Aug-Sept 2011 fish habitat survey data sheets	Field data sheets for 8/02-9/27/2011 qualitative fish habitat surveys for Sheboygan River AOC assessment (includes Onion River, Weedens Creek, and Willow Creek sites).	John Masterson	09/27/2011	
Sheboygan AOC Fish & Wildlife Survey & Assessment Budget Detail	Detailed budget for Sheboygan AOC fish and wildlife habitat and population assessment GLRI project.	Ryan Raab n	06/24/2010	
Sheboygan AOC Fish and	Sheboygan AOC Fish and Wildlife		10/07/2010	Draft GLRI project proposal

Title	Description	Author	Published	Comments
Wildlife Assessment	Assessment			
Sheboygan AOC Fish and Wildlife Survey and Assessment Project Budget	Budget for Sheboygan AOC Fish and Wildlife Survey and Assessment GLRI project.	-	06/24/2010	
Sheboygan AOC Herpitile Report	2011 Survey Report for Herptiles in Sheboygan River AOC	Jason Dare	09/01/2011	
Sheboygan AOC Oct-Nov 2010 macroinvertebrate survey data sheets	Field data sheets for 10/18- 11/10/2010 macroinvertebrate surveys for Sheboygan River AOC assessment (includes Onion River, Weedens Creek, and Willow Creek sites).	John Masterson	11/10/2010	
Sheboygan AOC Pathway to Delisting Habitat BUIs Survey and Assessment Project Proposal	Final GLRI project proposal for Sheboygan River AOC fish and wildlife habitat and population assessment project.	Various	06/24/2010	
Sheboygan AOC bat survey map 06142011	Map of bat species encountered during June 14, 2011 mobile acoustical bat survey of Sheboygan River AOC.	Owen Boyle	11/08/2011	
Sheboygan AOC bat survey map 07122011	Map of bat species encountered during July 12, 2011 mobile acoustica bat survey of Sheboygan River AOC.	Owen Boyle I	11/08/2011	
Sheboygan AOC bat survey map legend	Legend for bat species maps for June and July 2011 mobile acoustical bat surveys of Sheboygan River AOC.	Owen Boyle	11/09/2011	
Sheboygan AOC mussel report appendices	Appendices for 2011 Sheboygan AOC mussel survey report. Sheet 1 distribution IX page 24 Sheet 3 Richness IV page 18 Sheet 4 Relative Abun III page 17 Sheet 5 Freq VIII page 23 Sheet 6 raw data X page 25 sheet 7 shell point V page 19	Jason Dare	01/04/2012	
Sheboygan AOC mussel survey points	Appendix 1 of 2011 Sheboygan AOC mussel survey final report (mussel survey locations).	Jason Dare	01/04/2012	
Sheboygan River AOC Project - Summary Report part 1	Part 1 of Final report for grant to the Sheboygan River Basin Partnership to assist WDNR in implementing 2011 GLRI-funded Baseline Assessments and identify fish and wildlife habitat restoration projects in cooperation with the AOC Fish and Wildlife Technical Advisory Committee. Document was split into 4 parts to meet SWIMS file size limit.	Stantec Consulting Services	05/05/2011	
Sheboygan River AOC Project - Summary Report part 2	Part 2 of Final report for grant to the Sheboygan River Basin Partnership to assist WDNR in implementing 2011 GLRI-funded Baseline Assessments and identify fish and wildlife habitat restoration projects in cooperation with the AOC Fish and Wildlife Technical Advisory Committee. Document was split into 4 parts to meet SWIMS file size limit.	Stantec Consulting Services	05/05/2011	

Title	Description	Author	Published	Comments
Sheboygan River AOC Project - Summary Report part 3 Sheboygan River AOC Project - Summary Report part 4	Part 3 of Final report for grant to the Sheboygan River Basin Partnership to assist WDNR in implementing 2011 GLRI-funded Baseline Assessments and identify fish and wildlife habitat restoration projects in cooperation with the AOC Fish and Wildlife Technical Advisory Committee. Document was split into 4 parts to meet SWIMS file size limit. Part 4 of Final report for grant to the Sheboygan River Basin Partnership to assist WDNR in implementing 2011 GLRI-funded Baseline Assessments and identify fish and wildlife habitat restoration projects in cooperation with the AOC Fish and Wildlife	Stantec Consulting	05/05/2011	
Sheboygan River Kohler Horse Farm riffle 2011 fish community survey data sheet	Technical Advisory Committee. Document was split into 4 parts to meet SWIMS file size limit. Field data sheet for 8/30/2011 fish community survey of Sheboygan River riffle near Kohler Horse Farm (new site for Sheboygan River AOC fish	Travis Motl	08/30/2011	
Sheboygan River Pathway to Delisting QAPP Addendum	assessment). Adds SOP for mudpuppy trapping and replaces SOP for PCB method ESS 1480	Donalea Dinsmore	11/18/2011	
Sheboygan River between Riverbend Dam and Waelderhaus Dam 2011 fish community survey data sheet	Field data sheet for 7/21/2011 fish community survey of Sheboygan River between Riverbend Dam and Waelderhaus Dam (Site #7 of Sheboygan River AOC fish assessment).	Travis Motl	07/21/2011	
Sheboygan River between Wildwood Island and 8th St 2011 daytime fish community survey data sheets	Field data sheets for 9/01/2011 daytime fish community survey of Sheboygan River from Wildwood Island to Kiwanis Park and from Kiwanis Park to 8th St (Sites #1 and #2 of Sheboygan River AOC fish assessment).	Travis Motl	09/01/2011	
Sheboygan River between Wildwood Island and 8th St 2011 nighttime fish community survey data sheets	Field data sheets for 9/01/2011 nighttime fish community survey of Sheboygan River from Wildwood Island to Kiwanis Park and from Kiwanis Park to 8th St (Sites #1 and #2 of Sheboygan River AOC fish assessment).	Travis Motl	09/01/2011	
Sheboygan River downstream of Kohler Stables 2011 fish community survey data sheet	Field data sheet for 7/19/2011 fish community survey of Sheboygan River downstream of Kohler Stables (Site #8 of Sheboygan River AOC fish assessment).	Travis Motl	07/19/2011	
Sheboygan River near Onion River confluence 2011 fish community survey data sheet	Field data sheet for 7/19/2011 fish community survey of Sheboygan River near Onion River confluence (Site #9 of Sheboygan River AOC fish	Travis Motl	07/19/2011	

Title	Description	Author	Published	Comments
	assessment).			
Sheboygan River upstream of Kohler Municipal Garage 2011 fish community survey data sheet	Field data sheet for 7/26/2011 fish community survey of Sheboygan River upstream of Kohler municipal garage (Site #5 of Sheboygan River AOC fish assessment).	Travis Motl	07/26/2011	
Sheboygan River upstream of Taylor Dr wayside 2011 fish community survey data sheet	Field data sheet for 7/26/2011 fish community survey of Sheboygan River upstream of Taylor Drive wayside (Site #4 of Sheboygan River AOC fish assessment).		07/26/2011	
Sheboygan River upstream of Weedens Creek confluence 2011 fish community survey data sheet	Field data sheet for 8/01/2011 fish community survey of Sheboygan River upstream of Weedens Creek confluence (Site #6 of Sheboygan River AOC fish assessment).	Travis Motl	08/01/2011	
UW-Sheboygan stormwater pond 2011 fish community survey data sheet	Field data sheet for 9/13/2011 fish community survey of UW-Sheboygan stormwater retention pond located adjacent to Sheboygan River and southwest of Hwy PP and Taylor Drive intersection (part of Sheboygan River AOC fish assessment).	Travis Motl	09/13/2011	
Weedens Creek upstream of Cty A 2011 fish community survey data sheet	Field data sheet for 6/13/2011 fish community survey of Weedens Creek upstream of Cty Hwy A (Site #17 of Sheboygan River AOC fish assessment).	Travis Motl	06/13/2011	
Weedens Creek upstream of Hwy 28 2011 fish community survey data sheet	Field data sheet for 6/14/2011 fish community survey of Weedens Creek upstream of Hwy 28 (Site #16 of Sheboygan River AOC fish assessment).	Travis Motl	06/14/2011	
Willow Creek upstream of Greendale Rd 2011 fish community survey data sheet	Field data sheet for 6/17/2011 fish community survey of Willow Creek upstream of Greendale Rd (Site #14 of Sheboygan River AOC fish assessment).	Travis Motl	06/17/2011	
Willow Creek upstream of Sheboygan River confluence 2011 fish community survey data sheet	Field data sheet for 6/17/2011 fish community survey of Willow Creek upstream of Sheboygan River confluence (Site #13 of Sheboygan River AOC fish assessment).	Travis Motl	06/17/2011	
Willow Creek upstream of Woodlake Rd 2011 fish community survey data sheet	Field data sheet for 6/17/2011 fish community survey of Willow Creek upstream of Woodlake Rd (Site #15 of Sheboygan River AOC fish assessment).	Travis Motl	06/17/2011	
Wintering Bird Survey Wintering Bird Survey QAPP	Study design for wintering bird survey SAP for wintering bird study - interim approbal to do field work granted - Donalea Dinsmore	Laurel Last Katsma, Dale and Last, Laurel	12/20/2010 12/21/2010	

# Budget

**Combined Budgets:** 

Combined SLOH:

Funding				
Organization	Source	Туре	Amount Start Date	End Date