



SUAMICO AND LITTLE SUAMICO RIVERS WATERSHED (GB01)

This watershed has an abundance of naturally occurring wetlands, streams and lakes. The area abuts Green Bay, which enhances the areas natural diversity and animal populations. Land use is primarily agricultural, however significant tracts of forest and wetland remain.

*A Watershed Report
created by the
Bureau of Water
Quality in support
of the Clean Water
Act.*

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Watershed Details

About the Watershed

The Suamico and Little Suamico Rivers arise in eastern Shawano County and flow easterly to Green Bay, draining 139 square miles. Streams in this watershed are generally small and shallow and are not conducive to the development of a sport fishery except in the lowest reaches closer to the Bay. The depth to groundwater is often shallow and large swampy areas are common. Near Green Bay, and inland for several miles, wetlands are especially prominent and are valuable spawning habitat for Green Bay sport fish species. Primary land use in the watershed is agricultural, with dairy farming most prevalent.

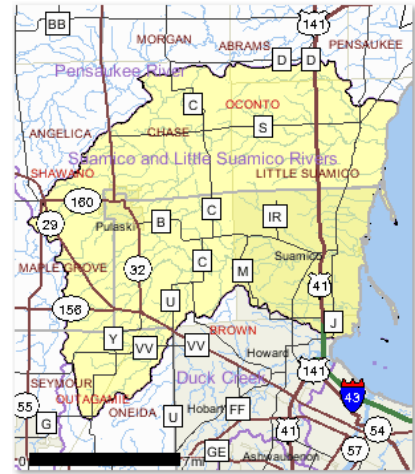


Figure 1 Watershed Location

Population and Land Use

This watershed has 340.92 stream miles, 10,769.31 lake acres and 15,918.95 wetland acres.

According to the 2006 National Land Cover Data (NLCD), Suamico and Little Suamico Rivers watershed is 171.78 mi². Land use in the watershed is primarily agricultural (56.36%), forest (20.04%) and a mix of wetland (13.66%) and other uses (9.93%).

Table 1 Suamico and Little Suamico Rivers Watershed Land Use

Land Use	% of Area
Agriculture	56.36
Forest	20.04
Wetland	13.66
Urban	1.06
Sub Urban	3.7
Open Land and Water	4.43
Barren	0.32
Grass Land	0.42

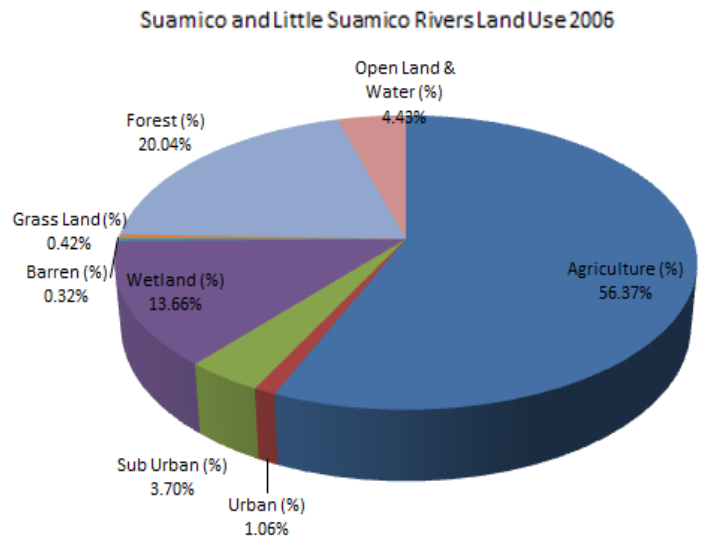


Figure 2 Land Use 2006 NAIP Land Cover

Hydrology

The Suamico and Little Suamico Rivers arise in eastern Shawano County and flow easterly to Green Bay, draining 139 square miles. Streams in this watershed are generally small and shallow and are not conducive to the development of a sport fishery except in the lowest reaches closer to the Bay. The depth to groundwater is often shallow and large swampy areas are common. Near Green Bay, and inland for several miles, wetlands are especially prominent and are valuable spawning habitat for Green Bay sport fish species.

Ecological Landscapes

The Suamico and Little Suamico Rivers Watershed is located primarily within the Northern Lake Michigan Coastal Ecological Landscape which is located in northeastern Wisconsin, and includes Green Bay and the northern part of the Door Peninsula. Its landforms consist of the Niagara escarpment, a prominent dolomite outcropping along the east side of Green Bay, a lacustrine plain along the west side of Green Bay, and ground moraine elsewhere. Low sand dunes and beach ridges that support Great Lakes endemics and many other rare species are found along the Great Lakes shoreline. The influence of Lake Michigan moderates extreme temperatures.

Soils are very diverse; in some areas, lacustrine sands are found overlying clays or bedrock within only a few feet of the surface. On the western side of Green Bay, the ground moraine is composed mostly of moderately well drained, rocky sandy loams, interspersed with lacustrine sands and

clays with peat and muck also common.

Historic vegetation included maple-basswood-beech forest, hemlock-hardwood forest, northern white cedar swamp, hardwood-conifer swamp, wet meadows, and coastal marshes. Conifer dominated upland forests that resemble the boreal forest were present along Lake Michigan; they contain a significant component of white spruce and balsam fir. Cliffs, sinkholes, and dolomite ledges are associated with the Niagara Escarpment. Current vegetation consists of more than 60% non-forested land, most of which is in agricultural crops, with smaller amounts of grassland, wetland, *shrub land*, and urbanized areas. Forested lands are dominated by maple-basswood, with smaller amounts of lowland hardwoods, aspen-birch, and lowland conifers.

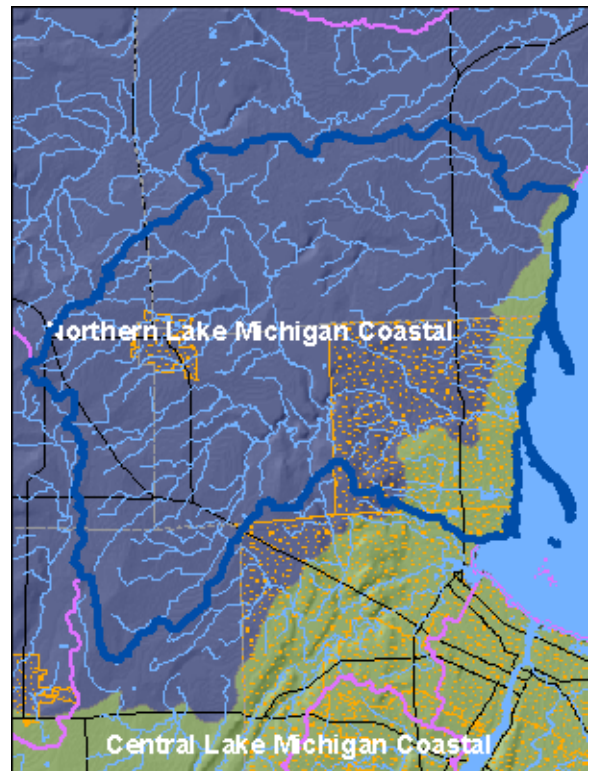


Figure 3 Ecological Landscape

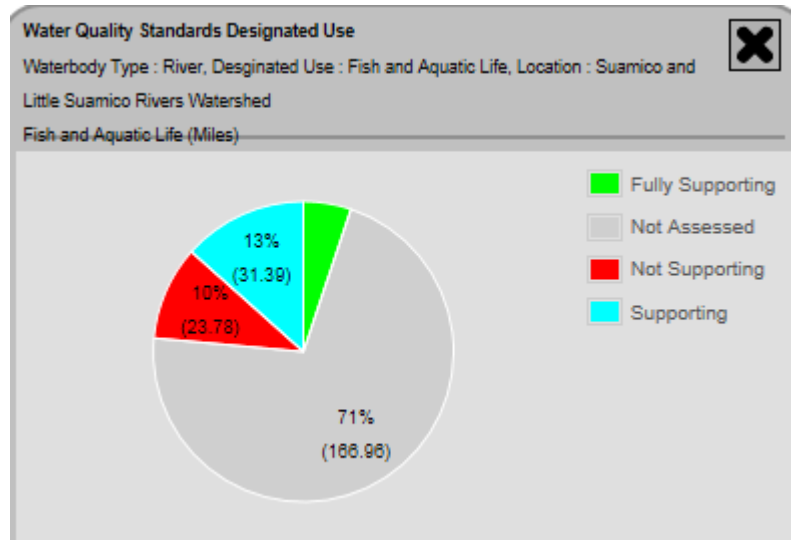
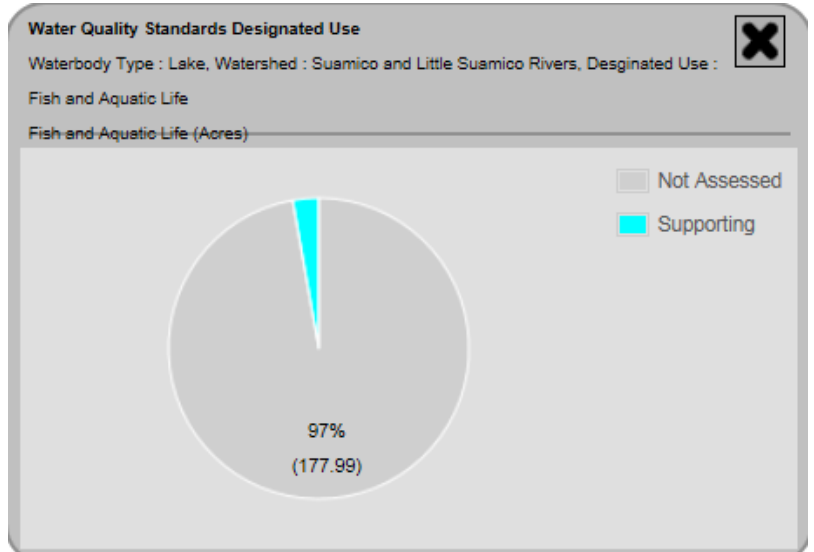
Watershed Condition

Overall Condition

Forty-one of ninety-three streams in the watershed have been monitored in the last five years. Of these waters, the Suamico River is identified as in “good” condition, Little Suamico River is identified as in poor condition, and Hidden Lake Creek (411100) is identified as in poor condition. Overall only a fraction of the waters are actually assessed, with a sliver of lakes known to be in good condition (of the 178 documented lakes, 97% are not assessed). However, many waters (rivers, streams, wetlands) are in forested or wetland lands use indicating that conditions are likely good.

River and Stream Condition

The chart at right indicates that 10% of rivers assessed do not support fish and aquatic life uses and 19 percent are either supporting or fully supporting their use. The remaining 71% are not assessed. With DNR’s proclivity to monitor impaired waters or waters known to have problems, this distribution of data is skewed toward identifying problem waters.



Lake Health

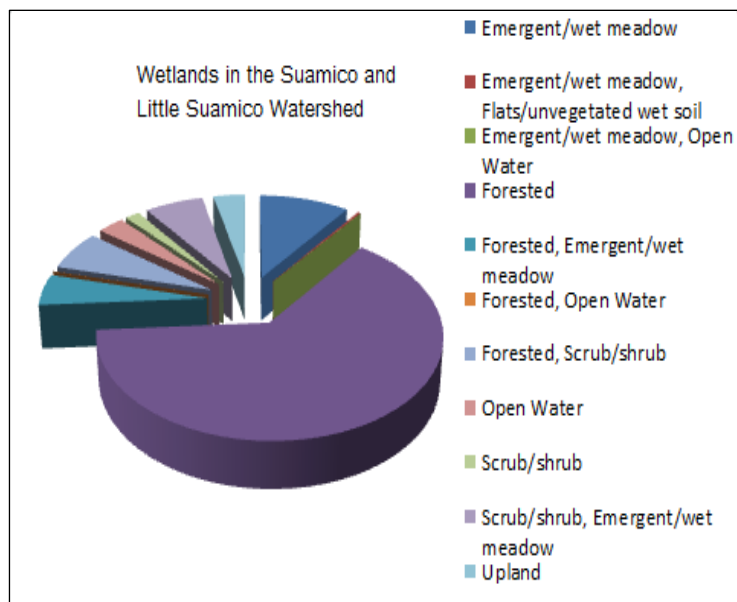
There are 177 open water acres in the GB01 Suamico and Little Suamico Watershed, with only 3% of these waters assessed. However, many of these lakes are considered high quality, undisturbed waters – with satellite clarity values indicating oligotrophic or mesotrophic -- reflecting good water clarity and few sources of runoff or pollutants. These figures do not include the acres for bays, harbors or Lake Michigan, all of which are located downstream and are considered degraded or polluted.

Watersheds	WATERS ID	WBIC	Waterbody Name	Length/Size	Unit	Counties
GB01	4705989	5591396	Unnamed Lake	5.75	ACRES	Brown
GB01	31544	5539306	Local Water	4.07	ACRES	Oconto
GB01	34252	5542104	Local Water	3.07	ACRES	Brown
GB01	27169	408800	Un Lake	0.48	ACRES	Outagamie
GB01	31545	5539311	Local Water	2.15	ACRES	Oconto
GB01	25985	409500	Un Lake	0.52	ACRES	Brown
GB01	31665	5543348	Local Water	2.21	ACRES	Brown
GB01	1850779	411300	Unnamed Lake	5.09	ACRES	Brown
GB01	31663	5543303	Local Water	18.18	ACRES	Brown
GB01	35844	5542649	Local Water	12.1	ACRES	Brown
GB01	35849	5543311	Local Water	2.78	ACRES	Brown
GB01	4705821	5541490	Unnamed Lake	5.97	ACRES	Oconto
GB01	35843	5542574	Local Water	12.97	ACRES	Brown
GB01	34257	5543559	Local Water	22.95	ACRES	Brown
GB01	35029	5540084	Local Water	5.66	ACRES	Oconto
GB01	31672	5543620	Local Water	2.26	ACRES	Brown
GB01	35426	5584635	Local Water	25.78	ACRES	Brown
GB01	4705816	5591397	Unnamed Lake	8.24	ACRES	Brown
GB01	4706399	5591395	Unnamed Lake	36.86	ACRES	Brown

Wetland Health

Over 8,000 acres of wetlands are documented in this watershed, with the majority of these acres forested wetlands. Emergent/wet meadow and forested/emergent wet meadow are also primary wetland types.

Row Labels	(Acres)
Emergent/wet meadow	801.54
Emergent/wet meadow, Flats/vegetated wet soil	23.00
Emergent/wet meadow, Open Water	2.00
Forested	5,146.03



Forested, Emergent/wet meadow	408.55
Forested, Open Water	1.43
Forested, Scrub/shrub	525.21
Open Water	240.21
Scrub/shrub	129.59
Scrub/shrub, Emergent/wet meadow	521.29
Upland	281.16
Grand Total	8,080.01

Groundwater

- Private Wells
- Potential Sources of Contamination Overspreading of manure

Point and Nonpoint Pollution

Point source dischargers to surface waters in the Suamico and Little Suamico River watershed include the village of Pulaski Wastewater Treatment Plant and the Little Suamico Sanitary District WWTP. Green Bay Dressed Beef land spreads paunch manure and clear rinse water at several field sites in the watershed. The village of Pulaski will soon be connecting with the Green Bay Metropolitan Sewerage District and its WWTP will no longer discharge to the Little Suamico River.

Waters of Note

Trout Waters

Class I trout streams are high quality trout waters that have sufficient natural reproduction to sustain populations of wild trout, at or near carry capacity. Consequently, streams in this category require no stocking of hatchery trout. These streams or stream sections are often small and may contain small or slow-growing trout,

especially in the headwaters. Class II trout streams may have some natural reproduction, but not enough to utilize available food and space. Therefore, stocking is required to maintain a desirable sport fishery. These streams have good survival and carryover of adult trout, often producing some fish larger than average size. Class III trout streams are marginal trout habitat with no natural reproduction occurring. They require annual stocking of trout to provide trout fishing. Generally, there is no carryover of trout from one year to the next. (<http://dnr.wi.gov/fish/species/trout/streamclassification.html>).



The watershed has one classified trout water, a class II trout stream named Haller Creek, located in Brown and Oconto counties. The class II classification extends 4.03 miles throughout the creek. The table below indicates where this trout water is located along the stream, starting from the mouth at mile zero.

Table 2 Suamico and Little Suamico Rivers Watershed Trout Stream

WADRS ID	Official Waterbody Name	Local Waterbody Name	WBIC	Start Mile	End Mile	Trout Class	Trout ID
10857	Haller Creek	Wilson Creek	411000	2.25	6.28	Class II	1640

Outstanding and Exceptional Resource Waters

There are no outstanding or exceptional resources waters located within the Suamico and Little Suamico Rivers Watershed.

Impaired Waters

The **entire inner bay of the Bay of Green Bay** (13,867.36 acres) that lies within the watershed is listed as impaired from *phosphorus deposition, sediment/total suspended solids and polychlorinated biphenyls (PCBs)*, which are a class of compounds used in a wide variety of manufacturing processes and in transformers. The Little Suamico River is also on the impaired waters list for phosphorus and degraded biological community.

The use of PCBs in new applications no longer occurs, but historic dumping of PCBs throughout the U.S. resulted in contamination of river bottoms and surrounding bays. PCBs attach to sediment or soil and is redistributed when the sediment is disrupted or disturbed. Organic contaminants are bio accumulating substances, which mean that they are stored in the fat of animals, such as fish, and transferred to predators, such as humans.

Table X: Suamico and Little Suamico Rivers Watershed Impaired Waters

Waters ID	Name	WBIC	Impaired	Pollutants
357876	Green Bay	70	13,867 ac	PCB's, Phosphorus, sediment/total suspended solids
10862	Little Suamico	411800	23.78 miles	Total Phosphorus / Degraded Biological Community

Fish Consumption

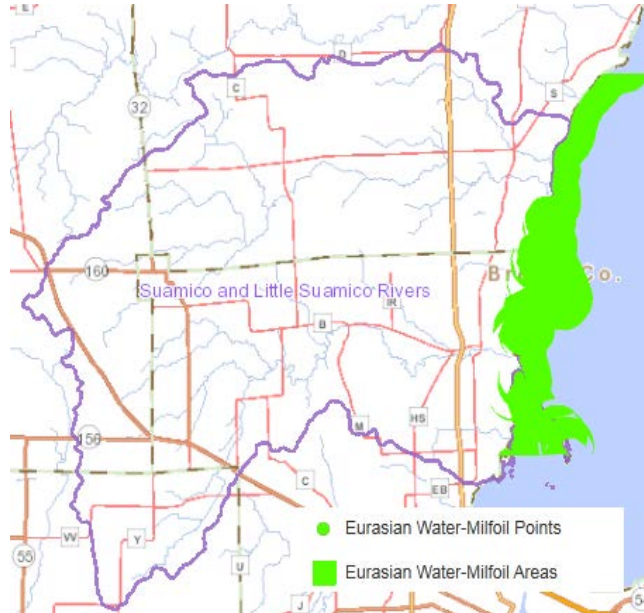
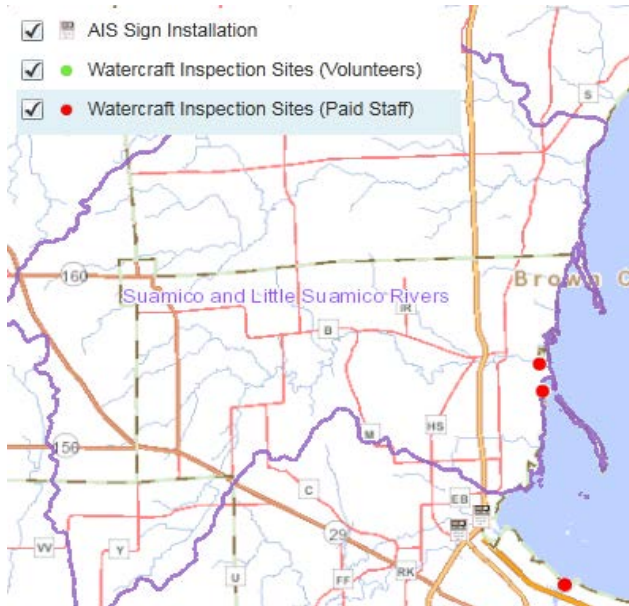
Wisconsin's fish consumption advisory is based on the work of public health, water quality, and fisheries experts from eight Great Lakes states. Based on the best available scientific evidence, these scientists determined how much fish is safe to eat over a lifetime based on the amount of contaminants found in the fish and how those contaminants affect human health. Advisories are based on concentrations of the following contaminants along with angler habits, fishing regulations, and other factors.

From Green Bay south of Marinette and its tributaries (except Lower Fox) from their mouths up to the first dam in the Suamico and Little Suamico Rivers Watershed, there has been a fish consumption advisories in effect for polychlorinated biphenyls (PCBs) since 1977.

Aquatic Invasive Species

Eurasian water milfoil is found along the coastal waters (Lake Michigan) in this watershed and in the lower reaches of the Suamico and Little Suamico Rivers. Two watercraft inspection sites have been established in this area to reduce the spread. Additional species and locations include: zebra mussel, rusty crayfish, Ruffe, Phragmites, Round Goby, and purple loosestrife. An extensive Phragmites control grant was funded through the Great Lakes Restoration Initiative in 2010. The project was aimed at controlling dense monotypic stands of this invasive along the coastal waters of the Bay from Marinette County down through Brown County.

Aquatic Invasive	Name
Zebra Mussel	Green Bay
Eurasian Watermilfoil	Green Bay
Rusty Crayfish	North Branch Suamico River
Round Goby	Little Suamico River
Round Goby	Suamico River
Phragmites	Extensive throughout Brown and Oconto Counties
Rusty Crayfish	Suamico River
Rusty Crayfish	West Branch Suamico River
Rusty Crayfish	Tibbet Creek
Ruffe	Green Bay
Purple Loosestrife	Hwy 41 / 141 - 1/2 mile S of weigh station



Species of Special Concern

Two threatened species of fish. The redbfin shiner (*Lythrurus umbratilis*) and the longear sunfish (*Lepomis megalotis*) have been reported in the Suamico River. The threatened wood turtle (*Clemmys insculpta*) breeds and over-winters in portions of the river. A full list of special concern plants and animals for this watershed can be found on the state's Natural Heritage Inventory (NHI) at <http://dnr.wi.gov/topic/nhi/>.

State Natural and Wildlife Areas

The Green Bay West Shores Wildlife Area

The Green Bay West Shores Wildlife Area is located along the west shore of Green Bay within Oconto and Brown Counties. The wildlife areas contain deltas formed by the Oconto River and the Suamico River, which serve as an important habitat for water fowl and fish populations in the Green Bay region. The Green Bay West Shores Wildlife Area is contained within the larger ecological unit known as the Pensaukee River Wetlands Complex. The state wildlife area is used for many kinds of recreation including hunting, fishing, trapping, boating, snowmobiling, and cross-country skiing. For more information please visit the [Wisconsin Coastal Wetlands Management program](#) and the [Wisconsin Wetlands Association](#).

Watershed Actions

Grants and Projects

Grant Details Habitat **Date** 10/1/2010

Waters Involved Lake Michigan

West Shore Green Bay Northern Pike Habitat Project: The northern pike (*Esox lucius*) is Wisconsin's second largest predator fish and is an important part of the Green Bay ecosystem and fish community. Northern pike have become scarce in Green Bay due to wetland habitat losses of as high as 70% (Bosley, 1978) due to a combination of human and non-human factors (Rost, 1996). In addition, fish encounter passage obstacles when leaving Green Bay to find spawning marshes or when fry migrate back to Green Bay. Small perennial and intermittent streams (including roadside and agricultural ditches) on the western shore of Green Bay provide high quality fish spawning and rearing habitat for northern pike (Rost 1992, 1993, 1994, 1995, 1996). These streams and pooled wetlands provide very productive habitat for other fish species as well as aquatic organisms. Reproduction in these wetlands is likely a principle source of recruitment for fish populations in Green Bay.



In 1998-99, the Wisconsin Department of Natural Resources (WDNR) conducted a habitat assessment in

the Suamico and Little Suamico Rivers watershed basins. Physical, chemical, and biological data were collected. Areas were identified for protection/restoration of northern pike spawning and rearing habitat. Study results revealed that the major impediments were excessive algae from eutrophication along with stream flashiness (extremely rapid increases and then decreases in stream discharge following rain events). In another study on lower Green Bay, the scarcity of top predator species, such as northern pike, was recognized as a significant problem in the Green Bay ecosystem. It is estimated that over 70% of the spawning habitat for northern pike has been lost. Since lost habitat also provided plankton to downstream communities, the Green Bay ecosystem continues to be out of balance.

Grant Details Urban Nonpoint - Stormwater Planning**Date 1/1/2007****Waters Involved** Unnamed**Status** Complete

Village Of Suamico: Storm Water Plan: To cost-share creation of runoff management ordinances, establishment of a public education program, and development of a storm water management plan for the Village. In addition to the projects above a number of pass through funding projects have been carried out in the watershed and nearby or affected county. See below for detail regarding these projects.

Project Name (Click for Details)	Year
Aquatic Invasives County Coordinator - Brown County	2011
Aquatic Invasives County Coordinator - Oconto County	2011
Aquatic Invasives County Coordinator - Outagamie County	2011
Aquatic Invasives County Coordinator - Shawano County	2011
BROWN COUNTY: Brown County Shoreland Ordinance Revision Project	2010
Brown County Navigability	2008
Cat Island Chain Restoration Project	2010
GLACIERLAND RC&D, INC.: Glacierland RCD Tri-County Clean Boats Project	2010
LUMBERJACK RC&D COUNCIL: Oconto & Marinette Counties Motor Tour Guide of Shoreland Restoration Projects Development	2005
OCONTO COUNTY: Gohr Farm Runoff Control	2009
OCONTO COUNTY: Oconto County Clean Boats-Clean Waters Project	2006
OCONTO COUNTY: Oconto County Lake Classification Ordinance Development	2004
OCONTO COUNTY: Oconto County Lakes Classification Project	2001
OUTAGAMIE COUNTY: Outagamie County Shoreland Ordinance Revision Project	2010
OUTAGAMIE COUNTY: Vandehei Farms Manure Storage	2008
SHAWANO COUNTY: Shawano County Lake Classification Study	2000
SHAWANO COUNTY: Shawano County Lakes AIS Project	2010
SHAWANO COUNTY: Shawano County Shoreland Ordinance Evaluation	2001
SHAWANO COUNTY: Shawano County Shoreland Ordinance Revision Project	2010
SHAWANO COUNTY: Shawano County Icyogonimus Parasite Study Phase 2	1999
VILLAGE OF SUAMICO: Storm Water Plan	2007
West Shore Green Bay Northern Pike Habitat Project	2010
West shore of Green Bay Northern Pike Habitat Project	2010

Monitoring

Great Lakes Beaches - 2002 Pilot Project 1/1/1960 Complete Monitoring for pathogens at Great Lakes to help assessment beach quality under the state's Recreational Use Designation.

Lake Michigan Basin Wetland Intensification Study 8/1/2011 Active Monitoring data are needed to assess the health of existing wetlands and measure the success of restoration projects. It is clear that to report a more complete picture on the status of wetlands we will need to develop more measures of wetland quality. We have worked with EPA to develop methods to assess wetland health, known as "condition assessment," and continue to work on additional methods. The EPA is planning a condition assessment survey of the nation's wetlands to be carried out in 2011. The Department is part of the work group designing the national survey. This is an intensification of the national survey that to focus in on Wisconsin wetlands, most likely within a particular watershed or river basin.

NER NC Stream Stratified Sites 2010, 2011 5/24/2010 Complete Project for Natural Communities. This project selects sites from all wadeable streams (83,500 miles, which includes ephemeral and macroinvertebrate streams). The random sites stratified by natural community (nc) and Region by Weigel. Two-hundred sites are sampled per year (approximately 25 sites per natural community per basin). This is a five year study. The sites are mapped on SWDV. April-October sampling

NER NC Stream Stratified Sites 2012 7/1/2012 Active Project for Natural Communities. This project selects sites from all wadeable streams (83,500 miles, which includes ephemeral and macroinvertebrate streams). The random sites stratified by natural community (nc) and Region by Weigel. Two-hundred sites are sampled per year (approximately 25 sites per natural community per basin). This is a five year study. The sites are mapped on SWDV. April-October sampling

NER Watershed Rotation Sites (Non_LTT) 7/1/2005 Complete Stream water quality monitoring covering primarily biological, chemical, and habitat related monitoring to determine ambient conditions at "pour point" locations for each of state's 330 watersheds.

Severely Impacted Sites 2012 7/1/2012 Active 100 sites total per year in 2012 and 2013 Identify most-impacted stream sites in state

Severely Impacted Sites 2013 3/27/2013 Active 100 sites total per year in 2012 and 2013 Identify most-impacted stream sites in state

Volunteer Monitoring

There are no citizen monitors in the Suamico/Little Suamico River Watershed. For information on how to become a Water Action Volunteer Stream Monitor, visit- <http://watermonitoring.uwex.edu/index.html>.

Basin/Watershed Partners

- Northeast Wisconsin Land Trust
- Barkhausen Waterfowl Preserve
- The Nature Conservancy
- Ducks Unlimited
- USFWS
- USGS
- NOAA
- Wisconsin Coastal Management Program
- Oconto County
- Brown County
- Shawano County

Priority Issues

- Wetland Conservation, mitigation, and Protection
- Fish passage- especially northern pike
- Manure Management- storage pits, land application practices, nutrient management plans
- Agricultural practices- buffer strips, crop rotation, tillage practices
- Fragmentation of intact habitats from urban sprawl pressure from greater Green Bay area
- Great Lakes Yellow Perch Fishery
- Phragmites Control

Recommendations

- Restore Wetlands to prevent altered food webs, a loss of biodiversity, and a poorly functioning ecosystem.
- Protect and enhance critical spawning wetlands
- Support the removal and replacement of high impact fish passage barriers to allow upstream spawning access to northern pike.
- Promote Smart Growth planning for residential pressures in the watershed.
- Adopt nutrient management plans for small to medium sized farms to ensure manure management and nutrient applications are consistent with protecting surface and ground water quality in the watershed
- District WRM should prepare data analysis and summary information for future Nine Key Elements Plans.

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Waters Condition Table – Fish and Aquatic Life Use

Official Name (Click for Details)	Local Name (Click for Map)	Start Mile	End Mile	Water Size Acres or Miles	WBIC	County	Last Year Monitored	Fish & Aquatic Life Condition	Trout Class
Dead Horse Bay	Dead Horse Bay			25.8	94	Brown		Unknown	
Green Bay	Green Bay (Inner Bay, Aoc)			13,867.4	70	Door	2014	Poor	
Haller Creek	Haller Creek	0.00	2.25	2.3 Miles	411000	Brown, Oconto	2013	Unknown	
Haller Creek	Wilson Creek	2.25	6.28	4.0 Miles	411000	Brown, Oconto	2014	Unknown	CLASS II
Lake Michigan	Long tail Beach, Lake Michigan			0.1 Acres	20	Brown, Door, Kenosha, Kewaunee, Manitowoc, Marinette, Milwaukee, Oconto, Ozaukee, Racine, Sheboygan	2013	Unknown	
Little Suamico River	Little Suamico River	0.00	23.78	23.8 Miles	411800	Brown, Oconto, Shawano	2013	Poor	
North Branch Suamico River	North Branch Suamico River	0.00	5.00	5.0 Miles	411400	Brown, Oconto	2012	Unknown	
Potter Creek	Potter Creek	0.00	6.00	6.0 Miles	411500	Brown, Shawano	2013	Suspected Poor	
Potter Creek	Unnamed Stream	6.03	8.64	2.6 Miles	411500	Brown, Shawano		Unknown	
South Branch Suamico River	South Branch Suamico River	0.00	3.52	3.5 Miles	411700	Brown, Outagamie	2003	Fair	
South Branch Suamico River	South Branch Suamico River	3.52	7.30	3.8 Miles	411700	Brown, Outagamie	2012	Unknown	
Suamico River	Suamico River	0.00	4.00	4.0 Miles	410900	Brown	2014	Unknown	
Suamico River	Suamico River	4.00	16.00	12.0 Miles	410900	Brown	2012	Good	
Tibbet Creek	Tibbett Creek	0.00	2.00	2.0 Miles	412300	Oconto	2014	Unknown	

Official Name (Click for Details)	Local Name (Click for Map)	Start Mile	End Mile	Water Size Acres or Miles	WBIC	County	Last Year Monitored	Fish & Aquatic Life Condition	Trout Class
Tibbet Creek	Tibbett Creek	2.00	5.00	3.0 Miles	412300	Oconto	2012	Unknown	
Tibbet Creek	Tibbet Creek	5.01	6.20	1.2 Miles	412300	Oconto		Unknown	
West Branch Suamico River	West Branch Suamico River	0.00	9.03	9.0 Miles	411600	Brown, Outagamie, Shawano	2013	Fair	
Unnamed	Unnamed Stream	0.00	0.36	0.4 Miles	5013864	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.38	0.4 Miles	5014801	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.39	0.4 Miles	5013806	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.40	0.4 Miles	5013416	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.42	0.4 Miles	5014135	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.44	0.4 Miles	3000593	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.46	0.5 Miles	5014754	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.48	0.5 Miles	5013496	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.49	0.5 Miles	5016056	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.49	0.5 Miles	5016147	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.49	0.5 Miles	5014050	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.50	0.5 Miles	5015298	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	0.50	0.5 Miles	5015298	Shawano		Unknown	

<u>Official Name</u> (Click for Details)	<u>Local Name</u> (Click for Map)	<u>Start Mile</u>	<u>End Mile</u>	<u>Water Size Acres or Miles</u>	<u>WBIC</u>	<u>County</u>	<u>Last Year Monitored</u>	<u>Fish & Aquatic Life Condition</u>	<u>Trout Class</u>
Unnamed	Unnamed Stream	0.00	0.51	0.5 Miles	5013881	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.51	0.5 Miles	5014911	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.51	0.5 Miles	5014841	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.52	0.5 Miles	5015489	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	0.52	0.5 Miles	5016645	Outagamie		Unknown	
Unnamed	Unnamed Stream	0.00	0.52	0.5 Miles	5014442	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.53	0.5 Miles	5014252	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.53	0.5 Miles	5013759	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.53	0.5 Miles	5014076	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.54	0.5 Miles	5013574	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.54	0.5 Miles	5015386	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	0.54	0.5 Miles	5014803	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.55	0.6 Miles	5014487	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.55	0.6 Miles	5016870	Outagamie		Unknown	
Unnamed	Unnamed	0.00	0.55	0.6 Miles	3000555	Brown	2014	Unknown	
Unnamed	Unnamed Stream	0.00	0.55	0.6 Miles	5014963	Shawano		Unknown	

<u>Official Name</u> (Click for Details)	<u>Local Name</u> (Click for Map)	<u>Start Mile</u>	<u>End Mile</u>	<u>Water Size Acres or Miles</u>	<u>WBIC</u>	<u>County</u>	<u>Last Year Monitored</u>	<u>Fish & Aquatic Life Condition</u>	<u>Trout Class</u>
Unnamed	Unnamed Stream	0.00	0.55	0.6 Miles	5016192	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.56	0.6 Miles	5015832	Brown, Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	0.57	0.6 Miles	5013940	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.57	0.6 Miles	5015156	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.58	0.6 Miles	5016808	Outagamie		Unknown	
Unnamed	Unnamed Stream	0.00	0.59	0.6 Miles	5014448	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	0.59	0.6 Miles	5013418	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.59	0.6 Miles	5015349	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	0.61	0.6 Miles	5014880	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.61	0.6 Miles	5015725	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.61	0.6 Miles	5014891	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.62	0.6 Miles	5014150	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.62	0.6 Miles	5016928	Outagamie		Unknown	
Unnamed	Unnamed Stream	0.00	0.62	0.6 Miles	5016918	Outagamie		Unknown	
Unnamed	Unnamed Stream	0.00	0.64	0.6 Miles	5015839	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.64	0.6 Miles	5016508	Outagamie		Unknown	

<u>Official Name</u> (Click for Details)	<u>Local Name</u> (Click for Map)	<u>Start Mile</u>	<u>End Mile</u>	<u>Water Size Acres or Miles</u>	<u>WBIC</u>	<u>County</u>	<u>Last Year Monitored</u>	<u>Fish & Aquatic Life Condition</u>	<u>Trout Class</u>
Unnamed	Unnamed Stream	0.00	0.64	0.6 Miles	5013498	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.64	0.6 Miles	3000017	Oconto		Unknown	
Unnamed	Unnamed	0.00	0.65	0.7 Miles	5013633	Oconto	2012	Unknown	
Unnamed	Unnamed Stream	0.00	0.65	0.7 Miles	5013956	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.65	0.7 Miles	5015733	Brown		Unknown	
Unnamed	Unnamed	0.00	0.67	0.7 Miles	5015368	Brown	2011	Unknown	
Unnamed	Unnamed Stream	0.00	0.68	0.7 Miles	5014649	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.69	0.7 Miles	3000565	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.70	0.7 Miles	5015418	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	0.71	0.7 Miles	5014743	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	0.72	0.7 Miles	5016061	Brown		Unknown	
Unnamed	Unnamed	0.00	0.74	0.7 Miles	3000553	Brown	2014	Unknown	
Unnamed	Unnamed Stream	0.00	0.75	0.8 Miles	5013857	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.76	0.8 Miles	5014175	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.77	0.8 Miles	5014494	Oconto, Shawano		Unknown	
Unnamed	Unnamed	0.00	0.79	0.8 Miles	5015123	Brown	2011	Unknown	
Unnamed	Unnamed Stream	0.00	0.80	0.8 Miles	5015106	Shawano		Unknown	

<u>Official Name</u> (Click for Details)	<u>Local Name</u> (Click for Map)	<u>Start Mile</u>	<u>End Mile</u>	<u>Water Size Acres or Miles</u>	<u>WBIC</u>	<u>County</u>	<u>Last Year Monitored</u>	<u>Fish & Aquatic Life Condition</u>	<u>Trout Class</u>
Unnamed	Unnamed Stream	0.00	0.82	0.8 Miles	5013529	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.82	0.8 Miles	5017134	Outagamie		Unknown	
Unnamed	Unnamed Stream	0.00	0.83	0.8 Miles	5014131	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.83	0.8 Miles	5016596	Outagamie		Unknown	
Unnamed	Unnamed Stream	0.00	0.84	0.8 Miles	5013687	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.84	0.8 Miles	3000114	Brown, Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.85	0.9 Miles	5013380	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.86	0.9 Miles	5014568	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.86	0.9 Miles	5015101	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.87	0.9 Miles	5013396	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.88	0.9 Miles	5015856	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.88	0.9 Miles	5015748	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	0.88	0.9 Miles	5013743	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.88	0.9 Miles	5015097	Brown		Unknown	
Unnamed	Unnamed	0.00	0.89	0.9 Miles	5015765	Brown	1993	Unknown	
Unnamed	Unnamed Stream	0.00	0.89	0.9 Miles	5015801	Brown		Unknown	

<u>Official Name</u> (Click for Details)	<u>Local Name</u> (Click for Map)	<u>Start Mile</u>	<u>End Mile</u>	<u>Water Size Acres or Miles</u>	<u>WBIC</u>	<u>County</u>	<u>Last Year Monitored</u>	<u>Fish & Aquatic Life Condition</u>	<u>Trout Class</u>
Unnamed	Unnamed Stream	0.00	0.89	0.9 Miles	5013825	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.90	0.9 Miles	5016635	Outagamie		Unknown	
Unnamed	Unnamed Stream	0.00	0.93	0.9 Miles	5013631	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.94	0.9 Miles	5015593	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.94	0.9 Miles	5016029	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	0.94	0.9 Miles	5014534	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.95	1.0 Miles	5013949	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.97	1.0 Miles	5014020	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	0.98	1.0 Miles	5015185	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	1.00	1.0 Miles	5015190	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	1.04	1.0 Miles	5016225	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	1.06	1.1 Miles	5015007	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	1.06	1.1 Miles	3000561	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	1.07	1.1 Miles	5016419	Outagamie		Unknown	
Unnamed	Unnamed Stream	0.00	1.07	1.1 Miles	3000548	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	1.08	1.1 Miles	3000583	Oconto		Unknown	

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Unnamed	Unnamed Stream	0.00	1.09	1.1 Miles	3000167	Brown		Unknown	
Unnamed	Unnamed	0.00	1.11	1.1 Miles	3000560	Brown	2011	Unknown	
Unnamed	Unnamed Stream	0.00	1.11	1.1 Miles	5013621	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	1.13	1.1 Miles	5015649	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	1.14	1.1 Miles	5014996	Brown, Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	1.18	1.2 Miles	3000547	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	1.20	1.2 Miles	3000584	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	1.21	1.2 Miles	3000402	Brown, Oconto		Unknown	
Unnamed	Suamico River	0.00	1.21	1.2 Miles	3000563	Brown	2011	Unknown	
Unnamed	Unnamed Stream	0.00	1.21	1.2 Miles	3000568	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	1.23	1.2 Miles	5015170	Brown, Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	1.25	1.3 Miles	5014456	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	1.26	1.3 Miles	5016214	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	1.28	1.3 Miles	5015490	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	1.36	1.4 Miles	3000589	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	1.38	1.4 Miles	5015947	Brown		Unknown	

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Unnamed	Unnamed Stream	0.00	1.41	1.4 Miles	5014524	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	1.47	1.5 Miles	5015271	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	1.48	1.5 Miles	5016244	Brown, Outagamie		Unknown	
Unnamed	Unnamed	0.00	1.53	1.5 Miles	3000404	Brown	2013	Unknown	
Unnamed	Unnamed Stream	0.00	1.59	1.6 Miles	5014355	Oconto, Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	1.59	1.6 Miles	5014031	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	1.62	1.6 Miles	3000551	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	1.64	1.6 Miles	5015504	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	1.68	1.7 Miles	5014892	Brown, Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	1.69	1.7 Miles	5014156	Oconto, Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	1.75	1.8 Miles	3000576	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	1.78	1.8 Miles	5015051	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	1.80	1.8 Miles	5014962	Brown, Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	1.81	1.8 Miles	5013931	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	1.82	1.8 Miles	5014112	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	1.95	2.0 Miles	3000619	Outagamie		Unknown	

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Unnamed	Unnamed	0.00	1.96	2.0 Miles	3000550	Brown	2014	Unknown	
Unnamed	Unnamed Stream	0.00	1.99	2.0 Miles	5015792	Brown, Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	2.00	2.0 Miles	5015656	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	2.02	2.0 Miles	3000571	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	2.07	2.1 Miles	5014692	Shawano		Unknown	
Unnamed	Unnamed - no feature	0.00	2.10	2.1 Miles	3000578	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	2.10	2.1 Miles	3000578	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	2.13	2.1 Miles	3000556	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	2.17	2.2 Miles	3000588	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	2.21	2.2 Miles	5016351	Outagamie		Unknown	
Unnamed	Unnamed Stream	0.00	2.23	2.2 Miles	3000586	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	2.23	2.2 Miles	5015112	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	2.37	2.4 Miles	5014562	Oconto		Unknown	
Unnamed	Unnamed	0.00	2.38	2.4 Miles	3000559	Brown	2011	Unknown	
Unnamed	Unnamed	0.00	2.39	2.4 Miles	3000564	Brown	2014	Unknown	
Unnamed	Unnamed Stream	0.00	2.43	2.4 Miles	3000596	Outagamie		Unknown	
Unnamed	Unnamed Stream	0.00	2.45	2.5 Miles	5015166	Brown		Unknown	

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Unnamed	Hidden Lake Creek	0.00	2.47	2.5 Miles	411100	Brown	2012	Fair	
Unnamed	Unnamed Stream	0.00	2.56	2.6 Miles	3000618	Outagamie		Unknown	
Unnamed	Unnamed Stream	0.00	2.59	2.6 Miles	3000591	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	2.64	2.6 Miles	3000582	Oconto, Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	2.68	2.7 Miles	5015290	Brown, Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	2.73	2.7 Miles	410800	Brown		Unknown	
Unnamed	Unnamed	0.00	2.74	2.7 Miles	3000562	Brown	2011	Unknown	
Unnamed	Unnamed Stream	0.00	2.81	2.8 Miles	3000566	Brown		Unknown	
Unnamed	Unnamed Stream	0.00	2.84	2.8 Miles	3000590	Oconto		Unknown	
Unnamed	Unnamed	0.00	3.08	3.1 Miles	3000166	Brown	2012	Unknown	
Unnamed	Unnamed Stream	0.00	3.34	3.3 Miles	3000574	Brown, Shawano		Unknown	
Unnamed	Unnamed	0.00	3.40	3.4 Miles	3000549	Brown	2014	Unknown	
Unnamed	Unnamed Stream	0.00	3.76	3.8 Miles	3000597	Shawano		Unknown	
Unnamed	Unnamed Stream	0.00	3.88	3.9 Miles	5014493	Oconto, Shawano		Unknown	
Unnamed	Unnamed	0.00	4.14	4.1 Miles	3000400	Brown	2014	Unknown	
Unnamed	Unnamed Stream	0.00	4.25	4.3 Miles	411900	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	4.65	4.7 Miles	3000557	Brown, Outagamie, Shawano		Unknown	

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Unnamed	Unnamed Stream	0.00	4.66	4.7 Miles	5013348	Oconto		Unknown	
Unnamed	Unnamed	0.00	5.00	5.0 Miles	3000558	Brown, Shawano	2014	Suspected Poor	
Unnamed	Unnamed	0.00	5.20	5.2 Miles	412000	Oconto	2011	Unknown	
Unnamed	Unnamed - no feature	0.00	5.20	5.2 Miles	412000	Oconto		Unknown	
Unnamed	Unnamed	0.00	5.37	5.4 Miles	410500	Brown	2014	Fair	
Unnamed	Unnamed Stream	0.00	5.46	5.5 Miles	412200	Oconto		Unknown	
Unnamed	Unnamed Stream	0.00	5.65	5.7 Miles	3000592	Oconto, Shawano		Unknown	
Unnamed	Unnamed - no feature	0.00	5.99	6.0 Miles	3000018	Oconto		Unknown	
Unnamed	Unnamed - no feature	0.00	6.00	6.0 Miles	3000590	Oconto		Unknown	
Unnamed	Unnamed	0.00	6.00	6.0 Miles	3000018	Oconto	2012	Unknown	
Unnamed	Tibbets Creek	0.00	6.54	6.5 Miles	3000570	Oconto	2013	Unknown	
Unnamed	Unnamed Stream	0.00	9.00	9.0 Miles	412100	Brown, Oconto, Shawano		Unknown	
Unnamed	Unnamed Lake			5.1 Acres	411300	Brown	2012	Unknown	
Unnamed	Unnamed			2.2 Acres	5543348	Brown		Unknown	
Unnamed	Un Lake			0.5 Acres	408800	Outagamie		Unknown	
Unnamed	Un Lake			0.5 Acres	409500	Brown		Unknown	
Unnamed	Unnamed			4.1 Acres	5539306	Oconto		Unknown	
Unnamed	Unnamed			2.2 Acres	5539311	Oconto		Unknown	
Unnamed	Unnamed Lake			8.2 Acres	5591397	Brown	2012	Unknown	

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Unnamed	Unnamed Lake			36.9 Acres	5591395	Brown	2014	Unknown	
Unnamed	Unnamed Lake			5.8 Acres	5591396	Brown	2012	Unknown	
Unnamed	Unnamed Lake			6.0 Acres	5541490	Oconto	2012	Unknown	
Unnamed	Unnamed			13.0 Acres	5542574	Brown		Unknown	
Unnamed	Unnamed			25.8 Acres	5584635	Brown	2012	Unknown	
Unnamed	Unnamed			2.8 Acres	5543311	Brown		Unknown	
Unnamed	Unnamed			18.2 Acres	5543303	Brown	2011	Unknown	
Unnamed	Unnamed			12.1 Acres	5542649	Brown		Unknown	
Unnamed	Unnamed			5.7 Acres	5540084	Oconto		Unknown	
Unnamed	Unnamed			23.0 Acres	5543559	Brown		Unknown	
Unnamed	Unnamed			3.1 Acres	5542104	Brown	2011	Unknown	
Unnamed	Unnamed			2.3 Acres	5543620	Brown		Unknown	