



Great Blue Heron Rookery, Scott Provost

SEVENMILE AND TENMILE CREEKS WATERSHED – CW09

This Central Sands watershed is vulnerable to surface water depletion through human induced groundwater drawdowns due to subsurface characteristics and land use/ land management practices. Central Wisconsin waters found here are still of good quality and management practices to maintain or improve quality are recommended.

*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 Sevenmile and Tenmile Creek Watershed is located in the counties of Adams, Portage, Wood and Waushara. This watershed is a maze of ditches and laterals that were created to drain lowland areas for agricultural activities. There are large sections of land that have been purchased by the state that are being maintained for grassland ecosystems. Both grazing and pivot irrigation are two land uses that impact the water quality of Sevenmile and Tenmile Creeks Watershed.

The watershed includes the towns of Pine Grove, Grant, and Almond and the Villages of Almond, Plainfield, and Port Edwards.

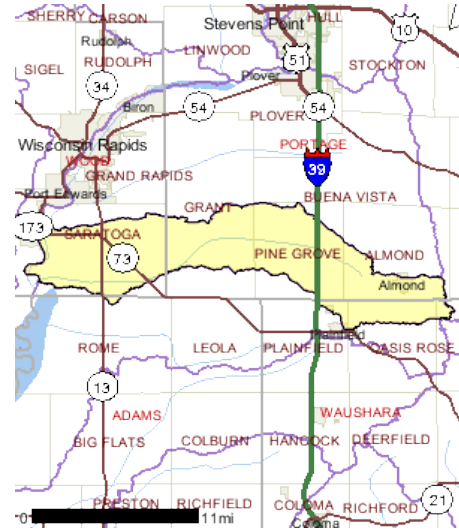


Figure 1 Watershed Location

In the 1990s, this watershed was ranked using the Nonpoint Source Priority Watershed Selection Criteria. Based on surface and ground water data, the overall ranking was considered high, establishing Sevenmile and Tenmile Creek Watershed as a high priority for future grant eligibility under the Runoff Management program. The Portage County Soil Erosion Control Plan identifies the towns of Pine Groe, Grant and Almond as having excessive soil loss rates due to wind and water erosion.

There are also several cranberry farms located in the watershed that utilize water for their operation. Water drawn from ditches reduces stream flow, decreases adult fish cover, reduces spawning areas for trout and likely exposes fish redds, and may result in an increase of water temperatures. Discharges from cranberry marshes can adversely affect water temperatures, deposit sediment, and release nutrients to the ditches. Periodic impounding of the ditches to flood marshes may prevent fish migration, increase water temperatures and de-water downstream reaches.

Population and Land Use

In terms of population, Wood, Waushara, and Adams Counties have lost population while Portage has increased just slightly according to the US Population Statistics between 2010 and 2013.

According to the 2006 National Land Cover Data (NLCD) just under half of the total land use in the Sevenmile and Tenmile Creeks Watershed is used for agricultural purposes (48.95%). Forest also occupies a sizeable portion of the

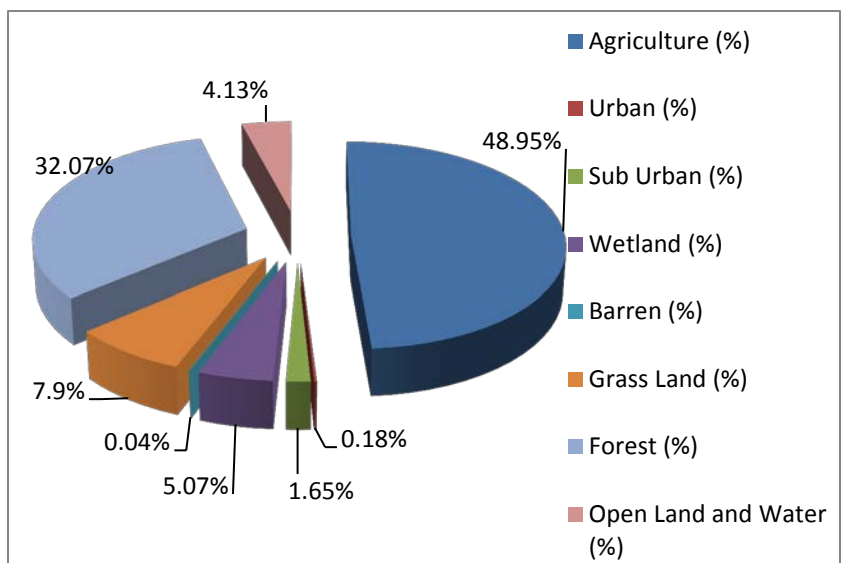


Figure 2 Land Use 2006 NAIP Land Cover

landscape as it covers 32.07%. Grass Land and Wetland in the watershed occupy 7.9% and 5.07% of the total land use. The remaining land uses make up only six percent of the entire watershed; these land uses are Open Land and Water (4.13%), Suburban (1.65%), Urban (0.18%) and Barren (0.04%).

Table 1 Sevenmile and Tenmile Creeks Watershed Land Use

Land Use	Acres	% of Area
Agriculture	35,162.74	48.95%
Forest	23,037.16	32.07%
Grass Land	5,674.89	7.90%
Wetland	3,641.98	5.07%
Open Land and Water	2,966.74	4.13%
Sub Urban	1,185.26	1.65%
Urban	129.30	0.18%
Barren	28.73	0.04%
Total Acres in Watershed	71,826.82	

Hydrology

Much of the upper portion of the watershed has been ditched in the early 1900's for drainage of the land. The Drainage District continues to provide maintenance dredging in order to remove sediment and vegetation from the channel. According to the District, this practice promotes improved drainage of the adjacent agricultural fields. A decision by DATCAP requires maintenance dredging to go no deeper than the approved profile. The Department supports this because over-dredging removes critical in-stream habitat for trout and other aquatic organisms, creates deep, low velocity pools, increases sedimentation, increases in-stream habitat recovery time and reduces potential spawning areas.

Fluctuating water levels and heavy siltation have reduced the trout population in the ditches. High nitrate values and stream bank pasturing (sedimentation) can cause water quality problems in some of the streams in the watershed. A special project to initiate baseflow monitoring in the central sands region of the state has been initiated due to significant disturbances in stream flow and aquatic health in this region from human uses of groundwater. The overuse of the groundwater has resulted in low of all flow in some streams, and significant drop in baseflow. The analyses from this study will result in management actions designed to remediate and better manage the surface water and groundwater in the state.



Ditch 10 at Farmers Road by Scott Provost

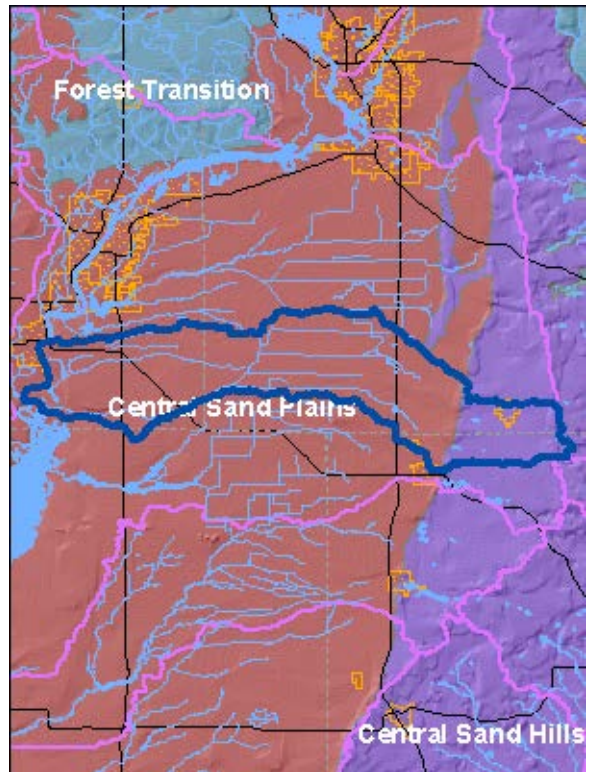
Ecological Landscapes

The Sevenmile and Tenmile Creeks Watershed is located primarily in the Central Sand Plains Ecological Landscape which is located in central Wisconsin, occurs on a flat, sandy lake plain, and supports agriculture, forestry, recreation, and wildlife management. The Ecological Landscape formed in and around what was once Glacial Lake Wisconsin, which contained glacial meltwater extending over 1.1 million acres at its highest stage. Soils are primarily sandy lake deposits, some with silt-loam loess caps. Sandstone buttes carved by rapid drainage of the glacial lake, or by wave action when they existed as islands in the lake, are distinctive features of this landscape.

The historic vegetation of the area included extensive wetlands of many types, including open bogs, shrub swamps, and sedge meadows. Prairies, oak forests, savannas and barrens also occurred in the Ecological Landscape. An area of more mesic forest with white pine and hemlock was found in the northwest portion, including a significant pinery in eastern Jackson County. Today, nearly half of the Ecological Landscape is nonforested, in agriculture and grassland. Most of the historic wetlands were drained early in the 1900s and are now used for vegetable cropping. The forested portion is mostly oak-dominated forest, followed by aspen and pines. A minor portion is maple-basswood forest and lowland hardwoods.

Historical Note

The Sevenmile and Tenmile Creeks watershed is located in the area covered by glacial Lake Wisconsin over 10,000 years ago. What remained after the lake dried up were the sandy soils of the lakebed and the organic mucky soils of the marshes from the lake's shorelines. Early Wisconsin farmers realized they could drain the marshes to expose the organic soil, straighten the existing streams, and use the water to plant potatoes and sweet corn in the sandy soil. This led to the creation of drainage districts back in the early 1900s. There are now over 200 drainage districts in 31 counties that manage the drainage ditches and have taxing authority. In fact, over one-third of Wisconsin farms are on land that has been drained, or reclaimed from wetlands and marshes.



The flat land and sandy soils of central Wisconsin
Photo courtesy of Ed Marek.

Watershed Condition

Overall Condition

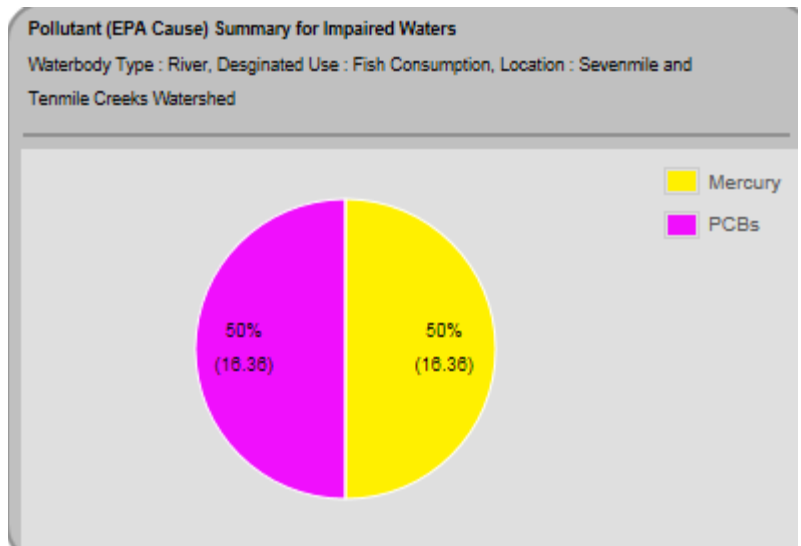
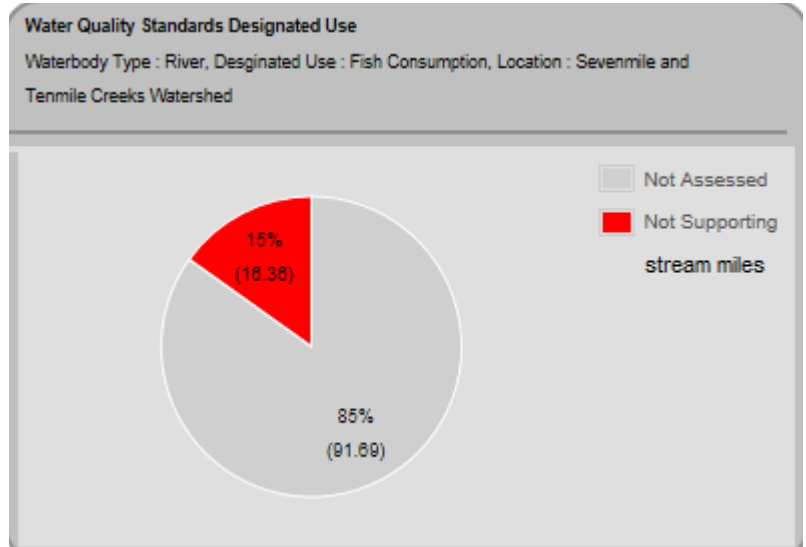
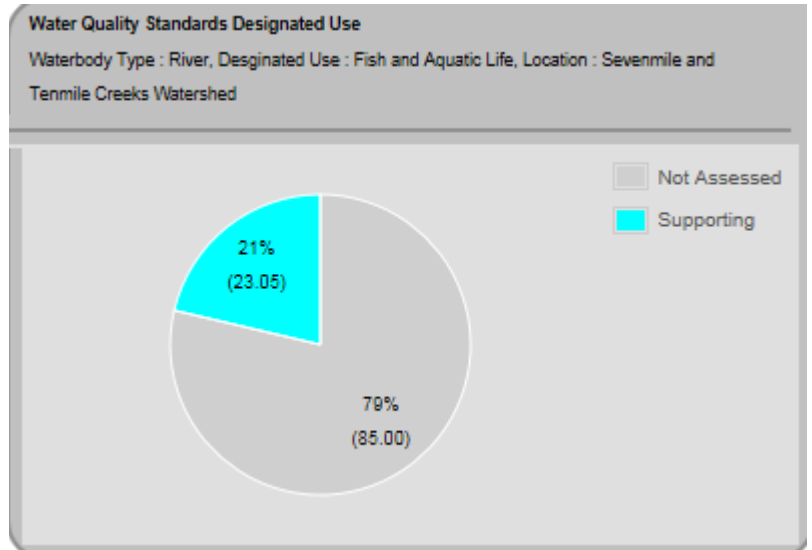
Seventy-Nine (79%) percent of the waters in the Sevenmile and Tenmile Creeks Watershed have not been assessed. Of the assessed waters all (21%) are supporting fish and aquatic life use. The segment of Wisconsin River making up the western border of this watershed does not currently support fish consumption use due to PCB contamination. This watershed is also included in the Wisconsin River TMDL, which involves excess phosphorus resulting in hyper eutrophication of “Lake Wisconsin” an impounded stretch of the Wisconsin River. More about the TMDL can be found here:

<http://dnr.wi.gov/topic/TMDLs/WisconsinRiver/>

River and Stream Condition

Twenty-one percent (21%) of streams in Sevenmile and Tenmile Creeks Watershed have been assessed for fish and aquatic life uses. Of this twenty-one percent, all are supporting their fish and aquatic life use, though Lateral #2 is suspected to be in poor condition based on a poor macroinvertebrate IBI result in 2012. The table on the next page shows the fish and aquatic life summary.

Seventy-nine percent of rivers and streams have not yet been assessed, however, so more monitoring is recommended to understand river and stream condition in this watershed. For Fish consumption, 15 % of assessed rivers and streams are not supporting the statewide baseline of a “general” advisory for mercury. This means that 16 miles of streams have a specific advisory for mercury and PCBs (see chart at right).



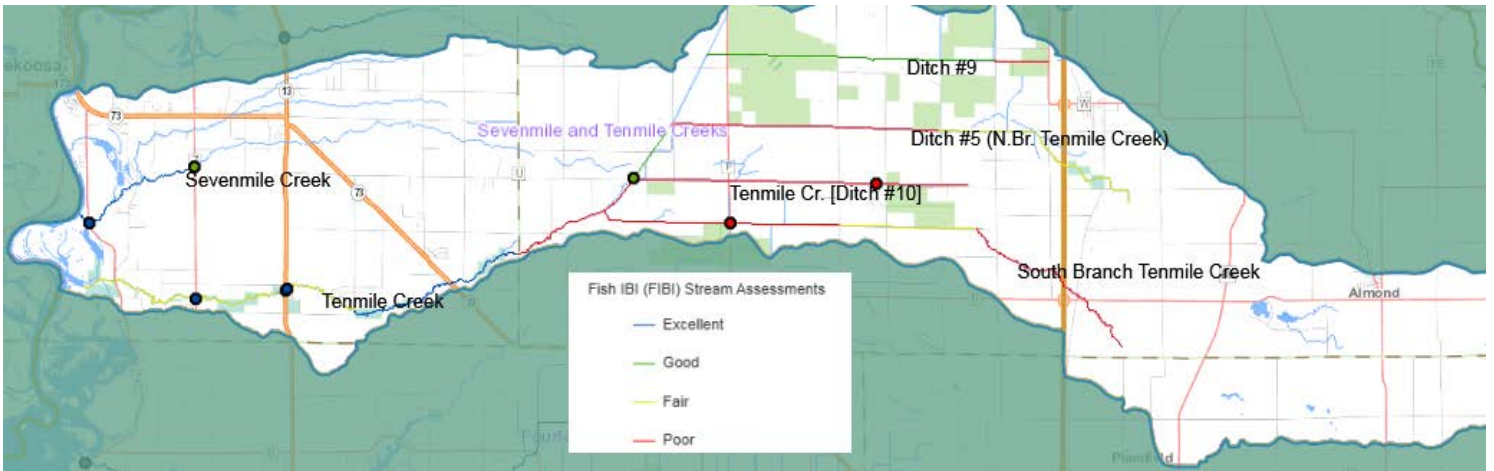
Summary of Assessed Waters for Fish and Aquatic Life

WBIC	STATION ID	CONDITION	DATE	STATION_NAME	
1382700	723232	Good	04/25/2007	Tenmile Creek at Hwy 13	
	723297	Good	12/02/2013	Tenmile Creek - Hwy 13 S - Near Nekoosa WI	
	10009190	Good	10/15/2014	10 Mile Cr Cth U Site 3	
	10009191	Good	10/15/2014	10 Mile Creek Cth Z Site 1	
	10009193	Excellent	10/15/2014	10 Mile Creek Bell Rd Site 2	
	10009201	Excellent	10/15/2014	Ditch 10 Evergreen / 110th St Site 9	
	10009202	Fair	10/08/2014	Ditch 10 Farmers Rd Site 10	
	10038448	Fair	12/02/2013	Unnamed Stream (Tenmile) @ Elm Road	
	10042762	Excellent	10/15/2014	North Branch Tenmile above confluence with south Branch Tenmile	
	10009192	Good	10/15/2014	S. Branch 10 Mile Creek Above Confluence W/ N. Branch Site 4	
	10009194	Fair	10/08/2014	S. Branch 10 Mile Creek W. Of Cth F N. Of Tower Site 5	
	10009195	Fair	10/08/2014	S. Bend Tenmile Creek Townline Rd Site 6	
	10009196	Fair	10/08/2014	S. Bend 10 Mile Creek Taft Rd Site 7	
	1384300	10016427	Poor	10/04/2012	Tenmile Creek - 40 Yards Upstream Of Evergreen Rd
	1384600	10009198	Good	10/08/2014	Ditch 5 / N Branch 10 Mile Creek Townline Rd Site 13
		10009199	Good	10/08/2014	Ditch 5 / N Branch 10 Mile Creek Cth F / Mill Rd Site 12
10009200		Good	10/08/2014	Ditch 5 / N Branch 10 Mile Creek Taft Rd Site 14	
1385500	10009204	Fair	10/08/2014	Ditch 9 Townline Rd Site 16	
	10009206	Fair	10/08/2014	Ditch 9 Taft Rd Site 17	
	10009207	Excellent	10/08/2014	9 Mile Creek / Ditch 9 Cth F Site 15	
1387000	10009205	Good	10/15/2014	7 Mile Creek Hollywood Rd Site 18	

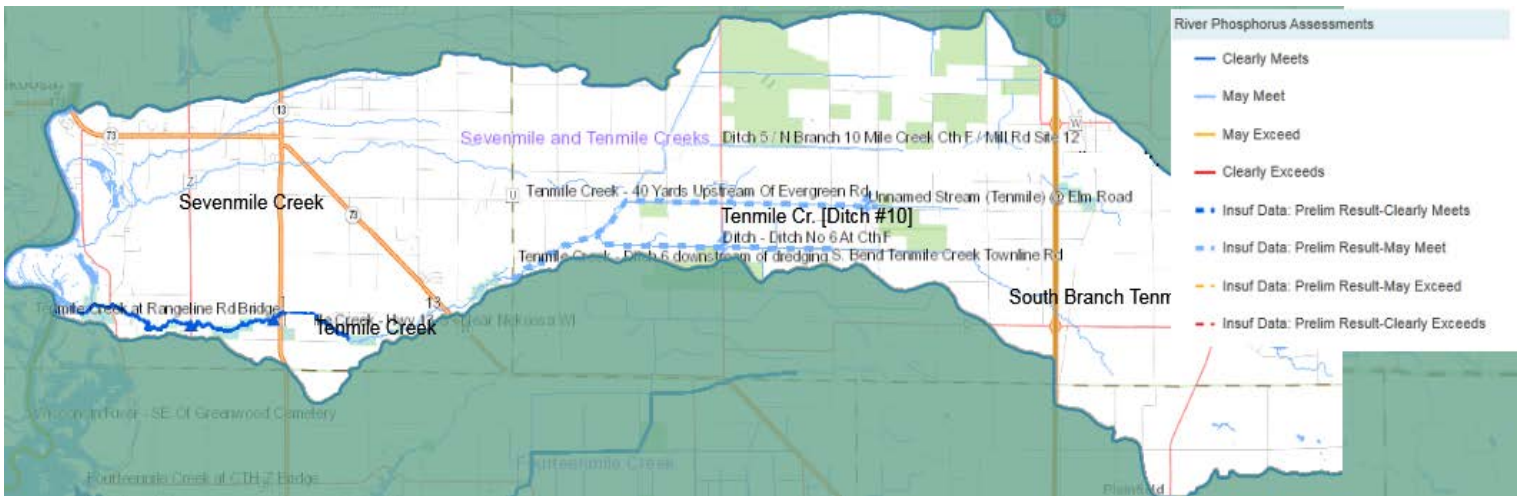
Macroinvertebrate IBI values 2016



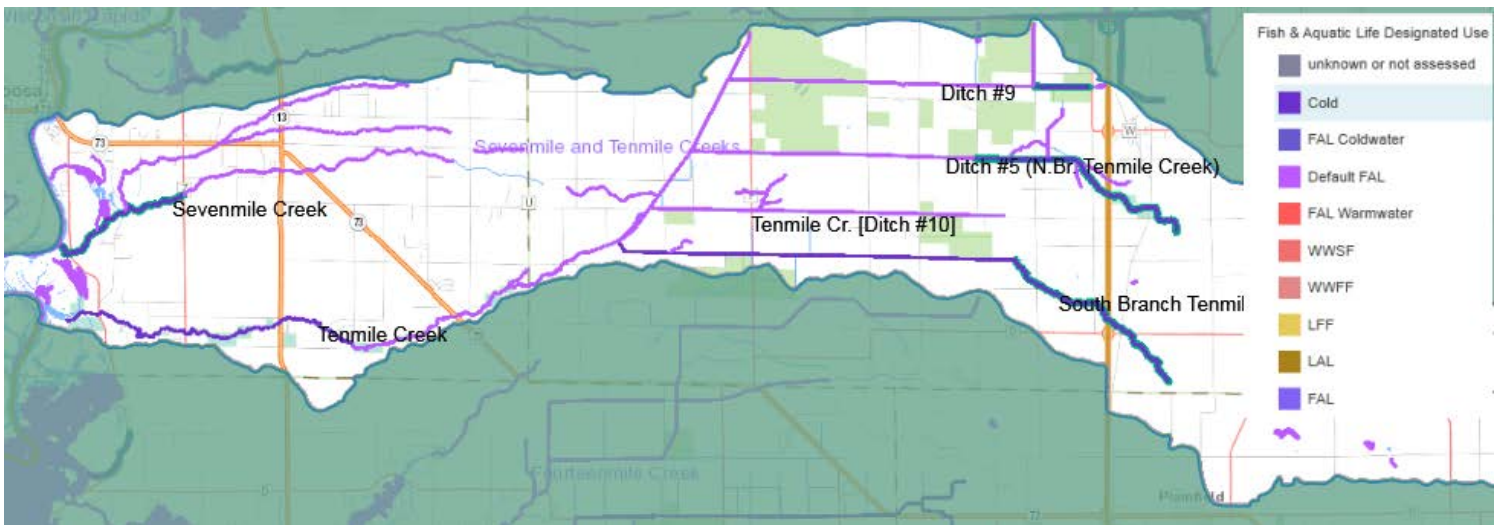
Fish IBI Values 2016



Total Phosphorus Package Data 2016

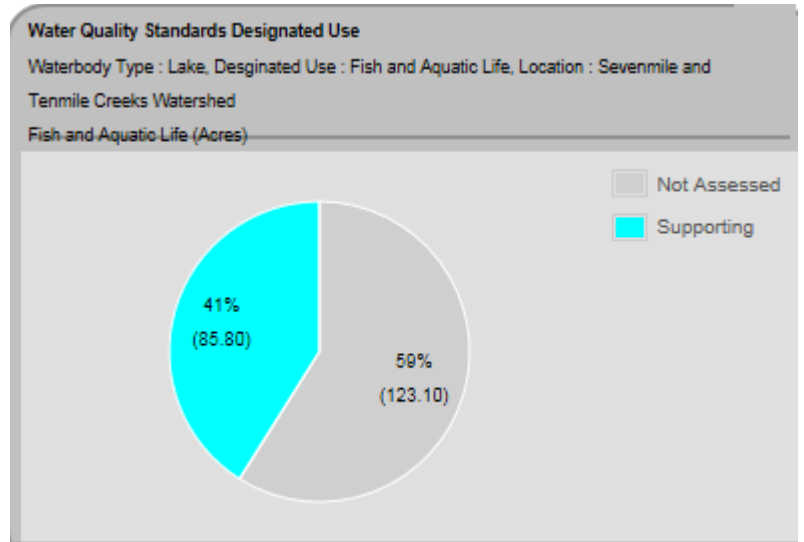


Water Quality Standards



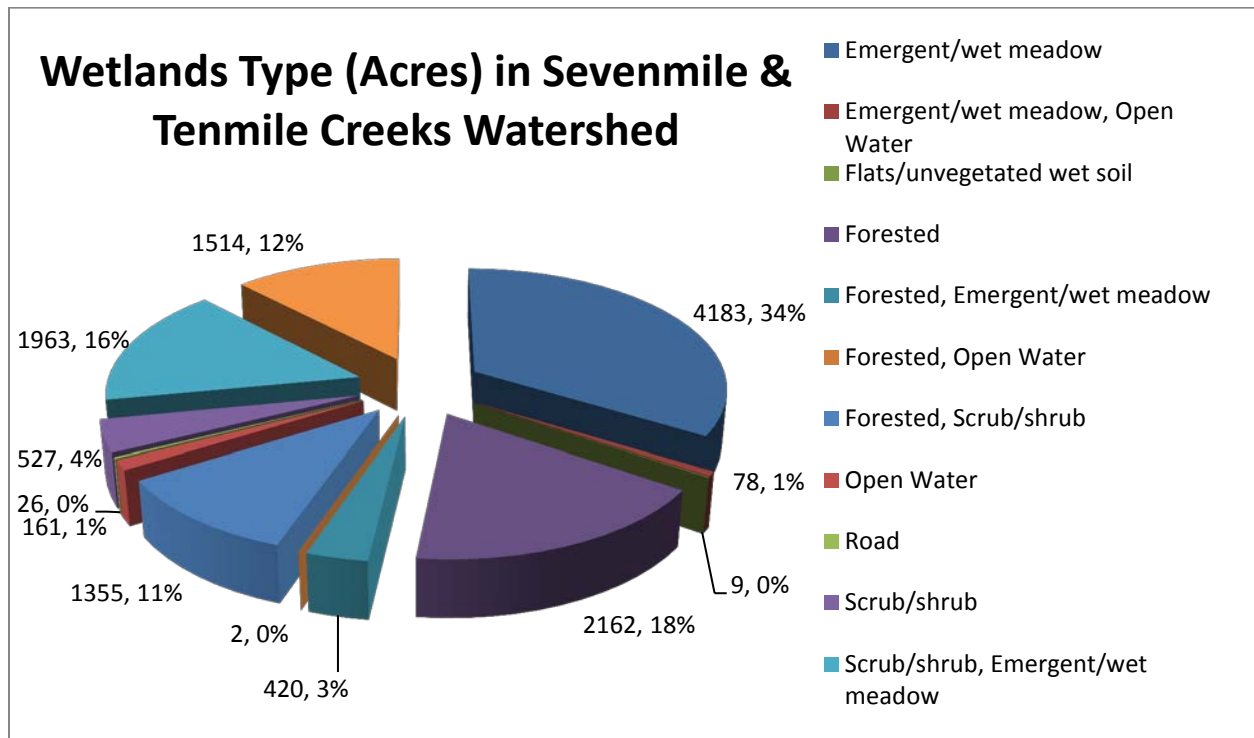
Lake Health

Natural lakes in this area are rare and are limited to riverine floodplains and a few scattered ponds within the bed of extinct Glacial Lake Wisconsin. Those lakes that do exist in the Sevenmile and Tenmile Creeks Watershed range from less than an acre in size, to over fifty acres. Two hundred eight acres of lakes or open waters are known to exist in this watershed; of these, 41% are thought to be supporting fish and aquatic life use. These data are largely derived from TSI - Satellite data rectified with site investigations for modeled assessments of lake quality. This work is done at the DNR’s Research Program.



Wetland Health

DNR maps indicate that as of 1994, over 777 acres of wetlands in this 214 square mile watershed had been drained and filled. Wetlands in the watershed are primarily forested, emergent and scrub shrub wetlands. Wetlands comprise 5% of the watershed land area, as indicated in the land use pie chart in the beginning of this document. Most of the wetlands, however, are located in the headwaters of the North Branch of Tenmile Creek.

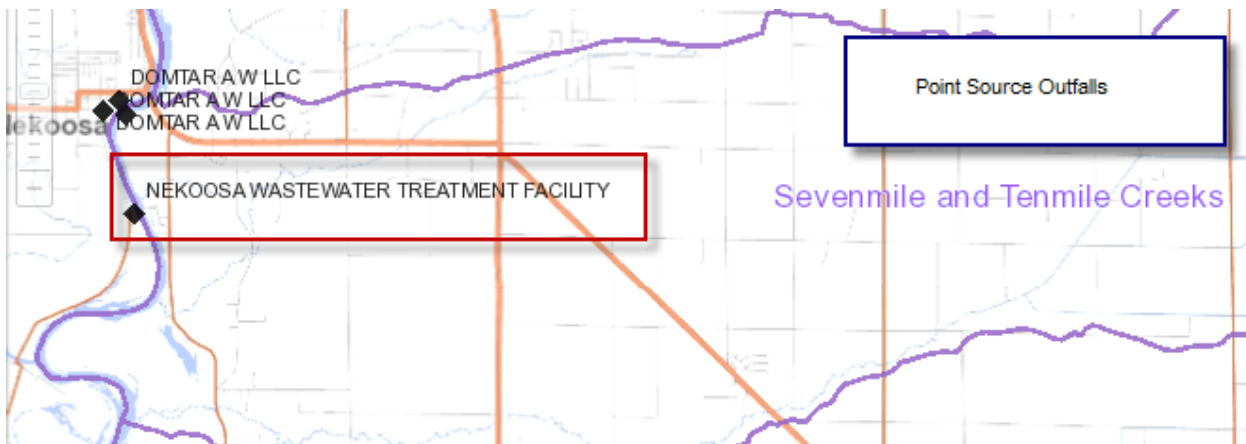


Groundwater

Groundwater drawdowns in this and adjoining watersheds are a concern for the water resources program. Studies of the area to gage baseflow on streams susceptible to water withdraws are ongoing. This work should provide a starting place for improving management of the surface water and groundwater interactions.

Point and Nonpoint Pollution

The only point source discharger to surface waters in the Sevenmile and Tenmile Creeks Watershed is the Domtar A W LLC private industrial paper mill just below the Nekoosa Dam via Nepco Lake standpipe overflow, outside the city of Nekoosa, and along the Wisconsin River western edge of this watershed and the Nekoosa Wastewater Treatment Facility, both of which are located on the Wisconsin River. The primary “nonpoint” source of pollution in the watershed is the myriad of cranberry farms located throughout the watershed.



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

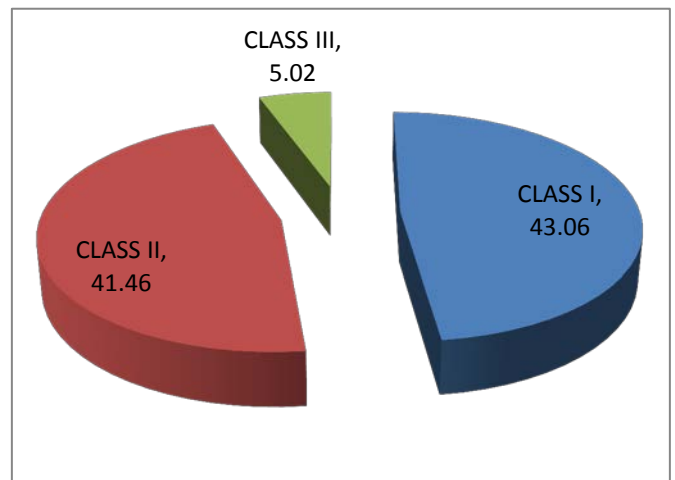


Figure 4 Trout water stream miles by trout class

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/topic/fishing/trout/streamclassification.html>).

The Sevenmile and Tenmile Creeks Watershed contains nearly forty-eight stream miles of trout water. Eleven of the twelve trout streams in this watershed are class I or class II trout streams, supporting at least some natural reproduction of trout. The table below indicates the names of, and where trout waters are located in the watershed, starting from the mouth at mile zero.

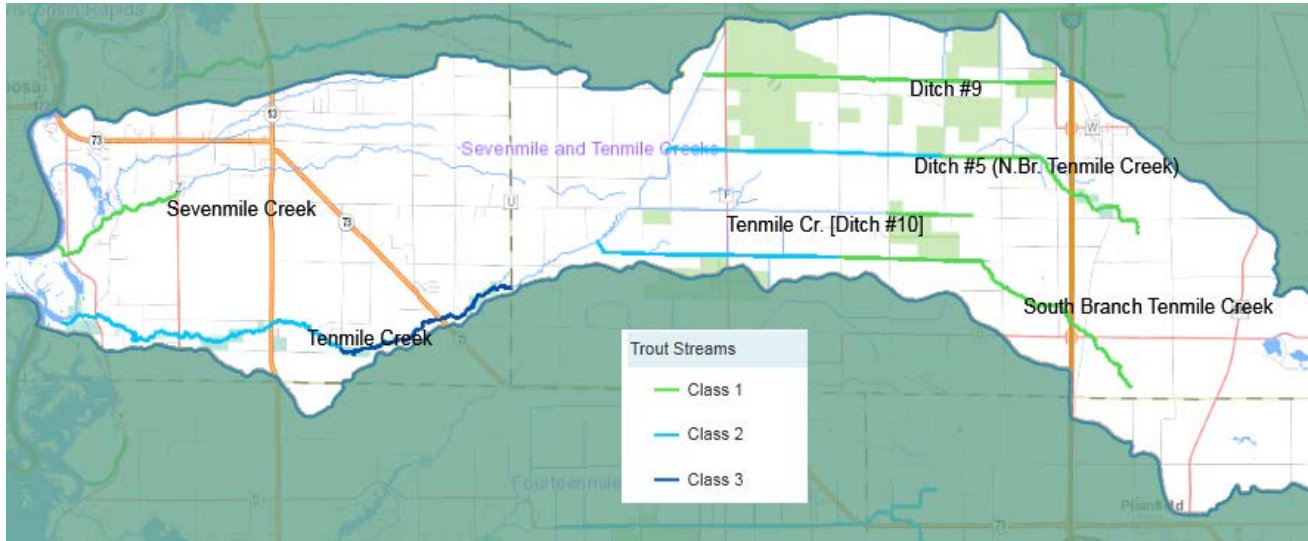
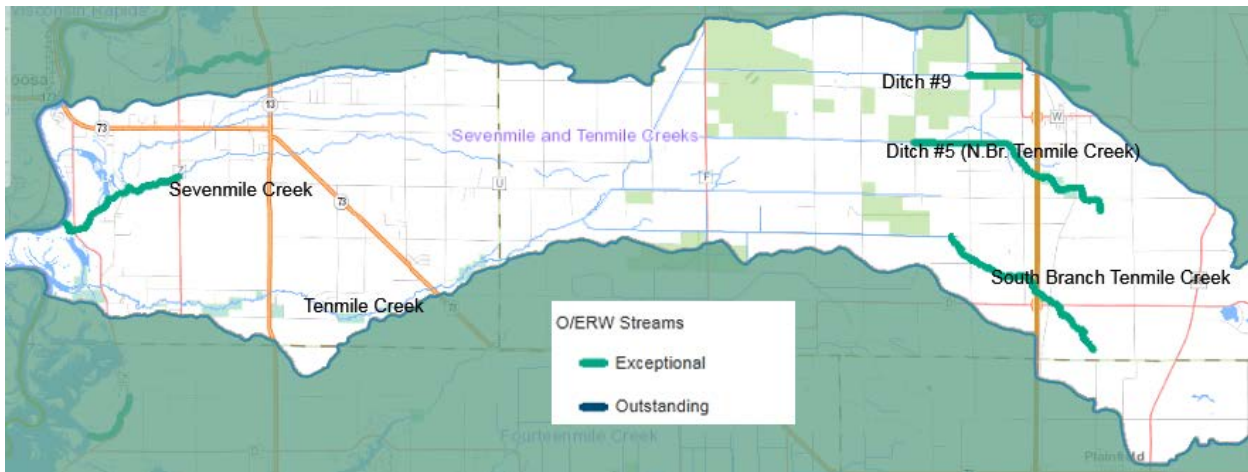


Table 2 Sevenmile and Tenmile Creeks Watershed Trout Stream

WADRS ID	Official Waterbody Name	Local Waterbody Name	WBIC	Start Mile	End Mile	Trout Class
12280	Ditch # 5	Ditch #5 (N.Br. Tenmile Creek)	1384600	0	4.92	CLASS II
1489534	Ditch # 5	Ditch #5 (N.Br. Tenmile Creek)	1384600	4.92	9.44	CLASS I
12284	Ditch # 9	Ditch 9 (T21n,R7e,S3,Sese,50)	1385500	5.28	6.25	CLASS I
1489617	Ditch # 9	Ditch #9	1385500	0	5.28	CLASS I
12291	Fourmile Creek	Ditch #4	1389600	9.37	13.15	CLASS I
12285	Sevenmile Creek	Sevenmile Creek	1387000	0	3.23	CLASS I
12277	South Branch Tenmile Creek	Ditch #6 (Grant S ; Pine Grove Tnshp)	1383200	0	4.41	CLASS II
1489394	South Branch Tenmile Creek	Ditch #6 (Grant S and Pine Grove Tnshp)	1383200	4.41	6.94	CLASS I
1489448	South Branch Tenmile Creek	South Branch Tenmile Creek	1383200	6.94	11.18	CLASS I
12275	Tenmile Creek	Tenmile Creek	1382700	0	7.58	CLASS II
12276	Tenmile Creek	Tenmile Cr. [Ditch #10]	1382700	7.58	12.6	CLASS III
1489336	Tenmile Creek	Tenmile Cr. [Ditch #10]	1382700	20.13	21.63	CLASS I

Outstanding and Exceptional Resource Waters

Wisconsin has designated many of the state's highest quality waters as Outstanding Resource Waters (ORWs) or Exceptional Resource Waters (ERWs). Waters designated as ORW or ERW are surface waters which provide outstanding recreational opportunities, support valuable fisheries and wildlife habitat, have good water quality, and are not significantly impacted by human activities. ORW and ERW status identifies waters that the State of Wisconsin has determined warrant additional protection from the effects of pollution. These designations are intended to meet federal Clean Water Act obligations requiring Wisconsin to adopt an "antidegradation" policy that is designed to prevent any lowering of water quality – especially in those waters having significant ecological or cultural value. More information on Wisconsin's O/ERW waters is available here: <http://dnr.wi.gov/topic/SurfaceWater/orwerw.html>.



The Sevenmile and Tenmile Creeks Watershed has over sixteen stream miles of exceptional resource waters.

Table 3 Sevenmile and Tenmile Creeks Watershed Exceptional Resource Streams

WADRS ID	Official Waterbody Name	Local Waterbody Name	WBIC	ORW/ERW	Start Mile	End Mile
1489534	Ditch # 5	Ditch #5 (N.Br. Tenmile Creek)	1384600	/ERW	4.92	9.44
12284	Ditch # 9	Ditch 9 (T21n,R7e,S3,Sese,50)	1385500	/ERW	5.28	6.25
12291	Fourmile Creek	Ditch #4	1389600	/ERW	9.37	13.15
12285	Sevenmile Creek	Sevenmile Creek	1387000	/ERW	0	3.23
1489448	South Branch Tenmile Creek	South Branch Tenmile Creek	1383200	/ERW	6.94	11.18

Impaired Waters

Segment nine of the Wisconsin River has been listed on the 303(d) Impaired Waters List since 1998 for Mercury and polychlorinated biphenyls (PCBs). Previous sampling has found high levels of 2,3,7,8-TCDD and 2,3,7,8-TCDF in sediments. PCBs and mercury have also been detected at limited sampling sites. Currently, a fish consumption advisory exists on the flowage for PCBs, dioxin and mercury. Since the mercury listing was delisted in 2008, the current listing is impaired for PCBs only, which are a class of compounds used in a wide variety of manufacturing processes and in transformers. The use of PCBs in new applications is no longer possible, but historical discharges or dumping of PCBs throughout the U.S. has resulted in contamination of

river bottoms and surrounding bays where PCBs attach to sediment or soil and are redistributed when the sediment is disrupted or disturbed. Organic contaminants are bio accumulating substances; meaning they are stored in the fat of animals, such as fish, and transferred to predators, such as humans.

Table 4 Sevenmile and Tenmile Creeks Watershed Impaired Stream

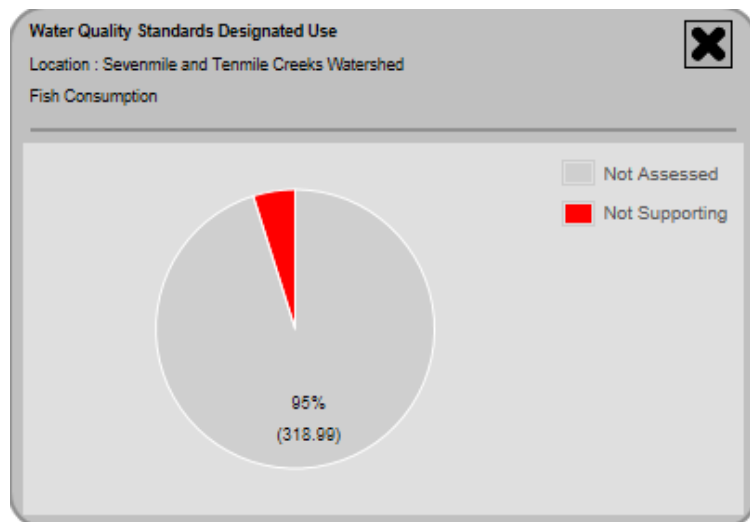
Waters ID	Waterbody Name	WBIC	Stream Miles Impaired	Impairment Status	Pollutants
885921	Wisconsin River	1179900	16.36	Pollutant Removed, 303d Listed	PCBs, Mercury

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 contaminants, along with angler habits, fishing regulations, and other factors.

In 2001, Wisconsin adopted a statewide general fish consumption advisory that applies to all (non-Great Lakes) waters of the state based on statewide distribution of mercury in fish and species differences in mercury concentrations. The statewide general advisory eliminated the need for many of the pre-2001 advisories because the equivalent of more stringent advice now applied through the general advisory. In addition to the statewide general advisory, some waters still require more stringent advice or exceptions to the general advisory. Exceptions to the general advice apply to some species of fish from specific waters where higher concentrations of mercury, PCBs, or other chemicals require advice more stringent than the general advisory.

The Wisconsin River, from the dam at Merrill downstream to the dam at Nekoosa, and from the dam at Nekoosa to the Petenwell dam (Petenwell Flowage), has a specific fish consumption advisory in addition to the general statewide advice. The specific advisory is for contaminated fish tissue from PCBs and Dioxin, and atmospheric deposition mercury, which are toxics. More information about the specific consumption advisory can be found in the publication: [Choose wisely: a health guide for eating fish in Wisconsin \[PUB-FH-824\]](#). It is available online at <http://dnr.wi.gov/topic/fishing/consumption/index.html>.



Aquatic Invasive Species

Several aquatic invasive species have been identified and confirmed in Sevenmile and Tenmile Creeks Watershed since 2000. In 2004 and 2011, zebra mussels were verified and vouchered in the Wisconsin River from Nepco Lake to Petenwell Lake, and downstream of the Mud Lake outfall, respectively.

Eurasian Water Milfoil was verified and vouchered in Ross Lake in 2000. Ross Lake is a 52 acre lake with a maximum depth of five feet, and low water clarity. In 2013, Chinese Mystery Snails were verified and vouchered in Washburn Lake, a 45 acre lake on the eastern side of the watershed.

Species of Special Concern

A full list of special concern plants and animals for this watershed can be found below from the state's Natural Heritage Inventory (NHI).

Table 5 Sevenmile and Tenmile Creeks Watershed Species of Special Concern

Common name	Scientific name	Type	State Status	Federal Status	Group
Stream--Slow, Hard, Cold	Stream--slow, hard, cold	Aquatic	NA		Community~
Sioux (Sand) Snaketail	Ophiogomphus smithi	Aquatic	SC/N		Dragonfly~
Redfin Shiner	Lythrurus umbratilis	Aquatic	THR		Fish~
Flat-stemmed Spike-rush	Eleocharis compressa	Aquatic	SC		Plant~
Vasey's Pondweed	Potamogeton vaseyi	Aquatic	SC		Plant~
Blanding's Turtle	Emydoidea blandingii	Aquatic	SC/H		Turtle~
Wood Turtle	Glyptemys insculpta	Aquatic	THR		Turtle~
Karner Blue Federal High Potential Range	Karner Blue Federal High Potential Range	Habitat	NA	HPR	Other
Barn Owl	Tyto alba	Terrestrial	SC/M		Bird
Greater Prairie-Chicken	Tympanuchus cupido	Terrestrial	THR		Bird
Henslow's Sparrow	Ammodramus henslowii	Terrestrial	THR		Bird
Short-eared Owl	Asio flammeus	Terrestrial	SC/M		Bird
Upland Sandpiper	Bartramia longicauda	Terrestrial	THR		Bird
Dusted Skipper	Atrytonopsis hianna	Terrestrial	SC/N		Butterfly
Karner Blue	Lycaeides melissa samuelis	Terrestrial	SC/FL	LE	Butterfly
Persius Dusky Wing	Erynnis persius	Terrestrial	SC/N		Butterfly
Regal Fritillary	Speyeria idalia	Terrestrial	END		Butterfly
Northern Dry-mesic Forest	Northern dry-mesic forest	Terrestrial	NA		Community
Sand Prairie	Sand prairie	Terrestrial	NA		Community
Southern Dry Forest	Southern dry forest	Terrestrial	NA		Community
Slender Glass Lizard	Ophisaurus attenuatus	Terrestrial	END		Lizard
Fernald's Sedge	Carex merritt-fernaldii	Terrestrial	SC		Plant
Missouri Rock-cress	Arabis missouriensis	Terrestrial	SC		Plant
Woolly Milkweed	Asclepias lanuginosa	Terrestrial	THR		Plant

Bald Eagle	Haliaeetus leucocephalus	Wetland	SC/P		Bird~
Red-shouldered Hawk	Buteo lineatus	Wetland	THR		Bird~
Gray Copper	Lycaena dione	Wetland	SC/N		Butterfly~
Alder Thicket	Alder thicket	Wetland	NA		Community~
Emergent Marsh	Emergent marsh	Wetland	NA		Community~
Northern Sedge Meadow	Northern sedge meadow	Wetland	NA		Community~
Shrub-carr	Shrub-carr	Wetland	NA		Community~
Many-headed Sedge	Carex sychnocephala	Wetland	SC		Plant~

[State Natural and Wildlife Areas / Resources of Interest](#)

Naturally reproducing sturgeon (ANSRI) have been documented in the Wisconsin River at Cruson Slough, Wisconsin Rapids Flowage, Wisconsin River, Wisconsin River - Unnamed Channel, several Wisconsin River - Unnamed Channels, several Wisconsin River - Unnamed Sloughs, Wisconsin River Flowage Number 1 51, and Wisconsin River Flowage Number 2 49.

[Fishery and Stream Bank Protection](#)

Fishery and Stream Bank Protection areas along streams, rivers, and lakes protect water quality by reducing erosion and run-off, and improve habitat and fishing opportunities. Several stream bank protection program areas exist within DNR fisheries areas along Tenmile Creek in the Sevenmile and Tenmile Creeks Watershed. The Stream Bank Protection Program (SBP) was established in 1990 as a supplement to the traditional Fisheries Areas Program with the goals to protect and restore corridors along cool and coldwater streams to improve water quality and provide public access. The program purchases easements directly from landowners to manage fish habitat and angling access on selected exceptional waterways identified under the program. For more information on these programs, visit: <http://dnr.wi.gov/topic/Lands/FisheriesAreas/>.

[The Central Wisconsin Grassland Conservation Area](#)

The Central Wisconsin Grassland Conservation Area (CWGCA) stretches from southeastern Taylor County, through parts of Clark and Marathon counties, between Stevens Point and Wisconsin Rapids and south to northeastern Adams County. It includes the [Leola Marsh Wildlife Area](#), [Buena Vista Marsh Wildlife Area](#), [Paul J. Olson Wildlife Area](#) and [George W. Mead Wildlife Area](#). DNR proposes to protect up to 15,000 acres of additional grassland habitat. Due to the size, quality and distribution of the existing public and private grasslands, this area is particularly attractive to a diverse community of grassland birds. The state's largest populations of [greater prairie chicken](#), short-eared owl and possibly Henslow's sparrow are found here. A great diversity of other declining or rare



Photo by Ray White

grassland birds, including sedge wren, Wilson's phalarope, blue-winged teal, bobolink, upland sandpiper, Brewer's blackbird, eastern and western meadowlarks, northern harrier and several rare sparrows (including grasshopper, field and clay-colored) are found locally.

Watershed Actions

Grants and Projects

Several grants have been awarded in this watershed over the years, with the most recent focusing on aquatic invasive species control, tracking and management, and a couple of lakes grants in Waushara County, as well as [LAKE ALICE ASSOCIATION, INC: Lake Alice Stewardship Program Phase II - Understanding the Biota of Lake Alice, which was initiated in 2010 to](#) develop and update an Adaptive Lake Management Plan (LMP) for Lake Alice.

Project Name (Click for Details)	Year Awarded
WAUSHARA COUNTY: Waushara County Lakes Ordinance Study, Evaluation and Class	1998
WAUSHARA COUNTY: Waushara County Shoreland Ordinance Revision Project	2010
ADAMS COUNTY: Adams AIS Specialist 2	2008
ADAMS COUNTY: Adams AIS Specialist 2	2010
ADAMS COUNTY: Adams Co Lakes Class - Phase 3	2005
ADAMS COUNTY: Adams Co Lakes Classification - Phase 1	2003
ADAMS COUNTY: Adams Co. Lake Levels	2008
ADAMS COUNTY: Adams Co. Lakes Class Phase 2	2004
ADAMS COUNTY: Adams County Lakes Shoreline Development Audit	1995
ADAMS COUNTY: Adams County Shoreline Restoration Workshop for Professionals	2001
Aquatic Invasives County Coordinator - Adams County	2008
Aquatic Invasives County Coordinator - Portage County	2011
Aquatic Invasives County Coordinator - Waushara County	2011
Aquatic Invasives County Coordinator - Wood County	2011
Dredging Evaluation of Ditch 6 (South Branch of 10-mile) WCR 09 09	2008
Fish Propagation Actions	2001
LAKE ALICE ASSOCIATION, INC: Lake Alice Stewardship Program Phase II - Understanding the Biota of Lake Alice	2010
PORTAGE COUNTY LCD: Portage Co EWM Implementation Plan	2005
PORTAGE COUNTY LCD: Portage Co Lake Classification - Phase 4	2003
PORTAGE COUNTY LCD: Portage Co. Lake Study (Classification) #1	2002
PORTAGE COUNTY LCD: Portage Co. Lake Study (Classification) #2	2002
PORTAGE COUNTY LCD: Portage County Lakes Study--Water Quality and Fisheries Inventory	2002
PORTAGE COUNTY LCD: Portage County Lakes Study--Water Quality and Herptology Study	2002

Project Name (Click for Details)	Year Awarded
PORTAGE COUNTY: Alternative Watering Systems	2003
PORTAGE COUNTY: Portage Co Lake Classification - Phase 3	2003
PORTAGE COUNTY: Portage Co. Lakes #5	2004
PORTAGE COUNTY: Portage EWM	2011
PORTAGE COUNTY: Portage Restore 2, Survey	2011
PORTAGE COUNTY: Shoreland Ordinance Revision	2011
WAUSHARA COUNTY: Waushara County AIS Specialist Project	2006
WAUSHARA COUNTY: Waushara County Lake Classification Project	2009
WAUSHARA COUNTY: Waushara County Lake Classification Project (Group A Lakes)	2010
WAUSHARA COUNTY: Waushara County Lake Classification Project (Group B Lakes)	2010
WAUSHARA COUNTY: Waushara County Lake Classification Project Ph 2	2010
WAUSHARA COUNTY: Waushara County Lakes I&E Project	2005
WAUSHARA COUNTY: Waushara County Lakes Study and Plan (Group B Lakes)	2011
WAUSHARA COUNTY: Waushara County Lakes Welcome Project	2010

Monitoring

WCR NC Stream Stratified Sites 2013

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 for 1 fish IBI, one macroinvertebrate IBI, Qualitative Habitat, Temp, pH, D.O., conductivity, 1TP sample in June, July OR August.

WCR Watershed Rotation Sites

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.

Seven-mile and Ten-mile Creek flow, and stream classification analysis

This project has been determined to be a priority for the West District (WD) due to permit applications for a large CAFO south of Wisconsin Rapids in the Seven and Ten-mile Creek Watershed. This project will also be used to gather needed flow data for various locations on these streams. Finally, it will be used to update our watershed narrative in WATERS. Several FTE water quality biologists and



Pressure Transducer can be used to measure water levels in streams or wells.

other FTEs and supervisors will participate in this project as well. Several LTEs will also participate in stream surveys and other work. Wadeable Baseline Monitoring protocols will be followed for macroinvertebrates, fish, and quantified habitat evaluations for 18 sites. These sites will mirror the previous sites completed in 1998-1999 by Huzaga, et al. The primary goal will be to evaluate changes in the aforementioned metrics that will help determine a baseline for stream health and use potentials. There will be 18 sites throughout the watershed. These sites have already been established and are found in SWIMS. We will use the same WIBIC and Station ID numbers as the 1999 study. This project will only run through November of 2014. There may be more report writing to follow depending on needs. All sites will have habitat, macroinvertebrates and fish. Once data are gathered, they will be shared with other DNR personnel in WD and Central Office to help in any review of the Golden Sands Dairy CAFO Environmental Impact Report. These data may also be used to assist in drafting of an Environmental Impact Statement.

Dredging Evaluation of Ditch 6 (South Branch of 10-mile) WCR_09_09

The purpose of this project is to evaluate dredging practices on Ditch 6 in the Portage County Drainage District. This ditch is a coldwater trout stream with excellent reproduction. The Drainage district is excavating/dredging as part of maintenance. There is some evidence that this dredging is having adverse impacts. No studies have been done to evaluate the immediate impact dredging has on salmonids and water quality.

Wisconsin River TMDL Rivers Monitoring

Monitoring of the Wisconsin River Basin for Inorganic and organic constituents.

Priority Issues

- Participate and implement the Wisconsin River TMDL with stakeholders, partners and resource experts.
- Identification of collaborative work to protect stream baseflow from hydrologic management practices that deplete surface waters of trout stream populations.
- Work with groundwater experts to identify innovative practices to encourage groundwater recharge and to maintain important stream resources.
- Work with local interested parties to identify stream bank protection, urban stormwater runoff, and related stream protection and management grants.

Recommendations

- Continue to monitor streams in the basin to evaluate contributions of phosphorus and sediment to the Wisconsin River.
- Identify opportunities for cooperative projects with county conservationists, local organizations and public sector nonprofit organizations.

Contributors

- Scott Provost
- Ruth Person
- Lisa Helmuth

Monitoring Station Report: Watershed: Sevenmile and Tenmile Creeks Waterbody Type: RIVER

WADRS ID	WBIC	Official Waterbody Name	Station Id	Station Name	Earliest Fieldwork Date	Latest Fieldwork Date	Map Link
12275	1382700	Tenmile Creek	723297	Tenmile Creek - Hwy 13 S - Near Nekoosa WI	05/01/1979	01/03/2016	Map Link
1489308	1384300	Lateral # 2	10016427	Tenmile Creek - 40 Yards Upstream Of Evergreen Rd	05/05/1998	01/03/2016	Map Link
12285	1387000	Sevenmile Creek	10040899	Sevenmile Creek at downstream culvert of CTH Z	07/17/2013	01/03/2016	Map Link
12278	1384300	Lateral # 2	10016427	Tenmile Creek - 40 Yards Upstream Of Evergreen Rd	05/05/1998	01/03/2016	Map Link
1489680	1387000	Sevenmile Creek	10040895	Sevenmile Creek at downstream culvert of Seven Mile Trl	07/16/2013	01/03/2016	Map Link
12275	1382700	Tenmile Creek	10040931	Tenmile Creek at CTH Z	07/21/2013	01/03/2016	Map Link
12285	1387000	Sevenmile Creek	10040896	Sevenmile Creek at downstream culvert of Rangeline Rd	07/23/2013	12/06/2015	Map Link
1489680	1387000	Sevenmile Creek	10040896	Sevenmile Creek at downstream culvert of Rangeline Rd	07/23/2013	12/06/2015	Map Link
12276	1382700	Tenmile Creek	10040721	Tenmile Creek @ Cty. Hwy. U	07/16/2013	11/25/2015	Map Link
1489308	1382700	Tenmile Creek	10040721	Tenmile Creek @ Cty. Hwy. U	07/16/2013	11/25/2015	Map Link
12275	1382700	Tenmile Creek	10012667	Tenmile Creek at Rangeline Rd Bridge	05/05/1998	10/17/2015	Map Link
12276	1382700	Tenmile Creek	10041784	Tenmile Creek - Off Wilderness Lane	03/15/2014	10/17/2015	Map Link
12276	1382700	Tenmile Creek	10009190	10 Mile Cr Cth U Site 3	08/07/2012	12/10/2014	Map Link
1489308	1382700	Tenmile Creek	10009190	10 Mile Cr Cth U Site 3	08/07/2012	12/10/2014	Map Link
12275	1382700	Tenmile Creek	10040932	Tenmile Creek at Wood Co snowmobile bridge	07/21/2013	12/06/2014	Map Link
12285	1387000	Sevenmile Creek	10040930	Sevenmile Creek at S Hollywood Rd	07/21/2013	12/06/2014	Map Link
12280	1384600	Ditch # 5	10009197	North Branch 10 Mile Creek Above S. Branch Confluence Site 8	10/15/2014	10/15/2014	Map Link
12278	1384300	Lateral # 2	10009203	Lateral Ditch 2 Bridge Site 11(N. Br. Tenmile Cr at Pine St)	06/10/2014	10/15/2014	Map Link
4698298	1387000	Sevenmile Creek	10009205	7 Mile Creek Hollywood Rd Site 18	06/06/2014	10/15/2014	Map Link

WADRS ID	WBIC	Official Waterbody Name	Station Id	Station Name	Earliest Fieldwork Date	Latest Fieldwork Date	Map Link
12277	1382700	Tenmile Creek	10042762	North Branch Tenmile above confluence with south Branch Tenmile	06/11/2014	10/15/2014	Map Link
12276	1382700	Tenmile Creek	10009193	10 Mile Creek Bell Rd Site 2	06/06/2014	10/15/2014	Map Link
12275	1382700	Tenmile Creek	10009191	10 Mile Creek Cth Z Site 1	06/06/2014	10/15/2014	Map Link
1489308	1382700	Tenmile Creek	10009201	Ditch 10 Evergreen / 110th St Site 9	10/07/1999	10/15/2014	Map Link
1489308	1382700	Tenmile Creek	10042762	North Branch Tenmile above confluence with south Branch Tenmile	06/11/2014	10/15/2014	Map Link
1489308	1383200	South Branch Tenmile Creek	10009192	S. Branch 10 Mile Creek Above Confluence W/ N. Branch Site 4	06/11/2014	10/15/2014	Map Link
12275	1382700	Tenmile Creek	10009193	10 Mile Creek Bell Rd Site 2	06/06/2014	10/15/2014	Map Link
12285	1387000	Sevenmile Creek	10009205	7 Mile Creek Hollywood Rd Site 18	06/06/2014	10/15/2014	Map Link
12277	1383200	South Branch Tenmile Creek	10009192	S. Branch 10 Mile Creek Above Confluence W/ N. Branch Site 4	06/11/2014	10/15/2014	Map Link
12277	1383200	South Branch Tenmile Creek	10009195	S. Bend Tenmile Creek Townline Rd Site 6	08/21/2008	10/08/2014	Map Link
1489617	1385500	Ditch # 9	10009204	Ditch 9 Townline Rd Site 16	06/10/2014	10/08/2014	Map Link
1489617	1385500	Ditch # 9	10009207	9 Mile Creek / Ditch 9 Cth F Site 15	06/10/2014	10/08/2014	Map Link
1489534	1384600	Ditch # 5	10009200	Ditch 5 / N Branch 10 Mile Creek Taft Rd Site 14	06/10/2014	10/08/2014	Map Link
12277	1383200	South Branch Tenmile Creek	10009194	S. Branch 10 Mile Creek W. Of Cth F N. Of Tower Site 5	06/10/2014	10/08/2014	Map Link
1489394	1383200	South Branch Tenmile Creek	10009195	S. Bend Tenmile Creek Townline Rd Site 6	08/21/2008	10/08/2014	Map Link
1489617	1385500	Ditch # 9	10009206	Ditch 9 Taft Rd Site 17	11/18/1999	10/08/2014	Map Link
1489448	1383200	South Branch Tenmile Creek	10009196	S. Bend 10 Mile Creek Taft Rd Site 7	05/05/1998	10/08/2014	Map Link
12280	1384600	Ditch # 5	10009199	Ditch 5 / N Branch 10 Mile Creek Cth F / Mill Rd Site 12	08/21/2008	10/08/2014	Map Link

WADRS ID	WBIC	Official Waterbody Name	Station Id	Station Name	Earliest Fieldwork Date	Latest Fieldwork Date	Map Link
12280	1384600	Ditch # 5	10009198	Ditch 5 / N Branch 10 Mile Creek Townline Rd Site 13	06/10/2014	10/08/2014	Map Link
1489336	1382700	Tenmile Creek	10009202	Ditch 10 Farmers Rd Site 10	06/10/2014	10/08/2014	Map Link
12284	1385500	Ditch # 9	10009206	Ditch 9 Taft Rd Site 17	11/18/1999	10/08/2014	Map Link
5503680	1385500	Ditch # 9	10009206	Ditch 9 Taft Rd Site 17	11/18/1999	10/08/2014	Map Link
12277	1383200	South Branch Tenmile Creek	503165	Ditch - Ditch No 6 At Cth F	08/21/2008	12/02/2013	Map Link
1489308	1382700	Tenmile Creek	10038448	Unnamed Stream (Tenmile) @ Elm Road	08/29/2012	12/02/2013	Map Link
5503866	970100	Bass Lake	10005136	Bass Lake	07/27/1999	09/27/2013	Map Link
5503835	970100	Bass Lake	10005136	Bass Lake	07/27/1999	09/27/2013	Map Link
902271	970100	Bass Lake	10005136	Bass Lake	07/27/1999	09/27/2013	Map Link
12275	1382600	Wisconsin River - Unnamed Slough	10036948	Wisconsin River - Unnamed Slough	07/01/2010	09/27/2013	Map Link
12285	1387000	Sevenmile Creek	10040169	Seven-mile Creek Baseflow Site	06/11/2013	06/11/2013	Map Link
12276	1382700	Tenmile Creek	10009128	Tenmile Creek Cty U	05/05/1998	10/16/2012	Map Link
1489308	1382700	Tenmile Creek	10009128	Tenmile Creek Cty U	05/05/1998	10/16/2012	Map Link
12285	5585947	Unnamed	100833	Unnamed - WBIC 5585947	08/19/2008	10/03/2012	Map Link
5503650	5585947	Unnamed	100833	Unnamed - WBIC 5585947	08/19/2008	10/03/2012	Map Link
4698433	5585947	Unnamed	100833	Unnamed - WBIC 5585947	08/19/2008	10/03/2012	Map Link
5503605	1387700	Unnamed	10007531	Unnamed Lake (T21 R5E S14)	07/27/1999	07/20/2011	Map Link
12285	1387200	Unnamed	10007529	Unnamed Lake (T21 R5E S23)	07/27/1999	07/08/2010	Map Link
12285	1387400	Unnamed	10007530	Unnamed Lake (T21 R6E S18)	07/27/1999	09/07/2009	Map Link

WADRS ID	WBIC	Official Waterbody Name	Station Id	Station Name	Earliest Fieldwork Date	Latest Fieldwork Date	Map Link
1489680	1387400	Unnamed	10007530	Unnamed Lake (T21 R6E S18)	07/27/1999	09/07/2009	Map Link
12277	1383800, 1383200	South Branch Tenmile Creek, Unnamed	10029487	South Branch Tenmile Creek [Ditch 6 dredging complaint]	11/06/2008	11/06/2008	Map Link
12277	1383200, 1383800	South Branch Tenmile Creek, Unnamed	10029489	South Branch Tenmile Creek [Ditch 6 complaint]	11/06/2008	11/06/2008	Map Link
12277	1383200	South Branch Tenmile Creek	10029075	South Branch Tenmile Creek - Ditch 6 downstream of dredging.	08/21/2008	09/02/2008	Map Link
12275	1382700	Tenmile Creek	723232	Tenmile Creek at Hwy 13	10/07/1999	09/19/2007	Map Link
1489394	1383200	South Branch Tenmile Creek	503167	South Branch Tenmile Creek - Ditch #6 Near Bancroft WI	05/19/2003	10/13/2003	Map Link
12277	1383200	South Branch Tenmile Creek	503167	South Branch Tenmile Creek - Ditch #6 Near Bancroft WI	05/19/2003	10/13/2003	Map Link
1489308	1383200	South Branch Tenmile Creek	10016562	Ditch #6 - #45 At Townline Rd	10/10/2003	10/10/2003	Map Link
1489448	1383200	South Branch Tenmile Creek	10031975	South Branch of Tenmile Cr at Central Sands Rd	12/15/1999	06/04/2001	Map Link
12280	1384600	Ditch # 5	503151	Ditch #5 - Ditch No. 5 At Cth F - Below Check Dam Downstream Bridge	10/07/1999	01/18/2000	Map Link
1489617	1385500	Ditch # 9	503152	Ditch #9 - Ditch No. 9 At Cth F	10/07/1999	01/18/2000	Map Link
1489308	1383200	South Branch Tenmile Creek	10016531	Ditch No 6 - 15 Yards Downstream Cuolvert Oncth F	11/18/1999	11/18/1999	Map Link
1489534	1385150	North Branch Tenmile Creek	10016784	North Branch Tenmile Creek - 30 Yards Upstream From Centralsands Road	05/05/1998	05/05/1998	Map Link
885921	1179900	Wisconsin River	723028	Wisconsin River - 1/2 Mi Bl Nepco Nekoosa	08/17/1975	11/30/1983	Map Link
5503605	1179900	Wisconsin River	723213	Wisconsin River - 1.25 Mi Bl Nepco Nekoosa	06/30/1977	08/09/1977	Map Link
885921	1387900, 1179900	Nekoosa Flowage, Wisconsin River	10043055	Wisconsin River - Nekoosa Flowage			Map Link