Wisconsin Department of Natural Resources
SWIMS Project Summary

General Project Information

Project ID: BL_WTPLAN
Name: WT Planning Bad Axe LaCrosse
Type: Water Quality Planning
Subtype: Basin Plans
Status: COMPLETE
Start Date: 05/11/2002
End Date: 12/31/2099

Purpose: The Bad Axe - La Crosse River Basin, located in southwest Wisconsin, contains numerous scenic vistas from the many hilltops and beautiful stream valleys. This basin is characterized by steep forested hillsides with agricultural activities located mainly in the relatively level valleys. The last glaciers to flatten Wisconsin did not reach this part of the state. Consequently, this basin is drained by a highly dendritic network of primarily cold, groundwater fed streams. In fact, the Bad Axe - La Crosse River basin contains 400 hundred miles of trout streams. Portions of Crawford, La Crosse, Monroe, and Vernon Counties lie within the Bad Axe - La Crosse River Basin.

This basin is rich in cold water streams. Many of these streams are in good shape, but many others are threatened by both urban and agricultural non-point source pollution. Stormwater runoff from urban areas, barnyard runoff and inadequate sod cover on streambanks top the list of problems. An extensive effort to restore in-stream habitat for trout and purchase streambank easements for fishing access has been very successful in the Bad Axe - La Crosse River Basin.

Groundwater provides drinking water to all citizens of the basin. This precious resource is at risk simply due to the prevalence of fractured dolomite, which acts as a conduit, rather than a filter of groundwater. Knowing this risk is pervasive throughout the basin, residents, business and municipalities must take great care in disposing of wastes that could potentially contaminate their drinking water supply.

The picturesque hills, valleys, and sandstone cliffs bring many visitors to the basin, some of whom decide to make it their home. Consequently, many farmers parcel their land and sell acreage to people who want to build homes in the hills. Even though many hills are too steep for crops or grazing, some new landowners simply carve out a hillside to create a flat building area for their home. These actions threaten surface water quality if erosion results as well as the integrity of the hillsides. The forests of the Bad Axe - La Crosse River Basin contain primarily oak species; however, oak wilt is taking its toll in the basin. The steep topography of this basin is not conducive to many acres of wetlands; however, large expanses still exist near the mouths of the Bad Axe River, Coon Creek, and the La Crosse River.

Objective: Major Bad Axe - La Crosse River Basin Issues

-Threats to land, forest and water quality from urbanization.
-Changing agricultural practices and the effect on surface and groundwater quality as well as forests.
-Land use changes and threats to the basin's many sensitive and unique plant and animal species and their associated habitats.
-Improvement in the availability of recreational opportunities.
-Need for coordinated management of forest ecosystems.
-Enhance public education regarding the basin's unique resources and how to protect them.

Comments:

Outcome:

Study Design: Watershed specified for planning and assessment purposes. Assessment of water quality condition in this respective county will use protocols described in WisCALM of the year of assessment. Minimum assessment work includes biological data (macroinvertebrates, fish indices), chemistry and habitat data. Additional work includes identification of priorities and goals, creating recommendations for actions, and updating narratives for watersheds and waterbodies. Assessments are to be double checked by at least one additional biologist.

QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments

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Name	Role	Status	Start Date	End Date	Organization	Comments
Helmuth, Lisa D	COORDINATOR	COMPLETE	01/01/1960	12/31/2099	Wisconsin DNR	

Project Statuses

Date	Reported By	Status	Comments

Actions

Action	Detailed Description	Start	End Date	Status
Stormwater Planning, Implementation	Increased runoff volumes from expanding urban areas in the basin threaten not only the quality but also the future existence of adjacent trout streams. The change in stormwater runoff volume as well as when and how much of it reaches an adjacent stream can degrade the in-stream habitat and water temperatures necessary for trout survival.	01/01/1960	12/31/2099	PROPOSED
Details:	**Parameter**	**Value/Amount**	**Units**	**Comments**
	% storm water runoff reduced			
Urban Growth Planning	Disturbance of steep slopes in the basin for building single family homes is becoming more common. The destabilization of already fragile hillsides can lead to movement of soils off site to nearby streams or wetlands. Landslides, which can contain extremely large rocks, have occurred on destabilized slopes during heavy rains.	01/01/1960	12/31/2099	PROPOSED
Runoff Grant	Beach closings due to unsafe bacterial levels in rivers and in some impoundments are of concern. Due to the topographic constraints of many farms in the basin, many barnyards and feedlots are immediately adjacent to streams. If not properly managed, these areas can contribute large amounts of bacteria laden manure to a stream.	01/01/1960	12/31/2099	PROPOSED
Control Streambank Erosion	Streambank erosion is a common sight in the Bad Axe - La Crosse River Basin. Some eroding streambanks are raw vertical banks created by the past accumulation of sediment in the valley and the stream naturally cutting into the bank. Other eroding streambanks result from unrestricted access of large animals which trample sloped streambanks and consume the soil retaining plants. The addition of sediment to streams in the basin threatens to eliminate existing in-stream habitat for fish and aquatic insects.	01/01/1960	12/31/2099	PROPOSED

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Action	Detailed Description	Start	End Date	Status
Best Management Practices, Implement	If new markets for cranberries are created, expansion of new cranberry operations into the La Crosse River Basin is expected. The need for impounded water in a cranberry operation will likely affect any coldwater streams in the basin by the release of warm water. A closed water system where no stream is impounded would have the least impact to the basin's trout streams.	01/01/1960	12/31/2099	PROPOSED
Urban Growth Planning	Increased development pressures in rural townships not adequately prepared for the accompanying decisions and long range implications of changing land use patterns has taxed some township staff and elected officials. Local officials must seriously consider what their township should look like in the future and what it will look like based on current land ownership and land use trends.	01/01/1960	12/31/2099	PROPOSED
Fish Management, Access	If new markets for cranberries are created, expansion of new cranberry operations into the La Crosse River Basin is expected. The need for impounded water in a cranberry operation will likely affect any coldwater streams in the basin by the release of warm water. A closed water system where no stream is impounded would have the least impact to the basin's trout streams.	01/01/1960	12/31/2099	PROPOSED
Information and Education	The permitting, design and construction of stream crossings is often met with resistance since the crossing must be designed to pass large stream flows. New landowners to La Crosse County are mostly unaware of the building restriction on slopes steeper than 30% in the county. People living in the Bad Axe - La Crosse River Basin should have a good understanding of why these and other restrictions are necessary.	01/01/1960	12/31/2099	PROPOSED
Urban Growth Planning	Development encroaching into the extensive lower La Crosse River wetland complex threatens not only the flood control function, but also the diversity of plant and animal species residing within. Requests to fill one acre here and a half acre there of the La Crosse River marsh contributes to the cumulative reduction in total area.	01/01/1960	12/31/2099	IN_PROGRESS

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Action	Detailed Description	Start	End Date	Status
Monitor and/or Protect Groundwater, Sourcewater	A trend in the agricultural community of increased dairy herd size threatens both surface and groundwater quality in the basin if the manure generated at these large dairy operations is not properly managed. It is crucial to build manure storage facilities according to the proper design specifications in order to protect groundwater. Another crucial component of proper manure management is having enough land to spread these large volumes of manure. Since many fields in the coulee region are located adjacent to streams, coordinating the proper day and time to spread liquefied manure is extremely important. Frozen ground conditions, impending rainstorms, and the ability to immediately incorporate manure into the ground must all be seriously considered when determining when, how and where to spread.	01/01/1960	12/31/2099	PROPOSED
Best Management Practices, Implement	The practice of grazing livestock in some wooded areas of the basin was resumed recently due to a change in tax codes. This grazing practice was proven not only inadequate for the support of livestock but also destructive to the absorptive capacity of soils in the driftless area.	01/01/1960	12/31/2099	PROPOSED
Control Streambank Erosion	Nutrient enrichment of the Mississippi River and impoundments in the basin, causing nuisance algae blooms, originates from the lands draining to them. Due to the topographic constraints of many farms in the basin, many barnyards, feedlots and cropped fields are immediately adjacent to streams. If not properly managed, these areas can contribute large amounts of nutrient laden manure and chemical fertilizer to a stream.	01/01/1960	12/31/2099	PROPOSED
Aquatic Plant Monitoring or Survey	Invasion of the exotic purple loosestrife threatens the plant and animal diversity that currently exists in the extensive wetland complex of the La Crosse River and many other waterbodies and wetlands in the basin. When purple loosestrife becomes established, it out competes native wetland vegetation, which in turn reduces biological diversity of plants, animals and insects.	01/01/1960	12/31/2099	PROPOSED
Water Quality Planning	Basin Planning	01/01/2002	12/31/2099	COMPLETE

Monitoring Stations

Station ID	Name	Comments

Assessment Units

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WBIC	Segment	Local Name	Official Name
1639300	1	Bad Axe River	Bad Axe River

Lab Account Codes

Account Code	Description	Start Date	End Date
AM171	PHOTOCHEMICAL ASSESSMENT MONIT	04/13/2016	06/30/2017

Forms

Form Code	Form Name
WADEABLE_MACRO_F	Wadeable Macroinvertebrate Field & Habitat Data

Methods

Method Code	Description

Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name

Documents

Title	Description	Author	Published	Comments
Artesian Well Bad Axe LaCrosse Basin	Artesian Well Bad Axe LaCrosse Basin	Koperski, Cindy	01/01/2001	
BAD AXE LACROSSE CHAPTER 1 BASIN PLAN 2002	First chapter of several BAL	Koperski, Cindi	01/01/2002	
BAD AXE LACROSSE CHAPTER 2 LAND RESOURCES BASIN PLAN 2002	Chapter 2 Land Resources BAL	Koperski, Cindy	01/10/2002	
BAD AXE LACROSSE CHAPTER 3 WATER RESOURCES BASIN PLAN 2002	Water Resources	Koperski, Cindy	01/10/2002	
BAD AXE LACROSSE CHAPTER 4 INDIVIDUAL WATERSHED NARRATIVES BASIN PLAN 2002	CHAPTER 4: WATERSHED NARRATIVES	Koperski, Cindy	01/10/2010	
BAD AXE LACROSSE PRIORITY ISSUES AND PARTNERSHIPS BASIN PLAN 2002	PRIORITY ISSUES AND PARTNERSHIPS	Koperski, Cindy	01/10/2002	
The State of the Bad Axe LaCrosse River Basin March 2002	A report by the Wisconsin Department of Natural Resources in cooperation with the Bad Axe - La Crosse River Basin Land and Water Partners and other stakeholders.	WDNR	09/01/2002	
WCWRPC LaCrosse Sewer Service Area WQM Plan 2013-2035	DNR Approval Letter, LO-0002 and Plan Update Document.	WCWRPC	01/16/2013	

Budget

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Combined Budgets:
Combined SLOH:
Combined Total:

Funding

Organization	Source	Type	Amount	Start Date	End Date