

A LAKE MANAGEMENT PLAN FOR LAKE COMUS

EXECUTIVE SUMMARY

A MANAGEMENT PLAN FOR LAKE COMUS AND ITS WATERSHED

The health of a lake ecosystem usually directly reflects the use and management of land within the lake's watershed. Abundant wetlands in Lake Comus' (the Lake's) watershed helps filter pollutants and supports diverse plant and wildlife populations, including several rare species. However, high phosphorus and sediment loading rates will continue to harm the Lake if active management action is not taken. The Lake Comus Management Plan (the Plan) was developed to quantify natural resource conditions in the Lake and its watershed and provide a set of targeted, specific recommendations to improve Lake Comus, Turtle Creek (the Creek), and ecological conditions throughout the watershed. This Plan supplements and builds upon previously completed plans and recommendations (such as the 1984 Turtle Creek Priority Watershed Plan) and integrates with Lake recreational planning concepts outlined in the Downtown Delavan Strategic Plan.

CHARACTERISTICS OF LAKE COMUS AND ITS WATERSHED

Lake Comus covers 131 acres on the north side of the City of Delavan. The Lake receives runoff from a 32.8 square mile watershed located entirely within Walworth County. Agriculture and wetlands are the most common land uses within the watershed. Lake Comus, a shallow impoundment on Turtle Creek, is a significant part of the extensive primary environmental corridor stretching along the Creek. Turtle Creek is the Lake's largest tributary, supplying approximately two-thirds of the Lake's water, while precipitation, groundwater, and other tributaries supply the rest. Unlike many lakes with public access in Southeastern Wisconsin, most of the Lake's shoreline is undeveloped wetland. This allows ample opportunity for wildlife viewing, fishing, and paddle sports. The Lake supports a warmwater sport fish community and is also regularly stocked with northern pike. The adjacent Paul Lange and Ora Rice Arboretums as well as close proximity to downtown Delavan enhances the Lake's recreational values and opportunities.



The public lands and wetlands surrounding Lake Comus provide ample recreational opportunities.

JUSTIFICATION FOR PLAN

As a shallow lake with a large watershed, Lake Comus is highly susceptible to problems associated with excessive nutrient and sediment loading. Such problems include diminished water clarity, minimal aquatic plant coverage, and frequent algal blooms. Issues of concern addressed in this management plan include the following:

- Water Quality Trends
- Priority Areas and Conservation Practices for Pollutant Load Reduction
- Aquatic Plant Community
- Shoreline Erosion and Restoration
- Restoring Natural Hydrology

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WATER QUALITY TRENDS

The limited water quality data available for Lake Comus suggests that the Lake has maintained its nutrient-rich (eutrophic) status since at least the late 1970s. Excessively high nutrient concentrations are detrimental to Lake health, resulting in low water clarity, greater frequencies of algal blooms, and reduced aquatic organism diversity - these impacts are recognized by the Lake's 2022 listing on the 303(d) impaired waters lists. Much of the ongoing sediment load delivered to the Lake accumulates on the Lake bottom. This has reduced the Lake volume by approximately 40 percent since 1963 despite a dredging project that removed 440,000 cubic yards of sediment from the Lake during the late 1980's. Nevertheless, recent water quality monitoring suggests that conditions are improving with declining total phosphorus and chlorophyll-a concentrations and increasing water clarity. These insights are only possible thanks to the renewed effort by volunteers to monitor the Lake's water quality as part of this plan. Continued monitoring of Lake water quality would help track progress towards meeting water quality goals as plan recommendations to reduce pollutant loading are implemented.

Excessive phosphorus and sediment loads threaten environmental quality and/or recreational use within the Lake if left unaddressed. The U.S. Environmental Protection Agency (USEPA) and the Wisconsin Department of Natural Resources (WDNR) identified the Turtle Creek watershed as a significant contributor of phosphorus and sediment to the Rock River, with reaches of the River listed as impaired for low dissolved oxygen. The USEPA established a total maximum daily load (TMDL) in 2011 for the Rock River basin to address excessive phosphorus and sediment pollution. Since the Turtle Creek watershed is part of the Rock River TMDL, these state permitted allocations establish minimum phosphorus and sediment reduction goals for the Lake's watershed. The recommendations provided within this management plan will help communities reduce their pollutant loading to meet and exceed these goals.



Greater water clarity and reduced algal abundance indicate improving water quality. Increasing phosphorus remains an issue of concern.

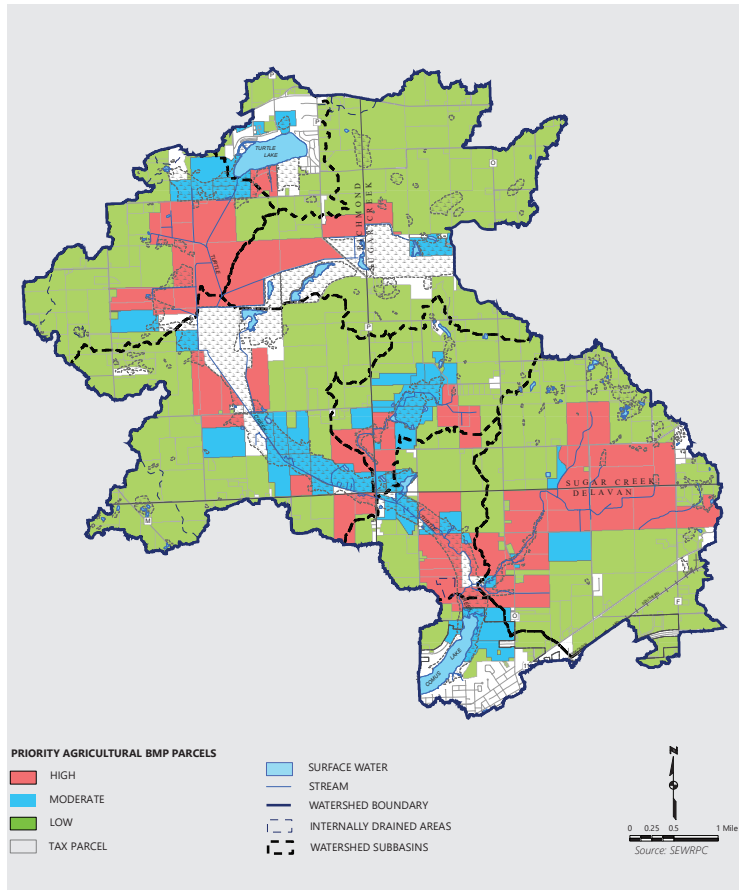
Continued monitoring is essential for tracking progress toward improving water quality.

Pollutant	Nonpoint Source Pollution Sources	Non-Permitted Urban Sources	MS4 Systems	Wastewater Treatment Plants
Total Phosphorus	49%	19%	0%	75%
Total Suspended Solids	25%	15%	0%	1%

Priority Areas and Conservation Practices for Pollutant Load Reduction

This planning project identifies priority areas and conservation practices that help reduce pollutant loads delivered to the Lake. Commission staff examined previous studies and conducted pollutant load modeling exercises throughout the watershed using the Commission's 2015 land use information. Prior studies and recent modeling results indicate that rural nonpoint sources are the largest sources of phosphorus and sediment to the Lake.

Achieving the phosphorus and sediment reduction goals set by the TMDL will require major commitments from all watershed stakeholders to implement best management practices. Due to the extensive agricultural land use within the watershed, novel agricultural practices and conservation practices that reduce rural nonpoint source loading should be prioritized and incentivized. These practices include utilizing cover crop and conservation tillage practices, ensuring that all agricultural lands are following a nutrient management plan, retrofitting drain tile systems, restoring wetlands in farmed areas, and expanding shoreline and riparian buffers. The Plan provides estimates of the number and acreage of rural nonpoint source conservation practices required to meet TMDL pollutant loading reduction goals based on the Commission's pollutant load modeling results. An inventory of priority areas and parcels for riparian buffers and agricultural conservation practices is also provided in the Plan.



Commission staff prioritized agricultural parcels by their potential for conservation practices to reduce sediment and phosphorus loading

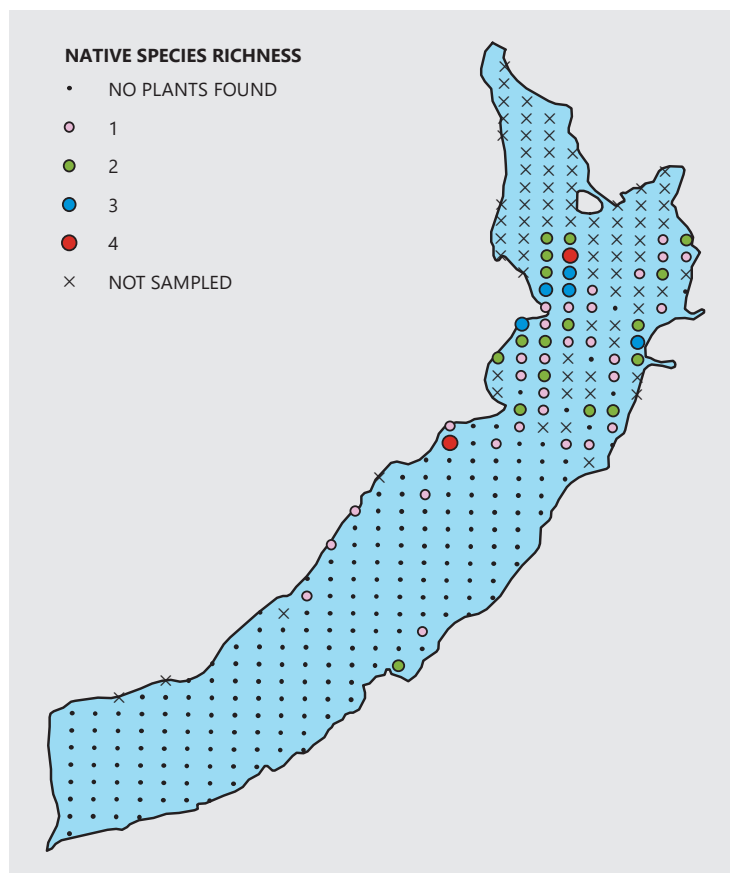


Example conservation practices recommended in the Plan: no-till cropping, riparian buffers, and cover crops planted into residue. These practices enhance soil health and reduce pollutant loading.

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AQUATIC PLANT COMMUNITY

The Lake's aquatic plant community is in generally poor condition, with low coverage by submerged vegetation, few native plant species, and a dominance of invasive species. A 2019 survey by Commission staff identified only five native aquatic plant species. Invasive Eurasian watermilfoil was the most common species observed. Submerged plants were growing no deeper than four feet. This suggests that turbid water likely does not transmit enough light for plants to grow beyond this depth. Additionally, aquatic plants were only found in half of the areas where enough light was available to sustain their growth, suggesting that other factors like disturbance and/or consumption by common carp might be reducing plant abundance in potentially suitable habitat. Enhancing the coverage and diversity of the Lake's aquatic plant community is an important component of the Plan as a healthier plant community would improve water quality, provide habitat and food for aquatic organisms, and subsequently enhance recreational activities on the Lake. As the LCPRD does not utilize intensive plant management activities like harvesting or chemical treatments, Commission staff recommend aquatic plant management strategies that enhance the Lake's native plant population. These strategies include measures that improve the Lake's water clarity and reduce the Lake's common carp population.



Lake comus is largely devoid of aquatic plants and has low native plant diversity. The highest aquatic plant coverage is in the shallow northeastern area of the Lake.

Enhancing Native Plant Community

Restoring native aquatic plant community would improve water quality, provide food and habitat for aquatic organisms, and enhance recreational opportunities

SHORELINE EROSION AND RESTORATION

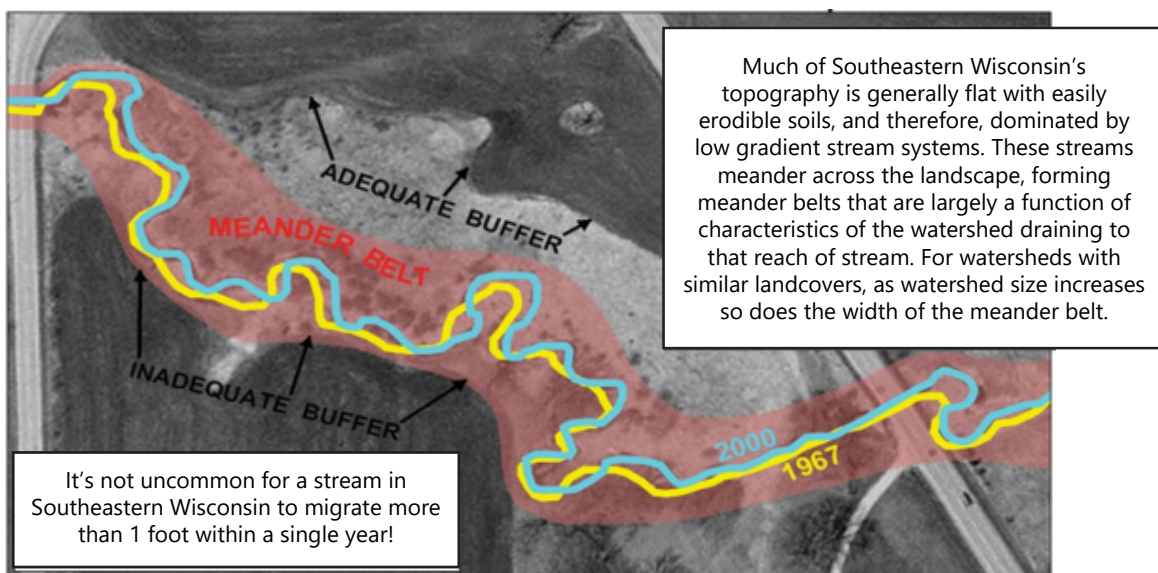
Lake residents expressed concern regarding shoreline erosion. To examine this concern, Commission staff performed a field inventory of shoreline conditions during 2019 and compared historical and current aerial imagery. Most of the Lake shoreline was in good condition, with extensive vegetative buffer and little noticeable erosion, aside from apparent shoreline recession along the Paul Lange Arboretum and slight erosion on the southwestern shoreline by North Terrace Street. Due to low wave activity in Lake Comus, techniques that incorporate both vegetation and low-lying structural surfaces, such as edging and sills, may be sufficient to restore the shoreline and protect it from further deterioration. These practices can be supported through state funding following verification by a more detailed engineering study.



Apparent shoreline recession along Paul Lange Arboretum

RESTORING NATURAL HYDROLOGY

The watershed uplands have been altered from their pre-settlement coverage by oak forest and prairie into predominantly agricultural uses. While much of the pre-settlement wetland remains, the hydrology of these wetlands has been changed through ditching, drain tiles, stream channelization, and filling largely to enhance agricultural production. Comparing the current Turtle Creek mainstem channel streamline against the streamline from an 1837 plat map demonstrates that many of the natural meanders were straightened, reducing the total stream length by nearly 25 percent. These land use and hydrologic changes reduce the landscape's ability to capture, filter, and detain runoff; lower downstream flood peaks; retain nutrients and sediment in the soil; maintain streamflow during dry periods; and provide suitable habitat for many fish species. Plan recommendations help communities preserve the Lake's water supply by modulating floodwater volumes, protecting groundwater infiltration, and advocating sustainable groundwater use and management concepts.



Example of a naturally meandering stream.

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Key Management Objectives to Improve the Lake Comus Watershed

- Use existing TMDL guidance for phosphorus and sediment load reduction goals
- Prioritize implementing regenerative agricultural practices to improve soil health and reduce phosphorus and sediment loading to Lake and Creek
- Continue water quality monitoring to track progress toward meeting nonpoint source load reductions and improving water quality
- Restore native aquatic plant community and reduce common carp population
- Preserve or enhance groundwater recharge to improve water quality and protect habitat for coolwater species
- Establish partnerships between municipalities, associations, and permitted entities to collaborate on water quality goals, pursue funding, and incentivize practices

The Lake's water levels have been controlled by an outlet dam for nearly two centuries. The current dam configuration, which needs major repairs and modifications, was not purposely designed to include features that help promote the Lake and watershed health. The dam is also a major barrier to fish passage and recreational use between the Lake and downstream Turtle Creek. The current dam will likely be replaced in the next few years. Dam replacement presents an important opportunity to incorporate features into dam design that help promote waterbody health and recreation. This management plan provides concepts and advice on how the dam modification can best foster the aesthetic, recreational, and ecological goals for the Lake and Turtle Creek.

FUNDING AND PARTNERSHIPS

Funding is available to implement conservation practices within the Lake Comus watershed. Several state and federal programs promote conservation practices that protect water quality. Through its Surface Water Grants and the Targeted Runoff Management programs, the WDNR offers funding for restoring surface waters and wetlands as well as implementing nonpoint source pollution reduction projects recommended in this Plan. Additionally, the LCPRD could sponsor the WDNR Healthy Lakes and Rivers program to fund in-lake and riparian projects, such as native plant buffers, rain gardens, and fish habitat structures. The U.S. Department of Agriculture administers several programs, such as the Conservation Reserve Program, the Environmental Quality Incentives Program, and the Conservation Stewardship Program, to implement conservation practices and promote land conservation in agricultural lands. The Wisconsin Department of Agriculture, Trade and Consumer Protection and the Natural Resource Conservation Service also offer grant funding for farmer-led activities to reduce nonpoint source pollution. Local land trusts work with landowners to preserve land through conservation easements, land purchases, and land donations.

The greatest potential for funding projects within the Lake's watershed may be through establishment of an adaptive management program to address permitted phosphorus point source loads. Adaptive management is a phosphorus compliance option that allows point and nonpoint sources to work together to reduce watershed phosphorus loading. As an example, the City of Oconomowoc established a program with the City of Oconomowoc Wastewater Utility and other partners to reduce pollutant loading in the Oconomowoc River watershed for the Rock River TMDL. Establishment of a similar program between the Walworth County Metropolitan (WalCoMet) wastewater treatment facility and the landowners and municipalities within the upper Turtle Creek watershed should be considered, as this would enable greater opportunities for cost-sharing and achieving TMDL compliance.

PARTNERSHIP AND COLLABORATION NECESSARY TO ACHIEVE WATER QUALITY GOALS

The Lake Comus watershed has significant aesthetic and ecological value and has the potential to be a more diverse and resilient aquatic ecosystem. Water quality within the Lake has slightly improved since the late 1970s, but as indicated by the Lake's 303(d) listing, excessive phosphorus and sediment loads as well as the altered watershed hydrology remain major management challenges. Following the recommendations provided in this Plan will help improve water quality and quantity for human needs and will help improve the hydrological and ecological integrity of the water resources. This will also lead to a healthier and more resilient local economy.

Achieving plan goals for the Lake Comus watershed will continue to be a challenge requiring collaboration of many participating organizations adopting elements component to the unified plan. The measures presented in this Plan primarily focus on those that can be implemented through collaboration between local organizations and individuals, such as the LCPRD; Lake residents and Creek riparian owners; Walworth County; the WDNR; the Wisconsin Department of Agriculture, Trade, and Consumer Protection; the USDA Natural Resource Conservation Service; WalCoMet; the Towns of Darien, Delavan, Richmond, and Sugar Creek; and other stakeholders. The plan must be adaptable to address new or changing challenges that may arise during implementation. Watershed implementation is primarily a volunteer effort, however, this effort needs support from targeted technical and financial assistance. All communities within the watershed must commit and collaborate to reach compliance with existing regulations, which in turn helps improve the Lake's condition.



Promote best management practices by supporting farmers to purchase equipment for cover crops as well as retrofitting infrastructure.

PLAN PURPOSE AND GOALS

1



Credit: SEWRPC Staff

Lake Comus (the Lake) lies within U.S. Public Land Survey Sections 7,8, and 18, Township 2 North, Range 16 East in west-central Walworth County, Wisconsin. The Lake is located almost entirely in the City of Delavan and partially in the Town of Delavan (Map 1.1). Lake Comus, together with its associated watershed and wetlands, is an important high-quality natural resource and is a substantial asset to the local and regional community. For this reason, preserving and enhancing the Lake's health is an issue of considerable interest to resource managers, Lake residents, Lake users, and others who benefit from the Lake's recreational, ecological, and aesthetic value.

1.1 PLAN PURPOSE AND OVERVIEW

The health of a lake or stream is usually a direct reflection of land use and management within the lake's watershed (the land surrounding a lake that slopes toward the lake or a tributary stream, and that contributes runoff to the lake). In the face of human-induced change, active intervention is often necessary to stabilize, maintain, or enhance resource conditions. This management plan focuses on what can be done to *protect* critical resources from human-induced deterioration and *prevent* future water pollution or resource degradation. This management plan is the first lake management plan developed by the Southeastern Wisconsin Regional Planning Commission (the Commission) for Lake Comus. This plan complements other existing programs and ongoing management actions in the Lake Comus watershed and represents the continuing commitments of government agencies, municipalities, and citizens to diligent land use planning and natural resource protection. This plan recommends appropriate and feasible watershed management measures to help enhance and preserve the water quality, aesthetics, and ecological integrity of the Lake and its tributaries and provide the public with opportunities for safe and enjoyable recreation within the Lake and its watershed. This document's primary purpose is to review and analyze available data and provide an updated management framework with specific recommendations. Such information enables organizations to take appropriate measures to protect the health and use value of the Lake.

This plan is divided into three chapters. Chapter One briefly outlines the plan's purpose, summarizes basic Lake characteristics and assets, and describes general goals and objectives. Chapter Two presents and interprets information needed to understand Lake conditions and the factors that could imperil Lake health. Finally, Chapter Three discusses approaches to protect and enhance the Lake and its watershed. Chapter

Map 1.1 Location Comus Lake Watershed Study



Source: SEWRPC

Three recommendations aim to enhance Lake Comus' native plant community, ecology, and water quality, while allowing Lake users and watershed residents opportunities for safe and enjoyable recreation within the Lake and the Lake's watershed.

This management plan provides practical guidance for maintaining or enhancing water quality within the Lake Comus watershed and for managing lands that drain directly and indirectly to the Lake and its tributary streams. The plan is developed to assist units of government, nongovernmental organizations, businesses, and citizens in developing strategies benefiting the natural assets of Lake Comus and protecting sensitive and other high-value habitats within its watershed. By applying the strategies outlined in this plan, the natural environment will be enriched and preserved. In addition, carefully planned urban development can preserve ecological benefits that directly benefit human habitation. For example, planning can create and maintain desirable aesthetics, groundwater recharge areas, and wildlife corridors, all of which benefit Lake Comus' ecology, watershed residents and businesses, and visitors.

This planning program was funded in part by a Chapter NR 190 Lake Management Planning grant awarded to the Lake Comus Protection and Rehabilitation District (LCPRD). Examples of major grant program deliverables include the following items:

- Maps delineating the watershed and defining characteristics such as groundwater recharge potential, buffers, and existing/planned land use
- Documenting stakeholder concerns, desires, and education
- Assessing Lake Comus' water quality condition and trends
- Examining Turtle Creek's water quality and quantity
- Characterizing the Lake's shoreline condition
- Modeling watershed phosphorus and sediment sources and loads
- A field investigation of Lake sediment depths and to provide suggestions for controlling sedimentation
- An aquatic plant inventory and management plan
- Describing fish and wildlife conditions as well as recreational use on the Lake and within its watershed
- Specific recommendations for watershed management including maps and an action plan
- Establishing pollutant load reduction goals consistent with the Rock River basin Total Maximum Daily Load (TMDL) allocations
- A comprehensive written report

The inventory and aquatic plant management plan elements presented in this report conform to requirements and standards set forth in relevant *Wisconsin Administrative Codes*.¹

¹ *This plan has been prepared pursuant to the standards and requirements set forth in the following chapters of the Wisconsin Administrative Code: Chapter NR 1, "Public Access Policy for Waterways;" Chapter NR 40, "Invasive Species Identification, Classification and Control;" Chapter NR 103, "Water Quality Standards for Wetlands;" Chapter NR 107, "Aquatic Plant Management;" and Chapter NR 109, "Aquatic Plants Introduction, Manual Removal and Mechanical Control Regulations."*

1.2 CHARACTERISTICS AND ASSETS OF LAKE COMUS AND ITS WATERSHED

Lake Comus is essentially a wide and deep section of Turtle Creek (the Creek) created by the Lake's outlet dam. The Creek enters the Lake on the northeastern shore and exits the Lake's southwestern shore. The Lake is in the central portion of the Turtle Creek watershed, downstream of Turtle Lake, and upstream of the confluences with Delavan Lake's outlet stream (hereafter referred to as "Swan Creek"). Turtle Creek enters the Rock River just south of Beloit, Wisconsin. From there, the Rock River enters the Mississippi River just south of Rock Island, Illinois. Water from Lake Comus and the Turtle Creek watershed ultimately discharges to the Gulf of Mexico.

Lake Comus is classified by the Wisconsin Department of Natural Resources (WDNR) as a reservoir. The reservoir was formed when Turtle Creek was dammed during the late 1830s just north of Delavan, Wisconsin. The dam originally drove milling equipment, however, the waterpower generated by the dam is no longer used. The dam is now used to maintain and control water levels in the upstream reservoir (i.e., Lake Comus). The Lake is rather shallow, with a maximum depth of six feet, and a mean depth of four feet.² Much of the Lake's shoreline is owned by the City of Delavan, making this lake very accessible to the public. Lake Comus has a surface area of 131 acres and receives runoff from over 33 square miles of primarily agricultural watershed (Map 1.2). This means that each acre of lake receives runoff from over 175 acres of watershed. Given that the Lake's watershed is dominated by agricultural land use, the potential for heavy sediment and nutrient loads to the Lake is high.

Lake Comus and its watershed provide numerous, widely varying, recreational assets. Prominent features include the Ora Rice Arboretum and Paul Rice Arboretum along the Lake's western shoreline, the Turtle Valley Wildlife Area in the upstream portion of the watershed, a public boat launch, and several shoreline residences. The Lake successfully supports a spectrum of recreational interests as evidenced by observations from Commission staff and Lake residents. Lake and Creek users engage in fishing, hunting, paddle sports, birdwatching, boating, and other activities.

Lake Comus supports a locally-popular warmwater fishery with a range of sport and panfish. Portions of the watershed, including the Lake's eastern shoreline and upstream groundwater springs, may also provide habitat for coolwater fish species as well as spawning grounds for northern pike (*Esox lucius*). The Lake's watershed also contains critical species habitat areas and a variety of wetlands, uplands, and woodlands. The watershed likely supports many resident animal species, including several species of amphibians and rare reptiles, small and large mammals, insects, and invertebrates, as well as a number of transient bird species that may be found in the area during seasonal migrations.³

1.3 LAKE MANAGEMENT GOALS

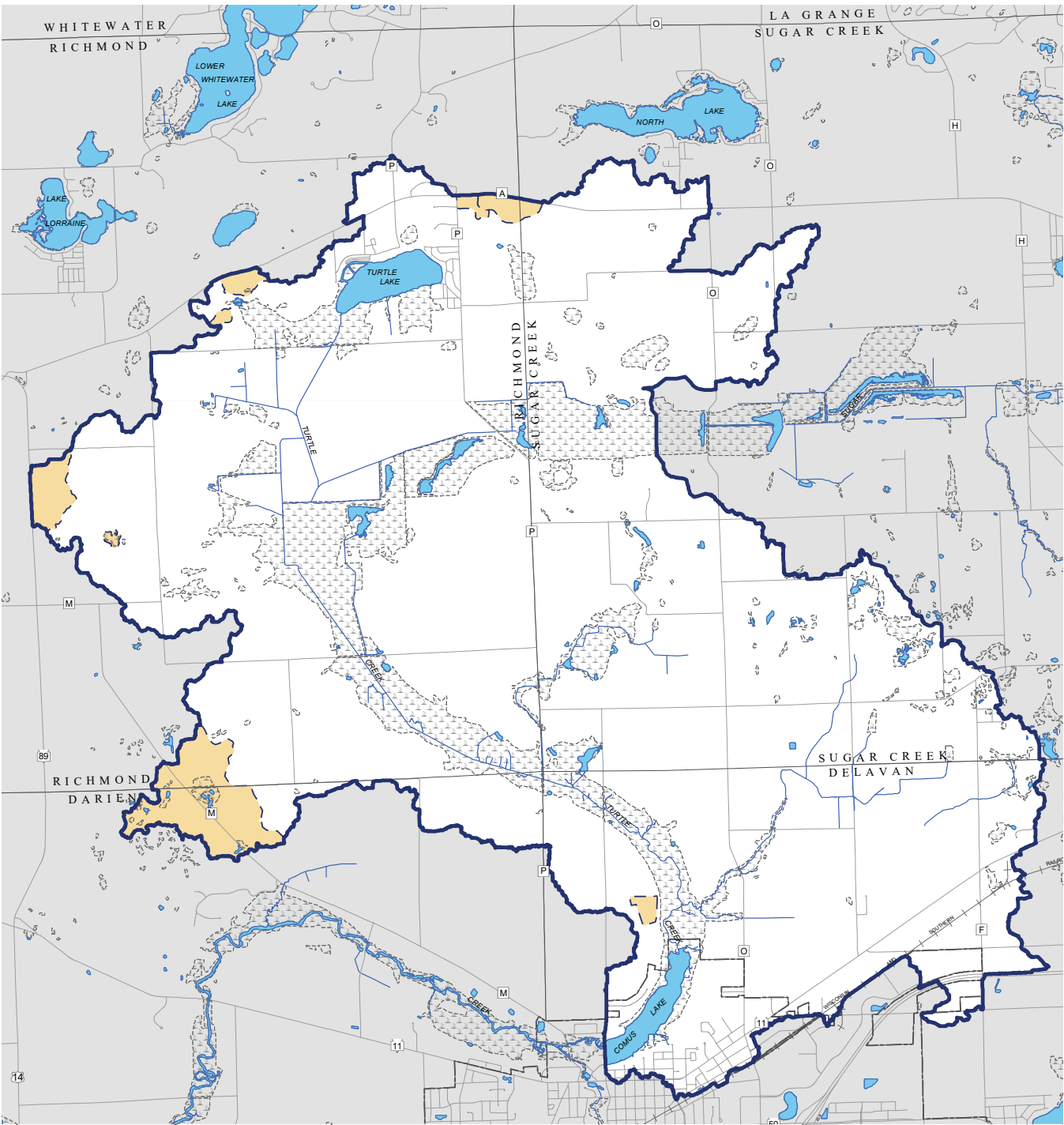
The purpose of this plan is to provide a framework to enable communities in the area to work together with a common mission: to protect and improve Lake Comus. This lake management plan focuses on what can be done to continue to protect existing high-quality resources from human impacts and prevent future water pollution or resource degradation from occurring by implementing the following general goals:

- Minimize the further degradation of surface water and preserve, restore, and maintain the high quality of all waterbodies within the watershed
- Identify opportunities to improve the quality of the land and water (including groundwater) resources within the watershed by reducing both nonpoint agricultural and urban runoff
- Manage and develop lands in a manner that is consistent with the protection of living resources: avoid habitat fragmentation and encourage the preservation and enhancement of wetlands and wildlife corridors including providing and preserving connections with upland habitats and through sensitive landscaping practices

² LCPRD board members report that some portions of the Lake are up to eight feet deep.

³ These estimates are based on bird, amphibian, and reptile databases for the Region.

Map 1.2
Surface Water Features and Internally Drained Areas Within the Comus Lake Watershed



Source: SEWRPC

- Enhance recreational opportunities on Lake Comus and Turtle Creek, particularly for fishing, hunting, and paddle sports
- Promote active stewardship among residents, farmers, landowners, businesses, community associations, as well as governmental and non-governmental organizations

These goals are consistent with objectives established in the Downtown Delavan Strategic Plan,⁴ the Turtle Creek Priority Watershed Plan,⁵ the Multi-Jurisdictional Comprehensive Plan for Walworth County,⁶ the Walworth County Land and Water Resources Management Plan,⁷ and the Rock River Recovery.⁸

This lake and watershed inventory represents an ongoing commitment by the LCPRD to sound environmental planning pursuant to recommendations set forth in the regional and river basin water quality management plans and forms the basis for the development of a comprehensive lake management plan for Lake Comus. This inventory was prepared by the Commission in cooperation with the LCPRD and the City of Delavan and it incorporates the data and analyses developed in the lake management related studies. This report describes the physical, chemical, and biological characteristics of the Lake and pertinent related characteristics of the tributary watershed, as a basis for assessing the feasibility of various watershed and in-lake management measures which may be applied to enhance the water quality conditions, biological communities, and recreational opportunities of the Lake. The primary objectives of this inventory are:

- Update watershed condition descriptions, with particular emphasis on the Turtle Creek watershed immediately upstream of the Lake. This includes identifying and quantifying potential point and nonpoint sources of pollution, nutrient and sediment inputs, and nutrient and contaminant balances. Also, provide conceptual examples of projects that could be undertaken to mitigate the impact of identified sediment and pollution sources.
- Identify the extent of existing and potential future water quality problems likely to be experienced in the Lake and in Turtle Creek. This includes examining the Lake's and Creek's water quality using physicochemical monitoring data collected as part of ongoing water quality monitoring programs. In addition, estimate future water quality changes and provide advice regarding appropriate future monitoring activity.
- Examine the Lake's aquatic plant community. Document the status of the Lake's aquatic plant community, with particular emphasis on the occurrence and distribution of nonnative species. Use this information to better understand the changes and dynamics of the Lake's aquatic plant community. Evaluate the impact of aquatic plants on Lake use, water quality, and habitat value.
- Survey sediment distribution, composition, chemistry, and susceptibility to compaction within the Lake and recommend strategies to reduce sediment loading to the Lake.
- Inventory Lake shoreline conditions and recommend practices to mitigate shoreline erosion.
- Assess the degree and intensity of recreational water use in and around Lake Comus.
- Compile and summarize readily available fish and wildlife information for the Lake, Turtle Creek, and the Lake's watershed.

⁴ *City of Delavan and Vandewalle & Associates, Inc., Downtown Delavan Strategic Plan: City of Delavan, Wisconsin, May 2013.*

⁵ *Rock County Department of Land Conservation, Turtle Creek Priority Watershed Plan, April 1984.*

⁶ *SEWRPC Community Assistance Planning Report No. 288 (2nd edition), A Multi-Jurisdictional Comprehensive Plan Update for Walworth County, June 2019.*

⁷ *Walworth County Land Use and Resource Management, Walworth County Land and Water Resource Management Plan: 2021 - 2030, 2020.*

⁸ dnr.wisconsin.gov/topic/TMDLs/RockRiver/index.html

- Formulate appropriate management objectives, action plans, public information and education strategies, ordinances, and other possible responses to the identified problems.
- Provide advice and concepts describing management, enhancement, and restoration measures that address identified issues of concern and could improve current and future Lake health and ecological resilience/resistance. This likely will include active measures as well as outreach and education.

Conscientiously implementing the actions recommended herein should provide an important step toward achieving the LCPRD's desired lake use/protection objectives over time.

