



The Homeowner's Guide to
Higgins Lake

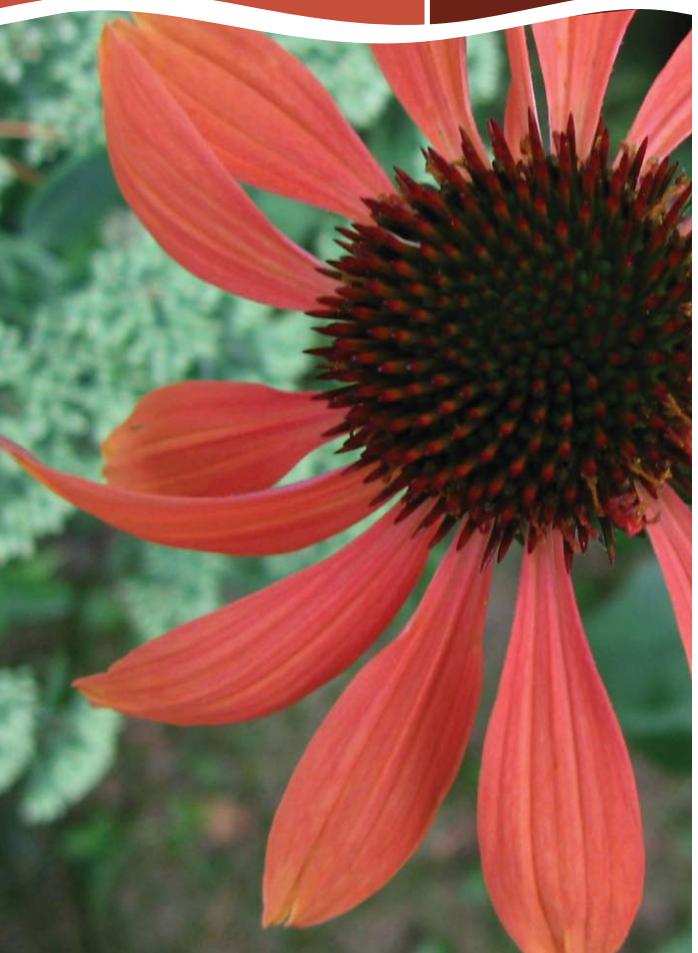


Partnering for Water Quality

The Higgins Lake watershed is popular for fishing, boating, swimming, and enjoying the outdoors. It covers nearly 29,000 acres in central northern Michigan and forms the headwaters for the Muskegon River. Although much of the area remains forested with pockets of rural development scattered throughout, intensive development has occurred around the lake. As the population around the lake increases, pressures on the lake's water quality will also increase. Because nearly every activity on the land has the potential to affect water quality, watershed management is vital to any water quality protection effort.

Higgins Lake Watershed Partnership (HLWP) is a community-based, voluntary initiative dedicated to preserving, protecting and improving the water quality of Higgins Lake. The HLWP was established in 2000 with a primary mission to provide a comprehensive watershed plan for reducing current and future pollution impacts in the Higgins Lake watershed. The partnership is a 10-year initiative to improve the ecological integrity of the Higgins Lake Watershed and will be renewed every two years to allow the partners to evaluate their role, address changing conditions, and assess programs for meeting their mission and goals.

The HLWP acts as a steering committee to assess watershed concerns and provide input into the overall watershed planning effort. Steering committee members include local government officials, conservation groups, environmental organizations, property owners, regional planning agencies, health departments, area businesspersons, concerned citizens, and others.



Watershed Planning

Watershed planning brings together stakeholders to consider the desired uses of the watershed, threats and impairments to those uses, and specific pollutants that are contributing to the identified problems. A coordinated effort is necessary to develop a watershed management plan that builds upon the strengths of existing programs and resources and addresses water quality concerns in an integrated, cost-effective manner, regardless of existing political boundaries.

The Higgins Lake Watershed Management Plan was developed by the HLWP and funded by the Michigan Department of Environmental Quality (MDEQ). After being updated to meet current EPA requirements it was approved by MDEQ in 2007, making projects related to achieving the goals set forth in it eligible for state and federal assistance.

This booklet is a summary of the official Higgins Lake Watershed Management Plan. To view the entire plan and learn more about efforts to protect Higgins Lake, visit www.huronpines.org.

I hear lake
water lapping
with low
sounds by the
shore. . . .

I hear it in the
deep heart's
core.

-William Butler Yeats

Watershed Facts

A watershed is the area of land in which all water drains to a certain point. All water around Higgins Lake drains to the lake, which then drains to Houghton Lake through the Cut River. The watershed forms the headwaters for the Muskegon River Watershed, eventually flowing into Lake Michigan.



Photo courtesy of the Higgins Lake Foundation

- **Watershed Area:** 28,731 acres
- **Surface Elevation:** 1,154 feet above sea level
- **Surface Area:** 10,198 acres
- **Volume:** 20 billion cubic feet
- **Hydrologic Retention Time** (amount of time a water droplet stays in the lake): 12.4 years
- **Comparison to Other Michigan Lakes:** 10th in size, 5th in depth
- **Shoreline:** 21.8 miles
- **Mean Depth:** 44.3 feet (maintained by Cut River dam)
- **Depth of Basins:** North Basin 135 feet deep, South Basin 100 feet deep

History



Photo courtesy of the Roscommon Area Historical Society.

The shores of Higgins Lake hosted Native American encampments according to early survey parties in the region. The Chippewa called the lake *Majinabeesh*, or "sparkling water." In 1839, John Brink of the State Geological Survey mapped and named it Forginson Lake. It was renamed Higgins Lake in honor of Sylvester Higgins, a state cartographer, following an 1852 survey by William A. Burt.

In the early 19th century, some of the best stands of white pine forest in Michigan were located in Roscommon and Crawford counties. Logging near Higgins Lake and the area streams and rivers began around 1875. As pine supplies dwindled, several Saginaw lumber barons built camps on Higgins Lake and in the summer, brought their families to live there. The transportation of timber from the region began in Higgins Lake and flowed down the waterways to Muskegon. By 1900, the pines around Higgins Lake had been depleted.

The first half of the 20th century was marked by steady growth of private vacation cottages. South State Park was established in 1927 and North State Park in 1963. By the 1960s, forests of oak, maple and pine had regenerated and many species of fish and wildlife were thriving. Both land and water proved to be irresistible, all-season attractions. The completion of expressways US-127 in 1969 and I-75 in 1971 brought an unprecedented influx of new property owners and visitors, which continues today.



Glacial Origins

Higgins Lake was formed from a giant block of ice left behind after the last glaciers melted away. The landforms around the lake are glacial outwash plain known as the Grayling outwash plain, meaning that melting water from the glaciers flowed across the landscape creating channels (Michigan's river valleys) before reaching the Great Lakes. The soils in the Higgins Lake watershed are mostly made up of sand, which was deposited as the glaciers passed through.

Because the Grayling outwash plain is a higher elevation than the shoreline of Michigan, the climate is much different than those areas. There are cold, snowy winters and hot, dry summers, and temperatures can change over 50 degrees in one day. The broad, high plain includes sandy ridges, jack pine barrens, white pine-red pine forests, and northern hardwood forests.

The average precipitation for the watershed is 28.43 inches per year. This information was obtained from the National Weather Service station in Houghton Lake, Michigan based on data collected from 1971 to 2000.

Spring Season (March-April-May)	6.91"
Summer Season (June-July-August)	9.40"
Fall Season (September-October-November)	7.51"
Winter Season (December-January-February)	4.61"

Total = 28.43"

A lake is the landscape's most beautiful and expressive feature. It is earth's eye; looking into which the beholder measures the depth of his own nature.

-Henry David Thoreau



Abundant Wildlife

The Higgins Lake watershed provides abundant wildlife habitat in its forests, streams, and lakeshore. In addition to white tail deer, black bears, and countless migratory birds, there are some rare species that call the watershed home. American bald eagles, secretive locusts, ospreys, Kirtland's warblers, and common loons have all been found near the lake.



A popular fishing destination for generations, Higgins Lake hosts healthy populations of many fish, including rainbow smelt, yellow perch, rainbow trout, brown trout, lake trout, whitefish, lake herring, northern pike, and smallmouth bass.

Lake trout have been stocked almost annually in Higgins Lake since 1941. Rainbow trout have been stocked consistently since then also. Brown trout have been regularly stocked since 1978. Splake were planted between 1981 and 1994 and Atlantic salmon were stocked in 1982 and 1990. Kokanee salmon were stocked on an experimental basis in the 1960s.

Higgins Lake continues to be one of the best fishing lakes in Michigan. The continuation of this condition depends upon suitable natural habitat. Human development activities along the shoreline of lakes directly influence natural habitat and tend to degrade it over time. For this reason, appropriate watershed management is necessary to sustain healthy biological communities, including fish, aquatic invertebrates, amphibians, reptiles, birds, and aquatic mammals.



If there is magic on this planet, it is contained in water.

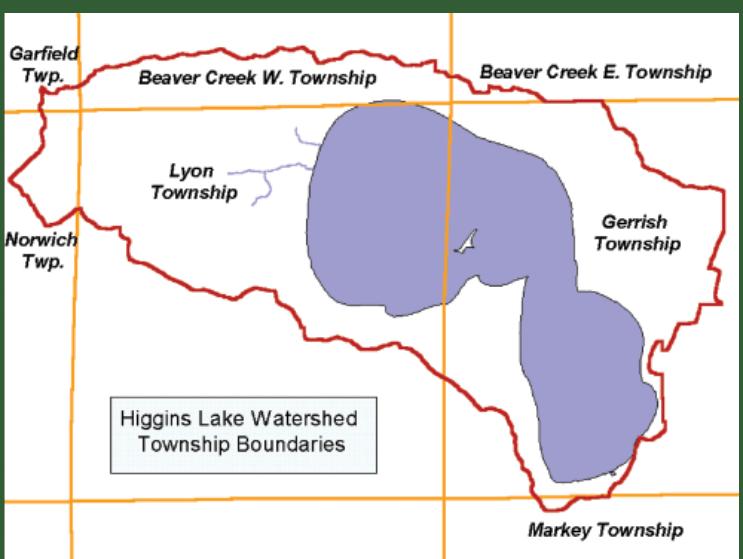
-Loren Eiseley



A Growing Community

Gerrish and Lyon Townships in Roscommon County comprise the vast majority of residential areas within the watershed. The U.S. Census Bureau indicated 607 permanent residents in Gerrish Township and 453 in Lyon Township in 1960. The 2000 Census report indicated an increase of 506% in the permanent residential population for Gerrish Township, bringing the total to 3,072 permanent residents. Lyon Township also demonstrated a substantial increase of 323%, with a total of 1,462 permanent residents in 2000. The number of seasonal residences have rapidly been expanding over the past 30 years, and these residences now make up the majority of homes in the Higgins Lake townships. With this increased development, much of the native vegetation has been replaced by lawns and roads. Because there are no public water or sewer systems, each household and business has its own water well and septic tank with drain field, dry well, or holding tank. Resort and residential uses dominate the economic structure of the area. There is a small amount of commercial development, but virtually no industrial development.

-William Wordsworth



Since its formation in 1935, the Higgins Lake Property Owners' Association (HLPOA) has been involved in efforts to "protect, preserve and enhance the quality of Higgins Lake and its surrounding watershed."

Over the years the organization and its members have been involved in activities such as water quality testing, control of invasive aquatic species, reduction of shoreline erosion and promotion of greenbelts, environmental education opportunities for area students, and collaboration on projects with the Higgins Lake Foundation, Huron Pines, United States Geological Survey, Michigan Lakes & Streams Association, and local government boards and agencies.



If you are not already a member, please join now!

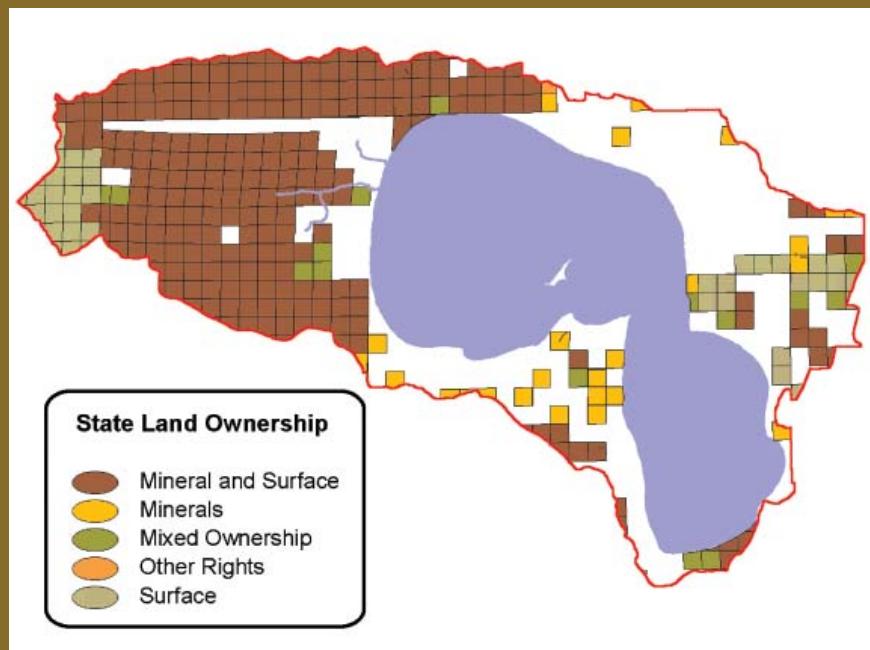
HLPOA

P.O. Box 55 • Roscommon, MI 48653
(989) 275-9181 • www.hlpoa.org



State Land Brings Visitors

The State of Michigan owns large tracts of land in the Higgins Lake Watershed. Much of this land is forested and managed for periodic logging. Some is utilized for mineral resources as well. The State of Michigan owns a total of 11,095 acres of land within the watershed, representing 39% of the watershed region.



Because of the large area of public land around the lake including state parks and boat launches, the Higgins Lake watershed is host to a number of visitors each year:

Yearly Park/Camp Visitors

Ralph A. MacMullen Conference Center	12,527 persons
Camp Westminster	2,000 persons
North Higgins Lake State Park	104,408 persons
South Higgins Lake State Park	306,890 persons
MDNR Public Access (West Boat Launch)	10,000 vehicles
Total Visitors	435,825 (persons/vehicles)



Visit one of the three state park boat launches to see educational kiosks about Higgins Lake.

Then, stay to enjoy the many recreation opportunities!

My mom said she learned how to swim. Someone took her out in the lake and threw her off the boat. That's how she learned how to swim. I said, "Mom, they weren't trying to teach you how to swim."

-Paula Poundstone

The Higgins Lake Foundation was founded in 1989 as a not-for-profit 501(c) (3) organization to "preserve the natural beauty of Higgins Lake and to enhance the quality of the lake and its watershed."



Under the direction of an all-volunteer Board of Trustees and through the generosity of our many supporters, the Higgins Lake Foundation is able to work hand-in-hand with numerous governmental and environmental groups on a variety of projects to preserve the quality of Higgins Lake.

The annual Higgins Lake Awareness Day is held early in August. Join us for the opportunity to socialize, share information, be entertained, win fabulous prizes, and unite in our effort to preserve Higgins Lake for generations to come. Contact the HLF office for a fund-raising ticket to this event or for more information about the HLF.

Higgins Lake Foundation

P.O. Box 753 • Roscommon, MI 48653
(989) 275-9183
hlf@charterinternet.com

Donations to the HLF are fully tax deductible.



Protect your shoreline: install a greenbelt of native plants to help prevent erosion and runoff, provide wildlife habitat, provide privacy, and create a unique frame for your view.

The Higgins Lake Foundation sponsors a project to encourage greenbelting and other good stewardship practices on the lake, providing a shoreline technician for site visits, educational materials, television PSAs, and workshops.

Learn more about greenbelting and the Higgins Lake Stewardship Program at www.huronpines.org.

Water Quality

Water quality is a general term covering many aspects of lake chemistry and biology. The water quality of a lake is influenced by many factors, including the amount of recreational use it receives, increased development and shoreline practices. The health of a lake is determined by its water quality.

A number of water quality surveys have taken place over the last 20 years at Higgins Lake, which show that Higgins Lake is an oligotrophic (low productivity—i.e., deep and clear) lake and currently exhibits high water quality. However, there are indicators that increased pressure from humans resulting in more development and an increase in use of septic systems, paved road surfaces, access issues, fertilizer use, etc. are starting to impact water quality.



Photo courtesy of Re/Max of Higgins Lake

Productivity refers to the amount of plant and animal life that can be produced within the lake. Increased productivity results in problems such as excessive weed growth, algal blooms and mucky bottom sediments. In most Michigan lakes, phosphorus is the nutrient most responsible for increasing lake productivity. Phosphorus has been banned as an additive to laundry detergent, but it is still allowed in dishwasher detergent and many lawn fertilizers contain phosphorus. Those sources, along with poorly maintained septic systems, have increased the amount of nutrients in the ground water. Since over 50% of Higgins Lake water comes from ground water, the effects of these higher concentrations can lead to decreased water quality. High water levels and shoreline erosion also introduce sediment into the lake. Studies indicate that Higgins Lake is just starting to accumulate organic material in bottom sediment.

Recently a cluster sewer system has been built for the 400+ dwellings in the Camp Curnelia (American Legion) campground on the northeast shore of Higgins Lake. This project—funded by a federal grant, the Higgins Lake Foundation, and the Camp's residents, and facilitated by state government, Lyon township, and the Higgins Lake Property Owners' Association—will greatly reduce the impact of septic seepage in that area of Higgins Lake.

Invasive Species

Closely tied to water quality is the number of invasive species that populate a lake. Non-native species can invade more easily when water quality is affected and the lake's ecosystem changes.



In addition to zebra mussels, Higgins Lake has been invaded by Eurasian watermilfoil (EWM), an exotic species with the potential to disrupt a lake's ecological system and interfere with recreation. EWM is a concern because it can rapidly colonize lakes and spreads easily by fragmentation. This plant can grow up to the surface of the water and form extremely dense mats, inhibiting boating and swimming. Once established, it is very difficult to remove and can be spread from lake to lake by boat traffic. The Higgins Lake Watershed Partnership conducts regular EWM surveys and recommends treatments to keep any populations in check through the use of barriers, weevils that eat the plant, and chemicals. So far, this hybrid approach has been very successful in controlling the spread of the plant.



A boat wash station is being developed on the north end of Higgins Lake with project coordination by the Higgins Lake Property Owners' Association and funding provided by the Higgins Lake Foundation, Entrust, and Roscommon County Community Foundation. It is hoped that voluntary use of the boat wash will reduce the amount of invasive species entering the lake.

Lake Level

Besides the amount of precipitation and evaporation, a dam located at the Cut River outlet affects the level of Higgins Lake. A summer legal lake level was established in 1926. In 1982 a Roscommon County Circuit Court order confirmed the summer legal lake level at 1154.11 feet elevation above sea level and a winter legal lake level of 1153.61 feet above sea level. The Roscommon County Board of Commissioners is vested with the authority and responsibility for maintaining the legal levels of Higgins Lake through management of the Cut River Dam. Efforts are under way to change the winter level to reduce the amount of ice that pushes on the shore.



Photo courtesy of Laurie Smith Tudor

Ice push is a major problem for some areas around Higgins Lake. Seawalls, whether wood, metal, or concrete, are not always the best answer. Often, a gradual slope of rock riprap will allow the force of the ice to dissipate rather than build up like it would with a seawall.



Daily lake stage records for Higgins Lake are available via the Internet at <http://mi.waterdata.usgs.gov>





Photo courtesy of the Roscommon Area Historical Society

The Roscommon County Community Foundation is dedicated to enhancing the quality of life for all citizens of Roscommon County, now and for generations to come, by attracting and holding permanent endowment funds from a wide variety of donors, by addressing community needs through awarding grants from the income of these endowment funds, and by providing leadership on key community issues. RCCF supports health, safety, environmental, recreational and educational grants and scholarships with earnings from . The criterion for an organization to be eligible for a grant is that they must have a 501C3 non-profit status or be a school or government organization, and operate in Roscommon County. Religious organizations may apply for funds for secular items only. There are also several scholarships available to students who live in Roscommon County.

Roscommon County Community Foundation

P.O. Box 824 • 701 Lake Street
Roscommon, MI 48653

(989) 275-3112

www.roscommoncountycommunityfoundation.org



Designated Uses

The Water Resources Commission Act (P.A. 451 of 1994, Part 31, Chapter 1) requires all waters within the State of Michigan to be of the quality that will meet the designated uses at the right. Currently, all the designated uses mandated by the State of Michigan are being met within the Higgins Lake watershed.



Desired Uses

Desired uses are those that are important to the watershed community. They help guide watershed restoration and protection efforts that go beyond the state list of designated uses. The desired uses listed below have been identified by the watershed partnership as applicable for this watershed based upon the unique circumstances and conditions within the watershed.

- 1) More areas of natural shoreline to protect habitat and water quality
- 2) Protection of environmentally sensitive and undeveloped areas
- 3) Protection of high-quality recreation opportunities



Agriculture
Navigation
Industrial water supply
Public water supply at point of intake
Warm water fishery
Other indigenous aquatic life and wildlife
Partial and total body contact recreation
Cold water fishery
Fish consumption





Effects of Known and Suspected Pollutants

Nutrients, sediments, invasive exotic species, pathogens, oils & greases, salts, pesticides, metals, and debris are the main pollutants of concern that threaten the designated and desired uses of Higgins Lake. The pollutants and their sources help determine and prioritize goals for protecting the lake's water quality. Below is a list of known and suspected pollutants.

Known and Suspected Pollutants to Designated Uses		Known and Suspected Pollutants to Desired Uses	
Threatened Use	Pollutants	Threatened Use	Pollutants
Navigation	Invasive exotic species (K) Sediment (S)	More areas of natural shoreline to protect habitat and water quality	Sediment (S) Pesticides (S) Metals (S)
Other indigenous aquatic life and wildlife	Nutrients (S) Sediment (S) Invasive exotic species (K) Pathogens (S) Oils & Greases (S) Salts (S) Pesticides (S) Metals (S) Debris (S)	Protection of environmentally sensitive and undeveloped areas	Nutrients (S) Sediment (S) Invasive exotic species (S) Pathogens (S) Oils & Greases (S) Salts (S) Pesticides (S) Metals (S) Debris (S)
Fisheries	Sediment (S) Invasive exotic species (S) Pathogens (S) Oils & Greases (S) Salts (S) Pesticides (S) Metals (S) Debris (S)	Protection of high quality recreation opportunities	Nutrients (S) Invasive exotic species (K) Pathogens (S) Debris (S)
Partial and total body contact recreation	Invasive exotic species (K) Pathogens (S) Debris (S)		

Known (K) and Suspected (S)



Sources of Pollutants

Land uses range from large tracts of state forest land to densely packed resort communities. To address pollutants within the watershed, it is important to understand their underlying causes. In some cases a cause such as large waves cannot be stopped. In other cases, however, a pollutant may be minimized.

The main sources of pollution are identified for each primary pollutant of concern within the Higgins Lake Watershed. The pollutants listed below were prioritized based on their potential to threaten and/or impair the designated uses of Higgins Lake. For each pollutant, there are multiple sources that can introduce it into the watershed and many causes that influence the severity of the sources' contributions.



Sources of Pollutants			Sources of Pollutants (continued)		
Pollutant	Source	Cause	Pollutant	Source	Cause
Nutrients	Septic Systems	Lack of maintenance Poorly sited Undersized Density Age of System	Invasive Exotic Species Pathogens Human Waste Oils and Greases Salts Pesticides and Herbicides Metals	Recreational boats and personal watercraft	Lack of education Apathy
	Shoreline practices by landowners	Lack of shoreline vegetation Lack of education Excessive development Poor shoreline setbacks Yard waste dumped in lake			Transportation of exotics
	Stormwater	Lack of vegetation for roads/ road end areas Excessive development Impervious surfaces Wetland loss		Stormwater	Lack of shoreline vegetation Wetland loss Poorly sited roads Impervious surfaces
	Fertilizer use	Near shore fertilizer High phosphorus content Overuse Poor timing of application		Human Waste	Lack of sanitary facilities for recreational users Lack of education
	Shoreline erosion	Lack of shoreline vegetation Ice Natural waves Lack of adequate setbacks Seawalls Large boats High lake levels		Stormwater	Lack of shoreline vegetation Wetland loss Road maintenance
	New construction	Lack of enforcement Parcel fragmentation Lack of effective regulation Lack of shoreline vegetation Poorly designated access		Watercraft engines	Fuel & oil spills Inefficient or poorly maintained watercraft motors
	Road end erosion	Lack of shoreline vegetation Poorly designed access		Stormwater	Lack of shoreline vegetation Wetland loss Poorly sited roads
	Road/Stream Crossing	Poor design Lack of maintenance		Homeowner practices	Lack of proper methods for use and disposal Lack of facilities for disposal Lack of education
	Stormwater	Wetland loss Impervious surface Lack of shoreline vegetation		Airborne particles Paints	Deposition from industry Painting of boats, docks, hoists, and seawalls
Debris	Recreational users	Lack of education Lack of disposal facilities Apathy		Stormwater	Lack of shoreline vegetation



Goals and Objectives

The goals for the Higgins Lake watershed were developed to protect the designated and desired uses of the watershed. The goals are recommendations for implementation efforts within the watershed. Each goal has multiple objectives that outline how the goal can be reached. Implementing most objectives requires a combination of four types of activities, each with associated tasks. These include 1) implementing Best Management Practices; 2) reviewing and modifying existing projects, programs, and ordinances; 3) designating and implementing education and information activities; and 4) evaluating the effectiveness of planned activities.

Many of these goals are ongoing. To read more about specific tasks and projects, visit www.huronpines.org.

Goal 1. Reduce the amount of nutrients and contaminants from sources within the critical areas of the watershed.

- Objective 1. Distribute educational material to property owners on nutrient reduction, closing of abandoned wells, Lake*A*Syst assessments, fertilizer sources, soil testing, septic system maintenance, and greenbelts.
- Objective 2. Develop sewer system/community septic systems in densely populated areas.
- Objective 3. Address concerns and options related to mandate septic system maintenance, inspection, mapping, and replacement.
- Objective 4. Arrange for a shoreline technician to meet one on one with property owners to voluntarily re-establish shoreline wetland areas and shoreline greenbelts.
- Objective 5. Develop shoreline greenbelt demonstration sites.
- Objective 6. Coordinate with businesses and property owners on the management and disposal of hazardous waste and promote hazardous waste collection locations and times.
- Objective 7. Develop stormwater management regulations.
- Objective 8. Replicate the United States Geological Survey's study.
- Objective 9. Implement methods to reduce the amount of road salts, sediment, debris, etc. from entering the lake.
- Objective 10. Continue water quality monitoring activities.



Goal 2. Institute responsible land use practices within the watershed.

- Objective 1. Review and comment on land use/zoning decisions.
- Objective 2. Publicize local regulations and ensure that information on adopted standards is clear, concise, and available to the public.
- Objective 3. Develop and propose a model ordinance to local governmental units for an effective, consistent standard for shoreline greenbelts.
- Objective 4. Coordinate master planning efforts among local units of government.
- Objective 5. Provide training for planning and zoning commissioners.
- Objective 6. Identify and map environmentally sensitive parcels and ecological corridors throughout the watershed and track development and conservation trends in these areas.

Important Phone Numbers

- Emergency calls
911
- DEQ
(231) 775-3960
- DNR
(989) 275-5151
- Gerrish Township Police
(989) 821-5207
- Higgins Lake Foundation
(989) 275-9183
- Higgins Lake Property Owners
(989) 275-9181
- Michigan State Police Houghton Lake Post
(989) 422-5101
- Michigan State University Extension
(989) 275-5043
- Roscommon County Animal Shelter
(989) 275-5630
- Roscommon County Sheriff
(989) 275-5101
- Roscommon County Sheriff Marine Patrol
(989) 275-0911



Objective 7. Assist landowners of environmentally sensitive parcels with the voluntary protection of their property.

Objective 8. Produce and distribute GIS maps to local governments.

Goal 3. Protect habitat diversity within the watershed by monitoring and reducing aquatic nuisance species.

Objective 1. Educate the public on steps they can take to help manage aquatic nuisance species.



Objective 2. Continue Eurasian Watermilfoil management program.

Objective 3. Work with riparian property owners to conduct yearly monitoring programs of aquatic nuisance species as needed (i.e. Zebra Mussels).



Goal 4. Protect shoreline habitats by reducing erosion.

Objective 1. Maintain legal summer and winter water levels for Higgins Lake.

Objective 2. Implement Best Management Practices at road ends where erosion and runoff is a problem.

Objective 3. Promote shoreline bio-technical erosion control methods.

Objective 4. Update shoreline inventory as needed.

Objective 5. Educate planners and local officials on using soil survey information.

Objective 6. Implement Best Management Practices at priority road/stream crossings where erosion and runoff is a problem.

Goal 5. Work to ensure the availability of high-quality recreational activities within the watershed and that they are conducted in such a way so as to not degrade the integrity of the watershed.

Objective 1. Educate recreational users on environmentally safe methods (including education on aquatic nuisance species) for practicing recreational activities.

Objective 2. Identify recreation concerns and make recommendations.

Objective 3. Establish a boat carrying capacity standard for Higgins Lake.

Objective 4. Monitor and improve fisheries and aquatic habitat.



Goal 6. Facilitate continued efforts by the Higgins Lake Watershed Partnership to review and update Plan progress and coordinate funding proposals.

Objective 1. Facilitate implementation of Watershed Management Plan.



Meeting Dates

- Gerrish Township: (989) 821-9313—second Tuesday at 7:30 p.m.
- Lyon Township: (989) 821-9694—third Wednesday at 7:30 p.m.
- Roscommon County Board of Commissioners: (989) 275-8021—second and fourth Wednesdays at 10:00 a.m.
- Roscommon County Road Commission: (989) 366-0333—second & fourth Thursdays at 7:00 p.m.

Resources

There are many local groups working to conserve the Higgins Lake area. Tear this sheet off and put it in a place where you can reference it when you have questions about local issues or the Higgins Lake environment.

Huron Pines

501 Norway St.
Grayling, MI 49738
(989) 344-0753
Fax: (989) 348-7945
www.huronpines.org

Higgins Lake Foundation

709 Lake Street, P.O. Box 753
Roscommon, MI 48653
(989) 275-9183
Fax: (989) 275-9184
hlf@charterinternet.com

Roscommon County Community Foundation

701 Lake Street, P.O. Box 824
Roscommon, MI 48653
(989) 275-3112
Fax: (989) 275-8513
www.roscommoncountycommunityfoundation.org

Higgins Lake Property Owners' Association

207 Terrace Dr., P.O. Box 55
Roscommon, MI 48653
(989) 275-9181
Fax: (989) 275-9182
www.hlpoa.org

Crawford-Roscommon Conservation District

606 Lake Street, P.O. Box 156
Roscommon, MI 48653
(989) 275-5231
Fax: (989) 275-3170
www.roscommoncounty.net/conservation

Everyday Actions

All landowners in the Higgins Lake watershed can take action to improve the lake's water quality. Whether it is changing your lawncare practices or reducing the use of harsh chemicals indoors, you can make a difference. Use the tips below every day to reduce the amount of pollution entering the lake and keep it clean and beautiful for years to come.

In Your Yard

- Maintain native trees and vegetation.
- Maintain existing wetlands (do not fill them in).
- Minimize the area of paved surfaces like driveways, sidewalks, and patios.
- Get your soil tested by MSU Extension to see if you need fertilizer.
- If you need it, use only phosphorus-free fertilizer.
- Water your lawn less often and using lake water—it has all the nutrients you need.
- Don't dump grass clippings in the lake or on the beach. Instead, use them to mulch your plants or dispose of them on yard waste pickup days.
- Landscape with native plants, which need less maintenance and help prevent erosion and absorb pollution.
- Plant a greenbelt of native plants on your shoreline to prevent erosion and runoff.
- Reduce the size of your lawn area to conserve water and reduce chemicals.
- Set your lawn mower at a higher level—your grass will be greener and will need less water.
- Do not feed ducks and geese (they carry swimmer's itch) but do feed and provide nesting habitat for songbirds and other species.

In Your Community

- Get active in the issues that interest you, whether it's land use, water quality, recycling, or invasive species.
- Join or organize beach cleanups for your neighborhood, local parks, and state parks.
- Attend workshops and awareness days to learn more about your watershed.
- Encourage your neighborhood association to include native vegetation rules in its bylaws.
- Call for help when you need it. There are many resources available to answer your questions and provide assistance.

In Your House

- Use environmentally friendly detergents and cleaning products, and use all chemicals sparingly.
- Never dump any chemicals down the drain—dispose of them at hazardous waste drop-off points.
- Unplug electrical devices when they're not being used.
- Have your septic system inspected every 1 to 3 years and pumped as recommended by the inspector.
- Recycle—contact the Crawford-Roscommon Conservation District for locations (see tear-off resources sheet)
- Fix leaks and use low-flow faucets.
- Turn off the water while you brush your teeth and use your washing machine and dishwasher only when they're full.

On Your Lake

- Inspect your boat and trailer for invasive plants and animals.
- Use a local boat wash when entering and leaving the lake.
- Do not transfer bait from one lake to another.
- Dispose of trash properly—don't dump anything overboard.
- Do not dump bundles of wood into the lake. It does not create good fish habitat; in fact, it provides anchor points for invasive mussels and weeds!
- Remove trash and human waste from the lake before the ice melts.
- Dispose of cigarette and cigar butts properly.
- Respect no-wake zones and noise restrictions.
- Do not disturb or aggravate wildlife.



This booklet was produced by Huron Pines with funding from the Roscommon County Community Foundation and the Higgins Lake Foundation. The full text of the Higgins Lake Watershed Management Plan can be found online at www.huronpines.org.

