Wisconsin Great Lakes Chronicle

2025

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Kenosha Harbor, Jeffrey Isaac Greenberg

FOREWORD

Governor Tony Evers

Dear Friends of the Great Lakes,

Caring for and being good stewards of our Great Lakes is a responsibility all of us share. I am proud that my administration is continuing our work to ensure our Great Lakes are able to provide clean water, sustainable habitat, commercial access, and recreational opportunities for people, families, and businesses both within and beyond our borders for future generations.

I remain concerned, however, about federal actions and decisions that may jeopardize efforts and investments to protect, preserve, and conserve our Great Lakes and waterways.

Intergovernmental partnerships and collaboration among the Great Lakes states, territories, provinces, and multiple levels of government have always been an important part of ensuring the sustainability of the Lakes—and that includes federal support and investments such as those listed below.

Transportation. Millions of tons of cargo, agricultural commodities, and minerals are transported by Great Lakes shipping to domestic and international ports. The U.S. Army Corps of Engineers (USACE) plays a primary role in dredging and port improvements to keep marine traffic moving.

Legacy Pollution. Years of industrial pollution continues to contaminate soils under our Great Lakes bays, rivers, and ports. Continued investments and leadership from the Environmental Protection Agency (EPA) are essential to remediation.

Invasive Species. Oceangoing vessels visiting the Great Lakes present the constant danger of bringing harmful or invasive species to our waters. Likewise, invasive carp in the Illinois River system threaten Lake Michigan and beyond. The EPA, U.S. Coast Guard, and other federal agencies must enforce laws and fund initiatives to stop invasives.

Resiliency and Recovery. Great Lakes coasts are especially susceptible to fluctuating lake levels and violent storms that erode shorelines, damage property, and threaten human life. USACE, the Federal Emergency Management Agency and other federal partners are needed to prevent damage and help communities recover from losses.

Habitat Restoration. Warming waters and pollution threaten the abundance and even existence of native Great Lakes animals and plants. The U.S. Fish and Wildlife Service and EPA Great Lake Restoration Initiative must continue to safeguard these resources.

Water Quality. PFAS and other pollutants threaten waters that nourish families and wildlife along Great Lakes coasts. Clean water improvements now and in the future depend on the EPA and other federal agencies to enforce laws and provide ongoing investments.

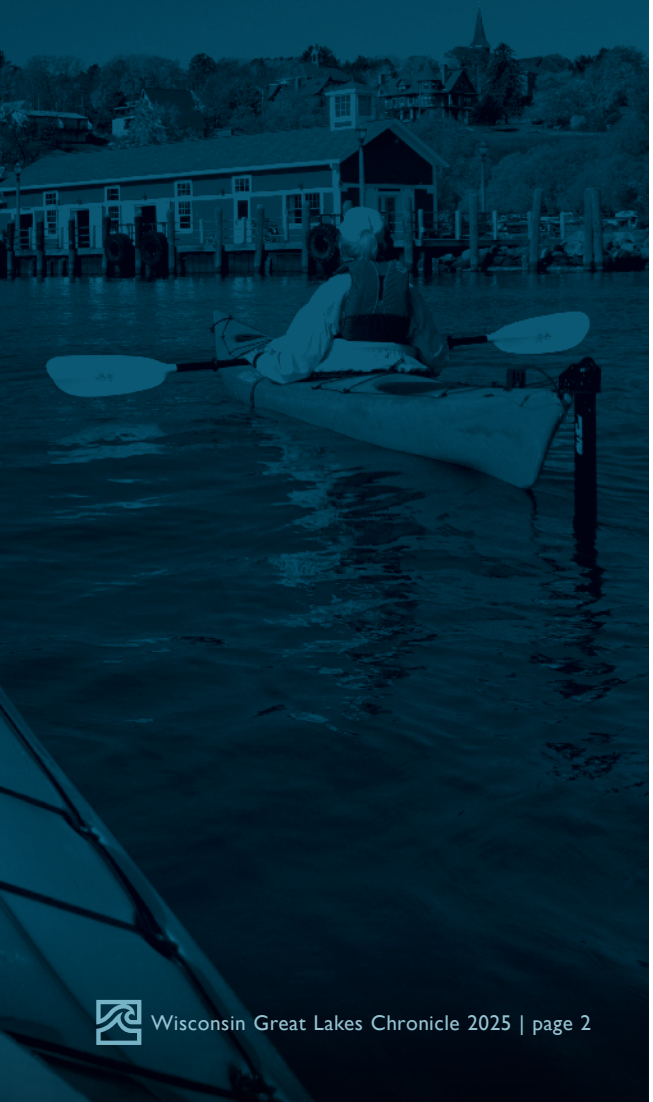
Diversions. The U.S. and Canadian governments and Great Lakes states and provinces are bound by international treaty to prevent the diversion of Great Lakes water outside the basin. Our federal government must be a strong partner to enforce agreements that protect our water.

Tribal Nations. Multiple treaties protect Great Lakes waters and resources for Tribal Nations. The federal government must stand by its obligations to protect the sovereign rights of the Tribal citizens.

Coastal Management. Our coastlines consist of a rich diversity of natural areas, communities, and industrial facilities, as well as private properties. Public-private partnerships are essential to ensuring these unique areas remain accessible, healthy, and productive. The NOAA Office for Coastal Management must be fully funded to support initiatives that strengthen our coastal communities.

This year's *Wisconsin Great Lakes Chronicle* highlights the importance of diligently managing our coasts and waters. I will continue doing everything in my power as governor of Wisconsin to protect the Great Lakes. I appreciate your support and hope that you and stakeholders at every level will join me in reaffirming our commitment to the health and wellbeing of our nation's greatest natural asset.

Coastal management sustains Wisconsin's Great Lakes as places where natural resources, economic activity and communities thrive in harmony with each other.



WHY COASTAL MANAGEMENT?

Jim Langdon

The first article in the inaugural Wisconsin Great Lakes Chronicle (2002) answered the question: Why coastal management? Given Wisconsin's complex Great Lakes history and emerging pressures on our coasts, the answers are even more relevant today.

The abundant resources of Wisconsin's Great Lakes have attracted people to our coasts for centuries. For the body, deep lakes, estuaries and bays provide fresh water, fish, migratory birds and other natural resources sought by humans to sustain life. For the spirit, warm beaches, breathtaking sunrises and glowing sunsets inspire the soul and draw people to live on the magnificent shores of Lake Michigan and Lake Superior.

These characteristics must have been pleasing to Wisconsin's original peoples whose communities—rich in culture and activity—stretched from the southern beaches of Lake Michigan to the sandstone cliffs of Lake Superior. Ojibwe communities harvested wild rice in Chequamegon Bay estuaries. Menominee and Ho-Chunk peoples thrived on fish and waterfowl taken in the waters and wetlands of Green Bay. Fish caught in the gently flowing rivers leading to Lake Michigan sustained Potawatomi and neighboring Tribes.

Wisconsin's Indian communities are stewards of the land and water, and we do well to heed the wisdom of their ancient principle that the decisions we make today must create a sustainable world for our children seven generations in the future. Unfortunately, early settlers and industries did not always appreciate the vulnerabilities of the Great Lakes. To some, the lakes were an infinite resource that could sustain infinite abuse.

Decisions of a century ago continue to haunt the waters of Superior, Marinette, Green Bay, Sheboygan and Milwaukee where refuse from tanneries and other industrial plants polluted not only the water, but also the sediment of river and lake beds in and near those coastal cities. Countless dollars were spent to remove toxins from the soils beneath the water and restore the health and vitality of these precious ecosystems.

Historically robust fisheries were depleted by overharvesting and pollution. Ships from oceanic ports discharged ballast water containing invasive species that threatened native aquatic wildlife through physical submission, competition for food and changes to the ecosystem.

Wetlands were viewed as swamps with no ecological value. Vast tracts were drained and converted to sites for growing communities. Little thought was given to the need to balance the demand of a growing population with protection of these valuable resources.

Urban waterfronts roared to life with new manufacturing and other industrial facilities that created thousands of jobs and shaped Wisconsin's emerging middle class. However, poor community planning deprived city residents of the beauty and recreational benefits of the water found on Great Lakes beaches and at lakeside parks.

That was then.

Today, we live in a vastly more enlightened age. We seek ways to protect the environmental health of our coastlines while growing our coastal economy to provide quality of life for families now and in the future. We do this with an appreciation for practical solutions, scientific research and collaboration between individuals, community groups, Tribes and all levels of government. This is the necessary, invaluable work of coastal managers.

Coastal management protects our Great Lakes waters. State, federal and local partners have spent decades removing contaminated sediments from the soils beneath the rivers and bays of our vibrant coastal communities. Dredging in the Sheboygan River and Chequamegon Bay at Ashland, for instance, removed toxins that threaten the health of the environment and nearby communities. Local officials and groups are involved to ensure this work leads to the desired goal of having federal Areas of Concern delisted as environmental threats.

Coastal management restores habitat for fish, shoreline mammals and birds. For instance, a partnership between the federal government, the States of Wisconsin and Minnesota, Tribes and local groups is working to clean and restore the St. Louis River at Duluth-Superior on Lake Superior. Their goal is to reestablish sustainable habitat for aquatic wildlife and plants while maintaining the critical infrastructure needed by shippers and industry to support the economic vitality of the Great Lakes' largest port.

Coastal management ensures waters within the Great Lakes basin are not subject to unlawful or misguided diversion. This principle is at the heart of the Great Lakes-St. Lawrence River Basin Water Resources Compact, an agreement between the region's eight Great Lakes states and two Canadian provinces. The Compact provides that all Great Lakes states and provinces must agree to any diversions of water to outside of the basin.

Coastal management ensures economic development is balanced by well-established goals and plans to protect the environment. Consider the Cat Islands in Green Bay. This project uses dredged material from the Port of Green Bay and the Fox River to build three barrier islands providing shoreline storm protection and habitat for fish and migrating birds, all while improving a commercial port that fuels the regional economy.

Protection of our waters does not happen only at the shoreline, but also inland where nonpoint runoff threatens water quality and habitat.

Coastal management finds innovative solutions to reduce pollution while maintaining the economic and commercial activity necessary to sustain vibrant communities and industries. A project in northeastern Wisconsin, for instance, converts manure to energy and prevents the release of phosphorous into rivers and streams that ultimately threaten the waters of Lake Michigan. This public-private initiative produces natural gas for local markets, manages thousands of tons of animal waste and supports the vitality of northeastern Wisconsin's dairy industry. Coastal management demonstrates that multiple public and private goals can be achieved through partnerships and smart investments.

Our Great Lakes continue to be threatened by the introduction of invasive species from other parts of the world. Maritime transportation is a critical means of delivering Wisconsin-produced commodities, products and equipment to markets across the globe, and coastal management supports vigilance to enforce laws that prevent the discharge of ballast water and invasive species from ocean going vessels into the Great Lakes.

The threat of Asian carp to the Great Lakes has emerged not from ocean freighters, but from migration through southern rivers and streams. Federal, state and local coastal management leaders throughout the Great Lakes basin have been unyielding in their call for immediate action by the federal government to play a leading role in providing the resources and regulatory framework necessary to prevent the introduction of this dangerous invasive species into the Lakes. This call must continue and necessary resources must be provided to coastal managers to protect not only our waters, but the commercial and tourism industries that rely upon a healthy Great Lakes ecosystem.

Wisconsin has a recent history of protecting wetlands that provide habitat for aquatic wildlife and waterfowl, clean water and flood control. However, wetland preservation must coexist with the needs of communities to grow and provide for economic and community development. Coastal management takes a balanced approach to preservation that identifies mitigation opportunities while also providing for responsible growth. Frequent review and reform of regulatory processes are necessary to balance wetland protection best practices with emerging economic opportunities to help our communities grow and thrive.

After a century of industrial development on our Great Lakes waterfronts, communities are reinventing these spaces to provide new opportunities for recreation and responsible commercial growth. Coastal management provides financial and technical support to assist cities redevelop lakeshore areas into attractive, lively spaces for residents and visitors.

For example, decaying industrial and harbor areas in Kenosha, Racine, Milwaukee, Port Washington, Sheboygan, Manitowoc, Sturgeon Bay, Green Bay, Ashland and Superior have been redesigned and redeveloped to meet emerging community needs and desires. Boardwalks, parks, hotels and retail districts now appear where abandoned coal docks and factories once stood. Coastal management encourages community engagement and partnerships among local officials, state government, nonprofit groups, business and the public to bring positive transformation to our urban shores.

Coastal management builds state and local partnerships to improve the health of beaches for the enjoyment of our residents and visitors. Vigilant water testing combined with the power of the Internet and social media provide real-time information on water quality and atmospheric conditions, important factors before deciding to put on sunscreen for a day at the beach. Better management of nonpoint and point source pollution will continue to limit the introduction of bacteria and other unhealthy materials into the waters where we swim and play.

At the bottom of our Great Lakes waters lie the remains of vessels whose officers and crews bravely served our communities and ports before many succumbed to the forces of nature. These ships, such as the Rouse Simmons, the famous Christmas Tree Ship launched 157 years ago in 1868, have long been protected by federal and state laws that provide for their preservation. Coastal management supports laws and initiatives to forever protect these underwater treasures for study by archeologists and exploration by the diving public.

Coastal management embraces that our Lake Michigan and Lake Superior coasts will forever be attractive places for Wisconsin residents and visitors to live and find recreational opportunities.

Thousands of people will continue to visit our beaches and lakeside parks to enjoy their water, sand, trails and magnificent views. Coastal management provides families with access to public places where these special experiences are forever available.

Coastal managers understand that our coastal economy will continue to transform. They support traditional maritime industries including shipbuilding, ports and transportation, and encourage emerging industries in technology and water sciences. The futures of our communities, state and nation not only rely upon resource protection, but also on the creation and retention of good-paying jobs that will allow our businesses and workforce to compete in global markets.

Coastal management sustains Wisconsin's Great Lakes as places where natural resources are thoughtfully managed and preserved. We work for lakeside cities, villages and towns where parents earn a good living to provide their children with comfortable homes in communities that are rich with opportunity. Coastal management's vision is of our grandchildren seven generations in the future who continue to enjoy the benefits of Wisconsin's Great Lakes because we had the intelligence and courage to make wise decisions today.

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GANAWENINDIWAG: PLANT RELATIVES TO HEAL AND PROTECT GICHIGAMI SHORELINES

Karina Heim, Rob Croll and Hannah Panci

Gichigami (Lake Superior) shorelines are under pressure from erosion, human development and climate change. A newly published resource encourages people to help care for these shorelines by strengthening their relationships with plant beings that have long existed in this coastal landscape and which stabilize soils, provide habitats, support culture, and offer food and medicine for humans and wildlife. *Ganawenindiwag: Working with plant relatives to heal and protect Gichigami shorelines* incorporates a blended knowledge approach that weaves institutional ecological principles together within an Ojibwe cultural framework to guide coastal caretakers in their efforts to nurture and promote plants in shoreline environments.

Readers of *Ganawenindiwag* ("they take care of each other" in Ojibwemowin) may find themselves thinking about plants in a new way as they encounter a cultural framing which affirms that plant beings are our relatives and teachers. Drawing from the Ojibwe creation story which tells that humans are the last and least order and dependent on all previous orders of creation for everything they need, the guide encourages readers to think of plants not as a tool, but as fellow beings on whom humans rely for the gifts that they give us. Our responsibility as humans in this relationship is to treat our plant relatives with respect, reciprocity and gratitude; harvest and use their gifts in a good way, and use our voices to speak for those who have no voice. This is the framework from which *Ganawenindiwag* gets its name.

The guide contains descriptions of 97 plant beings found in thirteen different plant communities present along the Wisconsin shoreline of Gichigami in landscapes ranging from forested sandspits to red-clay bluffs and wet meadows. A set of icons shown alongside each plant being acquaints readers with some of the known Ojibwe cultural relationships with these plants in the categories of food, medicine, technology and ceremony. This information is presented alongside plant characteristics, known names in both Ojibwemowin and English, and original imagery. A set of appendices details advice for planning and preparing a planting site.

The teachings of *Ganawenindiwag* extend beyond the content within its pages. For land and water caretakers working in the treaty-ceded territory of the Gichigami basin, the way this resource was developed offers lessons in respectful engagement with tribal communities and cultural knowledge holders. The geographic scope of *Ganawenindiwag* includes the reservations and ceded territory of Gaa-miskwaabikaang (Red Cliff Band of Lake Superior Chippewa Indians), Nagaajiwanaang (Fond du Lac Band of Lake Superior Chippewa) and Mashkiiziibiing (Bad River Band of Lake Superior Tribe of Chippewa Indians). Early in the project, meetings with tribal councils and staff led to the establishment of a cultural advisory committee to guide the work in a respectful, culturally appropriate manner. After the project was explained, prospective cultural advisors from each community were approached and gifted with asemaa (tobacco) and asked to join the cultural advisory committee.

The author team met with the cultural advisory committee five times over the course of nearly two years, sharing meals and coming together for open-ended conversation. Over the course of these gatherings, advisors offered knowledge and important cautions that shaped the information that is shared in this guide—and the information that isn't. Early on, advisors underscored humility and suggested that presenting plants merely as tools to solve erosion problems ignores their agency, and the reciprocal relationship with them. Later conversations encouraged the author team to be "deliberately vague" in sharing Ojibwe cultural knowledge and suggested the use of icons to convey the longstanding relationships that Ojibwe have held with different plant beings. The cultural advisory members affirmed that the title of the resource was a good fit for its message, and advised on the cover and interior artwork. Only through the trust and guidance of this advisory committee did *Ganawenindiwag* grow from an idea into a guide with a form and shape.

Ganawenindiwag is being used to guide restoration projects on Gichigami shorelines and beyond. From dune restoration to native plant revitalization in coastal wetlands, practitioners have appreciated *Ganawenindiwag* for its plant and plant community descriptions, and for the place-based cultural knowledge and perspective shifts it offers around our relationships with the plants and natural communities with whom we share the places where the land and water meet.

In a blended-knowledge project like this one, the final product is made more resonant because it is derived from multiple ways of knowing. This resource was authored by a collaborative team of fourteen people from many backgrounds, organizations and cultural perspectives. Many editors lent their time and expertise to reviewing this work. The project was funded by the NERRS Science Collaborative and represented a partnership between the Great Lakes Indian Fish & Wildlife Commission, Lake Superior Reserve, Lake Superior Research Institute (UW-Superior) and UW Madison Division of Extension Natural Resources Institute.

To access *Ganawenindiwag*, visit the GLIFWC Climate Change program page at https://glifwc.org/stewardship/climate-change-program#ganawenindiwag.

Hannah Panci is a Climate Change Scientist and Rob Croll is the Climate Change Coordinator with the Great Lakes Indian Fish and Wildlife Commission. Karina Heim is the Coastal Training Program Coordinator with the Lake Superior Estuarine Research Reserve. The GLIFWC Climate Change Program can be reached at climate@glifwc.org and the Lake Superior Estuarine Research Reserve can be reached at lakesuperiorreserve@extension.wisc.edu.

The Town of La Pointe began a process to purchase of the Madeline Island ferry service and secure the Island's connection to the mainland.

MADELINE ISLAND FERRY: A FUTURE SECURED

Glenn Carlson

Madeline Island, the only inhabited island in Lake Superior, lies entirely within the Town of La Pointe in Ashland County. It is roughly the same size and shape as Manhattan, measuring fourteen miles long and three miles wide, with no bridges or tunnels and only 428 year-round residents. It is the largest island in the Apostle Islands archipelago and the only one not part of the Apostle Islands National Lakeshore. The Island attracts seasonal residents and day tourists to the Chequamegon Bay area from across the Midwest, primarily Minnesota. The Bayfield ferry dock to Madeline Island is about a four-hour drive from the Minneapolis-St. Paul area.

In addition to being the nearly universal means for visitors to get to and from the Island, the ferry serves as a vital lifeline for the Island's residents, both seasonal and year-round. Everything from building materials and cement mixers to groceries and beer trucks is transported by the ferry. The Island's middle and high school students commute daily to Bayfield using the ferry, and many Island workforce members including construction workers, contractors, housekeepers and cooks reside on the mainland.

In addition to its indirect economic impact on the entire Bay area, the Town of La Pointe contributes nearly half of the property taxes for the Bayfield School District despite having about seven percent of its students, and approximately a quarter of Ashland County's property tax revenue with less than three percent of its population.

Almost as important as the ferry's existence is its accessibility. For most of the year, the ferry operates at a loss. There simply isn't enough traffic in the fall, winter, and spring to cover the operating expenses. Nearly all of the profit is generated in July and August.

In 1970, the two family-owned ferry lines serving Madeline Island merged to form Madeline Island Ferry Line, Inc., with each formerly competing family owning half of the combined enterprise. The Russell and Nelson families arrived on Madeline Island in the late 1890s and were deeply committed to the health and growth of the island. After the merger, the Russell family continued to operate it on a day-to-day basis. Although the ferry line lost money for most of the year, they ran the boats several times daily, even during the off-season.

By 2022, it was evident that there was no established family succession plan, and that the matriarch of the Nelson family and the patriarch of the Russell family were 52 years older than when the companies merged. Town of La Pointe Town Board Chairperson Glenn Carlson recognized that a sale to an unknown and/or distant buyer could be disastrous for the Town. Therefore, in August 2022, he approached the Russell family to inquire if the two families might consider selling the ferry line vessels, real estate, vehicles and other assets to the Town. Within two weeks, the answer was "yes," the two families would consider a sale.

At its September 13, 2022 meeting, the Town Board decided to establish a Harbor Commission under §30.37, Wis. Stats., to explore the feasibility of acquiring the Madeline Island Ferry Line. It is a peculiarity of Wisconsin law that a municipality cannot directly purchase or operate a ferry service. But a municipality on a navigable waterway (such as the Town of La Pointe on Lake Superior) can establish a Harbor Commission to do that.

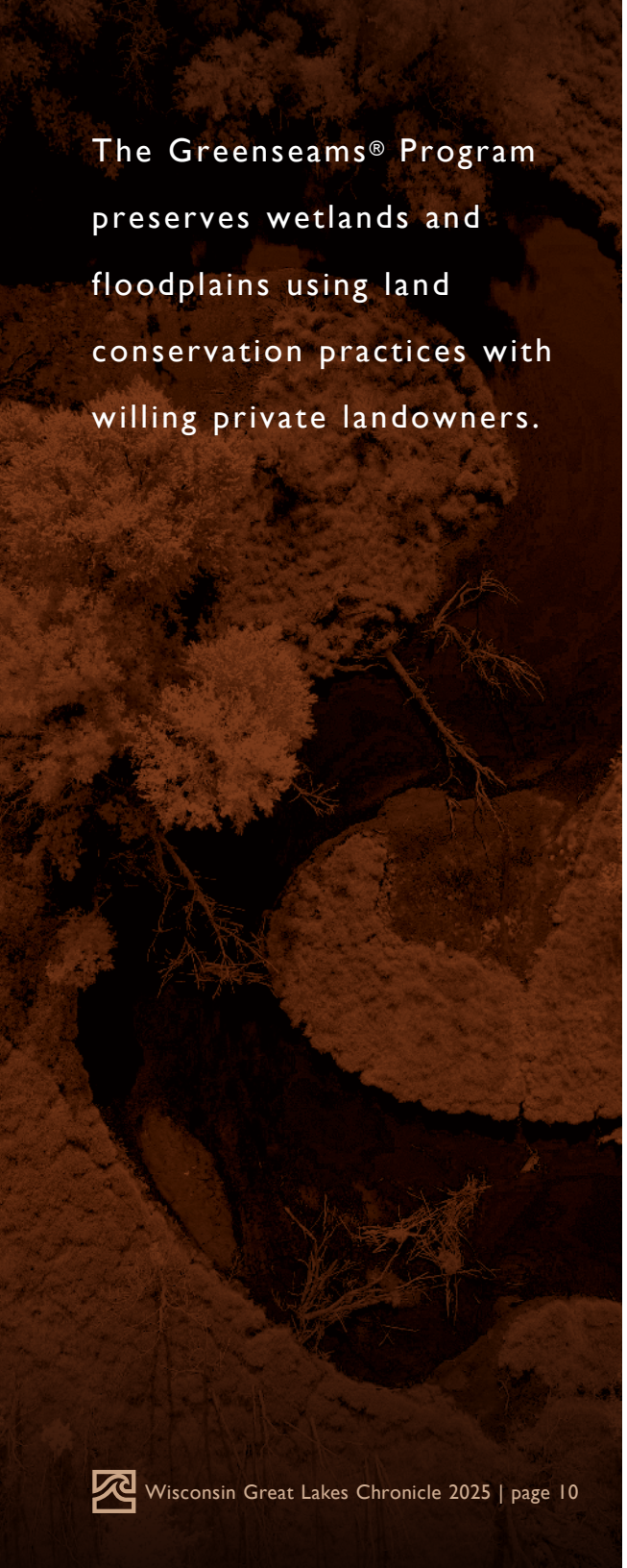
The Town Board accepted applications from qualified residents (under state law, commissioners must have been residents for the past three years) and appointed a board of seven members in early October. For the next seventeen months, the Board of Harbor Commissioners met at least once a week and initiated the complex process of negotiating and financing the purchase.

One of the Commission's first achievements was securing $200,000 in exploratory funding in the Governor's Biennial Budget. This was accomplished thanks to the efforts of then-State Senator Janet Bewley with strong support from State Senator Romaine Quinn and State Representative Chanz Green. It gave the Commission the resources to hire the necessary staff, financial consultants, attorneys and appraisers.

Equipped with independent appraisals for the five vessels and significant real estate—including the ferry landing, buildings and parking areas in Bayfield (the Town had always owned the Island dock)—and years' worth of confidential financial data, the Commission made an offer to purchase substantially all of the assets of the Madeline Island Ferry Line, Inc. Simultaneously, the Commission negotiated a Management Agreement with the sellers for them to continue day-to-day operations on a cost-plus arrangement. Although an incentive arrangement was considered, tax-exempt financing rules precluded it.

The parties agreed to a purchase price of $17,321,000 and a four-year management agreement. The next step was financing the purchase price. The Town's tax base enabled it to borrow about 60 percent of the purchase using general obligation debt. Bremer Bank, the Town's long-time bank, lent about 62 percent of the purchase price, split about evenly between general obligation debt and revenue bonds. The State of Wisconsin's Board of Commissioners of Public Lands lent $4.9 million and private individuals lent the remaining $3.0 million. The transaction was finalized on March 28, 2024 and the future of Madeline Island's connection to the mainland is secure.

Glenn Carlson is Chair of the Town of LaPointe. He can be reached at glenncarlson453@gmail.com.



The Greenseams® Program preserves wetlands and floodplains using land conservation practices with willing private landowners.

PROTECTING AND RESTORING NATURAL AREAS FOR FLOODWATER MANAGEMENT

Kristin Schultheis and Anthony Hatcher

Southeastern Wisconsin has experienced significant losses of wetlands and functional floodplain acreage from European settlement. In Milwaukee County alone, an estimated 95 percent of the natural landscape, including wetlands, has been lost (Milwaukee County Parks 2024 Strategic Plan). In consequence, the region has experienced multiple severe flooding events that have caused significant property damage and public safety concerns, including an estimated $207 million in property damages during years 2000-2022 in Milwaukee County alone.

In response, the Milwaukee Metropolitan Sewerage District (MMSD) initiated a watershed planning program in 1996 to address flooding problems while enacting policies and programs to reduce the future risk to flooding for the 29 municipalities and over 1.1 million customers in the region. There are five watersheds in MMSD's service area, and MMSD understood that the entire watershed including tributaries and headwaters must be considered to truly address flooding. This perspective led to developing the Greenseams® Program.

Started in 2001, the Greenseams® Program is designed to preserve wetlands and floodplain areas using the land conservation model where land or the interests in land are permanently protected through acquisitions and easements from willing private landowners. These lands have been identified as critical to protect against future flooding and are located in the upper reaches of the Milwaukee River, Menomonee River, Oak Creek and Root River watersheds. All of the sites contain hydric soils which act as large natural sponges to retain large volumes of water which curbs downstream flooding.

The Greenseams® Program partners with private landowners, municipalities and counties, state and federal agencies, private and public funders, and land trusts. Through these partnerships, the Greenseams® Program has protected over 5,800 acres on 161 sites which have the capacity to store over 3 billion gallons of floodwater. MMSD works closely with municipalities to ensure that acquired sites also meet municipal planning and weather resiliency goals. Over 2,300 acres are publicly accessible for passive recreation including 1,200 acres for hunting.

Upon acquisition, MMSD works to encourage land use compatible with flooding and restore the natural functionality of sites, which makes land management planning and implementation critical for enhancing ecological conditions. For instance, many Greenseams® sites include agricultural land and tiled wetlands. Site restoration is needed to reconnect the hydrology, improve soil water-holding capacity and infiltration, and enhance the plant community and wildlife habitat. The work includes completing site inventories and assessments, developing conservation and restoration plans, implementing projects and monitoring. The essence behind the Greenseams® Program is floodwater management, but there are a multitude of co-benefits to land conservation of which land management planning is required to maximize.

The Wisconsin Coastal Management Program (WCMP) and Greenseams® have a great history of partnering on acquisitions and land management. From 2003-2006, WCMP supported Greenseams® and the City of Oak Creek with acquisition and restoration funding for 42 acres of wetlands in a priority floodwater management area. In 2013 and 2018, WCMP supported a 73-acre project in the City of Mequon for restoring agricultural land with native plant communities. Today the WCMP supports the Greenseams® Program through the Great Lakes Coastal and Nearshore Habitat Engineering and Design Program and the Bipartisan Infrastructure Law (BIL) Capacity Grant.

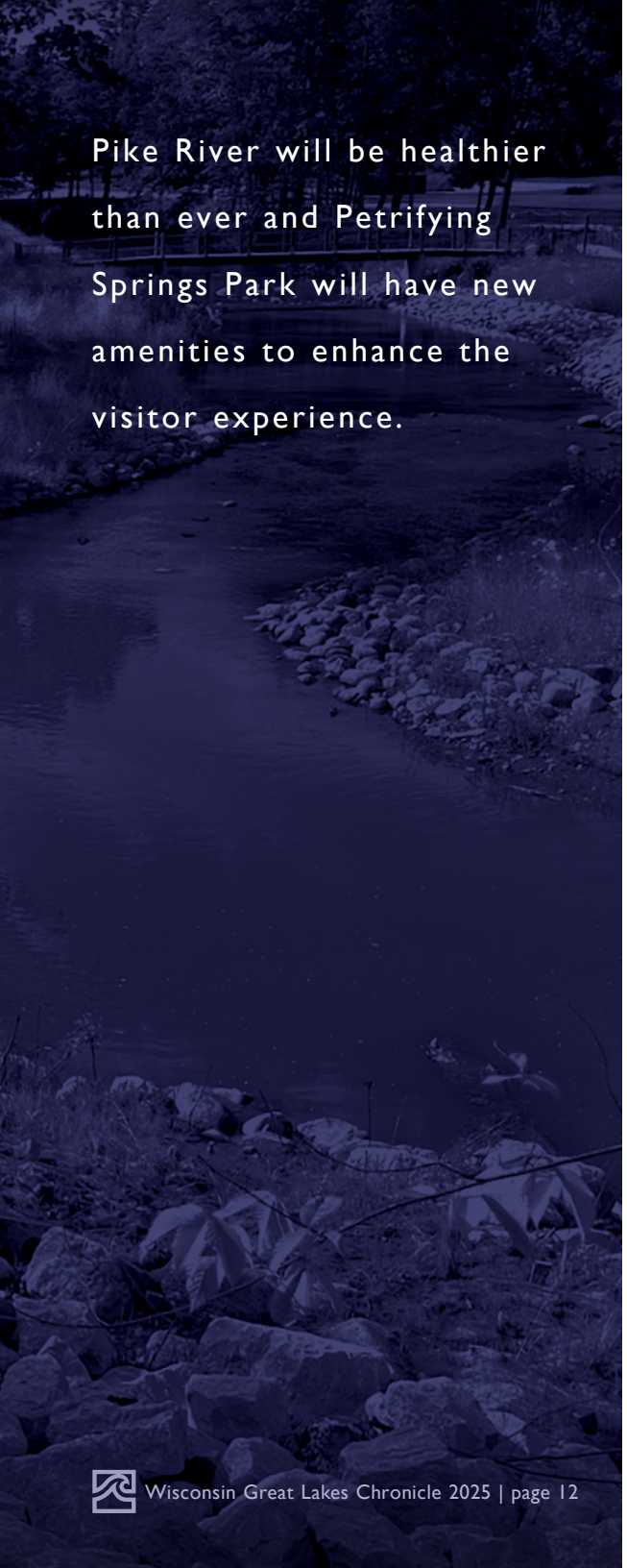
The Great Lakes Coastal and Nearshore Habitat Engineering and Design (E&D) Program is funded by the Great Lakes Restoration Initiative and is implemented by the Coastal States Organization through a partnership with the National Oceanic and Atmospheric Administration and the WCMP. The program provides 60 percent E&D services for habitat restoration projects and is a perfect fit for an 85-acre site located in the City of Mequon.

Much of the site is deep and shallow marsh with forested wetlands and uplands and is the headwaters of an unnamed tributary to the Milwaukee River. The site provides several ecosystem services including floodwater management, groundwater recharge, water purification, stopover habitat for migrating birds and habitat for rare plant species. The marsh has been degraded through filling, ditching and channel realignment, which has resulted in water-level changes, hydrologic disconnection and invasive species establishment. Restoration planning requires technical modeling and analysis and developing restoration alternatives, and the E&D Program is providing the much-needed funding and technical capacity for MMSD to plan and implement the site restoration.

The BIL Capacity Grant comes at a pivotal moment as a land management program is being developed specifically for more than 2,300 Greenseams® acres directly owned by MMSD. Dedicated staffing requires a full-time Land Management Coordinator with support from summer and fall interns. The BIL grant is providing three years of funding (2025-2027) towards these positions during which four restoration and fifteen land stewardship plans will be developed. These plans lay the framework from which restoration projects and stewardship activities will be implemented.

One of the great outcomes from the Greenseams® Program are all the partnerships and communication that has been established across the watershed around land conservation. Working across the watershed with a variety of partners and funding agencies has been crucial to the success of the Greenseams® Program. Assistance from WCMP has been important for the implementation of past and current projects, and MMSD is looking forward to continued partnership with WCMP in the years to come.

Kristin Schultheis is the Senior Project Planner and Greenseams Program Manager with the Milwaukee Metropolitan Sewerage District. She can be reached at kschultheis@mmsd.com. Anthony Hatcher is the Land Stewardship Coordinator with Pheasants Forever, Inc. He can be reached at ahatcher@pheasantsforever.org.



PIKE RIVER RESTORATION PHASE III

Karli Schwer and Wyatt Moore

The Pike River Restoration is a key part of a larger, multi-year project to revitalize the Pike River within Petrifying Springs Park. This ambitious project has already proven effective in improving water quality and creating better habitats for wildlife. The first two phases have been successfully completed, and with Phase III already underway, the project is poised to make an even bigger impact. Led by C.W. Purpero (who also provided construction services for Phase II), Phase III is made possible thanks to grants awarded by the Wisconsin Department of Natural Resources (WDNR), Sustain Our Great Lakes, the Fund for Lake Michigan and the U.S. Environmental Protection Agency (EPA).

Before the formal Pike River Restoration began, the dam located within Petrifying Springs Park had to be removed. As the last remaining barrier on the Pike River, the dam posed a significant obstacle to the seasonal migration of fish, including Chinook salmon, Coho salmon and steelhead. In 2012, the dam was removed, and a 40-foot-long clear-span bridge was constructed in its place, restoring fish access to 22 miles of stream.

The restoration work is based on the EPA-approved Pike River Watershed Plan which aims to improve the quality of both surface water and groundwater, and enhance both aquatic and terrestrial habitats. According to the WDNR, the Pike River is currently rated as "poor" because it supports few fish species. However, thanks to this project, experts anticipate significant improvements in water quality and the biological health of the river. This includes creating more breeding areas for various species and improving migration corridors for wildlife, including fish moving from Lake Michigan to the river's headwaters.

Phase I began in 2017 when Kenosha County received funding from the U.S. Environmental Protection Agency (EPA) through the Great Lakes Restoration Initiative. The grant supported the first phase of restoration which focused on a 3,145-foot section of the Pike River. The project addressed significant erosion issues by reshaping the streambanks and improving the flow of the river. Crews planted native vegetation across a 5.2-acre area to help stabilize the soil and improve water filtration in the surrounding riparian corridor. A wetland delineation study was conducted in the summer of 2017 to guide planning efforts. By spring 2018, the county had finalized engineering and construction plans.

Phase II took place along an additional 3,280 feet of the river, focusing on the central portion of the park. This phase added 4.83 acres of native plantings along the riverbanks to further prevent erosion and promote ecological health. Stone structures called revetments (large rocks) were installed to stabilize steep slopes that had been heavily eroded. Natural features—such as toe wood protection, log vanes and in-stream vegetation—were also added. These help protect the riverbanks from future erosion and provide shelter for fish and other aquatic life.

In addition to ecological improvements, Phase II included the development of roughly three-quarters of a mile of new trails which improved access for hiking, fishing and the use of non-motorized watercraft. A playground that was located within the river's floodplain was also relocated to a safer area.

The work performed in Phase III mirrors the activities in the first two phases. Riverbanks will be widened and stabilized with native plants, and stone revetments will be placed to prevent further erosion and create important riffles—shallow areas that help maintain a healthy fish population.

But that's not all. Phase III also includes exciting updates to the park such as a pedestrian bridge and a brand-new playground. The existing pedestrian bridge (located between Area 2 and the Biergarten parking lot) will be completely removed during the project and replaced with a new ADA-compliant bridge. The current playground, located in an area prone to flooding, will also be removed. A new playground will be installed across the street and out of the river's floodplain. This new playground will be safer and more durable, providing a better experience for park visitors.

Phase III aims to restore over five acres of riverbank habitat, 3,280 feet of streambank and 12,040 square feet of in-stream habitat. These changes will dramatically reduce the amount of sediment, phosphorus and nitrogen flowing into the river by several hundred tons. The restoration also includes

planting native species to support the endangered Rusty Patched Bumblebee and migratory bluebirds, helping boost local biodiversity.

Since 2018, Kenosha County has worked closely with UW-Parkside on water testing throughout the restoration area. UW-Parkside students monitor key water quality indicators like phosphates, nitrates, dissolved oxygen and more. The data collected from Phases I and II showed a noticeable improvement in river conditions, helping to shape the direction of Phase III.

In addition to water testing, Kenosha County also contracts monthly visits to maintain the ecological health of the project area, managing invasive species and ensuring that these restored areas continue to thrive.

When Phase III wraps up, the Pike River will be healthier than ever and Petrifying Springs Park will have new amenities to enhance the visitor experience. This restoration project is a shining example of how local, state and educational institutions can work together to create lasting, positive changes for both the environment and the community.

Karli Schwer is the Special Event Coordinator at Kenosha County Division of Parks. She can be reached at karli.schwer@kenoshacountywi.gov. Wyatt Moore is Director of the Kenosha County Division of Parks. He can be reached at wyatt.moore@kenoshacountywi.gov.

The 100% Great Lakes Fish initiative maximizes the value of each fish by identifying high-value applications for every part.

100% GREAT LAKES FISH INITIATIVE: A NEW WAY TO THINK ABOUT FISH

John Schmidt

From commercial and Tribal fishers to aquaculture and fish processors, the Great Lakes region produces a lot of fish. These activities create jobs and high-quality, nutritious seafood to communities across the region. However, traditional fish processing methods often result in substantial waste with only about 40 percent of each fish making it to the dinner plate. The remaining 60 percent including heads, bones and guts is frequently discarded, used as low-value animal feed or sent to landfills. This creates an environmental challenge and a missed economic opportunity.

The Conference of Great Lakes St. Lawrence Governors & Premiers (GSGP) is addressing this challenge head-on with the 100% Great Lakes Fish Initiative. Launched under the chairmanship of Wisconsin Governor Tony Evers and inspired by the success of Iceland's 100% fish model, this initiative aims to maximize the value of each fish by identifying high-value applications for every part. The goal is to enhance sustainability, strengthen fisheries and create new economic opportunities across the Great Lakes including Wisconsin.

Learning from Iceland's Success. Over a decade ago, Iceland pioneered the concept of fully utilizing every part of each fish. Their investment in research and product development enabled Icelandic companies to create new markets for fish-based products, generate jobs and increase the resilience of coastal communities. Today, Iceland uses fish byproducts to create everything from bandages and cosmetics to leather and biofuels. Inspired by this model, GSGP has partnered with the Iceland Ocean Cluster and Matís, a leading Icelandic research laboratory, as well as organizations around the region, to bring similar innovation to the Great Lakes St. Lawrence region.

A Regional Commitment to Sustainability. To drive this transformation, GSGP launched the 100% Great Lakes Fish Pledge that encourages commercial fishers, aquaculture producers, fish processors and related businesses to commit to utilizing 100 percent of each fish they handle. Over 40 companies have already signed on, including twelve from Wisconsin—the most of any state or province. These early adopters are helping to pioneer new uses for fish byproducts and demonstrating the economic and environmental benefits of a zero-waste approach:

- Aqua Garden LLC, Amery
- Bodin Fisheries, Bayfield
- Baileys Harbor Fish Co., Baileys Harbor
- Dan's Fish, Inc., Sturgeon Bay
- Dramm Corporation, Manitowoc
- Halvorson Fisheries, Cornucopia
- Henriksen Fisheries, Ellison Bay
- J&M Fisheries, Ellison Bay
- Lindal Fisheries, Sturgeon Bay
- Red Cliff Fish Co., Bayfield
- Rushing Waters Fisheries, Palmyra
- Superior Fresh, Northland

Innovative Uses for Fish Byproducts. Through ongoing research and collaboration with industry and academic partners, the 100% Great Lakes Fish Initiative is developing innovative applications for fish parts that were previously considered waste. Some promising examples include:

- **Fish Leather.** This durable material made from fish skins is the second strongest leather in the world and can replace traditional leather in fashion and upholstery.
- **Collagen and Gelatin.** Collagen extracted from fish skin and scales is a valuable ingredient in nutritional supplements and beauty products.
- **Fish Meal and Fish Oil.** These ingredients produced from fish trimmings are commonly used in high-quality animal feed, pet food, and fertilizers.
- **Protein Hydrolysates.** These hydrolysates derived from fish heads and bones are used as food additives and nutritional supplements, supporting muscle recovery and joint health.

Strengthening Partnerships Across Borders. Collaboration is at the heart of the 100% Great Lakes Fish Initiative. GSGP is working with a diverse group of partners, including state and provincial agencies, tribal and inter-tribal organizations, industry leaders and academic institutions. Agencies from Wisconsin, Illinois, Michigan, Minnesota and Ontario are working together toward the goal of full utilization. Partnerships with Tribes including the Red Cliff Band of Lake Superior Chippewa and inter-tribal organizations like the Great Lakes Indian Fish & Wildlife Commission help integrate indigenous perspectives into the initiative.

Connecting with industry partners through groups like the Wisconsin Lake Michigan Commercial Fishing Board and the Wisconsin Aquaculture Association brings valuable expertise to the table, while universities including the University of Wisconsin-Milwaukee are contributing research and innovation to advance the initiative's goals. Cross-border collaboration ensures fisheries in Wisconsin and beyond stay sustainable and competitive.

The Future of 100% Great Lakes Fish. Looking ahead, the 100% Great Lakes Fish Initiative is exploring how aquaculture can support full fish utilization, conducting supply and demand analysis for fish byproducts to better connect raw materials with high-value markets for finished products, and developing business models that help fishers, cultivators and processors maximize revenue. By continuing to invest in research, collaboration and commercialization, Wisconsin and the broader Great Lakes region can lead the way in sustainable fisheries while strengthening local economies and preserving the region's fishing heritage.

The initiative is financially supported by grants and awards from the Great Lakes Fishery Commission Great Lakes Fishery Trust, the Ontario Commercial Fisheries' Association and the Acme Smoked Fish Foundation. To learn more about GSGP's work and stay updated, please visit www.gsgp.org.

John Schmidt manages the 100% Great Lakes Fish initiative and is a Program Manager with the Conference of Great Lakes St. Lawrence Governors and Premiers. He can be reached at jschmidt@gsgp.org.

Two Wisconsin coastal scenic byways take travelers to Lake Superior and Lake Michigan communities rich in history, natural beauty and amenities.

COASTAL SCENIC BYWAYS

Mike Friis and Todd Breiby

Enjoying a leisurely drive is a time-honored pastime in American culture. Watching scenic landscapes and driving through picturesque communities offers relaxation and a broadening of one's knowledge of a place. In Wisconsin we have two designated coastal National Scenic Byways, each offering stunning views of the Great Lakes and unique cultural, historical, and natural attractions.

The Wisconsin Lake Superior Scenic Byway and Door County Coastal Byway are designated routes that were established for their scenic and intrinsic qualities. Both coastal byways intersect vibrant communities, embrace the unique character of each region and weave together an unforgettable experience. Both coastal byways are destinations that provide year-round opportunities.

Throughout each coastal byway travelers will experience breathtaking scenery, rich maritime history, unique communities and opportunities for outdoor recreation. Travelers will find state and local parks, a national lakeshore, nature preserves, lighthouses, beaches, scenic vistas, waterfalls, museums and so much more. Travelers will find opportunities to hike, bike, paddle, snowshoe, Nordic ski, sail and fish as well as indulge in local cuisines, fish boils, wineries, orchards, festivals, live music and theater.

Nestled along the south shore of Lake Superior, the Wisconsin Lake Superior Scenic Byway is a 70-mile route along Highway 13 stretching from the Town of Cloverland in Douglas County, along the coast of the Bayfield Peninsula, to the Town of Barksdale in Bayfield County. The route passes through the coastal communities of Port Wing, Herbster, Cornucopia, Red Cliff, Bayfield and Washburn, and the Towns of Orienta, Russell, and Bayview. Along the entire route, many tributaries to Lake Superior are crossed, including the Bark, Siskiwit and Sand Rivers, popular sites for fishing, paddling and scenic views. Hiking trails are abundant throughout the Byway and provide access to five waterfalls.

The Wisconsin Lake Superior Scenic Byway passes through the mainland portion of the Apostle Islands National Lakeshore from which many of the 21 islands that make up the National Lakeshore can be seen. The National Lakeshore is known for sea caves, kayaking, boat tours and beaches. There are nine lighthouses within the National Lakeshore, the highest concentration in a single location in the country. Of the National Lakeshore's mainland features, Meyers Beach is a popular access point for kayaking to the Sea Caves in the summer, and hiking to them in the winter when ice conditions are suitable. At Little Sand Bay, there is an accessible visitor center and historical displays as well as a beach, boat dock and camping.

Continuing along the Byway, you will find Frog Bay Tribal National Park, the first established tribal national park in the U.S. and a wonderful location to hike, access Lake Superior and birdwatch. Frog Bay Tribal National Park features boreal forests, beaches and wetlands. Turning

south on the Byway takes you into Chequamegon Bay where travelers will find opportunities for hiking, fishing, camping, mountain biking, boating and Nordic skiing, all the while visiting the historic communities of Bayfield and Washburn. Travelers can find an abundance of lodging options, local foods, art galleries, music and over a dozen orchards and fruit farms.

Turning our attention east to Lake Michigan and the Bay of Green Bay, travelers will find the Door County Coastal Byway, a 66-mile route that weaves through the Door County Peninsula along Highways 42 and 57 north of Sturgeon Bay to Northport. Following the Byway north along Highway 42 and the coast of Green Bay, travelers will pass through numerous charming and historic villages including Egg Harbor, Fish Creek, Ephraim, Sister Bay, Ellison Bay and Gills Rock before turning south on Highway 57 and driving along Lake Michigan and passing through Baileys Harbor and the Towns of Jacksonport and Sevastopol. These communities offer boutiques, galleries, museums, waterfront dining, music and theater, each providing a unique and memorable experience.

The Door County Coastal Byway passes through a natural landscape that includes coastal waters, forests, streams, beaches, ridges and swales, and the Niagara Escarpment as evidenced by the dramatic limestone cliffs along parts of the shoreline. Along the Byway, travelers will find three state parks, ten county parks, fifteen natural areas and preserves, and numerous local parks. Opportunities for outdoor recreation are abundant throughout the Byway for travelers and include hiking, camping, paddling, biking, boating, swimming, birdwatching, snowshoeing and Nordic skiing.

Lighthouses are an integral part of the maritime landscape and cultural heritage of Door County. There are eleven lighthouses found within the County, one of the highest concentrations of lighthouses in the country. Many of the lighthouses can be accessed from the Byway and several offer tours to travelers.

For both of Wisconsin's coastal byways, there are opportunities to also experience what each area has to offer by stepping off the highway. You can travel on the Madeline Island Ferry to explore La Pointe and Madeline Island, and journey across Death's Door by taking the Washington Island Ferry to explore Washington Island, and from there the Karfi Ferry to explore Rock Island. These islands in Wisconsin's Great Lakes offer additional opportunities for adventure and to experience life on an island.

Both of Wisconsin's coastal National Scenic Byways exemplify the unique and unforgettable experiences that await travelers and feature the beauty of life along Wisconsin's Great Lakes coasts.

Mike Friis is a Bureau Director at the Wisconsin Department of Administration He can be reached at michael.friis@wisconsin.gov. Todd Breiby is the Coastal Habitat, Wetland and Nonpoint Coordinator with the Wisconsin Coastal Management Program. He can be reached at todd.breiby@wisconsin.gov.

The Brown County One Map pilot project harmonizes three federal GIS base layers for use by local planners.

BROWN COUNTY ONE MAP PILOT PROJECT

Jim Giglierano and Jeff DuMez

Geospatial data is collected and consumed by a wide range of users to describe, visualize and analyze the physical, social and economic features of every location on Earth, including here in Wisconsin. Historically, most early geospatial data sets were digitized from existing paper maps and aerial photographs, but over the past few decades most new information is derived from digital sensors and cameras, either carried in aircraft or satellites, or collected on the ground with GPS.

Data collection methods continue to improve with technology. Topographic maps were first collected by ground survey crews with plane tables, then contours were extracted from stereo aerial photos, and now widespread use of LiDAR sensors record the 3D world. LiDAR technology for map making involves using a laser rangefinder pointing at the ground from an aircraft that can record millions of elevation points in a few seconds of flight. Wisconsin's LiDAR elevation mapping program recently completed standardized coverage of the state, all available free to the public for the first time.

What has not kept up with the advanced collection of data is the development of derivative products that are used by local, state and federal land and water managers to make decisions, such as where to sample water, permit new septic systems or locate commercial developments. One of the main pathways for creation of derived products is by federal agencies. As examples, water features such as rivers, lakes and streams are mapped by the USGS National Mapping Program, while wetlands are mapped by the U.S. Fish and Wildlife Service's National Wetland Inventory. The coastlines and areas draining to the Great Lakes are mapped by NOAA's Office of Coastal Management with their Coastal Change Analysis Program or CCAP.

In addition to the federal products, the Wisconsin Department of Natural Resources also maintains its own database of water features and wetlands, and many county, larger city and regional governments also have their own data sets, either created separately or derived from the federal or state versions. This patchwork approach is further complicated by the various agencies using different mapping standards, different source materials and resolutions, or dates of imagery collection. The end result is different representations of the same feature; a lake or shoreline, for example, appearing differently on all the various agency datasets. People trying to use these datasets together require some skill with GIS software tools, which limits their widespread use and acceptance by the public.

Wisconsin Coastal Management's One Map pilot project is seeking to address these issues as well as other GIS user needs. To begin to address some of the issues with different agency data, the One Map project is developing a process for "harmonization" of three federal GIS base layers: USGS's new 3D Hydrography Program (3DHP), U.S. Fish and Wildlife Service National Wetlands

Inventory (NWI) and NOAA's Coastal Change Analysis Program's hi-resolution land cover data. One Map better aligns these products by using the same source materials: Newly acquired USGS high-resolution lidar elevation data, and USDA leaf-on and county leaf-off imagery.

Normally each agency product is created separately, but in the One Map production cycle, the hydrography layer is first extracted from the LiDAR while comparing water bodies to the land cover extracted from the imagery. The NWI wetlands are mapped second, using the hydrography as a guide which also allows for any errors in the open water features to be corrected. A third cycle creates an updated and more detailed version of the land cover, with the NWI wetlands used as a starting place. A final version of the land cover product focuses on the tree canopy extracted from the high-resolution LiDAR point cloud. Once completed, the three layers are exported to specific agency formats for inclusion in their nationwide databases. After a check by the federal agencies, state and local users can add their own locally collected information, like sampling points and permits.

The One Map Project is being funded by the Wisconsin Coastal Management Program (WCMP) using a NOAA Bipartisan Infrastructure Legislation (BIL) capacity building grant. The BIL grant requires WCMP to develop a methodology focusing on assessing and ranking candidate sites for NOAA's habitat restoration and conservation

competitive grants. WCMP has subcontracted with the Brown County's Planning and Land Services Department to map five of Green Bay's HUC10 coastal watersheds. The harmonized database is being created through a contract between NV5 Geospatial and Brown County.

Brown County and other partners will investigate using the data for their own applications including shoreland zoning, permitting in environmentally sensitive areas, modeling conservation practices for water quality improvements, flood storage, managing the new Green Bay National Estuarine Research Reserve, and other activities. The BIL funded project commenced in 2023 and runs through 2025. Draft and final data products were delivered by NV5 throughout 2024, with application testing by state, local and tribal land and water partner agencies in 2025. A final report will be delivered by WCMP to NOAA Office of Coastal Management by the end of 2025.

Jim Giglierano was the State Geographic Information Officer with the Wisconsin Department of Administration Jeff DuMez is the GIS Coordinator and Land Information Officer with the Brown County Planning & Land Services Department. He can be reached at jeff.dumez@browncountywi.gov.

2025 WISCONSIN COASTAL MANAGEMENT PROGRAM GRANTS

Project Name
Grantee
WCMP Award
Project Description
Contact

Coastwide

Youth Watershed Education: Protecting the Sturgeon and its Habitat
Riveredge Nature Center, Inc.
$47,600
Engage middle school students through Streamside Sturgeon Rearing Facility tours and Milwaukee River water quality testing.
Ms. Anna Jean Hallmann, ajhallmann@riveredge.us

Wisconsin's Scenic Treasures: Wild Waters
Board of Regents of the University of Wisconsin System
$47,500
Produce a PBS Wisconsin Wild Waters documentary as part of the Wisconsin Scenic Treasures series featuring Great Lakes shorelines and habitats.
Ms. Marike Stucky, marike.stucky@pbswisconsin.org

Enhancing Coastal Resilience-WICCI Outreach
Natural Resources Foundation of Wisconsin
$43,987
Update the 2021 WICCI Assessment Report to include the latest science, impacts and solutions, and a summary highlighting changes since the last Assessment Report.
Ms. Caitlin Williamson, caitlin.williamson@wisconservation.org

Coastal Resiliency Plan
Bay-Lake Regional Planning Commission
$34,908
Develop a regional Coastal Resiliency Plan covering Brown, Door, Kewaunee, Manitowoc and Marinette Counties and about 400 miles of coastline.
Ms. Lydia Bernhoft, lbernhoft@baylakerpc.org

Bay of Green Bay National Estuarine Research Reserve, Public Engagement and Plan
Board of Regents of the University of Wisconsin System
$33,748
Draft the Final Environmental Impact Statement and Final Management Plan for Milestone 4 of the Green Bay NERR designation process.
Ms. Emily Tyner, tynere@uwgb.edu

Connecting Communities: Refreshing the Milwaukee Urban Water Trail Map
Milwaukee Riverkeeper
$30,000
Update, print and distribute the Milwaukee Urban Water Trail map and corresponding website.
Ms. Cheryl Nenn, cheryl_nenn@milwaukeeriverkeeper.org

Freshwater Reader: A Collection of Estuary Culture
Board of Regents of the University of Wisconsin System
$29,972
UW-Green Bay and partners will collect materials for a Field Guide about the history, biodiversity, and human connections of the Green Bay NERR.
Ms. Abbey Kleinert, kleinera@uwgb.edu

Rivers2Lake: Nurturing a Community of Lake Superior Educators
Lake Superior National Estuarine Research Reserve
$29,956
Expand the Rivers2Lake program to include five teachers from the South Shore of Lake Superior in the 2025-26 cohort.
Ms. Luciana Ranelli, luciana.ranelli@wisc.edu

Artificial Intelligent Webcam Network for Apostle Islands Water Monitoring
Board of Regents of the University of Wisconsin System
$29,514
UW-Madison Engineering will use image processing technology to determine wave characteristics from nearshore webcams in the Apostle Islands.
Dr. Chin Wu, chin.wu@wisc.edu

Bryophyte Floristic Work in Northeastern Wisconsin Minerotrophic Peatlands
Board of Regents of the University of Wisconsin System
$25,661
UW-Green Bay will develop bryophyte species identification and regional species diversity resources for Wisconsin minerotrophic peatlands in the northern Lake Michigan coastal region.
Dr. Keir Wefferling, wefferlk@uwgb.edu

Geologically-Realistic Numerical Groundwater Flow Model
Board of Regents of the University of Wisconsin System
$23,272
The Wisconsin Geological and Natural History Survey will calibrate and test a geologically-realistic numerical groundwater flow model for southern Door and Kewaunee Counties.
Ms. Anna Fehling, anna.fehling@wisc.edu

Technical Assistance
Bay-Lake Regional Planning Commission
$30,000
Provide technical assistance to the Wisconsin Department of Administration in the implementation of the Wisconsin Coastal Management Program.
Ms. Lydia Bernhoft, lbernhoft@baylakerpc.org

Technical Assistance
Southeastern Wisconsin Regional Planning Commission
$30,000
Provide technical assistance to the Wisconsin Department of Administration in the implementation of the Wisconsin Coastal Management Program.
Dr. Thomas Slawski, tslawski@sewrpc.org

Technical Assistance
Northwest Regional Planning Commission
$30,000
Provide technical assistance to the Wisconsin Department of Administration in the implementation of the Wisconsin Coastal Management Program.
Mr. Jason Laumann, jlaumann@nwrpc.com

Ashland County

Eliminate Stormwater System Contaminants
City of Ashland
$32,691
Identify causes and decrease contaminants entering Lake Superior through increased street sweeping, cleaning stormwater infrastructure and collecting water quality samples.
Mr. John Butler, jbutler@coawi.org

Ashland: In our Own Words
City of Ashland
$25,000
Develop a plan to update and create interpretive signs along the Ashland Rails to Trails System (ARTS) and City parks highlighting transformative coastal projects and the City's history.
Ms. Mandy Lyons, mlyons@coawi.org

Bayfield County

Siskiwit River Land Acquisition
Bayfield County
$94,628
Purchase a 125.41 acre property containing roughly ½ mile of the Siskiwit River located a few miles south of Lake Superior and Cornucopia.
Mr. Jason Bodine,
jason.bodine@bayfieldcounty.wi.gov

Lower Big Ravine Assessment and Redesign
City of Bayfield
$17,000
Hire a contractor to conduct an integrated analysis of the recreational and public works infrastructure in the lower Big Ravine.
Ms. Kate Kitchell, katepkitchell@gmail.com

Brown County

Wequiock Falls County Park Scenic Viewing Platforms
Brown County Parks
$87,613
Improve access to scenic viewing platforms and develop educational boards at Wequiock Falls.
Mr. Matt Kriese, matt.kriese@browncountywi.gov

Dynamic Comprehensive Planning
Town of Scott
$15,000
Update elements of its comprehensive plan to address challenges including fluctuating water levels, water quality concerns, coastal hazards and evolving housing and economic trends.
Mr. Dave Cerny, build@townofscottbrownwi.gov

Door County

Enhancing Door County Aquatic Research Tools
Crossroads at Big Creek Inc.
$27,962
Acquire and improve access to monitoring equipment in Door County and gather baseline water quality data for future research studies.
Ms. Samantha Koyen, info@crossroadsatbigcreek.org

Door County Coastal Terrestrial Invasive Species Education and Control
Door County Soil & Water Conservation Department
$25,800
Address the spread of terrestrial invasive species along the Lake Michigan shoreline through public outreach, workshops, workdays and herbicide certification for staff members.
Mr. Jason Miller, jmiller@co.door.wi.us

Pierless: Vanished Commercial Piers of Washington and Detroit Islands
Wisconsin Historical Society
$15,786
Investigate, map and evaluate submerged and associated shoreline cultural resources associated with commercial piers on Washington and Detroit Islands.
Ms. Kendra Kennedy, kendra.kennedy@wisconsinhistory.org

Iron County

Saxon Harbor Lake Superior Shoreline Stabilization
Iron County
$41,220
Produce final construction-ready design plans for stabilizing a section of the Lake Superior shoreline near Saxon Harbor.
Mr. Eric Peterson, icfadmin@ironcountyforest.org

Kewaunee County

Ecologically Resilient Kewaunee Marshland and Walk
City of Kewaunee
$27,800
Develop a habitat restoration plan for the city-owned marshland including 65 acres of an 810-acre wetland at the mouth of the Kewaunee River.
Mr. Heath Eddy, heddy@cityofkewaunee.org

Manitowoc County

Paddlers Park Revitalization: Enhancing Coastal Access
City of Two Rivers
$30,000
Construct a new concrete boat launch and dock, install water trail signage, and enhance fishing access at Paddlers Park.
Mr. Mike Mathis, mikmat@two-rivers.org

Milwaukee County

Ripples of Discovery: Water-Based Experiential Learning
Urban Ecology Center
$59,800
Expand the NEEP (K-12) and PEEP (Pre-K) programs to highlight water ecology, recreation and preservation.
Ms. Devin Lazo, dlazo@urbanecologycenter.org

Strengthening Flooding Resiliency in Milwaukee
Clean Wisconsin
$47,708
Work with the Layton Park and Forest Home Hills neighborhoods to assess the impact of green infrastructure to improve stormwater management.
Ms. Tamar Cloyd, grantsmanager@cleanwisconsin.org

Russell Avenue Fishing Pier Improvements
Port Milwaukee
$32,000
Hire a consultant to perform a site condition assessment and develop detailed architectural and engineering plans for improvements to the Russell Avenue fishing pier.
Mr. Brian Kasprzyk, bkaspr@milwaukee.gov

Artifacts of the Great Lakes Marine Collection
Milwaukee Public Library
$27,800
Provide proper storage for artifacts of the Great Lakes Marine Collection and the Wisconsin Marine Historical Society at the Milwaukee Public Library.
Mr. Robert Jaeger, rmjaege@milwaukee.gov

Coast Quest
Harbor District, Inc.
$27,724
Host free, bilingual (English/Spanish) in-water, bike and walking tours to improve community access to coastal redevelopment and habitat restoration projects around the Harbor District.
Ms. Tia Torhorst, tia@harbordistrict.org

Ozaukee County

Clay Bluffs Cedar Gorge Nature Preserve Public Access
Ozaukee County Planning and Parks Department
$200,000
Complete design and engineering documents for construction and complete implementation of public access features at Cedar Gorge Nature Preserve.
Mr. Andrew Struck, astruck@ozaukeecounty.gov

Racine County

Horlick Park Canoe and Kayak Access Project
Root-Pike Watershed Initiative Network
$20,627
Complete conceptual and final designs for public access improvements at Horlick Park in the City of Racine.
Mr. Dave Giordano, dave@rootpikewin.org

Sheboygan County

Sheboygan Marsh Boardwalk Final Design
Sheboygan County Planning and Conservation Department
$30,000
Complete design plans and specifications for a boardwalk/bridge in the 14,000-acre Sheboygan Marsh.
Mr. Aaron Brault, aaron.brault@sheboygancounty.com

ACKNOWLEDGMENTS

The Wisconsin Coastal Management Program was established in the Department of Administration (DOA) in 1978 under the Federal Coastal Zone Management Act. The program and its partners work to achieve balance between natural resource preservation and economic development along Wisconsin's Great Lakes coasts. The program thanks its principal federal partner, the National Oceanic and Atmospheric Administration, Office for Coastal Management, for the technical and financial support it provides on behalf of Wisconsin's coastal communities.

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24, WCMC Chair Larry MacDonald, WCMP

25, Wisconsin Point, Diane Friis

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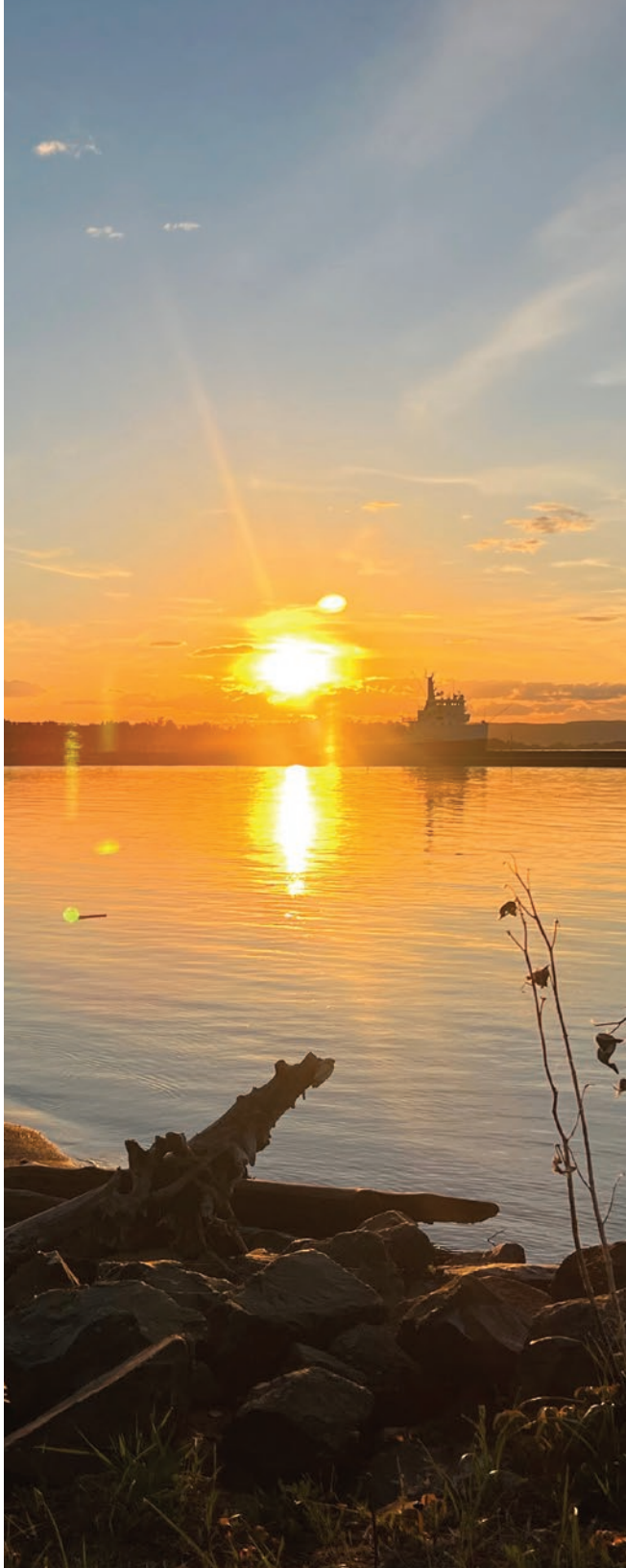
WISCONSIN COASTAL MANAGEMENT PROGRAM




Wisconsin Coastal
Management Program