

Tellock's Hill Woods State Natural Area in Waupaca County

## Conservation Needs and Opportunities

The Lake Michigan and Green Bay shorelines, although largely developed, remain among the most ecologically valuable resources in the state. These shorelines are a major migratory pathway for shorebirds, waterfowl, songbirds, and a variety of hawks. Some large, unprotected tracts still exist and could substantially contribute to maintaining important pockets of biological diversity.

The lower Wolf River is the dominant feature in the western portion of this landscape. Many large, high quality wetlands occur throughout this valley and are a major factor in the river's water quality. The DNR is currently pursuing opportunities to protect a large corridor along the Wolf and its major tributaries.

East of the Niagara Escarpment, this landscape once supported dense forests dominated by American beech and sugar maple with basswood, oak, and some hemlock. Currently the landscape is dominated by open farmland with small patches of trees. The largest stands are primarily located in wet areas. Several large wetlands still exist, notably Collins and Hayton (Killsnake) Marshes at the headwaters of the Manitowoc River. Maintaining open space between and around the three large state wildlife areas in this area would be important in maintaining the ecological connection that currently exists and help prevent conflicts with the hunting use of the properties.

This landscape harbors the only sizable example in the state of a rare type of natural community known as an alvar. Alvars are characterized by areas of thin discontinuous soil overlying horizontal beds of limestone or dolomite in the vicinity of Great Lakes shorelines. They have relatively low tree cover and a distinctive biota that includes elements of rocky Great Lakes shoreline, prairie, savanna and boreal forest communities.

### *Key characteristics:*

- » Lake Michigan shoreline and Bay of Green Bay
- » Fox Valley
- » Central portion of the Niagara Escarpment
- » Wolf River

### *Size:*

- » 2,740 square miles
- » 1,751,900 acres (4.9% of Wisconsin)

### *Population:*

- » 667,000 (12.5% of Wisconsin's population)

### *Notable species:*

- » Chinook salmon
- » Lake sturgeon
- » Yellow perch
- » Shorebirds
- » Migratory songbirds and waterfowl
- » American beech
- » Sugar maple
- » American sea-rocket
- » Thickspike

### *Natural communities:*

(See Appendix B for descriptions)

- » Alvar
- » Dry cliff
- » Forested ridge and swale
- » Great Lakes beach
- » Great Lakes dune
- » Hardwood swamp

Figure 81: Legacy Places and public conservation lands of the Central Lake Michigan Coastal

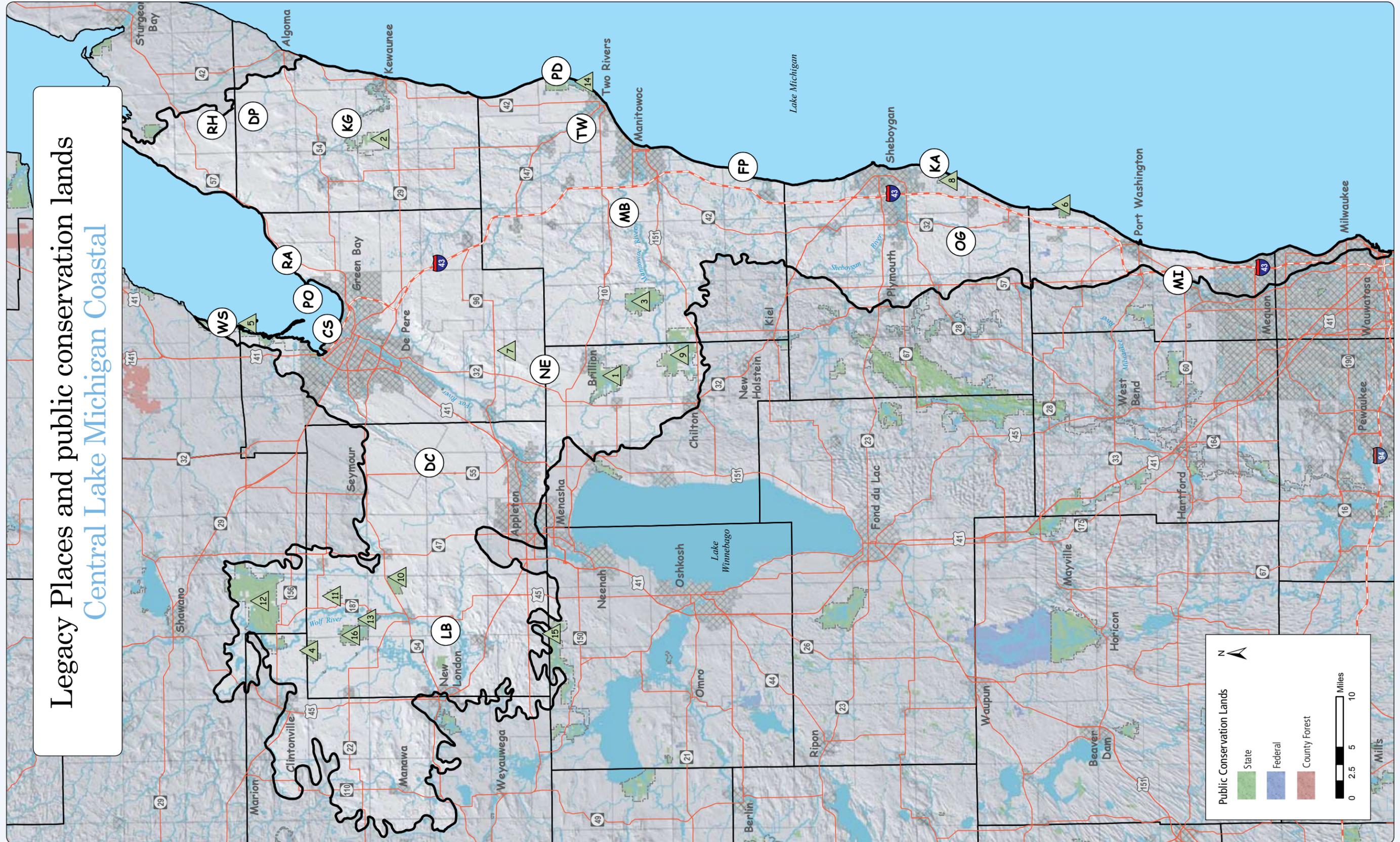
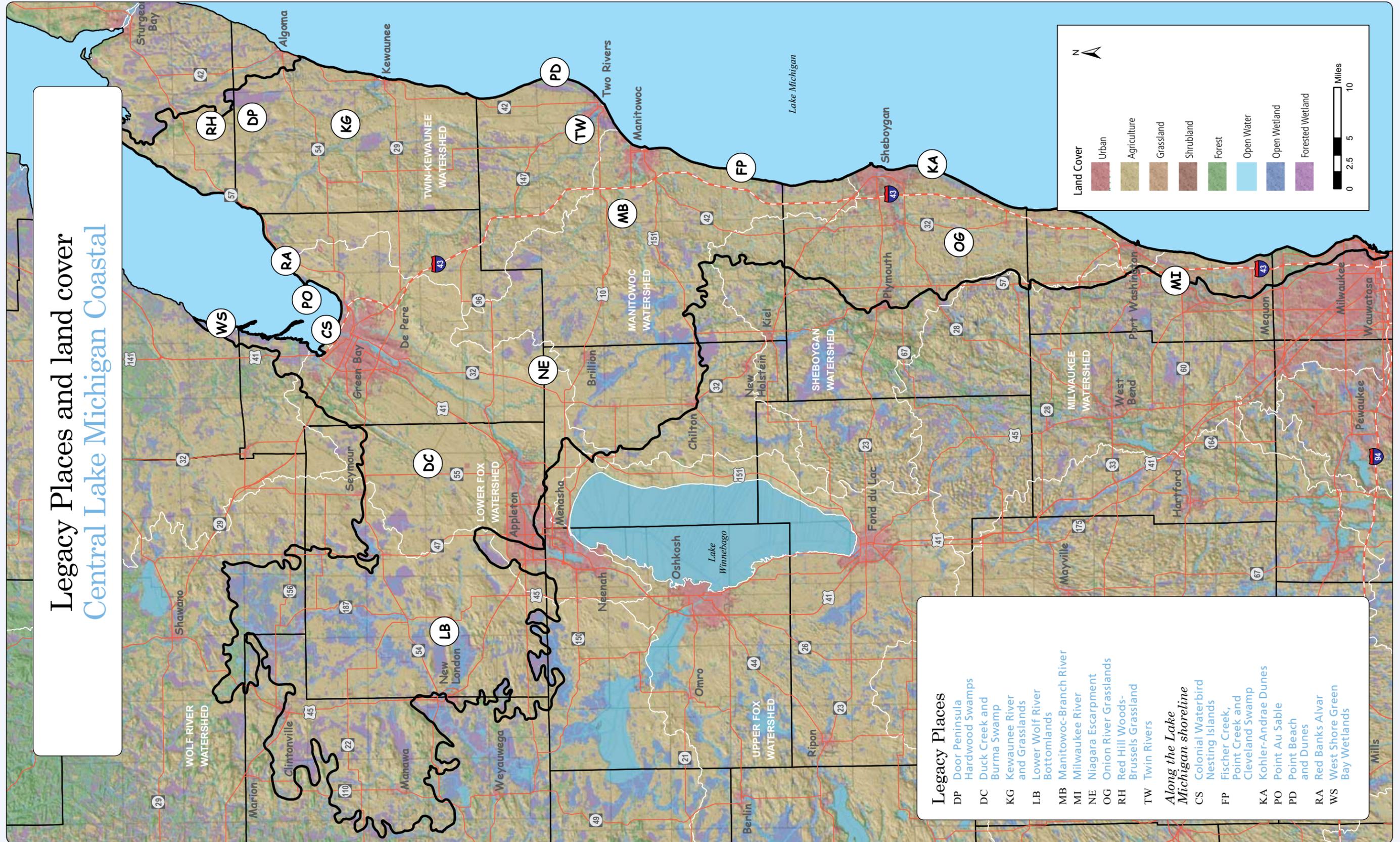


Figure 82: Legacy Places and land cover of the Central Lake Michigan Coastal



## Central Lake Michigan Coastal ecological landscape

### Public Conservation Lands

Map#	Property Name	Size (acres) <sup>1</sup>
<b>State</b>		
1	Brillion State Wildlife Area	4,835
2	C.D. (Buzz) Besadny State Fish and Wildlife Area	2,340
3	Collins Marsh State Wildlife Area	4,290
4	Deer Creek State Wildlife Area	1,490
5	Green Bay West Shores State Wildlife Area <sup>2</sup>	1,410
6	Harrington Beach State Park	610
7	Holland State Wildlife Area	530
8	Kohler-Andrae State Park	920
9	Killsnake State Wildlife Area	5,940
10	Mack State Wildlife Area	1,375
11	Maine State Wildlife Area	675
12	Navarino State Wildlife Area <sup>2</sup>	14,240
13	Outagamie State Wildlife Area	950
14	Point Beach State Forest	2,860
15	Rat River State Wildlife Area <sup>2</sup>	100
16	Wolf River Bottoms State Wildlife Area	3,070
	Miscellaneous Lands <sup>3</sup>	3,470
<b>Federal</b>		
	Waterfowl Production Areas	695
<b>County Forest<sup>4</sup></b>		
	None	
<b>TOTAL</b>		<b>49,800</b>

<sup>1</sup>Actual acres owned in this Ecological Landscape.

<sup>2</sup>This property also falls within adjacent Ecological Landscape(s).

<sup>3</sup>Includes public access sites, fish hatcheries, fire towers, streambank and non-point easements, lands acquired under statewide wildlife, fishery, forestry, and natural area programs, small properties under 100 acres, and properties with fewer than 100 acres within this Ecological Landscape.

<sup>4</sup>Locations and sizes of county owned parcels enrolled in the Forest Crop Law are presented here. Information on locations and sizes of other county and local parks in this Ecological Landscape is not readily available and is not included here, except for some very large properties.

### Recreation Uses and Opportunities

Stretching from Milwaukee to Green Bay, this ecological landscape is easily accessible to many of Wisconsin's residents. However, much of the existing public recreation land that is not adjacent to Lake Michigan contains a significant amount of wetland and provides a limited amount of recreation opportunity. The gently rolling hills of clay to loam soils could support a variety of outdoor activities, in particular warm-season trails. Trails that connect recreation lands to urban centers (for example, Sheboygan County's very popular Old Plank Road Trail from Sheboygan to the Northern Unit of the Kettle Moraine State Forest) are expected to be heavily used. The Ice Age Trail runs through this ecological landscape and, with several sections incomplete, there is great potential to partner with several organizations to accomplish broader recreation goals here.

Lake Michigan and the Bay of Green Bay are very popular boating, fishing, and sailing destinations. Given the tremendous views that large waterbodies provide, the shoreline along Lake Michigan and Green Bay is exceedingly popular for many different types of active and passive recreation. Although much of the shoreline is developed, there may be opportunities to protect areas, particularly in Kewaunee County, to provide additional public trails, camping, boat access, and fishing opportunities.



Lake Sturgeon (*Acipenser fulvescens*) spawning in the Wolf River

Figure 83: Land cover of the Central Lake Michigan Coastal

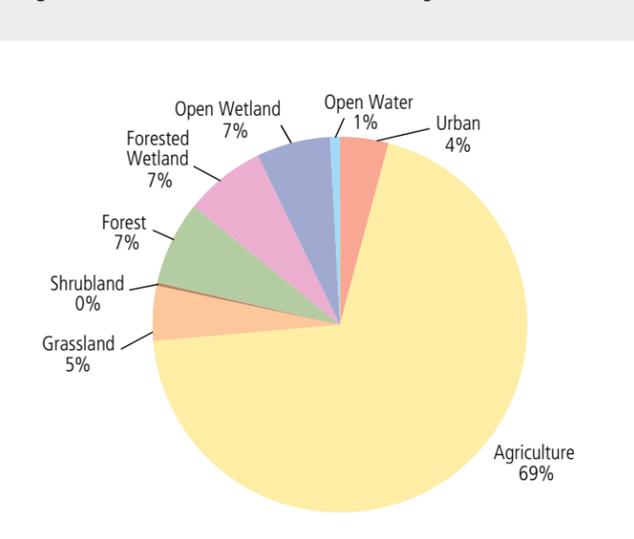


Figure 84: Public conservation and other land ownership in the Central Lake Michigan Coastal

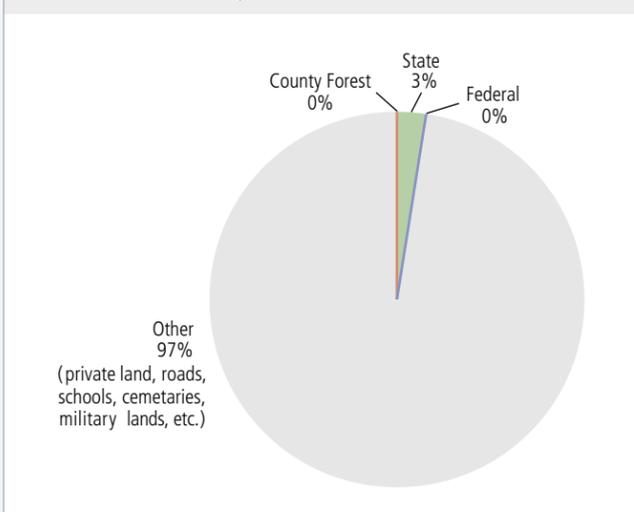
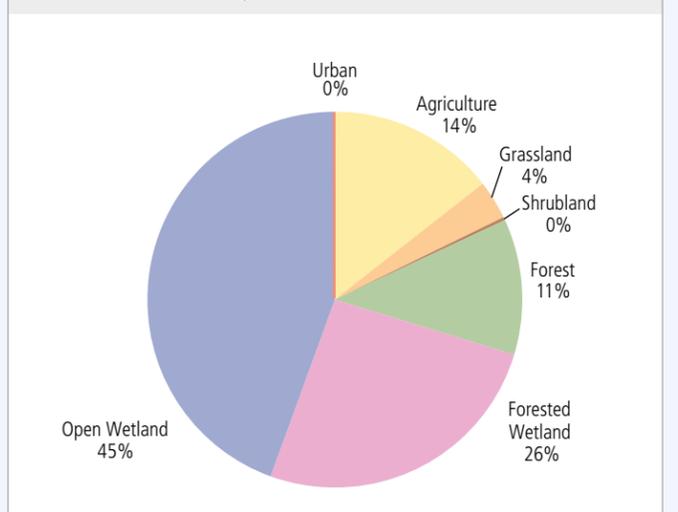


Figure 85: Land cover of public conservation lands in the Central Lake Michigan Coastal



# Legacy Places



Riverway walk along the Sheboygan River

## DP Door Peninsula Hardwood Swamps

Size . . . . . Medium  
 Protection Initiated . . . . . Limited  
 Protection Remaining . . . . . Moderate  
 Conservation Significance . . . . . ★★ ★  
 Recreation Potential . . . . . ★

Scattered along the southern Door Peninsula are several large wetlands dominated by black ash and red maple. Examples include: Duvall, Gardner, Cunningham, May, Stony Creek, Maplewood, Black Ash, and Lipsk Swamps. These wetlands provide high quality, consistent flow to creeks and streams in the area. Often found within agricultural settings, these wetlands also provide habitat for a variety of wildlife. Although these sites have limited recreation value (given their wet nature), protecting some lands surrounding these wetlands could provide a variety of trail opportunities.

## DC Duck Creek and Burma Swamp

Size . . . . . Small  
 Protection Initiated . . . . . Limited  
 Protection Remaining . . . . . Moderate  
 Conservation Significance . . . . . ★  
 Recreation Potential . . . . . ★★

Lying just east of the Village of Black Creek, Burma Swamp is a large forested wetland that sits at the headwaters of Duck Creek and is important in maintaining the creek's flow and water quality. Continued forest management is important in maintaining the area's character. The area could provide significant hunting opportunities in close proximity to several large population centers (Green Bay and the Appleton-Kaukauna area are both within 15 miles). Trout Creek, a tributary to Duck Creek, has the potential to be restored to a cold water fishery, the only one in Outagamie County.

## KG Kewaunee River and Grasslands

Size . . . . . Medium  
 Protection Initiated . . . . . Moderate  
 Protection Remaining . . . . . Moderate  
 Conservation Significance . . . . . ★★ ★  
 Recreation Potential . . . . . ★★ ★

Running across most of the Door Peninsula, the Kewaunee River flows through a predominantly wooded ribbon of habitat within a larger agricultural landscape. The Besadny Fish and Wildlife Area protects some of the forested land along the Kewaunee and Little Scarboro Rivers as well as some restored grasslands. Hunters and anglers heavily use the current properties and protection of additional property in the area could connect existing parcels and allow a wider variety of recreational uses.

Further downstream near the mouth of the river sits a large wetland complex on both sides of the river. The northern half of the wetland is open and marshy, while the southern half is wooded. The area surrounding has a gently rolling topography, but steep bluffs (60–80 feet high) define the boundaries of both the floodplain and the wetland. The marsh supports a diversity of birds, both because of the varied habitats in and around the wetland and because of the proximity of the wetland to Lake Michigan.

The Kewaunee River drains into Lake Michigan approximately 4 miles from the Green Bay municipal water system intakes and may affect the raw water quality of that system. The Green Bay system provides drinking water to approximately 103,000 customers.

## LB Lower Wolf River Bottomlands

Size . . . . . Large  
 Protection Initiated . . . . . Substantial  
 Protection Remaining . . . . . Moderate  
 Conservation Significance . . . . . ★★ ★★ ★  
 Recreation Potential . . . . . ★★ ★★ ★

Downstream of Shawano, the Wolf River winds through a corridor of extensive and very high quality floodplain forests and open wetlands. The heavy springtime flows flood many of the backwater sloughs, providing critical spawning habitat for many species, notably wall-eye, northern pike, bass, and perch. The Lower



Trout Lily (*Erythronium americanum*)

Wolf, and its major tributaries the Embarrass and the Little Wolf, support one of the world's largest remaining lake sturgeon populations. Waterfowl and migratory songbirds also heavily use the river corridor. Over 40% of all the state's native plant species are found in the Lower Wolf River Bottomlands and approximately 60% of the state's breeding bird species annually nest here. The rivers, backwaters, oxbows, and lakes harbor numerous fish species, both game and non-game, as well as a diverse concentration of reptiles, amphibians, and insects.

The Lower Wolf River Bottomlands offers a unique opportunity to protect riverine communities that are of multi-state significance in close proximity to large population centers. This area contains one of the last large, continuous and intact floodplain communities in the Midwest and is within a one-hour drive of 500,000 people in the Fox Valley communities and Green Bay. Primary recreation opportunities include fishing, hunting, wildlife watching, boating and flat-water paddling.

## Central Lake Michigan Coastal ecological landscape

The Department owns approximately 30,000 acres in the Lower Wolf watershed in a series of wildlife, fisheries, and natural areas. These properties are heavily used by the public throughout the year and the Department is currently working with local citizens to protect additional lands in the Lower Wolf watershed.

The Wolf River flows into Lake Winnebago, the source of water for the Oshkosh, Neenah, Menasha, and Appleton municipal water systems. As a result, water from this area may affect the raw water quality of those municipal systems, which provide drinking water for approximately 162,000 customers.

### MB Manitowoc-Branch River

Size . . . . . Large  
 Protection Initiated . . . . . Moderate  
 Protection Remaining . . . . . Substantial  
 Conservation Significance . . . . . ★★  
 Recreation Potential . . . . . ★★

Originating in a series of vast wetlands on the east side of the Niagara Escarpment, the Manitowoc River flows through a landscape of farm fields and forests before entering Lake Michigan. A key tributary, the Branch River, adds considerable volume. In its upper reaches, the river and its tributaries act as ecological connections between the wetlands that dominate the Killsnake, Brillion, and Collins Marsh State Wildlife Areas. These Wildlife Areas provide over 15,000 acres of wildlife habitat and associated recreation opportunities. Maintaining the surrounding landscape in agriculture would help ensure that these properties meet their recreation and ecological potential. Further downstream the river bottoms support extensive fish spawning habitat and are important to nesting and migrating waterfowl.

This river system supports several rare aquatic species, including greater redhorse and wood turtles. The river acts as a travel corridor for many species moving from the large wetlands upstream down to the Lake Michigan shore and the large protected properties of Woodland Dunes and Point Beach State Forest. Sections of this river

system could provide trails for the Ice Age Trail corridor. Canoeing opportunities are best along middle and lower sections of the river. Increased stocking of various strains of steelhead in the late 1980's resulted in an outstanding stream fishery in the spring and fall seasons. At present anglers are hampered by a lack of access to these rivers. The Manitowoc River has a few public access points, but access on the Branch River is limited to road crossings. Better access on both streams would allow anglers and other users to more fully enjoy these waters.

The Manitowoc River discharges into Lake Michigan near the City of Manitowoc's municipal water system intake and is believed to occasionally affect the raw water quality of that system. The Manitowoc system provides drinking water to over 33,000 customers.

### MI Milwaukee River

*See the Southeast Glacial Plains ecological landscape.*

### NE Niagara Escarpment

Size . . . . . Large  
 Protection Initiated . . . . . Moderate  
 Protection Remaining . . . . . Substantial  
 Conservation Significance . . . . . ★★  
 Recreation Potential . . . . . ★★

The Niagara Escarpment is a long dolomite ridge that, in Wisconsin, runs from the tip of Door County, south along the east side of Lake Winnebago, and then finally recedes underground in Dodge County. The Escarpment continues eastward through Michigan's Upper Peninsula, into Canada, then resurfaces to form Niagara Falls.

This linear, high ridge provides many of the state's most spectacular views and is the logical means to link many existing protected areas on and near the Escarpment. Ellison Bluff, Red Banks Alvar, Carlsville Bluff, High Cliff State Park, Lake Winnebago and Horicon Ledge are some of the best-known places along the Escarpment. Given its length and proximity to the Fox River Valley cities, it is one of the most frequently visited features in the state and there is considerable interest in protecting additional areas to meet conservation and recreation needs.

Given the numerous rock outcrops, cliffs, and talus slopes, the Escarpment also harbors some very unusual habitats that in turn support many uncommon species. Pockets of ancient cedar trees, cold springs, and areas where cool air gently flows out of the rocky hillsides are scattered along the Escarpment. These fragile microhabitats support delicate ferns, flowers, and maybe most notably, a diverse array of extraordinarily rare snails.

Areas along the Escarpment, particularly in Door County, have relatively thin soil deposits as a result of glacial scouring and little post-glacial deposition. These soil conditions, combined with the fractured nature of the dolomite, can lead to groundwater contamination problems.

### OG Onion River Grasslands

Size . . . . . Small  
 Protection Initiated . . . . . Limited  
 Protection Remaining . . . . . Moderate  
 Conservation Significance . . . . . ★★  
 Recreation Potential . . . . . ★★

Southwest of Sheboygan is a gently rolling area of predominantly farmland and old fields. Some of the farm fields in the area are drained wetlands, a few of which have been restored through the Wetland Reserve Program. These and other idle farmland could be used as a foundation on which to establish a mix of restored grasslands and wetlands along with farm fields. The restored grasslands and wetlands are likely to support a wider variety of wildlife if they are within an agricultural rather than a developed setting. Thus, efforts to protect and restore areas would need to be coordinated with efforts to protect farmland.

### RH Red Hill Woods-Brussels Grassland

Size . . . . . Small  
 Protection Initiated . . . . . Limited  
 Protection Remaining . . . . . Moderate  
 Conservation Significance . . . . . ★★  
 Recreation Potential . . . . . ★★

Brussels Township contains a mosaic of hay and small grain farm fields interspersed with open grasslands. This combination of agricultural fields and grasslands supports many grassland birds including upland sandpipers. North of this

large open area lies Red Hill, which contains the largest remaining maple-beech forest in this ecological landscape. Together, this area forms a valuable corridor between Gardner and Black Ash Swamps.

### TW Twin Rivers

Size . . . . . Large  
 Protection Initiated . . . . . Limited  
 Protection Remaining . . . . . Moderate  
 Conservation Significance . . . . . ★★  
 Recreation Potential . . . . . ★★

The East and West Twin Rivers are moderate-sized rivers that flow through a predominantly agricultural landscape interspersed with woods and wetlands. Patches of old-growth white cedar and American beech forest are scattered through the valleys. The river bottom forest harbors many birds usually found farther north. Among these are winter wren, blue-headed vireo, Blackburnian warbler, and yellow-bellied flycatcher. Several fish species of special concern are found in the system and several rare plants occur along the West Twin River. Many wetlands have been restored in this basin.

Upper reaches of the East Twin River and several tributaries of each river have good populations of brook trout and stocked brown trout. The middle and lower sections of the Twin Rivers support high quality warmwater fisheries. In addition, lower reaches of both rivers are stocked with Lake Michigan trout and salmon and have good seasonal migrations of returning adult fish. The woods and the occasionally exposed bedrock combine to make very scenic corridors for both water trails and land based trails. These mid-sized "flat-water" rivers provide excellent canoeing with some chutes and long runs. The Ice Age Trail passes along almost half of the length of the East Twin River, largely without permanent protection.

The Twin Rivers drain into Lake Michigan approximately 1 mile from the Two Rivers municipal water system intake and is believed to frequently affect the raw water quality of that system. The Two Rivers system provides drinking water to approximately 13,400 customers.

# Legacy Places

## along Green Bay and the Lake Michigan Shoreline



Point Beach Ridges in Manitowoc County

*The Central Lake Michigan Coastal ecological landscape includes about half of Wisconsin's Lake Michigan shoreline and the southern portion of Green Bay. There is considerable diversity of conditions along this shoreline, ranging from sloughs to large dune complexes to clay bluffs. Much of this shoreline is developed, in some places intensively, yet it still retains important ecological values. Kewaunee and northern Manitowoc Counties probably offer the best opportunities to protect large stretches of undeveloped Lake Michigan shoreline.*

*The west shore of the bay of Green Bay contains low sand banks and large coastal wetlands at the mouths of major rivers. Duck Creek and the Fox River empty into the southern end of the bay and form a marshy estuary that was once far more extensive and provided significant habitat for fish and wildlife. Today it has been reduced in size and degraded, but there are hopes that this estuary can be restored to some degree. Restoration of a chain of small islands, including Cat Island, would help to break wave action on their leeward*

*side and perhaps allow beds of emergent aquatic vegetation to return. The east shore of the bay consists of sand and gravel beaches, in some places backed by bluffs composed of glacial till and lacustrine sediments.*

*The Lake Michigan shore of this ecological landscape extends from Algoma to Milwaukee County. High clay bluffs, ranging from 10 to 70 feet, primarily characterize the northern stretch of shoreline. Also present, depending on lake levels, are narrow sandy beaches as well as major dune complexes at Point Beach State Forest and Kohler-Andrae State Park. In addition to their heavy recreation use, both properties have significant ecological value and harbor unusual species that are restricted to the unique habitats of sand dunes. The southern shore in this landscape contains areas of gently sloping, low sand banks fronted by wide beaches. Between Port Washington and Milwaukee are high glacial till bluffs, some reaching 140 feet, with only narrow beaches and few wetlands along the shore.*

*Several smaller protected sites exist along the shore and provide public access to the lake as well as some camping, trail, and other recreation opportunities. Harrington Beach State Park has about a mile of sand beach. Two Creeks Buried Forest is a small state natural area that reveals the remains of an ancient forest that was buried by material deposited by floodwaters and glaciation. Fischer County Park in Manitowoc County offers impressive views of the lake from atop a high bluff, and a city park at the mouth of the Pigeon River in Sheboygan provides fishing in a fairly natural and scenic environment. South of Port Washington are four interesting, steep-sided ravines cut into the clay bluffs of the shoreline—Cedar Heights Gorge, Lion's Den Gorge, Donges Bay Gorge and Fairy Chasm. These deep, cool and shady ravines contain relict plant species that are generally found further north. Although all are worthy of protection, only parts of Fairy Chasm and Lion's Den Gorge have been successfully protected to date.*

## CS Colonial Waterbird Nesting Islands

Size . . . . . Small  
 Protection Initiated . . . . . Substantial  
 Protection Remaining . . . . . Limited  
 Conservation Significance . . . . . ★★  
 Recreation Potential . . . . . ★

Scattered in both Green Bay and along the Lake Michigan coast are many small islands that are utilized primarily by colonial waterbirds for nesting. Examples include Hat, Little Strawberry, Jack, Adventure, Spider, Gravel, Pilot, Hog, and Fish Islands. The US Coast Guard currently owns some, but several are privately held.

## FP Fischer Creek, Point Creek, and Cleveland Swamp

Size . . . . . Small  
 Protection Initiated . . . . . Moderate  
 Protection Remaining . . . . . Moderate  
 Conservation Significance . . . . . ★★  
 Recreation Potential . . . . . ★★

This area contains a mix of wetlands, lowland forests, seeps, and lakeshore bluffs. A small county park exists near the mouth of Fischer Creek but a significant portion of the area is unprotected. Lake Michigan, through “seiche tides,” influences Fischer and Point Creeks at their outlets, and during high water periods, lake water can extend as far as one-quarter mile inland. As the lake level rises and falls, it continually changes the elevation of the creek outlets and is responsible for the high quality sedge meadows and cattail marshes that are present. Recreation could include low-impact activities such as interpretive displays, hiking trails, bird watching, and nature study, in addition to providing access to Lake Michigan.

## KA Kohler-Andrae Dunes

Size . . . . . Small  
 Protection Initiated . . . . . Substantial  
 Protection Remaining . . . . . Limited  
 Conservation Significance . . . . . ★★  
 Recreation Potential . . . . . ★★

South of Sheboygan along Lake Michigan is an interesting mix of river marsh, pine and hardwood forests, long beaches and active and stabilized sand dunes. There are several

interdunal wetlands (pannes) thickly vegetated with lakeshore rush and sedges. Some of the common plants that stabilize the dunes are sand reed, Canada wildrye, marram grass, northern wheat grass, common and trailing junipers, sand cherry, and willow species. More than 400 plant species are found in Kohler-Andrae State Park, including more than 50 different tree species. In autumn the skies above the dunes are often frequented by migrating raptors, while the low shrubs and pannes are very attractive to passerines. Four state-Threatened plant species are present.

A substantial amount of the area is protected within the very popular Kohler-Andrae State Park. Efforts to buffer and/or expand the park would help alleviate overcrowding, meet additional demand, and provide a wider variety of recreation activities.

## PO Point Au Sable

Size . . . . . Small  
 Protection Initiated . . . . . Substantial  
 Protection Remaining . . . . . Limited  
 Conservation Significance . . . . . ★★  
 Recreation Potential . . . . . ★

Lying several miles northeast of the city of Green Bay, Point Au Sable contains a wetland inside a hook-shaped peninsula. It is the only sizable wetland on the east side of the bay and, as such, is an important stopping point for many types of migratory birds. The primary wetland community is an emergent marsh comprised mostly of cattails and giant reed that has been considerably altered by the fluctuations in Green Bay water levels. A stream flows through the wetland, and there are many areas of open water.

## PD Point Beach Dunes and Ridges

Size . . . . . Medium  
 Protection Initiated . . . . . Substantial  
 Protection Remaining . . . . . Limited  
 Conservation Significance . . . . . ★★  
 Recreation Potential . . . . . ★★

This long stretch of undeveloped lakeshore contains some of the state’s largest sand dunes. Behind the dunes is a series of parallel ridges and swales that supports many rare plant species. Further inland is a large forested wetland. South of Two Rivers lies the Woodland Dunes Nature

Center, which harbors a mosaic of floodplains, forests, wetlands, and dune ridges. As some of the few undeveloped large blocks of habitat left along the shore, the Point Beach State Forest and the Woodland Dunes Nature Center provide critical resting and feeding habitat for the large number of birds migrating along Lake Michigan. In addition, over 100 bird species are known to nest here and the area provides habitat for a wide array of other amphibians, reptiles and mammals.

## RA Red Banks Alvar

Size . . . . . Small  
 Protection Initiated . . . . . Moderate  
 Protection Remaining . . . . . Moderate  
 Conservation Significance . . . . . ★★  
 Recreation Potential . . . . . ★

This site is the only sizable example of an alvar natural community in the state and it supports many rare snails, butterflies, and plants. The Niagara Escarpment forms the bedrock for the alvar upon which a thin layer of soil has developed. Stunted oak and cedar are present and interspersed with grassy openings that can include big bluestem, little bluestem, Indian-grass, and wood lily, as well as shoreline plants such as silverweed and dwarf lake iris. During wet weather, pools form in depressions and then gradually seep into the fractures in the limestone. Cool air and water seep out the base of the Escarpment, providing excellent habitat for rare snails. Nearby wetlands support many rare species and should be considered in any protection strategy that is developed.

## WS West Shore Green Bay Wetlands

Size . . . . . Large  
 Protection Initiated . . . . . Substantial  
 Protection Remaining . . . . . Limited  
 Conservation Significance . . . . . ★★  
 Recreation Potential . . . . . ★★

Along the west shore of Green Bay is a series of wetlands that offer multiple conservation benefits. The wetlands provide valuable spawning habitat for many of the fish species in Green Bay. Waterfowl, shorebirds and songbirds flock to the wetlands, particularly during spring and fall migrations.

Long Tail and Little Tail Points, two long arching sandy spits that jut out into Green Bay, provide resting and nesting habitat for many

shorebirds. The protected bays south and west of the points are filled with an abundant growth of aquatic plants. These emergent beds of rushes and sedges provide habitat for many species, including rails, herons, and yellow-headed blackbirds. During spring and fall migrations, thousands of birds can be seen on these two points.

## Other Areas of Interest

### Cooperstown & Morrison Swamps

(Manitowoc and Brown Counties)

These adjacent, connected wetlands harbor one of the largest and highest quality black ash-red maple swamps remaining in the Central Lake Michigan Coastal landscape. Recreation opportunities are limited due to the wet nature of the area.

### Rainbow Creek Headwaters

(Brown County)

This wetland complex provides important spawning habitat for large numbers of northern pike and other fish. The site consists of sedge meadow, shrub carr, and lowland hardwood wetlands that are flooded in the spring of the year. Much of this area is currently being used as private recreational land.

### Lebanon Swamp

(Waupaca County)

This large wooded wetland complex feeds several streams that drain to the Wolf and Little Wolf Rivers. The area supports a wide range of fish and wildlife species. Flynn Lake, a small undeveloped lake, is within the swamp.

### Thornberry Creek

(Brown County)

This is the only stream with a naturally reproducing trout population in Brown County and could provide easily accessible fishing opportunities for urban residents.

### Renard Swamp

(Door County)

Renard Swamp is located on the southwestern side of Door County, adjacent to Green Bay. This site contains a significant southern hardwood swamp with beach ridges. Yew is present on the ridges just north of Shoemaker Point. There is a high diversity of species present in the swamp, but water quality in Renard Creek has been impacted by non-point pollution.