

Chapter 5

Outdoor Recreation and Tourism

The Buckeye State offers excellent destinations for countless natural resource-based activities and eco-tourism including boating, fishing and hunting, camping, hiking, cycling and wildlife viewing. The Lake Erie region, specifically, is a popular destination for these and other outdoor activities such as golfing, skiing, sledding, ice fishing and ice skating, waterskiing and tubing, diving, site-seeing, canoeing, kayaking, mountain biking, hiking, windsurfing, walking, birding... the list goes on and on.

Maps in the Outdoor Recreation and Tourism chapter feature locations to participate in many of these natural resource-based recreational activities such as parks, preserves, wildlife areas, forests, trails, light-houses and campgrounds. While the possibilities to recreate in the

Lake Erie watershed are seemingly endless, a few key types of recreation areas are also featured.

Lake Erie Tourism

Recreational tourism along Lake Erie is one of the major uses of the lake, joining the ranks with other uses such as drinking water, commerce and transportation, power production and industry.

Tourism is an often misunderstood and overlooked industry because it is not a packaged item that can be set on a shelf. The "tourism product" is a collection of experiences a visitor encounters – from lighthouses to hotels and "mom and pop" diners to fishing charters.

Tourism is defined as a trip of 50 miles or more (one way) for business, pleasure or leisure. In Ohio, 51 percent of our visitors are here to visit friends and relatives, 18 percent

arrive for business and 31 percent for "marketable pleasure trips" which are most influenced by advertising and promotion (Longwoods International/OH Division of Travel and Tourism 2005).

Compared to the national level, Ohio has 11 percent more visitors to friends and relatives and 11 percent fewer visitors for marketable pleasure trips (LI/ODTT 2005). Ohio's approximate market share of the regional tourism industry of overnight leisure trips in the Midwest has decreased 3.2 percent since 1994 (LI/ODTT 2005). The state is developing a strategy to overcome this gap and create, promote and package reasons for visitors to travel to Ohio and to Lake Erie.

Tourism Generates Dollars and Jobs

Along Lake Erie, visitors spent \$8.7 billion in 2004. These are direct dollars exchanged for purchases such as gas, lodging, food, attractions, bait, etc. The tourism industry supported more than 146,800 full-time equivalent jobs with a payroll of more than \$2.6 billion. In addition, tourism sales generated state and local taxes that were used to fund other programs such as schools, roads and social services. In 2004, tourism generated \$386 million in state taxes and \$229 million in local taxes (LI/ODTT 2005).

These direct figures are but the tip of the iceberg. Tourism's impact is felt throughout a community.

Indirect economic impact occurs as hotels, restaurants and attractions purchase supplies or services from local communities. Local employees who derive their income from tourism also re-invest their payroll dollars through purchasing.

Factors Influencing Tourism Demand

Like other businesses, tourism does not operate in isolation, but is dependent on a variety of state, local and national factors. Because tourism is closely connected with consumer confidence and disposable income, a serious economic downturn generally impacts the number and length of trips taken by visitors.

Weather conditions also influence tourism, particularly for the family traveler. Gas prices affect tourism; however, because the Lake Erie Region is largely a destination chosen for short trips, the price of gasoline does not shape tourism here quite as much as elsewhere.

Tourism has also been challenged by shifting consumer preferences and trends. Travel patterns of Baby Boomers and Generation Xers are vastly different from those who came before. Plus, today's tourists do not have as much time to travel due to other time demands and responsibilities. According to a recent survey conducted by the Ohio Department of Natural Resources, lack of time is the top-ranking reason why people do not participate in outdoor activities.

These and other trends have

Destination Characteristics for American Travelers

Destination Characteristic	Percent of Travelers
Revisit a previously visited destination	75%
Outdoors, with comfortable accommodations	68%
Historic locations/charming towns	67%
Family-friendly destination	67%
Small towns/rural areas and countrysides	60%
Authentic historic/archaeological buildings/sites	53%
Learning opportunities	52%
Entertainment (nightlife, dining and shows, etc.)	47%
Large cities	43%
Remote locales	35%
Outdoor adventure/sport, challenging or risky	25%
Hunting/fishing	25%
Primitive travel/wilderness	20%

Source - Travel Industry Association and National Geographic Traveler, "Geotourism," 2003

transformed the tourism marketplace drastically in a very short time, creating a demand for shorter trips and closer to home.

The goal for Lake Erie is to differentiate itself in an increasingly competitive market and to develop new tourism products in demand by the traveling public. It will also be important for the Lake Erie tourism industry to diversify its product offering. This will create less reliance on a single market and offer new products to fill the times of year when additional visitors are wanted.

What Do Visitors Want to Do?

In general, visitors are no longer content to just be entertained. They want to see, tour and learn about a place. They may spend a morning visiting a natural area, and an afternoon touring a historic site. Today's travelers hope to gain something

from their visit – and no two travelers seek the same thing. Some desire family bonding. Others want spiritual renewal. Still others want to return home having learned something that will help them in their everyday life.

Lake Erie Coastal Ohio, Inc., a nonprofit group that recently spearheaded designation of a national scenic byway along Lake Erie, conducts web-based surveys to determine what activities are desired from Lake Erie visitors. General sightseeing (96 percent), visiting historic sites (75 percent), visiting natural areas (64 percent), boat tours (58 percent) and biking/hiking/kayaking (58 percent) top the list of preferred activities.

The Travel Industry Association of America and National Geographic Traveler conducted a survey of American travelers in 2003. Seventy-



Neon-lit palm trees in downtown Put-In-Bay, Ottawa County

five percent of these travelers desire to visit places they've been before, while 68 percent want to experience the outdoors and enjoy comfortable accommodations. Travelers seek a wide range of experiences. Few can find all these experiences at one location, city or even county. Linking Lake Erie communities and the natural resources across Ohio's coast so visitors find a network of attractions and activities may create an atmosphere where visitors stay longer and spend more money in our communities.

Connecting our Stories

Working with interpreters, community stakeholders, resource managers, visitor bureau leaders, community members, business owners and others, Lake Erie Coastal Ohio, Inc. has created an inventory of attractions that "tells the Lake Erie story." These attractions include historical sites, natural areas and cultural icons. Interpreters from across the region have worked on developing the storylines most important for attracting visitors and communicating the important tales regarding Lake Erie's influence on our nature, heritage and culture.

Lake Erie Coastal Trail

Lake Erie Coastal Ohio is working collectively with all visitors bureaus and communities along the lake to promote the region's heritage and

nature. From birdwatching to kayaking, touring a lighthouse to exploring an Underground Railroad site, Lake Erie Coastal Ohio works to help these providers improve these experiences, protect these resources and promote their availability.

In April 2005, a state scenic byway was designated along the coast. In October 2006, the Federal Highway Administration designated the Lake Erie Coastal Ohio Trail a part of the America's Byways™ system of national scenic byways in the United States.

Beginning in Ashtabula County and ending in Lucas County, the route parallels the lake. Scenic byway designation and signage will enable more Ohioans and visitors to enjoy the pleasures of the Lake Erie region by providing a clear path and a comprehensive way of obtaining information about the route and its amenities. The desired outcome is to increase tourism and aid new economic development. A web site (www.coastalohio.com) links the byway traveler with more than 300 sites to visit.

For more information:

Ohio Division of Travel and Tourism

Tel: 1-800-BUCKEYE
www.discoverohio.com

Lake Erie Coastal Ohio

Tel: (419) 609-0399
www.coastalohio.com

Ashtabula County Convention and Visitors Bureau
Tel: (800) 337-6746
www.visitashtabulacounty.com

Lake County Visitors Bureau
Tel: (800) 368-LAKE
www.lakevisit.com

Convention and Visitors Bureau of Greater Cleveland
Tel: (800) 321-1001
www.travelcleveland.com

Lorain County Visitors Bureau
Tel: (800) 334-1673
www.lcvb.org

Sandusky/Erie County Visitors & Convention Bureau
Tel: (800) 255-3743
www.GoCoastOhio.com

Sandusky County Convention and Visitors Bureau
Tel: (800) 255-8070
www.sanduskycounty.org

Ottawa County Visitors Bureau
Tel: (800) 441-1271
www.lake-erie.com

Greater Toledo Convention & Visitors Bureau
Tel: (800) 243-4667
www.dotoledo.org



Bird Watching

Birdwatchers visiting Magee Marsh Wildlife Area and Ottawa National Wildlife Refuge annually spend more than \$5.6 million in the local community. These birders flock to Lake Erie because of its enormous potential as a site for spotting neotropical migrants, shorebirds and other species. In recent years, new opportunities for birders have been created, including cruises aboard the Jet Express to Point Pelee Provincial Park. Although they visit Canada one day, these visitors average three nights in Ohio hotels as they combine this cruise with other trips to nearby attractions. Recent research by Bowling Green State University revealed that birders to Ohio's Lake Erie natural areas are particularly impressed with our friendly and helpful nature. "Noncombative" birding was identified as being one reason why birders visit Ohio.

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Outdoor Recreation



Fishing in the Sandusky River near Fremont, Sandusky County



Birders at Magee Marsh State Wildlife Area, Ottawa County



Metzger Marsh Fishing Access, Lucas County



Female Cardinal

Even before Ohio's statehood, wildlife has historically lured people to Lake Erie's shore. Aquatic, terrestrial and feathered species alike contribute to the cornucopia of fauna found along the coast. The lake, its bays and wetlands provide a venue for hunting, trapping, fishing, birding and other wildlife-related recreation for millions of Ohio residents and visitors each year.

Fishing

Many anglers and their families are discovering Ohio's greatest fishing resource – Lake Erie. Alive and well with clean water and sandy beaches, Lake Erie is one of the best freshwater fisheries in the country.

Nowhere in the Buckeye state is the impact of sport fishing more evident than along Lake Erie. In 2003, close to one-third of the fishing licenses sold in the state each year are sold in the counties that border the lake.

Sport fishing is big business and extremely important to local, state and national economies. From Toledo to Conneaut, coastal communities actively market available fishing resources and reel in benefits from angler visits. Some \$300 million of \$836 million spent by

anglers in Ohio annually is spent near Lake Erie. Anglers boost local economies through the purchase of goods and services, special taxes, licenses and other fees. Anglers support local jobs and wages, along with hotels and other lodging facilities, marinas, charter boat services, restaurants, grocery stores, gas stations, bait and tackle stores and other local businesses.

Diverse habitats, ranging from several major tributaries to shallow rocky reefs, shoals, rocky island shores and deep water flats, add to the abundance and diversity of Lake Erie's sport fishery. The lake's Western Basin is one of the most productive natural spawning and nursery areas on the Great Lakes and is often referred to as the "Walleye Capital of the World."

Improved water quality, numerous successful spawning seasons, and sound management of the walleye harvest spurred walleye mania in the 1980s. This has allowed Lake Erie to carry the reputation as having one of the finest walleye fisheries in the country.

Although walleye is the most sought-after sport fish, yellow perch, smallmouth bass and steelhead trout also make Lake Erie a fishing mecca. Additional species such as white bass, catfish, white perch, freshwater drum,

crappie, largemouth bass, rock bass and sunfish add to angler catches. Lake Erie steelhead move into Central Basin streams in the fall and provide excellent fishing opportunities for wading anglers from fall through spring.

Anglers trailering boats will find numerous launch ramps and dockage along the 312 miles of Ohio coast. Shore anglers can wet a line at a number of major fishing access facilities, docks, piers and breakwalls. Call toll-free 1-888-HOOK FISH (1-888-466-5347) for a recorded Lake Erie fishing forecast.

Hunting

A long heritage of some of the best waterfowl hunting in the country exists along the lakeshore, bays and adjacent marshes, especially in northwest Ohio. Excellent waterfowl hunting opportunities also exist on the Lake's open waters. Several warm-water discharge areas adjacent to power generating plants attract waterfowl and provide good late-season hunting opportunities.

Waterfowl descend upon Lake Erie and its adjacent waters because of the abundant food supplies and geographic location. At an intersection of two major waterfowl migration routes (Atlantic and Mississippi flyways), the marshes serve

as important resting and staging areas. Muddy Creek Bay in the upper reaches of Sandusky Bay is the largest staging area for black ducks in North America.

Twenty-nine species of ducks and four species of geese use the lake, bays and marshes. Some of the most popular species with hunters are Canada geese, mallards, black ducks, blue-winged teal, green-winged teal, pintails, gadwalls, wood ducks and lesser scaup.

Much of the 35,000 acres of marshlands that rim the lakeshore are being managed by the Division of Wildlife and U.S. Fish and Wildlife Service. These public marshlands are managed to preserve a variety of wetland species and their habitat, while also providing recreation for waterfowl hunters, trappers, birders, photographers and other wildlife enthusiasts. Management of the marshes through water level manipulation promotes the growth of plants preferred by waterfowl and creates habitat for other wildlife such as water birds, frogs, reptiles, amphibians, fish, insects, muskrats and mink.

The Sportsman's Migratory Bird Center at Magee Marsh State Wildlife Area (Ottawa County) is preserving the hunting and trapping heritage of the region with a habitat display of wildlife species found in the marshes, antique

waterfowl decoys and other historical items.

Turkey hunting is one of the fastest growing outdoor sports in the United States; Ohio has both spring and fall hunting seasons. Ashtabula County is well known for its plentiful population of wild turkeys and excellent turkey hunting. One of the county's most popular turkey hunting areas is the 1,088-acre Dorset State Wildlife Area.

Controlled hunts for waterfowl and white-tailed deer (by random lottery selection) for both youth and adults are held at a number of state wildlife areas and state parks in the eight counties along the lake. Visit the Division of Wildlife's website at www.ohiodnr.com/wildlife for application forms and information.

Hunting and fishing opportunities are available at these and other state parks and wildlife areas in the Lake Erie Watershed. Call 1-800-WILDLIFE (1-800-945-3543) to receive a Lake Erie Fishing Guide, Ohio Fishing Regulations, Ohio Hunting and Trapping Regulations, Ohio Hunting and Trapping, Fishing & Wildlife Viewing Areas Guide.

License Sales by Coastal County in 2003

Coastal County	Licenses Sold Total	Fishing Licenses Sold				Hunting Licenses Sold				Special Permits						
		Res	NR	NR 3-day	1-Day	Res	Res Youth	NR	NR 3-day	Deer	Urban Deer	Spring Turkey	Fall Turkey	Fur Taker	NR FT	Youth FT
Ashtabula	35,844	11,918	2,920	1,111	4,410	4,903	640	336	22	6,579	235	1,668	374	281	5	27
Cuyahoga	66,133	39,528	477	374	1,547	9,560	649	67	43	8,861	1,591	1,779	446	95	0	5
Erie	24,386	12,856	1,104	1,179	2,778	2,477	340	38	31	2,344	176	239	34	112	0	6
Lake	35,539	16,654	382	400	1,580	5,669	458	65	19	5,740	1,717	1,600	375	113	2	3
Lorain	43,327	19,061	517	572	1,519	7,958	895	87	32	8,124	1,763	1,139	241	337	1	25
Lucas	62,923	27,494	4,337	1,826	7,624	8,079	786	410	132	7,227	1,646	778	96	220	3	24
Ottawa	73,857	28,896	9,377	13,473	17,344	1,785	199	35	84	1,327	105	161	29	88	0	4
Sandusky	15,304	7,122	495	487	430	2,718	327	35	60	2,398	79	270	35	180	1	19
Wood	14,697	6,109	344	150	400	3,058	359	57	36	2,916	181	247	45	247	0	27

Res = Resident, NR = Non-Resident, FT = Fur Taker

From ODNR Division of Wildlife, License Sales by County 2003, Publication 62 (R1204)

Outdoor Recreation

Birding

The wetlands that rim Lake Erie's shores are like giant magnets attracting a kaleidoscope of feathered jewels, especially during the spring and fall migrations. During migration, thousands of birds representing more than 300 species descend upon the coastal marshes for resting and feeding. Some stay to nest, while most use the marshes as rest stops to refuel with the nutrient-rich food supplies of aquatic plants and invertebrates. While these refueling stops are essential to the birds' survival, they also provide a wealth of opportunities to experience the magic and color of migration.

Birder's World magazine designates Magee Marsh in Ottawa County as one of the top 10 birding locations in North America. Magee's visitors come for the wading birds, shorebirds, gulls, terns, waterfowl, raptors and songbirds, but it is the 37 species of migrating warblers that attract the most attention during the spring migration from mid-April through May.

The 2,161-acre state wildlife area provides spectacular birding opportunities from several vantage points. Bird watchers can view a diversity of birds from their vehicle, while walking nearly two miles of paths and boardwalks, or from an observation tower overlooking the marsh. Visitors can obtain birding information and other information about the region's wildlife at the Sportsman's Migratory Bird Center located on the area.

White-tailed Deer

The white-tailed deer, (Odocoileus virginianus), is Ohio's official state animal and one of the most frequently seen and easily identified wildlife species in the state. The white-tailed deer can be found in all 88 counties, although that has not always been true. In the early 1900s, due to unregulated hunting and land-use practices, few if any deer were present in Ohio.

White-tailed deer get their name from the white underside of their tail. When a deer runs, it flips its tail straight up. The white "flag" is easily seen and signals danger to other deer. Although deer have good eyesight and acute hearing, they depend mainly on their sense of smell and hearing to detect danger.

Whitetails are active around the clock, but less so during daylight hours. Most often, they are on the move at dawn and dusk. This behavior can prove hazardous to humans during the fall breeding season. Serious automobile accidents can result from encounters with deer crossing roads which is more frequent from October through December.

Male deer (bucks) shed their antlers each year in late winter and grow a new set of antlers the following summer. Female deer (does) give birth to one fawn their first year and usually twins each year after that. Occasionally they may have triplets. Following birth, fawns are often left alone for brief periods of time by their mother while she searches for food nearby. The mother may also leave the fawn to lead intruders away. At this point, people may come upon the fawn curled up on the ground alone, and thinking it has been abandoned, remove it from the area. In doing so, they decrease the fawn's chances of survival immensely. If left alone, the mother will return as soon as the perceived threat is gone. The family group of mother and fawns will stay together until the following spring. Doe fawns remain in proximity to their mother their entire life. Buck fawns generally leave their birth area in the spring



White-tailed deer walking along Lake Erie beach, Erie County.

and travel great distances to set up new home ranges.

The ODNR Division of Wildlife is responsible for managing the state's deer herd. The Division's goal is to maintain deer populations at a level that provides maximum recreational opportunities including hunting, viewing and photography; while minimizing conflicts with agriculture, motor travel and other human activities.

References:

ODNR Division of Wildlife, Deerassic Park Education Center and Gene Wright.

River Otters

River Otters (Lontra canadensis) are historically native to Ohio, but by the early 1900s were extirpated (removed completely). The ODNR Division of Wildlife reintroduced the species in 1986 when more than 100 otters were released into various Ohio rivers and creeks in four eastern Ohio locations. Since then, river otter populations have increased immensely. It is estimated there are now more than 2,000 river otters in the state in 52 counties, at least 44 watersheds.

Increased numbers of otters are likely the result of improved aquatic habitats, an expanding beaver population, and similar restoration efforts in neighboring states. River otters live in rivers, lakes and marshes. They prefer tributaries of major, unpolluted drainages where there is a minimal human disturbance. Log jams and submerged trees provide resting and feeding habitat. Otters often use abandoned beaver lodges for dens. Their habitat must provide an abundant amount of prey species such as carp and other slow moving fish. Home ranges are used throughout the year and may be from 5 to 30 square miles in size. Otters are generally nocturnal (active at night) or crepuscular (active at dawn or dusk), although diurnal (daytime) activity is not uncommon in undisturbed areas. River otters are often seen in family groups in the summer and early fall.

Although gregarious (sociable) in behavior among others of their species, otters generally avoid contact with humans; thus, most sightings are accidental. In the Lake Erie watershed, the best river otter viewing locations are the Grand River Wildlife Area in Ashtabula County and the Mosquito Creek Wildlife Area in Trumbull County.



River otters

References:

ODNR Division of Wildlife and Gene Wright.

Outdoor Recreation



Overhead view of Kelleys Island State Park campground, Erie County



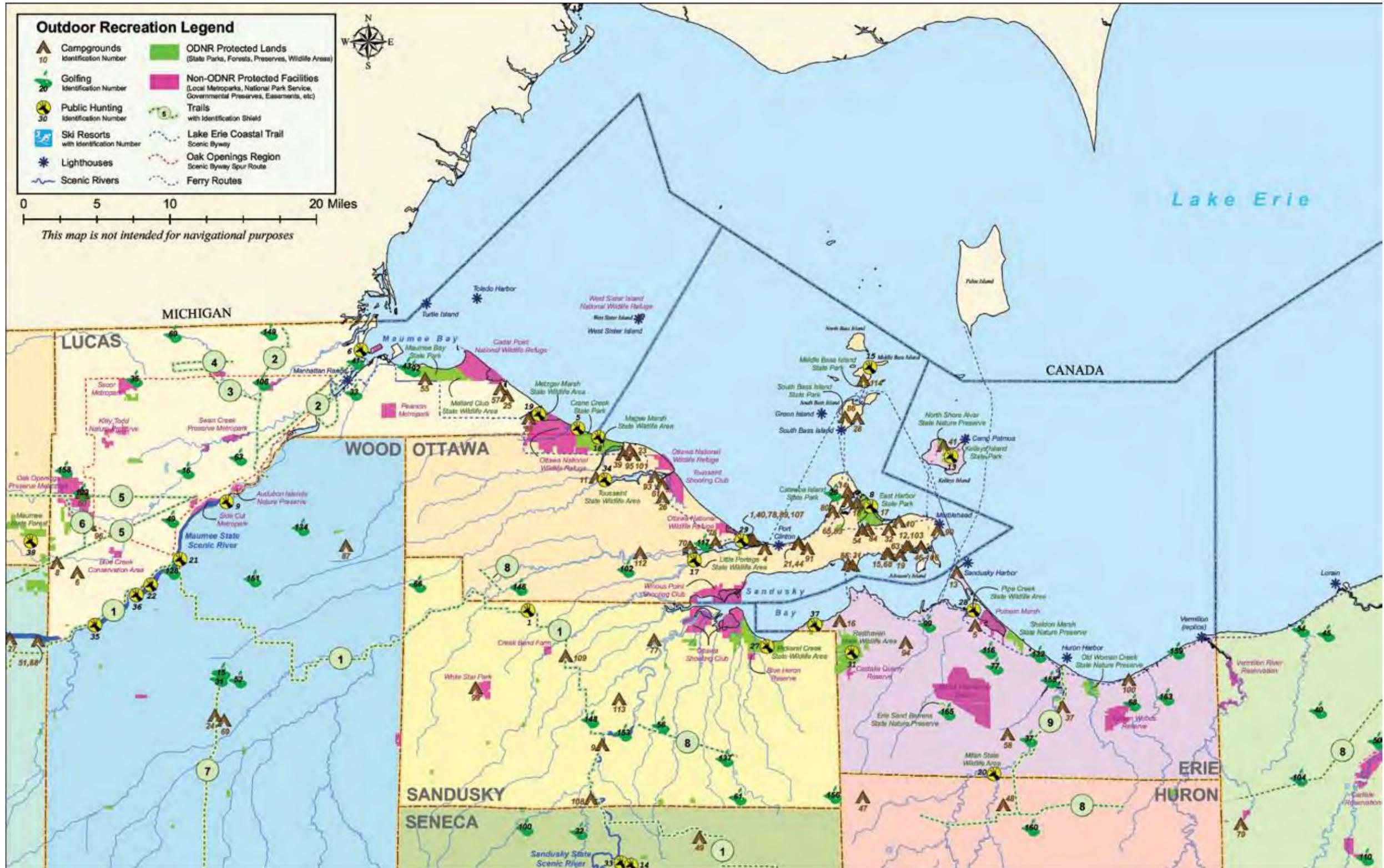
Birders at Magee Marsh State Wildlife Area, Ottawa County



Lakefront campsites at Kelleys Island State Park, Erie County

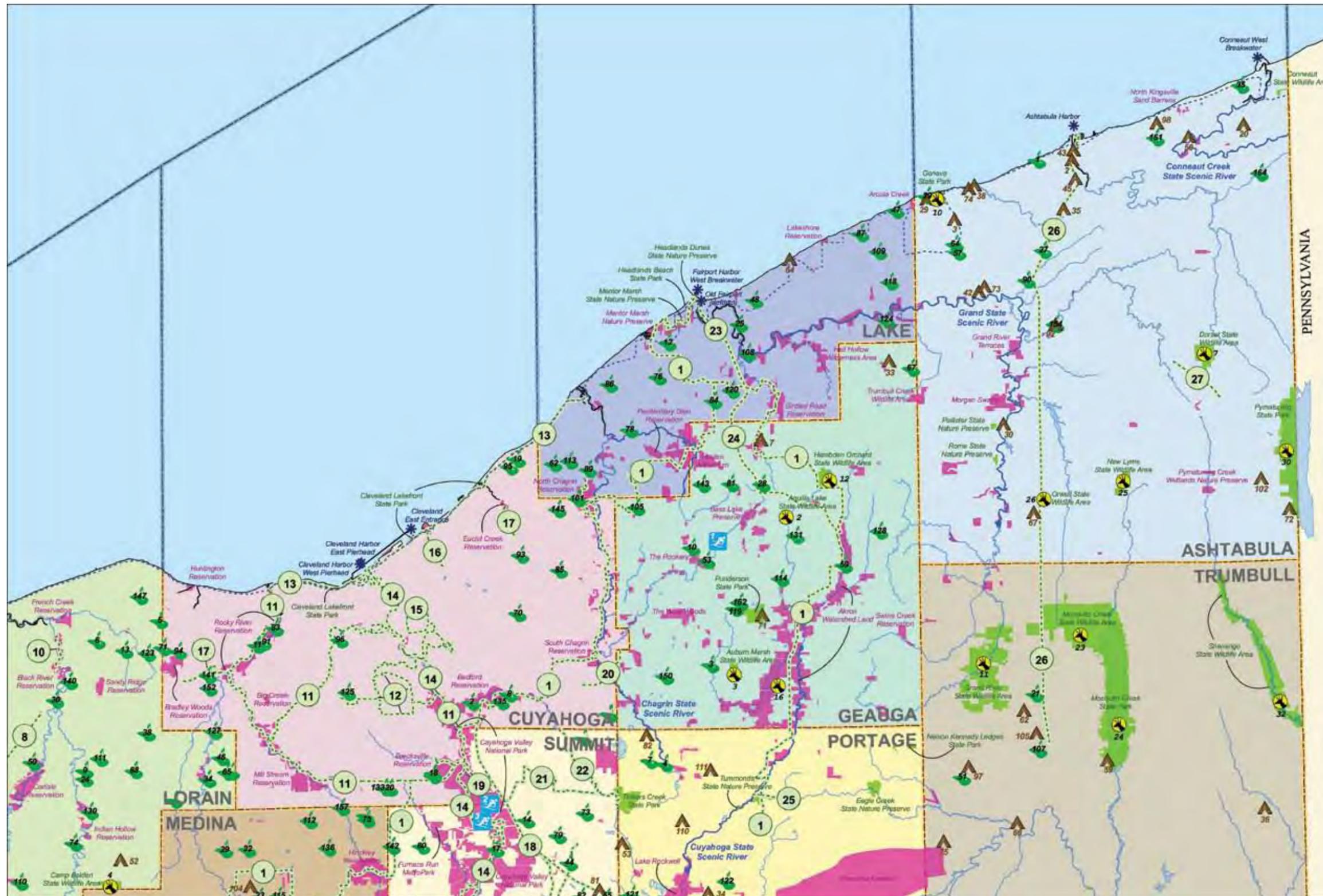


Crowded day at the beach, Headlands Beach State Park, Lake County



Map 14 GIS data citation in Appendices

Outdoor Recreation



Map 14 GIS data citation in Appendices



Hach-Otis State Nature Preserve, Lake County

Hach-Otis State Nature Preserve

The Hach-Otis sanctuary is an 81-acre forested tract overlooking the Chagrin State Scenic River valley. Located in Willoughby Hills, the preserve was protected as a bird sanctuary in 1944 and dedicated a state nature preserve in 1977.

Outdoor Recreation Identification

The outdoor recreation identification guide that corresponds with the map's numbered points is found on the next page.

Outdoor Recreation



Lakefront campsite at South Bass Island State Park, Ottawa County



Golf course at Maumee Bay State Park, Lucas County



Day at the beach, Cleveland Lakefront State Park, Cuyahoga County



Fishing in the Sandusky River, Sandusky County

Outdoor Recreation Map Identification Key

This identification key corresponds with the numbered points on the Outdoor Recreation Map.

CAMPGROUNDS

- | | | | |
|-----|--|----|--|
| ID# | Campground | 46 | Lakeside Campground |
| 1 | Angel Bay Marina | 47 | Lazy J Campgrounds |
| 2 | Ashtabula Recreational Unlimited | 48 | Le Mar Lake Park Campground |
| 3 | Audubon Lakes Campground | 49 | Leafy Oaks |
| 4 | Bass Isle Resort Campground | 50 | Locust Lane Campgrounds |
| 5 | Bayshore Estate Campground | 51 | Lucy's 22 |
| 6 | Betty's Country Campground | 52 | Maples Campground |
| 7 | Big Creek Park | 53 | Mar-Lynn Lake Park |
| 8 | Bluegrass Campground | 54 | Marina del Isle |
| 9 | Broken Paddle/Portage Trail Campground | 55 | Maumee Bay State Park Campground |
| 10 | Camp Runinmuck | 56 | Meinke Marina East |
| 11 | Camp Sabroske | 57 | Meinke Marina West |
| 12 | Castaway Harbor | 58 | Milan Travel Park |
| 13 | Cedar Point Camper Village | 59 | Mosquito Creek State Park Campground |
| 14 | Cedarlane RV Park | 60 | Oak Openings Metropark |
| 15 | Cottonwood Beach | 61 | Paradise Acres Campgrounds |
| 16 | Crystal Rock Campgrounds | 62 | Paradise Lakes |
| 17 | East Harbor State Park | 63 | Peninsula RV Trailer Park and Campground |
| 18 | East Harbor State Park Campground | 64 | Perry Township Park |
| 19 | Eckels Twin Oaks | 65 | Petersons Cove |
| 20 | Evergreen Lake Park | 66 | Pin Oak Acres Campground |
| 21 | Family Camping Center | 67 | Pine Lakes Campground |
| 22 | Fenwick Marina | 68 | Plymouth Shore on the Bay |
| 23 | Fire Lake Camper Park | 69 | Portage Quarry Recreation Club |
| 24 | Fleitz Marina | 70 | Portageview Campground |
| 25 | Floro's Camping | 71 | Punderson State Park Campground |
| 26 | Flying W | 72 | Pymatuning State Park Campground |
| 27 | Fox's Den Campground | 73 | R and R Camping |
| 28 | Geneva State Park Campground | 74 | Ralph's Place |
| 29 | Grand Valley Christian Center Camp | 75 | Ridge Ranch |
| 30 | Grand Valley Christian Center Camp | 76 | River Retreat Campground |
| 31 | Hank's Place Campground | 77 | Riverfront Marina and Campground |
| 32 | Harbor Grove Campgrounds | 78 | Riverside Marina |
| 33 | Heritage Hill Campground | 79 | Schaun Acres Campgrounds |
| 34 | Hidden Valley Campground | 80 | Shade Acres |
| 35 | Hide-A-Way Lakes Campground | 81 | Silver Springs Park |
| 36 | Homestead Campground | 82 | Silverhorn Campground |
| 37 | Huron River Valley Resort | 83 | Skyline Marina |
| 38 | Indian Creek Camping Resort | 84 | Snug Harbor |
| 39 | Inland Marina | 85 | Sonny's Beach |
| 40 | Jacknife Marina | 86 | South Bass Island State Park Campground |
| 41 | Kelleys Island State Park Campground | 87 | Stony Ridge KOA Campground |
| 42 | Kenisee's Grand River Campground | 88 | Sunset Cove RV Park |
| 43 | Kister Marine | 89 | Sunset Shore Campground |
| 44 | Knechts Beach and Marina | 90 | Surf Motel and RV Park |
| 45 | Koinonia Campgrounds | 91 | Tall Timbers Campground |
| | | 92 | Thousand Trails |
| | | 93 | Toussaint River |
| | | 94 | Traveland Camp Sandusky |
| | | 95 | Turtle Creek Marina and Campground |
| | | 96 | Twin Acres Campground Inc. |
| | | 97 | Valley Lake Park |

- | | | | |
|-----|--|----|-----------------------------|
| 98 | Village Green Campground | 27 | Chapel Hills GC |
| 99 | White Star Park | 28 | Chardon Lakes GC |
| 100 | Wild Waves Motel | 29 | Cherokee Hills GC |
| 101 | Wild Wings RV Park and Campground | 30 | Cherry Ridge CC |
| 102 | Wildwood Acres | 31 | City Park GC |
| 103 | Willow Cove | 32 | Clinton Height GC |
| 104 | Willow Lake Park | 33 | Collins Park GC |
| 105 | Willow Lake Park Inc. | 34 | Columbia Hills CC |
| 106 | Wilson's Beach | 35 | Conneaut Shores GC |
| 107 | Witterhaven Park Marina | 36 | Cottonwood Creek at Spuyten |
| 108 | Wolf Creek Park | 37 | Coupling Reserve GC |
| 109 | Wooded Acres Campground | 38 | Creekwood GC |
| 110 | Woodside Lake Park | 39 | Deer Lake GC |
| 111 | Yogi Bear's Jellystone Camp | 40 | Deer Track GC |
| 112 | Young's Suburban on the Portage | 41 | Detwiler Park GCB |
| 113 | Youngs Overnight Camping | 42 | Dorlon Park GC |
| 114 | Middle Bass Island State Park Campground | 43 | Eagle's Landing GC |

GOLFING

Abbreviations

GC = Golf Course

GCb = Golf Club

CC = Country Club

DR = Driving Range

ID # Golf Facilities

- | | | | |
|----|----------------------------|-----|------------------------------|
| 1 | Ashtabula CC | 79 | Lake Forest CC |
| 2 | Astrohurst CC | 80 | Leaning Tree GCb |
| 3 | Auburn Springs CC | 81 | Legend Lake GCb |
| 4 | Aurora Golf and CC | 82 | Leisure Time Recreation |
| 5 | Avon Oaks CC | 83 | Little Met GC |
| 6 | Avondale GCb | 84 | Little Mountain CC |
| 7 | Barrington GCb | 85 | Locust Grove GC |
| 8 | Bedford Reservation GC | 86 | Lost Nation Muni GC |
| 9 | Bentwood GCb | 87 | Madison CC |
| 10 | Berkshire Hills CC | 88 | Mallard Creek GCB |
| 11 | Big Met GC | 89 | Manakiki GC |
| 12 | Blackbrook CC | 90 | Maple Ridge GC |
| 13 | Bob-O-Link GC | 91 | Mastick Woods GC |
| 14 | Boston Hills GC | 92 | Maumee Bay State Park GC |
| 15 | Bowling Green CC | 93 | Mayfield CC |
| 16 | Brandywine CC | 94 | Meadowood GC |
| 17 | Brandywine CC | 95 | Memorial Park GC |
| 18 | Brecksville Reservation GC | 96 | Memorial Park GC |
| 19 | Briardale Greens GC | 97 | Midpines GC |
| 20 | Briarwood GC | 98 | Midpines GC |
| 21 | Bristolwood GC | 99 | Mills Creek GC |
| 22 | Brunswick Hills GC | 100 | Nature Trails GC |
| 23 | Bunker Hill GC | 101 | North Chagrin Reservation GC |
| 24 | Carlisle GCb | 102 | Oak Harbor GCb |
| 25 | Casement GC | 103 | Oak Openings Metropark GC |
| 26 | Catawba Willows GCb | 104 | Oberlin GCb |
| | | 105 | Orchard Hills CC |
| | | 106 | Ottawa Park GC |
| | | 107 | P & J's GC |
| | | 108 | Painesville CC |
| | | 109 | Pepperidge Tree GC |
| | | 110 | Pheasant Run GC |
| | | 111 | Pine Brook GC |
| | | 112 | Pine Hills GCb |
| | | 113 | Pine Ridge CC |
| | | 114 | Pleasant Hill GC |
| | | 115 | Pleasant Valley CC |
| | | 116 | Plum Brook CC |
| | | 117 | Port Clinton GCb |
| | | 118 | Powderhorn GC |
| | | 119 | Punderson State Park GC |
| | | 120 | Quail Hollow CC |
| | | 121 | Raccoon Hill GCb |
| | | 122 | Ravenswood GC |
| | | 123 | Red Tail GCb |
| | | 124 | Reserve at Thunder Hill CC |
| | | 125 | Ridgewood GC |
| | | 126 | Riverby Hills GC |
| | | 127 | Riverside GCb |
| | | 128 | Rolling Green GCb |
| | | 129 | Royal Crest GCb |
| | | 130 | Royal Oaks GCb |

Outdoor Recreation

- 131 Sand Ridge *Gcb*
- 132 Sawmill Creek *Gcb*
- 133 Seneca *GC*
- 134 Shady Oaks Dunes *Gcb*
- 135 Shawnee Hills *DR*
- 136 Skyland *GC*
- 137 Sleepy Hollow *Gcb*
- 138 Sleepy Hollow *Gcb*
- 139 South Toledo *GC*
- 140 Spring Valley *CC*
- 141 Springvale *Gcb*
- 142 St. Bernard *GC*
- 143 St. Denis *GC*
- 144 Stone Ridge *Gcb*
- 145 Stonewater *Gcb*
- 146 Sugar Creek *GC*
- 147 Sweetbriar *Gcb*
- 148 Sycamore Hills *GC*
- 149 Tamaron *CC*
- 150 Tanglewood *CC*
- 151 Tanglewood *Gcb*
- 152 The Links
- 153 Thornwood *GC*
- 154 Thousand Trails *GC*
- 155 Thunderbird Hills *GC*
- 156 Twin Lakes *GC*
- 157 Valleaire *Gcb*
- 158 Valleywood *Gcb*
- 159 Vermilion *CC*
- 160 Veteran's Memorial Lake Park *GC*
- 161 Village Green *GC*
- 162 Wicked Woods *GC*
- 163 Willow Creek *Gcb*
- 164 Windy Hills *GC*
- 165 Woussickett *GC*

- 15 Kuehnle State Wildlife Area
- 16 La Due Reservoir
- 17 Little Portage State Wildlife Area
- 18 Magee Marsh State Wildlife Area
- 19 Metzger Marsh State Wildlife Area
- 20 Milan State Wildlife Area
- 21 Miltonville Access
- 22 Missionary Island State Wildlife Area
- 23 Mosquito Creek State Wildlife Area
- 24 Mosquito Lake
- 25 New Lyme State Wildlife Area
- 26 Orwell State Wildlife Area
- 27 Pickrel Creek State Wildlife Area
- 28 Pipe Creek State Wildlife Area
- 29 Portage River Wildlife Access
- 30 Pymatuning State Park
- 31 Resthaven State Wildlife Area
- 32 Shenango State Wildlife Area
- 33 Sugar Creek State Wildlife Area
- 34 Toussaint State Wildlife Area
- 35 Van Tassel Access
- 36 Weir Rapids Access
- 37 Willow Point State Wildlife Area
- 38 Maumee State Forest

SKI RESORTS

- ID # Ski Resorts
- 1 Alpine Valley
- 2 Brandywine
- 3 Boston Mills

TRAILS

- 1 Buckeye Trail
- 2 Toledo Greenways Trail
- 3 University Parks Trail
- 4 Franklin Park Mall Connector
- 5 Wabash Cannonball Trail
- 6 North Country Trail
- 7 Slippery Elm Trail
- 8 North Coast Inland Trail
- 9 Huron River Greenway
- 10 Bridgeway Trail
- 11 Emerald Necklace
- 12 West Creek Greenway
- 13 Lakefront Bikeway
- 14 Ohio to Erie Trail
- 15 Broadway Greenway
- 16 Harrison-Dillard Trail
- 17 Cleveland Metroparks Trail
- 18 Bike and Hike Trail
- 19 Towpath Trail
- 20 Solon to Chagrin Falls Trail
- 21 Indian Creek-Case Parkway Trail
- 22 Tinkers Creek Trail
- 23 Lake Metroparks Trail
- 24 Maple Highlands Trail
- 25 Headwaters Trail
- 26 Western Reserve Greenway
- 27 Pymatuning Valley Greenway

**Coastal State Park
Total Visitor Occasions in 2004**

Coastal State Park	County	Visitor Count	Rank*
Cleveland Lakefront	Cuyahoga	8,001,985	1
Geneva	Ashtabula	2,412,110	4
Headlands Beach	Lake	1,897,794	7
Marblehead Lighthouse	Ottawa	1,352,337	11
East Harbor	Ottawa	1,319,210	12
Maumee Bay	Lucas	1,095,276	13
Lake Erie Islands**	Ottawa & Erie	860,232	16
Crane Creek	Ottawa	330,650	36

Total Visitors in 2004	Coastal Parks	17,269,594
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* Statewide rank out of 74 total state parks

** Includes Catawba Island, Kelleys Island, Middle Bass Island and South Bass Island state parks

From ODNR Division of Parks and Recreation Ohio State Parks 2004 Annual Report

PUBLIC HUNTING

- ID # Public Hunting Area
- 1 Aldrich Pond State Wildlife Area
- 2 Aquilla Lake State Wildlife Area
- 3 Auburn Marsh State Wildlife Area
- 4 Camp Belden State Wildlife Area
- 5 Crane Creek State Park
- 6 Cullen Park
- 7 Dorset State Wildlife Area
- 8 East Harbor State Park
- 9 Fort Meigs Access
- 10 Geneva State Park
- 11 Grand River State Wildlife Area
- 12 Hambden Orchard State Wildlife Area
- 13 Kelleys Island State Park
- 14 Knobby's Prairie State Wildlife Area

Ohio State Parks

Ohio State Parks provide ample opportunities for everyone to get out and enjoy the natural beauty that abounds in northern Ohio. From the wetlands of Maumee Bay to the limestone cliffs of South Bass Island to the rare coastal plants thriving at Geneva, many activities and opportunities for day or overnight trips are waiting in northern Ohio's state parks.

In 2004, more than 1.5 million guests spent over 773,000 combined nights in a variety of different state park lodging such as lodge rooms, cottages, getaway rentals and campgrounds. According to a 2003 study on the economic impact of tourism in Ohio, overnight stays at Ohio State Parks contributed \$291.8 million to Ohio's economy.

A wide variety of overnight experiences await guests in Ohio State Parks. Numerous campgrounds offering a range of camping options from primitive campsites at Mary Jane Thurston, Middle Bass Island, South Bass Island and Van Buren state parks to full-service campsites at East Harbor, Punderson and South Bass Island state parks are available for the avid campers. For those without camping equipment who still want to be in touch with nature, state parks offer getaway rentals, cedar cabins, cottages, rent-a-Yurt, rent-an-RV and cabents. Two state parks offer full-service lodges with rooms overlooking Lake Erie. Maumee Bay State Park lodge was built in May 1991 and Geneva State Park lodge opened in 2004.

Coastal state parks are also some of the most visited by day-trippers. More than 8 million people visited Cleveland Lakefront State Park in 2004, making it the most visited of Ohio's 74 state parks. In fact more than twice as many people recreated along this stretch of Cuyahoga County's lakeshore than in Ohio's

second most visited state park, Alum Creek located north of Columbus, which had 3.7 million visitors. In 2004, Geneva State Park was the fourth most visited park in the state tallying more than 2.4 million visitors. The 12 state parks adjacent to Lake Erie (Maumee Bay, Crane Creek, Catawba Island, East Harbor, Marblehead Lighthouse, South Bass Island, Middle Bass Island, Oak Point, Kelleys Island, Cleveland Lakefront, Headlands Beach and Geneva) combined for nearly 17.3 million day visits by Ohio residents and visitors in 2004.

Activities enjoyed by both overnight and day visitors to state parks include hiking, biking, boating, swimming, scuba diving, picnicking, birding and nature study in addition to playgrounds, volleyball and basketball courts, horse-back riding, mountain biking and other park activities.

For more information:

ODNR Division of Parks and Recreation
2045 Morse Road, Building C
Tel: (614) 265-6561
www.ohiodnr.com/parks



Punderson State Park, Geauga County



Oak Point State Park, Ottawa County



Findley State Park, Lorain County

Coastal Recreation Access

Coastal Recreational Access

The coastal recreational access maps illustrate locations along Lake Erie that are accessible to the public and offer various activities and amenities, such as beaches, fishing sites, picnic areas, playgrounds, trails and wildlife viewing. These sites represent state parks, nature preserves and wildlife areas, city and township parks, county metro-parks and fishing piers, among others. Private parks, beach clubs, marinas, restaurants, golf courses, commercial facilities, private campgrounds, apartment complexes and trailer parks, are not included in the inventory. Marinas, docks and other boating access facilities are mapped separately in this chapter.

There are 116 coastal recreational access locations along Ohio's 312-mile Lake Erie coast. Combined, these public areas consist of 41.7 miles of accessible



Skate ramp at Voinovich Bicentennial Park near the Rock and Roll Hall of Fame and Museum in Cleveland

shore, approximately 13% of the entire coast. The points were identified and field-checked in 2005 by the Office of Coastal Management. Erie County has the most publicly accessible recreation areas with 25 locations, followed by Cuyahoga and Lake counties (21 each), Ottawa County (17), Lorain County (13), Ashtabula County (11), Lucas County (7), and Sandusky County (1).

The tables on this and the next page correspond with the maps and identify various activities available to the public at each coastal recreation location.

Park This denotes whether the access point is a park (state, city, township, metro-park, or other), nature preserve (state or otherwise) or wildlife area. Typically, the areas that are not designated as a 'park' are fishing piers.

Beach This indicates a beach is accessible to the public. Not all beaches identified are intended for swimming. Some access locations discourage swimming and other activities such as wading and campfires.

Fishing This indicates the public has the opportunity to fish at a particular site. Not all parks and piers allow fishing in all locations.



Rocky River Park, Cuyahoga County

Picnic This signifies a public access point provides picnic tables and/or pavilions. Some pavilion facilities may need to be reserved in advance.

Playground This denotes a public access site provides playground equipment.

Trails This indicates an access point offering a type of walkway and/or leisure or activity trail. Trail types include non-strenuous walking trails, wooded hiking trails, beach boardwalks, exercise trails, bike trails and steps.

Wildlife This refers to public access sites that provide visitors with a designated area to observe wildlife. Viewable wildlife opportunities are designated based on whether the access location has (a) an observation deck or tower, (b) wildlife signage, or is (c) documented by text in the 'Habitat' chapter. Public access points that are *not* marked as areas to observe wildlife may still offer ample viewing opportunities.

Camping This signifies the free access location also has camping facilities, which may be for a fee. Types of camping, i.e. tent, RV, electrical and/or water hook-up, are not indicated. Private or commercial campgrounds are not considered public access in this document.

For more information:

ODNR Office of Coastal Management
105 West Shoreline Drive
Sandusky, Ohio 44870
Tel: (419) 626-7930
www.ohiodnr.com/coastal

ID	Park Name	City or Township	Park	Beach	Fishing	Picnic	Playground	Trails	Wildlife	Camping	Notes
LUCAS COUNTY											
1	Cullen Park	Toledo	○		○		○				
2	Bayshore Fishing Access	Oregon	○		○					○	ODNR
3	James A. Haley Boardwalk	Oregon	○		○		○				South Shore Park south of Bayshore Rd.
4	Maumee Bay State Park	Oregon	○	○	○	○	○	○	○		
5	Mallard Club Marsh State Wildlife Area	Jerusalem Twp.	○		○		○	○			
6	Metzger Marsh Fishing Access	Jerusalem Twp.	○		○		○	○			Access to Metzger Marsh Wildlife Area
7	Crane Creek State Park	Jerusalem Twp.	○	○	○	○	○	○			Shared entrance with Magee Marsh
OTTAWA COUNTY											
8	Magee Marsh State Wildlife Area	Carroll Twp.	○	○	○		○	○			Shared entrance with Crane Creek SP
9	Camp Perry	Erie Twp.		○							Photo ID required at entrance
10	Waterworks Park	Port Clinton	○		○	○	○				
11	Lakeview City Park	Port Clinton	○	○	○	○	○				
12	Catawba Island State Park	Catawba Island Twp.	○	○	○	○	○				Lake Erie Is's State Park main office
13	East Harbor State Park	Danbury Twp.	○	○	○	○	○	○	○		
14	Mazurik Access Area	Danbury Twp.	○		○		○				ODNR
15	Marblehead Lighthouse State Park	Marblehead	○		○	○	○				
16	Lake Point Park	Marblehead	○		○	○	○				
17	Dempsey's State Fishing Access	Danbury Twp.	○		○		○				ODNR
18	Sandusky Bay Bridge Access	Danbury Twp.			○				○		North section; ODNR
19	South Bass Island State Park	Put-In-Bay Twp.	○	○	○	○		○	○	○	
20	Aquatic Visitor Center	Put-In-Bay			○						ODNR
21	Oak Point State Park	Put-In-Bay	○		○	○			○		
22	DeRivera Park	Put-In-Bay	○		○	○					
23	Perry's Victory and Int'l Peace Mem.	Put-In-Bay	○								National Park Service
24	Middle Bass Island State Park	Put-In-Bay Twp.	○	○	○	○		○	○	○	
SANDUSKY COUNTY											
25	Pickereel Creek State Wildlife Area	Riley Twp.	○		○				○		Public hunting area
ERIE COUNTY											
26	Willow Point State Wildlife Area	Margaretta Twp.	○		○				○		Public hunting area
27	Old Bay Bridge	Bay View			○						South section; access from Bay View
28	Bayview Drive Scenic Overlook	Bay View			○	○					
29	Lions Park	Sandusky	○		○	○	○	○			
30	Shelby Street Public Boat Launch	Sandusky	○		○	○	○	○			
31	Jackson Street Pier	Sandusky			○						
32	Schade-Mylander Plaza	Sandusky			○						Fishing access across Shoreline Drive
33	Shoreline Park	Sandusky	○		○	○	○	○			
34	Battery Park	Sandusky	○		○	○	○	○			
35	North Shore Alvar SNP	Kelleys Island	○					○	○		Accessible via North Shore Loop Trail
36	Kelleys Island State Park	Kelleys Island	○	○	○	○	○	○	○	○	
37	North Pond State Nature Preserve	Kelleys Island	○					○	○		Accessible from Kelleys Island SP
38	Inscription Rock State Memorial	Kelleys Island									Ohio Historical Marker
39	Memorial Park	Kelleys Island	○		○						
40	Pipe Creek State Wildlife Area	Sandusky	○		○			○	○		
41	Preserve at Eagle Point	Huron Twp.	○					○	○		Erie MetroParks
42	Putnam Marsh Nature Preserve	Huron Twp.	○					○	○		Erie MetroParks
43	Sheldon Marsh State Nature Preserve	Huron Twp.	○	○				○	○		
44	Lake Front Park	Huron	○	○	○	○	○				
45	Huron Harbor West Pier	Huron			○			○	○		Access to lighthouse
46	Huron Harbor East Breakwater	Huron			○			○			Accessible from Nickel Plate Beach
47	Nickel Plate Beach	Huron	○	○	○	○	○	○			
48	Old Woman Creek SNP	Berlin Twp.	○	○				○	○		National Estuarine Research Reserve
49	Sherod Park	Vermillion Twp.	○	○	○	○	○	○			
50	Main Street Beach	Vermillion	○	○				○			

Coastal Recreation Access

ID	Park Name	City or Township								Notes:
			Park	Beach	Fishing	Picnic	Playground	Trails	Wildlife	

LORAIN COUNTY											
48	Showse Park	Vermilion	o	o	o	o	o	o	o		
49	Brownhelm Township Lakefront Park	Brownhelm Twp.	o			o					
50	Lakeview Park	Lorain	o	o	o	o	o	o			
51	City of Lorain Municipal Boat Ramp	Lorain			o						
52	City of Lorain Public Fishing	Lorain			o						
53	Lakeside Landing	Lorain	o		o	o	o	o			Lorain Port Authority
54	Century Park	Lorain	o	o	o	o	o	o			
55	Lakewood Beach Access	Sheffield Lake		o		o					Unmarked access
56	Community Park	Sheffield Lake	o			o					
57	West Shore Park	Sheffield Lake	o	o	o	o	o	o			Sheffield Lake Community Civic Center
58	Shell Cove Park	Sheffield Lake	o	o	o	o	o	o			
59	Miller Road Park	Avon Lake	o	o	o	o	o	o	o		
60	Veterans Memorial Park	Avon Lake	o	o	o	o	o	o			

CUYAHOGA COUNTY											
61	Huntington Reservation	Bay Village	o	o	o	o	o	o	o		Cleveland Metroparks
62	Cahoon Memorial Park	Bay Village	o			o		o			West entrance
63	Cahoon Memorial Park	Bay Village	o			o		o			East entrance
64	Columbia Park	Bay Village	o	o	o	o		o			
65	Bradstreet's Landing	Rocky River	o	o	o	o	o	o			
66	Rocky River Park	Rocky River	o	o		o	o	o			
67	Kensington Oval Scenic Overlook	Rocky River									
68	Lakewood Park	Lakewood	o			o	o	o			
69	Cleveland Lakefront State Park	Cleveland	o	o	o	o	o	o	o		Edgewater Park; West entrance
70	Cleveland Lakefront State Park	Cleveland	o	o	o	o	o	o	o		Edgewater Park; East entrance
71	Edgewater Marina	Cleveland			o						
72	Wendy Park & Whiskey Island Marina	Cleveland	o	o	o	o	o	o			Cuyahoga County property
73	North Coast Harbor	Cleveland						o			Free access; Admission to museums
74	Voinovich Bicentennial Park	Cleveland	o		o	o		o			
75	East 9th Street Pier	Cleveland			o						
76	Cleveland Lakefront State Park	Cleveland	o		o	o		o			East 55th Street Marina
77	Cleveland Lakefront State Park	Cleveland	o		o	o	o	o	o		Gordon Park
78	Cleveland Lakefront State Park	Cleveland	o	o	o	o	o	o			Euclid Beach
79	Cleveland Lakefront State Park	Cleveland	o		o	o		o			Wildwood and Villa Angela
80	Euclid Park	Euclid	o	o	o			o			Lakeshore Community Center
81	Sims Park	Euclid	o	o	o	o	o	o			

ID	Park Name	City or Township								Notes:
			Park	Beach	Fishing	Picnic	Playground	Trails	Wildlife	

LAKE COUNTY											
82	Lakefront Park	Willowick	o			o		o	o		Lake County MetroParks
83	City of Eastlake	Eastlake	o				o				Unnamed park
84	Eastlake Breakwall	Eastlake			o						
85	Willoway Park	Eastlake	o		o		o				Eastlake Police Athletic League
86	Osborne Park	Willoughby	o	o	o	o	o	o			
87	Overlook Beach Park	Mentor-on-the-Lake	o	o	o	o	o	o			
88	Mentor Beach Park	Mentor-on-the-Lake	o	o	o	o	o	o			
89	Mentor Lagoons Nature Preserve	Mentor	o	o		o		o	o		Trail access; parking
90	Mentor Lagoons Nature Preserve	Mentor	o	o				o	o		Trail access only; no parking
91	City of Mentor Beach Access	Mentor		o							
92	Headlands Beach State Park	Painesville Twp.	o	o	o	o	o	o			
93	Headlands Dunes SNP	Painesville Twp.	o	o				o	o		State Nature Preserve
94	Fairport Harbor Lakefront Park	Fairport Harbor	o	o	o	o	o	o			Lake County MetroParks
95	Painesville Township Park	Painesville Twp.	o		o	o	o	o			Lake County MetroParks
96	Perry Township Park	Perry Twp.	o		o	o	o	o			
97	North Perry Village Park	North Perry	o			o	o				
98	Lakeshore Reservation	North Perry	o	o	o	o		o	o		Lake County MetroParks
99	North Townline Park	North Perry	o	o	o	o	o	o			
100	Bill Stanton Community Park	Madison Twp.	o	o	o	o	o	o			
101	Tuttle Park	Madison Twp.	o		o	o	o				
102	Madison Township Park	Madison Twp.	o	o	o	o	o	o			
103	Arcola Creek Estuary	Madison Twp.	o	o	o	o		o	o		Lake County MetroParks

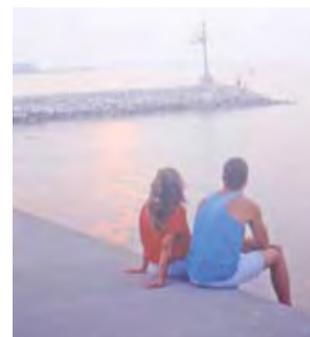
ASHTABULA COUNTY											
104	Geneva State Park	Geneva-on-the-Lake	o	o	o	o	o	o	o	o	
105	Grandview Park	Geneva-on-the-Lake	o								Ashtabula County Historical Society
106	Erieview Amusement Park	Geneva-on-the-Lake	o			o	o	o			Free access; Admission for rides
107	Geneva Township Park	Geneva-on-the-Lake	o			o	o	o			
108	Saybrook Township Park	Saybrook Twp.	o			o	o	o			
109	Walnut Beach Park	Ashtabula	o	o	o	o	o	o			
110	Point Park	Ashtabula	o								
111	Lakeshore Park	Ashtabula	o	o	o	o	o	o	o		
112	Al Cummings Sunset Park	North Kingsville	o			o	o	o			
113	Conneaut Township Park	Conneaut	o	o	o	o	o	o			
114	Lakeview Park	Conneaut	o		o	o		o	o		Conneaut Port Authority facility
115	Independence Park	Conneaut			o						

Coastal Recreation

Accessible Shoreline Lengths per County

(Shoreline lengths obtained from county parcel data and fieldwork)

County	Accessible Shoreline		Total Shoreline		Percent Accessible	
	Length	Rank	Length	Rank	Percent	Rank
Ashtabula	4.95 miles	6	29.96 miles	5	16.52%	5
Cuyahoga	6.24 miles	3	35.17 miles	3	17.75%	4
Erie	6.82 miles	2	56.32 miles	2	12.11%	6
Lake	5.85 miles	4	32.36 miles	4	18.07%	3
Lorain	2.35 miles	8	23.33 miles	7	10.07%	7
Lucas	5.13 miles	5	26.63 miles	6	19.27%	2
Ottawa	7.61 miles	1	95.63 miles	1	7.98%	8
Sandusky	2.78 miles	7	14.35 miles	8	19.38%	1



Maumee Bay State Park in Oregon, Lucas County



Oldest Stone House Museum at Lakewood Park, Cuyahoga County



Geneva State Park, Ashtabula

Coastal Recreation Access – Western Lakeshore



East Harbor State Park, Ottawa County



Catawba Island State Park, Ottawa County



Kelleys Island State Park, Erie County



Huron Lake Front Park, Erie County



Map 15 GIS data citation in Appendices

Coastal Recreation Access – Western Lakeshore



Map 15 GIS data citation in Appendices

Coastal Recreation Access Identification

LUCAS COUNTY

- 1 Cullen Park
- 2 Bayshore Fishing Access
- 3 James A. Haley Boardwalk
- 4 Maumee Bay State Park
- 5 Mallard Club Marsh State Wildlife Area
- 6 Metzger Marsh Fishing Access
- 7 Crane Creek State Park

OTTAWA COUNTY

- 8 Magee Marsh State Wildlife Area
- 9 Camp Perry
- 10 Waterworks
- 11 Port Clinton
- 12 Catawba Island State Park
- 13 East Harbor State Park
- 14 Mazurik Access Area
- 15 Marblehead Lighthouse State Park
- 16 Lake Point Park
- 17 Dempsey's State Fishing Access
- 18 Sandusky Bay Bridge Access
- 19 South Bass Island State Park
- 20 Aquatic Visitor Center
- 21 Oak Point State Park

- Toledo
- Oregon
- Oregon
- Oregon
- Jerusalem Twp.
- Jerusalem Twp.
- Jerusalem Twp.

- Carroll Twp.
- Erie Twp.
- Port Clinton
- Lakeview City Park
- Catawba Island Twp.
- Danbury Twp.
- Danbury Twp.
- Marblehead
- Marblehead
- Danbury Twp.
- Danbury Twp.
- Put-In-Bay Twp.
- Put-In-Bay
- Put-In-Bay

- 22 DeRivera Park Put-In-Bay
- 23 Perry's Victory and International Peace Memorial Put-In-Bay
- 24 Middle Bass Island State Park Put-In-Bay Twp.

SANDUSKY COUNTY

- 25 Pickerel Creek State Wildlife Area Riley Twp.

ERIE COUNTY

- 26 Willow Point State Wildlife Area Margaretta Twp.
- 27 Old Bay Bridge Bay View
- 28 Bayview Drive Scenic Overlook Bay View
- 29 Lions Park Sandusky
- 30 Shelby Street Public Boat Launch Sandusky
- 31 Jackson Street Pier Sandusky
- 32 Schade-Mylander Plaza Sandusky
- 33 Shoreline Park Sandusky
- 34 Battery Park Sandusky
- 35 North Shore Alvar State Nature Preserve Kelleys Island
- 36 Kelleys Island State Park Kelleys Island
- 37 North Pond State Nature Preserve Kelleys Island
- 38 Inscription Rock State Memorial Kelleys Island
- 39 Memorial Park Kelleys Island
- 40 Pipe Creek State Wildlife Area Sandusky
- 41 Community Foundation Preserve at Eagle Point Huron Twp.
- 42 Putnam Marsh Nature Preserve Huron Twp.
- 43 Sheldon Marsh State Nature Preserve Huron Twp.
- 44 Lake Front Park Huron
- 45 Huron Harbor West Pier Huron
- 46 Huron Harbor East Breakwater Huron
- 47 Nickel Plate Beach Huron
- 48 Old Woman Creek State Nature Preserve Berlin Twp.
- 49 Sherod Park Vermilion Twp.
- 50 Main Street Beach Vermilion



Kelleys Island State Park, Erie County

Coastal Recreation Access – Eastern Lakeshore



Lakeview Park, Lorain County



Geneva State Park, Ashtabula County



Cleveland's North Coast Harbor, Cuyahoga County



Headlands Dunes State Nature Preserve, Lake County



Map 15 GIS data citation in Appendices

Lake Erie Islands

Ohio's Erie Islands

Ohio has more than a dozen natural islands in Lake Erie's Western Basin. Just like the lake itself, each island formed as a result of a massive glacier that receded northward 14,000 years ago (see Chapter 10: Geology).

In size, the islands range from minuscule rock outcroppings that disappear and reappear with the rise and fall of the lake, to large human-inhabited land masses. Ohio's largest island is Kelleys (2836.9 acres), followed by South Bass (1,524 acres), Middle Bass (770.5 acres) and North Bass (705.5 acres). Johnson's Island, located in the Sandusky Bay and connected to the Marblehead Peninsula via a manmade causeway, is 282 acres; the remaining islands are all smaller than 80 acres.

From Native American tribes to golf cart driving tourists, Ohio's Erie islands have influenced many people. Early settlers encountered climate conditions and soil types similar to the grape-growing regions of Europe. Rich limestone deposits on Kelleys and Johnson's islands led to limestone quarrying. Historically, the islands were also used for commercial fishing. Today Ohio's islands—particularly Kelleys, Middle Bass and South Bass—are popular tourist destinations renowned for their natural resources, recreation, wineries, bars, views and charm.

Needle's Eye

Gibraltar Island

With few exceptions, Ohio is not noted for its geologic features such as natural arches, bridges and tunnels. The face of our state is too low and too level. However, the same basic processes that shaped the spectacular scenery of the West have also been at work in Ohio. The Ohio Natural Arch Survey has identified and studied more than 60 geological features.

Needle's Eye, located on the northeast end of Gibraltar Island, is Ohio's most famous example of a sea arch. The arch features an opening 32 inches wide by 15 feet in height (including the portion below lake level). Above Needle's Eye, the outcrop of dolomite thrusting out from the northeast end of Gibraltar Island at the entrance to the harbor marks the highest land elevation in the Put-in-Bay area. According to tradition, this point served as Oliver Hazard



Needle's Eye, Gibraltar Island

Perry's lookout post during the War of 1812.

Today, Gibraltar Island is home to Ohio State University's F.T. Stone Laboratory, the nation's oldest freshwater biological field station. The tiny island campus includes a laboratory, dormitories, cottages, research vessel dockage, a dining hall and the castle of Jay Cooke, one of the Union's major financiers during the Civil War. Needle's Eye is visible with binoculars (or sharp eyes) from Perry's Victory and International Peace Memorial, from Gibraltar Island and close-up from a boat.

Inscription Rock

Kelleys Island

Inscription Rock, on the south shore of Kelleys Island, is marked with prehistoric Indian pictographs. The 32 foot by 21 foot flat-topped limestone boulder portrays nearly 100 images of pipe-smoking figures, a chief, large animals and weapons.



No one is sure what the unusual drawings on this petroglyph depict. The most widely accepted theory is that the large rock was used as a "message stone" where various Native Americans would make drawings noting that they'd been there, how the hunting or fishing had been and/or where they were headed next.

The rock was discovered partially buried beneath the shoreline in 1833 by a Connecticut Land Company agent. Archaeologists believe the inscriptions date from sometime between AD 1200 and 1600.

Over time, the markings have been eroded by exposure to waves and weather, and today it is difficult to see them. In 1969 The Ohio Historical Society erected a cover to attempt to preserve the rock. A small-portion plaster replica of the accurate and detailed sketches done in the 1850s is also located at the site.

Glacial Grooves and Striations

Kelleys Island, South Bass Island, Middle Bass Island

Glacially-derived features such as striations and grooves are the result of a moving ice mass. These linear features formed when rocks and boulders imbedded in the glacier gouged the underlying rock surface as the ice moved. Striations resemble small scratches in the surface, whereas grooves are much larger. Exposed grooves and striations provide geologists a general idea of which direction a glacier was moving.

Striations and grooves are visible at many locations along Ohio's coast. Perhaps the finest example in the world of exposed glacial grooves is in the

northwestern portion of Kelleys Island, adjacent to the state park. Managed by the Ohio Historical Society, the Kelleys Island Glacial Grooves are publicly accessible and protected as a National Natural Landmark. These grooves are carved into solid limestone and measure 430 feet long, 35 feet wide and 15 feet deep. In the 1930s the limestone quarrying industry uncovered several more glacial striations and grooves.

Many were significantly larger than the adjacent grooves that remain on Kelleys Island, but substantial portions were quarried.

Glacial grooves and striations can also be found on Gibraltar, Middle Bass and South Bass islands as well as various locations on the mainland. Publicly accessible visible grooves on Middle Bass and South Bass islands are within each island's state park.



Kelleys Island Glacial Grooves, Erie County

North Pond State Nature Preserve

Kelleys Island

North Pond State Nature Preserve is a nearly pristine wetland with a channel leading to Lake Erie at the North Bay on Kelleys Island. The preserve is located within Kelleys Island State Park.

The 30-acre sanctuary with forest, marsh and hiking trail, is Ohio's only state-managed, lake embayment natural pond. Lake embayment ponds occur along the coasts of the Great Lakes. These ponds' water levels rise and fall with the lake. Of the 12 original embayment ponds on Ohio's Erie islands, North Pond is the most intact of the three remaining. The others are on Middle Bass and North Bass islands. The pond was formed as the lake receded from its ancient shore (see Chapter 10: Geology).

North Pond is also one of the few natural wetlands directly connected to Lake Erie. Virtually all of the remaining wetlands in Erie's Western Basin have been impounded by dikes and are artificially controlled.

North Pond's aquatic ecosystem harbors an assemblage of plant and animal life, much of which may be viewed from the one-mile recycled plastic lumber boardwalk winding through the area. In the center/wettest area of the pond, water lilies can be seen. Straw-colored umbrella sedges grow closer to the bank. At the pond's



outreaches, the land becomes less wet. There are buttonbush shrubs, ferns and shrubby willows, transitioning into a swamp forest which includes green ash and cottonwoods, the dominant forest species. Grasses, rushes and sedges dot the landscape.

When the pond is dry, swamp rose mallow, a native hibiscus, grows in the pond area along with bur marigolds (the stick-tight plant). Other plant life surrounding the pond includes smart weed, willow twigs, late summer-blooming cardinal flowers and the May-blooming wild blue iris. Arrowheads, including the endangered wapato, swamp rose mallow, bulrushes and many other wetland plants also occur in the marsh.



North Shore Alvar State Nature Preserve

Kelleys Island

Ohio's finest and most intact alvar community is the North Shore Alvar on Kelleys Island. Alvars are horizontal exposures of nearly barren limestone or dolomite which were exposed by glaciers and are kept open by a variety of environmental factors.

Almost all of North America's alvars occur within the Great Lakes basin, primarily in an arc from northern Lake Michigan across northern Lake Huron and along the southern edge of the Canadian Shield to include eastern Ontario and northwestern New York state. The name "alvar" is derived from a Swedish word for similar landforms near the Baltic Sea. Although some 120 alvars exist in the Great Lakes, they comprise only 0.2 percent of the land area.

Most types of alvar communities are globally imperiled, and they support several rare species. On Kelleys Island, only a few specially adapted plant species survive in the terrain which faces extreme temperatures while being scoured by wind, waves and ice. Unusual species include the northern bog violet (an endangered species), balsam squaw-weed, Kalm's



lobelia, Pringle's aster and the rare Showy Orange lichen. It is believed that the limestone cliffs of the Lake Erie islands are the only places in Ohio where this lichen is found.

The North Shore Alvar State Nature Preserve is located within Kelleys Island State Park on the North Shore Loop trail. Other Ohio alvars found on the Marblehead Peninsula have been disturbed or destroyed by quarrying and other human activities.



South Bass Island Caves

South Bass Island

South Bass Island consists of multiple layers of hard limestone rock that have many vertical and horizontal fractures extending to the land surface. Approximately 20 small caves are known to exist on the largest of the Bass Islands. The two most accessible to the public are Perry's Cave and Crystal Cave.

Discovered by workers in 1897 while digging a well for the winery 40 feet above, Crystal Cave is the world's largest known geode. A geode is a sphere-shaped rock that contains a hollow cavity lined with crystals. Geodes are found throughout the world. Deserts, volcanic ash beds and regions containing limestone are common geode locations.

The walls of Crystal Cave are covered in strontium sulfate, a blueish mineral called celestite. These crystals range from eight to 18 inches long. The original cave was much smaller than what appears today, as crystals were harvested and sold for manufacturing fireworks. Today the opening in the geode is large enough to walk around in.

Perry's Cave is named after Commodore Oliver Hazard Perry who was rumored to have discovered the void prior to the Battle of Lake Erie in 1813. The underground Perry's Cave Lake provided clean drinking water for Perry's crew and later for the guests of the former Hotel Victory (1892-1919), once the world's largest resort hotel.

Registered as an Ohio Natural Landmark, Perry's Cave is a 208-foot long, 165-foot wide natural limestone cave found 52 feet below ground. Its

9-foot ceiling, as well as the walls and cave floor, are covered in calcium carbonate, deposited by the constant dripping of water. It stays 50 degrees within the cave year-round. The underground lake rises and falls with the level of Lake Erie, demonstrating a probable underground link to the lake.

For more information/Sources:

Final Technical Report of the International Alvar Conservation Initiative - March, 1999

Heineman's Winery
www.heinemanswinery.com/crystalcave.cfm

Kelleys Island Audubon Club
www.kelleysislandnature.com

Kelleys Island Historical Association
www.kelleysislandhistorical.org/islandplaces

Lake Erie Coastal Ohio
www.coastalohio.com

ODNR Division of Natural Areas and Preserves
www.ohiodnr.com/dnap

ODNR Division of Park and Recreation, Lake Erie Islands State Park

www.ohiodnr.com/parks/parks/lakeerie.htm

Ohio Environmental Protection Agency
www.epa.state.oh.us/

Ohio Historical Society
www.ohiohistory.org/places

Perry's Cave & Gemstone Mining
www.perryscave.com

Ohio State University, Ohio Sea Grant College Program
F.T. Stone Laboratory
www.sg.ohio-state.edu/stonelab

Boating is an exceptionally popular activity on Ohio's 2.25 million acres of Lake Erie. Nearly 66,000 Ohio families and countless other U.S. and Canadian residents use Lake Erie as their primary boating location.

Ohio boaters make an average of 4.3 trips to Ohio's portion of Lake Erie each summer, according to the Ohio Sea Grant College Program. While there, boaters enjoy approximately 152 launch ramp sites, 2,783 transient docks and 33,203 seasonal docks. Approximately 272 marinas provide various amenities such as fuel, picnicking, concession stands, recreational facilities and bath-houses. Additionally, 121 of the 272 marinas offer pump-out or dump station services for vessel waste, and 19 have been designated as Ohio Clean Marinas under a new state program funded in part by the ODNR Office of Coastal Management.

Ohio ranks 8th nationally in the number of registered boats with more than 418,000 vessels licensed in 2003. Of those, 191,807 were 16-feet long or greater and motorized. Counties bordering Lake Erie accounted for 81,371 registered

vessels in 2003 with Cuyahoga County accounting for 33 percent of this. However, in Ohio, boats are registered to the owner's county of residence and not where the vessel is docked. More than 50 percent of Ohio's registered boats are motorized, while only 3 percent obtain their main source of power from the wind.

Boating...an Economic Stimulus

Ohio's recreational boating has a positive economic impact on the state, creating approximately 19,500 jobs and accounting for an estimated \$386 million in annual payroll to Ohio residents. The state's economy also benefits from the \$1.4 billion annually spent by recreational boaters, according to a 1999 recreational boating economic impact study conducted through the partnership of the ODNR Division of Watercraft, Ohio Sea Grant, the Lake Erie Commission, the Boating Associations of Ohio and the Lake Erie Marine Trades Association.

Enhancing activities through grant funding

To enhance boating opportunities in Ohio and assist economic development, the ODNR Division of Watercraft administers a variety of grants including Cooperative Boating Facility Grants. These grants are for the construction and rehabilitation of launch and marina facilities and to improve boating access.

The Division of Watercraft is responsible for boating safety, education and law enforcement on all waters of the state. Boating Safety Education Grants provide funding for boating education classes benefiting school groups, boaters, youth groups and the general public in an effort to reduce boating fatalities and make Ohio's waterways safer. Grants are provided through the Waterways Safety Fund, supported primarily by boat registration fees and a portion of Ohio's gasoline tax. The fund also supports the Division of Watercraft's capital improvements, enforcement and education programs.

Likewise, Marine Patrol Grants are awarded annually to help local marine patrol units intensify their

boating safety and enforcement efforts on the state's waterways. Navigational Aid Grants are also awarded on a non-matching basis to improve boating safety. Waterway areas that can be marked include controlled areas for boating traffic, restricted areas and hazardous areas. Buoys and signs must comply with the standard inland waterway regulatory marking system.

Field Offices Enhance Boater Safety

The Division of Watercraft maintains four field offices along Ohio's 312-mile coast including Maumee Bay, Sandusky, Cleveland and Ashtabula. Field offices are responsible for providing services to the public including watercraft registration, law enforcement patrols, homeland security, boating information and education classes. Division of Watercraft officers respond to boating-related search and rescue missions across the state of Ohio and other emergencies as needed.

Planning for Future Watercraft Access to Lake Erie:

In 2004, the Division of Watercraft completed the Boating on Ohio Waterways Plan, a tool to improve recreational boating opportunities in Ohio. The plan provides guidance on both management issues and facilities issues with respect to recreational boating in Ohio. Major recommendations in the Plan concern Lake Erie, particularly the development of transient moorage at Sandusky, the Lake Erie Islands region and Cleveland as first priority with Toledo, Lorain, Fairport Harbor, Ashtabula and Conneaut ranked as second priority. The plan can be found at Ohiodnr.com/watercraft/plan/default.htm.

Watercraft Access Sites along Lake Erie

Watercraft data shown on the accompanying maps indicate all access sites along Lake Erie and tributaries where the public can currently launch or dock a vessel. The database/watercraft inventory was updated during the summer of 2004 through the use of field visits and interviews. Global positioning

system (GPS) coordinates were collected using Magellan and Garmin GPS units, and in turn, these coordinates were rendered into a geographic information system layer (shapefile) using ArcView software.

For more information:

ODNR Division of Watercraft
2045 Morse Road, Building A
Columbus, Ohio 43229-6693
Tel: (614) 265-6480
Tel: 1 (877) 4BOATER (Ohio only)
Fax: (614) 267-8883
watercraft@dnr.state.oh.us

Sources:

Boating Associations of Ohio; Census Bureau; National Marine Manufacturers Association; ODNR Division of Watercraft; Ohio Department of Development's Division of Travel and Tourism; Ohio Sea Grant

Boating Access

Ohio Clean Marinas Program

The Ohio Clean Marinas Program is a proactive partnership designed to encourage marina operators and boaters to use simple, innovative solutions to keep Ohio's coastal and inland waterway resources clean. The goal of the program is environmental stewardship by educating marinas and boaters to be more aware of environmental laws, rules and jurisdictions, and to get as many marinas as possible to follow best management practices and to be designated as "Clean Marinas." The program assists operators in protecting the resources that provide their livelihood - clean water and fresh air.

The Ohio Clean Marinas Program began in September 2004. By July

31, 2006, 19 marinas were certified (see list at www.ohiocleanmarina.osu.edu). Prior to kick-off, the Ohio Clean Marinas Program was developed with federal financial assistance provided by federal dollars administered through the ODNR Office of Coastal Management and Division of Soil and Water Conservation's Coastal Nonpoint Pollution Control Program to Ohio Sea Grant.

Other program sponsors include ODNR's Division of Watercraft, Ohio Department of Health, Ohio Environmental Protection Agency, Ohio Department of Commerce, U.S. Coast Guard, U.S. Army Corps of Engineers, Lake Erie Marine Trades Association, Greater Cleveland Boating Association, local health

departments, local fire marshals, and marina and yacht club owners and managers.

For more information:

Ohio Clean Marinas Program
Gary L. Comer, Jr. - Coordinator
The Ohio State University
Ohio Sea Grant College Program
105 West Shoreline Drive
Sandusky, Ohio 44870
Tel: 419-609-4120
Fax: 419-609-4158
Web: www.ohiocleanmarina.osu.edu
E-mail: comer.29@osu.edu

Ohio Clean Boater Program

The Ohio Clean Boater Program is a proactive partnership designed to encourage marinas and boaters to use simple, innovative solutions to keep Ohio's coastal and inland waterway resources clean. Since close to 420,000 boats share Ohio's waterways, it is important that each boater shares responsibility in taking care of the environment.

The goal of the program is environmental stewardship by making marinas and boaters more aware of environmental hazards connected

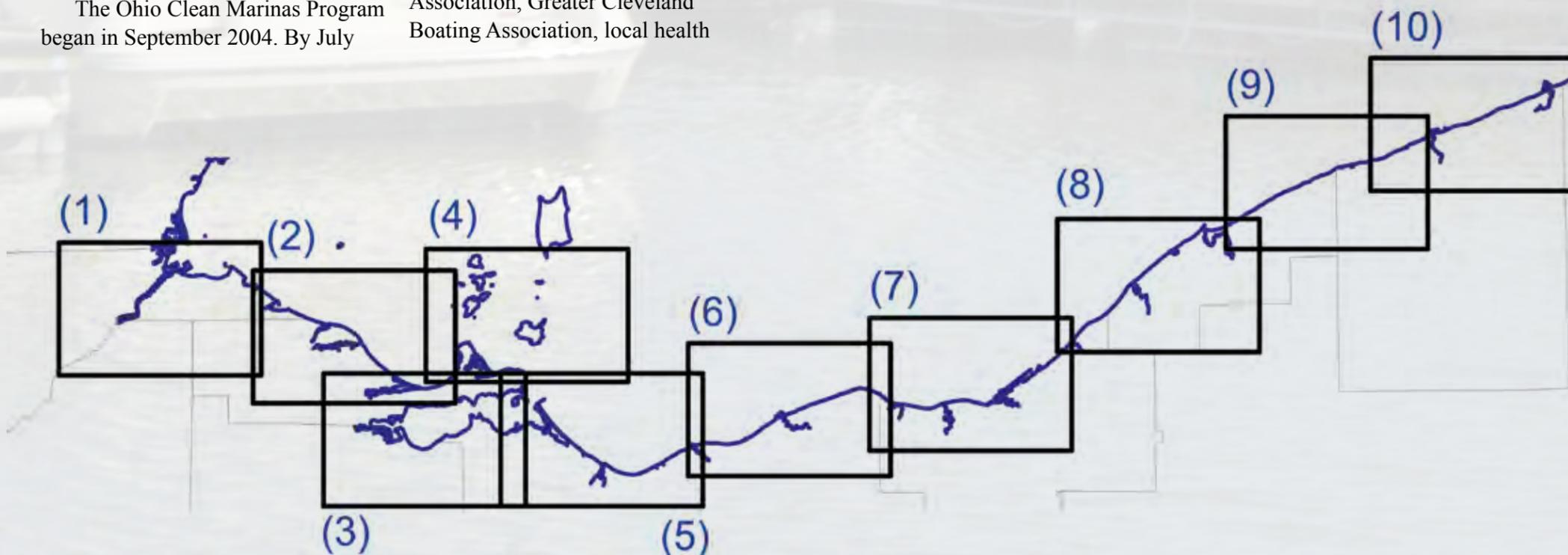
with boating and then having boaters pledge to take responsibility for their own boat by following environmental laws, rules and jurisdictions, and best boater practices.

The support and patronage of boaters pledging to be an "Ohio Clean Boater" is key to the success of the Ohio Clean Marinas Program. A grant has been received from the Lake Erie Protection Fund, Ohio Lake Erie Commission, to develop the clean boater program as a component of the Clean Marinas Program.

For more information/ Sources:

Ohio Clean Boater Program
Ohio Sea Grant College Program
Area 100 Research Center
1314 Kinnear Road
Columbus, Ohio 43212
www.sg.ohio-state.edu/cleanboaters/

ODNR Division of Watercraft, Clean Boaters
www.ohiodnr.com/watercraft/clean/



Navigation Guide for Boating Access Maps

Map Region 1: Toledo Area

Map Region 2: Locust Point Area

Map Region 3: Sandusky Bay Area

Map Region 4: Lake Erie Islands

Map Region 5: Sandusky and Huron Area

Map Region 6: Lorain Area

Map Region 7: Cleveland Area

Map Region 8: Painesville Area

Map Region 9: Arcola Creek Area

Map Region 10: Ashtabula and Conneaut Area

Background photo – Battery Park Marina, Sandusky, Erie County

Boating Access Identification



Mazurik Boating Access Area, Ottawa County



Shelby Street Public Boat Ramp, Sandusky, Erie County



Dempseys Boating Access Area, Ottawa County, with city of Sandusky in background



Moored at Kelleys Island, Erie County

Boating Access Map Identification Key

This identification key corresponds to the numbered points on the 10 Boating Access Maps.

ID#	Access	Municipality/Village
1	Side Cut Metropark	Maumee
2	Schroder's Farm	Perrysburg Twp.
3	Orleans Park	Perrysburg
4	Indian Hill Boat Club	Maumee
5	Hood Park	Perrysburg
6	Perrysburg Boat Club	Perrysburg
7	Maple Street Boat Ramp	Perrysburg
8	Corey Street Ramp	Maumee
9	Toledo Country Club	Toledo
10	Maumee River Yacht Club	Toledo
11	Toledo Sailing Club	Toledo
12	Walbridge Park Marina	Toledo
13	Lighthouse Banquet Hall & Café	Toledo
14	Rossford Marina	Rossford
15	Brenner 75 Marina	Toledo
16	International Park – The Docks	Toledo
17	Portside Docks – COSI	Toledo
18	Brenner Marine	Toledo
19	The New Harrison Marina	Toledo
20	Toledo Yacht Club	Toledo
21	Bayview Yacht Club	Toledo
22	Cullen Park Boat Launch	Toledo
23	Harbor View Yacht Club	Harbor View
24	Chamelon's on the River	Toledo
25	Anchor Inn	Toledo
26	Hammond Drive Launch	Toledo
27	Belpre Drive Launch	Toledo
28	President Drive Launch	Toledo
29	River Run Marina	Toledo
30	Chet's Marina	Toledo
31	Ottawa River Yacht Club	Toledo
32	Point Place Boat Club	Toledo
33	Jolly Roger Sailing Club	Toledo
34	Brenner Docks	Toledo
35	Riverview Yacht Club	Toledo
36	Jockett's Marina	Toledo

37	Bush Marina	Toledo
38	Bayshore Wildlife Access	Oregon
39	Maumee Bay State Park	Oregon
40	Bill's Lakemount Boats	Curtice
41	Anchor Pointe Boat-a-Minimum	Curtice
42	Cooley Canal Launch Ramp	Curtice
43	Meinke Marina West	Curtice
44	Meinke Marina East	Curtice
45	Metzger Marsh Launch Ramp	Curtice
46	Cooley Canal Yacht Club	Curtice
47	Turtle Creek Fishing Access	Carroll Twp.
48	Inland Marina	Carroll Twp.
49	Fenwick Marina	Carroll Twp.
50	Turtle Creek Marina	Carroll Twp.
51	Lumberjack's Marina	Carroll Twp.
52	Turtle Point Marina	Carroll Twp.
53	Al's Harbor	Carroll Twp.
54	Wild Wings Boat Harbor	Carroll Twp.
55	Toussaint State Wildlife Area	Carroll Twp.
56	Floro's Marina	Carroll Twp.
57	Evans Camp	Carroll Twp.
58	E & C Marina	Carroll Twp.
59	Toussaint River Marina	Carroll Twp.
60	Beef Creek Marina	Carroll Twp.
61	Brown's Marina	Carroll Twp.
62	LaCarpe Creek Yacht Club Marina	Erie Twp.
63	Lake Front Marina	Erie Twp.
64	Riverbend Campground	Salem Twp.
65	Chet's Place	Salem Twp.
66	Portage View Campgrounds	Erie Twp.
67	Little Portage State Wildlife Area	Bay Twp.
68	Erie Island Resort & Marina	Bay Twp.
69	Johnnie Camp & Marina	Bay Twp.
70	River Retreat Camp & Marina	Erie Twp.
71	EB's Place	Bay Twp.
72	Nugent Canal Yacht Club	Bay Twp.
73	Portage River Marina	Bay Twp.
74	White Caps	Erie Twp.
75	Portage River Wildlife Access	Erie Twp.
76	Jack Knife Marina	Erie Twp.
77	Vacation Land Marina	Port Clinton

78	Angel Bay Marina	Port Clinton
79	Witterhaven Marina	Port Clinton
80	Riverside Marina	Port Clinton
81	Brand's West Dock	Port Clinton
82	Happy Days Boating Co.	Port Clinton
83	Clinton Reef Club	Port Clinton
84	Coastal Marine II	Port Clinton
85	Brand's Marina	Port Clinton
86	Drawbridge Marina	Port Clinton
87	Port Clinton Yacht Club	Port Clinton
88	Lakeland Motel & Charters	Port Clinton
89	Vista Villa	Port Clinton
90	Knecht's Beach & Marina	Portage Twp.
91	Summer Breeze Assoc.	Portage Twp.
92	Northwest Catawba Marina	Catawba Island
93	Catawba Island Marina South	Catawba Island
94	Catawba Island Club	Catawba Island
95	Catawba Island State Park	Catawba Island
96	Harbor Park Marina	Catawba Island
97	West Harbor Marina	Danbury Twp.
98	Midway Marina Incorporation	Catawba Island
99	West Harbor Public Ramp	Catawba Island
100	Winke's Landing	Catawba Island
101	Anchor's Away Marina	Danbury Twp.
102	East Harbor State Park Marina	Danbury Twp.
103	N.E. Port Inc.	Catawba Island
104	Herl's Harbor	Catawba Island
105	Skyline View	Catawba Island
106	Catawba Moorings	Catawba Island
107	Hidden Harbor	Catawba Island
108	Marine Max Marina	Catawba Island
109	Foxhaven Marina	Catawba Island
110	Nor Easter Club	Catawba Island
111	Gem Beach Marina	Catawba Island
112	The Harbor's Edge	Danbury Twp.
113	East Harbor State Park Campground Ramp	Danbury Twp.
114	Harbor Haven	Danbury Twp.
115	Bass Haven Marina	Danbury Twp.
116	Marina del Isle	Danbury Twp.
117	Tibbel's Marina	Danbury Twp.

118	Marine City	Danbury Twp.
119	Harbor Winds	Danbury Twp.
120	Skipper's Marina Resort	Danbury Twp.
121	Mar-Lu	Danbury Twp.
122	Channel Grove Marina	Danbury Twp.
123	North Shore Estates	Danbury Twp.
124	Rocky Point Marina	Danbury Twp.
125	Little Ted's	Danbury Twp.
126	Lakevue Marina	Danbury Twp.
127	Marblehead Harbor Marina	Danbury Twp.
128	Shrock's Marina Inc.	Danbury Twp.
129	Mazurik State Wildlife Area	Danbury Twp.
130	Lakeside Marine Inc.	Lakeside
131	Island View Marina and Cottages	Marblehead
132	Orib Boat Club	Marblehead
133	Bay Point Marina	Marblehead
134	Taylor's Resort	Marblehead
135	Historic Harbor	Marblehead
136	Castaway Harbor	Danbury Twp.
137	Dempsey Wildlife Area	Danbury Twp.
138	South Beach Resort	Danbury Twp.
139	Behlke	Danbury Twp.
140	Camp Kozy & Marina	Danbury Twp.
141	Hank's Place	Danbury Twp.
142	South Bass Island State Park	South Bass Island
143	Oak Point State Park	Put-In-Bay
144	Scarpelli's Marina	Put-In-Bay
145	Millers Marina	Put-In-Bay
146	Put-in-Bay Yacht Club	Put-In-Bay
147	The Crew's Nest	Put-In-Bay
148	Boardwalk Marina	Put-In-Bay
149	DeRivera Park	Put-In-Bay
150	Put-in-Bay Village Marina	Put-In-Bay
151	Fox's Dock	Put-In-Bay
152	Ladd's Marina	Put-In-Bay
153	East Point Cottages	South Bass Island
154	Middle Bass Island State Park Marina	Middle Bass Island
155	Burgundy Bay	Middle Bass Island
156	Schmidlin Hidden Harbor	Middle Bass Island
157	Kelleys Island State Park	Kelleys Island

Boating Access Identification

158	SunSet Point	Kelleys Island	198	Huron North, Inc.	Huron	238	Captain Krumreig & Sons	Lakewood	273	Pacer's Restaurant Docks	Eastlake	292	Madison Township Park	Madison Twp.
159	Pleasant View Cottages	Kelleys Island	199	Huron Yacht Club	Huron	239	Emerald Necklace Marina (Rocky River Reservation)	Lakewood	274	Eastlake Marina	Eastlake	293	Lake Breeze Park	Madison Twp.
160	Craft's Lakeview Lane	Kelleys Island	200	Huron Municipal Boat Basin	Huron	240	Edgewater Yacht Club	Cleveland	275	Borac's Landing	Eastlake	294	Geneva State Park Marina	Geneva-on-the-Lake
161	Portside Marina	Kelleys Island	201	Cranberry Creek Marina	Berlin Twp.	241	Edgewater Marina	Cleveland	276	Mentor Harbor Yacht Club	Mentor-on-the-Lake	295	Redbrook Boat Club	Saybrook Twp.
162	The Casino Restaurant & Lounge	Kelleys Island	202	Water Works Marina	Vermilion	242	Cleveland Lakefront State Park – Edgewater Park Marina	Cleveland	277	Mentor Lagoons Marina	Mentor	296	River Marine	Ashtabula
163	Unique Marker Yacht Club	Kelleys Island	203	Vermilion Yacht Club	Vermilion	243	Channel Park Marina	Cleveland	278	Grand River Marine Inc., Fairport	Fairport Harbor	297	Ashtabula City Port Authority	Ashtabula
164	Seaway Marina	Kelleys Island	204	Vermilion Boat Club	Vermilion	244	Olde River Yacht Club	Cleveland	279	Grand River Marine Inc.	Grand River	298	Marshall Marina	Ashtabula
165	Tackle Box 2	Fremont	205	Moe's Marine Inc.	Vermilion	245	Whiskey Island Marina	Cleveland	280	Douglas & McLeod	Grand River	299	Sutherland Marine	Ashtabula
166	Riverfront Marina	Rice Twp.	206	Don Parson Inc.	Vermilion	246	Scaravelli's	Cleveland	281	Rutherford Landing	Grand River	300	Ashtabula Yacht Club	Ashtabula
167	Memory Marina	Riley Twp.	207	McGarvey's Landing	Vermilion	247	Commodore's Club Marina	Cleveland	282	Grand River Yacht Club	Grand River	301	Kister Marina	Ashtabula
168	Muddy Creek Bait & Tackle	Rice Twp.	208	Vermilion Power Boat Inc.	Vermilion	248	Nautica Boardwalk	Cleveland	283	Fairport Harbor Yacht Club	Fairport Harbor	302	Riverside Yacht Club	Ashtabula
169	Bay Harbor Marina	Vickery	209	Captain's Corner	Vermilion	249	North Coast Harbor – Voinovich Bicentennial Park	Cleveland	284	Fairport Rod & Reel	Fairport Harbor	303	Harbor Yacht Club of Ashtabula	Ashtabula
170	The Cove Inn	Vickery	210	Romp's Watersport	Vermilion	250	Lakeside Yacht Club	Cleveland	285	River's Edge Yacht Club – Riverbend Marina	Fairport Harbor	304	Jack's Marine Inc.	Ashtabula
171	Bob Clemons Boats & Marina	Bay View	211	Vermilion Public Launch, South Street Ramp	Vermilion	251	Forest City Yacht Club	Cleveland	286	Riverbend Marina #2	Fairport Harbor	305	Ashtabula Recreational Unlimited	Ashtabula
172	Resthaven State Wildlife Area, Pond #8	Castalia	212	Bulan's Boatyard	Vermilion	252	Sailing Inc.	Cleveland	287	Western Reserve Yacht Club	Fairport Harbor	306	Brockway/Northcoast Marina & Yacht Club	Ashtabula
173	Cold Creek Trout Camp	Sandusky	213	Valley Harbor Marina	Vermilion	253	Quay 55	Cleveland	288	Fairport Harbor Port Authority Boat Launch	Fairport Harbor	307	Northcoast Marina	Ashtabula
174	Sandusky Harbor Marina	Sandusky	214	West Shore Boat Club	Vermilion	254	Cleveland Lakefront State Park – E. 55th St. Marina	Cleveland	289	Harbor Town Point	Fairport Harbor	308	Lakeshore Park Ramp	Ashtabula
175	Sandusky Municipal Ramp	Sandusky	215	Key Harbor Marina	Vermilion	255	Intercity Yacht Club	Cleveland	290	Perry Township Park	Perry Twp.	309	Conneaut Port Authority	Conneaut
176	Deep Water Marina	Sandusky	216	Riverside Marina	Vermilion	256	Cleveland Lakefront State Park – Gordon Ramp	Cleveland	291	North Townline Park	North Perry	310	Conneaut City Marina	Conneaut
177	Dock of the Bay Marina	Sandusky	217	Mario's Landing	Vermilion	257	Newport Harbor	Bratenahl				311	Conneaut Boat Club, Inc.	Conneaut
178	Sandusky Yacht Club	Sandusky	218	Maple Grove Marina & Park	Vermilion	258	North East Yacht Club	Cleveland						
179	Battery Park Marina	Sandusky	219	Riverview Inc. RV Park & Marina	Vermilion	259	Cleveland Lakefront State Park – Wildwood Ramp	Cleveland						
180	Sadler Sailing Basin	Sandusky	220	Beaver Park North	Lorain	260	Wildwood Yacht Club	Cleveland						
181	Shepard's Shoreline/Craft Marine	Sandusky	221	Beaver Park Marina	Lorain	261	Chagrin Lagoons Yacht Club	Eastlake						
182	Battery Park Marine Service	Sandusky	222	Dickason Marina	Lorain	262	Chagrin Harbor Beach Yacht Club	Eastlake						
183	Son Rise Marina	Sandusky	223	Copper Kettle Marine	Lorain	263	LeVan's Landing	Eastlake						
184	Lyman Harbor Marina	Sandusky	224	Lorain City Park & Launch	Lorain	264	Sima Marine	Eastlake						
185	Venetian Marina	Sandusky	225	Lorain Sailing & Yacht Club	Lorain	265	East Island Marina	Eastlake						
186	Cedar Point Marina	Sandusky	226	Spitzer Lakeside Marina	Lorain	266	Lake County Yacht Club	Eastlake						
187	Pipe Creek Marina	Sandusky	227	Lakeside Launch	Lorain	267	Chagrin River Yacht Club	Eastlake						
188	Monroeville Marina	Sandusky	228	Riverside Park	Lorain	268	Eastlake Port Authority Boat Ramp	Eastlake						
189	Castaway Bay Marina	Sandusky	229	Gene's Marine Sales & Service	Lorain	269	Deck Lounge	Eastlake						
190	Mariner Village Marina	Huron	230	Spitzer Riverside Marina	Lorain	270	East Bank Marina	Eastlake						
191	Huron River Valley Resort	Huron Twp.	231	Black River Wharf Launch	Lorain	271	West Channel Yacht Club	Eastlake						
192	Huron Lagoons Marina	Huron	232	Miller Road Boat Launch	Avon Lake	272	South Shore Yacht Club	Eastlake						
193	Holiday Harbor Marina	Huron	233	Avon Lake Boat Club	Avon Lake									
194	Huron River Marina Inc.	Huron	234	Bay Boat Club	Bay Village									
195	Walski's Boat Ramp	Huron	235	Clifton Beach – Docks	Lakewood									
196	Gull Harbor Sailing Club	Huron	236	Cleveland Yacht Club	Rocky River									
197	Huron Marine Park	Huron	237	Marina at the Westlake	Rocky River									



East Harbor State Park docks, Ottawa County

Boating Access Map Region 1 – Toledo Area



Maumee Bay State Park, Lucas County



ODNR Division of Watercraft boat and officers, Lucas County



Happy Lake Erie boaters



Lake Erie sailing



Map 16 GIS data citation in Appendices

Boating Access Map Region 2 – Locust Point Area



NATIONAL STATISTICS

An estimated 72 million Americans participated in recreational boating during 2003.

The number of recreational watercraft owned in the U.S. in 2003 was estimated at 17.5 million.



Map 16 GIS data citation in Appendices

Boating Access Map Region 3 – Sandusky Bay Area



Kelleys Island, Erie County



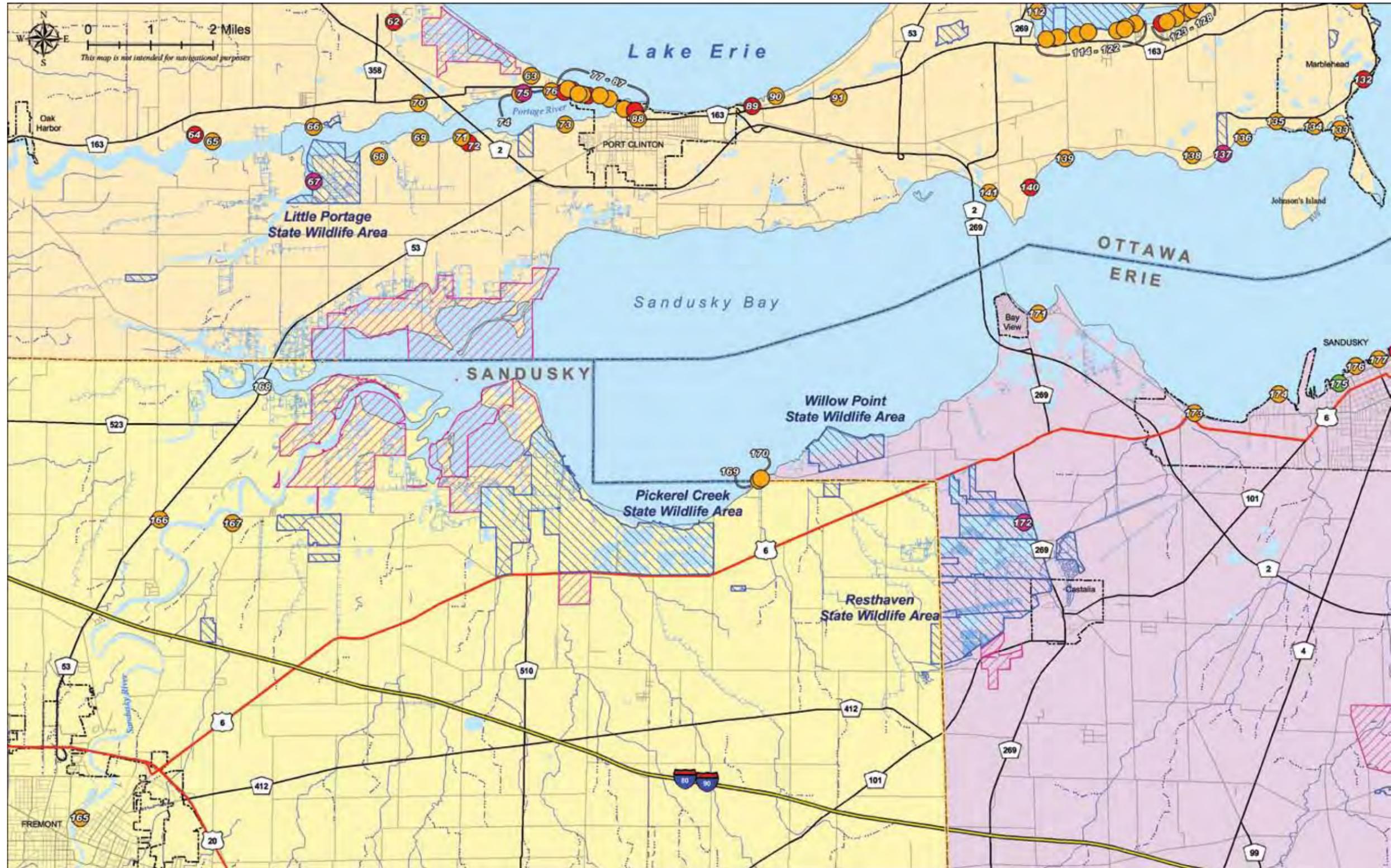
East Harbor State Park, Ottawa County



Middle Bass Island, Ottawa County



Kelleys Island, Erie County



Map 16 GIS data citation in Appendices

Boating Access Map Region 4 – Lake Erie Islands



OHIO STATISTICS

Ohio ranks eighth nationally in the number of registered watercraft.

An estimated 3 million Ohioans go boating each year.

Ohio's population increased 4.7 percent from 1990 to 2000. During the same period, the number of registered recreational watercraft increased 10.1 percent from 378,249 to a record 418,701.

There were 414,938 recreational watercraft registered in Ohio in 2004.

There are more than 100 boat, trailer, accessory and engine manufacturers in Ohio.



Map 16 GIS data citation in Appendices

Boating Access Map Region 5 – Sandusky and Huron Area



Sandusky, Erie County



Huron Harbor, Erie County



Boating on the Huron River, Erie County



Sailing past the Lorain lighthouse, Lorain County



Map 16 GIS data citation in Appendices

Boating Access Map Region 6 – Lorain Area



ECONOMIC IMPACT

Recreational boating in Ohio contributes an estimated \$2 billion annually to the state's economy and supports more than 19,000 jobs.

Boaters paid \$5.4 million in watercraft registration fees in 2004.

Excluding boat payments, the typical boat owning household spends an average of \$6,000 annually on recreational boating.



Map 16 GIS data citation in Appendices

Boating Access Map Region 7 – Cleveland Area



Sailing with a downtown Cleveland backdrop, Cuyahoga County



Dockage in the city of Lorain, Lorain County



Cleveland Lakefront State Park, Cuyahoga County

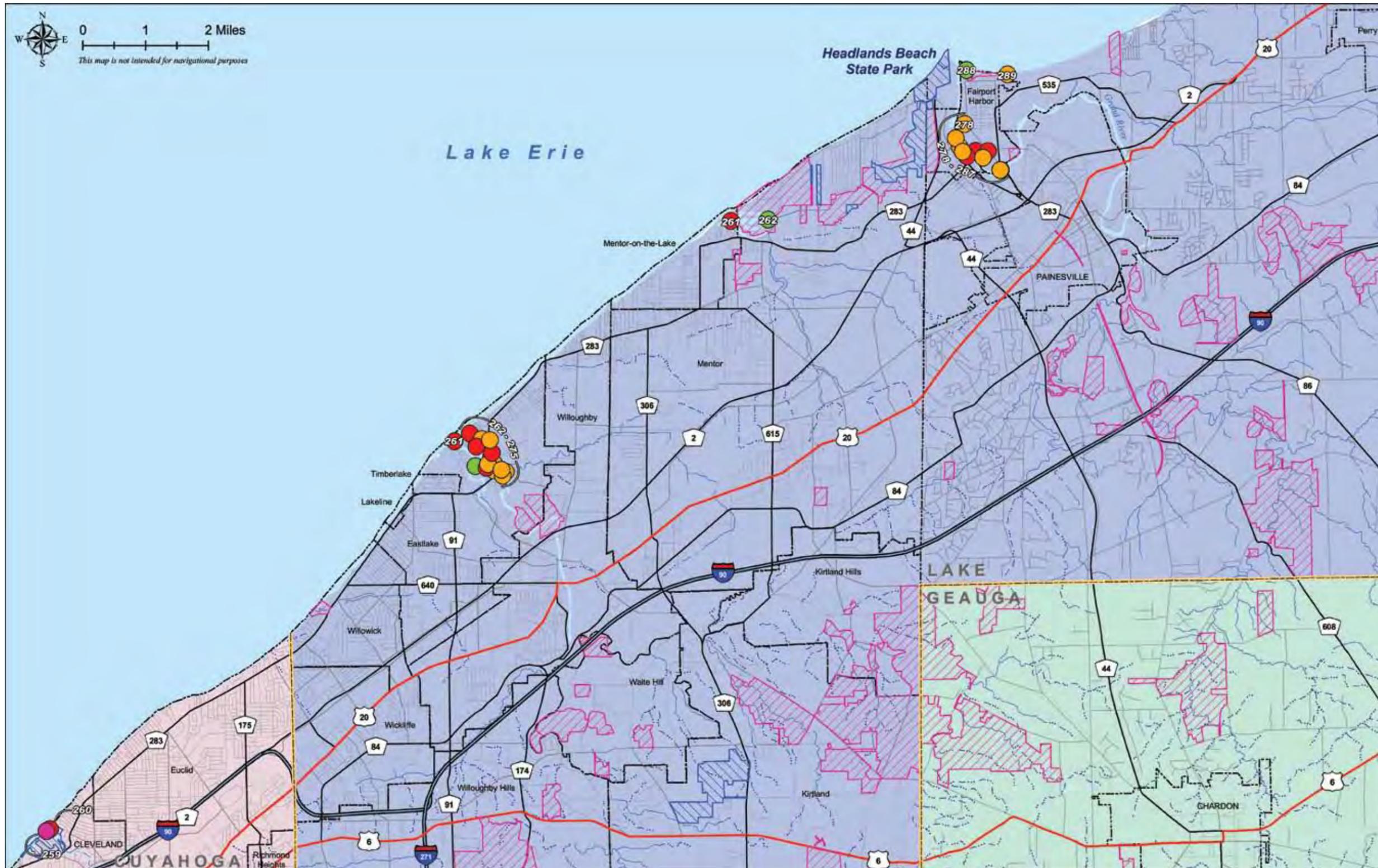


Cruising past the Cleveland West Pierhead Lighthouse, Cuyahoga County



Map 16 GIS data citation in Appendices

Boating Access Map Region 8 – Painesville Area



THE AVERAGE BOAT

The average boat in Ohio is 20 feet long and 15 years old.



Map 16 GIS data citation in Appendices

Boating Access Map Region 9 – Arcola Creek Area



Lake Erie boating



Geneva State Park, Ashtabula County



Boat ramp at Geneva State Park, Ashtabula County

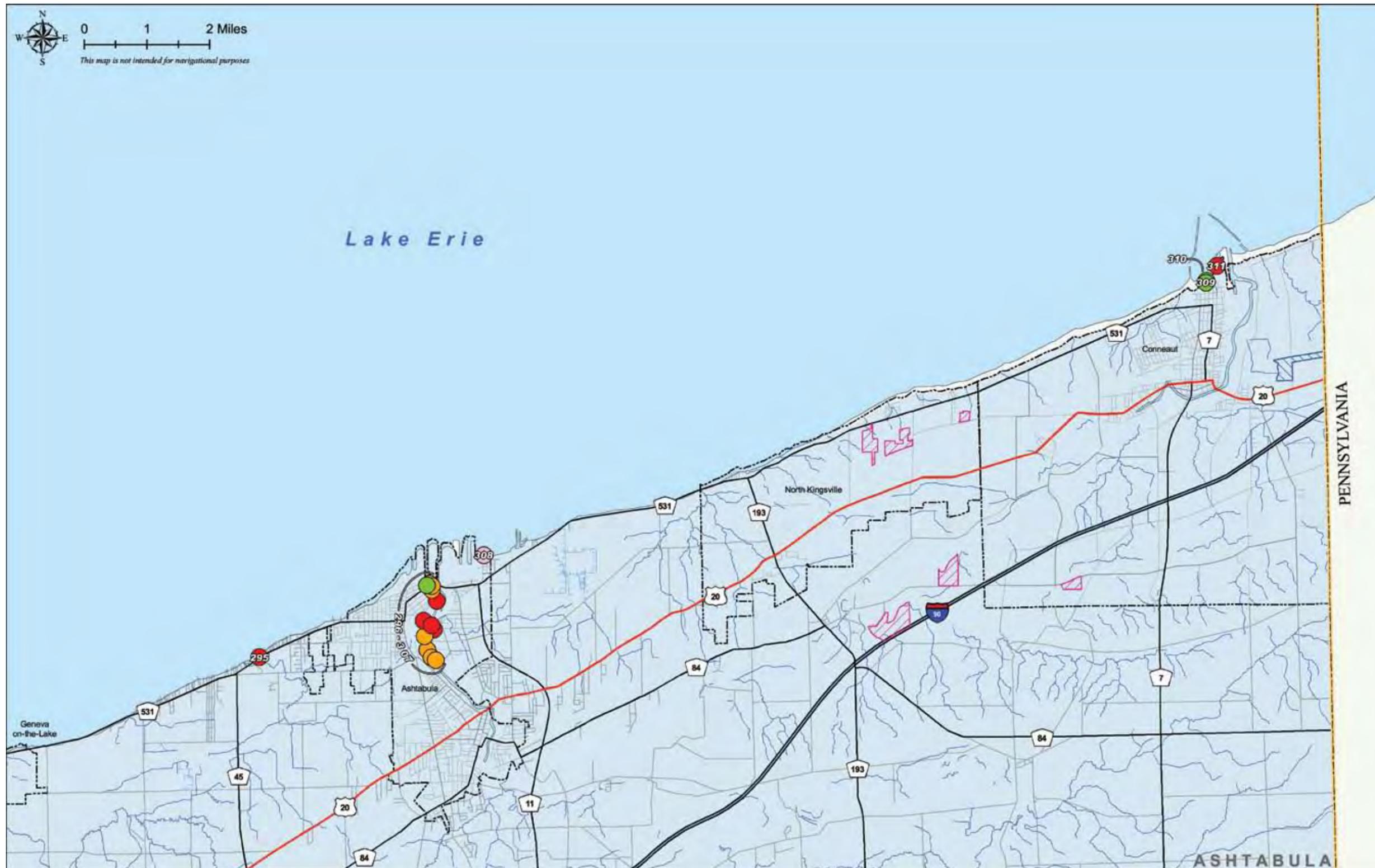


Sailing on Lake Erie



Map 16 GIS data citation in Appendices

Boating Access Map Region 10 – Ashtabula and Conneaut Area



Map 16 GIS data citation in Appendices



THE AVERAGE BOATER

The average Ohio boater is 53 years old with an annual household income of more than \$74,300.

Boaters spend half their boating time fishing.

69 percent of owners keep their boats at home during the boating season; 74 percent do so during the off-season.

Ohio's Lake Erie Lighthouses

Lighthouses

Often referred to as majestic beacons, lighthouses are silent sentinels that throughout time have guarded mariners sailing offshore on coastal waterways. Many in the Great Lakes have stood for well over a century, successfully resisting the forces of the wind and water. Their survival is a testament to innovative architecture and the craftsmanship of their construction. Each lighthouse – at least 24 of which have graced Ohio's coast – has its own tales. Many outdoor recreation enthusiasts enjoy seeking out and recording their own lighthouses memories.

Perhaps the most famous of Ohio's lighthouses is the Marblehead Lighthouse, the third built on Lake Erie and the oldest continuously operating lighthouse on the Great Lakes. This and other Ohio lights are featured later in the text as well as noted on maps in this chapter.

While not a lighthouse, the illuminated Perry's Victory and International Peace Memorial on South Bass Island serves as a navigational tool for boaters. The Manhattan Range Front and Rear lights which stood 80-foot tall and guarded the mouth of the Maumee River are now located at Toledo's Lighthouse Café and at H. Hansen Industries respectively.

While these and other lighthouses used to be watched over by keepers, modern technology has automated all light stations in the United States and eliminated the need for such personnel. Keeper's houses, which now serve as museums, are also popular destinations for those seeking to learn more about a light's history. There is no state lighthouse preservation society in Ohio, but many of the towers are supported by local groups and some are open for public tours.

Toledo Harbor Light

This three-story Romanesque structure and attached 72-foot lighthouse tower has guarded Toledo's harbor since 1904 from an artificial island about 8 miles from the mouth of the Maumee River. The lighthouse was commissioned after the Army Corps of Engineers dredged a deep water channel linking Lake Erie to the Maumee River and the thriving port of Toledo. Construction of the lighthouse began in 1901 with the sinking of a crib in approximately 21 feet of water. Beginning in the 1870s, crib foundations were used almost exclusively on the Great Lakes. Wooden cribs were constructed on the mainland, towed to the site, and then filled with stones and sunk. Concrete capped the foundation. When it was built, the lighthouse was considered the most modern facility of its kind anywhere in the world. The lighthouse was automated in 1965, but it still retains its Third-and-½ Order Fresnel lens.

Noteworthy:

In 1986, the United States Coast Guard put a mannequin dressed in a lighthouse keeper's uniform in a second-story window to prevent vandalism. Boaters soon started a rumor that this was a ghost, and it quickly became known as the Phantom of the Light.

Turtle Island Light

Turtle Island lies just outside Maumee Bay about 5-miles northeast of the mouth of the Maumee River. The island defines part of the boundary between Ohio and Michigan, with the ruins of a lighthouse on the Ohio side of the island.

The once nearly 7-acre island served as a fort in 1794. In 1827 the island was sold at auction, but repurchased by the federal government to establish a lighthouse there for the rapidly growing Toledo harbor. By this time, due to erosion, the island had been reduced to 1.5 acres because, unlike most other Lake Erie islands which consist of rock outcroppings, Turtle Island consists primarily of clay and gravel.

The first light on the island was a 44-foot tall structure on the north end of the island with a lamp visible to about 6 miles. In 1857, a new Fresnel lens and reflecting system was installed, increasing visibility of the original lamp to 14 miles.

After the Civil War, a new 45-foot tower was built, the light on which first operated in September 1866. However, by the beginning of the 20th century, increasingly larger ships used for shipping on the Great Lakes were not able to use the shallow shipping lane near Turtle Island. A new deeper channel was built, and in 1904, the Toledo Harbor Lighthouse was completed. The Turtle Island Light was subsequently decommissioned on May 15, 1904.

After decommissioning, the island was sold at auction and the lens and lighting apparatus were removed. The lighthouse fell victim to vandalism, and by the late 1920s, everything except for the bare walls had been removed or destroyed. Ruins of the square, brick tower lighthouse still stand on the privately owned island.



West Sister Island Lighthouse, Lucas County

West Sister Island Light

A lighthouse was established on the western-most point of West Sister Island in 1848 to mark the west end of the South Passage through Lake Erie's Bass Islands. The tower was renovated in 1868, and a keeper's dwelling was constructed. Today the conical limestone and brick tower rises to a height of 55 feet. Originally crowned with a fourth-order Fresnel lens in 1848, the light performed its daily function undisturbed for almost ninety years. In 1937, the same year the island was established as a refuge and breeding ground for migratory birds and other wildlife, and the light was automated with a 300mm lens and solar power cell.

West Sister Island was used by the United States Army for artillery practice during World War II. While neither the wildlife population nor the lighthouse suffered significant damage, the keeper's quarters were destroyed, and it is reported that fuel tanks, jettisoned by dive bombers, can still be found on the island. In January 1975, the government designated 77 of West Sister Island's 82 acres as wilderness. The United States Fish and Wildlife Service (USFWS) maintains ownership of this portion, while the U.S. Coast Guard owns the lighthouse and the remaining five acres.

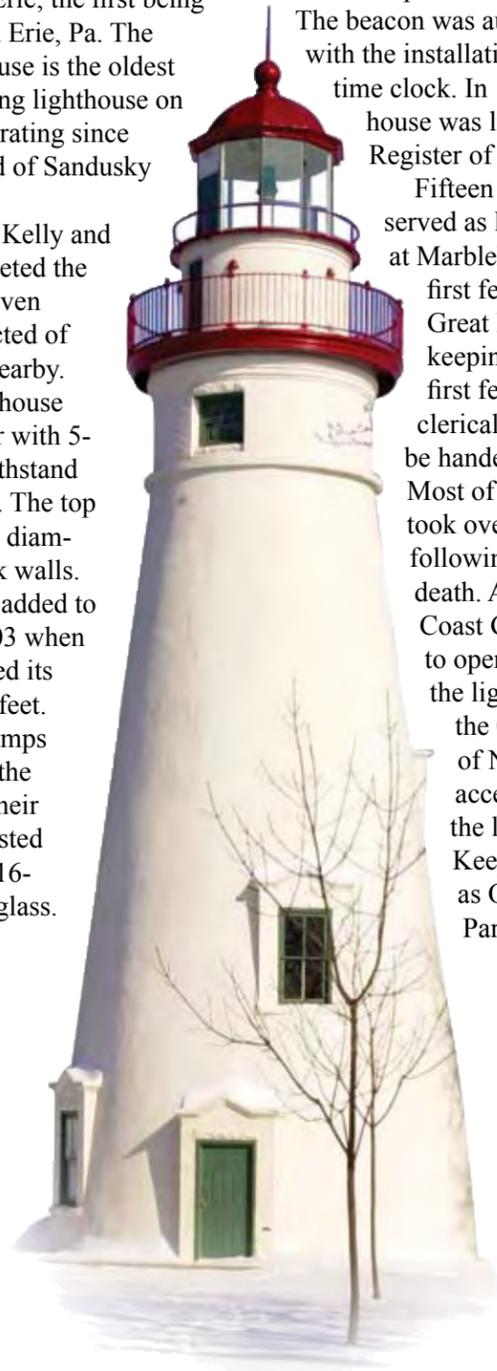
Background photo – Toledo Harbor Lighthouse

Ohio's Lake Erie Lighthouses

Marblehead Light

In 1819, the 15th U.S. Congress set aside appropriations to build the second lighthouse on Lake Erie; the first being built a year earlier in Erie, Pa. The Marblehead Lighthouse is the oldest continuously operating lighthouse on the Great Lakes, operating since 1822 at the north end of Sandusky Bay.

Builder William Kelly and two assistants completed the lighthouse in just eleven weeks. It is constructed of limestone quarried nearby. The base of the lighthouse is 25 feet in diameter with 5-foot-thick wall to withstand Lake Erie's beatings. The top narrows to 12 feet in diameter with 2-foot-thick walls. Another 15 feet was added to the lighthouse in 1903 when the lighthouse reached its present height of 67 feet. Thirteen whale oil lamps had to be ignited by the lighthouse keeper. Their flames were broadcasted across the lake by a 16-inch reflector of cut glass.



Background photo – Marblehead Lighthouse, Ottawa County

In 1858, a fourth order Fresnel lens was added. The lighthouse was converted to electricity in 1923, and the last lighthouse keeper left his post in 1946.

The beacon was automated in 1958 with the installation of an electric time clock. In 1969, the lighthouse was listed in the National Register of Historic Places.

Fifteen men and women served as lighthouse keepers at Marblehead, including the first female keeper on the Great Lakes. Lighthouse keeping was one of the first federal non-clerical jobs permitted to be handed over to women. Most of the female keepers took over for their husbands following retirement or death. Although the U.S. Coast Guard continues to operate and maintain the lighthouse beacon, the Ohio Department of Natural Resources accepted ownership of the light and Wolcott Keeper's House in 1998 as Ohio's 73rd State Park.

Green Island Light

In December 1851, the U.S. Government purchased Green Island for \$5,000. By 1855 a wooden structure with a tower attached to the keeper's quarters, similar to the Cedar Point Lighthouse, had been built at the west end of the island.

The lighthouse went up in flames on New Year's Eve in 1863 during a fierce winter storm. By July 1865, a new, two-story lighthouse had been built on Green Island. The square tower and its adjoining keeper's house were made of limestone.

In 1926, the U. S. Lighthouse Service abandoned the lighthouse but the light was active until 1939, when the Coast Guard replaced it with an automated light on top of a skeletal tower.

Green Island eventually became a wildlife refuge, managed by the Ohio Department of Natural Resources. The light is no longer operational, and the island is no longer open to the public. Vandals set fire to the lighthouse, leaving behind only a shell of limestone, which is now overgrown with thick vegetation.



Green Island Lighthouse, Ottawa County

Rattlesnake Light

Rattlesnake Island, consisting of 85 acres, is located 2 miles northwest of Put-in-Bay, past Gibraltar Island. Some claim the island got its name because it was once covered with rattlesnakes, while others say the name is derived from the shape, with the two tiny islands off its western tip representing the rattles. Little is known about the small lighthouse that was built at the end of a pier on the island sometime after 1968. Today the entire island is a privately owned resort, purchased in 1992 for \$4.6 million. It is readily accessible only to the 50 members of the Rattlesnake Island Club, the list of which is kept private. Sale of property on the island is controlled by the island club.



Rattlesnake Island Lighthouse, Ottawa County

South Bass Island Light

As the islands lured more settlers following the War of 1812, commerce quickly increased. Rocky reefs and shallow waters, made navigation to the islands particularly treacherous. The South Passage, a navigational route between Marblehead, Kelleys Island and South Bass Island, needed assistance in guiding vessels safely, especially in the late autumn when a winter storm could churn the shallow waters of Lake Erie with little warning.

The problems associated with increased boat traffic in the South Passage were brought to the attention of the U.S. Lighthouse Board, which approved the construction of a lighthouse in 1893. The South Bass Lighthouse first operated in 1897, illuminated by a fourth order Fresnel lens. The lighthouse

operated from late March through late December, and had a string of lighthouse keepers until an automated steel tower was installed in 1962.

Unlike other lighthouses with large towers and a separate house for the keeper, the South Bass Island Lighthouse is a Queen Anne style brick home with an attached tower. In 1983, the National Oceanic and Atmospheric Administration (NOAA) installed a meteorological station that enables satellite transmission of weather information to the National Weather Service. Noting the many research advantages of the site and its proximity to the Ohio State University's Stone Laboratory, lighthouse ownership was transferred from the federal government to the university in 1997. The Coast Guard continues to own and maintain the tower.



South Bass Island Lighthouse, Ottawa County

Ohio's Lake Erie Lighthouses



Huron Harbor Lighthouse, Erie County

Huron Harbor Light

The mouth of the Huron River was one of the first Ohio ports to be settled. As early as 1749, a French trading post operated from this port, although it was abandoned during the war with the British. In 1805, a Canadian Frenchman opened another trading post along the Huron River. By 1824, there was a small boarding house for workers at the harbor and a few log cabins, including one housing Huron's first shipbuilder. Other shipbuilders followed and Huron became a major builder of wooden ships by 1834. The first lighthouse was built a year later, and its concrete foundation can still be seen today.

A modern white steel light currently marks the entrance to the Huron Harbor. Its 72-foot-tall tower was built in 1936 on a pier that extends from the shore. Two similar lighthouses were built the same year, with Huron's "sister" lighthouse still standing in Conneaut. The light was formerly operated by remote control from a brick station on shore and it had a lantern on the top. The light was automated in 1972 and is managed by the U.S. Coast Guard.

Vermilion Light

In 1847, Congress appropriated \$3,000 to build a lighthouse and prepare the head of the pier on which it would be built. Prior to 1847, the people of Vermilion had constructed their own navigational aid: wooden stakes topped with oil-burning beacons at the entrance of the harbor.

In 1852, both the lighthouse and the pier were repaired. Seven years later, the lighthouse was rebuilt from wood and topped with a sixth order Fresnel lens. By 1866, Congress had appropriated funds to build a new light made of iron on the west pier.

Once completed in 1877, the iron tower of three tapering rings, octahedral in shape, measured 34 feet high and stood at the end of the pier with a long 400-foot-long catwalk running above it. This allowed the lighthouse keeper to travel between the light and the mainland when large waves crested over the pier.

The lamp was converted to acetylene in 1919, and then eventually into an electric beacon shining a steady red beam. In the summer of 1929, the Vermilion Lighthouse began leaning toward the river. The U.S. Army Corps of Engineers had the lighthouse dismantled and hauled away, despite an offer to move it to private property. In its place, a steep-sided 18-foot steel pyramidal tower was erected. The new structure continued to shine a red light.

By 1991, donations to the Great Lakes Historical Society Inland Seas Maritime Museum resulted in enough funds to build a 16-foot replica of Vermilion's 1877 lighthouse and make the light a working lighthouse. The replica light, dedicated June 6, 1992, is still operational, serving as part of the museum and an active aid to navigation.

Shortly after the replica light was built, the residents of Vermilion learned their original lighthouse had been in working order since 1935, sitting off Cape Vincent (Lake Ontario) at the entrance to the Saint Lawrence Seaway.

Lorain Breakwater Light

Lorain's first "light," in 1837, was a lantern hanging on a pole at the edge of Lake Erie. At least two other lighthouses stood guard over the Lorain Harbor until the existing Lorain Lighthouse was constructed in 1917. This concrete building with steel walls was built to withstand Lake Erie storms. The walls are more than 10 inches thick and even the baseboards and window frames are made of steel. Originally outfitted with a fourth order Fresnel lens, the beacon was replaced with a small red Coast Guard warning light before the lighthouse was decommissioned in 1965.

The lighthouse was replaced with an automated light at the west tip of the harbor breakwall.

The lighthouse was scheduled for immediate demolition in 1965 but community members rallied behind this historic beacon and won. Bad weather prevented the lighthouse from being razed during the winter of 1966, which gave the community time to make their case. The lighthouse was purchased by the Lorain Historical Society in 1977, and is now owned by the Port of Lorain Foundation, Inc. In 1978 the Lorain Lighthouse was placed on the National Register of Historic Places. It is also noted as a Special Management Area (SMA), Area for Preservation and Restoration (APR) in the Ohio Coastal Management Program.

Cleveland Harbor West Breakwater Light

Located on a bluff where West 9th Street is today, the first lighthouse was built in 1829 near the Cuyahoga River. This 63-foot-tall lighthouse was built by Levi Johnson, a shipwright and home builder. He also constructed the Cedar Point lighthouse in 1836 and placed the buoys in Sandusky Bay. Johnson later oversaw the building of a 700-foot-long stone pier east of the Cuyahoga River.

A long breakwater was later constructed to protect Cleveland Harbor with lighthouses positioned at both ends. The 67-foot-tall West Breakwater Light was built in 1911 and attached to a fog signal building constructed a year earlier. The small building adjacent to the lighthouse housed a lighthouse keeper and two assistants beginning in 1910.

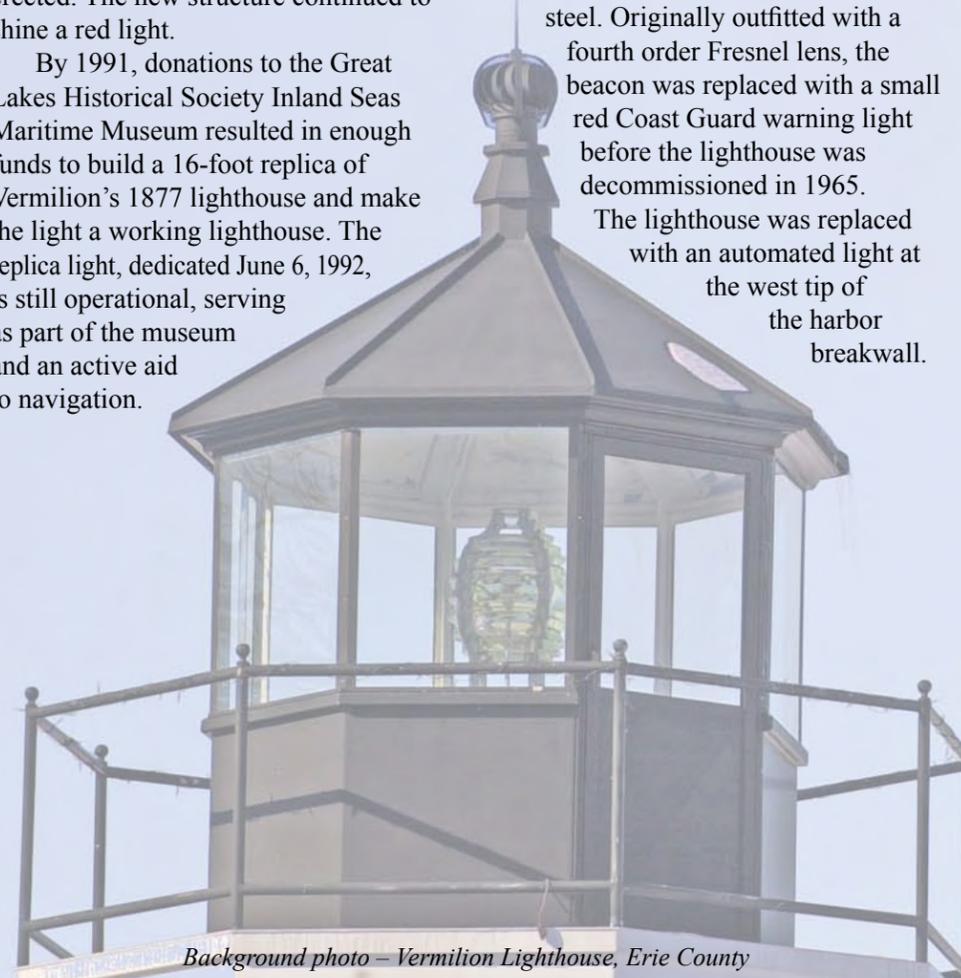


Cleveland Harbor West Pierhead Lighthouse, Cuyahoga County

The lighthouse protected the harbor until it was automated in 1965. The original fourth order Fresnel lens was removed in 1995 and is on display at the nearby Great Lakes Science Center.



Lorain Breakwater Lighthouse, Lorain County



Background photo – Vermilion Lighthouse, Erie County



Cleveland Harbor West Breakwater Lighthouse, Cuyahoga County

Ohio's Lake Erie Lighthouses

Fairport Harbor West Breakwater Light

The 42-foot tower, with its attached white brick two-story keeper's cottage, sits at the end of the west breakwater protecting the manmade harbor of Fairport. The harbor, in turn, protects the mouth of the Grand River, an important regional commercial hub.

The original Fairport Harbor Light (now a museum) fell into disrepair. The current Fairport Harbor West Breakwater Lighthouse was erected in June 1925.

The West Breakwater Light is constructed of steel-framed brick, and rests on a concrete pierhead. The original fourth order Fresnel lens flashed a white light, three seconds on and three seconds off. When the Fairport Harbor Breakwater Light was automated, the Fresnel lens was replaced with a 300 millimeter optic.

Still an active aid to navigation, it is owned and managed by the Coast Guard; however, as of March 1, 2006, the Coast Guard was looking to sell the lighthouse. A group of Lake County leaders wants a willing entity to assume its ownership and give public tours. The lighthouse is currently closed to



Fairport Harbor West Breakwater Lighthouse, Lake County

the public, but visitors wishing to get a better look at the light can walk along the breakwater.

Fairport Harbor Marine Museum and original Lighthouse

The Fairport Harbor Lighthouse was completed in 1825 and once stood 30 feet high. It was capped with an iron lantern. The tower and keeper's house were replaced in 1871, and the tower now stands 60 feet and has a 69-step spiral staircase leading to an observation platform with a breathtaking view of Lake Erie. The lighthouse was replaced by a combination light and foghorn station built on the west breakwater pier in 1925.

The adjacent museum, housed in the former lighthouse keeper's home, harbors the third order Fresnel lens which once operated in the lighthouse. Listed as a National Historic Landmark, the Fairport Harbor Marine Museum and Lighthouse showcases Great Lakes artifacts and displays, including maritime and industrial heritage. Founded in 1945, the museum was the first Great Lakes marine museum to be housed in a U.S. lighthouse.



Fairport Harbor Marine Museum and original Lighthouse, Lake County

Ashtabula Light

The first lighthouse along the Ashtabula River was built in 1836. This light sat upon a wood crib and was connected to the pier by a ramp. Its flame was fueled by sperm whale oil. When a new dock facility was constructed along the west pier, another lighthouse was built in 1876. This lighthouse was improved by the addition of a fourth order Fresnel lens in 1896.

The present lighthouse was constructed in 1905. Civilian keepers manned the lighthouse from a mainland house that now serves as the Great Lakes Marine and Coast Guard Memorial Museum. Ownership of the lighthouse was transferred to the U.S. Coast Guard in 1915. A year later, the lighthouse was moved to its present location and remodeled to accommodate on-site quarters for the keepers. The Ashtabula light, automated in 1973, was the last manned lighthouse on Lake Erie.



Ashtabula Lighthouse, Ashtabula County

Conneaut Harbor West Breakwater Light

With a "sister" tower in Huron, the Conneaut Harbor West Breakwater lighthouse is an operational 60-foot steel tower. Keeper's quarters and supply areas are located on the shore and are currently operated by the U.S. Coast Guard. Built in 1936, the tower is of an Art Moderne style. It was first built with the lantern of a previous lighthouse that guarded this harbor as early as 1835. The lighthouse was automated in 1972. Its black band around the tower serves as a navigational aid during the day.

Lighthouse Text Sources:

www.sanduskyohiocedarpoint.com
www.erie-county-ohio.net
www.cyberlights.com
www.circle-erie.com
www.coastalohio.com
www.michiganlights.com
www.lanternroom.com

Verbal by Steve Holland, ODNR Office of Coastal Management

Willoughby News Herald, Feb. 14, 2006

www.lighthousefriends.com
www.wikipedia.org

Background photo – Conneaut Harbor West Breakwater Lighthouse, Ashtabula County

Fresnel Lenses

America's first lighthouse used a system of silvered reflectors to intensify the main light source, a whale-oil lamp. By the 1850s, the government authorized use of a technology new to United States, a multiprismed lens invented by French physicist Augustin Fresnel in 1822.

The Fresnel Lens was much more efficient at collecting and directing the light rays and produced a beam five times more powerful than the reflector system previously used. To take maximum advantage of the higher light intensity, the light had to be placed high enough to compensate for the curvature of the earth. When mounted 100 feet above water level, it had a visible range of up to 18 miles.

Early lens designs resembled a giant glass beehive, with a light at the center. The lens could be as tall as 12 feet height with concentric rings of glass prisms above and below a center drum section to bend the light into a narrow beam. The glass prisms are shaped and positioned in such a way that the light from the single source inside the lens is reflected outward horizontally through each prism. In this way, the light streaming outward in all directions is maximized into large beams shining out to sea. Later designs incorporated a bull's eye design into the center of the lens shaped like a magnifying glass, so the concentrated beam was even more powerful.

The lenses were ranked in sizes called orders – the largest being a first



order, which is made up of hundreds of glass prisms. First order lenses were used in lighthouses on fogbound coasts while a fourth order lens was very typical on the Great Lakes. Most lenses were handmade and shipped unassembled from France. Others were made in England. Each lens cost \$12,000 at the time plus the cost of shipping.

Many lighthouses have their original Fresnel lenses in place; others have been replaced by aero-marine beacons. Some Fresnel lenses have been removed from the lighthouses and placed in museums and other display areas where the public can view and appreciate the workmanship that went into them. Others have been vandalized when the lighthouses were abandoned and left unguarded.