Coastal Guidance
for construction or development along Ohio’s Lake Erie shore

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Floods and Flood Damage Prevention Fact Sheet

Online Resources
Ohio Coastal Management Program
coastal.ohiodnr.gov/ocmp
Permits and Leases
costal.ohiodnr.gov/permits
Lake Erie Shore Erosion Management Plan
costal.ohiodnr.gov/erosion
Ohio Coastal Design Manual
costal.ohiodnr.gov/design
Ohio Coastal Atlas
costal.ohiodnr.gov/atlas
Interactive Maps
costal.ohiodnr.gov/mapviewers
Designated Coastal Management Area
costal.ohiodnr.gov/dcma
Ohio Floodplain Management Program
water.ohiodnr.gov/water-use-planning/floodplain-management
FEMA Flood Map Service Center
msc.fema.gov
seagrant.psu.edu
Coastal Regulations

Lakefront property owners may be interested in improving their property through construction or development along the shore of Lake Erie. However, such construction and development activities can impact fishing, swimming, boating, beaches, property values, habitat and other aspects of Lake Erie that make the coast a prized natural resource. For this reason, various federal, state and local regulations require property owners to obtain authorization before construction activities take place along the Lake Erie shore. This guidance sheet summarizes the most common coastal regulations and how they apply to construction activities and lakefront property.

**Federal Regulations**

Under Section 404 of the Clean Water Act [www.epa.gov/cwa-404/clean-water-act-section-404] and Section 10 of the Rivers and Harbors Act of 1899 [www.epa.gov/cwa-404/section-10-rivers-and-harbors-appropriation-act-1899], a permit from the U.S. Army Corps of Engineers may be required for the construction, excavation, or deposition of materials in, over or under navigable waters of the United States, and for the discharge of dredged or fill material into the waters of the United States, including certain wetlands. Information about USACE permits can be found online at [www.lrb.usace.army.mil/Missions/Regulatory] or by contacting a Corps office:

- **Buffalo District Office**
  - 1776 Niagara Street
  - Buffalo, NY 14207
  - 716-879-4330
  - www.lrb.usace.army.mil

- **Stow Field Office**
  - 3869 Darrow Road, Suite 100
  - Stow, OH 44224
  - 330-923-8197

- **Oak Harbor Field Office**
  - 240 Lake Street, Unit D
  - Oak Harbor, OH 43449
  - 419-898-3491

**State of Ohio Regulations - Ohio DNR**

A **Shore Structure Permit** (Ohio Revised Code §1506.40) may be required from the Ohio Department of Natural Resources (ODNR). A Shore Structure Permit is required to construct a beach, groin, revetment, seawall, pier, breakwater, jetty or other structure to arrest or control erosion, wave action, or inundation along or near Ohio’s Lake Erie shoreline (including the islands, bays and inlets). For more information or an application contact the Office of Coastal Management or go to: coastal.ohiodnr.gov/permits#SHO

A **Submerged Lands Lease** (ORC §1506.10 and §1506.11) must be entered into with the state of Ohio to place improvements on Lake Erie submerged lands. A Submerged Lands Lease is required for an improvement, or portion thereof, that occupies land lakeward of the water’s edge prior to placement of any fill including structures. To enter into a Submerged Lands Lease, the local authority (i.e. port authority, city, township) must first pass a resolution declaring that the submerged lands specified in the application are not needed for any public improvements and that their use complies with local waterfront plans. For more information or an application contact the Office of Coastal Management or go to: coastal.ohiodnr.gov/permits#SUB

A **Coastal Erosion Area (CEA) Permit** (ORC §1506.07) may be required from the ODNR Director. A CEA permit is required to erect, construct or redevelop a permanent structure if the structure, or portion thereof, is located within Ohio’s Lake Erie Coastal Erosion Area. A permanent structure is defined as a residential, commercial, industrial, institutional or agricultural building, or a septic system, or an addition 500 square-feet or greater at ground level to an existing permanent structure. For more information or an application contact the Office of Coastal Management or go to: coastal.ohiodnr.gov/permits#CEA

Office of Coastal Management
105 West Shoreline Drive | Sandusky, OH 44870
419-626-7980 | 1-888-644-6267 (toll free) | coastal@dnr.state.oh.us
Local Regulations

Floodplain regulations may be included in local zoning or building codes, in subdivision regulations, or as special purpose regulations. Before developing in a flood hazard area, contact your local Designated Floodplain Administrator. ODNR may provide assistance in locating or contacting your Designated Floodplain Administrator. More information can be found online at water.ohiodnr.gov then select Water Use & Planning, then Floodplain Management or by contacting the ODNR Floodplain Management Program at 614-265-6750.

County or municipal ordinances may require that a building permit be obtained or may place limitations on construction activities. The local building authorities should be consulted before beginning any construction.

If you are planning a construction or development project on your lakefront property, contacting each of the previously listed authorities early in the planning process may facilitate obtaining the required authorizations. If an agent or a consultant obtains the permits for you, be sure he or she keeps you informed of the status each required authorization. Keep in mind that you, the property owner, are ultimately responsible for obtaining these authorizations. If you have already begun construction, please cease all work and contact each of the previously listed authorities to receive further instructions.

State of Ohio Regulations - Ohio EPA
Under Section 401 of the federal Clean Water Act (33 U.S.C. Section 1341), a Water Quality Certification may be required from the Ohio Environmental Protection Agency (OEPA). A Water Quality Certification is required for any placement of dredged or fill material (including armor stone) into waters of the United States. Application requirements and an application form for a 401 Water Quality Certification are found on the Ohio EPA Division of Surface Water website or by contacting them at:

Ohio Environmental Protection Agency
Division of Surface Water - 401 & Isolated Wetlands
P.O. Box 1049
Columbus, OH 43216-1049
614-644-2001

401 Application Requirements and Form
epa.ohio.gov/dsw/401/permitting
then select “Water Quality Certifications”

contact us
Office of Coastal Management
105 West Shoreline Drive
Sandusky, Ohio 44870
419.626.7980
1.888.644.6267 toll free
coastal.ohiodnr.gov
costal@dnr.state.oh.us
In 1955, the State of Ohio began requiring permits for the construction of shore erosion, wave, and flood control structures as an early effort to protect and manage Ohio’s Lake Erie shore. Permits were initially issued by the Ohio Department of Natural Resources (ODNR) through its Division of Shore Erosion, then after 1961 through its Chief Engineer and then through the Division of Water. Since July 1, 2007, Shore Structure Permits have been issued by the ODNR Director after review by the Office of Coastal Management.

**What requires a Shore Structure Permit?**
A Shore Structure Permit must be obtained before constructing an erosion, wave or flood control structure along Ohio’s Lake Erie shore. Shore structures commonly include nourished beaches, seawalls, stone revetments, bulkheads, breakwaters, groins, docks, piers and jetties. Descriptions and pictures are found online at coastal.ohiodnr.gov/shorestructures.

**Is a Permit needed to repair or rehabilitate an existing shore structure?**
A Shore Structure Permit may be required to do repair or rehabilitation work depending on the type of work being performed, when the structure was originally constructed, and any approvals that were originally obtained.

Please contact the ODNR Office of Coastal Management prior to beginning any repair work.

**Is there a fee to apply for a Permit?**
There is no fee to apply for a Shore Structure Permit, but the services an Ohio registered professional engineer will need to be retained.

**How is a Shore Structure Permit application obtained?**
The application form and detailed instructions are provided in the ODNR Coastal Permits and Lease Booklet which can be obtained by visiting our office, by calling or online at coastal.ohiodnr.gov/permits.

A Shore Structure Permit application should be submitted to ODNR at least six months prior to the planned start of construction. Be sure to submit a complete application, including drawings and specifications prepared by an Ohio registered professional engineer and a copy of all design calculations, analyses or supporting documentation used by the professional engineer.

Contact Us
Office of Coastal Management
105 West Shoreline Drive
Sandusky, Ohio 44870
419.626.7980
1.888.644.6267 toll free
coastal.ohiodnr.gov
costal@dnr.state.oh.us
What does ODNR look at in the application?

- Is the proposed shore structure of sound coastal engineering design? The structure’s function and integrity, as well as the stability of the bank or bluff, must be addressed to maximize the shore structure’s effectiveness.

- What is the proposed shore structure’s impact to the shore as a natural resource? Most notably, the impacts to the nearshore wave climate, littoral transport, sand resources, and public safety are assessed. Potential and cumulative impacts are also considered. An acceptable shore structure will have a minimal impact on adjacent properties, the shoreline and Lake Erie.

- Does the proposed shore structure comply with all applicable ODNR regulations? These regulations frequently include Submerged Lands Leases (ORC §1506.11) and Coastal Erosion Area Permits (ORC §1506.07). A Shore Structure Permit will not be issued until all other applicable ODNR authorizations have been obtained.

ODNR’s review of the application, which usually includes a site visit, may generate comments that are sent to the applicant. These comments may suggest ways to improve the effectiveness of the structure or outline specific concerns that the applicant must address before a permit will be granted. The applicant may need to provide additional design information or modify the proposed design to address these comments.

Can ODNR rush a Permit?

ODNR strives to issue every permit in a timely manner. To facilitate the permitting process, contact ODNR as early in the planning process as possible. If an emergency situation exists where immediate construction of an erosion control structure is necessary, a Temporary Shore Structure Permit may be an option.

How long is a Shore Structure Permit valid?

A Shore Structure Permit is generally valid for two years after the date it is issued. All construction activities must be completed within those two years. A time extension may be granted if a written request is received by ODNR before the permit expires. After the permit is issued, another site inspection may be conducted to ensure the structure is constructed in accordance with the permit. Maintenance of a structure in accordance with the permitted design is allowed for the life of the structure.

What if a shore structure is not “in” the water?

A Shore Structure Permit may be required for structures built in or partially in the water, completely out of the water, or above the Ordinary High Water Mark. Furthermore, a Shore Structure Permit is required for structures built along the shore of the islands, bays and inlets, including Sandusky Bay and Maumee Bay.

In other words, a Shore Structure Permit may be needed for structures that do not require a U. S. Army Corps of Engineers’ permit or a Lake Erie Submerged Land Lease.

Is a Professional Engineer necessary?

Yes. Passage of Amended Substitute Senate Bill 182 in 1994 changed the Shore Structure Permit statute such that all plans and specifications, submitted as part of the application for a Shore Structure Permit, must be prepared by an Ohio registered professional engineer.

A professional engineer is not just providing professional drawing services, but is designing and professionally certifying the structure.
Coastal Guidance Sheet No. 3

Temporary Shore Structure Permits

Recent sustained high Lake Erie water levels combined with severe storms have resulted in severe damage to coastal properties due to coastal erosion and flooding. ODNR recognizes a need for a rapid response to these events to prevent further damage and loss to coastal property. To expedite the permitting process, Temporary Shore Structure Permits are available for emergency construction of new erosion control structures or for emergency repairs to existing unpermitted structures that are necessary to safeguard life, health, or property along Ohio’s Lake Erie shore. Repair of an existing permitted structure does not require a Temporary Permit because Shore Structure Permits allow repairs to the permitted structure for the life of the structure.

Temporary Shore Structure Permits are intended for emergency situations, such as those currently being experienced on Lake Erie due to severe storms and high Lake Erie water levels, where immediate action is necessary and the time to complete the usual permit process is not possible. Review of applications for temporary permits will be expedited and, in most cases, will be completed within a few days of receipt of the application. There is no fee to apply for a Temporary Shore Structure Permit.

How does a Temporary Shore Structure Permit differ from a Shore Structure Permit?
Shore Structure Permits are required prior to the construction or placement of any measure along or near the shore of Lake Erie structure that will control erosion, wave action, or inundation. Temporary Shore Structure Permits are issued by the Director of ODNR if it is determined necessary to safeguard life, health, or property. The services of a Professional Engineer registered in the State of Ohio are not required for a Temporary Permit, but are required for a Shore Structure Permit.

What is eligible for an Temporary Shore Structure Permit?
Temporary Shore Structure Permits are available for emergency construction of new erosion control structures or for emergency repairs to existing unpermitted structures. Examples of structures that could be authorized to be constructed or repaired by a Temporary Shore Structure Permit include stone revetments, concrete seawalls, and crib bulkheads. Existing structures that already have a Shore Structure Permit can be repaired to their permitted condition without any additional permits from ODNR.

What is not eligible for a Temporary Shore Structure Permit?
Placement or dumping of unconsolidated debris, concrete or other rubble, rebar, or fine-grained soils is not permitted along or near the shore. It can result in unsafe conditions on a bluff face, beach, and in the waters of Lake Erie. Additionally, structures not immediately necessary to safeguard life, health, or property along Ohio’s Lake Erie shore cannot be authorized under a Temporary Shore Structure Permit. Examples of structures that are not eligible for a Temporary Permit and must follow the usual Shore Structure Permit application process include new breakwaters, groins, docks, piers and jetties.

How long is a Temporary Shore Structure Permit valid?
Temporary Shore Structure Permits provide temporary authorization for a period of two years. By submitting the application form the applicant agrees apply for and obtain a Shore Structure Permit prior to or upon expiration of the Temporary Shore Structure Permit (2 years from date of issuance).

What information is required to obtain a Temporary Shore Structure Permit?
An application for a Temporary Shore Structure Permit should include:

- recent photographs taken with your phone or camera showing the current condition of the shoreline requiring emergency shore protection
- a map from the internet or otherwise showing the location of the project site
• copy of the deed/conveyance instrument confirming the current property owner(s)
• hand drawn sketches depicting both an overhead view and side view of the proposed new structure or repairs to the existing structure containing:
  o project dimensions (i.e. length along the shore, height of top of structure, distance structure will extend lakeward from the bluff or bank toe)
  o type and size of material to be used (i.e. armor stone & size, concrete block & dimensions, steel crib member and stone fill type and dimensions, etc.)

An example of a completed Temporary Shore Structure Permit application with supporting documents is available at coastal.ohiodnr.gov/tssp.

**How will ODNR review an application for a Temporary Shore Structure Permit?**

ODNR will review applications for Temporary Shore Structure Permits based on the following criteria:

• The new structure or the repair to the existing structure is necessary to safeguard life, health, or property.
• The size and height of the structure appears appropriate and necessary to control erosion, wave action, or inundation.
• The proposed structure or repair will be constructed or performed in a manner and of materials that appear sufficient to control erosion, wave action, or inundation.

General guidelines for erosion control structures are included in ODNR Coastal Guidance “Temporary Shore Structure Permit Project Guidance” available at coastal.ohiodnr.gov/tssp. This fact sheet includes a listing of construction materials that are generally suitable for use along the shore and a listing of those that are not suitable. Additionally, it provides general guidelines for structure dimensions (length, width, height, and slope) that are appropriate for successful erosion control projects. Following these guidelines now may decrease the need for any changes to the structure later in order to obtain a Shore Structure Permit upon expiration of the Temporary Permit.

**How do I apply for a Temporary Shore Structure Permit?**

The application for a Temporary Shore Structure Permit can be found online at coastal.ohiodnr.gov/tssp or paper application forms can be mailed to you upon request by calling (419) 626-7890. The application can be submitted via email to coastal@dnr.state.oh.us or can be printed and mailed to the address listed below.

**When will my Temporary Shore Structure Permit be issued?**

ODNR understands the serious impacts that high water levels are having on Ohio’s Lake Erie coast and will process applications as quickly as possible with the intent of issuance of permits within days of application receipt.

**What other authorizations may be required?**

Other local, state, and federal authorizations may also be required. ODNR Coastal Guidance Sheet “Coastal Regulations Summary” available at coastal.ohiodnr.gov/permits includes a listing of authorizations that may be required for structures along or near the Lake Erie shore.

**Questions?**

Staff at the ODNR Office of Coastal Management are available to assist with assessing erosion issues. At the request of the property owner, ODNR engineers can meet with the property owner on-site and assess the current conditions and make recommendations for erosion control options best suited to the site. Assistance with the permitting process is also available.
Submerged Lands Leases are a mechanism by which Ohio authorizes the development or improvement of the territory of Lake Erie. The territory of Lake Erie begins at the natural shoreline and includes Lake Erie’s water, the lands beneath the water, and the resources living in the water, and is held in trust by the State of Ohio for the people of the state. Sandusky Bay and Maumee Bay are considered part of Lake Erie while the rivers and streams that empty into Lake Erie are not.

What is a Submerged Lands Lease?
A Submerged Lands Lease is a contract between a shoreline property owner and the State of Ohio. The lease grants a private or public entity the special use of a portion of Public Trust (i.e. Lake Erie submerged lands). The public is compensated by a rental fee. The lease states the responsibilities of the lessor (the State of Ohio) and the lessee (the applicant). It defines the boundary of the lease area, the authorized use(s), sets the rental rate, and establishes the term of occupancy.

What projects require a Submerged Lands Lease?
A Submerged Lands Lease may be required for the area occupied by wharfs, docks, marinas, piers, boat ramps, seawalls, breakwaters, stone revetments, groins, jetties, water intakes, utility lines and any other structures or artificially placed fill that extends lakeward of the natural shoreline.

Do existing structures require a Submerged Lands Lease? Existing structures or fills that are not currently leased may potentially be able to obtain a Submerged Lands Lease. In some circumstances, modifications to the existing structure or fill may be required to comply with applicable laws and policies. ODNR will assist you with determining what structures could be leased and what, if any, modifications may be necessary.

How is a Submerged Lands Lease application obtained?
A Submerged Lands Lease application form and detailed instructions can be found in the ODNR Coastal Permits and Lease Booklet, which can be downloaded online or obtained by calling ODNR Office of Coastal Management. Please note that a resolution from the local legislative authority (e.g. port authority, municipality or county) that has jurisdiction at the location of the proposed lease area must accompany a Submerged Lands Lease application. Contact information for these local authorities and guidance on obtaining a resolution can be found in the permit application booklet, on the Local Resolution or Ordinance Web page and by contacting the Office of Coastal Management.

Is there an application fee?
There is no fee to apply for a Submerged Lands Lease. However, the services of an Ohio Registered Professional Surveyor are usually needed to establish the lease boundary. The Ohio Coastal Design Manual provides direction for surveyors. It can be downloaded online.

Office of Coastal Management
105 West Shoreline Drive
Sandusky, Ohio 44870
419.626.7980
1.888.644.6267 toll free
coastal.ohiodnr.gov
coastal@dnr.state.oh.us
**What happens after an application is submitted?**
ODNR reviews the application submittals to determine if it is complete and if the project complies with Ohio law, including Ohio’s coastal management policies. If the application does not contain all of the documents and information listed in the ODNR Coastal Permits and Lease Booklet, ODNR will request that the information needed to complete the application be provided. If the missing information is not received in a reasonable time, the application can be returned as incomplete.

ODNR’s review of the application usually includes a site visit, and comments may be generated. These comments are sent to the applicant and may note any specific concerns that need to be addressed. The applicant may need to modify the proposed project to address any conflicts with applicable laws and policies.

After ODNR determines that the project is acceptable, a draft lease is sent to the applicant. The draft lease must be signed by the applicant and returned to ODNR along with the first lease payment. The draft lease is then signed by the Director of ODNR or her designee or, in certain cases, by the Governor. The executed lease is then sent to the applicant. The executed lease represents a binding property transaction and should be recorded by the applicant at their county recorder’s office.

**How long is a Submerged Lands Lease valid?**
Submerged Lands Leases are typically valid for a 50 year period and can be renewable for an additional 50 years.

**What are the rental rates?**
The annual rental rate is usually based on the square footage of area occupied by the structure within Lake Erie and the proposed use of the structure. Rental rates range from 1 to 4 cents per square foot. (See Ohio Revised Code §1501-6-06).

**Web pages mentioned in this fact sheet:**
- Coastal Permits and Lease Booklet and Guidance [coastal.ohiodnr.gov/permits](http://coastal.ohiodnr.gov/permits)
- Ohio Coastal Design Manual [coastal.ohiodnr.gov/design](http://coastal.ohiodnr.gov/design)
- Ohio Revised Code §1506 [codes.ohio.gov/orc/1506](http://codes.ohio.gov/orc/1506)
- Ohio Administrative Code § 1501-6 [codes.ohio.gov/oac/1501-6](http://codes.ohio.gov/oac/1501-6)
A resolution or ordinance from your local authority is required to be submitted with a Submerged Lands Lease application. For the project's location the local port authority should be contacted first. If there is no port authority, then the local municipality, followed by the county office should be contacted. Follow the instructions provided in the ODNR Coastal Permits and Lease Booklet and on this sheet when making a request to your local authority.

### ASHTABULA COUNTY
- City of Ashtabula Port Authority
  - 4717 Main Ave.
  - Ashtabula, OH 44004
  - 440.964.7047

- City of Conneaut Conneaut Port Authority
  - P.O. Box 218
  - Conneaut, OH 44030
  - 440.599.7212

- Ashtabula County Port Authority
  - Executive Director
  - 35 West Jefferson Street
  - Jefferson, OH 44047
  - 440.576.6069

- Geneva-on-the-Lake Village
  - Mayor
  - Village Hall
  - 4064 South Spencer Drive
  - Geneva-on-the-Lake, OH 44047
  - 440.466.8197

- North Kingsville Village
  - 3541 E. Center Street
  - P.O. Box 253
  - North Kingsville, OH 44068
  - 440.224.0091

### CUYAHOGA COUNTY
- Cleveland/Cuyahoga County Port Authority
  - Maritime Director
  - 1100 W. 9th St, Ste 300
  - Cleveland, OH 44113
  - 216.241.8004

- City of Bay Village Clerk of Council
  - Bay Village City Hall
  - 350 Dover Center Rd.
  - Bay Village, OH 44140
  - 440.899.3406

- Village of Bratenahl Mayor
  - Village Hall
  - 411 Bratenahl Road
  - Bratenahl, OH 44108
  - 216.681.4266

- City of Euclid Director of Public Services
  - Euclid City Hall
  - 585 East 222nd Street
  - Euclid, OH 44123
  - 216.289.2701

- City of Lakewood
  - Law Department
  - City of Lakewood
  - 12650 Detroit Ave.
  - Lakewood, OH 44107
  - 216.529.6030

- City of Rocky River
  - Building Department
  - 21012 Hillard Blvd.
  - Rocky River, OH 44116
  - 440.331.0600

### ERIE COUNTY
- Bay View Village Clerk/Treasurer
  - 304 E. Bay View Dr.
  - Bay View/Sandskyu, OH 44870
  - 419.684.5315

- Huron-Joint Port Authority
  - Secretary, City Hall
  - P.O. Box 468
  - Huron, OH 44839
  - 419.433.5000

- Kelleys Island Village Mayor
  - P.O. Box 468
  - Kelleys Island, OH 43438
  - 419.746.2535

- City of Sandusky City Manager
  - 222 Meigs St.
  - Sandusky, OH 44870
  - 419.627.5844

- City of Vermilion Vermilion Port Authority
  - Port Operations Manager
  - 777 West River
  - Vermilion, Ohio 44089
  - 440.967.7087

If you are not located within any of these authorities’ boundaries, contact:

- Erie County Commissioners
  - Clerk of Board
  - 2900 Columbus Ave.
  - Sandusky, OH 44870
  - 419.627.7672

### LAKE COUNTY
- Lake County Port and Economic Development Authority
  - One Victoria Place, Ste 265A
  - Painesville, OH 44077
  - 440.357.2290

- Eastlake Port Authority
  - Eastlake City Hall
  - 35150 Lakeshore Blvd.
  - Eastlake, OH 44095
  - 440.951.1416

- Fairport Harbor
  - Port Authority
  - 678 Second Street, #4
  - Fairport Harbor, OH 44077
  - 440.352.3620

### WHEN REQUESTING A RESOLUTION:
1. Include the tax map parcel ID, street address, and a location map for the parcel upland of the project.
2. Include a copy of the construction drawings.
3. Provide instructions on where to send the resolution.
4. Allow sufficient time in your planning for the local office to process your request.
If you are not located within any of these authorities’ boundaries, contact:

**Lake County Board of Commissioners**
105 Main St.
Painesville, OH 44077
440.350.2979 or 800.899.5253

**Office of Coastal Management**
105 West Shoreline Drive
Sandusky, Ohio 44870
419.626.7980
1.888.644.6267 toll free
coastal.ohiodnr.gov
coastal@dnr.state.oh.us
A Coastal Erosion Area (CEA) is a designated land area along the Lake Erie shore that is anticipated to be lost due to Lake Erie-related erosion if preventative measures are not taken. More specifically, a 2018 designated CEA begins at the top of a bluff, bank or beach ridge, and includes all land predicted to erode within a 30-year period if that distance totals 14 or more feet.

CEAs are not fixed in position. They are a constant distance that is measured from the bluff, bank or beach ridge at its current position.

How were Coastal Erosion Areas Determined?
The Ohio Department of Natural Resources (ODNR) Division of Geological Survey used scientific records and data to analyze recession of the Lake Erie shore and forecast erosion rates. This process is based on Administrative Rules that were adopted in 1996. Geologists, engineers, local officials and lakeshore property owners assisted with and provided input on development of these rules. The ODNR is mandated to review and, if necessary, update the CEA once every 10 years. The initial CEA Maps were finalized in 1998. In January of 2018, the ODNR began the public process to update the CEA maps as prescribed in Ohio Revised Code §1506.06. The 2018 CEA designations were finalized in January 2019.

What is the Objective of having Coastal Erosion Areas?
The objective of the CEA program is to promote wise land use. A Permit must be obtained to construct a new building or septic system or to construct an addition of 500 square feet or larger to an existing building within a CEA. The CEA Permit requires that measures be taken to effectively protect the building or septic system from shore erosion and bluff instability. As a result, the risk of damage to or loss of property, possessions, infrastructure and life due to coastal erosion will be greatly reduced.

What requires a Coastal Erosion Area Permit?
In accordance with Ohio Revised Code §1506.07, a CEA Permit is required prior to construction of a new building (i.e. residential, commercial, industrial, institutional or agricultural) or septic system within a CEA. Furthermore, an addition of 500 square feet or larger, as measured at ground level, to an existing building also requires a permit. The only exceptions to these requirements are if the property is not immediately adjacent to Lake Erie or if the building is a stand alone structure not designed for human occupation, such as a garage or shed. ODNR can assist you with determining if your project requires a CEA Permit.

How Do I Obtain a Coastal Erosion Area Permit?
A CEA Permit application is in the ODNR Coastal Permits and Lease Booklet, which can be obtained from the ODNR Office of Coastal Management and is online at coastal.ohiodnr.gov/permits. The CEA Permit application must demonstrate that measures to control erosion and bluff instability will be constructed prior to or concurrent with the construction of the building, septic system or addition, and will meet certain criteria. These criteria generally require the erosion control measure to function effectively for an equivalent period of 30 years.
Frequently Asked Questions

How can I find out if a CEA is on my property?

The CEAs are depicted on aerial photographs of the shore, and the CEA distances are detailed in tables. You will need to reference these maps and tables to determine if you are building within a CEA.

The final maps can be viewed or downloaded individually from the ODNR coastal erosion Web page at coastal.ohiodnr.gov/ceamaps. Additionally, copies of the maps and tables are available for public inspection during normal business hours at certain municipal, township and county offices. You may also call the ODNR or visit our website to find the closest local office to you or to request a map of a specific area.

How do I locate the CEA on my property?

Instructions on how to use the CEA maps and tables are provided wherever the maps are available for viewing. You may also call the ODNR Office of Coastal Management for assistance or to schedule on-site assistance.

If a CEA crosses only a portion of my property is all of my property included within a CEA?

No. Only that portion of your property which is lakeward of the CEA line is within a CEA.

What if I already have an erosion control measure on my property?

If you decide to build a new permanent structure in the CEA, you will need to apply for a permit and submit the design specifications of the existing erosion control measure to ODNR. ODNR will assess the existing erosion control measure based on the same performance standards as a proposed erosion control measure.

What must I do if I want to sell my property?

If you want to sell any property, part or all of which is located within a designated CEA, you must disclose that information to potential buyers on the Seller Disclosure form that is required with all residential real property transactions in Ohio. This applies to all CEA-designated properties – both those located adjacent to the lake and those not adjacent to the lake.

When will I get my Coastal Erosion Area Permit?

After you submit a completed CEA Permit application, the ODNR must make a decision on your application within 30 days. However, you may also be required to obtain other local, state and federal approvals.

To help ensure that you submit a complete application and have obtained all of the necessary approvals, contact ODNR as early as possible. ODNR also recommends that applications be filed well in advance of the anticipated construction start date.

contact us

Office of Coastal Management
105 West Shoreline Drive
Sandusky, Ohio 44870
419.626.7980
1.888.644.6267 toll free
coastal.ohiodnr.gov
coastal@dnr.state.oh.us
WHAT: The Federal Consistency provisions of the Coastal Zone Management Act (CZMA) of 1972 require that federal actions having reasonably foreseeable effects on any land or water use or natural resource of Ohio’s designated coastal area must be consistent with the enforceable policies of the Ohio Coastal Management Program. “Federal actions” include federal agency activities, federal licenses or permits, and federal financial assistance to state and local governments. Federal Consistency may apply to federal actions regardless of the project’s location.

Since the federal approval of the Ohio Coastal Management Program in 1997, proposed projects have been reviewed by the Ohio Department of Natural Resources (ODNR) to determine whether they will be implemented in a manner that is consistent with the Ohio Coastal Management Program’s enforceable policies. These policies contain provisions that are legally binding under state law and are federally approved as part of the Ohio Coastal Management Program by the National Oceanic and Atmospheric Administration (NOAA).

HOW: Applicants for federal licenses or permits must submit a signed Consistency Certification Statement [coastal.ohiodnr.gov/permits#FCC] and provide all “necessary data and information” so that ODNR may conduct its review. ODNR staff may consult with other state agencies networked in the Ohio Coastal Management Program, federal agencies, and others before issuing a decision letter for the proposed activity.

Applicants can help expedite the review process by submitting complete applications for state agency permits, licenses, leases or other approvals required for the project as early as practicable in the project planning process. State authorizations that may be required for activities in Ohio’s designated coastal area include, but are not limited to: Submerged Lands Leases, Shore Structure Permits, and Coastal Erosion Area Permits, all from ODNR; and Section 401 Water Quality Certifications from the Ohio Environmental Protection Agency.

After the Federal Consistency review has been completed, ODNR will issue a Concurrence, Conditional Concurrence, or Objection to the Consistency Certification. If ODNR issues a Concurrence to the Consistency Certification, the federal agency may issue the permit or license activity. If ODNR issues a Conditional Concurrence, the federal agency may authorize the federal permit or license activity if the applicant amends the federal permit application to include the conditions.

If ODNR issues an Objection, then the federal agency cannot authorize the federal permit or license activity. In its Objection, ODNR may describe alternatives that, if adopted by the applicant, would make the proposed activity consistent with the policies of the Ohio Coastal Management Program. An applicant may appeal ODNR’s Objection to the U.S. Secretary of Commerce.

Regardless of ODNR’s decision, the federal agency may, at any time, deny the applicant’s request under its own authority.

WHY: Federal Consistency provides Ohio with substantial oversight and input into federal actions affecting the state’s coastal area and is an important mandatory, but flexible, mechanism to foster consultation, cooperation and coordination between applicants, state agencies and federal agencies. Federal Consistency is more than just a procedural dictate; it helps ensure the balanced use and protection of coastal resources through the Ohio Coastal Management Program policies.

contact us
Office of Coastal Management
attn: Federal Consistency Administrator
105 West Shoreline Drive
Sandusky, Ohio 44870
419.626.7980
1.888.644.6267 toll free
coastal.ohiodnr.gov
coastal@dnr.state.oh.us
The Ohio Department of Natural Resources does not promote or endorse any of the following businesses, but lists them as a service to littoral property owners. This is not a complete list. Other registered professional engineers may not be listed on this sheet. Please contact the Ohio Department of Natural Resources if you would like your business listed. The list is current as of the revision date.

<table>
<thead>
<tr>
<th>Business</th>
<th>Address</th>
<th>Phone</th>
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<tbody>
<tr>
<td>AECOM</td>
<td>1300 East 9th Street, Suite 500, Cleveland, Ohio 44114</td>
<td>216.622.2300</td>
</tr>
<tr>
<td>Aztech Engineering &amp; Surveying Co.</td>
<td>5425 Warner Road, Suite 12, Valley View, Ohio 44125</td>
<td>440.602.9071</td>
</tr>
<tr>
<td>BEC Associates, Inc.</td>
<td>6622 West Harbor Road, Port Clinton, Ohio 43452</td>
<td>419.898.9200</td>
</tr>
<tr>
<td>Bowser-Morner Associates, Inc.</td>
<td>1419 Miami Street, Toledo, Ohio 43697</td>
<td>419.691.4800</td>
</tr>
<tr>
<td>Bramhall Engineering &amp; Surveying Co.</td>
<td>801 Moore Road, Avon, Ohio 44011</td>
<td>440.934.7878</td>
</tr>
<tr>
<td>Carl Feick, P.E., P.S.</td>
<td>712 Bardwell Road, Castalia, Ohio 44824</td>
<td>419.656.3016</td>
</tr>
<tr>
<td>Contractors Design Engineering, Ltd.</td>
<td>1623 Old State Road, Norwalk, Ohio 44857</td>
<td>419.663.0885</td>
</tr>
<tr>
<td>CT Consultants, Inc.</td>
<td>8150 Sterling Court, Mentor, Ohio 44060</td>
<td>440.951.9000</td>
</tr>
<tr>
<td>DGL Consulting Engineers, LLC</td>
<td>3455 Briarfield Boulevard, Suite E, Maumee, Ohio 43537</td>
<td>419.535.1015</td>
</tr>
<tr>
<td>Engineered Technical Solutions</td>
<td>27330 Center Ridge Road, Westlake, Ohio 44145</td>
<td>440.899.1840</td>
</tr>
<tr>
<td>Greenland Engineering</td>
<td>4133 Erie Street, Willoughby, Ohio 44094</td>
<td>440.269.3221</td>
</tr>
<tr>
<td>Hull &amp; Associates, Inc.</td>
<td>219 South Erie Street, Toledo, Ohio 43604</td>
<td>419.385.2018</td>
</tr>
<tr>
<td>John Hancock &amp; Associates, Inc.</td>
<td>326 East Market Street, Sandusky, Ohio 44870</td>
<td>419.625.7838</td>
</tr>
<tr>
<td>John Matricardi, P.E.</td>
<td>352 Pineview Circle, Berea, Ohio 44017</td>
<td>216.408.3444</td>
</tr>
<tr>
<td>KS Associates, Inc.</td>
<td>260 Burns Road, Suite 100, Elyria, Ohio 44035</td>
<td>440.365.4730</td>
</tr>
<tr>
<td>Land Design Consultants, Inc.</td>
<td>9025 Osborne Drive, Mentor, Ohio 44060</td>
<td>440.255.8463</td>
</tr>
<tr>
<td>MS Consultants, Inc.</td>
<td>2221 Schrock Road, Columbus, Ohio 43229</td>
<td>614.898.7100</td>
</tr>
<tr>
<td>Poggemeyer Design Group, Inc.</td>
<td>1168 North Main Street, Bowling Green, Ohio 43402</td>
<td>419.352.7573</td>
</tr>
<tr>
<td>SmithGroup</td>
<td>44 East Mifflin Street, Suite 500, Madison, Wisconsin 53703</td>
<td>608.251.1177</td>
</tr>
<tr>
<td>WSP USA, Inc.</td>
<td>Two Miranova Place #450, Columbus, Ohio 43215</td>
<td>614.793.0191</td>
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419.898.9200

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801 Moore Road
Avon, Ohio 44011
440.934.7878

Contracts Design Engineering, Ltd.
1623 Old State Road
Norwalk, Ohio 44857
419.663.0885

CT Consultants, Inc.
8150 Sterling Court
Mentor, Ohio 44060
440.951.9000

Dempsey Surveying Company
12815 Detroit Avenue
Lakewood, Ohio 44107
216.226.1130

DGL Consulting Engineers, LLC
3455 Briarfield Boulevard, Suite E
Maumee, Ohio 43537
419.535.1015

Garrett & Associates
700 Beta Drive, Suite 200
Cleveland, Ohio 44143
440.449.4008

Hartung & Associates, Inc.
421 Williams Street
Huron, Ohio 44839
419.433.4321

Hess & Associates Engineering, Inc.
12121 Kinsman Road
Newbury, Ohio 44065
440.564.8008

J.A.R. Engineering & Surveying, Inc.
24629 Detroit Road, Suite 9
Westlake, Ohio 44145
440.871.8345

John Hancock & Associates, Inc.
326 East Market Street
Sandusky, Ohio 44870
419.625.7838

KS Associates, Inc.
260 Burns Road, Suite 100
Elyria, Ohio 44035
440.365.4730

Land Design Consultants, Inc.
9025 Osborne Drive
Mentor, Ohio 44060
440.255.8463

Lewandowski Engineers, LLC
234 North Erie Street
Toledo, Ohio 43624
419.255.4111

McGannon Surveying, LLC
1731 Gettysburg Drive
Lorain, Ohio 44053
440.282.2713

Poggemeyer Design Group, Inc.
104 N. Summit Street, Suite 100
Toledo, Ohio 43604
419.418.0389

Polaris Engineering & Surveying, Inc.
34600 Chardon Road, Suite D
Willoughby Hills, Ohio 44094
440.944.4433

Silva Surveying, Ltd.
527 Darby Lane
Maumee, Ohio 43537
419.705.6819

Snezek & Associates, LLC
3496 Colletta Lane
Cleveland, Ohio 44111
216.385.6791

Straub Surveying, LLC
12815 Detroit Avenue
Lakewood, Ohio 44107
440.333.1700
Erosion Control Loans

Owners of property in the Coastal Erosion Area (CEA) designated along the shore of Lake Erie may be eligible for a low interest loan to cover the cost of constructing a shore erosion control measure. This guidance sheet includes information on the eligibility requirements, costs eligible to be covered under a loan, and application information.

**Loan Eligibility Requirements**: To be eligible for a loan, the following four requirements must all be met.

1.) **Site must be located within a designated Coastal Erosion Area (CEA)**
A loan is available to the owners of properties that are wholly or partially located within a designated CEA, based on the 2018 final mapping. The CEA consists of land areas along the shore that are anticipated to be lost due to Lake Erie related erosion. Specifically, the CEA covers land areas where recession is anticipated to exceed fourteen (14) feet in the next 30 years. The CEA is indicated on special maps of the Ohio Lake Erie shore. These maps are available for viewing on-line at coastal.ohiodnr.gov/ceamaps or at certain township, village and city halls and county planning commission departments. Tabular data is also available so that you can determine the specific dimensions of the CEA as measured from your current bluff or bank. You may also contact the Ohio Department of Natural Resources toll free at 1-888-644-6267 to obtain a map of your area.

2.) **Project must be an Erosion Control Structure**
A loan is available only for construction of an erosion control structure. For the purpose of loan eligibility, an erosion control structure is considered to be a measure whose primary function is to reduce or control shore erosion. Examples include, but are not limited to, revetments, seawalls, bulkheads, certain breakwaters and other similar protective measures. Loans may not be available for piers, docks, wharfs, marinas, boat ramps and other structures generally not considered to be constructed for the purpose of reducing or controlling erosion, although their presence may affect the processes that cause erosion.

3.) **Construction began on or after June 1, 1998**
A loan is available to property owners who plan to construct an erosion control structure or who constructed an Erosion Control Structure after the CEA was officially designated on June 1, 1998. Loan applicants must demonstrate that construction of an existing erosion control structure started on or after June 1, 1998.

4.) **All permits and authorizations are obtained**
All appropriate authorizations must be obtained before a loan can be made. Various federal, state and local authorities require that a permit or authorization be obtained before construction of a shore erosion control structure. A summary of the permits and authorizations that frequently pertain to construction of a shore Erosion Control Structure is provided in Coastal Guidance Sheet No. 1: Coastal Regulations.

Any construction activities that occurred prior to issuance of the necessary authorizations are not eligible for a loan. Loan applicants must provide proof that all necessary authorizations were obtained prior to construction of an existing erosion control structure.
**Costs Eligible to be Covered under Loan**

The following costs may be included in the Loan amount.

- Costs incurred for hiring a registered professional engineer or surveyor to prepare construction documents for the installation of an erosion control structure. Some authorizations require the preparation of plans and specifications by a registered professional engineer, or may require the services of a registered professional surveyor.

- Costs incurred in obtaining the necessary authorizations. Such costs include the payment of fees to federal, state and local authorities, and charges by design professionals who have been authorized to seek the approvals on behalf of the property owner.

- Costs of materials, earthwork, labor, and equipment needed to construct the erosion control structure. These costs may include oversight of the project by a professional engineer or surveyor.

**Loan Application Information**

Loans are available through the county where the property within the Coastal Erosion Area is located. Contact the following participating county representatives for further information or a loan application:

- **Erie County**
  Erie County Regional Commission
  2900 Columbus Avenue
  Sandusky, Ohio 44870
  419.627.7792

- **Lorain County**
  Lorain County Community Development Department
  Lorain County Administration Building
  226 Middle Avenue
  Elyria, Ohio 44035
  440.328.2322

- **Lucas County**
  Lucas County Office of Economic Development
  One Government Center, Suite 800
  Toledo, Ohio 43604-2259
  419.213.4510

- **Ottawa County**
  Ottawa County Regional Planning Commission
  315 Madison Street, Room 107
  Port Clinton, Ohio 43452
  419.734.6779
Ohio’s Flood History

Floods are a natural and unavoidable fact of life along streams and rivers. Floods occur when streams overflow their banks and spill onto the adjoining land area, which is called a floodplain. Loss of life and property damage can result when people build their homes and other types of structures in the floodplain.

No area in Ohio is free from the threat of flood-producing storms. In fact, flooding occurs in Ohio every year although the location and seriousness vary according to the weather and ground conditions. Large floods in Ohio, such as those experienced in 1913, 1937, 1959, 1963, 1964, 1969, 1990, 1997, and 1998 have caused the loss of many lives as well as costing billions of dollars worth of property damage.

Severe flooding occurred in June 1990 near Shady-side (Belmont County) where 26 people perished, and in July 1992 in Massieville (Ross County) in which 2 residents lost their lives.

What is Being Done About Flood Damage?

In an effort to reverse the trend of rising flood damage, local, state and federal agencies have undertaken a variety of programs that can be grouped into three general categories:

A. Keeping flood waters away from people by:
   1. Constructing dams, levees and floodwalls
   2. Enlarging or altering stream channels
   3. Decreasing runoff through land treatment measures

B. Keeping people and buildings away from flood water through:
   1. Floodplain regulations
   2. Purchasing floodplain lands to discourage development

C. Reducing the cost of flood losses to individuals through:
   1. Flood insurance
   2. Flood disaster relief
   3. Tax adjustments

The Regulatory Floodplain

The first step in planning a floodplain management program is to determine the size of the flood against which we want to be protected. From this we can determine the amount of land area that would be covered by such a flood or, in other words, the size of the floodplain that we wish to regulate. This is known as the regulatory floodplain.

The 100-year flood has become the accepted national standard for regulatory purposes. It is defined as the flood event that has a one percent chance of occurring in any given year or, on the average, occurs once in an 100-year period. This does not mean that if there is such a flood this year it will not happen again for another 100 years. There have been cases in Ohio where floods of this size have occurred within 10 years of each other.

Floodplain Regulations

Floodplain regulations are designed to guide floodplain development to lessen the damaging effects of floods. Floodplain regulations may be included in zoning, building codes and subdivision regulations, or they can be adopted as special purpose regulations. Ohio communities frequently adopt special purpose floodplain regulations that combine both building code and subdivision requirements.
For regulatory purposes, the floodplain is divided into two areas based on water velocity: the floodway and the flood fringe. The floodway includes the channel and adjacent floodplain area that is required to pass the 100-year flood without unduly increasing flood heights. This is the hazardous portion of the floodplain where the fastest flow of water occurs. Due to the high degree of hazard found in the floodway, floodplain regulations require that proposed floodway developments do not block the free flow of flood water as this could dangerously increase the water’s depth and velocity. The flood fringe is the portion of the floodplain, outside of the floodway, that contains slow-moving or standing water. Development in the fringe will not normally interfere with the flow of water. Therefore, floodplain regulations for the flood fringe allow development to occur but require protection from flood waters through the elevation of buildings above the 100-year flood level or floodproofing buildings so that water cannot enter the structure.

**ODNR Assistance in Floodplain Management**

The Ohio Department of Natural Resources, Division of Soil and Water Resources, provides technical and planning assistance to local governments and private citizens in order to reduce flood losses in Ohio. The Division’s Floodplain Management Program is responsible for:

1. Promoting floodplain management in Ohio
2. Providing technical information to support floodplain regulations
3. Assisting local units of government in establishing floodplain management programs
4. Coordinating the efforts of federal, state, and local agencies involved in flood damage reduction in Ohio
5. Assisting communities to become eligible for participation in the National Flood Insurance Program
6. Assisting state and local flood-preparedness efforts

For additional information about floodplain management, please contact:

Ohio Department of Natural Resources  
Division Water Resources  
Floodplain Management Program  
2045 Morse Road, Bldg. B-2  
Columbus, Ohio 43229-6693  
Voice: (614) 265-6750 Fax: (614) 265-6767  
E-mail: dswc@dnr.state.oh.us  
Website: http://water.ohiodnr.gov/