

# CHAPTER 8: LAND/WATER INTERFACE ACTIVITIES

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## PURPOSE AND APPLICABILITY OF REGULATIONS

Manufacturers often conduct activities at or near locations where the land meets the water, often referred to as the land/water interface. Many construction activities conducted in or near wetlands, ponds, inland lakes, streams, floodplains, Great Lakes, sand dunes, or other such environmental features are regulated by the state and require



authorization by the Michigan Department of Environment, Great Lakes and Energy (EGLE) prior to completion. Review of this chapter may be beneficial to ensure that you are complying with state and federal laws regarding land/water interface resources, even if there are no site improvements currently under consideration

## AGENCIES AND THEIR LAWS AND RULES

EGLE's Water Resources Division (WRD) administers several parts of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended (Act 451), that regulate activities that are on, within, or involve any of the following land/water features:

- A 100-year floodplain or floodway (Part 31)
- A stream, river, ditch, drain, channel, or canal (Part 301)
- An inland lake (Part 301)
- Land change activities that result in the creation or alteration of a canal, ditch, lagoon, pond, or lake within 500 feet of an existing inland lake or stream (Part 301)
- A wetland (Part 303)
- A dam (Part 315)
- A Great Lake (Part 325)
- High-risk erosion areas, critical dune areas, and environmental areas in coastal counties (parts 323 and 353)

The U.S. Army Corps of Engineers (USACE) also regulates some of the above activities at the federal level if they are located within a navigable water identified in Section 10 of the federal Rivers and Harbors Act and wetlands directly adjacent to these waters. To simplify the permit process for Michigan's residents, the WRD has developed an "[EGLE/USACE - Joint Permit Application](#)" ([Michigan.gov/JointPermit](#)) process with the USACE to jointly regulate activities at or near the land/water interface ([Chapter 8.9](#)).

The WRD administers several other Parts of Act 451 that require a separate permitting process:

- **Aquatic Nuisance Control** (Part 33 of Act 451) regulates herbicide or pesticide application to lakes or ponds. This includes water treatment ponds for cooling or settling or ponds equipped with fountains for aesthetic purposes. Information can be found at [Michigan.gov/ANC](#).
- **Soil Erosion and Sedimentation Control** (Part 91 of Act 451) provides for the control of soil erosion and protects adjacent properties and the waters of the state from sedimentation. A permit is generally required for any earth change activity which disturbs one or more acres of land, or which is within 500 feet of a lake or stream. This statute authorizes county and local enforcing agencies to issue the permits. The authorized permitting agencies for each county are available at [Michigan.gov/SoilErosion](#). Authorized agencies have inspectors certified by EGLE. Information on training to obtain **Comprehensive Soil Erosion & Sedimentation Control (SESC) Certification** is also available at [Michigan.gov/SoilErosion](#).
- Construction activities that disturb one or more acres of land and have a point source discharge of storm water to the waters of the state require federal NPDES permit coverage as described in [Chapter 3.2.3.b](#).
- **Large Quantity Water Withdrawal** (Part 327 of Act 451): defines a large quantity water withdrawal as 70 gallons or more of total pump capacity and offers a tool to determine if your project requires a permit from the WRD. Visit [Michigan.gov/WaterUse](#) for more information on Large Quantity Water Withdrawal. This is also addressed more fully in [Chapter 9.5](#).

## 8.1 INTRODUCTION

The “[EGLE/USACE - Joint Permit Application](#)” covers permit requirements derived from state and federal rules and regulations for construction activities where the land meets the water. This Joint Permit prevents duplication of state and federal permitting and provides simultaneous review for [activities regulated by the parts of Act 451](#) summarized in this chapter. The Joint Permit Application is submitted through WRD’s permitting site, [MiWaters](#).

For more information on MiWaters, refer to [Chapter 3.1.1](#) or visit [Michigan.gov/MiWaters](#).



[Pre-application meetings](#) for proposed impacts to inland lakes, streams, wetlands, and critical dune areas are available upon request. This pre-application meeting with district permit staff ensures that a complete and accurate application is submitted that avoids and/or minimizes potential impacts and proposes mitigation when resource impacts are unavoidable. There is a fee for the pre-application meeting, with the exception of in-office meetings regarding single-family residential lots less than one (1) acre in size. See the online pre-application meeting form for a fee schedule.

The WRD district offices review permit applications, conduct site inspections, and issue permits for regulated activities covered on the Joint Permit Application. Technical assistance and permit review negotiations conducted by field staff minimize negative impacts to natural resources from new development. District staff may make a site inspection, collect comments, or ask for modifications to the proposal. It may take ninety days or more to receive a decision on a permit application. District offices also respond to complaints and conduct compliance activities. District staff can answer questions regarding the application, MiWaters, and regulations.

Find out more about applying for a Joint Permit at [Michigan.gov/JointPermit](#).



## 8.2 PART 31 OF ACT 451: WATER RESOURCES PROTECTION, FLOODPLAIN REGULATORY AUTHORITY

A Part 31 permit is required for any occupation, construction, filling, or grade change below the 100-year floodplain elevation of a river, stream, or drain with a drainage area of two square miles or more, regardless of whether the floodplain is mapped by FEMA. Part 31 requires that the channel and floodway are kept clear of obstructions and uninhabited and that structures placed in the floodplain are properly protected from flood damage. The floodway includes the stream channel and that portion of the floodplain that is required to convey the flow of floodwater. Projects within the floodway will typically require hydraulic modeling to demonstrate the project will not cause increased flooding at other properties. Structures that are placed within the 100-year floodplain must have their lowest floor, including basement, elevated 1-foot above the 100-year floodplain elevation. The state Building Code also contains additional floodplain development standards. Visit [Michigan.gov/FloodplainManagement](#) for more information.

## Flood Insurance Requirements

Many cities and townships within Michigan participate in the National Flood Insurance Program (NFIP). Those communities usually have a Flood Insurance Rate Map. If your site is located in the floodplain area (frequently designated as an “A Zone”), the requirements are that any new or substantially improved structure must have its first floor, including the basement, elevated above the 100-year floodplain elevation or floodproofed to the elevation of the floodplain. Floodproofing must be done in a manner that the building is watertight and able to withstand hydrostatic pressures up to the 100-year floodplain elevation. Flood insurance is required for any federally backed mortgage within the FEMA mapped floodplain regardless of whether a community participates in the National Flood Insurance Program (NFIP) or not. FEMA flood insurance is only available to property owners and renters within communities that participate in the NFIP. If the community participates, anyone within that community can purchase flood insurance regardless of whether they are located within the mapped floodplain or not. NFIP communities regulate all man-made changes within the FEMA mapped floodplain. More information on flood insurance is available at [floodsmart.gov](http://floodsmart.gov).

## 8.3 PART 301 OF ACT 451: INLAND LAKES AND STREAMS

The intent of the Inland Lakes and Streams Protection Program is to protect the public trust in the inland waters of the state as well as the correlative rights of riparian owners. Activities that disturb land below the ordinary high-water mark require a Part 301 permit. Examples of common projects that require a Part 301 permit are road and pedestrian crossings, utility crossings, stormwater outfalls – with or without streambank or streambed protection (riprap) –, stream relocations, and enclosures.



A Part 301 permit is required for the following activities below the ordinary high-water mark of all inland lakes and streams:

- Dredge or fill bottomlands.
- Construct, enlarge, extend, remove, or place a structure on bottomland.
- Construct, enlarge or expand a marina.
- Create, enlarge, or diminish an inland lake or stream.
- Structurally interfere with the natural flow of an inland lake or stream.
- Construct, dredge, commence, extend, or enlarge an artificial canal, ditch, lagoon, pond, lake, or similar waterway through which the purpose is ultimate connection with an existing inland lake or stream, or where any part of the artificial waterway is located within 500 feet of the ordinary high-water mark of an existing inland lake or stream.
- Connect any natural or artificially constructed waterway, canal, channel, ditch, lagoon, pond, lake, or wetland with an existing inland lake or stream for navigation or any other purpose.

Under Part 301, a stream is defined as a waterbody that has definite banks, a bed, and visible evidence of a continued occurrence of water. This Part does not include the Great Lakes, Lake St. Clair, or a lake or pond that has a surface area of less than five (5) acres. An inland lake or stream can also be a natural or artificial feature, including drains or impoundments.

## 8.4 PART 303 OF ACT 451: WETLANDS PROTECTION

Part 303 is intended to protect the functions and values wetlands provide such as flood and storm control, wildlife habitat, clean subsurface water resources, pollution treatment, erosion control, nutrient cycling, and economic and educational services. The following activities are prohibited in wetlands unless a Part 303 permit has been obtained from EGLE:



- Deposit or permit the placing of fill material in a wetland.
- Dredge, remove, or permit the removal of soil or minerals from a wetland.
- Construct, operate, or maintain any use or development in a wetland.
- Drain surface water from a wetland.

Regulated wetlands are defined in Part 303 and associated administrative rules. Part 303 defines a wetland as *“land characterized by the presence of water at a frequency and duration sufficient to support, and that under normal circumstances does support, wetland vegetation or aquatic life, and is commonly referred to as a bog, swamp, or marsh.”* The definition applies to public and private lands regardless of zoning or ownership. In addition, wetlands regulated by the state are one of the following:

- Connected to, or located within 1,000 feet of, one of the Great Lakes or Lake St. Clair.
- Connected to, or located within 500 feet of, an inland lake, pond, river, or stream.
- Not connected to one of the Great Lakes or Lake St. Clair, or an inland lake, pond, stream, or river, but are more than 5 acres in size.
- Has the documented presence of an endangered or threatened species under Part 365 or the Endangered Species Action of 1973, Public Law 93-205.
- Is a rare and imperiled wetland

### Wetlands Identification

While wetland inventory maps and other online tools are helpful in determining the potential for wetlands, an on-site investigation is required to identify wetlands on a property. EGLE’s Wetland Identification Program (WIP), is a fee-based program that offers two levels of service to identify wetland and upland areas on a property. For a Level 2 Identification, a Wetlands Specialist conducts an on-site review to determine the presence or absence of wetlands, and physically marks the wetland

boundaries in the field. A Wetlands Specialist can also provide a Level 3 Identification, which is an on-site review to confirm specific wetland boundaries marked by a wetland consultant. Both levels of service include a letter and map from EGLE summarizing the findings, which is guaranteed for a period of three years. Individuals interested in WIP services must submit a WIP application to the WRD, Wetlands, Lakes and Streams Unit. The WIP application and a fee calculator can be downloaded at [Michigan.gov/Wetlands](http://Michigan.gov/Wetlands) or you may call 517-284-5543.

## 8.5 PART 315 OF ACT 451: DAM SAFETY

Permits are required for dams with a “height” of six feet or more and have an impounded surface area of five acres or more at the Design Flood Elevation (DFE, also known as the Flood Protection Elevation). A permit is required to construct a new dam, enlarge an existing dam or impoundment, repair or alter a dam, remove a dam, abandon a dam, or reconstruct a failed dam. A licensed professional engineer must prepare, sign, and seal the construction plans, except for minor projects as defined in Part 315 or for projects by non-profit organizations under certain circumstances as specified in Part 315.

## 8.6 PART 323 OF ACT 451: SHORELANDS PROTECTION AND MANAGEMENT

This program provides for the designation and proper management of environmental areas, high-risk erosion areas, and flood risk areas along the Great Lakes shoreline. These areas include coastal wetlands and the adjacent uplands that provide habitat and nursery for fish and wildlife. Information about this program may be found online at [Michigan.gov/shorelands](http://Michigan.gov/shorelands).

A Part 323 permit is required for any of the following activities in a designated Environmental Area:

- Dredging, filling, grading, or other alterations of the soil.
- Alteration of natural drainage, but not including the reasonable care and maintenance of established drainage.
- Alteration of vegetation utilized for the preservation and maintenance of fish or wildlife, including identified colonial bird nesting areas.
- Placement of permanent structures.

The following counties have designated Environmental Areas:

<b>Alcona</b>	<b>Bay</b>	<b>Emmet</b>	<b>Monroe</b>
<b>Alger</b>	<b>Charlevoix</b>	<b>Houghton</b>	<b>Tuscola</b>
<b>Alpena</b>	<b>Cheboygan</b>	<b>Huron</b>	<b>Wayne</b>
<b>Arenac</b>	<b>Chippewa</b>	<b>Mackinac</b>	
<b>Baraga</b>	<b>Delta</b>	<b>Marquette</b>	

A Part 323 permit is required for the construction, installation, or moving of a permanent structure

on a parcel of land where any portion is a designated High-Risk Erosion Area. Examples include homes, porches, septic systems, additions, substantial improvements of existing structures, and outbuildings. The **current counties** with designated High-Risk Erosion Areas include:

<b>Alger</b>	<b>Berrien</b>	<b>Houghton</b>	<b>Mackinac</b>	<b>Ottawa</b>
<b>Allegan</b>	<b>Chippewa</b>	<b>Huron</b>	<b>Manistee</b>	<b>St. Clair</b>
<b>Antrim</b>	<b>Delta</b>	<b>Iosco</b>	<b>Mason</b>	<b>Sanilac</b>
<b>Baraga</b>	<b>Emmet</b>	<b>Keweenaw</b>	<b>Menominee</b>	<b>Van Buren</b>
<b>Bay</b>	<b>Gogebic</b>	<b>Leelanau</b>	<b>Muskegon</b>	
<b>Benzie</b>	<b>Grand Traverse</b>	<b>Luce</b>	<b>Oceana</b>	

New construction in the 100-year floodplain of the Great Lakes must be elevated to prevent property damage. Forty-one coastal communities have designated flood risk areas mapped and participate in the National Flood Insurance Program, the federal program providing the sole source of flood insurance. These designated communities have approved zoning ordinances and regulate construction in flood risk shorelands locally. Permits are issued by the local unit of government. The WRD oversees performance and provides technical assistance.

## 8.7 PART 325 OF ACT 451: GREAT LAKES SUBMERGED LANDS

A permit is required for all filling, dredging, and placement of structures (e.g., docks, piers, pilings, etc.) below the ordinary high-water mark and on all upland channels extending landward of the ordinary high-water mark of the Great Lakes, according to the 1985 International Great Lakes Datum. Part 325 also provides for the lease, or deed of state-owned bottomlands of the Great Lakes through the bottomlands conveyance program. Information about the program may be found at [Michigan.gov/EGLEGreatLakes](http://Michigan.gov/EGLEGreatLakes), then select Submerged Lands.

## 8.8 PART 353 OF ACT 451: SAND DUNES PROTECTION AND MANAGEMENT

The most unique and fragile sand dunes along the Great Lakes shoreline in Michigan are defined in the “**Atlas of Critical Dune Areas**” prepared by the Michigan Department of Natural Resources. A permit is required for activities that significantly alter the physical characteristics of a Critical Dune Area or for a contour change in a Critical Dune Area. Activities include the construction of a house or garage, building a road or driveway, installing a septic system, installing retaining walls, and sand removal, to name a few. Find more information at [Michigan.gov/CriticalDunes](http://Michigan.gov/CriticalDunes).



The following counties have designated Critical Dune Areas:

<b>Alger</b>	<b>Charlevoix</b>	<b>Luce</b>	<b>Oceana</b>
<b>Allegan</b>	<b>Chippewa</b>	<b>Mackinac</b>	<b>Ottawa</b>
<b>Antrim</b>	<b>Emmet</b>	<b>Manistee</b>	<b>Schoolcraft</b>
<b>Benzie</b>	<b>Keweenaw</b>	<b>Mason</b>	<b>Van Buren</b>
<b>Berrien</b>	<b>Leelanau</b>	<b>Muskegon</b>	

Islands that have designated Critical Dune Areas include:

<b>Beaver Island</b>	<b>North Fox Island</b>	<b>North Manitou Island</b>
<b>High Island</b>	<b>South Fox Island</b>	<b>South Manitou Island</b>

## 8.9 SECTION 404 OF THE FEDERAL CLEAN WATER ACT OF 1977 AND SECTION 10 OF THE RIVERS AND HARBORS ACT OF 1899

Section 404 of the Clean Water Act (CWA) prohibits the discharge of dredged or fill material into waters of the United States, including inland lakes and streams, the Great Lakes, and wetlands, without a permit. Michigan was the first of only two states currently authorized to administer the permit program for the federal government through state law. In most areas of the state, issuance of a permit by EGLE’s WRD in accordance with the CWA requirements also authorizes a project under Section 404, and no separate federal permit is required. However, since Section 10 does not provide for similar transfer to states, the U.S. Army Corps of Engineers (USACE) retains Section 404 jurisdiction within those waters that are navigable waters of the U.S. and their adjacent wetlands. Therefore, authorization is also required from the USACE for projects in traditionally navigable waters including the Great Lakes, connecting channels, other waters connected to the Great Lakes where navigational conditions are maintained, and wetlands directly adjacent to these waters. Submittal of a single, completed EGLE/USACE - Joint Permit Application to the WRD ensures that Section 404 permit applications will be processed by all appropriate agencies, including projects that require both EGLE and USACE authorization. For a project that requires authorization under a USACE permit, federal permit issuance is contingent upon EGLE granting Clean Water Act Section 401 Water Quality Certification and, in most cases, Coastal Zone Management Act Section 307 Consistency Certification.

## 8.10 FEES

The fees for permit applications vary significantly between the various parts of Act 451 and will vary within a Part depending on the scope of the project. General permit and minor project categories are described on the WRD’s Web site: [Michigan.gov/JointPermit](http://Michigan.gov/JointPermit). A [current Joint Permit Application fee schedule](#) is available at the same web site or by calling the appropriate [EGLE District Office](#) for the county in which the project will be located. Fees for the soil erosion and sedimentation control permits are established by the county or local agency issuing the permit.



## WHERE TO GO FOR HELP

Websites, program contacts, and publications/resources for common land/water interface regulation topics

### **Aquatic plant or algae growth nuisance control - Permit application for chemical treatment**

EGLE, WRD, Lakes Michigan and Superior Permits Unit: 517-284-5593 | [Michigan.gov/ANC](https://www.michigan.gov/ANC)

### **Floodplain Management**

[Michigan.gov/FloodplainManagement](https://www.michigan.gov/FloodplainManagement) | [Floodplain Staff Contacts](#)

### **Joint Permit application and instructions**

[Michigan.gov/JointPermit](https://www.michigan.gov/JointPermit) | [EGLE District Office](#), Water Resources Division

### **MiWaters**

[MiWaters Contacts](#) at [miwaters.deq.state.mi.us](https://miwaters.deq.state.mi.us)

- [MiWaters Training Material](#)
- [MiWaters Frequently Asked Questions](#)

### **Wetlands Identification**

[Michigan.gov/Wetlands](https://www.michigan.gov/Wetlands) | 517-284-5543.