

I own residential waterfront property and am thinking about making some improvements to it. Do I need permits from the DEQ?

Certain construction activities on Inland Lakes and Streams require permits from the Land and Water Management Division of the Michigan Department of Environmental Quality (DEQ) under the authority of Part 301, Inland Lakes and Streams, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 301).

The Inland Lakes and Streams Program is responsible for the protection of the natural resources and the public trust waters of the inland lakes and streams of the state. The program oversees activities including dredging, filling, constructing or placement of a structure on bottomlands, constructing or operating a marina, interfering with natural flow of water, or connecting a ditch or canal to an inland lake or stream.

The following are typical projects regulated under Part 301:

Shore Protection. Because shore protection structures can have negative effects on natural resources and other shoreline properties, shore protection structures should only be installed when they are needed to address erosion problems, and the type of shore protection used should be carefully considered. Near shore shallow waters provide habitat for a greater variety of organisms than all other aquatic zones and are essential in the life cycles of many of Michigan's fish and wildlife. Northern pike, bluegill, bass, and other fish spawn in shallow shoreline areas. Loons, ducks, geese, water birds, songbirds, and wildlife such as amphibians, reptiles, and insects live along shore areas.

Shoreline hardening which occurs with the construction of vertical walls (seawalls) has significant adverse effects on the fishery, wildlife, and the overall water quality of a lake. Where vertical walls are built, the natural transition is destroyed, wave reflection off vertical walls causes bottom scour to occur, stirs bottom sediments, increases water turbidity, and impacts spawning areas and aquatic vegetation. Vertical faces block access to and from the water for turtles, frogs, and other fauna that need access to the uplands to feed, rest, and nest. Seawalls damage or destroy these important habitat areas and weaken the ecosystem.

Because of these negative aspects of vertical walls, the DEQ recommends the use of natural shoreline treatments. New shoreline hardening should be avoided where alternate approaches such as plantings and natural stone can be used to protect property from erosion. The purpose and benefits of plantings/stone are to provide a natural transition between the open water and upland, while providing habitat.

Many problems can be avoided with proper placement of structures to minimize loss of natural vegetation and changes to topography. Leaving a natural transitional area or adding deep rooted plants, including natural (unmowed) vegetation, can minimize the effects of waves, ice, and fluctuating water levels. In order to prevent ongoing erosion, your property may benefit from the addition of deeper rooted plants such as shrubs and trees. A natural, vegetated shoreline is less expensive to construct, absorbs and disperses the energy of waves, provides habitat, and tends to be self healing.

Construction of any type of shore stabilization structure such as a seawall, bulkhead, revetment, etc., at or below the ordinary high water mark of a lake or stream requires a permit. No DEQ permits are required to plant native vegetation on your shoreline.

Permanent Docks or Permanent Boat Hoists. Permanent docks or boat hoists which are left in the lake year around require a permit. Seasonal docks and hoists do not require a permit if they are for private, non-commercial use by a landowner, do not unreasonably interfere with the use of the water by others, do not interfere with water flow, and will not be placed in wetlands.

Beach Sanding. Placement of sand, pea stone, or other clean fill below (waterward) the water line requires a permit. A reasonable amount of sand may be placed landward of the water line without a permit as long as the sand does not shift the location of the existing ordinary high water mark or the shoreline contour. The sand cannot be placed in a wetland.

Dredging or Excavation. Any dredging below (waterward) the ordinary high water mark of a lake or stream requires a permit. Dredging of a pond within 500 feet of a lake or stream also requires a permit. Excavation on the upland (dry land) within 500 feet of a lake or stream that does not extend below the water table does not require a permit from the DEQ. However, a soil erosion permit is required from the county for this activity. A permit is needed for any excavation where the purpose is ultimate connection with an existing lake or stream.

This is only a partial list of the most common projects associated with inland lakes and streams. Other types of activities may also require permits.

For additional information on the Inland Lakes and Streams Program visit www.michigan.gov/deqinlandlakes or call the **Environmental Assistance Center** at **800-662-9278**.