

A Property Owner's Guide to Wetland Protection in Michigan



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INTRODUCTION

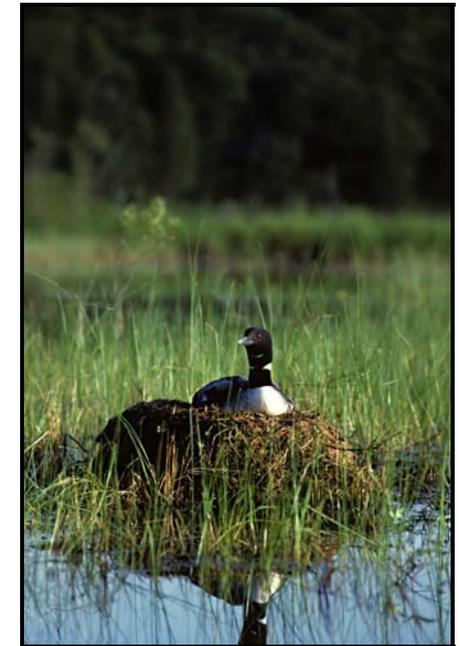
Wetlands, also called swamps, marshes, and bogs, are an important part of Michigan's natural heritage. In this state where people take pride in the quality of their environment and enjoy outdoor activities year-round, wetlands serve a vital role.



Wetlands are an essential part of our aquatic ecosystems, and their role in supporting fish and wildlife, protecting water quality, and providing flood control is widely recognized and documented. Waterfowl are almost entirely dependent upon wetlands, and 90 percent of Great Lakes fish species make use of coastal wetlands at some point in their life. Numerous threatened and endangered plant and animal species – including osprey, loons, cricket frogs, spotted turtles, prairie fringed orchids, and many others – are dependent upon wetlands.

Wetlands also provide the public with “water management” benefits including flood control, filtration and recharge of groundwater supplies, and protection of lakes and streams from sediment and other pollutants filtered from stormwater. The economic value of all public benefits provided by wetlands has been

estimated at over \$10,000 *per acre per year*. Multiplied by the estimated 5.5 million acres of wetlands in Michigan -- wetlands provide a multi-billion dollar annual benefit to our citizens.



Common loons and many other species of fish and wildlife depend on wetland habitat.

WHAT ARE WETLANDS?

Most people are familiar with the cattail or lily pad wetlands found in areas of standing water, but wetlands can also look like grassy meadows, shrubby fields, or mature forests in areas that are wet enough to alter the soils and plants that are present. Michigan's wetland protection statute defines wetlands as, “...**land characterized by the presence of water at a frequency and duration 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.**”

This definition applies to both public and private lands.



Wetlands are identified based on three factors: the presence of wetland vegetation, the presence of water, and changes in the soil resulting from the presence of water.

There are many types of wetlands in Michigan, including deciduous swamps, wet meadows, emergent marshes, conifer swamps, wet prairies, fens, and bogs. **Wetland vegetation** includes species of trees, shrubs, and other plants that are adapted to grow and reproduce where soils are either flooded or saturated with water. Common wetland plants include cattails and bulrushes; shrubs such as red-osier dogwood, alder and cranberry; and trees like willow, red and silver maple, American elm, cottonwood, northern white cedar, balsam fir, and tamarack.

While the kinds of plants found in wetland areas may vary, these ecosystems share a common characteristic in that they occur where water is concentrated in the landscape.

Water tends to concentrate in areas that are lower than the surrounding terrain. Thus, wetlands often border or occur in lakes, rivers, streams, valleys, swales, ditches, and similar depressions where water collects. Also, broad flat areas that are slow to drain, places where an obstruction has

blocked the flow of surface water, or areas where clay or bedrock obstruct the downward movement of water into the soil will remain wet for extended periods of time. These wetlands can frequently be recognized by the presence of permanent, seasonal, or temporary standing or flowing water. Many other wetland areas are supported by a high groundwater table, and standing water may not be visible during the year.

Soils that are frequently saturated with water are usually dark or dull in color, and wet or very moist to the touch. Wetland soils such as peat include high levels of organic matter, although wetlands can also occur on almost any soil.



Wetland soils are typically dark and often contain high levels of organic matter.

HOW DO I KNOW IF I HAVE WETLANDS ON MY PROPERTY?

Because wetlands are identified based on the presence of water, and on the type of plants and soils that are present, an on-site inspection by a trained person is necessary to define with certainty the boundary between wetland and non-wetland (or upland) areas. The DEQ offers the following assistance in identifying wetlands.

Wetland Inventory Maps

DEQ county wetland inventory maps are a good starting point in finding the general location of wetland areas in your area. However, because of the scale of these maps and the methods used to produce them, they cannot be used to accurately locate wetland boundaries on individual parcels of property. County wetland inventory maps are available through the DEQ wetlands Web page listed at the end of this pamphlet, or in many county offices.

Wetland Identification Program (WIP)

Landowners may request that the DEQ identify wetland boundaries on all or a portion of their property through the Wetland Identification Program (WIP). This is a voluntary program that charges a fee based on the area of land examined and the level of service requested. Wetland Identification may not be possible during winter months; therefore, please plan ahead if possible. Additional information regarding the WIP program is available from the DEQ - see contact information at the end of this pamphlet.

Many private consultants also offer wetland delineation services for a fee. A list of consultants is maintained on the DEQ wetland Web site.

HOW ARE WETLANDS REGULATED?

In 1979, the state Legislature passed wetland protection legislation that is now Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act (Public Act 451 of 1994, as amended).

A permit from the DEQ is required under this part to authorize construction activities including **filling, dredging, draining, and construction or operation of a use or development in a wetland.**

Under Part 303, wetlands are regulated if they are:

- Connected to or located within 1000 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.
- Not connected to one of the Great Lakes or Lake St. Clair, or an inland lake, pond, stream, or river, and less than 5 acres in size, if the DEQ has determined that these wetlands are essential to the preservation of the state's natural resources and has so notified the property owner.

The Wetland Protection Part includes legislative findings regarding the importance of wetlands and the benefits that they provide to the public. The Legislature also outlined criteria for the issuance of permits in the Wetlands Protection Part; the DEQ must follow these criteria in making permitting decisions.



Construction activities in most of Michigan's wetlands require a permit.

Generally, impacts to wetlands must be avoided if there is a feasible alternative. If the disturbance of a wetland area is unavoidable, then an Application for Permit must be filed with the DEQ. Any construction that is proposed in a wetland area must be the least damaging alternative to accomplish the necessary activity.

You may wish to consider that wetland conditions present a number of serious constraints to construction. Wetland soils are usually unsuitable for building and can add significantly to the cost of the construction. Basement flooding and excessive settling can result in cracked walls and foundations, and are problems common to building in wetlands. You may also wish to discuss the suitability of a wetland parcel for residential construction with your local health department.

What about federal permits?

Wetlands are also protected under Section 404 of the Federal Clean Water Act. In most states, landowners who seek physical alteration of wetlands need a separate "Section 404" permit from the U.S. Army Corps of Engineers (USACE).

Michigan's citizens are fortunate in that this is one of only two states granted approval to authorize federal Section 404 activities through its state permit program, eliminating the need in most cases for a separate federal permit. Thus, a wetland permit that is issued under Part 303, Wetlands Protection, *also* authorizes construction activities under the Federal Clean Water Act in most areas of the state. (Great Lakes coastal wetlands are an exception; along the coast and in some major tributaries, the USACE maintains permit authority.) Because the DEQ permit program operates under strict deadlines, our state-federal permits are typically issued much more quickly than USACE permits in other states.

The DEQ will handle all federal coordination issues for you – including coordination with other federal programs as required under the Clean

Water Act. Although federal coordination is largely invisible to most permit applicants, this "behind the scenes" work by the DEQ saves most property owners significant time and money.

What happens after I apply for a permit?

Before permits are issued, DEQ staff work with property owners to make sure that impacts to wetlands and other waters are avoided if possible. Often, permits are issued with modifications and conditions to minimize impacts. The DEQ typically issues 85 to 90 percent of wetland permit applications once wetland impacts are minimized. Decisions to issue permits that authorize the permanent loss of wetlands are made carefully, considering the statutory criteria, and after an opportunity for public comment.

Minimizing impacts to the wetland will help maintain its functions in the landscape – and the public benefits it provides - and ease the process of acquiring a permit. Examples include:

- Planning a road or utility line crossing of a wetland at its narrowest point.
- Locating a project in the area of the wetland determined by the DEQ to be the least environmentally damaging.
- Using construction methods suggested by DEQ representatives to avoid wetland impacts – such as working on construction mats when using heavy equipment.
- Making use of boardwalks or docks to access open water. Wetland functions may be only minimally disturbed by placing a walkway on posts above the wetland, and the appearance blends in well with the natural setting. The construction of such features in a wetland does require a permit from the DEQ.



The use of boardwalks and other elevated structures may minimize impacts to wetlands.

If a permitted activity results in the significant loss of wetlands, your permit may require **mitigation**, that is, the replacement of the lost wetland area and its public benefits through restoration, creation, or in some instance preservation of other wetlands.

Types of permits

Most applications for permits under Part 303 – Wetlands Protection, will be processed as **“individual permits”**. A public notice will be issued to allow adjacent landowners, local officials including the health department and drain commissioner, and other interested parties an opportunity to comment on the project during a specified time period. During this period, a public hearing may be requested. DEQ staff will evaluate the permit application to make sure that it includes all information needed to make a decision; inspect the site of the proposed project; and evaluate comments received before making a decision.

Some types of projects that have been determined to have more limited impact may be processed under a **“general permit”** process. This type of permit does not require issuance of a public notice, and is therefore typically reviewed more quickly. In some cases, general permit applications may be reviewed without a site

inspection, although additional photographs or other information may be required. General permits have been established where possible to further streamline the regulatory process, and to reduce the time and cost of obtaining state and federal authorization for minor activities that impact wetlands.

Where do I start?

Permit application forms are available on-line or through the mail. The following general contact information will assist you in obtaining the additional information that you need. You may also use these sources to request the name and contact information for current DEQ Land and Water Management Division field staff in your geographic area.



Bog vegetation including pitcher-plants and wild cranberries.

CONTACT INFORMATION

For additional information regarding DEQ's wetland protection and management program, including permit information, visit the DEQ Web site at:

www.michigan.gov/deqwetlands

You may also call the DEQ Environmental Assistance Center toll free at:

800-662-9278

Send written requests for information to:

**Land and Water Management Division
Michigan Dept. of Environmental Quality
P.O. Box 30458
Lansing, MI 48909**

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September 2007

Printed by authority of PA 451 of 1994
Total Copies Printed: 45,000 Cost: \$4,730.20