

VI. NATURAL FEATURE SETBACK

Introduction

A natural feature setback is land that separates a certain natural feature from the land uses adjacent to it. The setback is measured from the edge of the natural feature, and is usually a specified width. In general, the purpose of a setback is to minimize potential impacts of adjacent land uses on the natural feature and maximize the long-term viability of the natural feature. The setback area is often vegetated and in many cases left in its natural state. Setbacks are commonly used to protect a community's water resources such as rivers, lakes, streams, marshes, etc. but can be used for any type of natural feature.

Setbacks perform a number of significant functions including reducing water temperature; filtering sediments and other contaminants from stormwater; reducing nutrient loads to lakes; stabilizing stream banks with vegetation; providing riparian wildlife habitat; maintaining and protecting fish habitats; forming aquatic food webs; and providing a visually appealing greenbelt and recreational opportunities.

Often times, the terms “setback” and “buffer” are used interchangeably. This is appropriate in most instances because they essentially are referring to the same thing. Both describe a strip of vegetated land next to a natural feature whose purpose is to protect that feature. The different terminology occurred simply because the environmental community adopted the term “buffer,” while the community planning profession adopted the term “setback.” We use the term setback in this model ordinance because it has a direct link to planning enabling legislation in Michigan, and has proven to be a defensible term and concept.



Establishing the width of a setback so it is effective depends on the type and sensitivity of the natural feature and the expected impacts of surrounding land uses. In general, the wider the setback, the more protection it provides. Scientific data suggests a wide range of setback widths, some up to 100 feet or more. However, for most communities a 100 foot setback could eliminate a considerable amount of land that may otherwise be developed, and could be considered a significant hardship for property owners. These concerns can be alleviated if a community incorporates simple measures to ensure fairness and flexibility in designing its setback ordinance. These measures include maintaining setbacks in private ownership, setback averaging, density compensation, conservation easements, and variances.

The twenty-five (25) foot setback established by this model ordinance represents a compromise between scientific evidence, experience, and practicality. As a result, the ordinance is less restrictive on property owners, yet provides some measure of environmental protection. To protect natural features, a community may develop a schedule of setback requirements for various natural features and/or require minimum standards and a review process as part of the community's normal development review.

Setback requirements (width, composition, permitted use, etc.) typically appear as standards integrated into various chapters of a community's zoning ordinance (e.g. landscaping, woodlands, floodplains, overlay, or stormwater ordinance). As provided in the model example below, they can also be codified as a separate ordinance. Setback standards can also be incorporated as a requirement in a community's site plan review process. However, communities may *not* incorporate setback requirements into a wetland ordinance. Part 303, *Wetlands Protection*, of Public Act 451 of 1994 (Natural Resources and Environmental Protection Act), as amended is very specific about the authority granted to local government regarding wetland regulations. Part 303 allows local units of government to regulate wetlands but only within the specific boundaries of a wetland(s) as defined by the Act.

Regulatory Considerations

There is no specific language in Public Act 451 of 1994 (Natural Resources and Environmental Protection Act) as amended, granting authority to establish setbacks. However, the intent of the Act, "*to protect the environment and natural resources of the state,*" can be cited as a purpose in a setback ordinance. Authority to regulate natural features also comes from the City and Village Zoning Act (Act 207 of 1921 as amended), and the Township Zoning Act (Act 184 of 1943 as amended). Authority to protect natural features is also given in the Michigan Constitution. The following three (3) points indicate that zoning ordinances may include requirements for a setback to protect natural features:

1. The Michigan Constitution, Article 7, Section 34, has a directive that the provisions of law concerning counties, townships, cities and villages shall be liberally construed in their favor;

2. In Article 4, Section 52, of the Michigan Constitution, public policy states that the conservation of natural resources of the state are of “*paramount public concern*,” and the Constitution directs the Legislature to enact laws to provide for their protection; and
3. The Michigan Supreme Court in **Hess v Charter Township of West Bloomfield** 439 Mich 550, has held that the zoning enabling acts represent legislation intended to carry out the constitutional directive of Article 4, Section 52, of the Michigan Constitution to conserve natural resources.

Example Ordinance Language

The following provides example language for the protection of natural features using a setback. This particular example is from a rapidly growing community in Southeast Michigan that wishes to protect and preserve its water resources. Like any example, this language should only be used as a guide. Each community has a unique set of natural features and existing ordinances that this regulation needs to complement. Therefore, each ordinance section is accompanied by general considerations for individualizing the ordinance.

NATURAL FEATURE SETBACK

(COMMUNITY NAME), MICHIGAN

Ordinance No. _____

SECTION 1 - GENERAL

Section 1.1 - Intent

It is the intent of this section to require a minimum setback from natural features, and to regulate property within such setback in order to prevent physical harm, impairment and/or destruction of or to a natural feature. It has been determined that, in the absence of such a minimum setback, intrusions in or onto natural features would occur, resulting in harm, impairment and/or destruction of natural features contrary to the public health, safety and general welfare. This regulation is based on the police power, for the protection of the public health, safety and welfare, including the authority granted in the Zoning Enabling Act.

Section 1.2 – Purpose

The purpose of this section is to establish and preserve a minimum setback from natural features to recognize and make provision for the special relationship, interrelationship and interdependency between the natural feature and the setback area. This section acknowledges the unique spatial relationship between the setback and natural feature. It also acknowledges the interdependency of these areas in terms of physical location, plant and animal species diversity, over land and subsurface hydrology, water table, water quality, and erosion of sediment deposition.

If a greater setback or prohibition is required by other ordinance, or other provision of this ordinance, such greater setback or prohibition shall apply.

Section 1.3 – Regulation

A natural feature setback shall be maintained in relation to all areas defined in this Ordinance as being a "natural feature," unless, and to the extent, it is determined to be in the public interest not to maintain such setback.

SECTION 2 – DEFINITIONS

NATURAL FEATURE means a wetland, as defined by the Michigan Department of Environmental Quality (MDEQ), or watercourse, including a lake, pond, river, stream, or creek.

SIDEBAR TEXT

- The definition of a natural feature in this ordinance is fairly specific. However, natural features can be more broadly defined to include, but not limited to, endangered species habitat, 100-year floodplain, landmark trees, steep slopes, and woodlands.
- The MDEQ defines “wetlands” 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.”
- “Watercourse” could be defined as follows: “Any waterway including a river, stream, creek, lake, vernal pool, pond, or any body of surface water having definite banks, a bed and visible evidence of a continued flow or continued occurrence of water.”

SECTION 3 – AUTHORIZATION AND PROHIBITION

Section 3.1 – Authorization

The natural feature setback shall be an area or feature with boundaries and limitations determined in accordance with the standards and provisions in this section in relation to respective types of natural features.

Section 3.2 – Prohibition

- A. In conjunction with the review of plans submitted for authorization to develop property or otherwise undertake an operation in, or on, or adjacent to a natural feature applicable natural feature setbacks shall be determined. This will allow authorizations and prohibitions established by the body of officials undertaking the plan review. In the event an activity is proposed within a setback area as designated under Section 7, below, but such activity is not proposed in conjunction with an activity within the natural feature itself, review under this section shall be conducted by the (Community Name) body or official reviewing the proposed activity, or, if no other review is required, review shall be undertaken by the planning department. The body or official undertaking the review shall, if determined necessary or appropriate by such body or official, utilize the services of a wetland consultant, and, in such case, the applicant shall establish an escrow and shall be responsible for the fees of such consultant.

- B.** Within an established natural feature setback, unless and only to the extent determined to be in the public interest by the body undertaking plan review, there shall be no construction, removal or deposit of any structures or soils, including dredging, filling or land balancing. This prohibition shall not apply with regard to those activities exempted from this prohibition, below. In addition, no vegetation cutting or removal within the natural feature setback shall occur before all site plan approvals from the appropriate governmental body have been obtained.

SIDEBAR TEXT

- The activities permitted within a natural feature setback should be carefully considered by each community adopting a setback ordinance. This is the part of the ordinance where the community's goals for an ordinance are most clearly conveyed. The permitted activities described here can become more or less restrictive based on what the community is trying to achieve.

- C.** In determining whether proposed construction or operations are in the public interest, the benefit which would reasonably be expected to accrue from the proposal shall be balanced against the reasonably foreseeable detriments of the construction or other operation, taking into consideration the local, state and national concern for the protection and preservation of the natural feature in question. If, as a result of such a balancing, there remains a debatable question whether the proposed project and/or operation is clearly in the public interest, authorization for the construction and/or operation within the natural feature setback shall not be granted. The following general criteria shall be applied in undertaking this balancing test:
1. The relative extent of the public and private need for the proposed activity;
 2. The availability of feasible and prudent alternative locations and methods to accomplish the expected benefits from the activity;
 3. The extent and permanence of the beneficial or detrimental effects which the proposed activity may have on the public and private use to which the area is suited, including the benefits the natural feature and/or natural feature setback provides;
 4. The probable impact of the proposed construction and/or operation in relation to the cumulative effect created by other existing and anticipated activities on the natural feature to be protected;
 5. The probable impact on recognized historic, cultural, scenic, ecological, or recreational values, and on fish, wildlife and the public health;

6. The size and quantity of the natural feature setback being considered;
7. The amount and quantity of the remaining natural feature setback;
8. Proximity of the proposed construction and/or operation in relation to the general natural feature, taking into consideration the degree of slope, general topography in the area, soil type and the nature of the natural feature to be protected;
9. Economic value, both public and private, of the proposed construction and/or operation, and economic value, both public and private, if the proposed construction and/or operation were not permitted; and
10. The necessity for the proposed construction and/or operation.

SECTION 4 – EXEMPTIONS

Section 4.1

If and to the extent the (Community Name) is prohibited by its ordinances and/or law from regulating the proposed activity in or on the respective natural feature, regulation under this section shall be exempted. In addition, the following activities shall be exempted, provided, it is not the intent of this provision to exempt regulation by other ordinance provisions relative to the natural feature itself:

- A.** Installation of a fence within a setback area;
- B.** Maintenance of previously established lawn areas;
- C.** Grading and filling necessary in order to conform with express requirements imposed by the (Community Name) Engineer;
- D.** Installation of seasonal recreational structures for watercourse use; and
- E.** Planting of non-invasive trees and other vegetation, but not the use of fertilization.

SECTION 5 – APPLICATION FORM

Section 5.1

Application shall be made under this section on the form approved by the (Community Name) board and provided by the building and/or planning department.

SECTION 6 – SETBACK STANDARDS

Section 6.1

Unless otherwise determined by the body undertaking the plan review, the following setbacks shall apply:

- A.** A twenty-five (25) foot setback from the boundary or edge of a wetland, as defined by the Michigan Department of Environmental Quality (MDEQ) or other relevant ordinance or binding authority; and
- B.** A twenty-five-foot (25) setback from the ordinary high water mark of a watercourse.

SECTION 7 – APPEALS

Section 7.1 - An interested person who is aggrieved by the determination under this section may request an appeal to the (Community Name) board.

Section 7.2 - A request for appeal must be filed within ten (10) days following decision. If an appeal is requested during such ten day period, the effectiveness of the permit shall be suspended pending the outcome of the appeal.

Section 7.3 - The (Community Name) board shall determine whether to consider the appeal based upon the minutes of the body making the initial decision (if minutes are kept), or based upon an entirely new hearing. If a new hearing shall be conducted, notice of the time, date and place of the hearing shall be mailed to the owners of property, based upon (Community Name) records, within three hundred (300) feet of the property and also mailed to all persons, subdivision associations and lake associations registered with the (Community Name) to receive such notices.

Section 7.4 - If the (Community Name) board determines to consider the appeal based upon the minutes of the person or body being reviewed, the applicant and other interested parties as allowed by the (Community Name) board shall be entitled to be heard by way of argument and citation of authorities prior to the board's determination:

Section 7.5 - The (Community Name) board, based upon its appellate review, may reverse, affirm or modify the determination and/or permit issued.

Additional Resources

1. Southeast Michigan Resource Conservation & Development Council.
<http://www.semircd.org>
2. Schueler, Thomas R., H. K. Holland. 2000. *The Architecture of Urban Stream Buffers* in The Practice of Watershed Protection. Center for Watershed Protection. Ellicott City, Maryland.
3. National Conservation Buffer Initiative – Natural Resources Conservation Service.
<http://www.nhq.nrcs.usda.gov//CCS/Buffers.html>
4. Center for Watershed Protection. www.cwp.org.
5. Better Site Design: A Handbook for Changing Development Rules in Your Community. 1998. Center for Watershed Protection. Ellicott City, Maryland.
6. State NRCS and FSA Buffer Initiative Contacts:

Steven V. Law, DC
USDA-NRCS
2343 N. US 27 HWY
St. Johns MI 48879
517-224-8769 x116
fax: 517-224-1033

Chris Coulon, PAS
USDA-NRCS
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Bob Payne, Program Specialist
USDA-FSA
3001 Coolidge, Suite 100
East Lansing MI 48823
517-337-6660 x1215
fax: 517-337-6898

7. Fish and Wildlife Agency Buffer Initiative Contact in Michigan

Mark Sargent
Private Lands Wildlife Biologist
Wildlife Division Private Lands Office
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8. Conservation Buffers Work...Economically and Environmentally.
<http://www.nrcs.usda.gov/feature/buffers/pdf/BufferBr.pdf>