



**Environmental Commission  
Meeting Packet  
October 3, 2018**

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## AGENDA: October 3 2018

### *Town Hall Meeting Room – 5151 Marsh Rd. Okemos*

1. CALL MEETING TO ORDER AT 7:00 PM
2. GREEN THEME: **Solar Meridian Project** , Roger Eberhardt, Meridian Energy Team
3. APPROVAL OF THE AGENDA
4. APPROVAL OF THE MINUTES
5. PUBLIC REMARKS
6. NEW BUSINESS
  - A. Green Community Recognition
  - B. Other
7. OLD BUSINESS
  - A. Commissioner Nominations: <http://bit.ly/commission-app>
  - B. Wetland Ordinance Revisions (Resource [Page Here](#) and prior packets)
  - C. PAH memo
  - D. Other
8. REPORTS & UPDATES
  - A. CHAIR
  - B. COMMISSION/LIASON/WORKGROUP REPORTS
    - A. Planning
    - B. Land Preservation
    - C. Energy
    - D. Green Team
    - E. Other
  - C. STAFF
  - D. OTHERS
9. OTHER
10. PUBLIC REMARKS
11. ADJOURN

## MINUTES: September 5, 2018 (draft)

PRESENT: Chair, William McConnell; Commissioner John Sarver; Commissioner, Kirk Lapham  
ABSENT: Vice Chair, Ned Jackson; Commissioner, Susan Masten; Commissioner James Kielbaso  
STAFF: LeRoy Harvey, Environmental Programs Coordinator; Elizabeth Hossink, Social Media Intern;  
HOMTV Interns  
GUEST: Brent Forsberg, T.A. Forsberg, Inc. and Urban Systems

### **1. CALL MEETING TO ORDER**

Chair McConnell welcomed Brent Forsberg, the Green Theme Presenter at 7:02 pm.

### **2. GREEN THEME PRESENTATION**

Brent Forsberg shared his perspectives on “Green Placemaking” and Green Building. Forsberg was recognized at our last meeting as a developer who is leaving a “green” mark on our region and gaining a reputation as a local leader and innovator in the industry. He explained the challenges of creating sustainable/green, vibrant, walkable, affordable, and livable communities/places/developments while making a profit. He mentioned incentives (like density bonuses) and PACE financing as tools that can help achieve these goals. View his presentation at <http://meridianmi.swagit.com/play/09052018-830>

### **3. APPROVAL OF AGENDA**

No changes.

### **4. PUBLIC REMARKS**

None

### **4. APPROVAL OF MINUTES**

Chair McConnell suggested that we hold on approving the minutes until staff have had a chance to review a recording of last month’s Green Theme: <https://youtu.be/eEDHKVwxByA> on Wetland Banking.

### **5. PUBLIC REMARKS**

### **6. NEW BUSINESS**

- a. **Social Media Discussion and Update:** Elizabeth Hossink gave a brief update of her work posting environmental related news on the Facebook Page. Ms. Hossink is a Social Media Intern with HOMTV. Chair McConnell asked to be updated about postings. The Commission (and the public) is also encouraged to “like” the Green Meridian Facebook Page <https://www.facebook.com/GreenMeridiantwp/> and “join” the Green Meridian Group <https://www.facebook.com/groups/greenmeridian>
- b. **New Commissioner Recruitment:** All Meridian residents interested in environmental issues are encouraged to join the Environmental Commission and/or nominate interested citizens (apply at Meridian.mi.us – Gov’t -- Commission ) <http://bit.ly/commission-app>

### **7. OLD BUSINESS**

- c. **PAH Memo:**  
Several edits were suggested. A revised memo is attached and will be distributed in next month’s Packet.
- d. **Wetland Ordinance Next Steps:**  
Chair McConnell suggested a possible discussion with member(s) the Land Preservation Board about wetland ordinance changes. Harvey will notify Commissioners about their next meeting.

8. **REPORTS & UPDATES**

a. CHAIR: None

b. COMMISSION/LIASON/WORKGROUP REPORTS

F. **Planning:** Planning Commissioner David Premoe mentioned the upcoming project to build a bridge across the wetlands on Okemos rd. to connect two major pathways in the Township. I will improve accessibility and an opportunity to view the wetlands.

The Planning Commission is learning about form-based codes.

G. **Land Preservation:** None

H. **Energy:** Commissioner Sarver mentioned upcoming Solarizing Michigan workshop on Sept 12 and a Solar Open House on Oct. 6.

I. **Green Team:** Harvey shared information about the upcoming Meridian Regional Recycling Event, a need for volunteers, & update on an Apartment Recycling Survey.

c. **STAFF**

Harvey shared a Board Memo from Dreyfus about creation of a new position called "Director of Community Sustainability" to help assist with sustainability-related issues including development, planning, Master Plan visioning, greenspace preservation, energy usage, and others areas. The Environmental Commission may wish to weigh in on Dreyfus' proposal.

9. **PUBLIC REMARKS:** None

10. **ADJOURN:** Commissioner Lapham moved to adjourn. Seconded by Sarver. Motion passed.

NEXT MEETING: Oct 3

## MINUTES: August 1 2018 (draft)

- PRESENT:** Commissioners Jim Kielbaso, Ned Jackson, John Sarver, Kirk Lapham, Chair Bill McConnell
- ABSENT:** Marina Ionescu, Susan Masten
- STAFF:** Environmental Programs Coordinator LeRoy Harvey, Principal Planner Peter Menser
- OTHERS:** HOMTV, Ingham Drain Commissioner Pat Lindemann, Wetland Mitigation Bank Administrator MDNR Steve Shine

### 1. Call meeting to order

Vice Chair Ned Jackson called the meeting to order at 7 p.m.

### GREEN THEME PRESENTATION: Wetland Banking

Steve Shine, Wetland Mitigation Bank Administrator (MDNR) shared an informative presentation on wetland banking – an effort to maintain or enhance the ecological benefits of wetlands in watersheds (or eco-regions) where development infringes upon, or destroys them. The idea is to sell credits to developers to help pay for restoration and preservation of new wetlands elsewhere. See a HOMTV story here: <http://bit.ly/wetlandbanking>

There is interest in further “digging” in to this topic, particularly if we can identify sites within the township (areas that were once wetlands) that could be restored – especially in cases where development low-quality wetlands can help pay for restoration on a 2-1 or 3 to 1 basis (lose a low quality acre, gain 2-3 higher quality acres).

View the Powerpoint Presentation here: <http://bit.ly/wetlandbankppt>

### 2. Approval of Minutes

### 3. Approval of Agenda

Chair McConnell suggests moving Wetland Ordinance and related up on the agenda.

### 4. Wetland Ordinance and Ember Oaks Discussion

The EC invited the Drain Commissioner to report on its work in Ember Oaks. Ember Oaks is the site of a major wetland preservation effort and drain improvement. Ingham Drain Commissioner distributed a copy of a restoration project his office was involved with at Ember Oaks. See report:

<http://www.meridian.mi.us/Home/ShowDocument?id=13321&isPublished=False> A Wetland Delineation Report was recently received by the Township on behalf of a developer ([www.meridian.mi.us/Home/ShowDocument?id=13324](http://www.meridian.mi.us/Home/ShowDocument?id=13324)) and a Wetland Use Permit may be soon be submitted reviewed by the E.C. for further development on this site.

Lindemann commended the Township on its efforts to protect wetlands. He also provided some additional background on some of the projects he’s been involved with in Meridian and the region. He suggested that each project is unique and that creative solutions are not cookie cutter. Decisionmakers need to move beyond “checklists.” We also need to be thinking about a broad range of “low impact development” strategies – and the impacts of old style approaches to move water quickly off the site and down the drain. Lindemann cited the 100+ rain gardens in Towar

neighborhood as an example. See examples in the June and Aug Packets such as <http://semcog.org/Green-Infrastructure>.

Further research is needed as we revise our Wetland Ordinance, Platt Ordinance and related Wetland Use and Soil Erosion Control Permits.

**5. PAH Ordinance:** There is interest in beginning to educate our Township Board and Staff about this issue. Sarver offered to provide language used by the League of Women Voters. We also have brochures on the topic. Harvey will prepare a memo to the Board.

**6. Green Themes:** The upcoming schedule is in the packet. Summary below:

Sep 5	Brent Forsberg	“Green” Placemaking
Oct 3	Energy Team	Solar Meridian
Nov 7 -	Cathy DeShambo	East Lansing Environmental Initiatives
Dec 5	Garry Rowe	Wellhead Protection

**7. Social Media :** Elizabeth Hossink could not make the meeting but she has been helping promote environmental stories, including Green Themes. She encourages us to “like” the Green Meridian Page on Facebook and join the Green Meridian Group.

**8. Reports and Updates**

A. CHAIR: None

B. COMMISSION/LIASON/WORKGROUP REPORTS

J. Planning: None

K. Land Preservation: Kielbaso promised an invite to tour the new Serafine Preserve next Wed at 6 PM on the south side of Mt. Hope Road.

L. Energy: None

M. Green Team: See Packet

N. Other

C. STAFF: See Packet

D. OTHER: Commissioner Marina Ionescu has had to resign from the Environmental Commission due to other obligations. Appreciation was expressed for her contributions.

**9. Public Remarks:** None

**Adjournment:** Moved by McConnell, 2<sup>nd</sup> by Kielbaso, Unanimously supported.

## STAFF UPDATE

	<b>Summary</b>	<b>What's relevant to E.C.?</b>
Green Community Recognition	Meridian received a "Silver Level" award this month at the MTA conference.	The E.C. is key to success we've made in environmental areas. This program is a good resource for us as we consider our focus: <a href="http://migreencommunities.com">http://migreencommunities.com</a>
Green Infrastructure Project	LeRoy is working with a team of 5 students to learn about green infrastructure, identify examples, and increase awareness about G.I.	<a href="http://recycle.meridian.mi.us/studentprojects/">http://recycle.meridian.mi.us/studentprojects/</a>
Recycling Event	Event planned for 9/29	Bring your stuff! Spread the word! Volunteer! <a href="http://recycle.meridian.mi.us">http://recycle.meridian.mi.us</a>
Social Media -- Communications	Elizabeth Hossink has helped post eco-news. See postings at the links on the right.... HOMTV has also been quite active in covering "green" stories.	You can help spread awareness of the E.C. and its issues/goals/etc. Please share your news and views on the FB <a href="#">group</a> and <a href="#">page</a> . Also – share your story ideas with me/HOMTV!
<a href="#">Green Gazette</a>	I publish a new edition is out every month. This is a place to communicate environmental-related news.	<a href="#">Subscribe here</a> . Send stories, ideas, suggestions, and/or news to <a href="mailto:Harvey@meridian.mi.us">Harvey@meridian.mi.us</a>
Wetlands	I created a page to keep track of ideas and comments... <a href="http://recycle.meridian.mi.us/environmentalcommission/wetlands">http://recycle.meridian.mi.us/environmentalcommission/wetlands</a>	We will discuss again at our Sept meeting.
Energy	There is progress on Solarize Meridian, the 20 KW Solar System at Municipal Complex, and a plan reach our 100% renewable energy goals.	This relates to our Climate Action Goals. Roger Eberhardt with the Meridian Energy Team, will present Oct. 3 at our Green Theme Presentation.
Urban Growth Boundary	The Board will be reviewing a process to approve or deny requests to extend utilities beyond the UGB. It is my understanding that staff are recommending Act 61 rules, placing the responsibility with the Planning Commission to approve or deny utility extension requests. Urban Services Management Study <a href="#">here</a> and here: <a href="http://www.tri-co.org/lup.htm">http://www.tri-co.org/lup.htm</a>	Meridian is at the "cutting edge" of the Urban Growth Boundary – encourage development in existing urban centers vs. allowing urban sprawl. Urban redevelopment and sprawl are broad concerns amongst our Commission and residents in our entire region. E.C. might want to offer a recommendation related to the process to potentially include low-impact development, preservation of our "green infrastructure", etc.
PAH Ban	A revised memo to the Board is provided in this packet.	

## GREEN THEME SCHEDULE AND TOPICS

Sep 5	Brent Forsberg	“Green” Placemaking
Oct 3	Roger Eberhardt	Solar Meridian Overview
Nov 7 -	Cathy DeShambo	East Lansing Environmental Initiatives
Dec 5	Garry Rowe	Wellhead Protection
Jan 9		
Feb 6	Karim Chatti	Pavement Preservation
<b>2019</b>	Ideas	
Jan 2 or 9	<ul style="list-style-type: none"> <li>• Wetland Person – model ordinances – Elise Tripp?</li> <li>• Blue Trails -- (large county grant)</li> <li>• Green Burial Plots (Williamstown Twp – Wanda B.)</li> <li>• Green Building – Low Impact Development</li> <li>• Salt: Suggested by Rebecca Essleman</li> <li>• Radon (Susan)</li> <li>• EL’s Sustainable Building Ordinance – Green Building</li> <li>• 100% Renewable Goal of Traverse City – Kate Madigan (John)</li> <li>• Ecological Landscaping – Bill Schneider - WildType</li> <li>• Wayfinding: (related to our 2018 goals)</li> <li>• Greenspace Plan</li> <li>• Climate Sustainability - review ordinances</li> <li>• Relation between Greening and Economic Development/ attracting green businesses</li> <li>• Collaboration with the Land Preservation Advisory Board</li> <li>• Green chemistry (Ned)</li> <li>• Green Businesses <ul style="list-style-type: none"> <li>○ (Hopcat has a landfill/waste diversion is 90%)</li> <li>○ Buddies’ composting food waste <a href="https://livegreenlansing.org/scraps-to-soil/">https://livegreenlansing.org/scraps-to-soil/</a></li> <li>○ Others? Possibly a “Green Panel” of business people</li> </ul> </li> </ul>	
Mar 6		
Apr 3		
May 1		
Jun 5		
Jul 3 or 10		
Aug		
Sep		
Oct		
Nov		
Dec		

### View Past Green Themes:

<http://recycle.meridian.mi.us/growgreen/> or

<https://www.youtube.com/watch?v=6qFiWiZQA9A&list=PLYCL9BfEG5RX5LMXKoAde3LCmdRhwrCF>

## Benefits of Green Infrastructure I



REDUCES FLOODING  
DAMAGE TO HOMES AND  
BUSINESSES



IMPROVES WATER  
QUALITY AND LOWERS  
GROUND LEVEL OZONE



REDUCES COMBINED SEWER  
OVERFLOWS (CSOs) WHICH  
SEND RAW SEWAGE INTO  
WATERWAYS



PROVIDES A COST  
EFFECTIVE SOLUTION FOR  
BOTH PUBLIC AND  
PRIVATE SECTORS



INCREASES SEWER SYSTEM  
CAPACITY AND RESILIENCE  
TO PEAK STORM EVENTS



CREATES PERMANENT JOBS  
FOR CONSTRUCTION AND  
MAINTENANCE

## Benefits of Green Infrastructure (continued)



REDUCES MUNICIPAL  
WATER USE THROUGH  
RAIN HARVESTING AND  
GROUNDWATER RECHARGE



REDUCES THE URBAN HEAT  
ISLAND EFFECT AND LOWERS  
BUILDING ENERGY  
CONSUMPTION



CREATES AND RESTORES  
WILDLIFE HABITATS IN  
URBAN ENVIRONMENTS



PROVIDES COMMUNITY  
RECREATIONAL FACILITIES AND  
IMPROVES PUBLIC HEALTH



INCREASES PROPERTY VALUES  
DUE TO INCREASE IN TREES  
AND GREENERY



REDUCES IMPERVIOUS  
SURFACES AND NATURALLY  
INFILTRATES STORMWATER



**To: Board Members**  
**From: LeRoy Harvey, Environmental Programs Manager  
on behalf of the Meridian Environmental Commission**  
**Date: October 3, 2018**  
**Re: Potential Ban on Certain Sealcoats (containing PAHs)**

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The Meridian Environmental Commission is exploring your potential interest in adopting a ban on certain asphalt sealcoats which contain high levels of polycyclic aromatic hydrocarbons/PAHs. Studies by the U.S. Geological Survey (USGS), academic institutions, and State and local agencies have identified coal-tar-based pavement sealcoat as a major source of PAH contamination and a concern for human health and aquatic life. Several countries, the State of Minnesota and over a dozen Michigan communities have banned the use of coal-tar-based sealants containing high levels of PAHs.

As coal-tar-based sealcoat ages, it wears into small particles that can be tracked into homes and incorporated into house dust. For people who live adjacent to coal-tar-sealcoated pavement, ingestion of PAH-contaminated house dust and soil results in an elevated potential cancer risk, particularly for young children. Exposure, especially early in childhood, has been linked to increased risk of lung, skin, bladder, and respiratory cancers. Runoff from coal-tar-sealcoated pavement, even runoff collected more than 3 months after application, is acutely toxic to fathead minnows and water fleas, two species commonly used to assess toxicity to aquatic life. Exposure to even highly diluted runoff from coal-tar-sealcoated pavement can cause DNA damage and impair DNA repair. These findings demonstrate that coal-tar-sealcoat runoff can remain a risk to aquatic life for months after application.

In February, the Environmental Commission invited Rebecca Esselman, Huron River Watershed Council, to discuss this topic at our April 4th meeting. View her presentation here: <http://meridianmi.swagit.com/play/04042018-870> We have since contacted groups familiar with the issue, Michigan municipalities, and local sealcoat applicators to share information and gather their perspectives. While communities may initially face some resistance from contractors, cost-effective alternatives exist. Many contractors offer alternatives. Stores like Home Depot and Menards only sell alternatives.

Other resources:

- Bans: Ann Arbor <http://bit.ly/A2-BAN> Minnesota: <http://bit.ly/PAH-MN>
- The State of Michigan Proposed Legislation HB 5174: <http://bit.ly/PAH-MI>
- Tip of the Mitt Watershed Council: <http://bit.ly/pah-TIP>

The Environmental Commission invites your input and suggestions related to a potential ban in Meridian Township (including Township Operations). Thank you for your consideration of this matter.

The following Code does not display images or complicated formatting. Codes should be viewed online. This tool is only meant for editing.

## ARTICLEARTICLE IV Wetland Protection

### DIVISION 1 Generally

**Comment [1]:** State law references: Wetland protection, MCL 324.30301 et seq.; local wetland protection ordinances, MCL 324.30307(4), 324.30308.

#### § 22-116 Definitions.

[Code 1974, § 105-3; Ord. No. 2002-02, 3-19-2002; Ord. No. 2003-11, 7-6-2003; Ord. No. 2011-04, 3-15-2011]

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

#### **AQUATIC LIFE**

Vertebrates or invertebrates that are dependent on wetlands for some vital portion of their life cycle, including any of the following: breeding, spawning, nesting, rearing of young, feeding, and resting or protection.

#### **CONTIGUOUS**

Any of the following:

- (1) A permanent surface water connection or other direct contact with an inland lake, pond, river or stream.
- (2) A seasonal or intermittent direct surface water connection to an inland lake, pond, river or stream.
- (3) A wetland which is partially or entirely located within 500 feet of the ordinary high water mark of an inland lake, pond, river or stream, unless it is demonstrated by the property owner by clear and convincing evidence that there is no relation whatever between the wetland and the inland lake, pond, river or stream taking into the purposes of this article, as set forth in § 22-118.
- (4) Two or more areas of wetland separated only by barriers, such as dikes, roads, berms or other similar features, but only with any of the wetland areas contiguous under the criteria described in subsection (1), (2) or (3) of this definition.

#### **DEPOSIT**

To fill, place or dump.

#### **DIRECTOR OF COMMUNITY PLANNING AND DEVELOPMENT**

The Director of Community Planning and Development for the Township or his designee.

#### **ENVIRONMENTAL COMMISSION**

The body created pursuant to Chapter 2, Article VI, Division 3, and designated by the Township Board to advise the Township on wetland issues.

#### **FILL MATERIAL**

Soil, rocks, sand, or waste of any kind, or any other material which displaces soil or water, or reduces water retention potential.

## **INLAND LAKE, STREAM, RIVER OR POND**

Any of the following:

- (1) A river or stream that has definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water.
- (2) A natural or permanent artificial inland lake or impoundment that has definite banks, a bed, a visible evidence of a continued occurrence of water, and a surface area of water that is more than five acres, not including lakes constructed by excavating or diking dry land and maintained for the sole purpose of cooling or storing water and not including lagoons for treating polluted water.
- (3) A natural or permanent artificial pond that has permanent open water with a surface area that is more than one acre but less than five acres, not including ponds constructed by excavating or diking dry land and maintained for the sole purpose of cooling or storing water and not including lagoons used for treating polluted water.

## **INTERESTED PERSON**

Either:

- (1) A resident of the Township who will suffer an identifiable injury, loss, or potential loss as a result of a wetland use permit decision; or
- (2) An owner of property within 500 feet of the wetland that is the subject of a wetland use permit decision.

## **LOT**

Land occupied or to be occupied by a building, structure, land use, or group of buildings, together with such open space or yards as are required under the code of ordinances and having its principal frontage upon a street.

## **MINOR DRAINAGE**

Includes ditching and tiling for the removal of excess soil moisture incidental to the planting, cultivating, protecting, or harvesting of crops or improving the productivity of land in established use for agriculture, horticulture, silviculture, or lumbering.

**Comment [AE2]:** Minor drainage does not include drainage associated with the immediate or gradual conversion of a wetland to a nonwetland or conversion from 1 wetland use to another. Minor drainage does not include the construction of a canal, ditch, dike, or other waterway or structure that drains or otherwise significantly modifies a stream, lake, or wetland.

## **MITIGATION OF WETLANDS**

- (1) Methods for eliminating or reducing potential impact to regulated wetlands; or
- (2) Creation of new wetlands of the same or similar function to offset unavoidable loss of existing wetlands to meet the Township goal of no net loss of wetlands.

## **PERSON**

An individual, sole proprietorship, partnership, corporation, association, municipality, of the state; an instrumentality or agency of this state; the federal government, or an instrumentality or agency of the federal government, or other legal entity.

## **PROTECTED WETLANDS**

Any of the following:

- (1) Wetlands, regardless of size, which are contiguous to any inland lake stream, river, or pond, whether partially or entirely within the project site.
- (2) Wetlands, regardless of size, which are partially or entirely within 500 feet of the ordinary high

water mark of any inland lake, stream, river or pond, unless it is determined by the state department of environmental quality that there is no surface or groundwater connection between the wetland and the water body.

- (3) Wetlands which are larger than two acres, whether partially or entirely contained within a lot, and which are not contiguous to any inland lake, stream, river or pond.
- (4) Wetlands, regardless of size, which are not contiguous to any inland lake, stream, river or pond, if the state department of environmental quality determines the protection of the wetland is essential to the preservation of the natural resources of the state from pollution, impairment or destruction.
- (5) Wetlands, equal to or greater than one-quarter acre and equal to or less than two acres in size, which are not contiguous to any inland lake, stream, river or pond and are determined to be essential to the preservation of the natural resources of the Township as provided in § 22-156.

#### **REMOVE**

To dig, dredge, suck, pump, bulldoze, drag line, or blast.

#### **RESTORATION**

To return from a disturbed or totally altered condition to a previously existing natural or altered condition by some action of man.

#### **STRUCTURE**

Any assembly of materials above or below the surface of the land or water, including, but not limited to, buildings, bulkheads, piers, docks, landings, dams, waterway obstructions, paving and roadways, poles, towers, cables, pipelines, drainage tiles, and other underground installations.

#### **TOWNSHIP BOARD**

The legislative body of the Charter Township of Meridian, Ingham County, Michigan.

#### **TOWNSHIP ENVIRONMENTAL CONSULTANT**

A person professionally knowledgeable in wetland delineation and resource value assessment, wetland protection, wetland restoration and wetland mitigation, appointed pursuant to § 3.4 of the Township personnel policy to carry out certain duties hereunder. Any firm or individual appointed on a contract basis shall be selected competitively under the Township purchasing policy.

#### **TOWNSHIP WETLAND INVENTORY MAP**

The Meridian Township Wetland Inventory Map created to comply with § 30308 (1), of the Natural Resources and Environmental Protection Act (MCL § 324.30308). The Township wetland inventory map is based on the National Wetland Inventory Map of the U.S. Fish and Wildlife Service, the Michigan Resource Information System Mapping (MIRIS) of the state department of natural resources, the soils maps of the soil conservation service, aerial photography and on-site inspections.

#### **WETLAND**

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 commonly referred to as a bog, swamp, or marsh.

#### **WETLAND VEGETATION**

Plants that exhibit adaptations to allow germination and growth with at least their root systems in the water or saturated soils under normal conditions.

**Cross reference:** Definitions generally, § 1-2.

**§ 22-117 Findings.**

**[Code 1974, § 105-1; Ord. No. 2002-02, 3-19-2002]**

- (a) The Township Board finds that wetlands are indispensable and fragile natural resources that provide many public benefits, including maintenance of water quality through nutrient cycling and sediment trapping as well as flood and stormwater runoff control through temporary water storage, slow release, and groundwater recharge. In addition, wetlands provide open space; passive outdoor recreation opportunities; fish and wildlife habitat for many forms of wildlife, including migratory waterfowl, and rare, threatened or endangered wildlife and plant species; and pollution treatment by serving as biological and chemical oxidation basins.
- (b) Preservation of the remaining Township wetlands in a natural condition shall be and is necessary to maintain hydrological, economic, recreational, and aesthetic natural resource values for existing and future residents of the Township, and, therefore, the Township Board declares a policy of no net loss of wetlands. Furthermore, the Township Board declares a long-term goal of net gain of wetlands to be accomplished through review of degraded or destroyed wetlands in the Township and, through cooperative work with landowners, using incentives and voluntary agreements to restore wetlands.
- (c) Pursuant to Article 4, § 52 of the Constitution of the State of Michigan, the conservation and development of natural resources of the state is a matter of paramount public concern in the interest of the health, safety, and general welfare of the people. Therefore, with authority from § 30307(4) of the Natural Resources and Environmental Protection Act (MCL § 324.30307 et seq.), the Township Board finds that this article is essential to the long-term health, safety, economic, and general welfare of the people of the Township and to the furtherance of the policies set forth in Part 17 of the Natural Resources and Environmental Protection Act (MCL § 324.101 et seq.).

**§ 22-118 Purpose.**

**[Code 1974, § 105-2; Ord. No. 2002-07, 3-19-2002; Ord. No. 2011-04, 3-15-2011]**

The purposes of this article are to provide for:

- (1) The protection, preservation, replacement, proper maintenance, restoration, and use in accordance with the character, adaptability, and stability of the Township's wetlands in order to prevent their pollution or contamination; minimize their disturbance and disturbance to the natural habitat therein; and prevent damage from erosion, siltation, and flooding.
- (2) The encouragement of proper and reasonable economic use of wetlands, the discouragement and limitation of improper use, the reduction of financial burdens improper uses impose on the community, the maintenance of harmonious and compatible land use balance within the Township, and the prevention of nuisance conditions that arise with the indiscriminate development of wetlands.
- (3) The coordination with, and support for, the enforcement of applicable federal, state, and county statutes, ordinances, and regulations, including, but not limited to:
  - a. Part 303, Wetland Protection of the Natural Resources and Environmental Protection Act (MCL § 324.30301 et seq.), enforced by the State Department of Environmental Quality; and
  - b. Part 91 of the Natural Resources and Environmental Protection Act (MCL § 324.9101 et seq.), enforced by the Township.
- (4) Compliance with Part 17 of the Natural Resources and Environmental Protection Act (MCL § 324.1701 et seq.), which imposes a duty on government agencies and private individuals and organizations to prevent or minimize the pollution, impairment or destruction of the natural

resources that is likely to be caused by their activities.

- (5) The establishment of standards and procedures for the review and regulation of the use of wetlands.
- (6) The issuance of wetland use permits for approved activities.
- (7) A procedure for amending wetland use permits.
- (8) A procedure for appealing decisions.
- (9) The establishment of enforcement procedures and penalties for the violation of this article.
- (10) Assurance that the right to reasonable use of private property is maintained.

**§ 22-119 Penalties and enforcement.**

**[Code 1974, § 105-19; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

- (a) In the event of a violation of this article, the Township may commence a civil action for appropriate relief, including injunctive relief. An action under this article may be brought in the circuit court for the county. The court has jurisdiction to restrain the violation and to require compliance with this article. In addition to any other relief granted under this article, the court may impose a civil fine of not more than \$10,000 per day of violation. A person who violates an order of the court is subject to a civil fine not to exceed \$10,000 for each day of violation.
- (b) A person who violates this article is guilty of a misdemeanor, punishable by a fine of not more than \$2,500.
- (c) A person who willfully or recklessly violates a condition or limitation in a permit issued by the Township under this article, or a corporate officer who has knowledge of or is responsible for a violation, is guilty of a misdemeanor, punishable by a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. A person who violates this article a second or subsequent time is guilty of a felony, punishable by a fine of not more than \$50,000 for each day of violation, or by imprisonment for not more than two years, or both.
- (d) In addition to the penalties provided under subsections (a), (b), and (c) of this section, the court may order a person who violates this article to restore as nearly as possible the wetland that was affected by the violation to its original condition immediately before the violation. The restoration may include the removal of fill material deposited in the wetland or the replacement of soil, sand, or minerals.
- (e) Whenever any work is performed contrary to the provision of this article or of a condition set forth in a wetland use permit, the Township Manager or his agent shall order the work to cease by notice in writing served on any persons engaged in the doing or causing such work to be performed, and any such persons shall, upon receipt of the order, forthwith stop such work until authorized by the Township Manager or his agent to proceed. In addition, if a person acts in violation of this article the Township may refuse a certificate of occupancy or other construction permits related to the project whenever there is failure to comply with the provisions of this article.
- (f) The Director of Community Planning and Development or his agent shall have authority under this article to enter upon privately owned land for the purpose of performing the Township's duties under this article and may take or cause to be made such examinations, surveys or samplings as are deemed necessary.
- (g) Law enforcement officials or other officials having the police power shall have authority to assist the Department of Community Planning and Development in the enforcement of this article.

- (h) In the event of a violation of this article, the Township Board shall have the power to order wetland restoration for the damaged or destroyed wetland area by the owner of the property affected or the person or agent responsible for the violation. If the owner or person responsible does not complete the restoration measures within the ordered period of time, the Township Board may order the affected wetland restored to its prior condition and/or create or restore other wetlands for the purpose of offsetting losses sustained as a result of this violation. The owner or other person responsible for the original violation shall be responsible to the Township for the full cost of all such remedial activity.

**§ 22-120 Existing nonconforming lots, uses and structures.**

**[Code 1974, § 105-9; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

Building sites or lots, uses and structures lawfully existing on September 2, 1991, shall be subject to the requirements of this article, except as follows:

- (1) Any activity, structure, or use lawfully existing prior to September 2, 1991, but not in conformity with the provisions of this article, may be continued, maintained and operated. No nonconforming activity, structure or use shall be enlarged or increased or extended to occupy a greater area of land than was occupied at the effective date of Ordinance No. 2011-04, from which this article is derived without first obtaining a wetland use permit.
- (2) Any structure lawfully existing prior to September 2, 1991, if destroyed by any means to an extent of more than 50% of its replacement costs, exclusive of the foundation, may be reconstructed only in conformity with the provisions of this article. The estimated cost of reconstruction shall be determined by the Township Chief Building Inspector. Persons aggrieved by the determination of estimated replacement cost by the Chief Building Inspector may appeal such determination to the Zoning Board of Appeals.

**§ 22-121 Township wetland inventory map.**

**[Code 1974, § 105-5, Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

The Township wetland inventory map is a guide to the location of wetlands in the Township. The map shall be used in the administration of this article and Chapter **86**, Article **V**.

- (1) The Township wetland inventory map, together with all explanatory matter thereon and attached thereto, as may be amended through the wetland verification and delineation process, is hereby adopted by reference and declared to be part of this article. The Township wetland inventory map shall be on file in the Department of Community Planning and Development.
- (2) The Township wetland inventory map shall serve as a general guide for the location of protected wetlands.
- (3) The Township wetland inventory map does not create any legally enforceable presumptions regarding whether property that is or is not included on the inventory map is or is not in fact a wetland.
- (4) Map amendment process:
  - a. Any change to the Township wetland inventory map, approved by the Director of Community Planning and Development through verification or delineation, shall be added to the Township wetland inventory map on an annual basis.
  - b. The Township shall ensure that each recorded owner of property on the property tax roll shall be notified of any amendment to the Township wetland inventory map on an annual basis. The notice shall include the following information:

1. The maps have been amended.
2. The location to review the maps shall be indicated.
3. The owner's property may be designated as a wetland on the inventory map.
4. The Township has an ordinance regulating wetlands.
5. The inventory map does not necessarily include all of the wetlands within the Township that may be subject to this article.

**§ 22-122 Wetland delineation and verification.**

**[Code 1974, § 105-6; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

The Township wetland inventory map shall be validated through the wetland delineation process or the wetland verification process. The wetland delineation process shall be used to establish the actual boundaries of wetlands by the Township environmental consultant. The wetland verification process shall be used to verify the boundaries of wetlands through the review by the Township environmental consultant of a wetland delineation prepared by a qualified professional or wetland consultant.

Prior to issuance of a building permit or land development approval, the Director of Community Planning and Development shall determine the necessity for establishing the boundary of wetlands based on the proximity and relationship of the project to wetlands shown on the Township wetland map.

(1) Wetland delineation process.

- a. A property owner or an applicant with the property owner's written permission shall submit a wetland delineation application and fee authorized by the Township Board to the Department of Community Planning and Development with the following material:
  1. A survey, site plan, or plot plan drawn to an appropriate scale. The survey, site plan, or plot plan shall include the following:
    - i. Property lines and dimensions.
    - ii. North arrow and scale.
    - iii. Existing topography contours depicted at two-foot intervals.
    - iv. Adjacent and on-site roads; railroads; and streams, lakes, and ponds.
    - v. Footprints of existing buildings, parking lots, accessory structures, and other structures.
    - vi. Any notable man-made or natural features along the suspected wetlands.
  - b. The property boundaries shall be clearly flagged or staked prior to the field investigation.
  - c. Upon receiving a complete application, the Department of Community Planning and Development shall transmit the request to the Township environmental consultant for a field investigation. In the event that weather conditions prohibit the Township environmental consultant from conducting a thorough field investigation including the evaluation of vegetation, soil, and hydrology, the application and fee will be held until such time that the review can be conducted.
  - d. Identification, flagging, or staking of the wetland boundaries in the field shall be completed by the Township environmental consultant during a field investigation. An arc-map compatible digital copy of the delineated wetland boundary shall be provided to the Director of Community Planning and

Development.

- e. Wetland delineations completed by the Township environmental consultant shall be valid for a period of three years from the date of the delineation report.
- f. In delineating wetland boundaries, all delineations shall apply the technical wetland delineation standards set forth in the U.S. Army Corps of Engineers, January 1987 Wetland Delineation Manual, technical report y-87-1, and appropriate regional U.S. Army Corps of Engineers supplements.
- g. Wetlands under the jurisdiction of the department of environmental quality may need to have the delineation reviewed and approved by representatives of the state.

(2) Wetland verification process.

- a. A property owner or an applicant with the property owner's written permission shall submit a wetland verification application and fee authorized by the Township Board to the Department of Community Planning and Development with the following material:
  - 1. A survey, site plan, or plot plan that includes the following information:
    - i. Property lines and dimensions.
    - ii. North arrow and scale.
    - iii. Existing topography contours depicted at two-foot intervals.
    - iv. The boundary of all wetlands identified on the site.
    - v. Adjacent and on-site roads; railroads; and streams, lakes, and ponds.
    - vi. Footprints of existing buildings, parking lots, accessory structures, and other structures.
    - vii. Surveyed points of reference.
    - viii. Any notable man-made or natural features along the wetland boundaries.
  - 2. A wetland delineation report that is no more than three years old. The report shall at a minimum include the following information:
    - i. Dominant vegetation in the tree, sapling, shrub, and herb layers.
    - ii. Presence of or lack of accepted wetland hydrology layers.
    - iii. Analysis of soil including a description of the soil profile to at least 20 inches.
    - iv. Comparison of county soil survey to the wetland shown in a manner that allows comparison to the Township wetland inventory map.
    - v. A notation in the report whether potential off-site wetlands (within 40 feet of the property line) can be observed from the subject site.
- b. Upon receiving a complete application, the Department of Community Planning and Development shall transmit the request to the Township environmental consultant for a field investigation. In the event that weather conditions prohibit the Township environmental consultant from conducting a thorough field investigation including the evaluation of vegetation, soil, and hydrology, the application and fee will be held until such time that the review can be conducted.

**Comment [AE3]:** Presence of or lack of accepted wetland hydrology *indicators*.

**§ 22-123 Duties of the environmental commission.**

**[Code 1974, § 105-16; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

The environmental commission created pursuant to Chapter 2, Article VI, Division 3, shall perform the following duties with regard to this article:

- (1) Advise the Township Board, Planning Commission, and Director of Community Planning and Development, as necessary, on wetland use permits, appeals of wetland use permits, and mitigation plans.
- (2) Serve in an advisory role in setting policy guidelines on wetland issues in the Township.
- (3) Identify conflicts and propose solutions to resolve conflicts regarding wetland protection by present Township ordinances, Township operating procedures, and Township activities.
- (4) Identify and propose solutions to problems associated with wetland management.
- (5) Provide recommendations to the Director of Community Planning and Development on map administration.
- (6) Assist landowners who are interested in the voluntary protection of wetlands.
- (7) Promote wetland education at all levels. Develop education programs for the public and for Township schools. The program should promote the values of wetlands and awareness of the hazards and threats to wetlands. The program should be particularly targeted to landowners with wetlands and emphasize how best to protect wetland values on their property.
- (8) Coordinate a voluntary wetland stewardship program. Develop an adopt-a-wetland program for interested citizens to participate more directly in preservation of specific wetlands.

**§ 22-124 through § 22-150. (Reserved)**

**DIVISION 2**

**Permit**

**§ 22-151 Activities requiring a wetland use permit.**

**[Code 1974, § 105-8; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

- (a) It shall be unlawful for any person to conduct any activity listed below within a protected wetland without first obtaining a wetland use permit in accordance with the requirements of this division. Activities governed by this section include, but are not limited to, the following:
- (1) Depositing, permitting the placement of fill material or maintaining fill material in a protected wetland.
  - (2) Grading in a protected wetland.
  - (3) Dredging, removing, or permitting the removal of soil or minerals from a protected wetland.
  - (4) Draining, or causing to be drained, any water into or from a protected wetland.
  - (5) Constructing, operating, or maintaining any use or development in a protected wetland.
  - (6) Diverting, obstructing or impeding the flow of water into a protected wetland.

**§ 22-152 Activities not requiring a permit.**

**[Code 1974, § 105-7; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

**Comment [4]:** State law reference: Wetland permits, MCL 324.30306 et seq.

**Comment [AE5]:** Placement of biological residuals from activities, including the cutting of woody vegetation or the in-place grinding of tree stumps, performed under this section within a wetland, if all the biological residuals originate within that wetland.

- (a) The following uses shall be allowed in a wetland without a permit subject to other laws of this state and the owner's regulation:
- (1) Fishing, trapping or hunting.
  - (2) Swimming or boating.
  - (3) Hiking.
  - (4) Grazing of animals.
  - (5) Farming, horticulture, silviculture, lumbering, and ranching activities, including plowing, irrigation, irrigation ditching, seeding, cultivating, minor drainage, harvesting for the production of food, fiber, and forest products, or upland soil and water conservation practices. A wetland altered under this article shall not be used for a purpose other than a purpose described in this subsection without a permit from the Township.
  - (6) An activity in a wetland that was effectively drained for farming before October 1, 1980, and that on and after October 1, 1980, has continued to be effectively drained as part of an ongoing farming operation.
  - (7) Maintenance or operation of serviceable structures in existence on October 1, 1980, or constructed pursuant to part 303, of the Natural Resources and Environmental Protection Act (MCL § 324.30301 et seq.).
  - (8) Construction or maintenance of farm or stock ponds.
  - (9) Maintenance, operation, or improvement which includes the straightening, widening or deepening of the following which is necessary for the production or harvesting of agricultural products:
    - a. An existing private agricultural drain.
    - b. That portion of a drain legally established pursuant to the drain code of 1956 (MCL § 282.1 et seq.) which has been constructed or improved for drainage purposes.
    - c. A drain constructed pursuant to other provisions of part 303 of the Natural Resources and Wetland Protection Act (MCL § 324.30301 et seq.).
  - (10) Construction or maintenance of farm roads, forest roads, or temporary roads for moving mining or forestry equipment, if the roads are constructed and maintained in a manner to ensure that adverse effect on the wetland will be otherwise minimized.
  - (11) Drainage necessary for the production and harvesting of agricultural products if the wetland is owned by a person who is engaged in commercial farming and the land is to be used for the production and harvesting of agricultural products. Except as otherwise provided in part 303 of the Natural Resources and Environmental Protection Act (MCL § 324.30301 et seq.), a wetland improved under this subsection after October 1, 1980, shall not be used for nonfarming purposes without a permit from the state department of environmental quality. This subsection shall not apply to a wetland which is contiguous to a lake or stream, or to a tributary of a lake or stream, or to a wetland which the state department of environmental quality has determined by clear and convincing evidence to be a wetland which is necessary to be preserved for the public interest, in which case a permit shall be required.
  - (12) Maintenance or improvement of public streets, highways or roads, within the right-of-way and in such a manner as to ensure that any adverse effect on the wetland will be otherwise minimized. Maintenance or improvement does not include adding extra lanes; or deviating from the existing

**Comment [AE6]:** Established ongoing farming, ranching, horticultural, or silvicultural operation. Farming and silvicultural activities on areas lying fallow as part of a conventional rotational cycle as part of an established ongoing operation, unless modifications to the hydrological regime or mechanized land clearing are necessary to resume operation. Activities that bring into farming, ranching, horticultural, or silvicultural use an area not in any of these uses, or that convert an area from a forested or silvicultural use to a farming, ranching or horticultural use, are not part of an established ongoing operation.

location of the street, highway, or road.

- (13) Maintenance, repair, or operation of gas or oil pipelines and construction of gas or oil pipelines having a diameter of six inches or less, if the pipelines are constructed, maintained, or repaired in a manner to ensure that any adverse effect on the wetland will be otherwise minimized.
- (14) Maintenance, repair, or operation of electric transmission and distribution power lines and construction of distribution power lines, if the distribution power lines are constructed, maintained, or repaired in a manner to ensure that any adverse effect on the wetland will be otherwise minimized.
- (15) Operation or maintenance, including reconstruction of recently damaged parts, of serviceable dikes and levees in existence on October 1, 1980, or constructed pursuant to part 303 of the Natural Resources and Environmental Protection Act (MCL § 324.30301 et seq.).

(16) Construction of iron and copper mining tailings basins and water storage areas. ||

**Comment [AE7]:** Delete Section 22-152(a)(16) is not relevant to the Township.

(17) A wetland that is incidentally created as a result of one or more of the following activities:

- a. Excavation for mineral or sand mining, if the area was not a wetland before excavation. This exemption does not include a wetland on or adjacent to a water body of one acre or more in size.
- b. Construction and operation of a water treatment pond or lagoon in compliance with the requirements of state or federal water pollution control regulations.
- c. A diked area associated with a landfill if the landfill complies with the terms of the landfill construction permit and if the diked area was not a wetland before diking. ||

**Comment [AE8]:** or storm water facility

(18) Cranberry beds.

- a. The construction of cranberry beds, including associated dikes and water control structures associated with dikes, such as headgates, weirs, and drop inlet structures shall be considered a water-dependent activity.
- b. The following activities associated with cranberry operations are not considered to be water dependent:
  - 1. The construction of roads, ditches, reservoirs, and pump houses that are used during cultivation of cranberries.
  - 2. The construction of secondary support facilities for shipping, storage, packaging, parking, and similar purposes.
- c. The demonstration by an applicant that there is no feasible and prudent alternative to the construction of cranberry beds, including dikes, is not subject to either of the following presumptions:
  - 1. That the feasible and prudent alternatives that do not involve a wetland are available.
  - 2. That a feasible and prudent alternative that does not affect a wetland will have less adverse effects on the aquatic ecosystem.

**Comment [AE9]:** (d) Construction of drains in upland for the sole purpose of removing excess moisture from upland areas that are primarily in agricultural use. (e) Construction of roadside ditches in upland for the sole purpose of removing excess soil moisture from upland. (f) An agricultural soil and water conservation practice designed, constructed, and maintained for the purpose of enhancing water quality.

Part 303 clarifies the regulatory status of wetlands in the vicinity of sand and gravel mining operations as these operations expand. The Township should decide if it would accept this exemption. It may wish to require a Wetland Use Permit for mining within 300 feet of regulated wetlands, but outside a 40 foot or 20 foot buffer.

#### § 22-153 Relationship to state and federal permits.

[Ord. No. 2002-07, 8-20-2002]

Whenever persons requesting a wetland use permit are also subject to state and/or federal permit

requirements, the following shall apply:

- (1) The Township shall have jurisdiction for the regulation of wetlands under this article concurrent with the jurisdiction of the state department of environmental quality.
- (2) Approvals under this division shall not relieve a person of the need to obtain a permit from the state department of environmental quality and/or the U.S. Army Corps of Engineers, if required.
- (3) Issuance of a permit by the state department of environmental quality and/or the U.S. Army Corps of Engineers shall not relieve a person of the need to obtain approval under this division, if applicable.

**§ 22-154 Application requirements for wetland use permits.**

**[Code 1974, § 105-10; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

- (a) Application for approval, appeal, and issuance of wetland use permits shall be concurrent with the application for approval, appeal, and issuance of other necessary Township approvals. The applicant for a wetland use permit shall submit the following to the Director of Community Planning and Development.
  - (1) An application completed in full, on a form supplied by the state department of environmental quality and made available by the Township with such other information as required by the Director of Community Planning and Development.
  - (2) Wetland delineation documentation prepared by the Township environmental consultant pursuant to § 22-122(1) or wetland delineation documentation prepared by a qualified wetland professional or wetland consultant in accordance with the requirements listed in § 22-122(2), including verification by the Township environmental consultant.
  - (3) Soil erosion and stormwater management plans with runoff calculations. The plans shall be prepared and sealed by a professional engineer licensed by the State of Michigan.
  - (4) A mitigation plan, which complies with all federal, state and local laws, if the proposed activity will result in the loss of wetland resources.
- (b) The applicant may elect to have the application processed under the following procedure:
  - (1) The wetland application shall be reviewed immediately, either prior to or concurrent with the review of the proposed land use review, with the understanding that the land use review may not be completed at the time a decision is rendered on the wetland application. Election of this alternative may require a reopening of the wetland application if the land use approval is inconsistent with the wetland approval.

**§ 22-155 Method of review of wetland use permit application.**

**[Code 1974, § 105-11; Ord. No. 2002-07, 8-20-2002; Ord. No. 2003-11, 7-6-2003; Ord. No. 2006-04, 9-25-2006; Ord. No. 2011-04, 3-15-2011]**

- (a) The Director of Community Planning and Development shall ensure that all required information including a wetland delineation and payment of a fee has been submitted. If an application is not complete, it shall not be processed until the applicant provides all of the required information to the Department of Community Planning and Development. The receipt of a complete application shall constitute permission from the owner to conduct an on-site investigation.
- (b) Upon receipt of a complete application, the Director of Community Planning and Development shall:
  - (1) Transmit one copy of the application to the state department of environmental quality.

- (2) Cause to be published a notice of the application and the date and time for submission of written public comments.
- (3) Transmit one copy of the application and supporting materials to the Township environmental consultant to confirm the boundaries of the wetland and to review the proposal in light of the purpose and review standards of § **22-157** of this article and other applicable sections of this article.
- (c) The Township environmental consultant shall prepare and transmit a report and recommendation to the Director of Community Planning and Development documenting the review required by subsection (b)(3) of this section.
- (d) The following process shall apply to wetland use permit decisions by the Director of Community Planning and Development:
  - (1) For wetland use permit applications submitted in conjunction with activities that do not require approval by the Planning Commission and/or Township Board, the Director of Community Planning and Development shall approve, approve with conditions or deny the application within 90 days after receipt of a complete application.
  - (2) The Director of Community Planning and Development shall transmit application materials and the report and recommendation prepared by the Township environmental consultant to the environmental commission. The environmental commission may review the materials and transmit comments for consideration to the Director of Community Planning and Development.
  - (3) The applicant shall post a notice of the wetland use permit application on a form provided by the Township, on the subject property within five days of submittal of a complete application.
  - (4) Persons wishing to comment on the application must submit their comments in writing to the Director of Community Planning and Development prior to the date and time set in the notice. Persons wishing to receive notice of the Director of Community Planning and Development's decision must submit a written request to the Director of Community Planning and Development.
  - (5) The Director of Community Planning and Development's decision shall be made only after reviewing the report and recommendation from the Township environmental consultant, written public comments, and any comments submitted by the environmental commission.
  - (6) When a wetland use permit is approved, approved with conditions, or denied by the Director of Community Planning and Development, written notice shall be sent to the applicant and to all persons who have requested notice of the Director of Community Planning and Development's decision. The denial of a permit shall be accompanied by a written reason of denial.
  - (7) A permit approved by the Director of Community Planning and Development shall not be issued or effective until 10 calendar days following the date of the approval and compliance with § **22-159(c)**.
- (e) The following process shall apply to appeals of decisions made by the Director of Community Planning and Development or Planning Commission:
  - (1) Any interested person may appeal a decision by the Director of Community Planning and Development or Planning Commission, as applicable, to approve, approve with conditions, or deny a wetland use permit to the Township Board by filing a written statement containing the specific reasons for the appeal and setting forth the facts establishing status as an interested person. This written statement must be filed with the Township Clerk within 10 calendar days following the date of decision. The timely filing of a statement satisfying the requirements of this provision shall have the effect of staying the permit pending the Township Board's decision on appeal.
  - (2) The Township Board shall determine whether an individual pursuing an appeal is an interested

person as defined by this article before addressing the merits of that appeal.

- (3) The Township Board shall hold a hearing on the appeal, which shall be open to public comment, and shall include opportunity for the appealing party to present their appeal.
- (4) Notice of the time and place for consideration of an appeal shall be placed in a newspaper of general circulation in the Township not less than five days prior to the date of the hearing. A notice shall also be sent by mail or personal delivery to the owners of the property considered in the appeal and to all owners listed on the most recent tax roll of real property within 500 feet of the boundary of the property in question. Such notice shall be sent not less than five days prior to the hearing.
- (5) The Township Board shall affirm, affirm with conditions, or reverse the decision of the Planning Commission or Director of Community Planning and Development. The board's decision shall be based on written findings.
- (f) The following process shall apply to wetland use permit decisions by the Township Board and Planning Commission:
  - (1) Wetland use permit applications submitted in conjunction with a related land development activity shall be decided by the same entity that decides the related land development activity consistent with part 303 of the Natural Resources and Environmental Protection Act (MCL § 324.30301 et seq.). The Director of Community Planning and Development shall transmit application materials and the report and recommendation prepared by the Township environmental consultant to the Township Board, Planning Commission, and the environmental commission. The environmental commission may review the materials and provide comments for consideration by the Township Board or Planning Commission, as applicable.
  - (2) After review and study of the application materials, the Township environmental consultant's report and recommendation, and comments from the environmental commission, the Township Board or Planning Commission, as applicable, shall hold one public hearing after publication in a newspaper of general circulation in the Township not less than 15 days prior to the date of the hearing. Such notice shall indicate the place, time and subject of the hearing and the place and time the proposed wetland use permit may be examined. The wetland use permit hearing may be held in conjunction with a review of the related land use request.
  - (3) The notice shall be sent by mail or personal delivery to the owners of property for which approval is being considered and to all owners of property, as listed on the most recent tax roll, within 500 feet of the boundary of the property in question. Notification need not be given to more than one occupant of a structure, except that if a structure contains more than one dwelling unit or spatial area owned or leased by different persons, one occupant of each unit shall receive notice. In the case of a single structure containing more than four dwelling units, notice may be given to the manager or owner of the structure, who shall be requested to post the notice at the primary entrance to the structure. A notice containing the time, date, place and purpose of the hearing shall be posted by the applicant on a form provided by the Township, on the subject property at least 15 days prior to the hearing.
  - (4) After completing the review and holding one public hearing, if so required, the Township Board or Planning Commission shall approve, approve with conditions or deny the application within 90 days after receipt of an application, in accordance with this division.
  - (5) Written notice shall be sent to the applicant upon approval, approval with conditions or denial of a wetland use permit by the Township Board or Planning Commission. The denial of a permit shall be accompanied by a written reason for denial.
  - (6) A permit approved by the Township Board or Planning Commission shall not be issued or effective until 10 calendar days following the date of the approval and compliance with § **22-159(c)**.

§ 22-156 **Criteria for wetlands under two acres in size.**

[Code 1974, § 105-12; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]

**Comment [AE10]:** Kirk Lapham suggests that determining "essentiality" may constitute an unnecessary procedure that hampers the process of permit review.

- (a) Where an applicant proposes to perform a regulated activity in a protected wetland less than two acres in size, the Director of Community Planning and Development shall be so advised in writing. The Director of Community Planning and Development shall forward the location and other information concerning the wetland to the Township environmental consultant, who shall issue a preliminary finding as to whether one or more of the following criteria are likely to apply to the wetland:
- (1) The wetland supports state or federal endangered or threatened plants, fish, or wildlife appearing on a list specified in part 365 of the Natural Resources and Environmental Protection Act (MCL § 324.36501 et seq.).
  - (2) The wetland represents what is identified as a locally rare or unique ecosystem.
  - (3) The wetland supports plants or animals of an identified local importance.
  - (4) The wetland provides groundwater recharge documented by a public agency.
  - (5) The wetland provides flood and storm control by the hydrologic absorption and storage capacity of the wetland.
  - (6) The wetland provides wildlife habitat by providing breeding, nesting, or feeding grounds or cover for forms of wildlife or waterfowl, including migratory waterfowl and rare, threatened, or endangered wildlife species.
  - (7) The wetland provides protection of subsurface water resources and provision of valuable watersheds and recharging groundwater supplies.
  - (8) The wetland provides pollution treatment by serving as a biological and chemical oxidation basin.
  - (9) The wetland provides erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.
  - (10) The wetland provides sources of nutrients in water food cycles and nursery grounds and sanctuaries for fish.
- (b) The Township environmental consultant's report shall be forwarded to the Township Board, which shall determine whether a wetland use permit application meeting the requirements of § 22-154 shall be required, based on a finding that the wetland is essential to the preservation of the natural resources of the Township. Such determination shall be based on a finding that one or more of the criteria set forth in subsection (a) of this section are met.
- (c) If the Township Board determines that the wetland is not essential to the preservation of the natural resources of the Township, the Township Board's decision shall be so noted on the Township wetland inventory map at the time it is amended. The requested activity shall be approved subject to all other applicable laws and regulations.
- (d) When a wetland under two acres in size has been determined to be essential to the natural resources of the Township and the Township has found that one or more of the criteria set forth in subsection (a) of this section exist at the site, the Township shall notify the applicant in writing, stating the reasons for determining the wetland to be essential to the preservation of the natural resources.
- (e) After determining that a wetland less than two acres in size is essential to the preservation of the natural resources of the Township, the wetland use permit application shall be reviewed according to

the standards in § 22-157.

**§ 22-157 Review standards for wetland use permits.**  
**[Code 1974, § 105-13; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

The criteria to evaluate wetland use permits under this division and to determine whether a permit is granted are as follows:

- (1) A permit for any activity listed in § 22-151 shall not be approved unless the proposed activity is in the public interest, the permit is necessary to realize the benefits derived from the activity, and the proposed activity is otherwise lawful in all respects. Public input shall be evaluated in approving, approving with conditions, or denying the application. The reasonable use of the property involved in accordance with applicable local ordinances and state law shall also be considered.
- (2) In determining whether the proposed activity is in the public interest, the benefit which reasonably may be expected to accrue from the proposed activity shall be balanced against the reasonably foreseeable detriments of the activity. The decision shall reflect the national, state, and local concern for the protection of natural resources from pollution, impairment, and destruction. The following general criteria shall be considered:
  - a. The relative extent of the public and private need for the proposed activity.
  - b. The availability of feasible and prudent alternative locations and methods to accomplish the expected benefits from the activity.
  - c. The extent and permanence of the beneficial or detrimental effects which the proposed activity may have on the public and private uses to which the area is suited, including the benefits the wetlands provide.
  - d. The probable impact of each proposal in relation to the cumulative effect created by other existing and anticipated activities in the watershed.
  - e. The probable impact on recognized historic, cultural, scenic, ecological, or recreational values and on the public health or safety, or fish or wildlife.
  - f. Economic value, both public and private, of the proposed land change to the general Township area.
  - g. The size and quality of the wetland being considered.
  - h. The findings of necessity for the proposed activity which have been made by other agencies.
  - i. Amount of wetland remaining in the general area and proximity to a waterway.
  - j. Proximity to any water body.
  - k. Extent to which upland soil erosion adjacent to the protected wetland is controlled.
- (3) A wetland use permit shall not be issued unless it is shown that an unacceptable disruption will not result to the aquatic resources. In determining whether a disruption to the aquatic resources is unacceptable, the benefits outlined in § 22-117 and the criteria set forth in subsection (2) of this section shall be considered. A permit shall not be issued unless the applicant also shows either of the following:
  - a. The proposed activity is primarily dependent upon being located in the wetland; or
  - b. A feasible and prudent alternative does not exist.

**Comment [AE11]:** Kirk Lapham states: "We have had cases in which applicants specified the private need in terms of the financial benefits they expect from the project. This bears examination, no applicant is likely to request a permit in the absence of such a benefit."

- (4) Failure to submit a complete application may be reason for denial of a wetland use permit.
- (5) While determining the expected benefits of a proposed wetland use permit and its alternatives, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded, or managed in order to fulfill the basic purpose of the proposed activity may be considered as a feasible and prudent alternative for permitted activities.
- (6) An alternative that entails higher costs, as described in R281.922a(11) of the Michigan Administrative Code is not feasible and prudent if those higher costs are unreasonable. In determining whether such costs are unreasonable, the Director of Community Planning and Development, Planning Commission, or Township Board whichever is applicable shall consider both of the following:
  - a. The relation of the increased cost to the overall scope and cost of the project.
  - b. Whether the projected cost is substantially greater than the costs normally associated with the particular type of project.
- (7) Following approval of the application, a wetland use permit shall be issued upon determination that all other requirements of the ordinance and law have been met, including site plan, plat or land use approval, as applicable, and including issuance of a permit by the state department of environmental quality if required under MCL § 324.30301 et seq. In cases where a state department of environmental quality permit allows activities not permitted by the wetland use permit approval granted under this section, the restrictions of the approval granted under this section shall govern.

**§ 22-158 Consideration of wetland mitigation proposals.**

**[Code 1974, § 105-14; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

To ensure no net loss of wetlands in the Township, mitigation shall be required in instances where there are losses of wetland resources. The Township environmental consultant shall review an applicant's mitigation plan and transmit a recommendation to the Director of Community Planning and Development. The Director of Community Planning and Development, Planning Commission, or Township Board, as applicable shall review the applicant's mitigation plan and consider the Township environmental consultant's recommendation as part of the wetland use permit review process. A mitigation plan, if required, shall be approved as part of the wetland use permit decision. Mitigation shall not be considered a substitute for making all prudent attempts to avoid wetland impacts.

- (1) Prior to considering a proposal for wetland mitigation, it must be shown that it is practical to replace the wetland resource values which will be impacted, including flood prevention, wildlife habitat, groundwater resource protection and recharge, pollution treatment, erosion control, nutrient sources, aesthetics, recreation, open space and any other values identified.
- (2) If determined by the Township environmental consultant that the requirements of subsection (1) of this section are met, the following criteria shall be considered when reviewing an applicant's mitigation proposal:
  - a. Mitigation shall be provided on site where practical and beneficial to the wetland resources. If on-site mitigation is not practical and beneficial, then mitigation in the immediate vicinity, within the same watershed of the permitted activity may be considered. Only if all of these options are impractical shall mitigation be considered elsewhere.
  - b. Any proposal shall ensure that there will be no net loss to the wetland resource values.
  - c. The mitigation plan must comply with all applicable federal, state, and local laws.
  - d. A plan to monitor preserved and replacement wetlands.

- (3) Wetland mitigation and monitoring plans shall become conditions to the wetland use permit and shall be the responsibility of the applicant or its successors.
- (4) Financial assurances that mitigation is accomplished as specified by the permit condition may be required by the Director of Community Planning and Development, Planning Commission, or Township Board, as applicable.
- (5) Any mitigation activity shall be completed before initiation of other permitted activities, unless a phased concurrent schedule can be agreed upon between the Director of Community Planning and Development, Planning Commission, or Township Board, as applicable, and the applicant.
- (6) Wetland mitigation plans that create less than two acre wetlands shall meet one of the conditions listed in Subsection **22-156(a)**.

**§ 22-159 Wetland use permit conditions of issuance.**

**[Code 1974, § 105-15; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

- (a) The Director of Community Planning and Development, Planning Commission, or Township Board, as applicable, shall attach any reasonable conditions considered necessary to ensure that the intent of this article will be fulfilled, to minimize or mitigate damage or impairment to, encroachment in, or interference with natural resources and processes within the protected wetland, or to otherwise improve or maintain the water quality.
- (b) The Director of Community Planning and Development, Planning Commission, or Township Board shall fix a reasonable time for the undertaking and completion of all activities and structures, as applicable.
- (c) Following the approval of the wetland use permit application, a permit shall be issued upon determination that all other requirements of the ordinance and law have been met, including site plan, plat or land use approvals, as applicable, and including issuance of required permits by the county or the state department of environmental quality under part 303 of the Natural Resources and Environmental Protection Act (MCL § 324.30301 et seq.).
- (d) The Director of Community Planning and Development, Planning Commission, or Township Board, as applicable, upon issuance of a wetland use permit, may require the applicant to file with the Township Treasurer cash, certified check, or an irrevocable bank letter of credit in an amount the Director of Community Planning and Development, Planning Commission or Township Board, as applicable, determines is necessary to ensure compliance with the wetland use permit approval conditions and this article.
- (e) At no time shall the Director of Community Planning and Development, Planning Commission, or Township Board, as applicable, issue a wetland use permit that allows a more extensive alteration of the wetland than permitted by state or federal law.
- (f) Wetland use permits for seasonal operations need not be renewed annually unless otherwise stated in the permit.
- (g) Any change that increases the size or scope of the operation and that affects the criteria considered in approving the permit, as determined by the Director of Community Planning and Development, Planning Commission, or Township Board, as applicable, shall require the filing of a new wetland use permit application.
- (h) Any temporary, seasonal, or permanent operation that is discontinued for two years or two seasons shall be presumed to have been abandoned and the wetland use permit automatically voided.
- (i) Any permit granted under this division may be revoked or suspended by the Township Board, after

notice and an opportunity for a hearing, for any of the following causes:

- (1) A violation of a condition of the permit.
- (2) Misrepresentation or failure to fully disclose relevant facts in the application.
- (3) A change in a condition that requires a temporary or permanent change in the activity.
- (j) An applicant who has received a wetland use permit under this division shall comply with the following in connection with any construction or other activity on the property for which the wetland use permit has been issued:
  - (1) Maintain all soil erosion control structures and measures, including, but not limited to, silt fences, straw bale berms, and sediment traps. The permittee shall provide for periodic inspections throughout the duration of the project.
  - (2) Maintain clear delineation of the protected wetlands, so marked by the Township environmental consultant during the on-site inspection, so that such locations are visible to all construction workers.
  - (3) Post on the site, prior to commencement of work on the site and continuing throughout the duration of the project, a copy of the approved wetland use permit containing the conditions of issuance, in a conspicuous manner such that the wording of such permit is available for public inspection.
  - (4) Provide to the Township written notice of commencement prior to work beginning on the site.
  - (k) The wetland use permit shall remain effective for a time period coincidental with any other land use permit reviewed and approved concurrent with the wetland use permit. If applied for prior to the expiration date and concurrent with the expiring land use permit, the applicant may be granted an extension that corresponds to additional time granted for the underlying land use permit. Extensions shall be approved by the same person or body that made the original decision. The maximum number of extensions shall coincide with the maximum number allowed for the underlying land use permit.
  - (l) Where there is no other activity or permit involved, the wetland use permit shall remain effective for two years. One extension may be granted for a period not to exceed 12 months from the expiration date of the wetland use permit if requested in writing prior to the expiration date. An extension shall be reviewed and approved or denied in writing by the same person or body that made the original decision.

**§ 22-160 Amendments.**

**[Code 1974, § 105-17; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

- (a) Any applicant who has been granted a wetland use permit may apply for an amendment in writing to the Director of Community Planning and Development.
- (b) Amendments to an approved wetland use permit shall be granted by the same entity that decided the original wetland use permit in accordance with the procedures and criteria set forth in this section.
  - (1) Application. An application for an amended wetland use permit shall be submitted to the Director of Community Planning and Development prior to the expiration date of the existing wetland use permit.
  - (2) Public hearing. The application for an amended wetland use permit shall be subject to the same notices and hearings and all other procedures required for the initial application.
  - (3) Decision. Prior to deciding the application, the Township Board, Planning Commission, or Director

of Community Planning and Development shall refer the application to the Township environmental consultant for a recommendation and to the environmental commission for comments.

- (4) Appeals. Appeals of a decision on an amendment by the Director of Community Planning and Development and the Planning Commission shall follow the criteria established in Subsection **22-155(e)**.

**§ 22-161 Request for revaluation of affected property.**

**[Code 1974, § 105-18; Ord. No. 2002-07, 8-20-2002; Ord. No. 2011-04, 3-15-2011]**

The owner of any property for which a wetland use permit was applied for under this division and was denied, upon appeal, by the Township Board, may request a revaluation of the affected property by the Township Board of review for assessment purposes to determine its fair market value under the use restriction. A landowner who is aggrieved by a determination, action, or inaction under this article may protest and appeal that determination, action or inaction pursuant to the General Property Tax Act (MCL § 211.1 et seq.).

**§ 22-162 through § 22-170. (Reserved)**