

**State of Michigan
Department of Environmental Quality
Land and Water Management Division**

PUBLIC NOTICE

**PROPOSED GENERAL PERMIT CATEGORY:
BIOENGINEERING PRACTICES FOR STABILIZATION OF
INLAND LAKE SHORELINES**

June 22, 2009

Pursuant to Part 301, Inland Lakes and Streams; and Part 303, Wetlands Protection; of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, the Michigan Department of Environmental Quality's (MDEQ) Land and Water Management Division is proposing to issue a new General Permit (GP) to encourage the use of bioengineering practices to stabilize the shorelines of inland lakes. These practices -- also known as "soft" or "green" engineering -- are intended to prevent or control soil erosion and to restore native shorelines while protecting and enhancing fish and wildlife habitat and other natural features associated with the lake. Bioengineering uses a combination of native plantings and natural or biodegradable materials to engineer shoreline protection that, to the extent possible, mimics or enhances the natural shoreline.

Parts 301 and 303 authorize the issuance of GP for categories of activities that are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effects on the environment. If this GP is approved, then the MDEQ may review and authorize specific shoreline bioengineering projects under this GP in an accelerated manner without issuance of any additional public notice. In order to qualify for authorization under this GP, criteria specified in the proposed GP must be met.

The purpose of this public notice is to provide an opportunity for public review and comment prior to issuance of the GP. Written comments on the new Proposed General Permit Category should be sent to:

Ms. Peg Bostwick
Michigan Department of Environmental Quality
Land and Water Management Division
P.O. Box 30458
Lansing, MI 48909-7958
bostwickp@michigan.gov

All comments must be received by Friday, August 21, 2009.

This notice will be reviewed by federal agencies in accordance with an agreement with the United States Environmental Protection Agency, under provisions of Section 404 of the Federal Clean Water Act Amendments of 1977.



JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



STEVEN E. CHESTER
DIRECTOR

**GENERAL PERMIT CATEGORY:
BIOENGINEERING PRACTICES FOR STABILIZATION OF
INLAND LAKE SHORELINES**

DRAFT – June 22, 2009

Issued Under Part 301, Inland Lakes and Streams, of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended (NREPA), being Section 324.30101 to 324.30113 of the Michigan Compiled Laws, Annotated

And

Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended (NREPA), being Section 324.30301 to 324.30323 of the Michigan Compiled Laws, Annotated

BACKGROUND

PURPOSE

The purpose of this General Permit (GP) is to support the use of listed bioengineering practices (also known as “soft” or “green” engineering) to stabilize inland lake shorelines, as needed, to prevent erosion and restore native shorelines while protecting and enhancing fish and wildlife habitat and other natural features associated with inland lakes. Bioengineering uses a combination of native plantings and natural or biodegradable materials to engineer shoreline protection that, to the extent possible, mimics and or enhances the natural landscape.

The specific practices included in this GP are not recommended as the sole means of correcting existing erosion problems where wind and wave energy are excessive, or where eroded banks exceed three feet in height. However, these measures will typically be suitable for habitat enhancement, prevention of erosion problems, or to stabilize eroding banks at locations where:

- The longest unobstructed distance across the lake from the proposed project site is less than 1 mile.
- The proposed project site is not adjacent to a heavily used boating access point or marina.
- The proposed project site is not located on an unprotected point, headland, or island where erosive forces are high.

- At other locations dependent upon site specific conditions.

This GP category is not applicable to Great Lakes shoreline areas, streams and rivers. It is also not applicable to inland lakes where shorelines are stable, and where natural wetland habitat would be degraded by installation of these structures.

REGULATORY AUTHORITY

This GP category is issued by the Michigan Department of Environmental Quality's (MDEQ) Land and Water Management Division (LWMD) under the authority of Part 301, Inland Lakes and Streams; and Part 303, Wetlands Protection; of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. These authorities allow the issuance of a GP by the LWMD for activities that are similar in nature, will cause only minimal adverse environmental effects when performed separately, and will only have minimal cumulative adverse effects on the environment. The LWMD may impose additional site specific conditions as needed on a bioengineering project authorized under this GP if the conditions are designed to remove an impairment to the lake, to mitigate the impact of the project, or to otherwise restore or rehabilitate the lake. The LWMD may also establish a reasonable time when the proposed project is to be completed or terminated.

GENERAL PERMIT PROCEDURES

A person seeking authorization for a project under this GP must submit a permit application on a form provided by the LWMD and include the required information. The LWMD will review applications for authorization under this GP to determine whether the conditions and limitations of this GP are met. Applications processed under GP procedures are reviewed without issuance of a public notice. The MDEQ may issue, deny, or impose conditions on project activities authorized under this GP. The MDEQ will provide a written authorization or other response to the applicant.

If at any time in the review process it is determined that an application for authorization of a project does not meet all the general and specific GP criteria, the project may be subjected to public review. If it is determined that a proposed project could, in combination with other projects, result in more than minimal adverse cumulative impacts, the application will be processed as an individual permit application and public noticed. The processing as an individual permit application may require the applicant to provide additional information and an additional fee.

ACTIVITIES THAT MAY BE AUTHORIZED UNDER THIS GENERAL PERMIT

A property owner may request authorization under this GP to install and maintain the following bioengineering practices on an inland lake as necessary to prevent or control erosion, provided that the proposed activity meets the specified limitations and conditions.

- Placement of biological erosion control structures, including but not limited to fiber rolls, fiber mats, live stakes, brush mattresses, brush bundles, and plantings of native vegetation.

- Limited placement of natural stone or rock rip rap, covering no more than 25 percent of the shoreline and allowing for the free growth of plants, may be used if necessary to stabilize biological materials. Stone used for this purpose shall range from four to eight inches in diameter, and shall not be placed below the water's edge.
- Temporary placement of fiber rolls or similar materials to serve as wave breaks or barriers placed not more than five feet from the existing shoreline, to facilitate establishment of biological control structures or plantings. Temporary wave breaks must be constructed of and anchored with materials that are 100 percent biodegradable.
- Maintenance of previously authorized bioengineering structures.

Limitations and Conditions:

- Authorization under this GP shall be limited to 300 linear feet of shoreline per project.
- Bioengineered shore protection structures authorized under this GP shall not be utilized where the top of the bank is more than three feet above the ordinary high water mark of the lake.
- Vegetation, including plantings and other potentially viable material such as live stakes, brush bundles or other gathered woody material, shall be comprised only of plant species that are considered native according to the Floristic Quality Assessment with Wetland Categories and Examples of Computer Applications for the State of Michigan, (Michigan Department of Natural Resources, Revised, 2nd Edition, October 2001).
- Engineered material, such as jute and coconut fabric, shall be comprised of inert plant fiber that may be non-native.
- Excavation and backfill shall be authorized under this GP only to the extent necessary to stabilize slopes and to place bioengineering structures. Alteration of the natural contours of the lake shoreline or expansion of beach areas shall not be authorized. Excavation or fill below the water's edge shall be authorized only to support the re-establishment of native vegetation, to install temporary wave breaks, or to restore and stabilize a severely eroded bank.
- All natural and engineered stabilization materials shall be firmly staked and otherwise secured using biodegradable materials to prevent movement due to wind, waves, high water, or ice.
- All raw areas resulting from the authorized construction activity shall be promptly and effectively stabilized with native plant materials (seed and mulch), or other technology as specified in the project authorization, in a sufficient quantity and manner so as to prevent erosion and any potential siltation to surface waters or wetlands.
- This GP shall not be used to authorize the destruction or alteration of areas of existing native wetland or aquatic vegetation.
- This GP shall not be used to authorize activities that may have an adverse impact on state or federally listed or proposed threatened or endangered species or their habitat.

- This GP is not applicable in a state or federally designated wilderness or environmental area, or in an identified historic or archeological area.

GENERAL LIMITATIONS AND CONDITIONS

The following general limitations and conditions apply to all authorizations issued by the LWMD:

- A. Initiation of any work on the permitted project confirms the permittee's acceptance of and agreement to comply with all terms and conditions of an authorization under this permit.
- B. The permittee in exercising the authority granted by an authorization under this permit shall not cause unlawful pollution as defined by Part 31, Water Resources Protection, of the NREPA.
- C. A copy of this permit authorization shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
- D. All work shall be completed in accordance with the plans and the specifications submitted with the application and/or plans and specifications attached to the authorization.
- E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved herein.
- F. It is made a requirement of authorization under this permit that the permittee give notice to public utilities in accordance with Act 53 of the Public Acts of 1974, and comply with each of the requirements of that act.
- G. Authorization under this permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits or complying with other state statutes.
- H. Authorization under this permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his or her rights.
- I. The permittee shall notify the MDEQ within one week after the completion of the activity authorized by this permit.
- J. Authorizations under this permit shall not be assigned or transferred without the written approval of the MDEQ.
- K. Failure to comply with conditions of authorizations under this permit may subject the permittee to revocation of the permit and criminal and/or civil action as cited by the specific state act, federal act and/or rule under which this permit is granted.

NEED FOR OTHER PERMITS

Authorization of activities pursuant to this GP does not remove the need for other applicable local, state, or federal permits, including permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent (CEA). To locate the Soil Erosion Program Administrator for your county visit www.deq.state.mi.us/sesca/.

EXPIRATION DATE

This General Permit expires on _____, 2014 unless revoked or modified prior to that date.