Pursuant to ch. 227, Wis. Stats., the Wisconsin Department of Natural Resources has finalized and hereby certifies the following guidance document.

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<th>DOCUMENT ID</th>
<th>WW-19-012x-C</th>
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<tr>
<td>DOCUMENT TITLE</td>
<td>WATERWAYS PROGRAM</td>
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<tr>
<td>STATUTORY AUTHORITY OR LEGAL CITATION</td>
<td>CH. 30, WIS. STATS.</td>
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<tr>
<td>DATE SENT TO LEGISLATIVE REFERENCE BUREAU (FOR PUBLIC COMMENTS)</td>
<td>12/2/2019</td>
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<td>DATE FINALIZED</td>
<td>12/30/19</td>
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I have reviewed this guidance document or proposed guidance document and I certify that it complies with sections 227.10 and 227.11 of the Wisconsin Statutes. I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is not explicitly required or explicitly permitted by a statute or a rule that has been lawfully promulgated. I further certify that the guidance document or proposed guidance document contains no standard, requirement, or threshold that is more restrictive than a standard, requirement, or threshold contained in the Wisconsin Statutes.

12/23/19

Signature Date
INDIVIDUAL PERMIT APPLICATION INSTRUCTIONS

GREAT LAKES EROSION CONTROL STRUCTURES Individual Permit Application Instructions

Determine eligibility for this individual permit:

- Choose an activity decision module on web, http://dnr.wi.gov/topic/waterways

To apply:

- Apply online using our online ePermitting System at  http://dnr.wi.gov/permits/water
- Include all required attachments. Each document must be less than 15 megabytes and our online system offers a help guide to reduce file sizes
- Permit processing review times begin when all of the required application materials are received by the DNR. The Department may require additional information to evaluate the project.
- If you have questions regarding your application, contact the local Water Management Specialist for your county refer to http://dnr.wi.gov/topic/Waterways/contacts.html#county.

Please note, prior to starting any work at the project site, you are responsible for:

- Obtain all necessary local (e.g. city, town, village or county) permits
- Obtain U.S. Army Corps of Engineer permits or approvals
- Obtain any other applicable state permits

Public Notice Newspaper Posting:

- As part of the permit process, it is required to publish in the newspaper as a Class 1 public notice.
- The Department will prepare the Notice
- If you would like to delegate to the Department the required task of publishing in the newspaper, please select and pay the additional fee.

To find the local Water Management Specialist for your county refer to http://dnr.wi.gov/topic/Waterways/contacts.html#county.

Required attachments - Forms or documents you upload in our online ePermitting System

1. **Application form.** A complete, signed application form “Water Resources Application for Project Permits (WRAPP)” (Form#3500-053)

2. **Application fee.** Payment needs to be submitted through the ePermitting System as part of the application process. A list of fees can be found at http://dnr.wi.gov/topic/waterways/documents/PermitDocs/feesheet.pdf.

3. **Ownership Documentation.** (i.e. copy of deed, land contract, current property tax statement/receipt)

4. **Photographs** that clearly show the on-the-ground conditions of the existing project areas. Remember that too much snow cover or vegetation may obscure important details. If possible, have another person stand near the project area for size reference. Color images are preferred.
5. **Site Maps** which clearly illustrate the location and perimeter of the project site, and its relationship to nearby water resources (e.g. lakes, rivers, streams, wetlands), major landmarks and roads. Provide copies of relevant maps (e.g. wetland, aerial, topographical, soil, floodplain, or zoning maps), with the project location clearly identified. The Department offers a web mapping tool to assist in creating these maps at [http://dnr.wi.gov/topic/surfacewater/swdv/](http://dnr.wi.gov/topic/surfacewater/swdv/).

6. **Plans and specifications** that show what you intend to do. Plan drawings should be clear and to scale. Be sure to draw all plans as accurately and detailed as possible. The Department reserves the right to require additional information to evaluate the project.
   - The plans, drawings, etc. shall be stamped, signed and dated by a Professional engineer (PE) licensed by the state of Wisconsin as appropriate.

   **PLEASE BE AWARE:** THIS REQUIREMENT MAY BE WAIVED BY THE WATER MANAGEMENT SPECIALIST (WMS) IN CERTAIN CASES SUCH AS SMALL SCALE PROJECTS. CONTACT THE WATER MANAGEMENT SPECIALIST FOR YOUR COUNTY PRIOR TO SUBMITTING YOUR APPLICATION TO DETERMINE IF YOUR PROJECT IS SMALL SCALE. Water Management Specialist contact information can both be found at [http://dnr.wi.gov/topic/Waterways/about_us/county_contacts.html](http://dnr.wi.gov/topic/Waterways/about_us/county_contacts.html)

   **PLEASE BE AWARE** The act of signing and sealing a design drawing by a PE is a statement certifying that the work has been prepared with direct supervisory control and according to the best professional standards. It is an assurance to both the property owner and to the Department that the work has adhered to appropriate design standards, is protective of the public welfare, and safeguards life, health and property. Many sites have complex geology, drainage issues, structural conditions, and/or wave climates that require careful consideration, planning and design. Failure of an erosion control structure, even over a period of years, may result in the loss of additional upland, may threaten existing buildings, and can result in damage to adjacent properties. Impacts to the lakebed shall be minimized by reducing the footprint of the project to the minimum amount needed to meet the project purpose.

   - Plan view drawings of the existing site conditions and proposed project, including final slope of the face of the revetment (if applicable). **Note:** The Department may request a hard copy of any full size or enlarged construction drawings.
   - Overview plans for how the project ties into the neighboring properties.
   - Cross-sections showing existing and proposed conditions every 50 feet and at each end of the project. Cross sections must include elevations of the lakebed, the top of the proposed revetment, still water elevation at the time of plan design and the wave run-up floodplain elevation, if applicable. **Note.** The existing and proposed conditions transects need not be repeated if one or more representative sections can be drawn defining the proposed condition design.
   - PE statement that project as designed is stable and will not impact adjoining neighbors
   - Include a title block in the lower right corner of the plans. The title block must include the applicant’s name, site address, a drawing title, the date, and a sheet number (i.e. Sheet 1 of 4).
   - Plan drawings should be drawn to a standard scale and indicate that scale on the drawing sheet with a bar and written scale. Cross section horizontal and vertical at the same scale
   - Land and water elevations should be referenced on ALL drawings referencing the datum used (e.g. IGLD 1985, NAVD88).
   - Drawings should accurately depict all parcel boundaries.
• Plans should specify the site’s elevations, dimensions, and geologic materials. For example, the plan set should include:
  o the bluff/bank top and toe elevations
  o slopes and grades
  o beach width and material
  o bluff/bank geology
  o watercourses and/or existing drainage measures
  o existing shore structures
  o any physical features that provide horizontal or vertical reference
  o water’s edge and date of observation
• Plans should specify the structure’s elevations and dimensions including the crest and toe elevations
• Plans should clearly show total lakeward extent from existing toe of bluff to the lake ward end of the structure
• Plans should specify the structure’s materials. For example, the plan set should include:
  o type of material
  o interlocking mechanisms
  o unit size or specifications
• Plans should specify the structure’s components. For example, the plan set should include:
  o bedding, core, or foundation
  o type of filter fabric or filter stone/material being used
  o armor or cover layer
  o splash apron
  o toe protection and how it is keyed into the bed. **Note:** a separate dredging permit may be needed if removal of bed material is necessary for proper toe installation.
  o flank protection or wing walls,
  o anchoring system,
  o drainage measures
  o cuts and fills, including the square footage of disturbance.

7. **Narrative description** of your proposal on a separate page. Please include:
   • What the project is, purpose of project, and need for the project
   • How you intend to carry out the project, including methods, materials, and equipment
   • Your proposed construction schedule and sequence of work
   • What temporary and permanent erosion control measures will be used
   • The location of any disposal area for dredged or excavated materials
   • For disturbances or fill, provide a description of type, composition, and quality of materials
   • How you plan to avoid, minimize and mitigate impacts to waterways
   • Area (e.g. linear feet) impacted

8. **Riparian owners list.** Names and addresses of the adjacent property owners.

9. **Construction Details.** Please describe how access to the shoreline will be gained. For example, for all types of access the description should include information regarding:
   • What material, if any, will be temporarily stored on the lakebed and if so, where will it be stored?
• Detailed plans for any access roads that are needed including
  o Is the road temporary or permanent?
  o how they will be constructed, dimensions, and if any material will be brought in to be placed on the surface
  o If temporary, how and when the access road will be removed. Include plans for road cuts and grades within 20’ of any neighboring properties.
• How any excavated slopes near the road will be stabilized
• How the road will be designed to not create a preferential path for surface water
• Any dewatering proposed. If so, how?
• If equipment has to cross in front of other properties, will need written approval from each landowner
• What equipment will be operated on the lakebed and what is the expected maximum water depth?
• How much total grading is proposed in square feet?

A. For Barge access, the description should include the additional information regarding:
• Will all the material be hauled on one barge or are multiple trips needed?
• How will the excavated toe material be stored on the barge and for how long?
• What erosion control measures will be used on the barge to keep material stored from entering the lake?

B. For Bluff access, the description should include the additional information regarding:
• If done using a bulldozer, where does the excess material get placed at the shoreline?
• Will dump trucks be operated on the access road? How will the stone and other material be taken to the lake?
• Will the material be stored at the top of the bluff or along the shoreline?
• How will the excavated material be hauled up the bluff?
• How will any excavated slopes near the road be stabilized?
• What is the plan for slumped material on the road during construction and where will it be placed?

10. Site Restoration. Please describe how the site will be restored. For example, the description should include information regarding:
• Detailed planting plans for any exposed soil areas
• Any proposed beach nourishment? Separate permit may be required.

11. Engineering Calculations
PLEASE BE AWARE: This requirement may be waived by the Water Management Specialist (WMS) in certain cases such as small scale projects. Contact the Water Management Specialist for your county prior to submitting your application to determine if your project is small scale.
Water Management Specialist contact information can both be found at http://dnr.wi.gov/topic/Waterways/about_us/county_contacts.html

Please analyze the wave, currents, and longshore transport environments, and the coastal processes at the project site. For example, the analysis should include:
• Final design should be based on a range of water levels.
• A copy of any calculations (stability analysis, wave force analysis, sediment budget, etc.), and background information (photos, studies, historical data, material specifications, WIS reports, etc.) used by the PE in designing the structure should be provided.
• The engineering methods (ACES, Corps of Engineer Manuals, etc.) and the design conditions (geology, wave height, wind direction, water level, water depth, bathymetry, etc.) used by the PE in designing the structure, should also be specified.

• A copy of any historical permits, photographs of the erosion control structure or the shore, maintenance records, inspection reports, engineering analysis, surveys, or other relevant information that will attest to the stability of the bluff, and the integrity and effectiveness of the erosion control measure should be submitted with the application. Shore erosion control measure contractors, general contractors, consulting engineers, consulting geologists, or home inspectors may be able to assist you with providing this information.

12. **Endangered and Threatened Resources.** The applicant is not required, but is encouraged to request an endangered resources (ER) review letter before applying for the permit. Information on how to obtain a review can be found by visiting the website at [http://dnr.wi.gov/topic/ERReview/Review.html](http://dnr.wi.gov/topic/ERReview/Review.html). The applicant can also visit the NHI Public Portal, [http://dnr.wi.gov/topic/ERReview/PublicPortal.html](http://dnr.wi.gov/topic/ERReview/PublicPortal.html), to determine if a full ER Review is required. Read the ‘What is an ER Preliminary Assessment and what do the results mean?’ section to determine follow-up steps.

13. **Historical and Cultural Resources.** If you are aware there is a historical or cultural resource present, you are **required** to contact the Wisconsin State Historical Society to verify and receive documentation that the activity will not result in an adverse impact to these resources.