

Lakeshore Erosion Control – Riprap Vegetated Armoring General Permit Application Instructions

Determine eligibility for this general permit:

- Choose an activity decision module on web, <http://dnr.wi.gov/topic/waterways>, **or**
- Review the eligibility criteria below
 - If the project does not meet all of the eligibility standards, apply for an Individual Permit

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 <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, <http://www.mvp.usace.army.mil/Missions/Regulatory.aspx>.
- Any other applicable state permits

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 must 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** that clearly illustrate the location and perimeter of the project site, and its relationship to nearby water resources (e.g. lakes, rivers, streams or 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/>.

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. Please refer to this sample drawing for assistance developing your plans and specifications, http://dnr.wi.gov/topic/Waterways/sample_drawings/Riprap_Sample_Drawing_Grid.pdf.

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. Vegetation plan - Native vegetation must be seeded above the ordinary high water mark (OHWM). Please refer to the Shoreland Habitat: Wisconsin Biology Technical Note 1

(<http://dnr.wi.gov/topic/shorelandzoning/documents/nrcsbiotechnote.pdf>) or the NRCS Conservation Practice Standard 643A: Shoreland Habitat

(<http://dnr.wi.gov/topic/ShorelandZoning/documents/NRCSshorehabstandard.pdf>) to see the recommended practice standards establishing native vegetation.

9. Erosion Intensity Worksheet (EI) or Wave Energy Calculation to meet the requirements of the general permit which directs the type of shoreline erosion control structure needed based on the erosive energy at the project site. Please refer to the Wave Energy Calculation

(<http://dnr.wi.gov/topic/Waterways/shoreline/erosioncalculator.html>) or the EI Worksheet, which is filled out within the ePermitting System. Remember if the Energy Calculation and the EI Worksheet result in different energy levels, you must use the EI worksheet energy level.

Site Energy Calculation Definitions:

- High Energy Site – a site where the storm-wave height calculated is greater than or equal to 2.3 feet or where the erosion intensity score calculated has a score of greater than 67.
- Moderate Energy Site – a site where the storm-wave height is greater than or equal to 1.0 foot, but less than 2.3 feet, or where the erosion intensity score calculated has a score of 48 to 67.
- Low Energy Site – a site where the storm-wave height is less than 1.0 foot, or where the erosion intensity score calculated has a score of 47 or less.

10. 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>. The applicant can also visit the NHI Public Portal, <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.

11. 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.

Eligibility criteria:	
Projects that do not meet all criteria are not eligible for this general permit. If your project does not qualify for this general permit, you may apply for an individual permit.	
Riprap or vegetated armoring may not exceed 200 linear feet of shoreline.	
The project site is a moderate or high energy site; or a low energy site where the bank-edge recession described in s. NR 328.08 (3) is equal to or greater than 0.5 feet per year and the applicant can show a biological erosion control structure was previously placed according to the standards in s. NR 328.04 (3) and (4). Note: NR 328.08 (3) requires that the time between separate measurements shall equal or exceed 3 months during the open-water season. Note: The applicant will satisfy the “equal to or greater than 0.5 feet per year” requirement by demonstrating that the bank-edge recession is equal to or greater than 1.5 inches per 3 months during the open-water season.	
Riprap shall be clean fieldstone or quarry stone 6 to 24 inches in diameter.	
The toe of the riprap may not extend more than 8 feet waterward of the ordinary high water mark.	
The final riprap slope may not exceed (be steeper than) 2 feet horizontal to one foot vertical.	
Riprap may not be placed at an elevation higher than the ordinary high water mark plus the storm-wave height as calculated in s. NR 328.08 (1). For waters subject to subch. II, riprap may not be placed at an elevation higher than the ordinary high water mark plus 1.5 times the storm-wave height calculated in s.NR 328.08. Note: The listed waters in sub ch. II are typified by following conditions – impounded; 2500 acres and larger; extensive water level fluctuation; high shoreline recession rates; historic loss of shoreline vegetation.	
No fill material or soil may be placed in a wetland or below the ordinary high water mark of any navigable waterway.	
The riprap shall follow the natural contour of the shoreline.	
Filter cloth or clean-washed gravel shall be used as a filter layer under the riprap to extend the life of the structure, improve effectiveness and prevent soil erosion behind the riprap.	
Riprap or other vegetated armoring along moderate energy sites shall be re-vegetated above the ordinary high water mark by using native shrub plantings, native live stakes or native jointed plantings. Note: Erosion control treatments may include a 10-foot shoreline segment where plant establishment is not required for the purpose of ingress/egress associated with the placement of a pier or access to the waterway, or associated with public park activities.	
The structure may be placed and maintained only by a riparian.	
The project will not result in removal of greater than 20% of the aerial coverage of natural bank vegetation, emergent vegetation or floating vegetation, not including the area covered by the footprint of the riprap, or any access corridors necessary for the placement of the riprap.	
Any grading, excavation and land disturbance shall be confined to the minimum area necessary for the construction and may not exceed 10,000 square feet.	

<p>Erosion control measures shall meet or exceed the technical standards for erosion control approved by the department under subch. V of ch. NR 151. Any area where topsoil is exposed during construction shall be immediately seeded and mulched or riprapped to stabilize disturbed areas and prevent soils from being eroded and washed into the waterway. Note: These standards can be found at the following website: http://dnr.wi.gov/topic/stormwater/standards/.</p>	
<p>Unless part of a permanent stormwater management system, all temporary erosion and sediment control practices shall be removed upon final site stabilization. Areas disturbed during construction or installation shall be restored.</p>	
<p>All equipment used for the project shall be designed and properly sized to minimize the amount of sediment that can escape into the water.</p>	
<p>No waterward extension of the property is permitted other than what is reasonably necessary to conduct the project and protect the existing bank. No soil or similar fill material may be placed in a wetland or below the ordinary high water mark of any navigable waterway.</p>	
<p>Dredging under s. 30.20 (1g) (b) 1., Stats., is not allowed for the placement or maintenance of any shore erosion control structure.</p>	
<p>All equipment used for the project including but not limited to tracked vehicles, barges, boats, hoses, sheet pile and pumps shall be de-contaminated for invasive and exotic viruses and species prior to use and after use.</p>	
<p>The following steps must be taken every time you move your equipment to avoid transporting invasive and exotic viruses and species. To the extent practicable, equipment and gear used on infested waters shall not be used on other non-infested waters.</p> <ul style="list-style-type: none"> • Inspect and remove aquatic plants, animals, and mud from your equipment. • Drain all water from your equipment that comes in contact with infested waters, including but not limited to tracked vehicles, barges, boats, hoses, sheet pile and pumps. • Dispose of aquatic plants, animals in the trash. Never release or transfer aquatic plants, animals or water from one waterbody to another. <p>Wash your equipment with hot (>104° F) or high pressure water, steam clean or allow your equipment to dry thoroughly for 5 days.</p>	
<p>Follow the most recent department approved washing and disinfection protocols and department approved best management practices to avoid the spread of invasive species as outlined in NR 40, Wis. Adm. Code. These protocols and practices can be found on the Department website at http://dnr.wi.gov/topic/Invasives/bmp.html Keyword: "equipment operator" and at http://dnr.wi.gov/topic/Invasives/documents/EquipOper.pdf</p>	