Chapter 305: NATURAL RESOURCES PROTECTION ACT

PERMIT BY RULE

Section 10:

Stream Crossings (Bridges, Culverts and Fords)

NOTE: *This Section-by Section version of Permit By Rule is re-formatted to increase usability and includes additional guidance, annotations, and addendum. The entire rule, as published, is available below.*

Link to Permit By Rule Section 1 (Introductions & Compliance Info)

Official Chapter 305 Rule (all sections):
https://www.maine.gov/sos/rulemaking/agency-rules/department-environmental-protection-rules

AMENDED:
May 25, 2005 – filing 2005-174 December 5, 2006 – filing 2006-496
February 25, 2008 – Section 20 only, filing 2008-88
July 15, 2009 – filing 2009-339
July 30, 2011 – Section 16 only, filing 2011-211 (Final adoption, major substantive)
June 8, 2012 – filing 2012-146 (Final adoption, major substantive)
December 27, 2022 – Section 16-A only, filing 2022-256
December 9, 2023 - Section 16 only, filing 2023-231 (Final adoption, major substantive)
June 17, 2025 – filing 2025-129

NRPA Permit By Rule Section 10

A. APPLICABILITY

1 This section applies to the construction of a bridge span or culvert crossing of a river, stream or brook, and associated accessway construction within 25 feet of the river, stream or brook crossing excluding the following:

(a) Crossings of outstanding river segments identified in 38 M.R.S. Section 480-P;

(b) Crossings of any river as defined the Mandatory Shoreland Zoning Act by 38 M.R.S. Section 426-A(11), (information is available at the municipality office); or

(c) Crossings of any portion of a river, stream or brook that experiences tidal action.

NOTE: *Temporary structures do not require a permit from the department under the NRPA provided no filling and minimal soil disturbance occurs. All crossings involving filling in and adjacent to a river, stream or brook, such as culvert crossings, are subject to the NRPA and must first receive a permit before construction.*

2 This section also applies to the establishment of a permanent stream ford for purposes of timber harvesting, livestock, agriculture and construction and maintenance of a utility line.

3 A stream crossing constructed between July 15 and October 1 that is associated with forest management activities is exempt from the 20 working day waiting period required in Section 1(C)(1).

4 A stream crossing constructed between July 15 and October 1 that is performed or supervised by individuals currently certified in erosion control practices by the DEP is exempt from the 20 working day waiting period required in Section 1(C)(1).

5 Multiple stream crossings may be submitted on one PBR notification form as long as all of the crossing activities are located within one municipality.

6 ✗ This section does not apply to an activity that is not or will not be in compliance with the terms and conditions of permits issued under the Site Location of Development Law, 38 M.R.S. Sections 481 to 490, the Storm Water Management Law, 38 M.R.S. Section 420-D, or the Natural Resources Protection Act, 38 M.R.S. Sections 480-A to 480-KK.

7 ✗ This section does not apply to an activity that will not conform to the local shoreland zoning ordinance.

NOTES:

(1) Contact the local Code Enforcement Officer for information on local shoreland zoning requirements.

(2) Maintenance and repair of a public or private crossing of a river, stream or brook is exempt from the NRPA provided that:

(a) Erosion control measures are taken to prevent sedimentation of the water;

(b) The crossing does not block fish passage in the water course; and

(c) Any replaced culvert is not more than 25% longer than the culvert being replaced and is not longer than 75 feet.

(3) A permit will be required from the US Army Corps of Engineers for the following types of projects:

(a) Any activity involving impacts (direct and secondary) to freshwater wetlands; or

(b) An activity within a river, stream or brook between October 2 and July 14.

A copy of the PBR notification form and original photographs, not photocopies, should be submitted to the Corps of Engineers for these activities (US Army Corps of Engineers, 442 Civic Center Drive, Suite 350, Augusta, ME 04330. Tel. (207) 623-8367).

B. SUBMISSIONS

Submissions for all sections:

PBR Notification Form

Location Map

Submissions for Section 10:

1

For any crossing involving trenching or disturbance of substrate in a river, stream or brook that occurs **between October 2 and July 14**, the proposed dates for construction of the crossing must be clearly identified on the notification form under “Description of Project”.

2

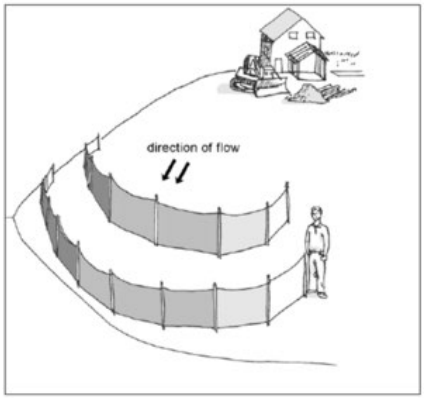
Except for crossings associated with forest management activities, the applicant is required to submit photographs of the area that will be affected by the activity proposed.

3

Photographs showing the completed project and the affected area must be submitted within 20 days of the activity's completion. The photographs must be sent with a copy of the notification form or labeled with the applicant's name and the municipality in which the activity took place.

C. STANDARDS

1 The following measures must be taken to prevent erosion of soil or fill material from disturbed areas into the resource:



(a) For any soil disturbance that is limited to the upland and does not extend into the protected natural resource, sediment controls such as trenched and anchored silt fence, an erosion control mix berm at least 1 foot tall, staked straw bales, anchored erosion control socks at least 12 inches in diameter, or a combination of these methods must be properly installed between the area of soil disturbance and the resource before the activity begins and maintained until the disturbed area is permanently stabilized;

(b) Any soil disturbance within a freshwater wetland, great pond, river, stream, or brook must be done during periods of low water to minimize impacts (in-stream work window, lake draw-down, etc.) and must be temporarily or permanently stabilized daily. The placement of sediment barriers within the water would be ineffective and could cause unnecessary damage to the resource;

(c) Any soil disturbance within a coastal wetland must be done at or near low tide and must be temporarily or permanently stabilized before being submerged. The placement of sediment barriers within the tidal zone would be ineffective and could cause unnecessary damage to the resource;

(d) Surface flows from above the disturbed area must be diverted around the disturbed area until final stabilization and any diverted runoff must be managed to prevent erosion; examples of diversions include but are not limited to erosion control mix berms or socks, sandbags, and shallow excavated trenches;

(e) Within 1 calendar day following the completion of any soil disturbance, and prior to any storm event, temporary or permanent stabilization must be implemented or spread on any exposed soils;

(f) All disturbed soils must be permanently stabilized; and

(g) Within 30 days of final stabilization of the site, any silt fence, straw bales, or temporary erosion or sediment controls containing plastic or other non-biodegradable materials must be removed and erosion control mulch berms must be raked to a depth of no more than 6 inches.

NOTE: *For guidance on erosion and sedimentation controls, consult the Maine Erosion and Sediment Control BMPs, dated October 2016. This handbook and other references are available online at: https://www.maine.gov/dep/land/erosion/escbmps/ or by contacting the DEP.*

2 If a perennial watercourse to be crossed is used for navigation, the crossing must consist of a bridge span or pipe arch with at least 4 feet of clearance during normal high water for boat traffic.

3 If the stream to be crossed is a perennial watercourse and has a slope of more than 2%, a bridge or a pipe arch must be used to maintain the natural streambed.

C. STANDARDS (CONT.)

4 Fill sideslopes in a stream or floodplain wetland must be maintained at a slope no shallower than 3 horizontal to 1 vertical and no steeper than 1.5 horizontal to 1 vertical. Fill sideslopes must be stabilized at the completion of the activity.

NOTE: *Uncompacted soils or sandy soils that are saturated at the toe of a slope will be unstable at a 1.5 to 1 slope.*

5 A bridge or culvert must provide an opening with a cross-sectional area at least equal to 3 times the cross-sectional area of the stream channel or sufficient in size to accommodate 25-year frequency water flows.

NOTE: *Stream crossings allowable under this section but located in flood hazard areas (i.e. A zones) as identified on a community's Flood Insurance Rate Maps (FIRM) or Flood Hazard Boundary Maps (FHBM) must be designed and constructed under the stricter standards contained in that community's National Flood Insurance Program (NFIP). For example, a crossing may be required to pass a 100-year flood event.*

6 Road surfaces must be constructed in a manner to prevent erosion of material into the river, stream or brook.

7 Surface water on or adjacent to crossing approaches must be diverted through vegetative filter areas at least 25 feet long to avoid sedimentation of the watercourse. Roadside ditches may not extend to the resource being crossed.

NOTE:
Surface water on or adjacent to crossing approaches should be diverted through vegetative filter areas to avoid sedimentation of the watercourse. Because roadside ditches may not extend to the resource being crossed, filter areas should be established in accordance with the following tables:

Average slope of land between exposed mineral soil and normal high-water mark (percent)	Width of strip between ditch terminus and normal high-water mark (feet along surface of the ground)
0	25
10	45
20	65
30	85
40	105
50	125
60	145
70	165

C. STANDARDS (CONT.)

8 A stream ford must be lined with crushed stone, blasted ledge, washed stone, gabion blankets or geotextile material for erosion control when the natural stream bed does not consist of ledge or rock.

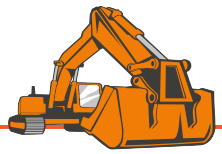
9 A stream ford must allow for fish passage at all times of the year and may not impound water. The fords must also allow for maintenance of normal stream flows.

10 Culvert crossings must:

(a) Be limited to 75 feet in length. This limit may not be exceeded within a half-mile length of the stream or within the length of stream controlled by the applicant, if less;
(b) Follow the alignment and grade of the existing stream channel where possible. On perennial streams the culvert's gradient may not exceed 1%;
(c) Have the bottom of the entire culvert installed at or below streambed elevation, except for additional culverts at the same crossing;
(d) Where two or more culverts are installed, be offset in order to concentrate low flows into the culvert within the natural channel;
(e) Be seated on firm ground, or on geotextiles, logs or other materials used to stabilize the ground;
(f) Be covered by soil to a minimum depth of 1 foot or according to the culvert manufacturer's specifications, whichever is greater;
(g) Have the soil compacted at least halfway up the side of the culvert; and
(h) Have the inlet and outlet ends stabilized by riprap in accordance with Section 8 Shoreline stabilization standards to avoid erosion of material around the culvert.

NOTE: *For guidance on riprap installation, consult the consult the Maine Erosion and Sediment Control BMPs, dated October 2016. This handbook and other references are available online at: https://www.maine.gov/dep/land/erosion/escbmps/ or by contacting the DEP.*

11 Wheeled or tracked equipment may not operate in the water. Equipment operating on the shore may, where necessary, reach into the water with a bucket or similar extension. Equipment may cross streams on rock, gravel or ledge bottom.



12 Work below the normal high-water line must be done during periods of low water level or flow.

13 If the crossing involves trenching or disturbance of substrate in a river, stream or brook between October 2 and July 14, the activity must occur during the time period approved by the DEP. The approved time period may be the time period proposed by the applicant or an alternative time period approved by the DEP. An alternative time period will be required where it appears an unreasonable impact on water quality or fisheries may result at the point of crossing or immediately downstream of the crossing. The applicant will be notified by the DEP within 20 working days if an alternative time period, other than the one proposed by the applicant, is required for constructing the crossing.

C. STANDARDS (CONT.)

14 If work is performed in a river, stream or brook that is less than three feet deep at the time of the activity and at the location of the activity, the applicant must provide for temporary diversion of flow to the opposite side of the channel while work is in progress.

(a) Diversion may be accomplished by placing sandbags, timbers, sheet steel, concrete blocks, 6+ mil polyethylene or geotextiles from the bank to midstream on the upstream side of the activity. No more than two-thirds (2/3) or 25 feet of stream width, whichever is less, may be diverted at one time.

(b) Any material used to divert water flow must be completely removed upon completion of the activity, and the stream substrate must be restored to its original condition.

(c) A pump may be operated, where necessary, for a temporary diversion. The pump outlet must be located and operated such that erosion or the discharge of sediment to the water is prevented.

15 All wheeled or tracked equipment that must travel or work in a vegetated wetland area must travel and work on mats or platforms in order to protect wetland vegetation.

16 All excavated material must be stockpiled either outside the wetland or on mats or platforms. Straw bales or silt fence must be used, where necessary, to prevent sedimentation.

17 The use of untreated lumber is preferred. Lumber pressure treated with chromated copper arsenate (CCA) may be used only if necessary and only if use is allowed under federal law and not prohibited from sale under 38 M.R.S. 1682, and provided it is cured on dry land in such a manner to expose all surfaces to the air for a period of at least 21 days prior to construction. Wood treated with creosote or pentachlorophenol must not be used where the wood will come in contact with water. Sawdust or other lumber waste materials may not be stored or placed in such a manner that pollutants may be discharged into the resource.

D. DEFINITIONS

The following terms, as used in this chapter, have the following meanings, unless the context indicates otherwise:

1 **Cross-sectional area**. The cross-sectional area of a stream channel is determined by multiplying the stream channel width by the average stream channel depth. The stream channel width is the straight-line distance from the normal high-water line on one side of the channel to the normal high-water line on the opposite side of the channel. The average stream channel depth is the average of the vertical distances from a straight line between the normal high-water marks of the stream channel to the bottom of the channel.

2 **Crossing.** Any activity extending from one side to the opposite side of a protected natural resource, or to an island or upland within a protected natural resource whether under, through or over that resource. Such activities include, but are not limited to roads, fords, bridges, culverts, utility lines, water lines, sewer lines and cables, and the clearing and removal of vegetation necessary to install and maintain these crossings.

3 **Fill.** a. (verb) To put into or upon, supply to, or allow to enter a water body or wetland any earth, rock, gravel, sand, silt, clay, peat, or debris; b. (noun) Material, other than structures, placed in or adjacent to a water body or wetland.

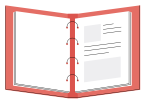
4 **Ford**. A permanent crossing of a stream utilizing an area of existing, non-erodible substrate of the stream, such as ledge or cobble, or by placing non-erodible material such as stone or geotextile on the stream bottom.

5 **Perennial watercourse.** A river, stream or brook depicted as a solid line on the most recent edition of a United States Geological Survey 7.5-minute series topographic map, or if not available, a 15-minute series topographic map.

6 **Riprap**. Heavy, irregularly-shaped rocks that are fit into place, without mortar, on a slope. Square or rectangular rocks with flat faces, such as quarry stone or manufactured blocks, do not qualify as “irregularly-shaped”.

7 **Used for navigation.** Those rivers, streams or brooks used by motorized watercraft.

HOW TO SUBMIT YOUR PERMIT BY RULE



STEP 1

DETERMINE APPLICABLE PERMIT-BY-RULE SECTION(S)

Permit-by-Rule regulations (Chapter 305) apply to certain activities that require a permit under the Natural Resources Protection Act (NRPA). Find the appropriate section for the activity you are proposing to see the requirements.

STEP 2

REVIEW CHAPTER 305 PBR SECTION STANDARDS

Find the section for your type of proposed activity in the Chapter 305 standards. Read the applicability section that describes in further detail which activities are included and where they are allowed. Read and comply with all the standards contained in the section.

STEP 3

MAINE ENTERPRISE LICENSING SYSTEM **(MELS)** HUB

Use the MELS Hub, which is the centralized DEP resource designed to apply for your PBR electronically. Payment is also accepted during this process:
Maine DEP: MELS Hub
https://www.maine.gov/dep/mels/hub.html

STEP 4

WAIT 20 WORKING DAYS AND PROCEED WITH PROJECT FOLLOWING STANDARDS

The PBR becomes effective 20 working days (M-F excluding holidays) from the date the Department receives the completed MELS submission, unless otherwise notified by the Department.

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GUIDANCE & RESOURCES

Maine DEP Erosion Control Best Management Practices Field Guide
www.maine.gov/dep/land/erosion/escbmps/esc_bmp_field.pdf

Maine DOT Stream Smart Road Crossing Pocket Guide
pocket_guide_stream_smart_web.pdf

MAINE AUDUBON
Stream Smart

Maine Stream Smart Program
https://maineaudubon.org/projects/stream-smart/