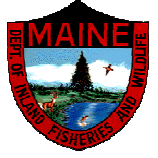


**RECOMMENDED MANAGEMENT GUIDELINES
FOR LAND USE IN OR ADJACENT TO STREAMS PROVIDING HABITAT FOR
ROARING BROOK MAYFLY AND NORTHERN SPRING SALAMANDER**



version 10/22/2020

To protect the integrity of stream habitats with documented or potential occurrences of Roaring Brook Mayfly (Threatened) or Northern Spring Salamander (Special Concern), MDIFW recommends the following guidelines for development and forestry activities proposed in or near the stream channel. These guidelines are based on the best professional judgment of MDIFW Wildlife Biologists and modeled after published standards for protecting rare aquatic and stream-side fauna (Carlson and Sweeney 1999, Elliott 1999, Mitchell et al. 2006, deMaynadier et al. 2007). The goal of these recommendations is to avoid or minimize impacts to these rare species and their habitat. If impacts are unavoidable and could lead to Take of the Roaring Brook Mayfly, MDIFW may recommend an Incidental Take Plan be developed to ensure compliance with Maine’s Endangered Species Act [12MRSA, Chpt. 925, §12808].

For development projects, streams with potentially suitable habitat should be surveyed for the presence of Roaring Brook Mayfly or Spring Salamander prior to any disturbance of the streambed or riparian vegetation. Approved survey protocols and detailed descriptions of suitable habitat characteristics for both species are available from MDIFW. In the absence of surveys, suitable streams should be considered as potentially occupied and protected using the following guidelines:

Management Guidelines

- Maintain a riparian management zone of 250 feet on both sides of the stream, within which no development or permanent land use conversion should occur. Permanent land use conversion includes any alteration that prevents succession of riparian vegetation to its formerly natural state (e.g., roads, turbine pads and laydown areas, buildings, transmission line ROWs).
- For timber harvest within the 250-foot riparian management zone, maintain the first 50 feet from the stream as a no-cut/no-disturbance zone and the remaining 50-250 feet as no less than 60-70% forest canopy cover in an evenly distributed stand.
- No construction activities, use of machinery, or other disturbances should occur within the stream channel except as necessary to place stream crossing structures per the standards below.
- Stream-crossings should be avoided. If crossings are unavoidable, they should be minimized to a narrow trail with forest canopy cover maintained to the greatest extent possible. Crossing structures should span at least 1.2 times the bankfull width of the stream channel and provide an openness ratio¹ of at least 0.60 meters. In the case of permanent crossings, a spanning arch or bridge structure is recommended. Current, published Best Management Practices for stream crossings (e.g., Maine Forest Service 2017) should be followed to prevent erosion, sedimentation, alteration of stream flow, or other impacts to stream habitat.

¹ The openness aspect or “ratio” of a structure is defined as the width times the height of the structure, which is then divided by the total length of the structure (Maine DOT publication “Waterway and Wildlife Crossing Policy and Design Guide”, 3rd edition, July 2008)

(continued)

- On slopes facing the stream, maintain an unscarified filter strip of at least the width indicated below between the normal highwater mark of the stream and any exposed mineral soil created by management activities. These recommendations follow minimum performance standards for timber harvest as defined in the Maine Land Use Regulation Commission’s Rules and Regulations (Chapter 10.27E)².

Average Slope of Land (%)	Width of Strip (feet along surface of ground)
0	25
10	45
20	65
30	85
40	105
50	125
60	145
70	165

- Avoid the use of herbicides or pesticides within the 250-foot riparian management zone. Exceptions may be considered depending on product and circumstance following consultation with MDIFW.

² text available at http://www.maine.gov/dacf/lupc/laws_rules/rule_chapters/Ch10_SubchapterIII.pdf

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