



Recommended Performance Standards for Riparian Buffers in Overhead Utility ROW Projects

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Applicability: This document applies to linear right-of-way projects that cross or abut rivers, streams, and brooks and associated riparian buffers. Maintaining vegetated riparian buffers is critical to maintain habitat conditions for a diversity of aquatic species that require cool, clean water with regular contributions of leaf fall and woody debris. For the purposes of this document, riparian buffers are defined as 100-foot natural vegetated buffers measured from the upland edge of associated fringe and floodplain wetlands on either side of the waterbody.

General Project Alignment: Where practicable, right-of-way alignment should be designed to avoid vegetation clearing within the riparian buffer. Where full avoidance is not an option, alignments should minimize the number and length of necessary waterbody crossings. The placement of structures within a riparian buffer must be avoided to the maximum extent practicable.

Defining Boundaries and Setbacks

The riparian buffer limits and setbacks defined in subsections of this document must be clearly marked in the field prior to the start of construction or subsequent maintenance work.

Riparian Buffer Performance Standards

A. Arboricultural Management Practices

(1) Capable vegetation may be removed and controlled within the transmission line corridor portions of the development. Capable vegetation is defined as species that are capable of growing to a height that would reach the conductor safety zone. Most tree species in Maine are defined as capable vegetation.

(2) Where capable vegetation removal would result in less than 20% areal coverage of woody vegetation within 25-feet of the stream, saplings that do not pose an immediate threat to the conductor safety zone should be left, or topped such that 50% areal

coverage of woody vegetation persists. As shrub growth develops, sapling sized capable vegetation can be removed.

(3) When terrain conditions permit (e.g., ravines and narrow valleys) capable vegetation must be permitted to grow within riparian buffers where maximum growing height can be expected to remain below the conductor safety zone. Narrow valleys are those that are spanned by a single section of transmission line, pole-to-pole.

(4) If a right-of-way crosses a riparian buffer we encourage pole spacing to minimize line sagging and maximize allowed growing height of vegetation within the riparian buffer.

(5) When capable vegetation within a riparian buffer must be removed for the purpose of construction, natural re-generation of non-capable woody vegetation must be allowed within the riparian buffer. To facilitate the regeneration of natural vegetation, the contractor must separate the topsoil from the mineral soil when excavating during project construction. The excavated topsoil must be returned to its original place and position in the landscape and appropriate erosion control methods utilized.

(6) Within a riparian buffer impacts to scrub-shrub and herbaceous vegetation, and other non-capable species must be minimized to the maximum extent practicable.

B. Herbicide Application

(1) Herbicides may not be applied within 25-feet of any river, stream, or brook. Herbicide should be limited to hand application only within a zone of 25 to 50 feet from the edge of a stream.

(2) Elsewhere in the riparian buffer herbicide usage must comply with all label requirements and standards established by the Maine Board of Pesticides Control (MBPC), as periodically amended. Herbicide restrictions and approvals are governed by MBPC. Some key standards include the following:

- (a) Use of only trained applicators working under licensed supervisors.
- (b) Awareness of the impacts of climatic conditions prior to application.
- (c) Application prohibited when wind speed exceeds 15 MPH as measured on-site at the time of application and administered in such a manner that drift is minimized to the extent practicable.

(3) Products with low potential for mobility and low persistence in the environment must be selected for use in riparian buffers. When operating within riparian buffers the following is required:

- (a) Only the following herbicides may be used unless otherwise approved in consultation with MDIFW prior to application:
 - (i) 2,4-D salt formulation, NOT the ester formulation,
 - (ii) Glyphosate,

- (iii) Imazapyr,
- (iv) Fosamine Ammonium,
- (v) Aminopyralid Triisopropanolammonium, and
- (vi) Metsulfuron methyl

(b) Only the following surfactants may be used unless otherwise approved in consultation with MDIFW prior to application:

- (i) Agri-Dex,
- (ii) Competitor,
- (iii) Dyne-Amic,
- (iv) Clean Cut,
- (v) Cide-Kick,
- (vi) Nu-Film IR,
- (vii) Induce,
- (viii) Chemsurf90, and
- (vii) 41-A

(4) Herbicides must be applied in accordance with USEPA label requirements to minimize washoff.

(5) There may be no aerial or motorized application of herbicides.

(6) Pre-application planning meetings between the electric utility owner or agent and pesticide applicator must be conducted.

(7) The electric utility owner or agent must closely supervise and inspect all riparian buffers during application.

(8) Low-pressure, manual backpack sprayers, with appropriate nozzles to minimize drift, must be used.

(9) Herbicide application must be specific to individual targeted species.

(10) The owner or agent must conduct post-treatment inspection.

(11) No herbicide may be stored, mixed or loaded within any riparian buffer.

C. Spill Management

(1) Any spill or release of petroleum products or other hazardous material within a utility transmission line corridor must be managed in accordance with the Spill Contingency Plan as approved by the Maine Department of Environmental Protection.

(2) No fuel storage, vehicle/equipment parking and maintenance, and refueling activity should occur within 100 feet of any river, stream, or brook.

D. Equipment Use

(1) Initial clearing within a riparian buffer must be undertaken during frozen ground conditions whenever practicable, and if not practicable, the recommendations of a third-party inspector must be followed regarding appropriate techniques to minimize disturbance to the maximum extent practicable, such as the use of travel lanes to accommodate mechanical equipment use within the riparian buffer.

(2) Unless frozen, streams must be crossed using mats or bridges. Equipment may cross streams on rock, gravel or ledge bottom so long as such a crossing does not result in bank rutting or erosion.

(3) Culverts may be installed during the construction of the temporary access roads provided that the streams to be culverted are not: Class A or AA waters, outstanding river segments, do not support salmon or other coldwater fisheries, or contain threatened or endangered species. Culverts must be installed when the stream channel is dry, the stream may be dammed and pumped around the construction site, and the culverts must be embedded six inches into the soil and sized so that the diameter is equal to 1.2 times the bank full width of the stream. The stream channel must be restored to natural conditions when the culverts are removed.

(4) Matting used for any construction or maintenance purposes:

(a) shall not be made from wood from ash trees (*Fraxinus spp*);

(b) shall be free of bark;

(c) shall be cleaned of soil and vegetative material by pressure washing if imported from out of State;

(d) shall not have been used in, or made from lumber from, Federally Quarantined areas as setout in 7 CFR 301 unless accompanied by the appropriate USDA certificate of treatment required for interstate transport. Said certificates will be maintained in a central filing location available for review by appropriate Agency personnel for a period of three years after project completion, as determined by utility owner; and,

(e) must have shipping information sufficient to identify the shipper and number and shipping origin of the mats.

(f) shall be subject to potential inspection for compliance with these standards by the Maine Forest Service and U. S. Department of Agriculture.

E. Slash Management

(1) No accumulation of slash shall be left within 50 feet, horizontal distance, of the top of the stream bank. In all other areas slash must either be removed or disposed of in

such a manner that it lies on the ground and no part thereof extends more than 4 feet above the ground.

(2) Any debris that falls below the normal high-water line of a stream shall be removed.