

WATER QUALITY IMPACTS FROM THE FOREST

By Gary Sabourin, edited by Nancy Patch

There is a concerted effort going on right now throughout the state and in many sectors to try and clean up Lake Champlain and the excessive Phosphorus flow into the lake. The forest industry takes this very seriously. We have had Acceptable Management Practices (AMPs) on logging jobs in place for more than 30 years, but these rules have just been overhauled by the Department of Forests, Parks and Recreation and are now out for public comment. Below is a summary of the changes to the AMP rules. The revision of the rules specifically strengthen stream crossings where most of the water quality problems exist. It should be noted that only a small percentage of the phosphorus load is thought to come from forest road erosion, but every sector needs to think about their impact.

Summary of Proposed Revisions to the Acceptable Management Practices (AMPs) for Maintaining Water Quality on Logging Jobs in Vermont

Background: The Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont (AMPs) were adopted as rules and became effective on August 15, 1987. Act 64 of 2015 (the Vermont Clean Water Act) amended 10 V.S.A. §2622 to require the Commissioner of Forests, Parks and Recreation, on or before July 1, 2016 to revise by rule the AMPs to ensure that all logging operations on both public and private forestland are designed to prevent or minimize discharges of sediment, petroleum products, and woody debris (logging slash) from entering streams and other waters; improve soil health of forestland; protect aquatic habitat and aquatic wildlife; and prevent erosion and maintain natural water temperature. Act 64 further states that the rules adopted shall be advisory and not mandatory. The proposed revisions will provide for a high level of forest water quality protection by enhancing standards for improving stream crossing practices

and controlling runoff from forest roads and skid trails. These are areas needing improvement as documented through the AMP Monitoring Program and the



2012 Vermont Timber Harvesting Assessment. The proposed revisions were developed with input from within ANR and from public stakeholders. The revisions also propose a new format: proposed AMPs are presented by category as they pertain to—Truck Roads, Skid Trails, Stream Crossings, Forest Buffers, Petroleum Products and Hazardous Materials and Log Landings.

The proposed revisions are summarized as follows:

Sizing Permanent Stream Crossing Structures (Culverts and Bridges) on Perennial Streams

Permanent bridges and culverts on perennial streams, including new installations and replacements, will need to comply with conditions and standards set forth in the ANR Stream Alteration General Permit and Rule.

Sizing Temporary Stream Crossing Structures (Culverts and Bridges) on Perennial and Intermittent Streams

Proposed revisions will provide new standards for sizing temporary stream crossing structures (culverts and bridges) on perennial and intermittent streams for logging operations. These structures are required to be removed upon completion of logging. Proposed revisions also include conditional requirements for the use of temporary pole-ford and brushed-in stream crossings.

Management of Ditch Water on Truck Roads

The AMPs currently prohibit drainage ditches along truck roads from terminating directly into streams but do not provide clear direction for how



to manage the ditch water to prevent sediment from discharging into streams. The proposed revisions provide for a new requirement that specifies a minimum distance for installing turn-outs to divert the ditch water into a filter area.

Management of Surface Runoff on Truck Roads and Skid Trails

The AMPs currently provide direction for preventing surface runoff from entering streams at stream crossings on skid trails and truck roads by installing waterbars, turn-ups or broad-based dips but do not specify where the diversion should be installed in reference to the stream crossing. Proposed revisions specify a minimum distance for installing waterbars, turn-ups or broad-based dips.

Stream Buffer Protection

Proposed revisions increase the distance for required seeding and mulching of areas of exposed soil adjacent to streams and other waters from 25 feet to 50 feet.

Petroleum Products and Hazardous Materials

Existing AMPs do not address the proper management of petroleum products and other hazardous materials on logging operations. The proposed revisions to the AMPs address this issue.

Acceptable Grades for Truck Roads and Skid Trails

Upper limits are proposed for acceptable maximum grades on newly constructed truck roads and skid trails to better control soil erosion and protect water quality.

Proposed AMP 6.1.1 states: *Permanent and temporary truck roads shall not exceed 10 percent*

This document was prepared by Gary Sabourin and edited by Nancy Patch. The entire AMP manual and the changes can be found at vtfpr.org under forestry.



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