# State of Vermont Agency of Natural Resources Department of Environmental Conservation

# Procedure for Application of Silviculture Allowed Uses of the Vermont Wetland Rules

# **April 2020**

# I. Introduction

The purpose of this document is to provide guidance regarding the Agency of Natural Resources' (ANR) application of the Vermont Wetland Rules (VWR) Allowed Uses 6.1-6.5 to silvicultural activities and related infrastructure. Silvicultural activities in wetlands are considered an 'Allowed Use' under the Vermont Wetland Rules (Section 6) as long as certain conditions are followed.

# II. Definitions

In interpreting the Wetland Rules, the Vermont Wetlands Program applies the following definitions:

**Drainage Ditch:** a ditch constructed along a truck road, skid trail or log landing to collect the surface water runoff and divert it into a filter area. (§5.10 of Vermont's Acceptable Management Practices for Maintaining Water Quality on Logging Jobs ("AMPs")).

Forest Buffer: an area of forested land adjacent to streams and other waters where forest management practices are modified to protect water quality. The width of the forest buffer shall be in accordance with Table 4 of the AMPs. (AMPs §5.13). This is different from the wetland buffer.

**Log Landing:** a place where trees and logs are gathered and sorted in or near the forest during a logging operation for further processing and transport to a mill or log yard facility. (AMPs §5.18).

Ordinary High Water Mark: means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, or the presence of litter and debris (AMPs §5.12).

**Rut:** a depression in the soils of the forest floor or depressions in dirt roads or skid trails made from the passage of any vehicles or logging equipment. (AMPs §5.28).

**Road:** a linear facility with a surface constructed from fill, used primarily for vehicular travel and access. A road structure is measured from the filled toe of slope to the toe of slope of either road shoulder, which is commonly called the **road prism**. Examples of roads include truck roads, town highways, and interstate highways. Roads require regular maintenance of their culverts, shoulders and surface in order for them to continue to be traveled upon. A road does not include a travel-

way, skid trail, or town trail<sup>1</sup>.

**Skid Trail:** cleared trail that is used by logging equipment during a logging operation to transport harvested trees and logs to a log landing. (AMPs §5.32). The surface of a trail is the same as the native material (not filled).

Silvicultural Activities<sup>2</sup>: those activities associated with the sustained management of land for silvicultural purposes including the planting, harvesting and removal of trees (VWR Section 2.31). Silvicultural activities do not include the harvest and removal of trees for reasons other than sustained silviculture. Examples of tree cutting activities that are not considered "Silvicultural Activities" include tree clearing for utility Right-of-Ways; conversion of wetland forest or shrub land to agriculture; and cutting woody vegetation in wetlands or buffer zones for building lots, lawns, viewsheds or shade management. In these examples, the standard of "silviculture activity" is not met as the purpose of the clearing is not for forest management, and/or the subsequent use of the protected areas of wetland and buffer after the tree harvest prevents the area from returning to forest which can be harvested again in the future (i.e., not sustained management of land for silvicultural purposes).

**Travel-Ways:** Travel-ways are not constructed features but rather areas that have been traditionally traveled upon. Common travel-ways include trails, woods roads, and tractor paths where the surface of the travel-way is the same as the native material (not previously filled), although possibly compacted with tire ruts. Travel-ways do not qualify as roads under the Vermont Wetland Rules. A Vermont Wetland Permit is required before doing any upgrade, maintenance, or repair, including the clearing of vegetation or adding of fill, to a travel-way in a buffer or wetland. The creation of a new travel way in a wetland or buffer requires a wetlands permit.

**Truck Road**: a road that connects a log landing to a public road system. (AMPs §5.40).

# III. Allowed Uses from the VT Wetland Rules

The Vermont Wetland Rules define certain silvicultural and silvicultural-related activities as allowed uses in Sections 6.1, 6.2, 6.3, 6.4 and 6.5. Activities that qualify as allowed uses do not require a wetlands permit. Silvicultural activities that qualify as allowed uses are as follows:

<sup>&</sup>lt;sup>1</sup> Town trails or legal trails as defined in VSA 19 § 301. While expansion of town trails is not considered under allowed use 6.1, those town trails may still be maintained for use by logging trucks in accordance with allowed use 6.12.

<sup>&</sup>lt;sup>2</sup> For purposes of this procedure, "Silvicultural Activities" includes "Forestry operation" as defined in 10 V.S.A. § 2602: those activities related to the management of forests, including a timber harvest; pruning; planting; reforestation; pest, disease, and invasive species control; wildlife habitat management; and fertilization. "Forestry operation" includes the primary processing of forest products of commercial value on a parcel where the timber harvest occurs.

#### "6.1 Silvicultural activities which:

- a. Comply with Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont adopted pursuant to 10 V.S.A. § 1259;
- b. Comply with silvicultural standards for deer wintering yards, established jointly by the Departments of Fish and Wildlife and Forests, Parks and Recreation, when occurring in significant wetlands or adjacent buffer zones containing deer wintering yards mapped by the Fish and Wildlife Department; and
- c. Restrict equipment maintenance and the storing or changing of oil, grease, or other petroleum products to log landings; and
- d. Restrict log landings to uplands or buffer zones except that landings not requiring the placement of fill may be located within the wetland when the ground is frozen."
- "6.2 The restoration, reconstruction, rehabilitation, or upgrading of existing roads used solely for silvicultural purposes provided that such roads are not increased in width by more than 20%."
- "6.3 The construction of new roads used solely for silvicultural purposes in buffer zones."
- "6.4 The removal of beaver dams to the extent necessary to prevent impairment of the use of existing logging roads or ongoing silvicultural management practices."
- "6.5 Silvicultural activities including the uses allowed by subsections b, c and d above, when occurring in any Class I wetland, the buffer zone for any Class I wetland and in any Class II wetland specifically designated by the Secretary or Panel to protect habitat for any species on the state or federal list of threatened or endangered species, that comply with a plan approved in writing by the Commissioner of the Department of Forests, Parks and Recreation."

# IV. Application of the Silviculture Allowed Use

The Wetlands Program interprets and applies the Silviculture-related allowed use provisions in the Rules as follows:

# a. Acceptable Management Practices and Wetlands

To qualify as an allowed use, a silviculture activity must comply with the Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont. <u>Vermont's Acceptable Management Practices (AMPs) for Maintaining Water Quality on Logging Jobs</u><sup>3</sup> are regulations

<sup>&</sup>lt;sup>3</sup> Copies of the AMPs are available from the Department of Forests, Parks and Recreation and are available at: <a href="https://dec.vermont.gov/sites/dec/files/wsm/wetlands/docs/wl\_AcceptableManagementPracticesForMaintainingWaterQualityOnLoggingJobsInVermont.pdf">https://dec.vermont.gov/sites/dec/files/wsm/wetlands/docs/wl\_AcceptableManagementPracticesForMaintainingWaterQualityOnLoggingJobsInVermont.pdf</a> or call (802) 828-1531 for a hard-copy.

intended to "provide measures for loggers, foresters, and landowners to utilize, before, during, and after logging operations to comply with the Vermont Water Quality Standards and minimize the potential for a discharge from logging operations in Vermont in accordance with 10 V.S.A. §1259". AMPs §2.

For an activity to qualify as an allowed use under Section 6.1 of the Vermont Wetland Rules, the AMPs must be followed when silvicultural activities take place in a significant (Class I or Class II) wetland or its buffers. Those activities that are out of compliance with the AMPs are not considered an allowed use and are out of compliance with the Vermont Wetland Rules. The AMPs apply to all logging operations on public and private lands in Vermont regardless of the purpose of the logging. AMPs §4. It should be noted that while the AMPs cover all "logging jobs" in Vermont, only a subset of logging-related activities will meet the Allowed Use in the VWR as silvicultural activities.

The AMPs specifically reference "waters" in discussion of receiving waters and forested buffer zones. "Waters," as the term is used in the AMPs, include all rivers, streams, creeks, brooks, reservoirs, ponds, lakes, springs and all bodies of surface waters, artificial or natural, which are contained within, flow through or border upon the state or any portion thereof. AMPs §5.43 and 10 V.S.A. § 1251(13). The AMPs' protections for waters apply to all wetlands that contain surface water for any part of the year, including vernal pools, ponds, ponded marshes, streams, braided stream channels, and ponded swamps. Surface water is most easily observed in the spring or fall.

The AMPs use the "top-of-bank" for determining the boundary from which setbacks and forest buffer widths are measured. Where the AMPs apply to wetlands, the top-of-bank is considered the ordinary highwater mark of the surface water.

# Dredging, Draining, Filling or Grading of Wetlands and their Buffers for Silviculture.

The planting, harvesting and removal of trees as a sustainable land management practice is allowed in the Vermont Wetland Rules, even in instances when those activities may result in an alteration of the flow into or out of the wetland, or result in the draining, dredging, filling or grading of the wetland or buffer. VWR §6.0. Those instances are specified in the Rules, and include the following situations:

- where AMP related infrastructure such as temporary brush crossings are installed to create stable skid trails and are removed after logging is completed, as soon as ground conditions are stable or within 12 months of installation, whichever is sooner. VWR §6.1a.
- where log landings requiring the placement of fill are placed in a wetland buffer zone. VWR §6.1d.
- where an existing truck road is reconstructed or upgraded for silvicultural purposes, provided the overall net increase in road width in a Class I or II wetland is no more than 20% beyond the original road width. This only applies to one-time expansions of the original road; additional expansions in significant wetlands are not considered an allowed use and require a wetlands permit. The road width includes the combined total width of the shoulders, roadbed, and ditches. VWR §6.2.
- where new truck roads intended solely for silvicultural purposes are constructed in buffer zones. VWR §6.3.
- where beaver dams need to be removed because they impair existing truck roads or impair ongoing silvicultural management practices. VWR §6.4.

• where waterbars are needed to disconnect runoff from streams, they may remain or be installed after the job is completed. VWR § 6.1a; §6.6.2 AMPs.

The following activities, which do not comply with the AMPs, are **not** considered Allowed Uses:

- Silvicultural activities in wetlands that result in excessive rutting which alters the hydrology of the wetland and remains uncorrected. In accordance with the AMPs, these ruts must be smoothed out at the close of job, as soon as ground conditions allow, if they pose a potential for erosion or concentrated flow. Failure to correct rutting of this nature is out of compliance with both AMPs and the VWRs.
- Leaving an excessive amount of log corduroy or brush in skid trails, winter haul roads or log landings in wetlands, either under frozen or unfrozen conditions. Corduroy or brush is considered excessive when it alters grade or hydrology or inhibits re-vegetation. Excessive material must be removed after logging is completed, after the ground conditions are stable, or after 12 months of installation, whichever is sooner. Corduroy or brush that does not alter the grade, hydrology or re-vegetation may remain after closeout.
- Bringing in earth fill, or adding earth fill through re-grading, in wetlands for new roads or skid trails without the appropriate wetland permits. The allowed uses only allow for the construction of new roads in buffer zones, not wetlands. VWR §6.3. Fill and grading of skid trails is only allowed for the purpose of creating necessary water bars. AMPs §6.4. Unless done for the purpose of creating necessary water bars, these activities are considered unauthorized fill or discharge in the wetland.

Please note that the discharge of sediment into a surface water, including a wetland, is a violation of the Water Quality Standards and is prohibited under Section 1 of the AMPs and 10 V.S.A. § 1259, regardless of whether the activity resulting in the discharge is considered an Allowed Use under the Wetland Rules.

#### b. Allowed Use 6.1 Qualification Determination

The Vermont Wetlands Program applies the following steps in determining whether an activity qualifies as an Allowed Use under Section 6.1:

- 1. Determine if the activity is proposed within a Class II wetland or buffer zone. The presence of wetland and the wetland boundaries will be determined in accordance with the methodology in the Federal Manual for Identifying and Delineating Jurisdictional Wetlands and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (USACE Manual). This methodology requires the presence of three parameters: hydrophytic vegetation (water-loving plants), hydric soils, and wetland hydrology, unless the scenario presented is a "difficult wetland situation" as defined in Chapter 5 of the USACE Manual. Difficult wetland situations are those situations in which wetlands are difficult to identify because wetland indicators may be missing or cryptic due to natural processes or recent disturbances, and they often include logged areas. The classification of the wetland will be determined by considering the parameters outlined in Sections 4 and 5 of the Vermont Wetland Rules. If the activity is found to occur in a jurisdictional wetland or buffer zone (Class I or II), continue to step two. If the activity occurs outside of wetland or buffer, the activity is outside of VWR jurisdiction, does not qualify as an Allowed Use under 6.1, and does not require a permit.
- 2. Determine if the activity is a silvicultural activity. If logging is conducted for the intended

purpose of creating a clearing for development, or for any reason <u>other than</u> the sustained harvesting and growing of forested land, the activity is not considered silviculture. The creation of drainage ditches, water bars, skid trails, and log landings are considered silvicultural activities if done in association with logging for the purpose of sustained harvesting of forested lands. **If the activity is silviculture, continue to step three**. If not silviculture, the activity will be reviewed to determine whether it qualifies as another Allowed Use under Section 6 of the Wetland Rules before it is determined that the activity requires a permit.

- 3. In order to know which parts of the AMPs apply to the subject wetlands, determine whether the wetland contains surface water (standing water) or demonstrates hydrology indicators dispositive of surface water presence for a portion of the growing season in a normal year. Many wetlands do not contain permanent surface water. Field checks for surface water are best conducted during the spring and fall, but evaluations during other times of the year will need to occur to allow for timely determinations. Where review of a wetland finds no surface water present, the following hydrology indicators, as described in the ACOE Manual, shall be dispositive of surface water presence for a portion of the year: Water Marks, Sediment Deposits, Drift Deposits, Algal Mat or Crust, Inundation Visible on Aerial Imagery, Water Stained Leaves, Aquatic Fauna, Thin Muck Surface, and Drainage Patterns. If there are signs of surface water; proceed to step four. If there are no signs of surface water: skip step four and proceed to step five.
- 4. The AMPs require certain forest buffers to protect surface waters. For surface water wetlands, determine the ordinary highwater mark of the wetland for measuring forest buffers. This may be determined by observing the extent of highwater during an appropriate wet season or by observing the following hydrology indicators described in the ACOE Manual: Water Marks, Sediment Deposits, Drift Deposits, Algal Mat or Crust, Inundation Visible on Aerial Imagery, Water Stained Leaves, Aquatic Fauna, Thin Muck Surface, and Drainage Patterns.
- 5. Determine if the activity has or will comply with the AMPs by reviewing Section 6 of the AMPs. For example, the following conditions apply to wetlands:
  - a. Drainage ditches along permanent and temporary truck roads shall not terminate directly into streams or other waters. AMPs 6.1.4. This applies to surface water wetlands only.
  - b. Ruts on skid trails shall be smoothed where soils, slopes, or depth and length of rutting, result in a likelihood of gully erosion, erosion or concentrated flow of surface water immediately after logging. AMPs 6.4.1.
  - c. Waterbars on skid trails shall be correctly installed to divert the surface water runoff into a filter area and shall be spaced at intervals according to Table 1 where existing soil, rock, ledge and skid trail conditions allow 6.4.2
  - d. On approaches to stream crossings, waterbars shall be correctly installed on truck roads and skid trails to divert the surface water runoff into a filter area. They shall be installed as close to 25 feet away from the top of bank as existing soil, rock, ledge and ground conditions allow. AMPs 6.5.

- e. A "forest buffer" shall be left along streams and other waters, including surface water wetlands, in which only partial cutting can occur such that openings in the forest canopy are minimal and continuous forest cover (60-70% crown closure) is maintained. The width of the buffer shall be in accordance with Table 4 of the AMPs as measured from the top of bank. AMPs 6.7.1.
- f. New truck roads, skid trails and log landings shall not be constructed in AMP forest buffers<sup>4</sup> unless necessary to cross a stream or there is no feasible alternative. AMPs 6.7.2 and 6.9.1.

It is understood that some draining, dredging, filling or grading may occur as a result of implementing AMPs in wetlands or their buffer zones to access property for silviculture purposes, but many of these practices can and must be removed at the closeout of the job to qualify under the AMPs and the Allowed Use 6.1. If the activity complies with the AMPs, proceed to step 6. If the activity does not comply, it does not qualify as an allowed use under Section 6.1 of the Wetland Rules.

6. Determine whether the activity is also occurring within a mapped deer wintering yard and, if so, also determine whether the activity will comply with the silvicultural standards for deer wintering yards established jointly by the Departments of Fish and Wildlife and Forest, Parks and Recreation in a document titled Management Guide for Deer Wintering Areas in Vermont<sup>5</sup>. If the activity complies with the management guide, the activity qualifies for allowed use 6.1. If the activity does not comply, it does not qualify as an allowed use under Section 6.1 of the Wetland Rules.

# c. Applicability of Allowed Uses 6.2 and 6.3: Truck Roads

Sections 6.2 and 6.3 apply to truck roads that are *solely* used for silviculture. This means that if a road was originally built for silviculture, and then restored and upgraded to be used as a driveway, that road would no longer be used solely for silviculture and thus any expansion of that road into a significant wetland or wetland buffer would not qualify as Allowed Use 6.2 or 6.3. Any expansion of a road into a wetland or buffer for non-silvicultural purposes will require a wetland permit unless the expansion of the road structure qualifies as an Allowed Use under Section 6.12 of the VWR. Likewise, the construction of a new truck road in a wetland requires a permit.

Section 6.2 specifies that truck roads may increase in width provided the overall net increase in road width is no more than 20% beyond the original road width. Therefore, existing truck roads in wetlands may be maintained, restored, reconstructed, rehabilitated, or upgraded, provided that work on existing truck roads results in an overall net increase in road width of no more than 20% beyond the original road width. The road width includes the combined total width of the shoulders, roadbed, and ditches; the truck road width is considered the original road prism out to the edge of any drainage ditches. Expansions beyond 20% of the original footprint do not qualify for Allowed Use 6.2 and require a wetlands permit.

<sup>&</sup>lt;sup>4</sup> Forest buffer, not to be confused with wetland buffer.

<sup>&</sup>lt;sup>5</sup> Copies of the Management Guide for Deer Wintering Areas in Vermont are available at: <a href="http://dec.vermont.gov/sites/dec/files/wsm/wetlands/docs/wl\_deerwintering.pdf">http://dec.vermont.gov/sites/dec/files/wsm/wetlands/docs/wl\_deerwintering.pdf</a>

# d. Removal of Beaver Dams, Allowed Use Section 6.4

Whereas the allowed use does not specify protocol for beaver dam removal, it is important to note that removing a dam poses a significant risk for a discharge into waters, and such a discharge would be in violation of the Vermont Water Quality Standards. Although not required, to prevent environmental harm it is recommended that those removing dams follow the <u>Best Management Practices for Resolving Human-Beaver Conflicts in Vermont<sup>6</sup>.</u>

# e. Class I Wetlands and Specially Designated Habitat

Program staff will ask for a silviculture plan and written approval from the Commissioner of the Department of Forests, Parks, and Recreation to determine whether silvicultural activities qualify for the allowed use when activities are proposed within a Class I wetland or buffer zone, or within any Class II wetland specifically designated to protect threatened or endangered species.

Signed this 14th of April , 2020

By Otta Lange

Peter Walke, Commissioner

Department of Environmental Conservation

<sup>&</sup>lt;sup>6</sup> Copies of the Best Management Practices for Resolving Human-Beaver Conflict in Vermont are available at <a href="https://dec.vermont.gov/sites/dec/files/wsm/wetlands/docs/Best\_Management\_Practices\_for\_Human-Beaver\_Conflicts.pdf">https://dec.vermont.gov/sites/dec/files/wsm/wetlands/docs/Best\_Management\_Practices\_for\_Human-Beaver\_Conflicts.pdf</a>