Vermont Agency of Natural Resources
Department of Environmental Conservation

Stream Alteration General Permit

Applicability: The subject of this General Permit is stream alterations which involve: 1) the movement, fill, or excavation of 10 cubic yards or more of instream materials within the top-of-bank to top-of-bank, cross-sectional limits of perennial streams; 2) activities to construct or maintain a berm in a flood hazard area or river corridor; and 3) in-stream emergency protective measures.

A. Introduction

The Secretary of the Vermont Agency of Natural Resources is issuing this General Permit pursuant to the Vermont Stream Alteration Rule (Environmental Protection Rule, Chapter 27), 10 V.S.A. chapter 41 (regulation of stream flow), and 10 V.S.A. chapter 165 (general permit authority for stream alteration activities). The purpose of this General Permit is to ensure that stream alteration activities are regulated in accordance with the Rule and the requirements of 10 V.S.A. chapter 41. This General Permit applies to non-emergency stream alteration activities and to emergency protective measures taken in accordance with 10 V.S.A. § 1021(b) and the Vermont Stream Alteration Rule. Should any project proponent be uncertain with regard to the interpretation of, application of, or compliance with the provisions of this General Permit, the project proponent should engage the services of a qualified consultant or contact a Department of Environmental Conservation River Management Engineer. The Secretary of Natural Resources reserves the right to require an individual permit for any project if deemed necessary by the Secretary pursuant to Section G.10. of this General Permit. Department contact information is located at: http://www.anr.state.vt.us/dec/waterq/rivers/docs/rv_contact.pdf.

B. Definitions, Jurisdictional Limits, and Stream Alteration Standards

B.1. Definitions

(1) ***"Activity"*** means a stream alteration.
(2) ***"Agency"*** means the Vermont Agency of Natural Resources.
(3) ***"Aggrading channel bed"*** means the deposit of instream materials and a raising of the channel bed elevation that occurs at the reach scale with a decrease in stream power, brought about by a change in channel dimensions, slope, and/or roughness characteristics.
(4) ***"Annual flood"*** means a discharge (Q) or flood flow event that occurs at a high frequency, i.e., there is greater than a 50% chance of a flood stage (<Q2) of at least this level occurring in any given year.
(5) ***"Aquatic life"*** means all organisms that, as a part of their natural life cycle, live in or on waters. Aquatic life is synonymous with "aquatic biota" as defined in the Vermont Water Quality Standards.
(6) ***"Bank full width"*** means the top surface width of the stream channel at a discharge corresponding to a water stage that occurs at a frequency of every one to two years (Q1.5 to Q2, i.e., there is a 50 to 66% chance of this high flow occurring in a given year). Bank full

widths are measured from the crest of the right streambank to the crest of the left streambank for streams in equilibrium condition, from field scour and deposition indicators of bank full stage for incised channels, or, when field measurements are not available, as calculated from reference data such as the Vermont Hydraulic Geometry Curves[1].

(7) ***"Berm"*** means a linear fill of earthen material on or adjacent to the bank of a watercourse that constrains waters from entering a "flood hazard area" or "river corridor," as those terms are defined in 10 V.S.A. §§ 752(3) and (11). For the purposes of this General Permit, the Secretary shall classify linear fill as a regulated berm when earthen material is pushed or excavated from a stream bed or adjacent lands into a raised barrier between a watercourse and adjacent lands.

(8) ***"Buffer"*** means an undisturbed area consisting of trees, shrubs, ground cover plants, duff layer, and generally uneven ground surface that extends a specified distance horizontally across the surface of the land from the top of the bank of an adjacent river or stream, as determined by the Agency.

(9) ***"Channelized"*** means the condition of a stream channel that has been straightened, bermed, dredged, and/or armored by human activity.

(10) ***"Channel incision"*** means an area of stream bed exhibiting vertical erosion or headcutting.

(11) ***"Channel roughness"*** means the frictional resistance, and its moderating effect on flow velocities, provided by: the sizes of instream material on stream beds and banks (i.e., channel boundaries); the undulations of stream bed forms; and the sinuous features along the channel planform.

(12) ***"Dam"*** means any artificial structure on a stream or at the outlet of a pond or lake, which is utilized for holding back water by ponding or storage and may include any penstock, flume, piping, or other facility for transmitting water downstream to a point of discharge, or for diverting water from the natural watercourse to another point for utilization or storage.

(13) ***"Degrading channel bed"*** means the erosion of instream bed materials and a lowering of the channel bed elevation that occurs at the reach scale with an increase in stream power, brought about by a change in channel dimensions, slope, and/or roughness characteristics.

(14) ***"Dredge"*** means lowering the elevation of the stream bed profile or any clearing, deepening, widening, or excavating, either temporarily or permanently.

(15) ***"Emergency protective measure"*** means an action necessary to preserve life or to prevent severe imminent damage to public or private property, or both.

(16) ***"Equilibrium conditions"*** means the width, depth, meander pattern, and longitudinal slope of a stream channel that occurs when water flow, sediment, and woody debris are transported by the stream in such a manner that it generally maintains dimensions, pattern, and slope without unnaturally aggrading or degrading the channel bed elevation.

(17) ***"Fill"*** means any placed material that raises, either temporarily or permanently, the surface elevation of the stream bed, floodplain, or river corridor, or extends the limits of the streambank.

(18) ***"Flood hazard"*** means those hazards to public safety or property from inundation damages.

(19) ***"Flood hazard area"*** means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

(20) ***"Flood flowage"*** means any waters, sediment, and debris associated with a high discharge or flood flow event (Q1.5 or greater).

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[1] http://www.anr.state.vt.us/dec/waterq/rivers/docs/rv_hydraulicgeocurves.pdf

(21) ***"Floodplain connectivity"*** means that geomorphic condition in which flows, at or greater than the annual flood stage (Q1.5), will spill out of the stream channel and onto the floodplain.

(22) ***"Fluvial erosion hazards"*** means those hazards to public safety or property related to the erosion or scouring of stream beds and banks during high flow conditions of a river.

(23) ***"Geomorphic condition"*** means the degree of departure, if any, from the dimensions, pattern, and profile associated with the naturally stable channel that result from the unique set of natural stream processes or dynamic equilibrium conditions of a stream or river segment.

(24) ***"Geomorphic sensitivity"*** means the potential of a river, given its inherent characteristics and present geomorphic conditions, to be subject to a high rate of fluvial erosion and other river channel adjustments, including erosion, deposit of sediment, and flooding.

(25) ***"Headcutting"*** means the erosive process of stream bed particles being washed off a steepened area of a stream bed, deepening the channel and resulting in a loss in vertical and floodplain connectivity.

(26) ***"Horizontal streambank alignment"*** means the location of the channel margins, or boundaries along right and left streambank lines from upstream to downstream, which may be altered by streambank fill and excavation activities.

(27) ***"Hydrologic regime"*** means the timing, volume, and duration of flow events throughout a defined period of time, which may be influenced by the climate, soils, geology, groundwater, watershed land cover, connectivity of the stream, riparian, and floodplain network, and valley and stream morphology.

(28) ***"Instream materials"*** means all gradations of sediment from silt to boulders; ledge rock; or large woody debris, as these materials exist in the bed of a watercourse, within the banks of a watercourse, or enter as placed-fill in the bed or on the banks of a watercourse.

(29) ***"Imminent threat"*** means there is a risk to life or a risk of severe property damage within the next 72 hours.

(30) ***"Improved property"*** means a habitable structure, the property immediately surrounding a habitable structure, public utility or transportation infrastructure, and private bridges or culverts and associated infrastructure providing primary access to a habitable structure. For the purposes of this General Permit, a habitable structure means any enclosed roofed structure; residential, commercial, or industrial; public or private, that is fit for people to enter and utilize.

(31) ***"Intermittent stream"*** means a seasonal stream that only flows for part of the year.

(32) ***"Large woody debris"*** means any piece of wood within a watercourse with a diameter of ten or more inches and a length of ten or more feet that is detached from the soil where it grew.

(33) ***"Longitudinal stream bed profile"*** means the slope or vertical drop of the stream bed from upstream to downstream in relationship to adjacent floodplain features.

(34) ***"Next-flood threat"*** means those risks to life or of severe damage to improved property posed by the next annual flood.

(35) ***"Outstanding resource water"*** means any waters designated by the Secretary as having exceptional natural, recreational, cultural, or scenic values, pursuant to 10 V.S.A. § 1424a.

(36) ***"Perennial stream"*** means a watercourse or portion, segment, or reach of a watercourse, generally exceeding 0.5 square miles in watershed size, in which surface flows are not frequently or consistently interrupted during normal seasonal low flow periods. Perennial streams that begin flowing subsurface during low flow periods, due to natural geologic conditions, remain defined as perennial. All other streams, or stream segments of significant length, shall be termed intermittent. A perennial stream shall not include the standing waters in wetlands, lakes, and ponds.

(37) ***"Q"*** means discharge, or the volumetric flow rate of water, generally expressed in cubic feet per second (cfs).

(38) ***"River corridor"*** means the land area adjacent to a stream or river that is required to accommodate the dimensions, slope, planform, and buffer of the naturally stable channel and that is necessary for the natural maintenance or natural restoration of dynamic equilibrium conditions, as that term is defined in 10 V.S.A. § 1422, and for minimization of fluvial erosion hazards, as delineated by the Agency in accordance with the ANR River Corridor Protection Guide[2].

(39) ***"Secretary"*** means the Secretary of the Agency of Natural Resources or the Secretary's authorized representative.

(40) ***"Sediment regime"*** means the size, quantity, sorting, and distribution of sediments, which may differ between stream types due to their proximity to different sediment sources, their hydrologic regime, their stream, riparian and floodplain connectivity, and valley and stream morphology.

(41) ***"Significant flooding event"*** means a flood greater than the annual flood where flood flowages may result in significant erosion and depositional processes, i.e., a flooding event that may be in the order of a five-year recurrence interval (Q5 or a 20% chance of occurring in any given year) or greater.

(42) ***"Stream"*** means the full length and width, including the bed and banks, of any watercourse, including rivers, streams, creeks, brooks, and branches, which experience perennial flow. "Stream" does not include ditches or other constructed channels primarily associated with land drainage or water conveyance through or around private or public infrastructure.

(43) ***"Stream bed erosion"*** means a stream process whereby stream power is sufficient to move even the largest stream bed sediments and transport the quantity of sediment flowing from upstream, leading to a deficit of sediment and a lowering of the vertical stream bed profile.

(44) ***"Stream bed deposition"*** means a stream process whereby stream power is insufficient to move or transport the size and quantity of sediment flowing from upstream, leading to a buildup of sediment and a raising of the vertical stream bed profile.

(45) ***"Stream forms"*** means the width, depth, meander pattern, and longitudinal slope of a stream channel that vary little within a narrow range of values at the stream reach-scale, when larger-scale stream processes remain unchanged.

(46) ***"Stream processes"*** means the hydrologic, sediment, and large woody debris regimes of a particular stream reach and is a term used to describe stream channel hydraulics, or the erosion and deposition of instream materials by the power of flowing water, which may result in the vertical and lateral movement of stream bed and banks, and may change or be changed by stream forms and channel roughness.

(47) ***"Vertical stream channel movement"*** means changes to the vertical stream bed profile caused by reach-scale changes in stream processes.

(48) ***"Watercourse"*** means any perennial stream. A watercourse is contained horizontally by its cross-section, including the stream bed and banks. "Watercourse" shall not include ditches or other constructed channels primarily associated with land drainage or water conveyance through or around private or public infrastructure.

(49) ***"Width to depth ratio"*** means the channel width divided by the mean channel depth.

(50) ***"Windrowing"*** means pushing and berming instream materials to the stream margins.

[2] http://www.anr.state.vt.us/dec/waterq/rivers/docs/rv_RiverCorridorProtectionGuide.pdf

B.2. Jurisdictional Limits

B.2.1. - This General Permit applies to all stream alteration activities subject to 10 V.S.A. chapter 41and the Vermont Stream Alteration Rule.

B.2.2.Within Watercourses - A person shall not change, alter, or modify the course, current, or cross section of any watercourse or of designated outstanding resource waters, within or along the boundaries of this State either by movement, fill, or by excavation of ten cubic yards or more of material in any year, unless authorized by the Secretary (10 V.S.A § 1021(a)). A watercourse is any perennial stream.

While perennial streams generally exceed 0.5 square miles of watershed area, streams with watershed areas less than 0.5 square miles may be determined in the field[3] as perennial streams. While the lack of resident fish species may not be determinant; the Agency will identify a stream as perennial when resident fish species are present. Human-caused interruptions of flow (e.g. flow fluctuations associated with hydroelectric facility operations or water withdrawals) shall not influence the Secretary's determination of a perennial stream, for purposes of this General Permit. A perennial stream shall not include the standing waters in wetlands, lakes, and ponds. For purposes of this General Permit, the exclusion of "ditches or other constructed channels primarily associated with land drainage or water conveyance" from the definition of "watercourse" in 10 V.S.A. §1002(10), shall not be interpreted to include perennial streams that have been excavated and re-formed into a straightened, channelized condition.

B.2.3. Within River Corridors and Floodplains - A person shall not establish or construct a berm in a flood hazard area or river corridor, as those terms are defined in Section B.1. of this General Permit, unless authorized as an emergency protective measure as prescribed in Section E. of this General Permit (10 V.S.A. § 1021(a)).

B.3. Stream Alteration Standards

B.3.1. Statutory Standards (10 V.S.A. §1023(a)) – An authorization under this General Permit shall be granted for a stream alteration, subject to such conditions determined to be warranted by the Secretary, if it appears that the change:

1. Will not adversely affect the public safety by increasing flood or fluvial erosion hazards;
2. Will not significantly damage fish life or wildlife;
3. Will not significantly damage the rights of riparian owners; and
4. In the case of any waters designated as outstanding resource waters under 10 V.S.A. § 1424a, will not adversely affect the values sought to be protected by the designation.

[3] Additional technical guidance, including town-based maps, for the evaluation and identification of perennial streams is available at: http://www.watershedmanagement.vt.gov/rivers/htm/rv_management.htm

B.3.2. Stream Alteration Performance Standards (§27-402(b), Vermont Stream Alteration Rule) – Public safety, aquatic life, and riparian property are at an increased risk of being adversely affected when stream alterations change the course, current, or cross-section of a stream in a manner that causes the stream to depart from, further depart from, or be impeded from attaining an equilibrium condition or that alters the connectivity of the stream in its vertical and horizontal dimensions.

In determining whether a proposed stream alteration seeking coverage under this General Permit meets the statutory criteria set forth in Section B.3.1. of this General Permit, the Secretary shall apply the following performance standards:

B.3.2.1. **Equilibrium Standard -** An activity shall not change the physical integrity of the stream in a manner that causes it to depart from, further depart from, or impedes the attainment of the channel width, depth, meander pattern, and slope associated with the stream processes and the equilibrium conditions of a given reach of stream.

The equilibrium standard is met when it can be shown that, following the stream alteration, the water flow, sediment, and woody debris produced by the watershed will be transported by the stream channel in such a manner that the stream maintains its dimension, general pattern, and slope with no unnatural aggrading (raising) or degrading (lowering) of the channel bed elevation along the longitudinal stream bed profile.

B.3.2.2. **Connectivity Standard-** An activity shall not change physical stream forms or alter local channel hydraulics, natural streambank stability, or floodplain connectivity in a manner such that changes in the erosion or deposition of instream materials results in localized, abrupt changes to or disconnects within the horizontal alignment of streambanks or vertical profile of the stream bed.

A person shall not, unless authorized by the Secretary, change the course, current, or cross-section of a watercourse so as to create a physical obstruction or velocity barrier to the movement of aquatic organisms or change the vertical stream bed profile in a manner that impedes the movement of aquatic organisms.
A person shall not establish, construct, or maintain a berm in a flood hazard area or river corridor, as defined in this General Permit, unless authorized as an emergency protective measure as prescribed in Section E. of this General Permit.

Technical guidance for meeting the equilibrium and connectivity standards is available at: http://www.watershedmanagement.vt.gov/rivers/htm/rv_management.htm.

B.3.3. Stream Alteration Erosion and Sediment Control Requirements – All activities authorized under this General Permit shall comply with the following requirements to ensure compliance with the Vermont Water Quality Standards.

B.3.3.1. The permittee shall comply with the requirements of a general or individual NPDES construction stormwater permit, if required.

B.3.3.2. All equipment shall be clean and well maintained, and free of fuel, hydraulic, and gear oil leaks.

B.3.3.3. There shall be no discharge of uncured concrete or other toxic substances to a watercourse.

B.3.3.4. All areas of streambank disturbed during construction shall be suitably reshaped and stabilized with stone fill or a vegetative planting prior to completion of the project. Streambank disturbance and disturbance of established vegetation shall be minimized to the extent practicable.

B.3.3.5. The method and duration of construction shall be that which presents the least disturbance of stream flow and results in minimal turbidity and minimal discharge of sediment.

B.3.3.6. Work must be done in the dry and be isolated from stream flow with appropriate sediment controls to the maximum extent practicable. Pumping from excavation areas shall be discharged to an overland area or off-stream settling basins such that the effluent shall be essentially clarified before reentering the stream flow.

B.3.3.7. If a permittee cannot comply with the foregoing requirements of Section B.3.3. of this General Permit, the permittee must propose alternative methods to avoid discharges of sediment and receive prior approval from the River Management Engineer before proceeding with work.

C. General Permit Coverage for Non-emergency Stream Alterations

C.1. Exempt Activities

This Section describes certain stream alteration activities that are statutorily exempt activities that do not require coverage under this General Permit (10 V.S.A. § 1021). Project exemption from coverage under this General Permit does not relieve any person of the responsibility to comply with any and all other applicable federal, state, and local laws, regulations, and permits, and to obtain landowner permission if working on the lands of others.

The following stream alteration activities are statutorily exempt activities that do not require coverage under this General Permit:

C.1.1. Projects involving movement, fill, or excavation of less than ten cubic yards of instream materials in any year within the limits of the watercourse;

C.1.2. Removal of up to 50 cubic yards of gravel per year from that portion of a watercourse running through or bordering on the owner's property, provided:

a) The material shall be removed only for the owner's use on the owner's property;
b) The material removed shall be above the waterline; and
c) At least 72 hours prior to the removal of ten cubic yards, or more, the landowner shall notify the Secretary;
d) However, if the portion of the watercourse in question has been designated as outstanding resource waters, then the riparian owner may so remove no more than ten cubic yards of gravel per year, and must notify the Secretary at least 72 hours prior to the removal of any gravel;

C.1.3. Dam related projects subject to 10 V.S.A. chapter 43;

C.1.4. State transportation infrastructure projects subject to 19 V.S.A. §10(12);

C.1.5. Accepted agricultural or silvicultural practices, as defined by the Secretary of Agriculture, Food and Markets, or the Commissioner of Forests, Parks and Recreation, respectively; and

C.1.6. Hand panning prospecting techniques.

C.2. Activities Eligible for Coverage

C.2.1. Non-Reporting Activities – Unless specified otherwise in this General Permit, activities listed in Sections C.2.1.1. through C.2.1.5. below, that are conducted in accordance with the activity-specific requirements set forth in this General Permit, and are not located in a designated outstanding resource water, are very low impact activities that meet the requirements of 10 V.S.A. § 1023(a) and the Vermont Stream Alteration Rule with a high degree of certainty and may proceed without notification to the Secretary, regardless of watershed size.

Non-reporting activities must be conducted between July 1 and October 1 and in a manner which minimizes or avoids turbidity associated with the activity.

C.2.1.1. Removal of human-made debris from a stream channel when the activity will not involve the movement or excavation of ten cubic yards or more of instream material.

C.2.1.2. Directional boring of utility crossings involving no earthwork within the watercourse.

C.2.1.3. Placement of municipal dry hydrants provided the intake is installed within 100 linear feet of a municipal bridge or culvert.

C.2.1.4. Construction of at-grade fords provided:

a) The ford is constructed perpendicular to the stream channel and is properly stabilized with clean stone fill; and
b) No change in existing channel cross-section and bed elevation except for minor bank grading at the point of the crossing.

C.2.1.5. Maintenance of existing channelized perennial streams less than 0.5 square miles of watershed size, i.e. those through and around roadsides and agricultural fields, and streams diverted for water supply purposes, provided:

a) The maintenance work is conducted in a manner which minimizes or avoids turbidity associated with the activity; and
b) If the work is in association with agricultural lands, vegetated buffers required under the Accepted Agricultural Practices (AAPs), Medium or Large Farm Operation Permits, and/or other applicable rules or permits are maintained;
c) Erosional channels are appropriately stabilized with vegetative and/or structural treatments;
d) Excavated sediments to maintain channel capacity are disposed appropriately;
e) The work does not result in existing surface waters being converted to subsurface flows, and
f) Project improvements that move toward attainment of the Performance Standards outlined in Section B.3.2. of this General Permit are implemented wherever feasible.

If a project is not eligible for coverage under Section C.2.1. of this General Permit above, a project proponent may not proceed until the project obtains project approval in accordance with Sections C.2.2. or C.2.3. below, or obtains an Individual Stream Alteration Permit in accordance with Section D. below. Any person who may be unfamiliar with or unable to ensure their activity will be in compliance with the Stream Alteration Standards (Section B.3.) should contact an Agency River Management Engineer[4]. Failure to comply with the Stream Alteration Standards in accordance with the requirements of this General Permit may be cause for an enforcement action (see Section G.8.).

C.2.2. Reporting Activities Not Requiring an Application – A person considering a project that falls within a category of Reporting Activity described in this Section shall first contact a River Management Engineer[5] for a determination of whether the project is eligible for coverage under this section. After consideration of the risk factors listed in Section G.10.(a) of this General Permit and based on information provided by the project proponent, the Secretary shall determine that the project either:

a) Represents a low impact, low risk activity, and meets the Stream Alteration Standards (Section B.3.) with a high degree of certainty, in which case the Secretary shall authorize the activity as a reporting activity under this General Permit that does not require the submission of a formal permit application; or

[4] Engineer contact information at: http://www.watershedmanagement.vt.gov/rivers/docs/rv_contact.pdf

[5] See footnote 3 above.

b) Requires additional information and public notice before the Secretary can determine whether or not the project represents a low risk activity, in which case the project proponent shall seek authorization under this General Permit by submitting an application to the Secretary pursuant to Section C.2.3. of this General Permit; or
c) Is not a low risk activity, in which case the project proponent shall apply for an individual permit if required by the Secretary pursuant to Section D.

Reported activities must be conducted during the period between July 1 and October 1, unless the Secretary determines that: a) the activity will be conducted in a manner which isolates work from the flowing water and avoids turbidity and sedimentation that may be associated with the activity; and b) the activity will not result in the interruption of aquatic organism movements associated with reproduction; or c) there is no reasonable alternative and the activity is necessary to avoid a severe hardship to the applicant.

The following activities must comply with the reporting requirements set forth in this Section:

C.2.2.1. Activities in perennial streams that are not exempt under Section C.1. of this General Permit and that do not qualify as Non-Reporting Activities (list and activity-specific requirements in Section C.2.1.).

C.2.2.2. Maintenance of existing channelized perennial streams, i.e., those through and around roadsides and agricultural fields, and streams diverted for water supply purposes; with watershed areas:
a) Less than 0.5 square miles, that does not meet the criteria specified in Section C.2.1.5. of this General Permit.
b) 0.5 square miles or greater, regardless of whether the criteria specified in Section C.2.1.5 are met.

C.2.2.3. Repair[6] of any existing stream crossing structures of any type provided:
a) Scour protection, erosion treatments, or structural modifications do not reduce the channel cross section dimensions and cross sectional area;
b) There is no channel realignment;
c) The repaired structure will not create a further departure from equilibrium conditions or create a greater discontinuity in the vertical or horizontal dimensions than what existed prior to the repair;
d) The repair, including linings, will not further reduce aquatic organism passage through the stream crossing structure by increasing velocities within or below the structure, increasing the outlet elevation relative to the stream channel profile, or by reducing water depth within the structure; and
e) Any temporary structure for traffic maintenance used to span the stream channel during construction provides a span length no less than that of the existing structure, 1.0X bank full width, or as approved by the Secretary.

[6] A stream crossing structure is considered repairable when damages do not exceed 50 percent of the cost of replacing the crossing. Section G.11. of this General Permit provides detailed conditions for the repair and replacements of instream structures.

C.2.2.4. Construction of new bridges or replacement of existing bridges (includes any open bottom structure such as an arch or three sided box) that are in compliance with the Stream Alteration Standards (Section B.3.) by meeting the following design requirements:

a) Structure meets the following span length and opening height dimensions:
   i. Span Length
      1. Minimum span length = 1.0X the bank full[7] width of the stream; or
      2. Minimum span length ≥ 1.2X the bank full width of the stream, as determined by the Secretary, in reaches having high risk of excessive erosion or deposition, based on stream process and geomorphic conditions, as specified in the most current updated version of the Vermont Standard River Management Principles and Practices;
   ii. Opening Height
      1. Minimum opening height ≥4.0X the mean depth of the bank full channel[8] and provides the hydraulic capacity to pass design flows, sediment, and debris, as specified in the most current updated version of the VTrans Hydraulics Manual; or
      2. Minimum opening height ≥ 3.0X the mean depth of the bank full channel at sites where physical constraints preclude achievement of the 4.0X standard and any potential increase in flooding hazard associated with a reduced opening height will be offset by other factors such as a lower roadway fill height, as approved by the Secretary and as specified in the most current updated version of the VTrans Hydraulics Manual;

b) There is no channel or roadway realignment and any structure for traffic maintenance during construction used to span the stream channel has the span length no less than that of the existing structure or provides a span length of at least 1.0X bank full width; and

c) Where required, a municipal zoning permit is obtained, prior to construction, if the proposed project is located in a flood hazard area as designated in the municipal flood hazard area ordinance or bylaw. The River Management Engineer, in coordination with the State Floodplain Manager's Office, will conduct the state compliance review of a bridge project subject to municipal flood hazard area ordinances or bylaws, in accordance 24 V.S.A. § 4424(2)(D). A stream alteration permit issued by the River Management Engineer will serve as the agency's commentary that the project is consistent with National Flood Insurance Program (NFIP) requirements.

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[7] Span length should be measured as the inside dimension of a culvert or, for bridges, between abutments or abutment reinforcements, where present (i.e. rip rap). The ANR Standard River Management Principles and Practices, including technical guidance for determining the bank full width of a stream may be found at: http://www.watershedmanagement.vt.gov/rivers/htm/rv_management.htm.

[8] The mean depth of the bank full channel is calculated from a series of depth measurements made along the channel cross-section from the bed of the channel to the stage at which the bank full width is measured. When field measurements are not available, mean depth is calculated from reference data such as the Vermont Hydraulic Geometry Curves.

C.2.2.5. Construction of new culverts or replacement of existing culverts (closed bottom structures) that are in compliance with the Stream Alteration Standards (Section B.3.) by meeting the following design requirements:

a) Structure meets the following dimensions, embeddedness, and profile requirements:
   i. Span Length
      1. Minimum span length = 1.0X the bank full width of the stream; or
      2. Minimum span length ≥ 1.2X the bank full width of the stream, as determined by the Secretary, in reaches having high risk of excessive erosion or deposition, based on stream process and geomorphic conditions, as specified in the most current updated version of the Vermont Standard River Management Principles and Practices;
   ii. Opening Height
      1. Minimum opening height ≥4.0X the mean depth of the bank full channel and the hydraulic capacity to pass design flows, sediment, and debris, as specified in the most current updated version of the VTrans Hydraulics Manual; or
      2. Minimum opening height ≥ 3.0X the mean depth of the bank full channel at sites where physical constraints preclude achievement of the 4.0X standard and any potential increase in flooding hazard associated with a reduced opening height will be offset by other factors such as a lower roadway fill height, as approved by the Secretary, and as specified in the most current updated version of the VTrans Hydraulics Manual;
   iii. The minimum depth of structure embeddedness[9] shall be the greater of 30% of the calculated structure opening height (i.e. the clear height), the diameter of the median axis of immobile bed material (>=D84), or 1.5 feet. The maximum required embeddedness depth shall be 4 feet. Where channel gradient is 0.5% or less or the structure is under outlet control, depth of embeddedness may be reduced, as approved by the Secretary, to achieve continuity of stream processes through the structure and aquatic organism passage; and
   iv. The vertical longitudinal profile of a culvert shall be set at the same slope as the natural stream gradient (i.e. at equilibrium condition) that results in a smooth longitudinal transition at the structure inlet and outlet;

b) The structure shall not obstruct the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction. No activity may disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area. To meet this provision of this General Permit and to qualify as a Reporting Activity, the project shall be designed, in consideration of current and future conditions, such that the stream will naturally and permanently retain, through the structure, the substrate composition, bed forms, and flow velocities, turbulence, and depth similar to adjacent stream reaches. Technical guidance for designing stream crossings for aquatic organism passage is at: http://www.vtfishandwildlife.com/fisheries_AOP.cfm;

[9] Total Structure Height = Opening height + Depth of structure embeddedness (for closed bottom structures, e.g., culverts)

c) When the project consists of replacing an existing culvert: there is no channel or roadway realignment, and any structure for traffic maintenance used during construction to span the stream channel has the span length no less than that of the existing structure or provides a span length of at least 1.0X bank full width; and
d) Where required, a municipal zoning permit is obtained, prior to construction, if the proposed project is located in a flood hazard area as designated in the municipal flood hazard area ordinance or bylaw. The River Management Engineer, in coordination with the State Floodplain Manager's Office, will conduct the state compliance review of a culvert project subject to municipal flood hazard area ordinances or bylaws, in accordance 24 V.S.A. § 4424(2)(D). A stream alteration permit issued by the River Management Engineer will serve as the agency's commentary that the project is consistent with National Flood Insurance Program (NFIP) requirements.

C.2.2.6. Projects designed to restore equilibrium conditions, horizontal or vertical connectivity (including berm removal in a river corridor), and/or provide aquatic organism passage.

The Secretary shall, upon review of a project under this Section, require submittal of information on a form provided by the Secretary, necessary to evaluate and fully document the proposed activity as qualifying for coverage under Section C.2.2. of this General Permit, which may consist of:

a) A location map, a written description of the proposed project, and landowner(s) and contractor(s) contact information;
b) Documentation of a stream crossing as necessary to demonstrate that activity-specific requirements will be met, including documentation of structure repair and replacement costs for proposed structure repair projects;
c) Documentation showing that any proposed changes to stream forms, geomorphic conditions, the horizontal alignment of streambanks, or the vertical profile of the stream bed will not alter channel hydraulics and thereby increase streambank erodibility or cause a change in natural stream processes, i.e., erosion or deposition of instream materials on the stream bed. Such documentation may include:
    i. Characterization of instream materials on the channel bed and banks;
    ii. A plan view, vertical profile, and at least one typical cross section depicting the location or elevation of water surface at the bankfull width;
    iii. Each drawing (not necessarily to scale) depicting both existing and proposed conditions; and
    iv. Other documentation necessary to determine stream type, geomorphic condition, and geomorphic sensitivity consistent with data and evaluations published in the Vermont ANR Stream Geomorphic Assessment Protocols[10].

The Secretary may waive the requirement for submittal of detailed documentation (e.g., the full range of field survey and listed drawings) for any low impact activity under Sections C.2.2.1.

[10] http://www.watershedmanagement.vt.gov/rivers/htm/rv_geoassesspro.htm

through C.2.2.6. of this General Permit if the Secretary determines that the project will not alter the width, depth, pattern, profile, or channel boundary conditions of a stream at or near equilibrium conditions.

Reported activities listed in Sections C.2.2.1. through C.2.2.6. determined by the Secretary to be low impact, low risk by meeting activity-specific requirements and the Stream Alteration Standards (Section B.3.) with a high degree of certainty, may proceed without submitting a formal application after receiving a written authorization from the Secretary as follows:

a) The Secretary shall post a draft written authorization for the project on the Agency's website for three business days.
b) After consideration of any comments received on the draft authorization, the Secretary shall issue or deny a final authorization.

The Secretary's electronic authorizations, including any required project documentation, shall be posted on the Agency's website for 90 days or until the end of the calendar year in which the activity was posted, whichever is longer.

C.2.3. Reporting Activities Requiring an Application – Upon consideration of the factors listed in Section G.10.(a) of this General Permit, the Secretary may determine that an activity in Section C.2.2, while it shall meet the Stream Alteration Standards (Section B.3.), represents a greater potential risk to fish life, wildlife, and the rights of riparian owners. For such activities, project proponents shall submit an application for coverage under this General Permit on a form provided by the Secretary.

C.2.3.1. **Notice Requirements for Reported Activities Requiring an Application** –Once the Secretary determines that an application is complete, the applicant shall provide notice, on a form provided by the Secretary, to the clerk and selectpersons of the municipality in which the activity is proposed, to the local and regional planning commissions, and to the owners of property which abuts or is opposite the land where the alteration is to take place. The applicant shall certify, on the notification form, that such notifications have been made and shall provide a copy of the notifications to the Secretary. The Stream Alteration Reporting Activity application form is from the River Management Engineer[11] and is available at: http://www.watershedmanagement.vt.gov/permits/htm/pm_streamalt.htm.

The Secretary may, upon review, require submittal of additional information necessary to evaluate the proposed activity and application. If the applicant does not submit the necessary additional information within 60 days, the Secretary may deny the application as administratively incomplete. This 60-day period may be extended at the sole discretion of the Secretary.

C.2.3.2. Review of Application and Public Comment Period -Following receipt of confirmation by the applicant that the required public notice of the application has been provided, the Secretary shall post notice of the application on the Agency's website and provide an opportunity of at least ten business days for written comment re-

[11] http://www.watershedmanagement.vt.gov/rivers/docs/rv_contact.pdf.

garding whether the application complies with the terms and conditions of this General Permit. After consideration of the application and any public comment and any other relevant information, the Secretary may grant an authorization under this General Permit if:

a) The application is deemed complete;
b) The required notice of the application has been provided;
c) The proposed activity will be:
    i. In compliance with the Stream Alteration Standards (Section B.3.); and
    ii. In compliance with activity-specific requirements in Sections C.2.2.3. through C.2.2.5. of this General Permit.

If, after amendment of an application, authorization by the Secretary under this General Permit is not granted, the applicant may submit an application for an individual permit.

The Secretary's authorizations, including the application and any required project documentation, shall be posted on the Agency's web page for 90 days or until the end of the calendar year in which the activity was completed, whichever is longer.

D. Individual Stream Alteration Permits

An individual stream alteration permit shall be required for any activity that is:

a) Not a statutorily exempt activity (listed in Section C.1. above);
b) Not otherwise authorized under Sections C.2.1. through C.2.3. of this General Permit;
c) Deemed necessary by the Secretary to require an individual permit pursuant to Section G.10. of this General Permit.

Applicants for an individual stream alteration permit shall have the burden to show that a proposed activity will be designed[12] to meet the Stream Alteration Standards (Section B.3.).

The Secretary may determine, upon review of an application for an individual permit, that the project represents a low risk, and will meet the Stream Alteration Standards (Section B.3.) with a high degree of certainty, and therefore proceed as a Reporting Activity. An individual permit application is available through an Agency River Management Engineer, or at: http://www.watershedmanagement.vt.gov/permits/htm/pm_streamalt.htm

[12] As specified in the most current updated version of ANR Manual of Standard River Management Principles and Practices.

E. General Permit Coverage for Emergency Protective Measures

E.1. Criteria for Coverage as an Emergency Protective Measure

E.1.1. General Criteria (10 V.S.A. § 1021(b), 10 V.S.A. § 1027(b), and Subchapter 7, Vermont Stream Alteration Rule) - An activity may be authorized as an emergency protective measure, when it meets the following criteria:

a) The emergency protective measure shall be necessary to preserve life or to prevent severe imminent damage to public or private property, or both;
b) The emergency protective measure shall have prior approval from a state or municipal governmental representative or entity that has legal authority to make a public health or safety determination;
c) The emergency protective measure shall be limited to the minimum amount necessary to remove imminent threats to life or property and shall not itself pose an imminent threat to life, public health, or safety. To meet this criteria, the emergency measures must be proportional to the threat and shall cease when the threat to life or threat of severe damage to a property has ended;
d) The emergency protective measure falls within one of the categories of measures set forth in Section E.2. below; and
e) The emergency protective measure is implemented in a manner consistent with the standards set forth in Sections E.2.1. through E.2.4. of this General Permit and shall meet the Stream Alteration Standards (Section B.3.) to the greatest extent possible recognizing that emergency protective measures may potentially result in or significantly contribute to ongoing damage to fish life, wildlife, and the rights of riparian owners.

E.1.2. Municipal Approval of Emergency Protective Measures - A member of a municipal legislative body has the legal authority to determine threats to life and imminent threats of severe damage to public and private property and may approve an emergency protective measure, which may proceed without prior authorization from the Agency, when:

a) The emergency protective measure shall be necessary to preserve life or to prevent severe imminent damage to public or private property, when such property has experienced damage or is under threat of imminent failure within the next 72 hours; and
b) The municipality shall notify the Secretary by written and verbal communications within 24 hours of approving the emergency protective measure. Notifications to the Secretary shall include:
    1. The location (i.e., nearest street address) of the emergency measures;
    2. A description of the emergency protective measure; and
    3. A description of the imminent threat to life or property and how the emergency protective measure addresses that threat.

E.2. Categories of Emergency Protective Measures and Standards

Emergency protective measures necessary to preserve life or to prevent the imminent threat of severe damage to public or private property, or both, shall be limited to one or more of the following categories of activity:

a) Removal of flood-related deposits of instream materials for the purpose of re-creating stream channel conveyance;
b) Stream bed or streambank fills necessary to provide access to public facilities or infrastructure or limit further vertical or lateral stream channel movement;
c) Repair of infrastructure, the loss of which would represent an imminent threat to public health and safety; and
d) Temporary berming to protect public safety by preventing stream flows from causing severe imminent damage to an improved property.

In order to be eligible for authorization under this General Permit, emergency protective measures deemed necessary to prevent severe imminent damage to an unimproved property, where threats to public safety do not exist, shall meet the Stream Alteration Standards (Section B.3.) of this General Permit**.**

E.2.1. Removal of Instream Materials

a) Removal of instream material, as an emergency or next-flood protective measure, is conducted for the purpose of creating critical stream channel conveyance by means of excavating flood deposited instream materials from a watercourse, and thereby preserving life or preventing severe damage to an improved property if stream flows were to become blocked and diverted from the channel;

b) Where the stream is filled with sediment and debris, to the point where an annual flood flowage will not be carried in a river channel, sediment and debris excavation will be authorized to at least a pre-flood cross-section (i.e., the pre-flood level of safety) or excavated to a width and depth along a stable vertical profile necessary to meet the stream equilibrium standard (Section B.3.2);

c) Extending sediment and debris removal, horizontally or vertically, beyond that necessary to preserve life or to prevent severe damage to improved property is not an emergency or next-flood protective measure and must have prior authorization from the Secretary.

d) Windrowing sediment and debris to the margins of the channel may be authorized as a temporary measure where immediate access and mobilization for off-site transport of excavated materials is not possible. Channel excavation shall not result in a bed profile (elevation) lower than the pre-flood condition. The project proponent shall be responsible for the removal of any windrowed material placed on the channel banks and within the river corridor or floodplain as directed by the Secretary;

e) Where the post-disaster stream channel has the capacity to convey the annual flood flowage (~Q1.5), and threats to life or severe damage to improved property related to channel con-

veyance do not exist, excavation of instream material will only constitute an emergency or next-flood protective measure where relocation of a stream channel is necessary to address further vertical or lateral stream channel movement that would otherwise represent a threat to life or severe damage to improved property; and

f) Excavating new channels that did not exist immediately prior to the flood event is not permitted without prior approval from the Secretary and a determination that doing so would be consistent with the equilibrium standard (Section B.3.2).

E.2.2. Stream bed and Streambank Protection

a) Placing fill material within the stream channel to align and/or armor the vertical stream bed profile or the horizontal streambank alignment may be conducted to address a next-flood or imminent threat. Bed or bank protection is an emergency or next-flood protective measure when conducted to protect a property from further damage or resist flow velocities acting on the stream bed or banks to at least the annual flood stage (~Q1.5) that would otherwise cause fluvial erosion hazards and threats to life or severe damage to public or private property.

b) Fills placed to establish or re-establish streambank armor as a next-flood or emergency protective measure shall not encroach into and narrow the bank full width of the stream channel, or create an acute horizontal streambank misalignment.

c) Where the natural bed armor has been scoured during a flood, next-flood or emergency protective measures may be necessary to reduce the risk of the stream bed continuing to down-cut (i.e., channel incision) and erode upstream through a headcutting process. Channel incision and the streambank failure that results during a flood may undermine and cause failure of immediately adjacent improved property. The Secretary shall require the construction oversight of a qualified river engineer or their designee to raise and stabilize a stream bed, in a manner that:
   1. Aligns the vertical stream bed profile with upstream and downstream segments;
   2. Establishes a channel width to depth ratio consistent with equilibrium conditions;
   3. Increases floodplain connectivity; and
   4. Restores or re-establishes resistance to bed scour.

E.2.3. Temporary Stabilization/Restoration of Infrastructure

a) Where critical infrastructure, including bridges, culverts, roadways, wastewater, or water systems, and electric and telecommunications facilities, has been damaged and immediate restoration of services is necessary to address an imminent threat to life or property, and instream construction activities are necessary to create a temporary facility and restore service, such instream work is considered and may be authorized as an emergency protective measure in a post-flood context;

b) As may be necessary to temporarily establish or stabilize infrastructure, the removal of instream material, stream bed and streambank protection, and temporary berming shall meet the requirements set in Sections E.2.1., E.2.2., and E.2.4. of this General Permit respectively;

c) The final authorization of emergency measures to establish or stabilize temporary facilities shall include requirements for the permanent repair or replacement of infrastructure, including a date when any permanent repair or replacement work must be completed. A stream crossing structure is considered repairable when damages do not exceed 50 percent of the cost of replacing the crossing as it existed prior to the emergency, and it is feasible to repair the crossing so that it can perform the function for which it was being used. All stream crossings deemed by the Secretary not to be repairable shall be removed in a manner, as allowed by federal and state law or shall be replaced with a permanent structure that meets the standards set forth in Section B.3. of this General Permit; and

d) The stabilization and restoration of infrastructure may require fills within the footprint of the infrastructure as it existed prior to the emergency. These fills shall not encroach into and narrow the bank full width of the stream channel, create an acute horizontal streambank misalignment, and/or use undersized or otherwise unsuitable materials for streambank and/or roadway embankment stabilization; except as temporary construction-related fills as necessary for infrastructure restoration. Wherever fill material is not adequately sized to effect permanent stability of the stream bed or bank, the Secretary may require undersized materials be replaced or stabilized with appropriately sized material.

E.2.4. Construction of Berms

a) A person shall not establish, construct, or maintain a berm in a flood hazard area or river corridor unless the construction is necessary to preserve life by preventing stream flows from impinging directly on an improved property. Berms constructed for this purpose shall be considered temporary and shall be removed coincident with the removal of threats to public safety.

b) Berms may be constructed, or, in the case of an emergency protective measure, be allowed to remain in place, only upon the issuance of an individual stream alteration permit.

E.3. Authorization and Public Notice of Emergency Protective Measures

The time, travel, and operational constraints that often exist during emergencies necessitate a two stage process to meet the statutory requirements for Agency authorization, documentation, interagency coordination, and public notice of emergency protective measures. Municipalities shall seek both preliminary and final authorization and comply with the public notice requirements set forth in this subpart and in any applicable general or individual permit issued by the Secretary.

E.3.1. Preliminary Authorization

a) Upon notification by a municipality pursuant to Section E.1.2. of this General Permit, the Secretary shall determine whether an activity seeking authorization constitutes an emergency protective measure eligible for coverage under this General Permit.

b) Upon making this determination, the Secretary shall either:
   1. Deny authorization;
   2. Preliminarily approve (verbally and electronically) the emergency protective measure, either as planned or with conditions deemed necessary to address an imminent threat to life or property and to comply with the categorical standards in Section E.2. of this General Permit; or
   3. Require that instream activities or berming cease immediately until a site visit can be made by the Secretary. The Secretary may then deny or issue preliminary authorization of an emergency protective measure, with explicit written conditions, consistent with Sections E.1. and E.2. of this General Permit.

c) The Secretary may, at any time, require that emergency work cease. The Secretary may provide preliminary authorization (verbally and electronically) for the work to commence after setting conditions deemed necessary for the measures to qualify for final authorization under an individual or general permit.

E.3.2. Final Authorization

a) All emergency protective measures must receive final authorization from the Secretary either in an individual permit or authorization under a general permit.

b) Within 30 days of completion of the emergency protective measure, a municipality shall submit to the Secretary the following documentation:
   1. Copies of all information provided by the municipality in its written notifications to the Secretary as required in Section E.1.2. of this General Permit;
   2. Copies of any preliminary authorizations issued by the Secretary;
   3. Written verification and photo documentation that the emergency protective measures were carried out to meet the standards established Section E.2. of this General Permit;
   4. Map documentation of the location where the emergency protective measure was completed depicting the approximate beginning and ending point of the stream segment in which the measure was taken. Narrative information should accompany the map explaining the approximate length of the stream segment where the work was completed; and
   5. Documentation of the types and quantities of instream material removed and/or the protective fills required. Narrative information describing the methods used to determine quantities should accompany the quantity calculations.

c) The Secretary may, upon request of the municipality, grant additional time for the submission of the required documentation for a period not to exceed 30 additional calendar days.

E.3.3. Public Notice

a) Notifications, authorizations, and documentation, as they are issued, shall be placed:
   1. On-site where and when the emergency protective measures are being undertaken,
   2. On file at the municipal clerk's office of the town in which the measures are being undertaken, and

3. On file with the Secretary, where they may be publically viewed on a website maintained by the Agency.

b) The municipal clerk shall post the initial notification and preliminary authorization for emergency protective measures at the municipal offices during the emergency and until a final authorization is provided.

c) The Secretary shall post authorizations as they are made and documentation, as received, on an Agency webpage for a period of no less than 90 days after the final authorization is issued.

F. General Permit Coverage of Next-Flood Protective Measures

This Section addresses the Secretary's authorization of next-flood protective measures that become necessary to address risks to life or severe damage to improved property that would occur during the next annual flood. These measures are distinguished from the "emergency" protective measures approved by a municipality pursuant to 10 V.S.A. § 1021(b) to address imminent threats where the risks to life or threat of imminent failure to public or private property would occur within the next 72 hours.

The time-sensitivity and risk abatement addressed by the next-flood protective measure may be as severe or nearly as severe as those addressed by an emergency protective measure. In this respect, the Department has established in this Section an expedited reporting and authorization process. The following specific criteria for coverage and reference to emergency standards are intended to govern how next-flood protective measures will be regulated by the Secretary.

F.1. Criteria for Coverage as a Next-Flood Protective Measure

a) Next-flood protective measures are necessary to preserve life or to prevent severe damage to improved property that would occur during the next annual flood.
b) Any person or municipal entity may conduct next-flood protective measures to address threats to life or threats of severe damage to improved property that would exist during the next flood, but only with prior authorization under this General Permit or an individual stream alteration permit.
c) A next-flood protective measure shall be limited to the minimum amount necessary to remove threats to life or improved property and shall not itself result in a threat to life, public health, or safety. To meet this criterion, protective measures shall be limited such that they are proportional to the threat and conditioned to cease when the threat to life or the threat of severe damage to an improved property has ended.
d) Next-flood protective measures shall fall within one of the categories of measures listed in Section F.2. below.
e) Next-flood protective measures must meet the standards detailed in Sections E.2.1. and E.2.2. of this General Permit.
f) Next-flood protective measures must meet the Stream Alteration Standards (Section B.3.) to the greatest extent possible recognizing that next-flood protective measures may potentially result in or contribute to ongoing damage to fish life, wildlife, and the rights of riparian owners.

F.2. Categories of Next-Flood Protective Measures and Standards

Next-flood protective measures eligible for coverage under this permit shall be limited to one or more of the following categories of activity:

a) Removal of flood-related deposits of instream materials for the purpose of re-creating stream channel conveyance, where failure to do so may threaten public safety or result in severe damage to an improved property; or
b) Stream bed or streambank fills necessary to provide access to public facilities or infrastructure or limit further vertical or lateral stream channel movement that would otherwise represent a next-flood threat.
c) Repair or removal of an existing berm within a flood hazard area or river corridor where the maintenance or removal is necessary to preserve life or prevent severe damage to an improved property.

F.3. Authorization and Reporting of Next-Flood Protective Measures

a) The Secretary shall, upon review of a proposed next-flood protective measure, require submittal of information, which may include:
    1. The location (i.e., nearest street address and ownership) of the next-flood protective measures;
    2. A description of the next-flood protective measure;
    3. Photo documentation and a description of the threat to life or threat of severe damage to improved property, including photo documentation, and how the next-flood protective measure addresses that threat; and
    4. Any information, as determined by the Secretary, necessary to evaluate and document the proposed activity as qualifying for coverage as a next-flood protective measure under Sections F.2.1. and F.2.2. of this General Permit, and how it will meet the Stream Alteration Standards to the greatest extent possible.

b) An activity reported to the Secretary and deemed, utilizing the information above, to be a next-flood protective measure, meeting the criteria for coverage in Sections F.1. and F.2. of this General Permit, may proceed after the issuance of a written authorization, made by the Secretary in an electronic report and posted on the Agency's web page.

c) The Secretary's electronic authorization reports, including any required project documentation, shall be posted on the Agency's website for 90 days or until the end of the calendar year in which the activity was posted, whichever is longer.

G. General Conditions

G.1. Access to Property

By conducting any activity authorized under this General Permit, the permittee agrees to allow Agency representatives access to the property covered by the authorization, at reasonable times, for the purpose of ascertaining compliance with the authorization and this General Permit.

An authorization under this General Permit does not grant the permittee the right to enter onto any property not owned by the permittee.

G.2. Authorization for Substantial Changes

All activity shall be completed and maintained in accordance with the terms and conditions of this General Permit and any authorizations thereunder. No material or substantial changes shall be made to a non-reported project such that it would only qualify as a reported project without the prior written approval of the Secretary. A permittee shall notify the Secretary of any planned changes to an authorized reported activity. The Secretary may require the permittee to submit additional information on any proposed changes. The Secretary will notify the permittee if, based on the proposed changes to the authorized activity, a revised application for an individual permit must be submitted.

G.3. Remedial Measures

The Secretary maintains continuing jurisdiction over an activity authorized under this General Permit and may at any time order remedial measures if it appears the activity is not in compliance with this General Permit or an authorization issued under this General Permit.

G.4. Compliance with other Regulations

Authorization under this General Permit does not relieve the permittee of the responsibility to comply with any other applicable federal, state, and local laws, regulations, and permits.

G.5. Legal Responsibilities for Damages

The Secretary, by issuing this General Permit and any authorization hereunder, accepts no legal responsibility for any damage direct or indirect of whatever nature and by whom ever suffered arising out of the approved activity.

G.6. Revocation

The Secretary may, after notice and opportunity for a hearing, revoke or suspend, in whole or in part, an authorization under this General Permit for cause, including, but not limited to:

a) Violation of the terms or conditions of this General Permit;

b) Obtaining authorization by misrepresentation or failure to fully disclose all relevant facts;

c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized activity.

G.7. Requiring Coverage under this General Permit

The Secretary may require that an activity for which issuance or reissuance of an individual permit is sought be subject to this General Permit if the Secretary finds that the activity is eligible for coverage under and will meet the terms and conditions of this General Permit and that the authorization under this General Permit will protect public safety and the environment and meet the requirements of 10 V.S.A. chapter 41.

G.8. Duty to Comply; Enforcement

The permittee shall comply with all terms and conditions of this General Permit and all authorizations for activities issued hereunder. Any permit noncompliance constitutes a violation of 10 V.S.A. chapter 41and may be cause for an enforcement action and/or revocation and reissuance, modification, or termination of the permittee's authorization under this General Permit.

G.9. Continuation of Expired General Permit

If this General Permit is not reissued or replaced prior to its expiration date, but the Department makes a determination that it will be renewed, this General Permit will be administratively continued and remain in full force and effect. Any permittee that was granted permit coverage prior to the expiration date will automatically remain covered by the continued General Permit until the earliest of the following:

a) Reissuance or replacement of this General Permit, at which time the permittee must comply with the conditions of the new permit to maintain authorization for the activity;
b) Issuance of an individual permit for the designated activity; or
c) A formal permit decision by the Secretary not to reissue this General Permit, at which time the permittee must seek coverage under an alternative general permit or individual permit.

G.10. Requiring an Individual Permit

The Secretary may require any person proposing an activity that may otherwise be authorized under this General Permit to apply for an individual permit. The Secretary may require an individual permit when:

a) The activity is deemed a higher risk and there is a lower degree of certainty that the Stream Alteration Standards (Section B.3.) will be met. The Secretary will evaluate risks, certainty, and potential impacts of activities in consideration of the:
    i. current biological condition, geomorphic condition, and geomorphic sensitivity of the stream within which the activity would occur;

ii. size and scope of the applicant's or permittee's activities or operation;
iii. qualifications and compliance record of the applicant, permittee, and/or contractors involved with the activity;
iv. proximity and potential for damage to improved property and riparian owners;
v. extent and nature of the stream alteration;
vi. margin of safety incorporated into the project design;
vii. qualification of the project for coverage under this General Permit;
viii. availability of demonstrated technology or practices for the activity; and
ix. other relevant factors.

b) The permittee is not in compliance with the terms and conditions of this General Permit.
c) The application does not qualify for coverage under this General Permit.
d) A change has occurred in the availability of demonstrated technology or practices for the activity.
e) Federal requirements have been adopted that conflict with one or more provisions of this General Permit.

If the Secretary finds that a permittee authorized under this General Permit is required to apply for an individual permit, the Secretary shall so notify the permittee. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a time for the permittee to file the application, and a statement that on the effective date of the individual permit this General Permit as it applied to the individual permittee shall automatically terminate. The Secretary may grant additional time upon request of the applicant.

G.11. Repair and Replacement of Instream Structures

Instream structures, including bridges, culverts, dams, and weirs, damaged during a flood or otherwise requiring maintenance, shall be authorized by the Secretary as a repair or replacement under the following conditions:

a) An instream structure is considered repairable when damages do not exceed 50 percent of the cost of replacing the structure, and:
   i. The repairs are consistent with the stream alteration statutory criteria (10 V.S.A. § 1023(a)); and
   ii. For the repair of existing stream crossing structures, the repairs are consistent with and meet the requirements of Section C.2.2.3. of this General Permit.

b) If the damages do not exceed 50 percent of the cost of replacing the structure, but it is not feasible to repair the existing damaged structure to meet the stream alteration statutory criteria (10 V.S.A. § 1023(a)), the Secretary may require an application to replace the structure. If such a structure can be replaced and meet the stream alteration statutory criteria, then the Secretary shall permit the replacement.
c) When damages to an instream structure exceed 50 percent of the cost of replacing the structure, the structure will not be considered repairable. Permanent replacement structures must meet the Stream Alteration Standards (Section B.3.).

G.12. Transfer of Authorization

An authorization for an activity under this General Permit may be transferred provided that a notice of transfer is submitted to the Secretary no later than ten days prior to the transfer and the notice includes the following:

a) The name, mailing address, and contact information of the present permittee;
b) The name, mailing address, and contact information of the prospective permittee;
c) The proposed date of transfer; and
d) A statement signed by the prospective permittee, stating that:
    i. The conditions that contribute to, or affect, any authorized activity will not be materially different under the new ownership; and
    ii. He/she has read and is familiar with the terms of this General Permit and agrees to comply with all the terms and conditions of this General Permit.

G.13. Modification of this General Permit

After notice and opportunity for a public meeting, this General Permit may be modified in accordance with 10 V.S.A. chapter 165.

G.14. Limitations

This General Permit conveys no vested rights or exclusive privileges. This General Permit conveys no title to land nor authorizes any injury to public or private property.

G.15. Reopener

If, after granting authorization for an activity under this general permit, the Secretary determines, in his or her sole discretion, that there is evidence indicating that an authorized activity does not comply with the requirements of 10 V.S.A. Chapter 41 or this general permit, or any authorization issued hereunder, the Secretary may require the permittee to obtain an individual permit, or the Secretary may modify any authorization for the activity to include different limitations and/or requirements.

H. Appeals

Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Division of the Superior Court within 30 days of the date of the decision. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Division; and must be signed by the appellant or their attorney. In addition, the appeal must give the address or location and description of the property, project or facility with which the appeal is concerned and the name of the applicant or any permits involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available on line

at www.vermontjudiciary.org. The address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, VT 05641 (Tel. # 802-828-1660).

I. Term

This permit is valid upon signing and shall remain in effect for five years from the date of signing.

Dated at Montpelier, Vermont this 11th day of April, 2014

State of Vermont
Agency of Natural Resources

David K. Mears, Commissioner
Department of Environmental Conservation

BY:

Digitally signed by Peter LaFlamme
DN: cn=Peter LaFlamme, o=VTDEC, ou=Watershed Management Division, email=pete.laflamme@state.vt.us, c=US
Date: 2014.04.11 11:31:41 -04'00'

Peter LaFlamme, Director
Watershed Management Division