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CHAPTER Env-Wt 900  STREAM CROSSINGS

PART Env-Wt 901  PURPOSE AND APPLICABILITY

Env-Wt 901.01  Purpose. The purpose of this chapter is to:

(a) Enhance public safety by establishing standards for necessary stream crossings that are designed to lessen the risk of blockages and wash-outs of culverts and bridges, and the associated flooding, which can jeopardize property and human lives upstream and downstream of such crossings and on roadways;

(b) Preserve the functions and values of existing streams, support the restoration of impacted streams to their natural state, and improve aquatic life passage and sediment transport, while recognizing that well-managed forest management activities, normal agricultural operations, and trail activities play important roles in protecting water quality; and

(c) Implement the program established by RSA 482-A:3, XVII - XIX to certify certain individuals to maintain, repair, replace, or modify culverts.

Source. #9714, eff 5-12-10; ss by #10491, eff 12-21-13

Env-Wt 901.02  Applicability.

(a) All crossings of perennial streams and intermittent streams shall be subject to Env-Wt 903 and Env-Wt 904 unless the work on the crossing is:

(1) Exempted under Env-Wt 901.03; or

(2) Undertaken in accordance with the certified culvert maintainer program established by RSA 482-A:3, XVII - XIX and Env-Wt 905.

(b) The rules in this chapter shall not apply to crossings of drainage swales or ephemeral streams, or to any crossings located upstream of where the scouring starts for an intermittent stream or perennial stream.

Source. #9714, eff 5-12-10; ss by #10491, eff 12-21-13

Env-Wt 901.03  Exemptions. The following shall be exempt from Env-Wt 903 and Env-Wt 904:

(a) Routine roadway and railway maintenance activities conducted in accordance with Env-Wt 303.05(q);

(b) Minimum impact projects to allow vehicular access to a piece of property for forest management activities, conducted in accordance with:

(1) Env-Wt 303.04(e) for roadway construction through forested wetlands; or

(2) Env-Wt 303.04(g) for installation of a structure and associated fill to cross wetlands, including streams;

(c) Minimum impact agricultural activities conducted in accordance with Env-Wt 303.04(u);

(d) Minimum impact trail activities conducted in accordance with Env-Wt 303.04(y); and

(e) Minimum impact stream crossings for access to a property for a single-family residential property or building lot, for noncommercial recreational purposes including conservation projects, or for normal agricultural operations, conducted in accordance with Env-Wt 303.04(z) or (ag).

Source. #9714, eff 5-12-10
PART Env-Wt 902  DEFINITIONS

Env-Wt 902.01  “Aggradation” means the raising of the grade or level of the bed of a watercourse by the deposition of detritus, sediment, or other material.

Source.  #9714, eff 5-12-10

Env-Wt 902.02  “Aquatic life” means plant and animal species whose life-cycle depends, in whole or in part, on fresh water, salt water, or both. The term includes fish, amphibians, reptiles, and macroinvertebrates. The term does not include any exotic aquatic weed as defined in RSA 487:16, II.

Source.  #9714, eff 5-12-10

Env-Wt 902.03  “Bankfull flow” means the volume of flow in a watercourse at which water begins to overflow into the active floodplain.

Source.  #9714, eff 5-12-10

Env-Wt 902.04  “Bankfull width” means the width of the wetted channel during bankfull flow.

Source.  #9714, eff 5-12-10

Env-Wt 902.05  “Closed culvert” means a culvert that is solid at the top, along its sides, and across its lower edge, such that its cross-section is continuous. A closed culvert can be square, rectangular, circular, or oval in cross-section.

Source.  #9714, eff 5-12-10

Env-Wt 902.06  “Connectivity” means the state in which upstream and downstream reaches of a watercourse meet in a geomorphically stable situation that does not adversely affect the movement of aquatic life or the transport of sediment.

Source.  #9714, eff 5-12-10

Env-Wt 902.07  “Designated river” means “designated river” as defined in RSA 483:4, VIII.

Source.  #9714, eff 5-12-10

Env-Wt 902.08  “Designated river corridor” means the river corridor of a designated river.

Source.  #9714, eff 5-12-10

Env-Wt 902.09  “Embedded” means, when referring to a stream crossing structure, buried within the stream bed to such an extent that water depths and velocities at a variety of flows within the crossing structure are comparable to those found in the natural channel upstream and downstream of the stream crossing structure.

Source.  #9714, eff 5-12-10

Env-Wt 902.10  “Existing legal crossing” means a stream crossing for which:

(a) All applicable federal, state, and local requirements were met when the crossing was originally installed; and

(b) If the crossing was modified, repaired, or reconstructed subsequent to its original installation, the work, when undertaken, met all applicable federal, state, and local requirements.

Source.  #9714, eff 5-12-10

Env-Wt 902.11  “Forest management activities” means activities necessary for forest management as defined in RSA 227-G:2, IX, including but not limited to extracting timber, planting and replanting of various
species, and cutting roads and pathways through forests, provided such activities are undertaken in compliance with applicable statutes and rules, including RSA 227-J, and best management practices.

Source. #9714, eff 5-12-10

Env-Wt 902.12 “Normal agricultural operations” means activities as described in RSA 21:34-a, including the construction or maintenance of farm roads.

Source. #9714, eff 5-12-10

Env-Wt 902.13 “Open-bottom culvert” means a culvert whose sides do not meet at its lower edge.

Source. #9714, eff 5-12-10

Env-Wt 902.14 “Permanent crossing” means a crossing that is intended to remain in place for 2 years or more after installation, regardless of the purpose for its installation.

Source. #9714, eff 5-12-10

Env-Wt 902.15 “Pipe arch” means a culvert that has rounded sides and a rounded top with a flat bottom.

Source. #9714, eff 5-12-10

Env-Wt 902.16 “River corridor” means “river corridor” as defined RSA 483:4, XVIII.

Source. #9714, eff 5-12-10

Env-Wt 902.17 “Span structure” means a structure that crosses from the top of one bank to the top of the opposite bank, such that it does not disturb the stream channel or its banks.

Source. #9714, eff 5-12-10

Env-Wt 902.18 “Stream channel” means a channel that carries the bankfull flow.

Source. #9714, eff 5-12-10

Env-Wt 902.19 “Stream enhancement” means stream rehabilitation activities undertaken to improve water quality or ecological function of a watercourse that do not qualify as total stream restoration, including but not limited to in-stream or stream bank stabilization activities that restore one or more of the geomorphic variables such as dimension, pattern, and profile.

Source. #9714, eff 5-12-10

Env-Wt 902.20 “Stream simulation” means a method of designing and constructing a stream crossing structure, in which the structure created within the channel is as similar as possible to the natural channel in both physical structure and function, and which takes into account appropriate bed forms and streambed characteristics so that water depths and velocities within the crossing structure at a variety of flows are comparable with those found in the natural channel upstream and downstream of the stream crossing.

Source. #9714, eff 5-12-10

Env-Wt 902.21 “Temporary crossing” means a crossing that will:

(a) Be used solely for forest management activities, normal agricultural operations, or trail activities, or a combination of such activities; and

(b) Remain in place for less than 2 years after installation.

Source. #9714, eff 5-12-10
Env-Wt 902.22 “Protected species or habitat” means:

(a) Any threatened wildlife species as defined in RSA 212-A:2, V, any endangered wildlife species as defined in RSA 212-A:2, IV, or any habitat of such species which is determined to be critical by the executive director of the NH department of fish and game (NHF&G) under RSA 212-A:9, III; and

(b) Any protected plant species as defined in RSA 217-A:3, VIII, or any exemplary natural community as identified by the New Hampshire department of resources and economic development, division of forest and lands, natural heritage bureau (NHB).

Source. #9714, eff 5-12-10

Env-Wt 902.23 “Tier one stream crossing” means a crossing that meets the criteria specified in Env-Wt 904.02(a).

Source. #9714, eff 5-12-10

Env-Wt 902.24 “Tier 2 stream crossing” means a crossing that meets the criteria specified in Env-Wt 904.03(a).

Source. #9714, eff 5-12-10

Env-Wt 902.25 “Tier 3 stream crossing” means a crossing that meets the criteria specified in Env-Wt 904.04(a).

Source. #9714, eff 5-12-10

Env-Wt 902.26 “Trail activities” means activities necessary for public-access trail construction and management, including but not limited to cutting roads and pathways through forests, provided such activities are undertaken in compliance with RSA 482-A:3, XII(a) by conforming to the Best Management Practices for Erosion Control During Trail Maintenance and Construction published by the department of resources and economic development (Trail BMPs) and filing the required notice.

Source. #9714, eff 5-12-10

PART Env-Wt 903 STREAM CROSSINGS: CLASSIFICATIONS AND APPLICATIONS

Env-Wt 903.01 Classification of Stream Crossings and Stream Crossing Projects.

(a) Stream crossings shall be classified as tier one, tier 2, or tier 3 based on the location of the project, as specified in Env-Wt 904.02(a), Env-Wt 904.03(a), and Env-Wt 904.04(a), respectively.

(b) A stream crossing project shall be classified as minimum impact, minor impact, or major impact based on (e) through (g), below, regardless of the tier classification of the stream crossing included in the project.

(c) The requirements for the design of a stream crossing and the information that must be submitted with the application shall be based on the tier classification of the crossing, regardless of whether the project is a minimum impact, minor impact, or major impact project, except that if a tier 3 stream crossing is downgraded to a tier 2 or tier one crossing pursuant to Env-Wt 904.04(b) or (c), the design and application submission requirements of the final classification shall apply.

(d) The classification of a stream crossing project as minimum impact, minor impact, or major impact shall be used to determine the fee that must be submitted with the application and how the application is processed.

(e) A project shall be classified as a minimum impact project if (f) and (g), below, do not apply, and the only stream crossing included in the project is:

(1) A new tier one stream crossing that meets the criteria of Env-Wt 904.02(b);
(2) A repair or rehabilitation that is classified as a minimum impact project under Env-Wt 904.06(c); or

(3) A replacement that is classified as a minimum impact project under Env-Wt 904.07(c).

(f) A project shall be classified as a minor impact project if (g), below, does not apply, and:

(1) The only stream crossing included in the project is:

   a. A new tier one stream crossing for which approval of an alternative design is being sought as specified in Env-Wt 904.02(c);
   b. A new tier 2 stream crossing that meets the criteria of Env-Wt 904.03(b);
   c. A replacement tier 2 stream crossing that does not meet the criteria of Env-Wt 904.06;
   d. A repair or rehabilitation that is classified as a minor impact project under Env-Wt 904.06(d); or
   e. A replacement that is classified as a minor project under Env-Wt 904.07(d); or

(2) Any of the criteria for a minor impact project specified in Env-Wt 303.03 are met.

(g) A project shall be classified as a major impact project if:

(1) The stream crossing is a new or replacement tier 3 crossing; or

(2) Any of the criteria for a major project specified in Env-Wt 303.02 are met, regardless of the tier classification of the stream crossing that is part of the project.

Source. #9714, eff 5-12-10

Env-Wt 903.02 Application Fees.

(a) The application fee for a stream crossing project classified as minimum impact shall be as specified in RSA 482-A:3, I(c) for a minimum impact project.

(b) The application fee for any stream crossing project that does not qualify as a minimum impact project shall be calculated as specified in RSA 482-A:3, I(c) based upon the sum of the square feet of impacts to the banks and channel bottom and other associated jurisdictional areas.

Source. #9714, eff 5-12-10

Env-Wt 903.03 Information Required for a Stream Crossing Application.

(a) In addition to the information required in Env-Wt 501.02, for all stream crossing projects the applicant shall submit the following:

(1) On the USGS map required by Env-Wt 501.02(a)(4), the approximate boundaries and size of the contributing watershed;

(2) Plans showing the following information:

   a. The scale, north arrow, and at least 3 reference points outside of the construction disturbance area;
   b. Clearing limits showing all work areas covered by special project requirements with notes;
c. Structure location with inlet and outlet inverts;  
d. Extension of channel excavation and filling;  
e. Road locations, including road edges and centerline;  
f. Channel work identified including bank erosion control features, grade control, and channel linings; and  
g. Estimated drainage area at the crossing location;  

(3) Streambed details, with figures, which show the following:  
a. The distance from the top of the right bank to the top of the left bank;  
b. Approximate elevations, spacing, diameters, and locations of rocks for steps, bankline, and other channel rocks for roughness;  
c. Details for sediment retention structures, if any, within embedded structures; and  
d. A visual estimate of dominant channel materials upstream, downstream, and if applicable, within the existing crossing;  

(4) Existing crossing metrics, including:  
a. Existing riparian zone, including the extent and type of existing vegetation surrounding or in the stream bank;  
b. Existing crossing type and dimensions, including material, length, and dimensions; and  
c. Existing tailwater control, including its location and materials, and pool configuration;  

(5) The dewatering system, as follows:  
a. Estimates of the maximum flow anticipated during construction, including any summer storm estimates;  
b. Location, height, and width of the diversion dam;  
c. Sump locations, including estimate of necessary flow and sump capacity;  
d. Backwater prevention method; and  
e. Sediment treatment plan with methods, release point, and extent;  

(6) Erosion and pollution controls, as follows:  
a. Any additional methods of controlling erosion;  
b. A stormwater management plan, including but not limited to where to cover stockpiles and place straw bales;  
c. Pollution control methods for pumps, fuel stations, and equipment storage;  

(7) Footings, including the following:  
a. Estimate of bearing capacity; and  
b. Footing depth and width for bottomless arch or bridge; and  

(8) Structural details of the crossing, including the following:  
a. Structural section, gauge or thickness, and material, minimum and maximum cover limits;
b. Structures, drawn to scale, on elevation views showing bed material location relative to structure, and special backfill zones; and

c. Structural excavation quantity and total excavation estimate.

(b) In addition to the information required in Env-Wt 501.02 and (a), above, the applicant for any tier 3 - major impact stream crossing project shall provide the following additional information:

(1) Structure location including inlet and outlet inverts;

(2) Streambed details, with figures, which show the streambed simulation materials and its extent, depth and length within the crossing;

(3) Road locations, including road edges and centerline;

(4) Channel information for the design reference reach including bankfull width, bankfull depth, entrenchment ratio, sinuosity, flood prone width, a long profile that is 7-10 bankfull widths long with grade controls, pools and gradients shown, an appropriate reference reach cross section with channel details, reference reach pebble count, including a narrative explaining why the cross section is considered representative;

(5) Pebble count upstream, downstream, and if applicable, within the existing crossing; and

(6) The hydraulic calculation for the bypass pipe or channel size, length and gradient.

Source. #9714, eff 5-12-10

PART Env-Wt 904 DESIGN AND CONSTRUCTION OF STREAM CROSSINGS

Env-Wt 904.01 General Design Considerations. All stream crossings shall be designed and constructed so as to:

(a) Not be a barrier to sediment transport;

(b) Prevent the restriction of high flows and maintain existing low flows;

(c) Not obstruct or otherwise substantially disrupt the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction;

(d) Not cause an increase in the frequency of flooding or overtopping of banks;

(e) Preserve watercourse connectivity where it currently exists;

(f) Restore watercourse connectivity where:

   (1) Connectivity previously was disrupted as a result of human activity(ies); and

   (2) Restoration of connectivity will benefit aquatic life upstream or downstream of the crossing, or both;

(g) Not cause erosion, aggradation, or scouring upstream or downstream of the crossing; and

(h) Not cause water quality degradation.

Source. #9714, eff 5-12-10
Env-Wt 904.02  Tier One Stream Crossings.

(a) A tier one stream crossing shall be a crossing located on a watercourse where the contributing watershed is less than or equal to 200 acres.

(b) Tier one stream crossings shall:

1. Meet the general design considerations specified in Env-Wt 904.01;
2. Be sized so as to accommodate the greater of:
   a. The 50-year frequency flood; or
   b. Applicable federal, state, or local requirements; and
3. Be a span structure, pipe arch, open-bottom culvert, or closed-bottom culvert, with or without being embedded with stream simulation.

(c) An application requesting approval for an alternative design for a tier one stream crossing shall constitute an application for a minor impact project.

(d) An existing legal crossing that would be classified as tier one under (a), above, may be repaired or rehabilitated pursuant to Env-Wt 904.06 or replaced in kind pursuant to Env-Wt 904.07.

(e) Compensatory mitigation shall not be required for any tier one minimum impact project.

(f) Construction involving in-stream work shall be limited to low flow conditions.

(g) Crossings that require excavation in flowing water shall use best management practices, such as temporary by-pass pipes, culverts, or cofferdams, so as to maintain normal flows and prevent water quality degradation.

Source. #9714, eff 5-12-10

Env-Wt 904.03  Tier 2 Stream Crossings.

(a) A tier 2 stream crossing shall be a crossing located on a watercourse where the contributing watershed is greater than 200 acres and less than 640 acres.

(b) Subject to (c), below, any new tier 2 stream crossing and any replacement tier 2 stream crossing that does not meet the criteria specified for in-kind replacement in Env-Wt 904.07 shall be a span structure, pipe arch embedded with stream simulation, open-bottom culvert with stream simulation, or closed-bottom culvert embedded with stream simulation.

(c) The applicant shall use an alternative design only if a request is submitted and approved as specified in Env-Wt 904.09.

(d) An existing legal crossing that would be classified as tier 2 under (a), above, may be repaired or rehabilitated pursuant to Env-Wt 904.06 or replaced in kind pursuant to Env-Wt 904.07.

(e) Compensatory mitigation shall not be required for:

1. Any new tier 2 stream crossing that meets the requirements of this section and Env-Wt 904.05; or
2. Any tier 2 stream crossing that is repaired or rehabilitated pursuant to Env-Wt 904.06 or replaced in kind pursuant to Env-Wt 904.07.
(f) Plans for a tier 2 stream crossing shall be stamped by a professional engineer who is licensed under RSA 310-A to practice in New Hampshire.

(g) Construction involving in-stream work shall be limited to low flow conditions.

(h) Crossings that require excavation in flowing water shall use best management practices, such as temporary by-pass pipes, culverts, or cofferdams, so as to maintain normal flows and prevent water quality degradation.

Source. #9714, eff 5-12-10

Env-Wt 904.04 Tier 3 Stream Crossings.

(a) Subject to (b), below, a tier 3 stream crossing shall be a crossing located:

(1) On a watercourse where the contributing watershed is 640 acres or greater;

(2) Within a designated river corridor;

(3) On a watercourse that is listed on the surface water assessment 305(b) report in effect at the time of application as not attaining surface water quality standards for aquatic life based on one or more of the following:
   a. Benthic macroinvertebrate index of biological integrity;
   b. Fish assemblage index of biological integrity;
   c. Habitat assessment; or
   d. Stream channel stability;

(4) Within a 100-year flood plain or fluvial erosion hazard zone;

(5) In a jurisdictional area having any protected species or habitat; or

(6) In or within 100 feet of a wetland that has been designated by a municipality as a prime wetland pursuant to RSA 482-A:15, unless a waiver has been granted pursuant to RSA 482-A:11, IV(b).

(b) The applicant for a project in which a stream crossing is categorized as tier 3 based solely on (a)(3) or (4), above, may request that the crossing be categorized as a tier one or tier 2 stream crossing, as applicable based on watershed size, if there are no impacts to the resource or the impacts to the resource are specifically mitigated in accordance with Env-Wt 800.

(c) If an applicant for a project in which a stream crossing is categorized as tier 3 based solely on (a)(5), above, wishes to have the crossing categorized as tier one or tier 2 based on watershed size, the applicant shall consult with the NHB if any protected plant species or habitat is impacted or the NHF&G if any protected wildlife species or habitat is impacted. The department shall down grade the stream crossing to tier one or tier 2, with mitigation if necessary, if the NHB or NHF&G, as applicable, recommend such a downgrade.

(d) A tier 3 stream crossing shall be a span structure or an open-bottomed culvert with stream simulation, not a closed-bottom culvert or pipe arch.

(e) The applicant shall use an alternative design only if the request is submitted and approved as specified in Env-Wt 904.09.

(f) Compensatory mitigation shall not be required for:

   (1) Any new tier 3 stream crossing that is self-mitigating; or
(2) Any replacement of a crossing that met all applicable requirements when originally installed but is in a location that results in the crossing being classified as tier 3 under these rules, provided the proposed stream crossing meets the requirements of Env-Wt 904.08.

(g) Plans for a tier 3 stream crossing shall be stamped by a professional engineer who is licensed under RSA 310-A to practice in New Hampshire.

(h) Construction involving in-stream work shall be limited to low flow conditions.

(i) Crossings that require excavation in flowing water shall use best management practices, such as temporary by-pass pipes, culverts, or cofferdams, so as to maintain normal flows and prevent water quality degradation.

\section*{Source.} #9714, eff 5-12-10

\section*{Env-Wt 904.05 Design Criteria for Tier 2 and Tier 3 Stream Crossings.} New tier 2 stream crossings, replacement tier 2 stream crossings that do not meet the requirements of Env-Wt 904.07, and new and replacement tier 3 stream crossings shall be designed and constructed:

(a) In accordance with the NH Stream Crossing Guidelines, University of New Hampshire, May 2009, which can be downloaded for free at \url{http://www.unh.edu/erg/stream_restoration/};

(b) With the bed forms and streambed characteristics necessary to cause water depths and velocities within the crossing structure at a variety of flows to be comparable to those found in the natural channel upstream and downstream of the stream crossing;

(c) To provide a vegetated bank on both sides of the watercourse to allow for wildlife passage;

(d) To preserve the natural alignment and gradient of the stream channel, so as to accommodate natural flow regimes and the functioning of the natural floodplain;

(e) To accommodate the 100-year frequency flood, to ensure that:

\begin{enumerate}
    \item There is no increase in flood stages on abutting properties; and
    \item Flow and sediment transport characteristics will not be affected in a manner which could adversely affect channel stability;
\end{enumerate}

(f) To simulate a natural stream channel; and

(g) So as not to alter sediment transport competence.

\section*{Source.} #9714, eff 5-12-10

\section*{Env-Wt 904.06 Repair or Rehabilitation of Tier One or Tier 2 Existing Legal Stream Crossings.}

(a) An existing legal crossing that would be classified as tier one under Env-Wt 904.02(a) or as tier 2 under Env-Wt 904.03(a) shall be repaired or rehabilitated pursuant to this section only if the crossing does not have a history of causing or contributing to flooding that damages the crossing or other human infrastructure.

(b) Repair or rehabilitation of a culvert or other closed-bottom stream crossing structure pursuant to this section may be accomplished by concrete repair, slip lining, cured-in-place lining, or concrete invert lining, or any combination thereof, except that slip lining shall not occur more than once.

(c) An existing legal crossing that would be classified as tier one under Env-Wt 904.02(a) or as tier 2 under Env-Wt 904.03(a) shall be repaired or rehabilitated as a minimum impact project only if the stream crossing as proposed to be repaired or rehabilitated will:
(1) Meet the general criteria specified in Env-Wt 904.01;

(2) Not diminish the hydraulic capacity of the crossing; and

(3) Not diminish the capacity of the crossing to accommodate aquatic life passage.

(d) If the criteria of (c), above, cannot be met, an existing legal crossing that would be classified as tier one under Env-Wt 904.02(a) or as tier 2 under Env-Wt 904.03(a) shall be repaired or rehabilitated as a minor impact project if the stream crossing as proposed to be repaired or rehabilitated will:

(1) Not adversely impact the stability of the stream banks or stream bed upstream or downstream of the crossing; and

(2) Not cause an increase in the frequency of flooding or overtopping of banks.

Source. #9714, eff 5-12-10

Env-Wt 904.07 In-Kind Replacement of Tier One or Tier 2 Existing Legal Stream Crossings.

(a) If the routine roadway/railway maintenance exemption of Env-Wt 303.05(q) is not available, an existing legal crossing that would be classified as tier one under Env-Wt 904.02(a) or as tier 2 under Env-Wt 904.03(a) may be replaced pursuant to this section, provided that the existing crossing does not have a history of causing or contributing to flooding that damages the crossing or other human infrastructure.

(b) The replacement stream crossing shall be:

(1) The same size and type as the existing stream crossing; or

(2) An upgrade of the existing stream crossing, for example by replacing a closed-bottom culvert that did not have stream simulation with a span, or with a pipe arch or culvert with stream simulation.

(c) An existing legal crossing that would be classified as tier one under Env-Wt 904.02(a) or as tier 2 under Env-Wt 904.03(a) shall be replaced as a minimum impact project only if the stream crossing as proposed to be replaced will:

(1) Meet the general criteria specified in Env-Wt 904.01;

(2) Not diminish the hydraulic capacity of the crossing; and

(3) Not diminish the capacity of the crossing to accommodate aquatic life passage.

(d) If the criteria of (c), above, cannot be met, an existing legal crossing that would be classified as tier one under Env-Wt 904.02(a) or as tier 2 under Env-Wt 904.03(a) shall be replaced as a minor impact project if the stream crossing as proposed to be replaced will:

(1) Not adversely impact the stability of the stream banks or stream bed upstream or downstream of the crossing; and

(2) Not cause an increase in the frequency of flooding or overtopping of banks.

Source. #9714, eff 5-12-10

Env-Wt 904.08 Replacing Tier 3 Existing Legal Stream Crossings.

(a) As part of an application for replacing an existing legal crossing that would be classified as a tier 3 stream crossing under Env-Wt 904.04(a), the applicant shall provide an assessment of the geomorphic
compatibility of the existing stream crossing based on the NH Stream Crossing Guidelines, University of New Hampshire, May 2009, which can be downloaded for free at http://www.unh.edu/erg/stream_restoration/.

(b) A replacement tier 3 stream crossing shall comply with the specific design criteria in Env-Wt 904.05, unless a request for an alternative design is submitted and approved as specified in Env-Wt 904.09.

Source. #9714, eff 5-12-10

Env-Wt 904.09 Alternative Designs.

(a) If the applicant believes that installing the structure specified in the applicable rule is not practicable, as that term is defined in Env-Wt 101.73, the applicant may propose an alternative design in accordance with this section.

(b) To request approval of an alternative design, the applicant shall submit a written request to the department, accompanied by a technical report prepared by an environmental scientist or professional engineer that clearly explains how the proposed alternative meets the criteria for approval specified in (c) or (d), below, as applicable.

(c) The department shall approve an alternative design for a new tier 2 crossing, a replacement tier 2 crossing that does not meet the requirements of Env-Wt 904.07, or a new or replacement tier 3 crossing if:

(1) The report submitted pursuant to (b), above, demonstrates that adhering to the stated requirements is not practicable;

(2) The proposed alternative meets the specific design criteria specified in Env-Wt 904.05 to the maximum extent practicable; and

(3) The alternative design meets the general design criteria specified in Env-Wt 904.01.

(d) The department shall approve an alternative design for a new tier one crossing or a replacement tier one crossing that does not meet the requirements of Env-Wt 904.07 if:

(1) The report submitted pursuant to (b), above, demonstrates that adhering to the rules is not practicable; and

(2) The alternative design meets the general design criteria specified in Env-Wt 904.01 to the maximum extent practicable.

(e) The department shall notify the applicant in writing of its decision on the request. If the request is denied, the notice shall specify the reason(s) for the denial. If the request is approved, the permit issued shall include such conditions as are needed to ensure that the project’s impacts are minimized.

Source. #9714, eff 5-12-10

PART Env-Wt 905 CERTIFIED CULVERT MAINTAINER PROGRAM

Env-Wt 905.01 Applicability.

(a) The rules in this part shall apply to any employee of a state or municipal public works agency who wishes to be certified to maintain, repair, replace, or modify culverts as provided in RSA 482-A:3, XVII, reprinted in Appendix C.

(b) Nothing in this part shall be construed to prevent routine roadway and railway maintenance activities from being undertaken in accordance with Env-Wt 303.05(q).
(c) Nothing in this part shall be construed to prevent a certified individual from undertaking culvert maintenance activities for a state or municipal public works agency other than the one by which the individual is employed, for example pursuant to an inter-municipal agreement.

Source. #10491, eff 12-21-14

Env-Wt 905.02 Definitions.

(a) “Approved provider” means an organization that has been approved by the department pursuant to Env-Wt 905.11 to offer one or more of the courses, including field work, necessary for an individual to become knowledgeable in one or more of the areas identified in Env-Wt 905.03(b).

(b) “Certificate” means the document identified in RSA 482-A:3, XVII - XIX as a certification or installer’s permit, which is issued by the department to authorize a state or municipal public works employee to maintain, repair, replace, or modify culverts as provided in RSA 482-A:3, XVII - XIX.

(c) “Certified culvert maintainer program” means the program established by RSA 482-A:3, XVII - XIX to certify individuals to maintain, repair, replace, or modify culverts.

(d) “Culvert project” means a discrete endeavor undertaken to maintain, repair, replace, or modify a specific culvert.

(e) “Incidental damage” means disturbances to areas outside of the immediate work area that are corrected in the normal course of a culvert project. The term does not include any disturbance or other action that:

1. Causes any injury to any individual who is not working on the culvert project;
2. Causes injury to an individual who is working on the culvert project to the extent that the individual is hospitalized or otherwise cannot work; or
3. Results in harm to public or private property in an amount that triggers an insurance claim by the state or municipal public works agency undertaking the culvert project or by the owner of the property.

(f) “Public way” means a paved or unpaved path upon which travel occurs, including but not limited to lanes, alleys, streets, avenues, boulevards, roads, turnpikes, highways, and railway beds, that is maintained by a state or municipal public works agency.

Source. #10491, eff 12-21-14

Env-Wt 905.03 Qualifications for Initial Certificate. Any state or municipal public works employee who wishes to become qualified to maintain culverts under RSA 482-A:3, XVII, as reprinted in Appendix B, shall:

(a) Fulfill the requirements of the certification program established in this part or be a professional engineer who is duly licensed by the New Hampshire board of professional engineers;

(b) Be knowledgeable in the following areas:

1. State rules and federal regulations governing culvert replacement and maintenance;
2. Culvert purpose and function;
3. Culvert design, including proper sizing, and installation;
4. Culvert replacement and maintenance techniques; and
5. Best management practices for culvert replacement and maintenance, including identifying those areas that are not within the scope of the BMP manual; and
Env-Wt 905.04  Application for Initial Certificate.

(a) Any individual wishing to be certified shall complete and submit an application form to the department that:

1. Provides the information and documentation specified in (b), below, on or with an application form obtained from the department; and

2. Has been signed by the applicant as specified in Env-Wt 905.05.

(b) The information and documentation required by (a)(1) shall be as follows:

1. The applicant’s name, mailing address, daytime telephone number, and email address;

2. The name, address, and daytime telephone number of the state or municipal public works agency by which the individual is employed;

3. If the applicant wishes to qualify as a professional engineer, written confirmation from the New Hampshire board professional engineers that the applicant is a professional engineer licensed by the board and in good standing; and

4. If the applicant wishes to qualify based on specific training, documentation from the approved provider(s) whose course(s) the applicant attended which demonstrate that the applicant has met the requirements for certification under this program.

Env-Wt 905.05  Signature Required.

(a) The applicant for an initial or renewal certificate shall sign and date the application form.

(b) The applicant’s signature shall constitute certification that:

1. The information provided on or with the application form, as applicable, is true, complete, and not misleading to the best of the applicant’s knowledge; and

2. The applicant understands that:

   a. The submission of false, incomplete, or misleading information is grounds for denying the application or revoking any certificate that is issued based on the information; and

   b. He or she is subject to the penalties specified in RSA 641:3, as reprinted in Appendix C, for making unsworn false statements.

Env-Wt 905.06  Issuance of Certificate.

(a) Within 10 working days of receiving a complete application as specified in Env-Wt 905.04(a), the department shall determine whether the information submitted demonstrates that the applicant meets the requirements for becoming a certified culvert maintainer specified in RSA 482-A:3, XVII - XIX and this part.

(b) If the department determines that the applicant meets the requirements, the department shall issue a certificate that identifies the individual as a certified culvert maintainer.
(c) As provided in RSA 482-A:3, XIX and subject to (d) and (e), below, certificates shall be issued for a 2-year term, from January 1 of the year of issue through December 31 of the following year.

(d) An initial certificate shall be issued for a term that begins on the date of issuance and extends through December 31 of the year following the year of issuance.

(e) A certificate shall remain valid for its full term provided the certified individual remains employed by a state or municipal public works agency, unless sooner suspended or revoked pursuant to Env-Wt 905.10.

(f) If the department determines that the individual does not meet the requirements for becoming a certified culvert maintainer, the department shall send a written notice to the applicant that:

1. Specifies the reason(s) why the applicant was not certified; and
2. Informs the individual that an appeal may be taken as provided in RSA 482-A:10 and RSA 21-O:14.

Source. #10491, eff 12-21-14

Env-Wt 905.07 Certificate Renewal; Continuing Education Required.

(a) As provided in RSA 482-A:3, XIX, certificates shall be renewable.

(b) To apply for renewal, a certified culvert maintainer shall submit an application for renewal as specified in (c) and (d), below, to the department no later than December 15 of the year of expiration.

(c) An applicant for renewal shall provide the following information and documentation to the department on or with a form obtained from the department:

1. The applicant’s name, mailing address, daytime telephone number, and email address;
2. The name, address, and daytime telephone number of the state or municipal public works agency by which the applicant is employed;
3. Documentation that the applicant has completed 2 hours of instruction from an approved provider in one or more of the areas identified in Env-Wt 905.03(b) within the 2-year term of the individual’s current certificate; and
4. A statement that the applicant currently holds a valid certificate as a culvert maintainer and has not acted or failed to act in any way that would constitute just cause to suspend, revoke, or refuse to renew the certificate.

(d) The applicant shall sign the application for renewal in accordance with Env-Wt 905.05.

(e) Within 10 working days of receiving a complete application for a renewal certificate as specified in (b) through (d), above, the department shall determine whether the information submitted demonstrates that the applicant:

1. Currently holds a valid culvert maintainer certificate;
2. Is employed at the time of renewal by a state or municipal public works agency;
3. Has filed all required reports; and
4. Has not acted or failed to act in any way that would constitute just cause to suspend, revoke, or refuse to renew the certificate.

(f) If the department determines that the applicant meets the requirements, the department shall issue a certificate that:
(1) Identifies the individual as a certified culvert maintainer; and
(2) As provided in RSA 482-A:3, XIX, is valid from January 1 of the year of issue through December 31 of the following year.

(g) If the department determines that the applicant does not meet the requirements for renewal, the department shall send a written notice to the applicant that:

(1) Specifies the reason(s) why the applicant’s certificate was not renewed; and
(2) Informs the individual that an appeal may be taken as provided in RSA 482-A:10 and RSA 21-O:14.

Source. #10491, eff 12-21-14

Env-Wt 905.08 Obligations and Responsibilities of Certified Individuals. Each individual certified under this part shall:

(a) Undertake or supervise work performed pursuant to RSA 482-A:3, XVII;
(b) Use reasonable care, judgment, and application of his or her knowledge when maintaining, repairing, replacing, or modifying a culvert;
(c) Not submit any information that is false, incomplete, or misleading on, in, or with any application for an initial or renewal certificate or quarterly report;
(d) Repair, replace, or modify each culvert in compliance with:
   (1) RSA 482-A, exclusive of the requirement to obtain a permit;
   (2) Env-Wt 100 et seq., exclusive of the requirement pertaining to applying for and obtaining a permit; and
   (3) Best management practices to protect water quality; and
(e) Correct any work that is identified as defective by the department or by the state or municipal public works agency for which the work was performed.

Source. #10491, eff 12-21-14

Env-Wt 905.09 Quarterly Reporting Required.

(a) As required by RSA 482-A:3, XVIII, all individuals certified under this program shall submit a quarterly report to the department to fully identify the work performed in the prior quarter.
(b) If more than one certified individual works on or supervises the same culvert project, each individual shall identify the project in her or his quarterly report.
(c) Quarterly reporting periods and due dates for reports shall be as specified in Table 905-1, below:

<table>
<thead>
<tr>
<th>Reporting Period</th>
<th>Report Due</th>
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</thead>
<tbody>
<tr>
<td>January 1 through March 31</td>
<td>April 15</td>
</tr>
<tr>
<td>April 1 through June 30</td>
<td>July 15</td>
</tr>
<tr>
<td>July 1 through September 30</td>
<td>October 15</td>
</tr>
<tr>
<td>October 1 through December 31</td>
<td>January 15</td>
</tr>
</tbody>
</table>
(d) Each quarterly report shall contain the following information for each culvert maintained, repaired, replaced, or modified during the reporting period:

1. The state or municipal public works agency for which the work was done;
2. The municipality in which the work was done;
3. The name or other identification of the public way that crosses the culvert;
4. The location of the culvert, as follows:
   a. If the public way has numbered buildings along it, the numbers of the 2 closest buildings that bracket the culvert;
   b. If the public way has utility poles along it, the identification numbers of the 2 closest utility poles that bracket the culvert;
   c. If there are no numbered buildings or utility poles but the public way has mile markers, the numbers of the 2 closest markers that bracket the culvert; and
   d. If none of the information identified in a. through c. above, is available, the distance from the culvert to the nearest identifiable intersection, to the nearest 0.1 mile, plus any other information that is helpful in locating the culvert.
5. Whether the culvert was maintained, repaired, replaced, or modified;
6. Whether the work was done as part of a planned routine maintenance procedure or was unexpected;
7. If the work was not part of a planned routine maintenance procedure, an assessment of what caused the culvert to need to be repaired, replaced, or modified;
8. The size, type, and condition of the culvert prior to the maintenance, repair, replacement, or modification; and
9. The size, type, and condition of the culvert following the maintenance, repair, replacement, or modification.

Source. #10491, eff 12-21-14

Env-Wt 905.10 Suspension, Revocation, or Refusal to Renew Certificate.

(a) As provided in RSA 482-A:3, XIX, a certificate issued under this part may be suspended, revoked, or not renewed for just cause.

(b) Just cause to suspend, revoke, or refuse to renew a certificate shall include the following:

1. Installing culverts in violation of the requirements specified in Env-Wt 905.08(d);
2. Refusing to correct defective work;
3. Failing to use reasonable care, judgment, and application of his/her knowledge in the performance of his/her duties;
4. Failing to submit required quarterly reports;
5. Submitting false or misleading information regarding any application for an initial or renewal certificate; and
6. Obtaining any certificate through fraud, deceit, or intentional falsification.
(c) If after issuing a certificate the department receives information which indicates that just cause, as specified in (b), above, exists to suspend or revoke the certificate, the department shall proceed in accordance with RSA 541-A:30 and the provisions of Env-C 200 that apply to adjudicative proceedings.

(d) After proceeding in accordance with (c), above, the department shall revoke the certificate if the department determines that the certified individual:

1. Intentionally submitted false or misleading information on any application for an initial or renewal certificate or otherwise obtained a certificate through fraud, deceit, or falsification;

2. Repaired, replaced, or modified a culvert in violation of the requirements specified in Env-Wt 905.08(d) more than once in any 2-year period or in such a way as to cause water quality violations;

3. Refused to correct defective work;

4. Failed to use reasonable care, judgment, and application of his/her knowledge when maintaining, repairing, replacing, or modifying a culvert where such failure resulted in more than incidental damage to public or private property; or

5. Intentionally submitted false or misleading information on any quarterly report.

(e) An individual whose certificate has been revoked shall not be eligible to reapply for a new certificate for 2 years.

(f) After proceeding in accordance with (c), above, the department shall suspend the certificate if the department determines that the certified individual:

1. Negligently or inadvertently submitted false or misleading information regarding any application for an initial or renewal certificate;

2. Repaired, replaced, or modified a culvert in violation of RSA 482-A, Env-Wt 100 et seq., and best management practices to protect water quality, but:

   a. Did not do so more than once in any 2-year period; and

   b. Did not cause water quality violations;

3. Failed to use reasonable care, judgment, and application of his/her knowledge when maintaining, repairing, replacing, or modifying a culvert, where such failure resulted in no damage or only incidental damage to public or private property;

4. Negligently or inadvertently submitted false or misleading information on any quarterly report; or

5. Failed to submit required quarterly reports.

(g) If a certificate is suspended pursuant to (f), above, or (i)(2), below, the department shall not reinstate the certificate until the certified individual:

1. Remedies all violations, including as applicable:

   a. Providing accurate and complete information regarding an application for an initial or renewal certificate;

   b. Correcting any defective work that has not already been corrected;

   c. Providing corrected quarterly reports; and
d. Submitting all required quarterly reports;

(2) Completes an extra 2 hours of instruction from an approved provider in the area in which the reason for the suspension occurred; and

(3) Submits a written request to the department requesting that the certificate be reinstated, together with documentation that the requirements of (1) and (2), above, have been met.

(h) If after receiving a request for renewal of a certificate the department receives information which indicates that just cause, as specified in (b), above, exists to refuse to renew the certificate, the department shall proceed in accordance with (c), above.

(i) After proceeding in accordance with (c), above, the department shall:

(1) Refuse to renew the certificate, if the department determines that one or more of the reasons to revoke a certificate, as listed in (d), above, applies; or

(2) Renew the certificate and suspend it, if the department determines that one or more of the reasons to suspend a certificate, as listed in (f), above, applies.

(j) An individual whose certificate has been refused renewal shall not be eligible to reapply for a new certificate for 2 years.

(k) If the department renews a certificate and suspends it as specified in (i)(2), above, the department shall not reinstate the certificate until the certified individual has complied with (g)(1)-(3), above.

Source. #10491, eff 12-21-14

Env-Wt 905.11 Designation as Approved Provider.

(a) An organization that wishes to become an approved provider shall apply as specified in (d), below.

(b) Within 45 days of receiving a complete application to become an approved provider, the department shall:

(1) Determine whether the applicant has met the criteria specified in (e), below; and

(2) Notify the applicant in writing of its determination.

(c) If the department determines that the applicant has not met the criteria specified in (e), below, the notice sent pursuant to (b)(2) shall specify the reason(s) for the determination.

(d) To apply to become an approved provider, an organization shall submit the following in writing to the department:

(1) A description of the organization, including:

a. The organization’s name, mailing address, and daytime telephone number; and

b. If the organization is required by RSA 292, RSA 293, RSA 293-A, or other applicable provision of New Hampshire law to register with the New Hampshire secretary of state, proof of being registered and in good standing to do business in New Hampshire.

(2) The name, mailing address, daytime telephone number, and email address of an individual at the organization who can be contacted regarding the application;

(3) If approval is being sought for an entire curriculum, a list of the courses to be offered; and
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(4) A complete description of each course for which the organization is seeking approval, including:

a. The name of the course;
b. The name and qualifications of each individual who will present the course;
c. The length of time attendees of the course will be under the direct supervision of the instructor;
d. A syllabus for the course and the written materials to be used in the course;
e. The method to be used to evaluate attendees at the conclusion of the course; and
f. The format the organization will use to provide the documentation required by Env-Wt 905.04(b)(3)a. and Env-Wt 905.07(c)(3).

(e) The department shall designate an organization as an approved provider for the proposed curriculum or for one or more specific courses if the information submitted demonstrates that the curriculum or course(s), as applicable, will impart the information necessary for attendees to become knowledgeable in one or more of the areas identified in Env-Wt 905.03(b).

(f) An organization that has received approval for less than all of the courses it offers shall be an approved provider only as to the courses that have been submitted pursuant to Env-Wt 905.11(d)(4) and approved by the department.

Source. #10491, eff 12-21-14

APPENDIX A: STATUTES IMPLEMENTED

<table>
<thead>
<tr>
<th>RULE Section(s)</th>
<th>State Statute Implemented</th>
</tr>
</thead>
<tbody>
<tr>
<td>Env-Wt 900 (see Part below for specific paragraphs)</td>
<td>RSA 482-A:1 &amp; 3; RSA 482-A:11</td>
</tr>
<tr>
<td>Env-Wt 905</td>
<td>RSA 482-A:3, XVII through XIX</td>
</tr>
</tbody>
</table>

APPENDIX B: INCORPORATION BY REFERENCE INFORMATION

[None in this Part]

APPENDIX C: STATUTORY PROVISIONS ESTABLISHING THE CERTIFIED CULVERT INSTALLATION PROGRAM

RSA 482-A:3:

XVII. State and municipal public works employees who have fulfilled the requirements of a certification program developed by the department may maintain, repair, replace, or modify culverts up to a maximum diameter of 48 inches, or the hydraulic equivalent, as long as the structure can pass flows from the contributing watershed without causing damage to upstream or downstream properties, and in accordance with best management practices to protect water quality, without prior notification to the department.

XVIII. The department shall develop an installer’s certification program, in accordance with paragraph XVII, and shall determine the educational requirements for certification, including continuing education requirements. Professional engineers who are duly licensed by the New Hampshire board of professional engineers are exempt from the program requirements of this section. All certified individuals who perform such work shall submit a quarterly report to the department fully identifying work that they performed during each quarter and documentation of continuing education requirements.
XIX. The department shall issue an installer’s permit to any individual who submits an application provided by the department, and has satisfactorily completed the program in accordance with paragraphs XVII and XVIII. Permits shall be issued from January 1 and shall expire December 31 of every other year. Permits shall be renewable upon proper application, and documentation of compliance with the continuing education requirement of paragraph XVIII. The installer's permit may be suspended, revoked, or not renewed for just cause, including, but not limited to, the installation of culverts in violation of this chapter or the refusal by a permit holder to correct defective work. The department shall not suspend, revoke, or refuse to renew a permit except for just cause until the permit holder has had an opportunity to be heard by the department. An appeal from such decision to revoke, suspend, or not renew a permit may be taken pursuant to RSA 21-O:14.

APPENDIX D: ADDITIONAL APPLICABLE STATUTE

RSA 641:3 Unsworn Falsification. – A person is guilty of a misdemeanor if:

I. He or she makes a written or electronic false statement which he or she does not believe to be true, on or pursuant to a form bearing a notification authorized by law to the effect that false statements made therein are punishable; or

II. With a purpose to deceive a public servant in the performance of his or her official function, he or she:

(a) Makes any written or electronic false statement which he or she does not believe to be true; or

(b) Knowingly creates a false impression in a written application for any pecuniary or other benefit by omitting information necessary to prevent statements therein from being misleading; or

(c) Submits or invites reliance on any writing which he or she knows to be lacking in authenticity; or

(d) Submits or invites reliance on any sample, specimen, map, boundary mark, or other object which he or she knows to be false.

III. No person shall be guilty under this section if he or she retracts the falsification before it becomes manifest that the falsification was or would be exposed.