


PROCEDURE NUMBER: <i>ENV 1-15</i>	PROCEDURE NAME: <i>Stream Diversions</i>
ADOPTION DATE: <i>July 7, 2023</i>	LAST UPDATED: <i>July 7, 2023</i>
PROCEDURE APPROVED BY: <i>Chairperson, Policy & Records Workgroup</i>	SIGNATURE: 
RESPONSIBLE OFFICE: <i>Bureau of Environment</i>	CONTACT PERSON: <i>Administrator, Bureau of Environment</i>
RELATED POLICY: <u>ENV 1 Environmental Policy</u>	RELATED FORMS: <u>Best Management Practices for Routine Roadway Maintenance Activities in New Hampshire, 2019</u>

PURPOSE

The purpose of this procedure is to promote water quality protection through project-level documentation, and implementation of water quality control measures for compliance with NH Wetlands regulations (RSA 482-A, and PART Env-Wt 100-900, specifically Env-Wt 527.05(a), and Env-Wt 307.03) and Clean Water Act (CWA) Section 404 regulations (collectively referred to as “Wetlands Rules”) for the protection of Surface Waters of the State ([RSA 485-A:2,XIV](#)) (herein referred to as “Waters”), particularly riverine systems or streams. In some cases, these riverine waters will flow thorough active construction sites where they are likely, if not properly isolated, protected, and/or diverted, to receive construction-related sediment, and develop turbid conditions. Additional and special planning, as well as water quality control measures, may be necessary to obtain permits to make infrastructure improvements involving culverts, and closed drainage systems.

SCOPE

This procedure shall apply to all individuals needing to apply for, and/or are responsible for overseeing the development of, New Hampshire Standard Dredge and Fill Permit/CWA Section 404 Permit (collectively referred to as “Wetlands Permit Application” and “Wetlands Permit,” respectively) as part of the development of a project. This procedure applies to work in or around riverine Surface Waters of the State.

GENERAL PROVISIONS

- [RSA 485-A:2, XIV](#)
- [PART Env-Wt 100-900](#)
- [Env-Wq 1506.12\(e\) Sediment Control Methods: Temporary Stormwater Diversions](#)
- [Env-Wt 307.03\(c\)](#)

[Env-Wt 527.05 Construction Requirements for Public Highway Projects \(a\)](#) *“The permit shall be contingent on review and approval by the department [of environmental services] of final stream diversion and erosion control plans that detail the timing and method of stream flow diversion during construction and show temporary siltation, erosion, and turbidity control measures to be implemented...”*

DEFINITIONS

Definitions related to this procedure may be viewed on the SOS [Approved Definitions](#) page.

Riverine Waters – All wetlands and deepwater habitats associated with flowing water, characterized by the absence of trees, shrubs, or emergent vegetation. Riverine waters are generally bounded by upland areas to the lateral edges of the channel, and by lacustrine or estuarine systems downstream where they drain into a stationary waterbody.

Surface Waters of the State – Pursuant to RSA 485-A:2,XIV, perennial and seasonal streams, lakes, ponds, and tidal waters within the jurisdiction of the state, including all streams, lakes, or ponds bordering on the state, marshes, water courses, and other bodies of water, natural or artificial.

Water Quality Control Measures – Pursuant to Env-Wt 104.47, methods, practices, and devices that are designed and implemented to prevent or minimize erosion, siltation, or turbidity, or any combination thereof. The term includes but is not limited to phased construction, vegetated filter strips, geotextile silt fences, stormwater detention and infiltrations systems, sediment detention basins, and any other method, practice or device identified in Env-Wq 1506 through Env-Wq 1508. Water quality control measures are also referred to as Stormwater Control Measures (SCMs), formerly known as Best Management Practices (BMPs).

RESPONSIBILITY

1. Design Lead
 - a. As applicable, ensure that NHDOT projects are designed in accordance with the Wetlands Rules.
 - b. Verify that a consultant project demonstrates compliance with the Wetlands Rules, as applicable.
2. Construction Lead/Contract Administrator - As applicable, ensure that NHDOT projects are constructed in accordance with contract plans, and the Wetlands Rules.
3. Environmental Manager
 - a. Assist with understanding the applicability of the Wetlands Rules, as well as promoting compliance.
 - b. Coordinate among Design Lead, the Bureau of Environment (BOE) Water Quality Program, and BOE Wetlands Program to determine applicability of water quality control measures for Waters on individual projects.

4. Environmental Coordinator
 - a. Assist with understanding the applicability of the Wetlands Rules, as well as ensuring compliance during construction with water quality control measures.
 - b. Coordinate among construction staff, Environmental Manager, BOE Water Quality Program Manager, BOE Wetlands Program Manager, as needed to ensure construction activities comply with Wetlands Permits and water quality control measures.
5. BOE Water Quality Program
 - a. Assist the Design Lead to ensure projects are designed in accordance with the water quality control measures of the Wetlands Rules.
 - b. Promote the discussion of necessary water quality information for projects reviewed at Monthly Natural Resource Agency Coordination Meetings.
 - c. Provide necessary water quality documentation to the BOE Wetlands Program Manager for inclusion in Wetlands Permit Applications.
6. BOE Wetlands Program
 - a. Ensure Wetlands Permit Applications include necessary water quality control measures.
 - b. Ensure that projects are designed in compliance with the Wetlands Rules.
 - c. Promote the discussion of necessary water quality information for projects reviewed at Monthly Natural Resource Agency Coordination Meetings.
7. BOE Administrator
 - a. Approve environmental documentation identifying project impacts/compliance, including any wetlands requirements.
 - b. Ensure that this procedure is followed for NHDOT-sponsored projects.

PROCEDURES

1. When applying for a Wetlands Permit for a project, the Environmental Manager shall coordinate with the Design Lead, Environmental Coordinator, Wetlands Program Manager, and/or Water Quality Program Manager, to determine if there is a need for a stream diversion(s) in the project.
2. If applicable, the Water Quality Program Manager shall coordinate among the Design Lead, Wetlands Program, Environmental Coordinator, and the Environmental Manager to ensure that Waters and wetlands within construction sites are depicted on project plans, including Erosion Control Plans, submitted with the Wetlands Permit Application.
3. Waters within the construction site will be depicted on the Erosion Control Plans as follows:
 - a) **Unimpacted Riverine Surface Waters of the State (URS)** –Riverine Waters that pass through a construction site and upon which there is no proposed work, and/or impact.
 - b) **Routine Roadway Qualifying Activity (RQA)** – A work location where riverine Waters pass through a construction site, and where proposed work would qualify for activities specified in the NHDOT manual: *Best Management Practices for Routine Roadway*

Maintenance Activities in New Hampshire, 2019, specifically work on a culvert or culverts with a combined opening up to 48" in diameter (or 12.5 square feet).

- c) **Stream Diversion (SD)** – A work location where riverine Waters pass through a construction site, and where the proposed work would **not** qualify for activities specified in the NHDOT manual: *Best Management Practices for Routine Roadway Maintenance Activities in New Hampshire, 2019*, specifically because the culvert or culverts have a combined opening greater than 48" in diameter (or 12.5 square feet).

4. Review and Approval

- a) URS – Because URS will have no impacts or work, there shall be no special permitting approvals related thereto. These riverine Waters shall be protected from any work and/or impacts at all times during construction.
- b) RQA – The work at these locations shall be approved as part of the Wetlands Permit Application. However, since the work would have otherwise qualified for applicability under the NHDOT manual: *Best Management Practices for Routine Roadway Maintenance Activities in New Hampshire, 2019*, based specifically on a culvert or culverts with a combined opening less than or equal to 48" in diameter (or 12.5 square feet), no additional authorization or approval would be needed by NHDES in construction, provided that the protective techniques described in the manual are employed and maintained.
- c) SD – The work at these locations shall be approved by NHDES during construction. As these locations generally carry riverine Waters in a culvert or culverts with a combined opening greater than 48" in diameter (or 12.5 square feet), location-specific water quality control measures will be developed into a final Stream Diversion Plan by NHDOT and submitted to NHDES for approval with the Wetlands Permit Application. Or, if the SD will be submitted during construction, provisions will be included in the contract documents requiring the Contractor to submit a final Stream Diversion Plan through NHDOT, for approval by NHDES prior to the start of work at the SD.

5. As applicable, the Design Lead and Environmental Manager, in consultation with the BOE Wetlands Program and BOE Water Quality Program, shall prepare documentation demonstrating project compliance with RQAs or SDs, or include appropriate items in the contract documents to ensure water quality control measures (Env-Wt 307.03(c)) are implemented during construction.

6. Consistent with Env-Wq 1506.12(e), SDs shall convey the 2-year, 24 hour design storm without overtopping. However, in instances where the 2-year, 24 hour storm capacity cannot be met, the following information shall be provided to NHDES for approval:

- a) Explanation as to why the 2-year, 24 hour storm cannot be accommodated;
- b) Flow calculation of the 2-year storm;
- c) Capacity of the proposed bypass pipe, pump(s), or system;
- d) Explanation as to how water quality will be maintained should overtopping occur; and
- e) The timeframe for installation and removal of the bypass system.

TRAINING

All NHDOT staff completing environmental review and/or water quality designs, as well as Construction and Operations personnel, shall be made aware of this procedure. The procedure will also be made available to external organizations completing environmental reviews on behalf of NHDOT.

DISCIPLINE

Disciplinary action related to this procedure can be found in the referenced policy.

AMENDMENT RECORD

This procedure shall be reviewed every two years to ensure its continuing relevance and accuracy. The record of amendments is recorded below.

Date	Comments	Name	Authority
7/7/2023	Original Procedure Adopted	Andre Briere	Deputy Commissioner