

Stormwater Management Program (SWMP)

DERRY

14 Manning Street NH 03038

EPA NPDES Permit Number NHR041005

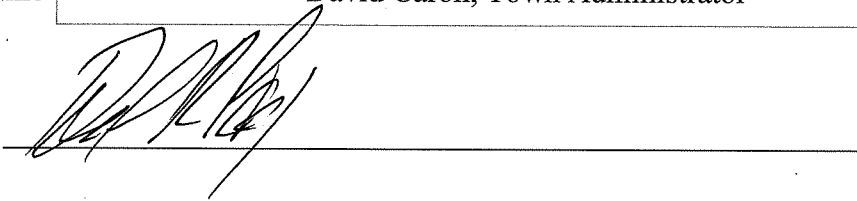
Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Printed Name

David Caron, Town Administrator

Signature



Date

7/12/22

Background

Stormwater Regulation

The Stormwater Phase II Final Rule was promulgated in 1999 and was the next step after the 1987 Phase I Rule in EPA's effort to preserve, protect, and improve the Nation's water resources from polluted stormwater runoff. The Phase II program expands the Phase I program by requiring additional operators of MS4s in urbanized areas and operators of small construction sites, through the use of NPDES permits, to implement programs and practices to control polluted stormwater runoff. Phase II is intended to further reduce adverse impacts to water quality and aquatic habitat by instituting the use of controls on the unregulated sources of stormwater discharges that have the greatest likelihood of causing continued environmental degradation. Under the Phase II rule all MS4s with stormwater discharges from Census designated Urbanized Area are required to seek NPDES permit coverage for those stormwater discharges.

Permit Program Background

On May 1, 2003, EPA Region 1 issued its Final General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (2003 small MS4 permit) consistent with the Phase II rule. The 2003 small MS4 permit covered "traditional" (i.e., cities and towns) and "non-traditional" (i.e., Federal and state agencies) MS4 Operators located in the states of Massachusetts and New Hampshire. This permit expired on May 1, 2008 but remained in effect until operators were authorized under the 2016 MS4 general permit, which became effective on July 1, 2018.

Stormwater Management Program (SWMP)

The SWMP describes and details the activities and measures that will be implemented to meet the terms and conditions of the permit. The SWMP accurately describes the permittees plans and activities. The document should be updated and/or modified during the permit term as the permittee's activities are modified, changed or updated to meet permit conditions during the permit term. The main elements of the stormwater management program are (1) a public education program in order to affect public behavior causing stormwater pollution, (2) an opportunity for the public to participate and provide comments on the stormwater program (3) a program to effectively find and eliminate illicit discharges within the MS4 (4) a program to effectively control construction site stormwater discharges to the MS4 (5) a program to ensure that stormwater from development projects entering the MS4 is adequately controlled by the construction of stormwater controls, and (6) a good housekeeping program to ensure that stormwater pollution sources on municipal properties and from municipal operations are minimized.

Town Specific MS4 Background (optional)

Small MS4 Authorization

The NOI was submitted on: **September 28, 2018**

The NOI is posted by EPA at the web address below upon approval by EPA:

<https://www.epa.gov/npdes-permits/regulated-ms4-new-hampshire-communities>

The NOI is posted by Town at the web address:

https://www.derrynh.org/sites/g/files/vyhlf3026/f/pages/derry_ms4gp_nhr041005_noi_final_signed_attachment_1.pdf

Authorization to Discharge was granted on: **August 21, 2019**

The Authorization Letter can be found (document name or web address):

https://www.derrynh.org/sites/g/files/vyhlf3026/f/pages/nh_ms4_authorization_derry_nhr041005.pdf

Stormwater Management Program Team

SWMP Team Coordinator

Name: Michael Fowler Title: Director of Public Works

Department: Public Works

Phone Number: 603-432-6144 Email: mikefowler@derrynh.org

Responsibilities: Overall coordination with Program Team members, assignment of responsibilities, development of Department budget.

SWMP Team

Name Craig Durrett Title Environmental Coordinator

Department Public Works

Phone Number 603-432-6144 Email craigdurrett@derrynh.org

Responsibilities: Team lead for preparation and implementation of the SWMP, facility inspections, stormwater infrastructure and illicit discharge inspections, data collection, and code enforcement, and reporting.

Name Alan Cote Title Superintendent of Operations

Department Public Works

Phone Number 603-432-6144 Email alancote@derrynh.org

Responsibilities: Overall compliance with the SWMP as it relates to the Highway Division and Buildings and Grounds Division, the Highway garage, salt storage facility, and implementation of relevant parts of the SWMP including operating and maintenance of the Town's stormwater infrastructure, and implementation of the Town's Salt Reduction Plan, Division budgeting and staff assignment.

Name: Thomas Carrier Title: Deputy Director, Public Works

Department: Public Works

Phone Number: 603-432-6144 Email: tomcarrier@derrynh.org

Responsibilities: Overall compliance with the SWMP as it relates to the Water and Sewer Department, Asset Management, operation and maintenance of the Wastewater Treatment Facility and sanitary Sewer infrastructure, responding to SSOs, Division budgeting and staff assignment.

Name: Kim Walsh

Title: Parks and Recreation

Department: Public Works

Phone Number: 603-432-6136

Email: kimwalsh@derrynh.org

Responsibilities: Overall compliance with SWMP as it relates to the operation and maintenance of the Town's parks and recreation facilities, athletic fields, and Town beaches.

Receiving Waters

The following table on the next page lists all receiving waters, their identified impairments, and known number of outfalls discharging to each waterbody segment as of June 2022. Listed impairments are subject to change by NHDES and USEPA adds or removes waterbody segments from based on revised or updated information. The current number of outfalls listed only identifies Town-owned outfalls and not those owned by the State (NH DOT and NH Courts System) or private entities. As information becomes available, State- and privately-owned outfalls are being included in the Town's stormwater system mapping program.

Eligibility: Endangered Species and Historic Properties

*Reminder: The proper consultations and updates to the SWMP must be conducted for construction projects related to your permit compliance where Construction General Permit (CGP) coverage, which requires its own endangered species and history preservation determination, is NOT being obtained. U.S. Fish and Wildlife Service (if applicable)

Attachments:

- The results of Appendix C U.S. Fish and Wildlife Service endangered species screening determination
- The results of the Appendix D historic property screening investigations

If applicable, any documents from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), or other Tribal representative to mitigate effects

These attachments are required within one year of the permit effective date and are:

- Attached to this document (document names listed below)
 - USDOI-Fish and Wildlife Service letter, 1/8/18
 - US Fish and Wildlife Information, Planning, and Conservation (IPaC) System Mapping Tool Report, 7/23/18
 - Map: New England Rivers and Subwatersheds Where ESA-Listed Shortnose and Atlantic sturgeon under NMFS Jurisdiction Occur
 - Publicly available at the website listed below
-

Under what criterion did permittee determine eligibility for ESA?

- Criterion A Criterion B **Criterion C**

Under what criterion did permittee determine eligibility for Historic Properties?

- Criterion A** Criterion B Criterion C Criterion D

Below add any additional measures for structural controls that you're required to do through consultation with U.S. Fish and Wildlife Service (if applicable):

None

Below add any additional measures taken to avoid or minimize adverse impacts on places listed, or eligible for listing, on the NRHP, including any conditions imposed by the SHPO or THPO (if applicable):

None

MCM 1

Public Education and Outreach

Permit Part 2.3.2

Objective: The permittee shall implement an education program that includes educational goals based on stormwater issues of significance within the MS4 area. The ultimate objective of a public education program is to increase knowledge and change behavior of the public so that the pollutants in stormwater are reduced.

BMP 1A: Signs – Dog Waste Ordinance

Document Name: Signs – Ordinance to Clean up after your dog

Description: Signs installed in problem areas stating the threat of leaving dog waste and informing the public that cleaning up after their dog is required by law.

Targeted Audience: Residents (Dog owners and dog walkers) and visiting workforce that bring their dogs to work that walk them in two areas downtown identified as problem areas: Derry Municipal Center and Hood Pond Park.

Responsible Department/Parties: Public Works (Buildings and Grounds), Parks and Recreation

Measurable Goal(s): Reduction in volume of dog waste picked up by Derry’s Buildings and Grounds Department and a reduction in frequency of elevated bacteria in nearby surface water.

Message Date(s): Continuous, started in 2018 (Year 2)

BMP 1B: Pet Waste & Water Quality and/or Scoop the Poop Campaign

Document Name and/or Web Address:

- 1) “*Pet Waste and Water Quality: It’s not just on the Lawn, It’s in Your Water*” (Flyer)
- 2) “*I Poop, You Scoop*” (Postcard Mailer or Bi-fold Brochure/Pledge Form)
- 3) Updated webpage

Description:

The “*Pet Waste and Water Quality*” flyer is available at kiosks, handed to participants at HHW collection events, and posted on Town website. The flyer is also distributed to Beaver Lake Improvement Association members during summer meeting and for posting on their own website.

A bifold brochure or mailer postcard stating the problem with dog waste, highlighting the benefit of cleaning up and properly disposing of dog waste, and encouraging dog owners to voluntarily take an online pledge that they will clean up after their dog. The brochure includes a QR code and a link to access the State of our Estuaries website and take the pledge. The brochure or similar information will be posted on the Town Clerk’s dog licensing web page and/or the Public Works.

Targeted Audience: Residents (Dog Owners)

Responsible Department/Parties:

- Public Works/Environmental Division – Prepare brochure and outreach material, distribute to Town Clerk for mailing, place at town kiosks (Town Hall, Parks and Recreation Department), distribute at events.
- Town Clerk’s Office – Mailing to dog owners of record. (Due to confidential nature of dog owners’ licensing information, only the Town Clerk’s office can conduct mailing.)

Measurable Goal(s):

- Monitor the number of flyers taken at different kiosks or distributed
- Number of brochures mailed to dog owners of record
- Number of dog owners that voluntarily took the pledge

Message Date(s): May-June 2020 (Year 2) and annually thereafter

BMP 1C: Septic System Maintenance for Homeowners

Document Name: Brochure – *Do Your Part-Be SepticSmart-A simple guide to the proper care and maintenance of your septic system (EPA-832-B-12-003 September 2012)*

Description: A 4-fold brochure template prepared by USEPA for homeowners on the importance of maintaining their septic system. Brochures are edited with links for additional information. Distribution will be through Town kiosks (Derry Municipal Center, Parks and Recreation), and electronic version posted on the Town website.

Targeted Audience: Residents (Homeowners with Septic Systems)

Responsible Department/Parties: Public Works-Environmental Division

Measurable Goal(s): Number of brochures taken from the kiosks

Message Date(s): Continuous, starting in 2019 (Year 2)

BMP 1D: SepticSmart Week Outreach

Document Name: SepticSmart Week Outreach

Description: Issue press release regarding Annual SepticSmart week in September, raising awareness among homeowners with septic systems about proper care and maintenance of their septic system.

Targeted Audience: Residents (Homeowners with septic systems)

Responsible Department/Parties: Public Works Environmental Division with assistance from Big Island Pond Corporation

Measurable Goal(s): Press release published in local paper and number of residents reached via newsletter.

Message Date(s): September 2019 (Year 2) and annually thereafter

BMP 1E: Winter Salt Management

Document Name:

- Snow and Ice Removal for the Business Owner-Clean Water and Safe Parking Lots (NHDES WD-WMD-24 2014)
- NH Certified Green SnowPro Business Flyer (NHDES)

Description: Post information on Town Website with downloadable brochure regarding salt reduction and the Green SnowPro Program

Targeted Audience: Businesses, Institutions, and Commercial Facilities

Responsible Department/Parties: Public Works

Measurable Goal(s): Number of brochures collected or distributed

Message Date(s): Continuous, start in 2018

BMP 1F: Proper Fertilizer Use and Yard Waste Management

Document Name and/or Web Address:

Green Grass and Clear Water Pamphlet/Brochure for fertilizer use and management of yard waste

Description: Distribution and promotion of flyer produced by UNH Cooperative Extension and NH Sea Grant outlining simple recommendations to keep lawns healthy while reducing water quality impacts - including proper fertilizer techniques and disposal of grass clippings.

Brochures will be available at Town kiosks and an electronic version on the Town website.

Targeted Audience: Residents (homeowners) and/or Businesses and Institutions

Responsible Department/Parties: Public Works

Measurable Goal(s): Number of brochures distributed and/or taken from kiosks, number of hits on website, and/or number of residents reached via newsletter.

Message Date(s): 2019 (spring)

BMP 1G: Sedimentation and Erosion Control Requirements

Document Name and/or Web Address: Construction Site Erosion Control brochure

Description: Informational brochure summarizing erosion and sediment control requirements for developers during construction. Provide to developers when submitting site plans for review. E-version will be posted on webpage when available.

Targeted Audience: Developers (construction)

Responsible Department/Parties: Public Works/Planning Department w/assistance from planning commission

Measurable Goal(s): Number of developers reached/brochures distributed

Message Date(s): 2023

BMP 1H: Stormwater Pollution Prevention for Industrial Sites

Document Name and/or Web Address: Stormwater Pollution Prevention at Industrial Facilities Pamphlet or informational Sheet

Description: A pamphlet or informational sheet summarizing MSGP requirements and BMPs for stormwater pollution prevention. Information will be posted on the Town website and distributed to permitted MSGP industries in Town.

Targeted Audience: Industrial Facilities

Responsible Department/Parties: Public Works

Measurable Goal(s): Number of brochures distributed/Number of facilities reached

Message Date(s): 2020

BMP 1I: Fleet Maintenance/Pollution Prevention Flyer

Document Name and/or Web Address:

Fleet Maintenance for Pollution Prevention informational brochure or flyer

Description: Informational flyer or brochure describing Fleet maintenance best management practices for proper maintenance and pollution prevention.

Targeted Audience: Commercial or industrial facilities with fleets of vehicles

Responsible Department/Parties: Public Works

Measurable Goal(s): Number of flyers distributed/number of industries reached

Message Date(s): 2022

BMP 1J: Green Landscaping for Water Quality

Document Name: Green Landscaping for Water Quality Pamphlet/Flyer

Description: Brochure/Flyer promoting environmentally sensitive landscaping and regulations regarding turf law and applicability of Shoreland Protection Act to landscaping in Derry. Brochures were available at Town kiosks, on Town website, and mailed to landscaping companies known to work in the Town of Derry and surrounding towns.

Targeted Audience: Businesses, Institutions and Commercial Facilities (Primarily landscaping companies) and Do-It-Your Landscaping enthusiasts

Responsible Department/Parties: Public Works

Measurable Goal(s): Number of brochures distributed/mailed and number of class registrants

Message Date(s): 2022

BMP 1K: Low Impact Development

Document Name and/or Web Address: Low Impact Development Brochure

Description: Flyer or Brochure on allowable Low Impact Development that can be used to reduce the impact of development on stormwater pollution and promote onsite recharge.

Targeted Audience: Developers

Responsible Department/Parties: Public Works, Planning, Engineering

Measurable Goal(s): Developers reached and made aware about low impact development options and incorporated into new development.

Message Date(s): 2023

BMP 1L: New 2022 Construction General Permit - Inspector Requirements

Document Name and/or Web Address: New 2022 Construction General Permit Flyer & Cover Letter

Description: Informational brochure summarizing new requirements under the revised 2022 EPA Construction General Permit and focusing on the requirement to have a certified stormwater inspector.

Targeted Audience: Developers and Demolition Companies, and their engineering consultants

Responsible Department/Parties: Public Works

Measurable Goal(s): Number of developers reached/brochures distributed

Message Date(s): June 2022

MCM 2
Public Involvement and Participation
Permit Part 2.3.3

Objective: The permittee shall provide opportunities to engage the public to participate in the review and implementation of the permittee's SWMP.

BMP 2A: Public Review of Stormwater Management Program

Location of Plan and/or Web Address: To Be Posted on Website

Responsible Department/Parties: Public Works

Measurable Goal(s): Stormwater Management Plan is publicly available for review at all times.

BMP 2B: Public Participation in Stormwater Management Program Development

Description: Provide opportunity for public to comment on the program or be involved in the implementation of the Stormwater Management Plan. The Town works with two local watershed groups, Beaver Lake Improvement Association and the Friends of Big Island Pond, to promote involvement and outreach. Members of these groups participate in VLAP monitoring.

Responsible Department/Parties: Public Works

Measurable Goal(s): Annual public input provided.

BMP 2C: Catch Basin Stenciling

Description: The Town has several stencils available that read “No Dumping, Drains to Wetland” or “No Dumping, Drains to Stream”. The Town makes these stencils and marking paint available to various groups including Beaver Lake Improvement Association, Girl Scouts, Boy Scouts, student organizations, or other interested groups. The Town coordinates with the groups on their selection of streets to avoid conflicts with road work and paving projects.

Responsible Department/Parties: Public Works with local organizations/groups

Measurable Goal(s): The number of interested individuals or groups conducting stenciling and the number of catchbasins stenciled.

BMP 2D: Shoreline Cleanups

Description: Two shoreline cleanups are performed each year, Spring and Fall. The cleanups are organized and performed by members of the Beaver Lake Improvement Association. The Spring event is held in coordination with the Town-wide Spring Cleanup days. The Town provides all trash bags and picks up full bags the week

following each cleanup.

Responsible Department/Parties: Participation by Beaver Lake Improvement Association with Public Works assistance.

Measurable Goal(s): Participation by the shoreline residents and the interested groups/lake association, and miles of shoreline cleaned up.

BMP 2E: Roadside Cleanups

Description: Annual Roadside Cleanup Day occurs in April each year. The Town advertises the event, provides all trash bags to the public, and picks up full trash bags the week following each cleanup weekend.

Responsible Department/Parties: Public Works Transfer Station coordinates with Residents.

Measurable Goal(s): Participation by residents, number of streets and/or the miles of roads cleaned up.

BMP 2F: Annual Household Hazardous Waste Collection Event

Description: Hold annual Household Hazardous Waste Collection Event in May each year for the residents of Derry and Londonderry. The Town of Londonderry sponsors a separate event in November each year for residents of both towns. The event allows residents of each town to legally and properly dispose of household hazardous waste from their home. The event is also used to spread outreach materials directly to residents. Outreach brochures on the Town's website promoting health and safety and HHW reduction as well as stormwater pollution prevention including:

- *Alternative Household Products*
- *Hazardous Materials in your Home*
- *Green Painting Techniques*
- *Proper handling and disposal of yard waste*
- *Pet Waste*

Responsible Department/Parties: Public Works Environmental Division coordinates, advertises, and runs the event. Residents participate

Measurable Goal(s): Number of cars, households and residents represented and reached by outreach material and the volume of waste received.

BMP 2G: Landscaping for Water Quality Class

Document Name: Landscaping for Water Quality 2-Day Class

Description: In partnership with UNH-T2 and NHDES, the Town of Derry co-hosted a 2-day training for landscapers and landscaping enthusiasts promoting environmentally sensitive landscaping and regulations regarding turf law and applicability of Shoreland Protection Act to landscaping in Derry and surrounding communities. Brochures were available at Town kiosks, on Town website, and mailed to landscaping companies known to work in the Town of Derry and surrounding towns.

Targeted Audience: Groundskeeping personnel, landscaping companies, and Do-It-Your landscaping enthusiasts

Responsible Department/Parties: Public Works

Measurable Goal(s): Number of brochures distributed/mailed and number of class registrants

Message Date(s): 2021

MCM 3
**Illicit Discharge Detection and
Elimination (IDDE) Program**
Permit Part 2.3.4

Objective: The permittee shall implement an IDDE program to systematically find and eliminate illicit sources of non-stormwater discharges to its municipal separate storm sewer system and implement procedures to prevent such discharges.

BMP 3A: IDDE Legal Authority

Completed (by May 1, 2008) ☒

Ordinances Link or Reference: Chapter 131 Stormwater Management <https://ecode360.com/13121730>

Department Responsible for Enforcement: Code Enforcement w/support from DPW

BMP 3B: Sanitary Sewer Overflow (SSO) Inventory

Completed (by year 1) ☒

Document Name and/or Web Address: Sanitary Sewer Overflow (SSO) Inventory

Description: Annually track and report the following SSO information: the location; a clear statement of whether the discharge entered a surface water directly or entered the MS4; date(s) and time(s) of each known SSO occurrence; estimated volume(s) of the occurrence; description of the occurrence indicating known or suspected cause(s); mitigation and corrective measures completed with dates implemented; and mitigation and corrective measures planned with implementation schedules. Update inventory as needed.

Responsible Department/Parties: DPW Asset Manager and Sewer Department

Measurable Goal(s): Maintain an SSO inventory of the previous five years and report in the Annual Report.

SSO Reporting:

In the event of an overflow or bypass, a notification must be reported within 24 hours by phone to EPA. Follow up the verbal notification with a written notification to EPA and NHDES within five days of becoming aware of the SSO occurrence. (Note: This is a redundant effort already covered under the existing NPDES permit for the Town's Wastewater Treatment Facility.)

<p>The NHDES contacts are: NHDES Water Division Wastewater Engineering Bureau 29 Hazen Drive, PO Box 95 Concord, NH 03302-0095 (603) 271-3503</p>	<p>The EPA contacts are: USEPA New England 5 Post Office Square Suite 100 Boston, MA 02109-3912 (617) 918-1510</p>
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BMP 3C: Map of Storm Sewer System

Phase I Completed (by year 2)

Phase II Completed (by year 10) Stormwater Sanitary Sewer Completed in 2015

Document Location and/or Web Address:

The Draft Derry Stormwater Infrastructure Map can be viewed at:

https://www.derrynh.org/sites/derrynh/files/uploads/2018_derry_storm_water_infrastructure_map.pdf

Description: Maintain a stormwater infrastructure map within the Town’s GIS. The map will be added into the Derry Asset Management Program incorporating information in the Measurable Goals below.

Responsible Department/Parties: Public Works, IT, Utility Assets Coordinator, outside contractor

Measurable Goal(s):

Within 2 years of the permit's effective date, map 100% of outfalls and receiving waters, open channel conveyances, interconnections with other MS4s and other storm sewer systems, municipally owned stormwater treatment structures, waterbodies identified by name and indication of all use impairments, and initial catchment delineations.

Within 10 years of the permit's effective date, map 100% of outfall spatial locations, pipes, manholes, catch basins, refined catchment delineations, municipal sanitary sewer system (if available), and municipal combined sewer system (if applicable).

BMP 3D: IDDE Program- Development and Implementation

Written Document Completed (by year 1)

Document Location: Department of Public Works, Derry Municipal Center

Description: Written document describing procedure for inspecting outfalls both as routine inspections required under the MS4GP and procedures for responding to complaints or reports of illicit discharge. Document includes SOPs for dry weather screening, wet weather screening, outfall sampling, and catchment investigations.

Responsible Department/Parties: Public Works, Code Enforcement

Measurable Goal(s):

July 1, 2021 - Conduct 100% of dry weather outfall screening on High and Low Priority Outfalls within 3 years of the permit's effective date.

July 1, 2025 - Complete catchment investigations for 100% of the Problem Outfalls within 7 years of the permit's effective date.

July 1, 2028 - Complete 100% of all catchment investigations and wet weather screening within 10 years of the permit's effective date.

The initial ranking of outfalls is included in the IDDE Plan.

The outfall/interconnection inventory and the dry weather outfall and interconnection screening and sampling results can be found: Upon completion, will be maintained at the Department of Public Works, Derry Municipal Center. Updates will be reported in the annual report.

BMP 3E: Employee Training

Description: The Town continues to provide various training to town field personnel on IDDE, stormwater pollution prevention, sedimentation and erosion control Best Management Practices, Good Housekeeping, and identifying and responding to spills.

Certain training programs (Green SnowPro program, Road Scholar erosion control, etc.) are provided through outside/third parties including UNH Technology Transfer Center. Other training will be provided during in-house training sessions.

Responsible Department/Parties: Department of Public Works – hold in-house training and/or coordinate with UNH-T2 to schedule on- or off-site training.

Measurable Goal(s): Training will occur annually on Department agreed upon dates, as scheduled by third party, or when certification renewal is required. Goals will be measured by the number of employees trained and the types of training sessions held or attended.

MCM 4

Construction Site Stormwater Runoff Control

Permit Part 2.3.5

Objective: The objective of an effective construction stormwater runoff control program is to minimize or eliminate erosion and maintain sediment on site so that it is not transported in stormwater and allowed to discharge to a water of the U.S. through the permittee's MS4.

BMP 4A: Sediment and Erosion Control Ordinance and Regulations

Completed (by May 1, 2008) (Updated 2022)

Ordinance Link or Reference:

Stormwater Management Ordinance:

<https://ecode360.com/13121730>

Stormwater System Design Regulations:

https://www.derrynh.org/sites/g/files/vyhlf3026/f/uploads/derry_nh_storm_water_system_design_regulations_-_final.pdf

Land Development Control Regulations:

<https://ecode360.com/7626031>

Department Responsible for Enforcement: Code Enforcement/Department of Public Works/Engineering

BMP 4B: Site Plan Review Procedures

Written procedures completed (by year 1)

Document Name and/or Web Address: <https://www.derrynh.org/public-works/pages/forms-applications>

Description: Site plan review procedures and application forms used vary depending on whether it is a change or expansion in use or new development. Procedures and application forms are described in one of more of the following documents at the above web address:

- *Change in Use Form*
- *Change/Expansion of Use*
- *Excavation Application*
- *Subdivision-Site Plan Application*
- *Subdivision and Site Plan Process*

Responsible Department/Parties: Public Works (Engineering, Highway, Environmental, Water/Sewer), Planning Department, Planning Board, Code Enforcement, Police Department, Fire Department

Measurable Goal(s): Conduct site plan review of 100% of projects according to the procedures outlined above.

BMP 4C: Site Inspections and Enforcement of Sediment and Erosion Control Measures Procedures

Completed (by year 1)

Document Name and/or Web Address:

Subdivision & Site Plan Construction Monitoring, Procedures & Checklist – January 2011

https://www.derrynh.org/sites/g/files/vyhlif3026/f/uploads/subdivison_and_site_plan_construction_monitoring_procedures_and_checklist_2011.pdf

Description:

The booklet discusses procedures for observing construction of subdivisions and related activities being performed in the Town of Derry. The procedures are based upon the Town of Derry Zoning Ordinance, Subdivision Regulations, Site Plan Regulations, Utility Construction Specifications and other pertinent Town Codes. It outlines the relationship between the Developer, the Developer's Contractor and Engineer and the Town of Derry.

Responsible Department/Parties: Public Works-Engineering Division

Measurable Goal(s):

Inspect 100% of construction sites as outlined in the above document and take enforcement actions as needed.

BMP 4D: Waste Control

Completed (by year 1) completed May 1, 2008

Ordinance Link or Reference:

Stormwater System Design Regulations:

https://www.derrynh.org/sites/g/files/vyhlif3026/f/uploads/derry_nh_storm_water_system_design_regulations_-_final.pdf

Description:

The regulation includes requirements to control wastes, discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes. These requirements are also included by reference to current recognized best management practices documents and guidelines that require development of SWPPPs that specifically cite these requirements.

Department Responsible for Enforcement: Public Works Engineering

MCM 5

Post Construction Stormwater Management in New Development and Redevelopment

Permit Part 2.3.6

Objective: The objective of an effective post construction stormwater management program is to reduce the discharge of pollutants found in stormwater to the MS4 through the retention or treatment of stormwater after construction on new or redeveloped sites and to ensure proper maintenance of installed stormwater controls.

BMP 5A: Require As-Built Plans for On-site Stormwater Control

Completed (by year 1) completed in 2008

Town Regulation Link:

Land Development Control Regulations:

<https://ecode360.com/7626031>

Stormwater System Design Regulations:

https://www.derrynh.org/sites/g/files/vyhlf3026/f/uploads/derry_nh_storm_water_system_design_regulations_-_final.pdf

Description: Requirement for a) submission of as-built drawings including all stormwater control structures and BMPs and b) preparation and submittal of a site-specific stormwater operation and maintenance plan.

Department Responsible for Enforcement: Engineering

Measurable Goal(s):

- Receipt of as-builts as required
 - Receipt of stormwater O&M plan
-

BMP 5B: Post-Construction Ordinance or Regulation

Completed (by year 2) completed in 2008

Town Regulation Link:

Stormwater System Design Regulations:

https://www.derrynh.org/sites/g/files/vyhlf3026/f/uploads/derry_nh_storm_water_system_design_regulations_-_final.pdf

Department Responsible for Enforcement: Engineering, Building Department/Code

Enforcement

BMP 5C: Street Design and Parking Lot Guidelines Report (combined with BMP 5D)

Written procedures completed (by year 4)

Document Name and/or Web Address: *Assessment of Street Design and Parking Lot Guidelines & Implementation of Low Impact Development and Green Infrastructure Report – June 2022*

Description: A report assessing current street design and parking lot guidelines and other local requirements that affect the creation of impervious cover. Use assessment information to determine if the design standards for streets and parking lots can be modified to support low impact design options. If the assessment indicates that modifications can be made, the assessment shall include recommendations and proposed schedules to incorporate policies and standards into relevant documents and procedures to minimize impervious cover attributable to parking areas and street designs.

Responsible Department/Parties: Public Works (Highway, Engineering, Environmental) and Planning Department, Planning Board, as assigned.

Measurable Goal(s):

- Completion of a Street Design and Parking Lot Guidelines Review Report
- If necessary, implementation of feasible recommendations identified in the report, if any, as per recommended schedule and report progress annually.

BMP 5D: Green Infrastructure Report (combined with BMP 5C)

Completed (by year 4)

Document Name and/or Web Address: *Assessment of Street Design and Parking Lot Guidelines & Implementation of Low Impact Development and Green Infrastructure Report – June 2022*

Description:

A report assessing existing local regulations including, but not limited to, zoning and construction codes to determine the feasibility of making the following green infrastructure practices allowable when appropriate site conditions exist:

- Green roofs;
- Infiltration practices such as rain gardens, curb extensions, planter gardens, porous and pervious pavements, and other designs to manage stormwater using landscaping and structured or augmented soils; and

- Water harvesting devices such as rain barrels and cisterns, and the use of stormwater for non-potable uses.

The assessment shall indicate whether and under what circumstances the practices are allowed in the MS4 jurisdiction. If the practices are not allowed, the Town shall identify impediments to the use of these practices, and what changes in local regulations are feasible that may be made to make them allowable and provide a schedule for implementation of recommendations. The permittee shall implement all feasible recommendations, in accordance with the schedules contained in the assessment.

Responsible Department/Parties: Public Works (Highway, Engineering, Environmental), Planning Department, Planning Board, Building Department/Code Enforcement

Measurable Goal(s):

- Completion of Report by June 2022.
- Recommendations are implemented per recommended schedule.
- Report progress annually.

BMP 5E: List of Municipal Retrofit Opportunities

Completed (by year 4)

Document Name and/or Web Address: *Phosphorus Source Identification Report - June 2022*

Description: Complete an inventory and priority ranking of permittee-owned property and existing infrastructure that could be retrofitted with BMPs designed to reduce the frequency, volume and pollutant loads of stormwater discharges to its MS4 through the mitigation of impervious area.

Responsible Department/Parties: Public Works (Environmental, Highway, and Engineering)

Measurable Goal(s): The list and priority ranking shall be completed by 2022 and updated, as needed. Implement feasible recommendations, if any, and report on status in annual report.

MCM 6
**Good Housekeeping and Pollution
Prevention for Permittee Owned Operations**
Permit Part 2.3.7

Objective: The permittee shall implement an operations and maintenance program for permittee-owned operations that has a goal of preventing or reducing pollutant runoff and protecting water quality from all permittee-owned operations.

PERMITTEE OWNED FACILITIES

BMP 6A: Parks and Open Spaces Operations and Maintenance Procedures

Written Document Completed (by year 2)

Document Name and/or Web Address: To Be determined

Description:

Standard Operating Procedures (SOPs) and maintenance procedures to address:

- the proper use, storage, and disposal of pesticides, herbicides, and fertilizers (PHF) including minimizing the use of these products and using them only in accordance manufacturer's instruction.
- lawn maintenance and landscaping activities to ensure practices are protective of water quality. Protective practices include reduced use of PHFs, integrated pest management (IPM), recycling or proper disposal of lawn clippings and other vegetative waste and use of native and drought resistant landscaping materials.
- management of trash containers at parks (scheduled cleanings; sufficient number),
- signage in areas concerning the proper disposal of pet wastes.
- waterfowl congregation areas where appropriate to reduce waterfowl droppings from entering the MS4.
- Areas where erosion or poor vegetative cover is observed; especially if the erosion is within 50 feet of a surface water.

Responsible Department/Parties: Public Works, Parks & Recreation Department, Conservation Commission

Measurable Goal(s): Implement the SOP listed above on 100% of the parks and open spaces

Properties List: Don Ball Park, Alexander Carr Park, Dog Park, Hood Park, Galliens Beach, and MacGregor Park

BMP 6B: Buildings and Facilities Operations and Maintenance Procedures (where exposed to stormwater)

Written Document Completed (by year 2)

Document Name and/or Web Address:

Description:

Develop Standard Operating Procedures (SOPs) or policies and procedures to address:

- use, storage, and disposal of petroleum products and other potential stormwater pollutants,

- employee training for that those responsible for handling these products know proper procedures,
- management procedures for dumpsters and other waste management equipment,
- sweeping parking lots and keeping areas surrounding the facilities clean to reduce runoff of pollutants,
- Compliance with SWPPPs and SPCC plans where applicable.

As applicable to the following facilities:

Town offices, police, and fire stations, and other permittee-owned or operated buildings or facilities where pollutants are exposed to stormwater.

Responsible Department/Parties: Public Works, Parks & Recreation Department, Police Department, Fire Department

Measurable Goal(s): Implement the SOPs, policies and procedures listed above on 100% of applicable buildings and facilities.

Properties List (Optional): *Vehicle Maintenance Facility, Highway Garage, Buildings & Grounds*

BMP 6C: Vehicles and Equipment Operations and Maintenance Procedures

Written Document Completed (by year 2)

Document Name and/or Web Address:

Description: Standard Operating Procedures (SOPs) to address:

- Routine storage of permittee vehicles.
- Requirement to store vehicles with fluid leaks indoors or provide containment until repaired.
- Vehicle and equipment fueling at permittee-owned fueling areas to minimize exposure to stormwater (consider fueling under cover)
- Vehicle washing to ensure vehicle wash waters are not discharged to the municipal storm sewer system or to surface waters.

Responsible Department/Parties: Department of Public Works (Highway, VMF, Water/Sewer, Buildings & Grounds), Parks and Recreation, Police Department, Fire Department

Measurable Goal(s): Implement the SOPs listed above for 100% of vehicles and equipment according to the above document(s).

INFRASTRUCTURE

BMP 6D: Infrastructure Operations and Maintenance/Asset Management Program

Written Procedure Completed (by year 2)

Document Name and/or Web Address:

- SOPs per BMPs listed below
- Stormwater Asset Management Program

Description:

Activities and procedures that will be implemented so that the MS4 infrastructure is maintained in a timely manner to reduce the discharge of pollutants from the MS4. Includes development of SOPs or plans for:

- routine inspections, cleaning and maintenance of catch basins (BMP 6E);
- procedures for sweeping and/or cleaning streets and permittee-owned parking lots (BMP 6F)
- procedures for winter road maintenance, use and storage of salt and sand, minimizing the use of sodium chloride and other salts, evaluation of alternative materials, and proper snow disposal activities (BMP 6G).
- inspection and maintenance frequencies and procedures for the storm drain systems and for all stormwater treatment structures such as water quality swales, retention/detention basins, infiltration structures, proprietary treatment devices or other similar structures (BMP 6H).

Subject to funding, the Town will initiate development of a Stormwater Asset Management Program. The program will piggy-back on the Town's existing Sewer and Water Asset Management Program using Lucity Software program. A stormwater module will be added to allow the Town to schedule and track complaints, inspections, repairs, and replacements and other work tasks, including personnel, equipment and material usage which is essential for our administrators and councilors to assess and trend condition and real cost of Derry's stormwater system infrastructure. This information is critical in making budgetary decisions relative to system repairs and replacements and developing annual operating budgets and a long-term capital improvement plan that is financially sustainable.

Responsible Department/Parties: Public Works-Highway Division, Environmental, Asset Management

Measurable Goal(s):

- 100% of infrastructure is maintained to ensure proper function in accordance with the procedures above.
- Implementation of the Stormwater Asset Management Program (subject to funding and staffing)

BMP 6E: Catch Basin Cleaning Program

Written Procedure Completed (by year 1)

Document Name: *Standard Operating Procedure – Catch Basin Cleaning*

Description: Procedures for coordinating catch basin cleaning, frequency of cleaning, method of cleaning, storage and disposal/reuse of debris, and record keeping

Responsible Department/Parties: Public Works-Highway Division with Outside Contractor

Measurable Goal(s): All catch basins are cleaned in accordance with the document above such that no catch basin is more than 50% full at any given time. The Town's established program of cleaning 750 catchbasins each year for the last 10 years has demonstrated that no excess accumulation above 50% due to normal accumulation has been discovered.

BMP 6F: Street Sweeping Program

Written Procedure Completed (by year 1)

Document Name: *Standard Operating Procedure – Sweeping Streets and Parking Lots*

Description: Procedures for the operation and maintenance of street sweepers, frequency of sweeping, storage and disposal/reuse of debris, and record keeping

Responsible Department/Parties: Outside Contractor, coordinated by Public Works

Measurable Goal(s): Annually sweep 100% of all curbed streets with closed drainage systems located within the downtown urban compact and/or high pollutant load areas as well as 50% of all municipal parking lots.

BMP 6G: Winter Road Maintenance Program

Written Procedure Completed (by year 1) First completed in 1999, updated as necessary

Document Name:

- Winter Maintenance Snow and Ice Control Policy (rev 2007)
- Winter Operations Booklet (updated annually)
- Town of Derry, NH – Salt Reduction Plan for Beaver Brook (rev 9/01/18)

Description: The documents describe the Town’s policy on snow and ice control, and winter road maintenance, areas of overage, and best management practices to be followed to promote and ensure the reduction in the use of deicing chemicals.

Responsible Department/Parties: Public Works – Highway Department

Measurable Goal(s): Improved water quality in chloride impaired stream segments (no TMDL violations since 2011) and reduce the salt imports based on the 10-year running average and the Weather Severity Index each winter.

Evaluate at least one salt/chloride alternative for use in the municipality. (per USEPA) – COMPLETED

The Town of Derry along with USEPA, NHDES, NH Dept of Transportation, Federal Highway Administration, and University of New Hampshire Technology Transfer Center evaluated alternatives to salt/chloride as part of the I-93 Salt Reduction Workgroup. The consensus of the entire group was that alternatives were either not economically feasible, were highly corrosive to equipment infrastructure and vehicles, or would cause other water quality and stormwater pollution issues. Instead an agreed upon Salt Reduction Plan focusing on Best Management Practices and improved technology and equipment was approved.

BMP 6H: Stormwater Treatment Structures Inspection and Maintenance Procedures

Completed (by year 1)

Document Name and/or Web Address: *Standard Operating Procedure – Stormwater Treatment Structures Inspection and maintenance Procedures*

Description:

Inspection and maintenance frequencies and procedures for the storm drain systems and for all stormwater treatment structures such as water quality swales, retention/detention basins, infiltration structures, proprietary treatment devices or other similar structures.

Responsible Department/Parties: Public Works-Highway Division

Measurable Goal(s): Inspect all permittee-owned stormwater treatment structures (excluding catch basins) annually and maintain 100% of treatment structures to ensure proper function.

BMP 6I: SWPPP for Waste Handling Facilities

Completed (by year 2) Completed in 2010, Updated 6/30/2021

Document Name: Stormwater Pollution Prevention Plan, Derry Public Works Facilities 38-46 Transfer Lane, Derry, NH (rev June 30, 2021)

Description: A SWPPP was prepared for discharge under the Multi-Sector General Permit (MSGP) for the Transfer Station/Recycling Facility and Wastewater Treatment Facility (WWTF). In 2010, the SWPPP was expanded to include the following adjacent/nearby facilities: Vehicle Maintenance Facility, Highway Garage, Salt Storage Facility, and Septage Transfer Facility. In 2015 and 2020, the Town obtained a No Exposure Exclusion for the WWTF but retained the WWTF in the SWPPP as a Town BMP. In 2021, the SWPPP under the MSGP and MS4GP were separated so that SWPPP was a standalone document separate from the MSGP SWPPP for the Transfer Station.

Responsible Department/Parties: Public Works Environmental Division

Measurable Goal(s):

Develop and implement SWPPPs for 100% of Town-owned and/or operated waste handling facilities where pollutants are exposed to stormwater. COMPLETED

BMP 6J: Mandatory Recycling Program

Completed (by year 2) Completed in 1990

Document Name: Chapter 128 Solid Waste, Article I Recycling (adopted 3/20/1990)

Web Address: <https://ecode360.com/7623460>

Description: Mandatory recycling program adopted in 1990. The Town transfer Station is regulated under the NPDES Multi-Sector General Permit program and has its own SWPPP. A new source-separated recycling facility was constructed a few years ago.

Responsible Department/Parties: Public Works

Measurable Goal(s):

Residents continue to recycle at the new transfer station while reducing the volume of municipal waste.

BMP 6K: Pharmaceutical Take-Back Day

Completed (by year 2) Annual to Semi-Annual Collection day

Document Name: NA

Description: The Derry Police Department will hold and advertise up to two Pharmaceutical Take-Back Days per year, pending funding from the Department of Justice. A permanent drop off is located inside the Derry Police Department lobby and is available 24-hours/day

Responsible Department/Parties: Police Department

Measurable Goal(s):

Residents participate in pharmaceutical take-back events eliminating improper disposal.
Quantities of pharmaceuticals collected at each event.

Annual Evaluation

Year 1 Annual Report

Document Name and/or Web Address:

Year 2 Annual Report

Document Name and/or Web Address:

Year 3 Annual Report

Document Name and/or Web Address:

Year 4 Annual Report

Document Name and/or Web Address:

Year 5 Annual Report

Document Name and/or Web Address:

Year X Annual Report

Document Name and/or Web Address:

TMDLs and Water Quality Limited Waters

Applicable Impairments and/or TMDLs

Impairment(s)

- Bacteria/Pathogens
- Chloride
- Phosphorus
- Nitrogen*
- Solids/oil/grease (hydrocarbons)/metals(iron)*

TMDL(s) (Appendix F)

- Bacteria/Pathogens
- Chloride
- Lake/Pond Phosphorus

*In the 2017 MS4GP identifies nitrogen and iron as applicable impairments to the Town of Derry. The Town included in the Notice of Intent reasons as to why these are not applicable to the Town. The reasons are reiterated in the relevant sections that follow.

Alternative TMDL and Impairment Plans (if applicable)

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Bacteria/Pathogens

Combination of Impaired Waters Requirements and TMDL Requirements as Applicable

Applicable Receiving Waterbody(ies)		TMDL Name (if applicable)
NHLAK700061101-01-02	ISLAND POND - CHASE'S GROVE	New Hampshire Statewide Total Maximum Daily Load (TMDL) for Bacteria Impaired Waters
NHLAK700061203-02-02	BEAVER LAKE - GALLIEN'S BEACH	New Hampshire Statewide Total Maximum Daily Load (TMDL) for Bacteria Impaired Waters
NHLAK700061203-03-02	HOODS POND - TOWN BEACH	New Hampshire Statewide Total Maximum Daily Load (TMDL) for Bacteria Impaired Waters
NHLAK700061203-05-02	RAINBOW LAKE - KAREN-GENA BEACH	New Hampshire Statewide Total Maximum Daily Load (TMDL) for Bacteria Impaired Waters
NHRIV700061203-09	BEAVER BROOK	New Hampshire Statewide Total Maximum Daily Load (TMDL) for Bacteria Impaired Waters
NHRIV700061101-05	TAYLOR BROOK	New Hampshire Statewide Total Maximum Daily Load (TMDL) for Bacteria Impaired Waters

Annual Requirements Beginning Year 1

Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking:

Completed – The above applicable receiving waters have been ranked High Priority per App. H Part III.1.a.i.2.

The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

BMP 1B: Pet Waste and Water Quality and/or Scoop the Poop Campaign

BMP 1C: Septic System Maintenance for Homeowners

BMP 1D: SepticSmart Week Outreach

Public Education and Outreach

(Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information))

Annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate. Permittee or its agents disseminate educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time. The relevant BMP number(s) listed above in the Stormwater Management Program is:

BMP 1A: Signs – Dog Waste Ordinance

BMP 1B: Pet Waste and Water Quality and/or Scoop the Poop Campaign

Provide information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria. The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

BMP 1C: Septic System Maintenance for Homeowners

BMP 1D: SepticSmart Week Outreach

Lake and Pond Phosphorus TMDL & Phosphorus Impairment(s)

Applicable Receiving Waterbody(ies)		TMDL Name (if applicable)
NHLAK700061203-03	Hoods Pond	Total Maximum Daily Load for Phosphorus in Hoods Pond, Derry, NH May, 2012
NHLAK700061203-02-01	Beaver Lake	Impaired
NHLAK700061101-01-01	Island Pond	Impaired

Applicable Receiving Waterbody(ies)	Phosphorus Control Plan Complete	Document Location
NHLAK700061203-03 Hoods Pond	<input type="checkbox"/>	

Annual Requirements Beginning Year 1

Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking:

Completed – The above applicable receiving waters have been ranked High Priority

The relevant BMP number(s) listed above in the Stormwater Management Program relevant to phosphorus control include the following:

BMP 1A: Signs – Dog Waste Ordinance

BMP 1B: Pet Waste and Water Quality and/or Scoop the Poop Campaign

BMP 1F: Proper Fertilizer Use and Yard Waste Management

BMP 1G: Sedimentation and Erosion Control Requirements

BMP 1H: Stormwater Pollution Prevention for Industrial Sites

BMP 1J: Green Landscaping for Water Quality

BMP 1K: Low Impact Development

BMP 6A: Parks and Open Spaces Operations and Maintenance Procedures

BMP 6B: Buildings and Facilities Operations and Maintenance Procedures (where exposed to stormwater)

BMP 6D: Infrastructure Operations and Maintenance Procedures

BMP 6E: Catch Basin Cleaning Program

BMP 6F: Street Sweeping Program

BMP 6H: Stormwater Treatment Structures Inspection and Maintenance Procedures

BMP 6I: SWPPP for Waste Handling Facilities

Public Education and Outreach

(Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information))

Distribute an annual message in the spring (April/May) that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release and phosphorus-free fertilizers.

The relevant BMP number(s) listed above in the Stormwater Management Program are:

BMP 1F: Proper Fertilizer Use and Yard Waste Management

Distribute an annual message in the summer (June/July) encouraging the proper management of pet waste, including noting any existing ordinances where appropriate.

The relevant BMP number(s) listed above in the Stormwater Management Program are:

BMP 1A: Signs – Dog Waste Ordinance

BMP 1B: Pet Waste and Water Quality and/or Scoop the Poop Campaign

Distribute an annual message in the fall (August/September/October) encouraging the proper disposal of leaf litter

The relevant BMP number(s) listed above in the Stormwater Management Program is:

BMP 1F: Proper Fertilizer Use and Yard Waste Management

Good Housekeeping and Pollution Prevention for Permittee Owned Operations

Increase street sweeping frequency of all municipal-owned curbed streets and parking lots subject to Permit part 2.3.7.a.iii.(c) to a minimum of two times per year (spring and fall)

The relevant BMP number(s) listed above in the Stormwater Management Program are:

BMP 6F: Street Sweeping Program

Establish procedures to properly manage grass cuttings and leaf litter on permittee property, including prohibiting blowing organic waste materials onto adjacent impervious surfaces

The relevant BMP number(s) listed above in the Stormwater Management Program are:

BMP 1F: Proper Fertilizer Use and Yard Waste Management

BMP 6A: Parks and Open Spaces Operations and Maintenance Procedures

BMP 6B: Buildings and Facilities Operations and Maintenance Procedures (where pollutants are exposed to stormwater)

Stormwater Management in New Development and Redevelopment

Retrofit inventory and priority ranking under 2.3.6.1.b. shall include consideration of BMPs to reduce pollutant discharges. The relevant BMP number(s) listed above in the Stormwater Management Program are:

BMP 5E: List of Municipal Retrofit Opportunities

Potential structural BMPs

Any structural BMPs listed in Table 3 of Attachment 1 to Appendix H already existing or installed in the regulated area by the Town or its agents will be tracked and the Town will estimate the phosphorus removal by the BMP consistent with Attachment 1 to Appendix H. Document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in mass per year by the BMP in each annual report.

The Town will inventory any of the above referenced structural BMPs and if existing, will begin evaluating and reporting their annual phosphorus removal.

Requirements Due by Year 4

Stormwater Management in New Development and Redevelopment

The requirement for adoption/amendment of the permittee's ordinance or other regulatory mechanism shall include a requirement that new development and redevelopment stormwater management BMPs be optimized for phosphorus removal. The relevant BMP number(s) listed above in the Stormwater Management Program OR the description of implementation actions and document location(s) are:

The Town completed a review of the Town's Stormwater Ordinance, Stormwater Regulations, and Land Development Control Regulations. The Town's Land Development Control Regulations (LCDR) were updated to require that BMPs are optimized for phosphorus removal. The updated LCDR can be viewed at:

<https://ecode360.com/7626031>

Requirements Due by Year 4

Complete a Phosphorus Source Identification Report **Completed**

The document name (if attached) and/or web address is/are:

Phosphorus Source Identification Report (Appendix H-Part II 1.b) Derry, NH

Stormwater Management in New Development and Redevelopment

Retrofit inventory and priority ranking under 2.3.6.1.b. shall include consideration of BMPs that infiltrate stormwater where feasible. The relevant BMP number(s) listed above in the Stormwater Management Program are:

BMP 5E: List of Municipal Retrofit Opportunities

Requirements Due by Year 5

Potential Structural BMPs

Evaluate all permittee-owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under Permit part 2.3.6.d.ii or identified in the Phosphorus Source Identification Report that are within the drainage area of the impaired water or its tributaries

The relevant BMP number(s) listed above in the Stormwater Management Program are:

BMP 5E: List of Municipal Retrofit Opportunities

Complete a listing of planned structural BMPs and a plan and schedule for implementation

The relevant BMP number(s) listed above in the Stormwater Management are:

Lake Phosphorus Control Plan

Requirements Due by Year 5

Lake Phosphorus Control Plan

The Town will prepare a Lake Phosphorus Control Plan (LPCP) for Hood Pond. The Town applied for and was selected to receive a Clean Water State Revolving Fund (CWSRF) in the amount of \$100,000 for preparing a LPCP and a Watershed-based Management Plan for Hood Pond.

Chloride TMDL and Impairment

Applicable Receiving Waterbody(ies)		TMDL Name (if applicable)
NHRIV700061203-16	Beaver Brook (w/Horns Brook)	Total Maximum Daily Load (TMDL) Study For Waterbodies in the Vicinity of the I-93 Corridor from Massachusetts to Manchester, NH: Beaver Brook in Derry and Londonderry, NH (2008)
NHRIV700061203-09	Beaver Brook (w/West Running Brook and tributaries)	Impaired
NHRIV700061203-11	Beaver Brook (aka upper and lower Shields Brooks)	Impaired

Annual Requirements Beginning Year 1 (TMDL)

Develop and implement a Chloride Reduction Plan

The document name (if attached) is: ***Town of Derry, NH Chloride Reduction Plan for Beaver Brook Watershed within the Boundary of the Town of Derry (rev 9/22/22)***

Derry's Salt Reduction Plan was first prepared in 2010 and was approved by USEPA, NHDES, NHDOT, and FHWA and has been updated in 2011, 2016, 2018, and 2022. The Town elected to implement all policies, procedures, and BMPs described in the Chloride Reduction Plan Town-wide and not just in the Beaver Brook Watershed.

Annual Requirements Beginning Year 1 (Impairments)

Rank outfalls to these receiving waters as high priority for IDDE implementation in the initial outfall ranking. **Completed. (Included in the IDDE Plan)**

The relevant BMP number(s) listed above in the Stormwater Management Program are:

Town of Derry, NH Salt Reduction Plan for Beaver Brook (rev 9/1/18)

Public Education and Outreach

(Public education messages can be combined with other public education requirements as applicable (see Appendix H and F for more information))

Include an annual message in November/December to private road salt applicators and commercial industrial site owners on the proper storage and application rates of winter deicing material, along with the steps that can be taken to minimize salt use and protect local waterbodies

The relevant BMP number(s) listed above in the Stormwater Management Program are:

BMP 1E: Winter Salt Management

Requirements Due by Year 3

Develop a Chloride Reduction Plan

The document name (if attached) is:

Town of Derry, NH Chloride Reduction Plan for Beaver Brook Watershed within the Boundary of the Town of Derry (rev 9/22/22)

Requirements Due by Year 4

Continue implementation of the Chloride Reduction Plan

Requirements Due by Year 5

Continue full implementation of the Chloride Reduction Plan

Nitrogen Impairments

Applicable Receiving Waterbody(ies)	Watershed Name
NHRIV600030802-23 NHIMP600030802-07 NHRIV600030802-01	Tributaries in the TOWLE BROOK-LILY POND Watershed

Under Section 2.2.2.a.i of the MS4GP, USEPA claims that Derry's MS4 discharges to tributaries that eventually discharged to nitrogen-impaired waterbodies and is therefore required to comply with Appendix H, Part I of the permit. The Town of Derry disagrees for the following reasons:

- This statement is incorrect and is only based on a small (approximately 0.78 square miles) area of Derry being located within the TOWLE BROOK-LILY POND Watershed (AU: 010600030802) which drains to the Exeter River (NHRIV600030802-03).
- The area of Derry located within the referenced watershed is not within the EPA 2017 MS4 Designated area for the Town of Derry.
- The Town does not own or maintain any property, roads, or stormwater drainage systems within the referenced watershed. A figure showing the subject area along with the watershed boundary and the regulated MS4 area was included with the NOI.
- The 3 Assessment Units located either partially or entirely within the Town of Derry (NHRIV600030802-23, NHIMP600030802-07, & NHRIV600030802-01) are not listed as impaired for nitrogen on the 2016 305(b)/303(d) list.
- The small area (0.78 sq. mi.) of watershed located within the Town of Derry drains to a substantially larger area (-13.8 sq.mi.) within the Town of Chester for which received a waiver from the MS4GP. Any efforts by the Town of Derry to implement the requirements for nitrogen reduction within such a small area would have no meaningful or even measurable impact since it drains to such a large area in a downstream town whose land use is largely farms and agriculture but yet has no requirement to implement similar measures.

Solids, Oil and Grease (Hydrocarbons), or Metals Impairments

Applicable Receiving Waterbody(ies)		Impairment (if applicable)
NHRIV700061203-16	Beaver Brook with Horns Brook	Iron

NHRIV700061203-16 Beaver Brook is reported to be impaired for iron. The Town believes that complying with Appendix H Part V is not necessary as it is already regulated under a separate regulatory program, the monitoring results over the past 12 years demonstrate iron in surface water meets chronic surface water quality standard, and a primary source of the iron is naturally occurring.

- 1) The iron impairment is based on individual surface water grab samples collected by NHDES at two separate locations in 1999 which is before the first edition of the Consolidated Assessment and Listing Methodology and the Ambient River Monitoring Program QAPP, both published in 2002. According to the NH 2016 305(b)/303(d) list of Impaired Waters, the cause of the impairment is listed as "Landfill". The 2 sample locations are located adjacent to and downstream of the Town's closed/capped landfill (capped in 1986 and 1998).
- 2) The site and portion of the adjacent stream segment are being monitored and addressed under a separate regulatory program. The Town has been monitoring surface water at 3 locations within this segment of Beaver Brook under a NHDES issued Groundwater Management and Discharge Permit (GMDP) since 2002. One surface water location (SW-3) immediately downstream of the landfill is the same location as one of the original DES samples collected in 1999.
- 3) Surface water monitoring under the GMDP shows there are only minor differences in total iron concentration in surface water from upstream to downstream past the landfill. In fact, total iron concentrations in surface water since 2006 were all well below the NH Chronic standard of 1 mg/l (1000 ug/l). No sample collected during this time exceeded the Chronic Criteria concentration of 1 mg/l.
- 4) Evidence also suggests that a significant portion of the iron in surface water is naturally occurring. According to USGS WRI Report 91-4025 "Geohydrology and Water Quality of Stratified-Drift Aquifers in the Lower Merrimack and Coastal River Basins, Southeastern New Hampshire", Beaver Brook flows through stratified drift (sand and gravel) aquifers which primarily "discharge by flow to rivers and ponds in the basin." The report also states that "High concentrations of iron and manganese were the most common water quality problems found during the investigation" with iron concentrations as high as 7.4 mg/l in groundwater. The Town also operated several water supply wells upstream of the landfill until the 1980s. A 1973 Report "Improvements to the Municipal Water System" by Camp, Dresser & McKee, Inc. also reported that several of the supply wells which abutted Beaver Brook in the same stream segment were high in iron.

Derry Closed Municipal Landfill/NHRIV700061203-16 Beaver Brook

NHDES ID	SAMPLE LOCATION			
		10+K-BVR US of Landfill	10+H-BVR DS of Landfill	
Town ID	SW-1		SW-3	SW-6
Location	Upstream of Landfill	Adjacent to Landfill	Downstream of Landfill	Downstream of I-93
DATE	*Fresh Water Chronic Criteria = 1 mg/l			
8/19/1999 (NHDES Samples)		2.13	2.38	
11/07/06	0.29		0.42	0.42
04/03/07	0.21		0.25	0.38
11/06/07	0.63		0.79	0.83
04/12/08	0.3		0.39	0.39
11/10/08	0.29		0.38	0.35
04/28/09	0.41		0.55	0.52
11/17/09	0.29		0.39	0.40
04/12/10	0.24		0.34	0.33
11/09/10	0.17		0.34	0.31
04/21/11	0.19		0.26	0.23
11/02/11	0.22		0.28	0.28
04/24/12	0.594		0.395	0.441
11/14/12	0.26		0.40	0.360
04/01/13	0.33		0.21	0.16
04/29/14	0.21		0.27	0.26
04/23/15	0.15		0.19	0.19
04/14/16	0.27		0.31	0.26
04/06/17	0.09		0.26	0.14
04/30/18	0.22		0.31	

*Protection of Aquatic Life Concentration per Env-Wq 1703.21(b)

Attachment 1

Appendix C U.S. Fish and Wildlife Service endangered Species Screening Determination



United States Department of the Interior



FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
<http://www.fws.gov/newengland>

January 8, 2018

To Whom It May Concern:

This project was reviewed for the presence of federally listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

<http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm> (accessed January 2018)

Based on information currently available to us, no federally listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required. No further Endangered Species Act coordination is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact David Simmons of this office at 603-227-6425 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
<http://www.fws.gov/newengland>

In Reply Refer To:

July 23, 2018

Consultation Code: 05E1NE00-2018-SLI-2483

Event Code: 05E1NE00-2018-E-05765

Project Name: Derry MS4GP ESA Review

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office

70 Commercial Street, Suite 300

Concord, NH 03301-5094

(603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2018-SLI-2483

Event Code: 05E1NE00-2018-E-05765

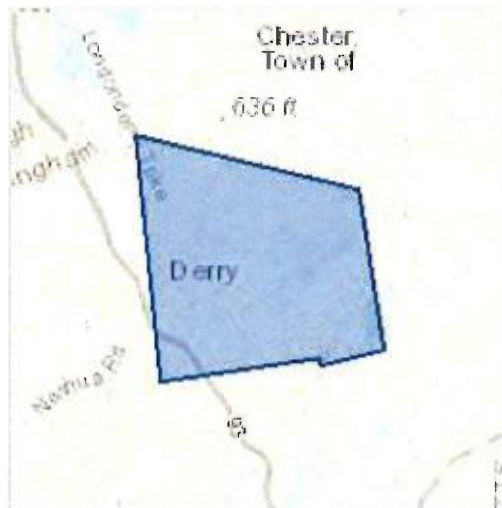
Project Name: Derry MS4GP ESA Review

Project Type: ** OTHER **

Project Description: Town of Derry MS4GP evaluation of whether MS4 discharges impact endangered species or habitat.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/42.891162790557594N71.27686179049526W>



Counties: Rockingham, NH

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

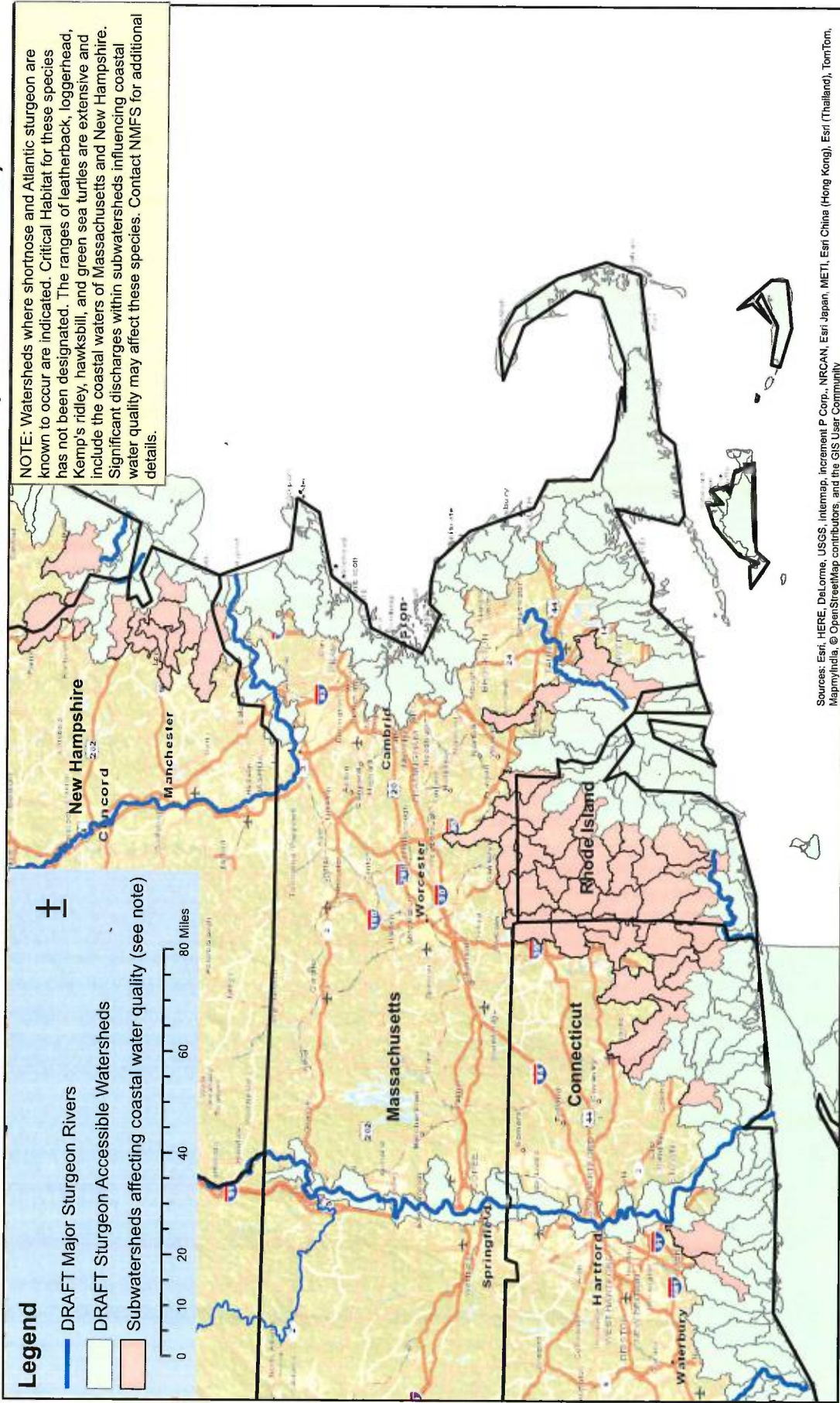
Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

New England Rivers and subwatersheds where ESA-listed shortnose and Atlantic sturgeon occur (created 5/26/2015)



Attachment 2
Derry Salt Reduction Plan