

Year 4 Annual Report

New Hampshire Small MS4 General Permit

Reporting Period: July 1, 2021 - June 30, 2022

Town of Exeter

EPA NPDES Permit Number NHR041007

Certification of Small MS4 Year 4 Annual Report

"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

Title

Signature

Date

Contact Information

Primary MS4 Program Manager Contact Information:

Name: **Nils Larson**

Title/Position: **Engineering Tech**

Department: **Public Works**

Street Address: **13 Newfields Road**

City: **Exeter**

State: **New Hampshire**

Zip Code: **03833**

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Small MS4 Authorization

The following annual report, which serves as a self-assessment, is intended to document the activities undertaken over the **reporting period from July 1, 2021 through June 30, 2022** in accordance with the Permit.

The Notice of Intent (NOI) can be found at the following (document name or web address):

<https://www3.epa.gov/region1/npdes/stormwater/nh/tms4noi/exeter.pdf>

Compliance activities have been identified and described in the Town of Exeter's Stormwater Management Plan (SWMP) and Illicit Discharge Detection and Elimination Plan (IDDE). Those documents and other pertinent Year 4 information can be found attached to this submission or at the following websites, and will be referred to throughout this report:

SWMP: <https://www.exeternh.gov/publicworks/stormwater> (*posted under MS4 Phase II Stormwater General Permit*)

Date SWMP was Last Updated: **7/1/2022**

[June 2019 (full document); Attachment 4.1 Site Plan Review and Construction Site Inspection and Enforcement Procedures (June 2020); Appendix 6.1 O&M Procedures for Municipally-Owned or Operated Parks and Open Spaces, Buildings and Facilities, Vehicles and Equipment, and Infrastructure (May 2021), and Appendix 5.1 Regulation Assessment Report (July 2022)]

IDDE Program Plan: ***Located at the Exeter Public Works Department – 13 Newfields Road***

SSO Inventory: <https://www.exeternh.gov/publicworks/combined-sewer-sanitary-sewer-overflows>

Dry Weather Screening Data: ***See attached submission***

Inventory and Ranking of Outfalls/Interconnections: ***See attached submission***

Wet Weather Screening Data: ***N/A***

Catchment Investigation Data: ***N/A***

Illicit Discharge Removal Report: ***See attached submission***

Nitrogen Source Identification Report: <https://www.exeternh.gov/publicworks/stormwater> ***(posted under Stormwater Reports and Documents). Refer to Appendix F & H of this annual report for additional information.***

Self-Assessment

Select the impairment(s) and/or TMDL(s) that are applicable to your MS4. Make sure you are referring to the 2018 EPA approved Section 303(d) Impaired Waters List which was used for the Year 4 reporting period and can be found here:

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/2018-epa-approval-20200225.pdf> (EPA Approval Letter)

<https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/2018-303d.xlsx> (Appendix A.1 – 303(d) List)

All **Appendix F and H requirements** can be found under “Appendix F and H: Water Quality Limited Waters & TMDLs” section of this report.

Impairment(s)

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Bacteria/Pathogens | <input type="checkbox"/> Chloride | <input checked="" type="checkbox"/> Nitrogen |
| <input type="checkbox"/> Phosphorus | <input checked="" type="checkbox"/> Solids/ Oil/ Grease (Hydrocarbons)/ Metals | |

TMDL(s)

- | | | |
|--|-----------------------------------|---|
| <input checked="" type="checkbox"/> Bacteria and Pathogens | <input type="checkbox"/> Chloride | <input type="checkbox"/> Lake and Pond Phosphorus |
|--|-----------------------------------|---|

Receiving Waters/Impaired Waters/TMDL

Have you made any changes to your lists of receiving waters, outfalls, or impairments since the NOI was submitted?

Yes

The Town of Exeter has made changes to the list of receiving waters, outfalls, or impairments since the NOI submission. The following impairments and/or TMDLs have been added or delisted:

Water Quality Impaired Waters: ***None***

TMDL: ***None***

Changes made included adding interconnections to DOT's MS4, reviewing and updating the number of outfalls discharging to each receiving water, and removing water segments that did not have outfalls discharging to them.

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

Minimum Control Measures

MCM 1: Public Education

Total number of all MS4 related educational efforts completed *during this reporting period*: 13

BMP 1: Pet Waste Brochures/Pamphlets

Outreach Resources:

"Every Drop" post cards or flyer <https://stateofourestuaries.org/everydrop/every-drop-matters/for-towns/>

"Every Drop Pledge" <https://stateofourestuaries.org/everydrop/petpledge/>

See Attachment for Facebook Post "Reach"

Description:

Distribution and promotion of "Every Drop" post cards or flyers with proper pet waste management, impacts of improper management, pet waste ordinance, and disposal requirements messaging. May include pledge to pick up pet waste to be made available during dog registration and other events or venues (veterinarians, dog training, groomers, etc.). Every Drop is a collaborative education effort with Piscataqua Region Estuaries Partnership (PREP), New Hampshire Department of Environmental Services (NHDES), and other partners.

Targeted Audience:

Residents, businesses, institutions, and commercial facilities

Responsible Department/ Parties:

Engineering/Town Clerk

Measurable Goal(s):

Dog owners and/or dog walkers are aware of the potential water quality impacts from pet waste, local pet waste ordinances, and how to dispose of pet waste properly. If pledges are signed, there will be an increase of dog owners committed to picking up pet waste. For additional information, refer to: https://www4.des.state.nh.us/nh-ms4/?page_id=54, "Minimum Control Measure 1: Public Outreach and Education".

Following is the number of residents that pledged through the PREP "Every Drop" website during this reporting period: 0

The Town continued to use the "Every Drop" flyer. Flyers were made available at the Public Works Department office. Additionally, the Town posted on Facebook encouraging dog owners to pick up and properly dispose of pet waste. One of the Facebook posts included a

link to the Think Blue: Pet Waste webpage that included a complete list of pet waste stations in Exeter as well as other information, including links to the Every Drop Scoop the Poop pledge. As a method to assess the measurable goal, the reach for social media posts in Year 4 related to BMP 1 were tallied with a total reach of 2,676. Posts included those related to proper pet waste disposal.

Year 4 goal was achieved.

Message Date: Annually in spring and through the permit year

BMP 2: Clean Water/Healthy Lawn Brochures/Pamphlets

Outreach Resources:

5 Easy Steps “Healthy Lawns – Clean Water”: <https://www.exeternh.gov/bcc/exeters-healthy-lawns-clean-water-initiative>

Facebook Page: <https://www.facebook.com/exeterhealthylawns-cleanwater/>

See Attachment for Facebook Post “Reach”

Description:

Distribute Clean Water/Healthy Lawns information

Targeted Audience:

Residents, businesses, institutions, and commercial facilities

Responsible Department/ Parties:

Natural Resource Planner

Measurable Goal(s):

To see an increased awareness of proper fertilizer use. The following is a summary of Healthy Lawns Clean Water efforts during Year 4:

- A Healthy Lawns Clean Water display was included in the Alewife Festival, which was hosted by the Town of Exeter in April 2022. The festival was an environmental fair timed to coordinate with the running of the alewives. Participants included NH Fish and Game, Exeter Conservation Commission, River Study Committee, Sustainability Advisory Committee, Public Works Department, Exeter Squamscott Local Advisory Committee, and Energy Committee. Relevant displays or presentations addressed river restoration and its role in water quality improvement and fish habitat improvement, recycle right, composting, rain barrel display, groundwater model, stormwater enviroscape model, stormwater pollution, healthy lawns clean water, and lawn conversion to native plant pollinator habitat. The Town estimates approximately 50-75 attendees.*
- The Healthy Lawns Clean Water Facebook page has over 160 followers and over 150 likes as of September 2022.*
- The Healthy Lawns Clean Water Facebook page continued to post new content.*

- **Healthy Lawns Clean Water** was tagged in posts on the Exeter Conservation Commission Facebook page.

In the past, the Town partnered with the Great American Rain Barrel Company for residents to purchase rain barrels. In 2022, to promote water conservation, Public Works upcycled previously used, 35-gallon barrels to be re-purposed as rain barrels for residents of Exeter. Public Works distributed 65 rain barrels in 2022. The Town continued engagement on social media and continued interest in rain barrels. As a method to assess the measurable goal, the reach for social media posts in Year 4 related to BMP 2 were tallied with a total reach of 10,667. Posts included those related to healthy lawns, rain barrel program, the Alewife festival, etc.

Year 4 goal was achieved.

Message Date: *Annually in the spring*

BMP 5: Septic Smart Displays/Poster/Kiosks

Outreach Resources:

Think Blue Exeter: <https://www.exeternh.gov/bcc/think-blue-septic-system-maintenance>
Septic Smart Week posters
See Attachment for Facebook Post “Reach”

Description:

Utilize Septic Smart posters to encourage residents to inspect and maintain their septic systems each year.

Targeted Audience:

Residents with septic systems

Responsible Department/ Parties:

Engineering/Planning Department

Measurable Goal(s):

To see an increase in septic system testing/maintenance. In Year 4, the Septic Smart posters were displayed at the Town Clerk’s and Public Works offices during Septic Smart Week in September 2021. Additionally, the Town posted information during Septic Smart week on the Public Works Department, Conservation Commission, and Exeter Healthy Lawns Clean Water Facebook pages, and the Think Blue Exeter website includes a septic system maintenance page with similar information. As a method to assess the measurable goal, the reach for social media posts in Year 4 related to BMP 5 were tallied with a total reach of 4,472. Posts included those related to Septic Smart Week.

Year 4 goal was achieved.

Message Date: *Annually in the fall during Septic Smart week*

BMP 6: Leaf and Yard Waste Collection

Outreach Resources:

*Flyers at Town Office, Public Works, and Library
Yard Waste poster displayed at the HHW Collection Day
See Attachment for Facebook Post "Reach"*

Description:

Post notices of leaf and yard waste collection.

Targeted Audience:

Residents, businesses, institutions, and commercial facilities

Responsible Department/ Parties:

Highway Department

Measurable Goal(s):

To see an increase in the disposal of leaf and yard waste at the transfer station. In Year 4, notices were posted on the town's website and on social media, and flyers were displayed at the Town Office, Public Works, and Library. Additionally, town clerks distributed an informational packet with each registration that had information on yard waste disposal, recycling, and composting programs in town. Curbside collection of leaf and grass waste is available twice per year (once in the spring and once in the fall). Leaves and grass waste can also be taken to the Transfer Station during normal operating hours. Leaves and grass are composted at the transfer station, and the finished compost is free to Exeter residents. As a method to assess the measurable goal, the reach for social media posts in Year 4 related to BMP 6 were tallied with a total reach of 5,008. Posts included those related to curbside leaf collection (spring and fall). A poster was also displayed at the regional HHW Collection event to be viewed by the people waiting to drop off their waste. There were 94 households from Exeter who attended the HHW event and are assumed to have seen the poster.

Year 4 goal was achieved.

Message Date: Annually in the spring and fall

BMP 7: Exeter Conservation Commission's Guest Speaker Night

Description:

Organize and host an Exeter Conservation Commission's Guest Speaker Night.

Targeted Audience:

Developers (construction)

Responsible Department/ Parties:

Natural Resources Planner/Engineering/Planning Department

Measurable Goal(s):

To see an increase in awareness of the local stormwater regulations among developers. It is anticipated that a simple survey of attendees following the presentation will be used to evaluate attendees increased awareness of the local stormwater regulations. A Guest Speaker Night was not held in Year 4.

See additional relevant details below. Revised BMP was achieved in Year 4.

Message Date: Suggested time for this BMP was Year 4

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

The Exeter Conservation Commission's Guest Speaker Night aimed at Developers (construction) was not held in Year 4. BMP 7 (Exeter Conservation Commission's Guest Speaker Night) was removed from the SWMP and replaced with a BMP to provide information about EPA's Construction General Permit to local contractors to raise their awareness of the permit. In Year 4, the Town provided Construction General Permit outreach related to the new and updated requirements of the 2022 EPA Construction General Permit. The Town sent an email on February 23, 2022 to individuals who held a Certified Pipe Layer's license in the Town of Exeter. The email notified them of changes to the construction general permit. The email included a link to the construction permit changes and a webinar training. Additionally, Public Works discusses the construction checklist to identify responsible parties, erosion control practices, and other best management practices, and requirements of the EPA Construction General Permit at the Technical Review Committee meetings as well as pre-construction meetings.

Additional Public Education and Outreach conducted in Year 4: Conservation and Sustainability Planner presented a three-day program to eighth grade science students at the Cooperative Middle School. Students learned about stormwater pollution, the role of natural buffers around wetlands and waterbodies, and how to monitor water quality based on pH, temperature, dissolved oxygen, and specific conductance.

MCM 2: Public Participation

- Provided an opportunity for public participation in review and implementation of SWMP and complied with State Public Notice requirements as described in the Town of Exeter SWMP.
- Kept records relating to the permit available for 5 years and made available to the public

Describe the opportunity provided for public involvement in the development of the Stormwater Management Program (SWMP) *during this reporting period*:

Description: The Town of Exeter’s Stormwater Management Program (SWMP) is available to the public for review on the Town’s website or at the Public Works Department office during regular business hours. Documents and records relating to the SWMP are retained and available to the public for five years at the Exeter Public Works Department. The public is encouraged to submit written comments on the SWMP. Instructions on how to do this (email address provided of where to submit comments) are included on the Town’s Stormwater website (<https://www.exeternh.gov/publicworks/stormwater>). No comments were received in Year 4.

Measurable Goal(s):

Make SWMP publicly available and receive input on the SWMP from the public. No comments were received in Year 4; records continue to be maintained.

Year 4 goal was achieved.

Describe any other public involvement or participation opportunities conducted during this reporting period:

The Town hosted a community roadside clean up in April 2022. Public Works provided bags and collected the bagged litter that was placed roadside by volunteers. There were at least 20 participants from the public. Additionally, the Conservation and Sustainability Planner participated in the “A Tale of Two Dams” presentation organized by the Ipswich River Watershed Association. She presented information about the Exeter Dam removal process to members of the public in a hybrid in-person, virtual event on April 19, 2022. Approximately 50 people attended online and approximately 20 people attended in person. The Conservation and Sustainability Planner and a member of the Exeter Historical Society participated in a program “Lessons Learned from Removing the Great Dam in Exeter” for Durham, NH residents put on by the Great Bay - Piscataqua Waterkeeper and Free the Oyster River virtual event on March 3, 2022. Approximately 8 people attended.

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

MCM 3: Illicit Discharge Detection and Elimination (IDDE)

Sanitary Sewer Overflows (SSOs)

- This SSO section is NOT applicable because we DO NOT have sanitary sewer.
- This SSO section is NOT applicable because we DID NOT find any new SSOs.
- The SSO inventory has been updated, including the status of mitigation and corrective measures implemented or was addressed and can be found at the following website <https://www.exeternh.gov/publicworks/combined-sewer-sanitary-sewer-overflows>.

Below, report on the number of SSOs identified in the MS4 system and removed:

Number of SSO's identified **during this reporting period: 1**

Number of SSO's removed **during this reporting period: 1**

MS4 System Mapping

- Updated system map due in Year 2 as necessary:

Provide additional status information regarding your map:

Map of storm sewer system and associated outfalls is continually updated to reflect findings and changes.

Screening of Outfalls/Interconnections

- No outfalls were inspected for dry weather screening **during this report period.**
- Dry weather outfall screening data is attached to the email submission.

Dry Weather Screening

Number of outfalls screened **during this reporting period: 28**

Percent of total known outfalls screened **to date: 100**

The inventory and ranking of outfalls/interconnections was updated. The revised inventory and ranking of outfalls/interconnections is attached to the email submission.

Wet Weather Screening

- No outfalls were inspected for wet weather screening *during this reporting period*.
- Wet weather outfall screening data is attached to the email submission **and/or** found at the following website: **N/A**

Number of outfalls screened *during this reporting period*: **N/A**

Percent of total outfalls screened *to date*: **N/A**

Catchment Investigations

- No catchment investigations were conducted *during this reporting period*.
- Catchment investigation data is attached to the email submission **and/or** found at the following website: **N/A**

Number of catchment investigations *during this reporting period*: **N/A**

Percentage of total catchments investigated to date (Years 1 - Year 4): **N/A**

IDDE Progress

- No illicit discharges were found *during this reporting period*.
- The illicit discharge removal report can be found attached to the email submission.

Number of illicit discharges identified *during this reporting period*: **1**

Number of illicit discharges removed *during this reporting period*: **1**

Estimated gallons of flow removed *during this reporting period*: **N/A**

Total number of illicit discharges identified since the effective date of the permit (July 1, 2018):
2

Total number of illicit discharges removed since the effective date of the permit (July 1, 2018): **2**

Employee Training

Provided training to employees involved in IDDE program *during the reporting period:*

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

No IDDE training was completed during Year 4. The last IDDE training was held in Year 3. The Town relied on a consultant for dry weather screening and sampling.

A system vulnerability assessment was completed and added to the Initial Outfall Inventory and Priority Ranking Matrix.

MCM 4: Construction Site Stormwater Runoff Control

The following tasks are in progress in accordance with the permit.

Number of site plan reviews completed **during this reporting period: 18**

Number of inspections completed **during this reporting period: 97**

Number of enforcement actions taken **during this reporting period: 0**

No formal enforcement action was needed on constructions sites. Minor deficiencies were noted by the inspectors for each site; however, all issues were repaired in a timely fashion.

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

The breakdown of site plan reviews includes: 6 Site Plan Review, 4 Subdivision, 5 Conditional Use Permits (2 Wetlands/3 Shoreland), 1 Lot Line Adjustment, and 2 Preliminary Design Reviews. The Town contracts with a consultant to perform third-party construction site inspections of erosion and sediment control measures during construction for all projects that get Planning Board approval. In Year 4, the number of construction sites inspected was 10 sites.

MCM 5: Post-Construction Stormwater Management in New Development and Redevelopment

Ordinance or Regulatory Mechanism

The Town of Exeter has regulatory mechanism consistent with permit requirements 2.3.6.a.ii.

Date regulatory mechanism was adopted: **April 2018**

A Post-Construction Ordinance has not been drafted or adopted. **N/A**

As-built Drawings

Number of as-built drawings received **during this reporting period: 0**

Retrofit Properties Inventory

Identified permittee-owned properties that could potentially be modified or retrofitted with BMPs to reduce impervious cover

The Town of Exeter has identified the following permittee-owned properties that could be modified or retrofitted with BMPs to mitigate impervious areas. The following list is based on a GIS analysis performed in 2019 using publicly available GIS layers that yielded total nitrogen pollutant load “hot spot” data per parcel. The list below includes non-conservation parcels owned by the municipality and are in descending order by acreage of impervious cover. The summary report is available at: https://www4.des.state.nh.us/nh-ms4/wp-content/uploads/2021/11/Pollutant-Hot-Spot_Priority-Summary-Report_Exeter_2021.pdf

Street Address	NH GIS ID
4 Hampton Rd	08072-069-004-0000
82 Linden St	08072-095-056-0000
149 Kingston Rd	08072-100-004-0000
20 Court St	08072-072-130-0000
58 Lincoln St	08072-073-275-0000
30-32 Court St	08072-072-132-0000
Bow St	08072-072-012-0000
Water St	08072-064-047-0000
4 Chestnut St	08072-072-042-0000
Front & R R Sq	08072-073-196-0000
Bow St	08072-072-006-0000

<i>Street Address</i>	<i>NH GIS ID</i>
107 Court St	08072-083-054-0000
36 Water St	08072-072-013-0000
9 Front St	08072-072-225-0000
10 Front St	08072-072-001-0000
167 Front & Winter	08072-073-188-0000
Center St	08072-072-202-0000
16-20 Auburn St	08072-071-019-0000

Developed a report assessing current street design and parking lot guidelines and other local requirements within the municipality that affect the creation of impervious cover, made it available as part of the SWMP, and:

No updates were recommended.

Updates were recommended. The anticipated date or date of completion for updates is: **N/A**

Developed a report assessing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist, made it available as part of the SWMP, and:

No updates were recommended.

Updates were recommended. The anticipated date or date of completion for updates is: **N/A.**

Describe progress made on any **incomplete requirements** listed above **or** optionally provide any additional relevant details, in the box below:

N/A

MCM 6: Good Housekeeping

Catch Basin Cleaning

- Properly stored and disposed of catch basin cleanings so they did not discharge to receiving waters
- Report on number of catch basins inspected and cleaned, along with the total volume of material removed from the catch basins:

Number of catch basins inspected **during this reporting period: 479**

Number of catch basins cleaned **during this reporting period: 0**

Total volume or mass of material removed from all catch basins **during this reporting period: 0**

Total number of catch basins within the MS4 system: **1,307 +/-**

Report on the actions taken if a catch basin sump is more than 50% full during two consecutive routine inspections/cleaning events: ***The Town developed a catch basin optimization plan in Year 3, and is in the process of evaluating existing data and conducting training to improve data collection and the data's accuracy to better evaluate catch basin sumps more than 50 percent full during two consecutive routine inspections/cleaning events. A schedule for catch basin cleaning has been established with the goal of ensuring that a catch basin should not be more than 50% full. See end of report section for additional relevant information.***

Street Sweeping

- Properly stored and disposed of street sweepings so they did not discharge to receiving waters
- All curbed roadways were swept at least once within the reporting period

Number of (lane) miles swept **during this reporting period: 3,000 miles +/-**

Volume of swept material **during this reporting period: 100 cubic yards +/-**

Note: All municipally-owned streets and municipally-owned parking lots are swept a minimum of two times per year (spring and fall). The sweeper operates from April 1 through October 31. The sweeper prioritizes sweeping the Squamscott South/Downtown district before sweeping the peripheral roadways.

Stormwater Pollution Prevention Plan (SWPPP)

- Implemented SWPPPs for all permittee owned or operated maintenance garages, public works yards, transfer stations, and other waste handling facilities

Number of site inspections completed **during this reporting period: 4**

Number of corrective actions taken **during this reporting period: 6**

Describe any corrective actions taken at a facility with a SWPPP:

Swept salt storage shed area (12/21/2021); cleaned up highway maintenance garage and waste oil area and replaced absorbent pads adjacent to waste oil tank (3/18/2022); neutralized leak (with lime) at the wastewater screening dumpster and constructed rain guard for cover to prevent future exposure (3/17/2022 and 3/21/2022); added stone to eroded areas along roadway and parking lot (3/23/2022), removed polymer totes stored onsite (3/22/2022); and stabilized area adjacent to resident salt shed with erosion stone and wattle (8/24/2022).

Operations and Maintenance (O & M) Programs

- O&M programs for all permittee-owned facilities have been completed and/or updated as noted below:
- Implemented all maintenance procedures for permittee owned facilities in accordance with O&M programs
- Updated inventory of all permittee-owned facilities as necessary: **N/A**

All permittee owned facilities, including an inventory, are included as an attachment to the SWMP. There were no changes to report during Year 4.

- Implemented program for MS4 infrastructure maintenance to reduce the discharge of pollutants as outlined in the SWMP
- Inspected all permittee owned treatment structures (excluding catch basins) as outlined in the SWMP
- Enclosed all road salt storage piles or facilities and implemented winter road maintenance procedures to minimize the use of road salt as outlined in the SWMP

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

The Town has funding in the 2022 budget year to clean an estimated 450 catch basins in the first week of October 2022. The Town will be utilizing the catch basin optimization plan to target catch basins with high sediment loads.

The Town was unable to inspect all of the town-owned treatment structures. The Town inspected and cleaned the rain garden at the Town library in March 2022 and inspected and maintained a tree filter on Water Street in mid-April 2022. The Town plans to inspect the remaining town-owned treatment structures this calendar year.

Appendix F and H: Water Quality Limited Waters & TMDLs

Bacteria/Pathogens Impairment (Appendix H) AND TMDL (Appendix F)

- Annual message was distributed encouraging the proper management of pet waste, including noting any existing ordinances where appropriate *during this reporting period. See MCM 1, BMP 1.*
- Permittee or its agent(s) disseminated educational material to dog owners at the time of issuance or renewal of dog license, or other appropriate time *during this reporting period. See MCM 1, BMP 1.*
- Provided information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria *during this reporting period. See MCM 1, BMP 5.*

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

Chloride Impairment (Appendix H) – N/A

- Permittee does not have a chloride impairment

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

It should be noted that Part 2.2.2.d.i.1 of the 2017 NH Small MS4 General Permit lists Exeter as a municipality/MS4 discharging to waterbodies impaired due to chloride. Upon further review and discussion with NHDES and EPA, it was determined that this listing was in error. Exeter MS4 does not discharge to waterbodies impaired due to chloride and is not subject to the enhanced requirements of Part IV of Appendix H.

Nitrogen Impairment (Appendix H)

- Permittee does not have a nitrogen impairment
- Distributed an annual message that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release fertilizers *during this reporting period. See BMPs 2 and 6.*

- ☒ Distributed an annual message encouraging the proper management of pet waste, including noting any existing ordinances where appropriate **during this reporting period. See BMP 1.**
- ☒ Distributed an annual message encouraging the proper disposal of leaf litter **during this reporting period. See BMP 6.**
- ☒ Increased street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.d.iii to a minimum of two times per year (spring and fall) **during this reporting period.**

Nitrogen Source Identification Report

- ☒ The Nitrogen Source Identification Report can be found on the Town’s Stormwater webpage under “Stormwater Reports and Documents”:
<https://www.exeternh.gov/publicworks/stormwater>
The Town is using existing studies completed under the Water Integration for Squamscott-Exeter (WISE) Integrated Plan to meet the nitrogen source identification report requirements. See end of this report section for additional relevant information.

Potential Structural BMPs

The tracking and accounting elements associated with the NH MS4 permit are ongoing, adaptive and are consistent with Attachment 3 of Appendix F of the permit. Currently there is emergent utilization of a new database tracking system called the Pollutant Tracking and Accounting Program (PTAP) supported by NHDES and a select number of municipalities. Seacoast Stormwater Coalition communities understand the importance of this effort and are committed to continuing to work towards better tracking and accounting strategies for both structural and non-structural BMPs. PTAP theoretically has limitless expansion capacity in the region and is already integrated with the EPA Region 1 supported BMP Accounting and Tracking Tool (BATT). This emerging collaboration will be a large component of future implementation efforts. While BMP tracking and accounting programs are not fully functional, these integrated planning tools provide a comprehensive solution to successful tracking and accounting metrics now and moving forward in the future.

The Town of Exeter through its participation in the Seacoast Stormwater Coalition and continued involvement with the PTAP satisfies the tracking and accounting requirement of the municipally-owned structural BMPs listed in Attachment 3 to Appendix F. The PTAP report for Exeter of projects constructed during Year 4 (generated using BATT) is attached to the email submission.

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

The Town did not develop a separate Nitrogen Source Identification Report; rather they relied on existing documents. The Town of Exeter developed a Phase 1 and Phase 2 of the Water Integration for Squamscott-Exeter (WISE) Integrated Plan. As part of the WISE project a watershed level load model was developed to determine the nitrogen load to the Squamscott-Exeter estuary. Phase 1: Lincoln Street Subwatershed Nutrient Control Strategies (June 2017) builds off the WISE analysis to identify specific green infrastructure and low impact development practices that could be installed in Exeter to manage stormwater, reduce nutrient loads, and increase resiliency. The Phase 1 report includes site selection and BMP feasibility, best management practice retrofit opportunities, and BMP performance and pollutant load reduction, as well as other topics. The Phase 1 and Phase 2: Lincoln Street Subwatershed Control Strategies – Incentivizing Resiliency Through Implementation Plans in One of Coastal New Hampshire’s Fastest Growing Communities (March 2018) report presents information from both phases of the WISE Integrated Plan. These reports help address requirements of the nitrogen source identification report and BMP optimization and prioritization. The Town also developed a Nitrogen Control Plan in 2018 and Total Nitrogen Annual Reports.

The above referenced reports can be viewed on the Town’s Stormwater webpage (under Total Nitrogen Reports and Stormwater Reports and Documents):
<https://www.exeternh.gov/publicworks/stormwater>

Phosphorus Impairment (Appendix H) – N/A

Permittee does not have a phosphorus impairment

Solids, Oil and Grease (Hydrocarbons), or Metals Impairment(s) (Appendix H)

Permittee does not have a solids, oil and grease, or metals impairment(s)

Increased street sweeping frequency of all municipal owned streets and parking lots to a schedule that targets areas with potential for high pollutant loads **during this reporting period**

Describe progress made on any **incomplete requirements** listed above or optionally provide any additional relevant details, in the box below:

N/A

Chloride TMDL (Appendix F) – N/A

Permittee does not have a chloride TMDL

Lake and Pond Phosphorus TMDL (Appendix F) – N/A

Permittee does not have a lake and pond phosphorus TMDL

Additional Required Information

Monitoring or Study Results

Results from other stormwater or receiving water quality monitoring or studies conducted **during the reporting period** and **not otherwise mentioned above**, where the data is being used to inform permit compliance or permit effectiveness is:

Not applicable

The results from additional reports or studies are in submission and/or can be found at the following: *N/A*

Description of Any Changes in Identified BMPs or Measurable Goals

The Town of Exeter made changes as noted below to the following BMPs and/or measurable goals that were outlined in the permit and identified in the SWMP:

BMP 7 Exeter Conservation Commission's Guest Speaker Night was removed from the SWMP and replaced with BMP 7 Construction General Permit Outreach. The new measurable goal was to provide outreach to local contractors to raise their awareness of EPA's Construction General Permit. The revised BMP was achieved in Year 4.

COVID-19 Impacts

If any of the above Year 4 requirements could not be completed **during this reporting period** due to the impacts of COVID-19, please identify the requirement(s) that could not be completed, any actions taken to attempt to complete the requirement, and reason the requirement could not be completed below:

The Town of Exeter Public Works Department has felt the economic impacts from COVID-19 which have hindered hiring of staff. The Public Works Department, in general, including the Highway Department has been short staffed, as such, the Town was unable to inspect and maintain all permittee-owned treatment structures in Year 4. The Town will aim to inspect and maintain these structures in Year 5.

Activities Planned for Next Reporting Period

The Town of Exeter will continue to implement activities in accordance with the permit and SWMP.

Facebook Post “Reach”



BMP	Posted By	Post Message	Posted	Reach
1	ECC	We don't like doing it any better than the next person but the statistics are staggering! Scoop the Poop. #petwaste , #MS4, #stormwater	2021-12-01T09:24:01	366
1	ECC	We see this a lot. One would think it goes without saying but please pack out your trash INCLUDING dog waste.	2021-10-20T15:57:44	122
1	ECC	We aren't sure what is cuter, the pup or the message. Until a poop fairy is discovered, we all need to Scoop their Poop! #petwaste #MS4 #stormwater	2021-10-01T09:15:26	128
1	DPW	Pick up after your pet! Pet waste (including that associated with farm animals) is more than just a nightmare for our shoes. Just like human sewage, untreated pet fecal matter is harmful to waterways. Rain washes pet waste containing excess nitrogen and disease-causing organisms, such as giardia and salmonella, into rivers and streams via storm drains. ☹️ Bag it and throw it away in the nearest pet waste station or in your trash. A complete list of pet waste stations can be found on the site below! #ms4community https://www.exeternh.gov/bcc/think-blue-pet-waste	10/8/21 7:49 AM	2060
2	ECC	This is a great opportunity to learn how to care for your lawn in an environmentally friendly way. Exeter Healthy Lawns Clean Water	2022-05-04T09:47:24	91
2	ECC	This is a not-to-be-missed program! (HLCW related post)	2022-03-30T17:04:55	162
2	ECC	Tomorrow. Don't miss this wonderful opportunity. (HLCW related post)	2022-02-27T05:15:19	97
2	ECC	The power of selecting native plants.	2022-02-01T07:00:08	157
2	ECC	Do you love clean water? Commit to 5 clean water actions and receive a Tide Turner yard sign. #MS4community, #healthylawnsCleanwater, Great Bay Stewards	2021-10-01T08:07:34	112
2	ECC	Do you own property along the tidal shoreline? Here is a new resource to guide you in selecting plants suitable for these erosion and flooding prone areas. https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/tidal-erosion-planting-guide.pdf	2021-09-28T07:27:08	214
2	ECC	Do you have milkweed on your property? Help expand pollinator habitat by collecting some pods for NHDOT.	2021-09-20T08:42:21	210
2	HLCW	Tune in tomorrow to this important program. (HLCW related post)	2022-02-27T06:21:19	11
2	HLCW	Did you miss the presentation from Pollinator Pathways NH on how to "put your garden to bed". You can catch the recorded version here.	2021-10-28T06:50:09	17
2	HLCW	Check out this webinar for tips to support your lawn in a manner healthy for our planet.	2021-08-03T04:08:54	28
2	ECC	Did you know that DPW is running a rain barrel program this year? They are providing pre-drilled barrels for FREE (with a donation to St. Vincent DePaul) and have a parts for supplies to build your own rain barrel.	2022-03-30T07:00:02	198
2	ECC	Here are some more photos from this weekends Alewife Festival.	2022-05-17T07:03:59	269
2	ECC	Thank you to all the volunteers and the visitors who came out to the 2022 Alewife Festival. The winner of the kayak in the Guess the Alewife Run Date was Gwen English, and the winner of the mascot contest was Renay Allen. Share your photos with us. Also a big thank you to Sawbelly Brewing for their custom brew Alewife Festival Ale--stop by and try it out for yourself while it lasts. #alewifeFestival, #Alewife, #exeternh #WorldFishMigrationDay	2022-05-16T06:28:13	331
2	ECC	The Alewife Film Festival will return tomorrow from 4-6 at Exeter Town Hall.	2022-05-13T11:25:02	112
2	ECC	The story walk is in place and the weather is leaning in our favor for the 2022 #Alewife Festival. Info: exeternh.gov #exeternhalewifeFestival	2022-05-11T07:18:43	1959
2	ECC	The 2022 Exeter Alewife Festival is just one week away! Follow the link for the event schedule, contest opportunities and more! #exeternhalewifeFestival, #Alewife, #exeternh	2022-05-07T02:00:03	221
2	ECC	Your leaf pile isn't litter. It is important habitat for loads of insects. Try leaving them this year and next summer you may be rewarded with a yard full of fireflies to enjoy! #leavetheleaves #MS4	2021-10-09T09:27:31	454
2	ECC	Save your back, protect winter habitat for pollinators. #leavetheleaves #pollinatorpathways https://www.facebook.com/DavidSuzukiFoundation/photos/a.80953228873/10159641203353874	2021-10-09T07:48:50	174
2	DPW	Matt & Trisha stopped by St. Vincent De Paul yesterday to drop off all the generous donations from Exeter residents during the Rain Barrel food drive! 4 large 65-gallon recycle totes FULL of non-perishables for St. Vincent De Paul to help stock their shelves before the Summer season. 46 barrels (that residents can convert to rain barrels) have been distributed to residents who brought in a bag of non-perishables for SVDP! Water conservation is one of our top priorities. We take pride in sustainability and want to be sure that residents have the opportunity to reduce their water usage to conserve water! Be sure to reach out if you'd like to reserve a barrel! publicworks@exeternh.gov pictured: Trisha Allen, Public Works Business Manager Matthew Berube, Water Sewer Manager St Vincent de Paul Exeter #PublicWorksMakesItHappen #publicworks https://www.exeternh.gov/publicworks/rain-barrels	2022-06-09T04:28:17	408

BMP	Posted By	Post Message	Posted	Reach
2	DPW	<p>More photos from the Alewife fest!</p> <p>Yesterday's Alewife fest was a success! The alewives arrived on Friday, but don't worry you'll still be able to see them for at least the next few days! NH Fish and Game did a great job giving us all an upclose look at the beautiful blue back alewives and a lamprey (not so pretty)!</p> <p>The majority of folks were curious about our new rain barrel program... Did you reserve yours or pick up yours yet?</p> <p>Let me know when you'll be by to pick it up and in exchange we just as for donations for St. Vincent De Paul!</p> <p>So far we've given out 38 rain barrels & collected roughly 3 large recycle toters full of donations for SDVP! >øöþ>øáÝ>øöp</p>	2022-05-17T12:12:58	508
2	DPW	<p>https://www.exeternh.gov/publicworks/rain-barrels</p>	2022-05-15T06:33:13	449
2	DPW	<p>@trisha__allen Alewife festival 2022! A festivals celebrating the return of the alewives, conservation & sustainability! @exeter_tv</p>	2022-05-14T07:58:27	117
2	DPW	<p>Ready for your questions at the Alewife Festival! =øÜ</p> <p>Alewife history: Longer than people have lived along the banks of the Squamscott River, the alewives have run its waters, headed upstream each spring during the vernal equinox, when daylight and darkness are evenly split. Anadromous fish, they fulfill their ancient migration ritual, leaving the salt waters of the ocean and bay to spawn upstream of the falls in the fresh water of the Exeter River. Male alewives first enter the river during daylight hours. Females spawn at night, laying as many as 200,000 eggs, only three of which might survive. After spawning, many alewives die. Those that live return to the ocean within a few days.</p> <p>#publicworks #alewifestival #recycleright #clothesarenttrash #mrfoxcomposting #NPWW #NationalPublicWorksWeek</p>	2022-05-14T06:37:02	140
2	DPW	<p>Ready for your questions at the Alewife Festival! =øÜ</p> <p>Alewife history: Longer than people have lived along the banks of the Squamscott River, the alewives have run its waters, headed upstream each spring during the vernal equinox, when daylight and darkness are evenly split. Anadromous fish, they fulfill their ancient migration ritual, leaving the salt waters of the ocean and bay to spawn upstream of the falls in the fresh water of the Exeter River. Male alewives first enter the river during daylight hours. Females spawn at night, laying as many as 200,000 eggs, only three of which might survive. After spawning, many alewives die. Those that live return to the ocean within a few days.</p> <p>https://www.exeterhistory.org/exeter-history/2016/6/24/exeters-alewives</p> <p>#publicworks #alewifestival #recycleright #clothesarenttrash #mrfoxcomposting #NPWW #NationalPublicWorksWeek</p>	2022-05-14T06:02:20	634

BMP	Posted By	Post Message	Posted	Reach
2	DPW	<p>Don't forget to stop by outside of the Exeter Public Library NH to help us celebrate the return of the Alewives!</p> <p>Alewife Fest Saturday, May 14th 9am - 1pm</p> <p>Test your RECYCLING knowledge at our table! There will be food, music, activities for kiddos, a kayak tour, sustainable solutions, educational displays, and more!</p> <p>Don't forget to get your Alewife costume ready for the costume contest!</p>	2022-05-11T12:15:13	548
2	DPW	<p>We have plenty of rain barrels left! If you haven't picked up one yet let us know when you will come by, your address, and whether you want one that has holes drilled or not! In exchange please bring a grocery bag filled with non-perishables for St Vincent de Paul Exeter!</p> <p>We have 2 recycle toters FULL of non-perishables so far!</p> <p>https://www.exeternh.gov/publicworks/rain-barrels</p>	2022-04-20T11:07:14	226
2	DPW	<p>NEW this year, we are excited to offer a sustainable rain barrel program!</p> <p>In the past, the town partnered with Great American Rain Barrel Company for residents to purchase rain barrels. This year the Water Sewer team has taken the initiative to upcycle previously used, 35-gallon chemical barrels to be re-purposed as rain barrels. Barrels are clean and the crew drilled the necessary holes in some for easy assembly. You'll just need a few parts from the hardware store averaging under \$45 and your barrel will be ready in very little time!</p> <p>A parts list will be provided when you pick up your barrel to make sure you can get started right away.</p> <p>To reserve please contact the Public Works Office (contact info below). Let us know when you'll pick it up.</p> <p>In exchange, all we ask is you have a standard grocery bag filled with donations for St. Vincent DePaul (wish list below). At this time we are providing 1 rain barrel per residence to ensure many Exeter residents have the opportunity to conserve water.</p> <p>Water conservation is one of our top priorities. We take pride in sustainability and want to be sure that residents have the opportunity to reduce water usage to save money and water.</p> <p>Reserve yours today by letting me know if you want a pre-drilled barrel, your address, and when you'd like to pick-up! publicworks@exeternh.gov https://www.exeternh.gov/publicworks/rain-barrels</p>	2022-03-31T15:00:03	2307
2	DPW	<p>The Alewife Festival is back! Come visit us and celebrate the return of the alewives! =ØÛ</p> <p>May 14th ~ 9am-1pm Founder's Park (by the Exeter Library)</p> <p>There will be a run, kayak tour, fun activities, sustainable informational displays, and more! =Ø Þ See you there!</p> <p>Winniez Mobile Diner Sawbelly Brewing</p> <p>https://www.exeternh.gov/bcc-cc/2022-alewife-festival</p>	2022-03-24T05:30:15	513
5	ECC	<p>This interactive graphic will help you to become #SepticSmart! #MS4</p>	2021-09-21T08:34:08	58

BMP	Posted By	Post Message	Posted	Reach
5	ECC	It's the start of Septic Smart Week!	2021-09-20T08:29:21	113
		It's Septic Smart Week: This annual event focuses on educating homeowners and communities on the proper care and maintenance of their septic systems.		
5	HLCW	Print out this handy graphic to stay Septic Smart all year. #epa #SepticSmartWeek2021 #SepticSmartWeek21	2021-09-25T09:27:32	17
		It's Septic Smart Week: This annual event focuses on educating homeowners and communities on the proper care and maintenance of their septic systems.		
		Here's how to be a good septic system owner:		
5	HLCW	#epa #SepticSmartWeek2021 #SepticSmartWeek21	2021-09-24T09:22:32	21
		It's Septic Smart Week. This annual event focuses on educating homeowners and communities on the proper care and maintenance of their septic systems.		
		Today's tip: Think at the Sink!		
5	HLCW	#epa #SepticSmartWeek2021 #SepticSmartWeek21	2021-09-23T09:18:50	15
		It's Septic Smart Week. This annual event focuses on educating homeowners and communities on the proper care and maintenance of their septic systems.		
		Today's Topic: Failure symptoms: Mind the signs!		
		A foul odor is not always the first sign of a malfunctioning septic system. Call a septic professional if you notice any of the following:		
		=Ø@Ü Wastewater backing up into household drains.		
		=Ø@Ü Bright green, spongy grass on the drainfield, especially during dry weather.		
		=Ø@Ü Pooling water or muddy soil around your septic system or in your basement.		
		A strong odor around the septic tank and drainfield.		
5	HLCW	#epa #SepticSmartWeek2021 #SepticSmartWeek21	2021-09-22T09:18:39	17
		It is Septic Smart Week! This annual event focuses on educating homeowners and communities on the proper care and maintenance of their septic systems.		
		Do you have a septic system? Here is today's tip for what you can do: Learn how your septic system works with this interactive tool.		
		https://www.gbra.org/presentations/septic/index.html		
5	HLCW	#epa #SepticSmartWeek2021 #SepticSmartWeek21	2021-09-21T08:10:45	65
		It is the start of Septic Smart Week! This annual event focuses on educating homeowners and communities on the proper care and maintenance of their septic systems.		
		Unsure if you have a septic system? Here are some indicators that you may:		
		=Ø@Ü Your street does not have any manholes labeled "sewer"		
		=Ø@Ü Your yard has an elevated bump up area in the lawn		
		=Ø@Ü Your water/sewer bill shows a \$0.00 sewer charge		
		=Ø@Ü Your neighbors have a septic system		
		Still unsure? Contact the town to find out.		
5	HLCW	#epa #SepticSmartWeek2021 #SepticSmartWeek21	2021-09-20T08:09:43	120
5	DPW	Septic Smart Week Tip# 7: Pump your tank! #ms4community #septicmartweek	9/26/21 5:00 AM	190
5	DPW	Septic Smart Week Tip# 7: Pump your tank #ms4community #septicmartweek https://youtu.be/-nXw5wsRJxY	9/26/21 4:00 AM	217
5	DPW	Septic Smart Week Tip# 6: Protect it and inspect it! #ms4community #septicmartweek	9/25/21 5:00 AM	200
5	DPW	Septic Smart Week Tip# 6: Protect it and inspect it! #ms4community #septicmartweek https://youtu.be/4eyrh4zY4ok	9/25/21 4:00 AM	201
5	DPW	Septic Smart Week Tip# 5: Sheild your field! #ms4community #septicmartweek	9/24/21 5:00 AM	205
5	DPW	Septic Smart Week Tip# 5: Sheild your field! #ms4community #septicmartweek https://youtu.be/Q4bTQ0PQiJA	9/24/21 4:00 AM	759
5	DPW	Septic Smart Week Tip# 4: Keep it clean! #ms4community #septicmartweek	9/23/21 5:00 AM	151
5	DPW	Septic Smart Week Tip# 4: Keep it clean! Don't flush medications or harsh chemicals. #ms4community #septicmartweek https://youtu.be/Tz6wx8kmr_A	9/23/21 4:00 AM	218

BMP	Posted By	Post Message	Posted	Reach
5	DPW	Septic Smart Week Tip# 3: Don't strain your drain! #ms4community #septicmartweek https://youtu.be/om4mwk5VGN0	9/22/21 5:00 AM	204
5	DPW	Septic Smart Week Tip# 3: Don't strain your drain! #ms4community #septicmartweek	9/22/21 4:00 AM	193
5	DPW	Septic Smart Week Tip #2: Don't overload the commode! #ms4community #septicmartweek https://youtu.be/mcYAubOSEvc	9/21/21 5:00 AM	271
5	DPW	Septic Smart Week Tip #2: Don't overload the commode! #ms4community #septicmartweek	9/21/21 4:00 AM	317
5	DPW	Septic Smart Week Tip# 1: Think at the Sink #ms4community #septicmartweek	9/20/21 5:00 AM	305
5	DPW	We're kicking off Septic Smart Week with the most popular drain in your house... the sink! #ms4community #septicmartweek https://youtu.be/fIWob2QtBvY	9/20/21 4:00 AM	316
5	DPW	Next week we focus on septic systems during Septic Smart Week! Residents on Town sewer can also benefit from these tips as well. Stay tuned for more info next week! U.S. Environmental Protection Agency #ms4community #septicssystem https://blog.epa.gov/tag/septic-smart/	9/17/21 4:01 AM	299
6	DPW	Just a reminder trash & recycling pick-up for today is ON SCHEDULE. Leaf pick-up will be during the week of Thanksgiving. Thanksgiving Day is the next holiday trash, recycling, and leaf pick-up will be delayed. If your pick-up day is Thursday it will be Friday, and Friday will be Saturday during Thanksgiving week. www.exeternh.gov/publicworks	11/12/21 7:54 AM	983
6	DPW	Solid Waste Updates: * Trash and recycling pick-up is on as scheduled this week. * Fall curbside leaf collection will be during the week of Thanksgiving. * Household Hazardous Waste Day is this Saturday! Pre-registration is REQUIRED. https://www.exeternh.gov/publicworks	10/13/21 5:47 AM	955
6	DPW	Trash and recycle pick-up is ON SCHEDULE next week. Waste Management does not have Indigenous People's Day off. The Town Offices and Public Works Office will be closed. Curbside fall leaf pick-up will be during the week of Thanksgiving, Nov. 22-27. Have a safe holiday weekend! https://www.exeternh.gov/publicworks/curbside-collection	10/8/21 12:22 PM	740
6	DPW	Good Morning All! We have a lot going on (as usual). Here's some helpful updates and reminders: <Ø8ß Check out the total number of pounds we have diverted from the landfill with Mr. Fox & HELPSY! <Ø8ß Next week (4/18) there will be a lot of construction in the Salem Street neighborhood. Check the project page below for details. <Ø8ß The annual Easter Egg Hunt put on by Parks and Rec will begin tomorrow at 10am at Swasey Parkway (start times vary depend on child's age) <Ø8ß Community roadside clean-up is ongoing until Earth Day, Friday, April 22nd. Once the litter trash bags are filled please drop them off at the Transfer Station or notify Public Works where the bags are for pick up! <Ø8ß We still have rain barrels available! We want to be sure that residents have the opportunity to reduce water usage to save money and most importantly water. Reservations are required. <Ø8ß Water mains will be flushed during the day starting April 18th to May 6th. Flushing will be performed during the day 7:30am-2:30pm. You may experience low water pressure and discoloration of the water can and may occur. <Ø8ß Spring curbside leaf pick-up is next week, April 18th-22nd. Pick-up will not be delayed due to rain or wind. Please have your leaves out before 7am on your regular pick-up day. Collection is limited to 12 biodegradable paper leaf bags. <Ø8ß Alewife fest returns on May 14th 9a-1p at Founders Park outside the Library. Links to all will be in the comments below. Have a Happy Easter weekend!	2022-04-15T07:59:23	1466
6	DPW	FRIENDLY REMINDERS! 3' p Happening TODAY: Town of Exeter is participating in an annual drill related to the Seabrook Station Power Plant. You may hear sirens and see increased activity in town but this is just a drill. 3' p Water main flushing begins next week! (April 10th - May 6th) 3' p Curbside leaf pick-up will be April 18th - 22nd on your regular pick-up day 3' p Roadside litter clean-up is April 11th - 22nd (Earth Day is April 22nd) 3' p We still have rain barrels available for those interested 3' p Alewife festival at Founders Park (outside of the Library) will be May 14th 9am-1pm 3' p Sign up for our e-newsletter! Additional information for each project/event will be found in the comments below!	2022-04-06T06:31:35	864
BMP	Posted By	Description	BMP Total Reach	
1	ECC/DPW	Pet Waste	2,676	
2	ECC/HLCW/DPW	Fertilizer, Healthy Lawn/Clean Water	10,667	
5	ECC/HLCW/DPW	Septic Systems	4,472	
6	DPW	Leaf/Yard Waste	5,008	
			Total	22,823

Dry Weather Outfall Program Sampling Results



Memorandum

Date: December 20, 2021

To: Paul Vlasich P.E., Town Engineer, Department of Public Works, Town of Exeter

From: Renee Bourdeau, P.E. (NH); Geosyntec Consultants

Subject: Dry Weather Outfall Program Sampling Results, Exeter, New Hampshire

Geosyntec Consultants (Geosyntec) performed dry weather outfall sampling on behalf of the Town of Exeter (Town) as required by the Illicit Discharge Detection and Elimination (IDDE) Plan prepared for the Town by Wright-Pierce (Wright Pierce, 2020) and the September 15, 2021 scope of work prepared by Geosyntec. The sampling program and analytical results are summarized below.

Sampling

Based on the Updated Initial Outfall Inventory & Priority Ranking Analysis provided by the Town and prepared by Wright-Pierce, dated May 4, 2021, 18 outfall locations required dry weather sampling.

The 18 outfalls (Figure 1) were evaluated and sampled (if dry weather flow was observed) on October 7, 2021 and October 8, 2021 following a period of at least 48 hours with less than 0.1-inch of rainfall¹. During the sampling event the 3 locations had dry weather flow and samples were collected. At the remaining 15 outfalls no flow was observed with 12 being dry and 3 with stagnant water. Per the IDDE Plan, these were not sampled. Additionally, at the Town's request outfall SQRV-090 was sampled. At the time of inspection, the outfall was submerged; however, flow was observed at the next upstream manhole and samples were collected. The status of each outfall is summarized in **Table 1**.

¹ Rainfall was determined using the following sources identified in the IDDE plan:

<https://w1.weather.gov/obhistory/KPSM.html>

<https://www.wunderground.com/history/weekly/us/nh/portsmouth/KPSM>

Table 1. Screening Status for Outfalls Requiring Dry Weather

Outfall ID	Receiving Water	Status
Interconnection_3	Taylor River - Ash Brook	Flow observed - sample collected
SQRV-170	Squamscott River South	Flow observed - sample collected
SQRV-190	Squamscott River South	Flow observed - sample collected
SQRV-090*	Squamscott River South	Outfall was submerged. Flow observed in upgradient catch basins - sample collected
Interconnection_1	Taylor River - Ash Brook	No flow
Interconnection_2	Taylor River - Ash Brook	No flow
EXRV-100	Exeter River	No flow
EXRV-110	Exeter River	No flow
LTRV-001	Little River	No flow
LTRV-010	Little River	No flow
NRBK-020	Norris Brook	No flow
SQRV-020	Squamscott River South	No flow
SQRV-060	Squamscott River South	No flow
SQRV-070	Squamscott River South	No flow
SQRV-080	Squamscott River South	No flow
SQRV-100	Squamscott River South	No flow
SQRV-130	Squamscott River South	No flow
SQRV-160	Squamscott River South	No flow
SQRV-210	Squamscott River South	No flow

**Requested by the Town to be reinspected*

Additionally, 9 outfalls in the May 4, 2021 memo prepared by Wright-Pierce, were identified as requiring reinspection (Figure 2). The 9 outfalls were evaluated and sampled (if necessary) on October 22, 2021 following a period of at least 48 hours with less than 0.1-inch of rainfall. Of the 9 outfalls inspected, 2 had dry weather flow and were sampled. One outfall (SQRV-180) was unable to be located and therefore, the next upgradient catch basin was inspected, and flow was observed entering the catch basin during the initial inspection. However, prior to sampling the catch basin a vehicle had parked over the catch basin making it inaccessible and samples could not be collected. The 6 remaining outfalls did not have dry weather flow. The status of each outfall is summarized in Table 2.

Table 2. Screening Status for Outfalls Requiring Reinspection

Outfall ID	Receiving Water	Status
WWCK-001	Wheelwright Creek	Flow observed - sample collected
WWCK-090	Wheelwright Creek	Flow observed - sample collected
SQRV-180	Squamscott River South	Outfall could not be located. Flow observed in upgradient catch basins, but in accessible, no sample collected.
LTRV-050	Little River	No flow
LTRV-120	Little River	No flow
NRBK-001	Norris Brook	No flow
SQRV-090	Squamscott River South	No flow
WWCK-080	Wheelwright Creek	No flow
CLPD-002	Colcord Pond	No flow

Field Parameters

Field parameters including temperature, pH, conductivity, and salinity were measured at each outfall which had dry weather flow using a YSI Pro Series meter which was calibrated prior to each day of sampling. Field measurements for ammonia were collected using Hach Ammonia (Nitrogen) test strips. Field measurements for chlorine were collected using a Hach DR300 pocket colorimeter and field measurements for surfactants were collected using the CHEMetrics® K-9400 visual test kit. Field test kits were used in accordance with manufacturer's instructions and results were recorded in the field notes provided in Attachment 1.

Analytical Parameters

Samples were collected from each outfall with dry weather flow for the parameters identified in the September 15, 2021 Scope of Work prepared by Geosyntec. When possible, samples were collected from flowing water and placed directly into laboratory supplied bottle ware. Where access did not allow for sampling directly with the bottle ware the samples were collected using clean, dedicated unpreserved bottle ware and transferred to laboratory supplied bottle ware. Analytical samples were placed on ice and transported to Absolute Resource Associates in Portsmouth, New Hampshire under chain of custody procedures.

Results

The results of the dry weather outfall sampling are presented in Table 3 (attached). Analytical laboratory reports are provided in Attachment 2.

Standard Monitoring Parameters

Temperature ranged from 15.1°C to 20.1°C. Conductivity ranged from 468.8 to 4,305 microsiemens per centimeter ($\mu\text{s}/\text{cm}$) and salinity ranged from 0.23 to 2.3 parts per trillion (ppt), respectively. The highest concentration for conductivity and salinity was observed at WWCK-090, located along Wheelwright Creek. pH was measured at each location and ranged from 7.28 to 8.06.

Free chlorine concentrations ranged from 0.11 to 0.84 milligrams per Liter (mg/l). Total chlorine concentrations ranged from 0.07 to 0.77 mg/l. Free and total chlorine exceeded the benchmark value of 0.02 mg/l at all six locations. Ammonia concentrations ranged from 0 to 0.25 and was not detected above the benchmark value of 0.5 mg/l. Surfactants ranged from 0.25 to 2 parts per million (ppm) and exceeded the benchmark value of 0.25 ppm at all locations.

E. Coli was detected at concentrations ranging from non-detect to 2,419.6 most probable number per 100 milliliters (MPN/100ml). Detections of E. Coli exceeded the benchmark value of 406 at SQRV-170 on October 22, 2021.

Priority Pollutants

Dissolved oxygen was measured at three of the six locations. Dissolved oxygen ranged from 8 to 9 mg/l. PAHs and oil & grease were non-detect.

Chlorophyll-a, enterococci, nitrogen, oil & grease, PAHs, and metals were measured at three locations (SQRV-090, SQRV-170, and SQRV-190). Chlorophyll-a and enterococci were not analyzed from the samples collected on October 8, 2021. Chlorophyll-a ranged from non-detect to 0.9 mg/l and total nitrogen ranged from non-detect to 1.0 mg/l. Enterococci concentrations ranged from 9.4 to 231.8 MPN.

Aluminum concentrations ranged from 0.11 to 0.20 mg/l. Zinc was detected at a concentration of 0.011 mg/l in the sample collected from SQRV-09 on October 8, 2021. Other metals were not detected.

Conclusions

As outlined in the IDDE plan, any outfalls where information gathered identifies a possible sewer input must be ranked as a Problem outfall and investigated within 7 years of the effective permit date. The criteria for sewer input indicators which include:

Dry Weather Outfall Sampling Results

December 20, 2021

Page 5

- Olfactory or visual evidence of sewage;
- Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and bacteria levels greater than the water quality criteria applicable to the receiving water; or
- Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and detectable levels of chlorine.

The results from the dry weather outfall sampling do not meet the criteria in the IDDE plan for sewer input indicators or Problem outfalls. Therefore, investigations shall be completed within 10 years of the effective permit date. The results from this dry weather screening along with the System Vulnerability Factors (SVFs) will be used to prioritize the outfalls, as high or low, for future investigation.

References

Wright-Pierce. Illicit Discharge Detection and Elimination (IDDE) Plan for the Town of Exeter, NH. July 2020

* * * * *

ATTACHMENTS:

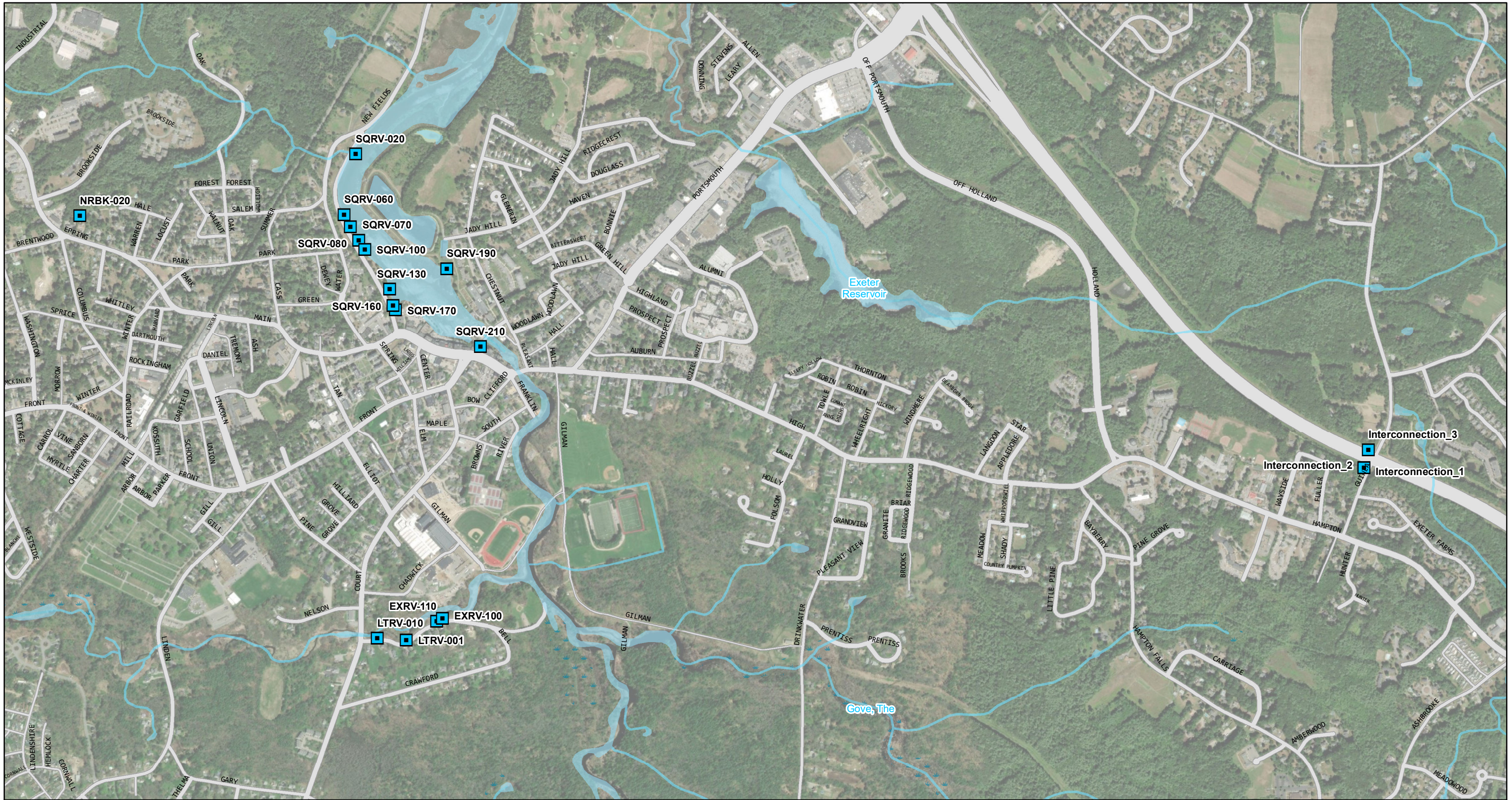
Figure 1 – Dry Weather Outfall Sampling Locations

Figure 2 – Outfall Locations for Reinspection

Table 3 – Dry Weather Outfall Sampling Analytical and Field Results

Attachment 1 – Field Notes

Attachment 2 – Analytical Laboratory Reports



Legend

- Outfall Locations
- STREAM/RIVER
- WATERBODY
- WETLAND
- ROAD

N

0 1,080 Feet

Dry Weather Outfall Sampling Locations	
Exeter	
Acton, MA	November 2021
Figure 1	



Legend

- Outfall Locations
- STREAM/RIVER
- WATERBODY
- ~ WETLAND
- ROAD

N

0 1,080 Feet

Outfall Locations for Reinspection	
Exeter	
Acton, MA	November 2021
Figure 2	

Table 3
Dry Weather Outfall Sampling Analytical and Field Results
Exeter, NH

Parameter	Units	Method	Benchmark	INT-0003-10072021 10/7/2021	SQVR-090-10222021 10/22/2021	SQVR-170-10222021 10/22/2021	SQVR-190-10222021 10/22/2021	WWCK-001-10222021 10/22/2021	WWCK-090-10222021 10/22/2021
Miscellaneous									
E. Coli (MPN)	MPN/100ml	9223B	406	<1.0	6.3	2419.6	23.5	325.5	30.1
Dissolved Oxygen	mg/l	45000-C	NA	--	8H	8H	9H	--	--
Total Nitrogen	mg/l	-	NA	--	<1.0	<1.0	<1.0	--	--
Oil & Grease, Hem-Grav	mg/l	1664A	NA	--	<5	<5	<5	--	--
Enterococci	MPN	Enterolert	NA	--	17.1	231.8	9.4	--	--
Chlorophyll A	mg/l	446.0(M)	NA	--	<0.9	0.9	<1.8	--	--
Nitrogen, Total Kjeldahl	mg/l	4500NH3-H	NA	--	0.6	0.7	0.6	--	--
Nitrogen, Nitrate/Nitrite	mg/l	4500NO3-F	NA	--	<1.0	<1.0	<1.0	--	--
Metals, Total									
Aluminum, Total	mg/l	6010D	NA	--	0.11	0.13	<0.050	--	--
Arsenic, Total	mg/l	6010D	NA	--	<0.0025	<0.0025	<0.0025	--	--
Copper, Total	mg/l	6010D	NA	--	<0.010	<0.010	<0.010	--	--
Lead, Total	mg/l	6010D	NA	--	<0.0050	<0.0050	<0.0050	--	--
Nickel, Total	mg/l	6010D	NA	--	<0.010	<0.010	<0.010	--	--
Zinc, Total	mg/l	6010D	NA	--	<0.010	<0.010	<0.010	--	--
Cadmium, Total	mg/l	6020B	NA	--	<0.0010	<0.0010	<0.0010	--	--
Polycyclic Aromatic Hydrocarbons									
2-Methylnaphthalene	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Acenaphthene	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Acenaphthylene	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Anthracene	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Benzo(a)anthracene	ug/l	8270D-SIM	NA	--	<0.1	<0.1	<0.2	--	--
Benzo(a)pyrene	ug/l	8270D-SIM	NA	--	<0.2	<0.2	<0.4	--	--
Benzo(b)fluoranthene	ug/l	8270D-SIM	NA	--	<0.1	<0.1	<0.2	--	--
Benzo(ghi)perylene	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Benzo(k)fluoranthene	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Chrysene	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Dibenzofuran	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Dibenzo(a,h)anthracene	ug/l	8270D-SIM	NA	--	<0.1	<0.1	<0.2	--	--
Fluoranthene	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Fluorene	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Indeno(1,2,3-cd)pyrene	ug/l	8270D-SIM	NA	--	<0.1	<0.1	<0.2	--	--
Naphthalene	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Phenanthrene	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Pyrene	ug/l	8270D-SIM	NA	--	<0.5	<0.5	<0.9	--	--
Field Measurements									
Temperature	°C	FIELD	NA	20.1	16.86	15.61	16.74	16.00	16.03
pH	SU	FIELD	NA	7.28	7.5	7.37	7.95	8.06	7.48
Conductivity	(uS/cm)	FIELD	NA	1094	656	2913	1051	564	4305
Salinity	ppt	FIELD	NA	0.54	0.32	1.52	0.52	0.27	2.30
Ammonia	mg/l	FIELD	0.5	0.25	0.25	0.25	0.25	0	0
Free Chlorine	mg/l	FIELD	0.02	0.15	0.21	0.14	0.22	0.16	0.11
Total Chlorine	mg/l	FIELD	0.02	0.07	0.23	0.14	0.23	0.18	0.09
Surfactants	ppm	FIELD	0.25	0.5	0.5	1.5	0.5	0.75	2

Notes:

1. Definitions:

- B = A low level of this analyte was also detected in the method blank
- H = Sample was received beyond the method holding time
- U = parameter was not detected above the laboratory reporting limit shown
- = parameter was not analyzed for in that sample
- NA = no benchmark value has been established in the IDDE Plan.
- SU = standard units
- ug/l = micrograms per liter
- mg/l = milligrams per liter
- MPN = most probable number

2. Highlighting indicates an exceedance of the benchmark value. Benchmark values are from Table 6-3 of the Illicit Discharge Detection and Elimination (IDDE) Plan prepared by Wright-Pierce for the Town of Exeter in July 2020.

3. Analytical samples were analyzed by Absolute Resource Associates in Portsmouth, New Hampshire.

4. Field measurements were taken from a YSI which was calibrated in the field daily.

OUTFALL SAMPLING RECORD

Geosyntec
consultants

289 Great Road, Acton, MA 01720
Phone: 978-263-9588, Fax: 978-263-9594

Project Name: Exeter
Project Number: BR0595
Field Personnel: B. D'Ascoli and E. Grimes
Date: 10/7/2021

Page 1 of 1
Recorded by: E Grimes
Weather: Sunny, 70s

Outfall ID	Time	Temp	pH	Sp. Conductivity	Salinity	Ammonia	Free Chlorine	Total Chlorine	Surfactants	Comments
		°C	(units)	(µS/cm)	ppt	mg/L	mg/L	mg/L	ppm	
INT-003	1148	20.1	7.28	1097	0.54	0.25	0.08 ^{0.15}	0.00 ^{0.07}	0.50	

EG

OUTFALL SAMPLING RECORD

Geosyntec[®]

consultants

289 Great Road, Acton, MA 01720
Phone: 978-263-9588, Fax: 978-263-9594

Project Name: Exeter
Project Number: BR0595
Field Personnel: B. D'Ascoli and E. Grimes
Date: 10/8/2021

Page 1 of 1
Recorded by: E. Grimes
Weather: Sunny, 60s

Outfall ID	Time	Temp	pH	Sp. Conductivity	Salinity	Ammonia	Free Chlorine	Total Chlorine	Surfactants	Comments
		°C	(units)	(µS/cm)	ppt	mg/L	mg/L	mg/L	ppm	
SQRV-170	800	15.1	7.88	1058	0.53	0	0.84	0.77	0.50	
SQRV-090	845	16.3	7.46	468.8	0.23	0.25	0.53	0.69	0.25	<ul style="list-style-type: none"> •outfall submerged •Inspect first upstream catch basin → no flow •Collect from second upstream catch basin
SQRV-190	915	16.1	7.73	874	0.43	0.25	0.38	0.39	0.75	

(E)

Project ID: Exeter BR0595

Job ID: 58925

Lab Number: 58925-001

Sample ID: INT-0003-10072021

Matrix: Water

Sampled: 10/7/21 11:42

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis			Reference
	Result	Limit	Units	Factor			Batch	Date	Time	
Total Coliform Bacteria	14.6	1.0	MPN	1	DBV	2103328	10/7/21	13:48	SM9223BColilertMPN	
E. coli Bacteria	< 1.0	1.0	MPN	1	DBV	2103328	10/7/21	13:48	SM9223BColilertMPN	

Project ID: Exeter BR0595

Job ID: 58940

Lab Number: 58940-001

Sample ID: SQRV-090-10082021

Matrix: Water

Sampled: 10/8/21 8:45

Parameter	Reporting		Instr Dil'n		Prep		Analysis		Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date Time	
naphthalene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
2-methylnaphthalene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
acenaphthylene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
acenaphthene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
dibenzofuran	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
fluorene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
phenanthrene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
anthracene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
fluoranthene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
pyrene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
benzo(a)anthracene	< 0.1	0.1	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
chrysene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
benzo(b)fluoranthene	< 0.1	0.1	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
benzo(a)pyrene	< 0.2	0.2	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
indeno(1,2,3-cd)pyrene	< 0.1	0.1	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
dibenzo(a,h)anthracene	< 0.1	0.1	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
Surrogate Recovery		Limits							
2-fluorobiphenyl SUR	58	43-116	%	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E
o-terphenyl SUR	79	33-141	%	1	CL	10/13/21	14356	10/18/21 14:17	SW3510C8270E

Lab Number: 58940-001

Sample ID: SQRV-090-10082021

Matrix: Water

Sampled: 10/8/21 8:45

Parameter	Reporting		Instr Dil'n		Prep		Analysis		Reference	
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date Time		
Dissolved Oxygen	9 H	1	mg/L	1	SFM		2103331	11/8/21 11:19	SM4500-O G	
H = Sample was received beyond method holding time.										
Nitrite/Nitrate-N	< 1.0	1.0	mg/L	10	DBV		2103333	10/9/21 1:18	E300.0A	
Nitrogen, total	1.0	1.0	mg/L	1			2103016		Calc	
Oil and Grease	< 5	5	mg/L	1	SLB		2103424	10/18/21 7:38	E1664B	
Total Kjeldahl Nitrogen (TKN)	1.0	0.5	mg/L	1	SFM		2103362	10/12/21 9:20	ASTMD359002A	
Total Coliform Bacteria	>2419.6	1.0	MPN	1	DBV		2103334	10/8/21 11:11	SM9223BColilertMPN	
E. coli Bacteria	42.2	1.0	MPN	1	DBV		2103334	10/8/21 11:11	SM9223BColilertMPN	

Project ID: Exeter BR0595

Job ID: 58940

Lab Number: 58940-002

Sample ID: SQRV-170-10082021

Matrix: Water

Sampled: 10/8/21 8:00

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
naphthalene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
2-methylnaphthalene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
acenaphthylene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
acenaphthene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
dibenzofuran	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
fluorene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
phenanthrene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
anthracene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
fluoranthene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
pyrene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
benzo(a)anthracene	< 0.1	0.1	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
chrysene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
benzo(b)fluoranthene	< 0.1	0.1	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
benzo(a)pyrene	< 0.2	0.2	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
indeno(1,2,3-cd)pyrene	< 0.1	0.1	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
dibenzo(a,h)anthracene	< 0.1	0.1	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
Surrogate Recovery			Limits							
2-fluorobiphenyl SUR	63	43-116	%	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E
o-terphenyl SUR	81	33-141	%	1	CL	10/13/21	14356	10/18/21	14:48	SW3510C8270E

Lab Number: 58940-002

Sample ID: SQRV-170-10082021

Matrix: Water

Sampled: 10/8/21 8:00

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Aluminum	0.20	0.050	mg/L	1	EEB	10/11/21	14343	10/12/21	4:45	E200.8
Arsenic	< 0.0025	0.0025	mg/L	1	EEB	10/11/21	14343	10/12/21	4:45	E200.8
Cadmium	< 0.0010	0.0010	mg/L	1	AGN	10/11/21	14343	10/14/21	4:03	E200.8
Copper	< 0.010	0.010	mg/L	1	EEB	10/11/21	14343	10/12/21	4:45	E200.8
Lead	< 0.0050	0.0050	mg/L	1	EEB	10/11/21	14343	10/12/21	4:45	E200.8
Nickel	< 0.010	0.010	mg/L	1	EEB	10/11/21	14343	10/12/21	4:45	E200.8
Zinc	< 0.010	0.010	mg/L	1	EEB	10/11/21	14343	10/12/21	4:45	E200.8

Project ID: Exeter BR0595

Job ID: 58940

Lab Number: 58940-002

Sample ID: SQRV-170-10082021

Matrix: Water

Sampled: 10/8/21 8:00

Parameter	Reporting		Instr Dil'n		Analyst	Prep	Analysis			Reference
	Result	Limit	Units	Factor		Date	Batch	Date	Time	
Dissolved Oxygen	8 H	1	mg/L	1	SFM		2103331	11/8/21	11:20	SM4500-O G
H = Sample was received beyond method holding time.										
Nitrite/Nitrate-N	< 1.0	1.0	mg/L	10	DBV		2103348	10/11/21	21:27	E300.0A
Nitrogen, total	< 1.0	1.0	mg/L	1			2103016			Calc
Oil and Grease	< 5	5	mg/L	1	SLB		2103424	10/18/21	7:38	E1664B
Total Kjeldahl Nitrogen (TKN)	0.6	0.5	mg/L	1	SFM		2103362	10/12/21	9:20	ASTMD359002A
Total Coliform Bacteria	>2419.6	1.0	MPN	1	DBV		2103334	10/8/21	11:11	SM9223BColilertMPN
E. coli Bacteria	1203.3	1.0	MPN	1	DBV		2103334	10/8/21	11:11	SM9223BColilertMPN

Project ID: Exeter BR0595

Job ID: 58940

Lab Number: 58940-003

Sample ID: SQRV-190-10082021

Matrix: Water

Sampled: 10/8/21 9:15

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
naphthalene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
2-methylnaphthalene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
acenaphthylene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
acenaphthene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
dibenzofuran	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
fluorene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
phenanthrene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
anthracene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
fluoranthene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
pyrene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
benzo(a)anthracene	< 0.1	0.1	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
chrysene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
benzo(b)fluoranthene	< 0.1	0.1	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
benzo(a)pyrene	< 0.2	0.2	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
indeno(1,2,3-cd)pyrene	< 0.1	0.1	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
dibenzo(a,h)anthracene	< 0.1	0.1	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
Surrogate Recovery			Limits							
2-fluorobiphenyl SUR	66	43-116	%	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E
o-terphenyl SUR	80	33-141	%	1	CL	10/13/21	14356	10/18/21	15:18	SW3510C8270E

Lab Number: 58940-003

Sample ID: SQRV-190-10082021

Matrix: Water

Sampled: 10/8/21 9:15

Parameter	Reporting		Instr Dil'n		Prep		Analysis			Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Aluminum	< 0.050	0.050	mg/L	1	EEB	10/11/21	14343	10/12/21	4:54	E200.8
Arsenic	< 0.0025	0.0025	mg/L	1	AGN	10/11/21	14343	10/14/21	4:11	E200.8
Cadmium	< 0.0010	0.0010	mg/L	1	AGN	10/11/21	14343	10/14/21	4:11	E200.8
Copper	< 0.010	0.010	mg/L	1	EEB	10/11/21	14343	10/12/21	4:54	E200.8
Lead	< 0.0050	0.0050	mg/L	1	EEB	10/11/21	14343	10/12/21	4:54	E200.8
Nickel	< 0.010	0.010	mg/L	1	AGN	10/11/21	14343	10/14/21	4:11	E200.8
Zinc	0.011 B	0.010	mg/L	1	AGN	10/11/21	14343	10/14/21	4:11	E200.8

B = A low level of this analyte was also detected in the method blank.

Project ID: Exeter BR0595

Job ID: 58940

Lab Number: 58940-003

Sample ID: SQRV-190-10082021

Matrix: Water

Sampled: 10/8/21 9:15

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis			Reference
	Result	Limit	Units	Factor			Batch	Date	Time	
Dissolved Oxygen	9 H	1	mg/L	1	SFM	2103331	11/8/21	11:22	SM4500-O G	
H = Sample was received beyond method holding time.										
Nitrite/Nitrate-N	< 1.0	1.0	mg/L	10	DBV	2103348	10/11/21	21:43	E300.0A	
Nitrogen, total	< 1.0	1.0	mg/L	1		2103016			Calc	
Oil and Grease	< 5	5	mg/L	1	SLB	2103424	10/18/21	7:38	E1664B	
Total Kjeldahl Nitrogen (TKN)	0.5	0.5	mg/L	1	SFM	2103362	10/12/21	9:20	ASTMD359002A	
Total Coliform Bacteria	>2419.6	1.0	MPN	1	DBV	2103334	10/8/21	11:11	SM9223BColilertMPN	
E. coli Bacteria	83.6	1.0	MPN	1	DBV	2103334	10/8/21	11:11	SM9223BColilertMPN	

Project ID: Exeter BR0595

Job ID: 59092

Sample#: 59092-001

Sample ID: SQRV-090-10222021

Matrix: Water

Sampled: 10/22/21 7:50

Parameter	Reporting		Instr Dil'n		Prep		Analysis		Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date Time	
naphthalene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
2-methylnaphthalene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
acenaphthylene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
acenaphthene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
dibenzofuran	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
fluorene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
phenanthrene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
anthracene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
fluoranthene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
pyrene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
benzo(a)anthracene	< 0.1	0.1	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
chrysene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
benzo(b)fluoranthene	< 0.1	0.1	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
benzo(a)pyrene	< 0.2	0.2	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
indeno(1,2,3-cd)pyrene	< 0.1	0.1	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
dibenzo(a,h)anthracene	< 0.1	0.1	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
Surrogate Recovery		Limits							
2-fluorobiphenyl SUR	67	43-116	%	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E
o-terphenyl SUR	74	33-141	%	1	CL	10/26/21	14386	10/26/21 17:05	SW3510C8270E

Project ID: Exeter BR0595

Job ID: 59092

Sample#: 59092-002

Sample ID: SQRV-170-10222021

Matrix: Water

Sampled: 10/22/21 8:30

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
naphthalene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
2-methylnaphthalene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
acenaphthylene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
acenaphthene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
dibenzofuran	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
fluorene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
phenanthrene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
anthracene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
fluoranthene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
pyrene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
benzo(a)anthracene	< 0.1	0.1	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
chrysene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
benzo(b)fluoranthene	< 0.1	0.1	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
benzo(k)fluoranthene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
benzo(a)pyrene	< 0.2	0.2	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
indeno(1,2,3-cd)pyrene	< 0.1	0.1	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
dibenzo(a,h)anthracene	< 0.1	0.1	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
benzo(g,h,i)perylene	< 0.5	0.5	ug/L	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
Surrogate Recovery		Limits								
2-fluorobiphenyl SUR	71	43-116	%	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E
o-terphenyl SUR	81	33-141	%	1	CL	10/26/21	14386	10/26/21	17:35	SW3510C8270E

Project ID: Exeter BR0595

Job ID: 59092

Sample#: 59092-003

Sample ID: SQRV-190-10222021

Matrix: Water

Sampled: 10/22/21 9:10

Parameter	Reporting		Instr Dil'n		Prep		Analysis		Reference
	Result	Limit	Units	Factor	Analyst	Date	Batch	Date Time	
naphthalene	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
2-methylnaphthalene	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
acenaphthylene	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
acenaphthene	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
dibenzofuran	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
fluorene	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
phenanthrene	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
anthracene	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
fluoranthene	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
pyrene	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
benzo(a)anthracene	< 0.2	0.2	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
chrysene	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
benzo(b)fluoranthene	< 0.2	0.2	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
benzo(k)fluoranthene	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
benzo(a)pyrene	< 0.4	0.4	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
indeno(1,2,3-cd)pyrene	< 0.2	0.2	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
dibenzo(a,h)anthracene	< 0.2	0.2	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
benzo(g,h,i)perylene	< 0.9	0.9	ug/L	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
Surrogate Recovery		Limits							
2-fluorobiphenyl SUR	69	43-116	%	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E
o-terphenyl SUR	80	33-141	%	1	CL	10/26/21	14386	10/26/21 18:06	SW3510C8270E

Project ID: Exeter BR0595

Job ID: 59092

Sample#: 59092-001

Sample ID: SQRV-090-10222021

Matrix: Water

Sampled: 10/22/21 7:50

		Reporting		Instr Dil'n		Prep		Analysis		
Parameter	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
Oil and Grease	< 5	5	mg/L	1	SLB		2103497	10/25/21	7:43	E1664B

Sample#: 59092-002

Sample ID: SQRV-170-10222021

Matrix: Water

Sampled: 10/22/21 8:30

		Reporting		Instr Dil'n		Prep		Analysis		
Parameter	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
Oil and Grease	< 5	5	mg/L	1	SLB		2103497	10/25/21	7:43	E1664B

Sample#: 59092-003

Sample ID: SQRV-190-10222021

Matrix: Water

Sampled: 10/22/21 9:10

		Reporting		Instr Dil'n		Prep		Analysis		
Parameter	Result	Limit	Units	Factor	Analyst	Date	Batch	Date	Time	Reference
Oil and Grease	< 5	5	mg/L	1	SLB		2103497	10/25/21	7:43	E1664B

Project ID: Exeter BR0595

Job ID: 59092

Sample#: 59092-001

Sample ID: SQRV-090-10222021

Matrix: Water

Sampled: 10/22/21 7:50

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Aluminum	0.11	0.050	mg/L	1	EEB	11/5/21	14425	11/9/21	8:46	E200.8
Arsenic	< 0.0025	0.0025	mg/L	1	EEB	11/5/21	14425	11/9/21	8:46	E200.8
Cadmium	< 0.0010	0.0010	mg/L	1	EEB	11/5/21	14425	11/9/21	8:46	E200.8
Copper	< 0.010	0.010	mg/L	1	EEB	11/5/21	14425	11/9/21	8:46	E200.8
Lead	< 0.0050	0.0050	mg/L	1	EEB	11/5/21	14425	11/9/21	8:46	E200.8
Nickel	< 0.010	0.010	mg/L	1	EEB	11/5/21	14425	11/9/21	8:46	E200.8
Zinc	< 0.010	0.010	mg/L	1	EEB	11/5/21	14425	11/9/21	8:46	E200.8

Sample#: 59092-002

Sample ID: SQRV-170-10222021

Matrix: Water

Sampled: 10/22/21 8:30

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Aluminum	0.13	0.050	mg/L	1	AGN	11/10/21	14438	11/10/21	19:41	E200.8
Arsenic	< 0.0025	0.0025	mg/L	1	AGN	11/10/21	14438	11/10/21	19:41	E200.8
Cadmium	< 0.0010	0.0010	mg/L	1	AGN	11/10/21	14438	11/10/21	19:41	E200.8
Copper	< 0.010	0.010	mg/L	1	AGN	11/10/21	14438	11/10/21	19:41	E200.8
Lead	< 0.0050	0.0050	mg/L	1	AGN	11/10/21	14438	11/10/21	19:41	E200.8
Nickel	< 0.010	0.010	mg/L	1	AGN	11/10/21	14438	11/10/21	19:41	E200.8
Zinc	< 0.010	0.010	mg/L	1	AGN	11/10/21	14438	11/10/21	19:41	E200.8

Sample#: 59092-003

Sample ID: SQRV-190-10222021

Matrix: Water

Sampled: 10/22/21 9:10

Parameter	Result	Reporting		Instr Dil'n		Prep		Analysis		Reference
		Limit	Units	Factor	Analyst	Date	Batch	Date	Time	
Aluminum	< 0.050	0.050	mg/L	1	AGN	11/10/21	14438	11/10/21	20:09	E200.8
Arsenic	< 0.0025	0.0025	mg/L	1	AGN	11/10/21	14438	11/10/21	20:09	E200.8
Cadmium	< 0.0010	0.0010	mg/L	1	AGN	11/10/21	14438	11/10/21	20:09	E200.8
Copper	< 0.010	0.010	mg/L	1	AGN	11/10/21	14438	11/10/21	20:09	E200.8
Lead	< 0.0050	0.0050	mg/L	1	AGN	11/10/21	14438	11/10/21	20:09	E200.8
Nickel	< 0.010	0.010	mg/L	1	AGN	11/10/21	14438	11/10/21	20:09	E200.8
Zinc	< 0.010	0.010	mg/L	1	AGN	11/10/21	14438	11/10/21	20:09	E200.8

Project ID: Exeter BR0595

Job ID: 59092

Sample#: 59092-001

Sample ID: SQRV-090-10222021

Matrix: Water

Sampled: 10/22/21 7:50

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis		Reference
	Result	Limit	Units	Factor			Batch	Date	
Dissolved Oxygen	8H	1	mg/L	1	SFM	2103528	10/22/21	11:20	SM4500-O G
H = Sample was received beyond method holding time.									
Enterococci Bacteria	17.1	1.0	MPN	1	DBV	2103492	10/22/21	13:14	Enterolert
Nitrite/Nitrate-N	< 1.0	1.0	mg/L	10	DBV	2103548	10/27/21	15:21	E300.0A
Nitrogen, total	< 1.0	1	mg/L	1		2103016			Calc
Total Kjeldahl Nitrogen (TKN)	0.6	0.5	mg/L	1	SFM	2103516	10/26/21	7:55	ASTMD359002A
Total Coliform Bacteria	2419.6	1.0	MPN	1	DBV	2103493	10/22/21	13:13	SM9223BColilert MPN
E. coli Bacteria	6.3	1.0	MPN	1	DBV	2103493	10/22/21	13:13	SM9223BColilert MPN

Sample#: 59092-002

Sample ID: SQRV-170-10222021

Matrix: Water

Sampled: 10/22/21 8:30

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis		Reference
	Result	Limit	Units	Factor			Batch	Date	
Dissolved Oxygen	8H	1	mg/L	1	SFM	2103528	10/22/21	11:20	SM4500-O G
H = Sample was received beyond method holding time.									
Enterococci Bacteria	231.8	1.0	MPN	1	DBV	2103492	10/22/21	13:14	Enterolert
Nitrite/Nitrate-N	< 1.0	1.0	mg/L	10	DBV	2103548	10/27/21	15:54	E300.0A
Nitrogen, total	< 1.0	1	mg/L	1		2103016			Calc
Total Kjeldahl Nitrogen (TKN)	0.7	0.5	mg/L	1	SFM	2103516	10/26/21	7:55	ASTMD359002A
Total Coliform Bacteria	>2419.6	1.0	MPN	1	DBV	2103493	10/22/21	13:13	SM9223BColilert MPN
E. coli Bacteria	2419.6	1.0	MPN	1	DBV	2103493	10/22/21	13:13	SM9223BColilert MPN

Sample#: 59092-003

Sample ID: SQRV-190-10222021

Matrix: Water

Sampled: 10/22/21 9:10

Parameter	Reporting		Instr Dil'n		Analyst	Prep Date	Analysis		Reference
	Result	Limit	Units	Factor			Batch	Date	
Dissolved Oxygen	9H	1	mg/L	1	SFM	2103528	10/22/21	11:20	SM4500-O G
H = Sample was received beyond method holding time.									
Enterococci Bacteria	9.4	1.0	MPN	1	DBV	2103492	10/22/21	13:14	Enterolert
Nitrite/Nitrate-N	< 1.0	1.0	mg/L	10	DBV	2103548	10/27/21	16:10	E300.0A
Nitrogen, total	< 1.0	1	mg/L	1		2103016			Calc
Total Kjeldahl Nitrogen (TKN)	0.6	0.5	mg/L	1	SFM	2103516	10/26/21	7:55	ASTMD359002A
Total Coliform Bacteria	2419.6	1.0	MPN	1	DBV	2103493	10/22/21	13:13	SM9223BColilert MPN
E. coli Bacteria	23.5	1.0	MPN	1	DBV	2103493	10/22/21	13:13	SM9223BColilert MPN

Project ID: Exeter BR0595

Job ID: 59092

Sample#: 59092-004

Sample ID: WWCK-090-10222021

Matrix: Water

Sampled: 10/22/21 9:45

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Batch	Analysis		Reference
		Limit	Units	Factor	Analyst			Date	Time	
Total Coliform Bacteria	913.9	1.0	MPN	1	DBV	2103493	10/22/21	13:13	SM9223BColilert MPN	
E. coli Bacteria	30.1	1.0	MPN	1	DBV	2103493	10/22/21	13:13	SM9223BColilert MPN	

Sample#: 59092-005

Sample ID: WWCK-001-10222021

Matrix: Water

Sampled: 10/22/21 9:30

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Batch	Analysis		Reference
		Limit	Units	Factor	Analyst			Date	Time	
Total Coliform Bacteria	>2419.6	1.0	MPN	1	DBV	2103493	10/22/21	13:13	SM9223BColilert MPN	
E. coli Bacteria	325.5	1.0	MPN	1	DBV	2103493	10/22/21	13:13	SM9223BColilert MPN	

Sample#: 59092-001

Sample ID: SQRV-090-10222021

Matrix: Water

Sampled: 10/22/21 7:50

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Batch	Analysis		Reference
		Limit	Units	Factor	Analyst			Date	Time	
Chlorophyll a	< 0.9	0.9	mg/m3	1	DJM	2103592	10/29/21	16:40	SM 10200H-2	

Sample#: 59092-002

Sample ID: SQRV-170-10222021

Matrix: Water

Sampled: 10/22/21 8:30

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Batch	Analysis		Reference
		Limit	Units	Factor	Analyst			Date	Time	
Chlorophyll a	0.9	0.9	mg/m3	1	DJM	2103592	10/29/21	16:40	SM 10200H-2	

Sample#: 59092-003

Sample ID: SQRV-190-10222021

Matrix: Water

Sampled: 10/22/21 9:10

Parameter	Result	Reporting		Instr Dil'n		Prep Date	Batch	Analysis		Reference
		Limit	Units	Factor	Analyst			Date	Time	
Chlorophyll a	< 1.8	1.8	mg/m3	1	DJM	2103592	10/29/21	16:40	SM 10200H-2	

Outfall Inventory and Priority Ranking Matrix with System Vulnerability Factors



Town of Exeter, NH
MS4 Outfall Summary
May 2021

	Receiving Water	RecWaterbody_ID	# Outfalls	Note
	Interconnection	DOT's MS4	3	
Colcord Pond	Colcord Pond	NHLAK600030804-01	2	
	Unnamed Brook	NHRIV600030804-12	1	Unnamed Brook flows to Colcord Pond
	Dearborn Brook	NHRIV600030806-03	2	
Exeter River	Exeter River	NHRIV600030805-02	7	
	Exeter River	NHRIV600030805-32	12	
	Unnamed Brook	NHRIV600030805-16	1	Unnamed Brook flows to Exeter River
	Unnamed Brook - To Exeter River	NHRIV600030805-08	15	
	Little River	NHRIV600030804-11	34	
Norris Brook	Norris Brook	NHRIV600030806-01	1	
	Norris Brook	NHRIV600030806-02	5	
	Perkins Brook	NHRIV600030805-15	1	
	Squamscott River South	NHEST600030806-01-01	22	
	Taylor River - Ash Brook	NHRIV600031003-06	3	
Wheelwright Creek	Wheelwright Creek	NHRIV600030806-26	13	
	Wheelwright Creek - Exeter Reservoir	NHIMP600030806-02	5	
		Total:	127	
* Note: #Outfalls is linked to Priority Ranking Matrix.				

Outfall ID (dwp_id / WP_IDDE_OF_ID)	Old Outfall ID	Receiving Water	Previous Screening Results Indicate Likely Sewer Input?	Discharging to Area of Concern to Public Health?	Frequency of Past Discharge Complaints	Receiving Water Quality?	Density of Generating Sites?	Age of Development/Infrastructure?	Historic Combined Sewers or Septic?	Aging Septic?	Culverted Streams?	Additional Characteristics	Score	Priority Ranking	History of SSO in the catchment area, including, but not limited to, due to rain events, high water table and blockages	Common or twin-invert manholes serving storm and sanitary sewer	Common trench construction serving both storm sewer and sanitary sewer alignments	Crossing of storm and sanitary sewer where sewer is shallower than storm drain	Sanitary sewer alignments known or suspected to have been constructed with an underdrain system	Inadequate sanitary sewer level of service resulting in regular surcharging, customer back-ups, or frequent customer complaints	Area formerly (with-in last 20 years) served by combined sewer systems	Area with known sanitary sewer infrastructure defects	Total SVFs
Information Source			Outfall Inspections and screening/sampling results	GIS Maps	Town Staff	Impaired Waters List	Land Use/GIS Maps, Aerial Photography	Land Use Information, Visual Observation	Town Staff, GIS Maps	Land Use, Town Staff	GIS and Storm System Maps	Other			Town Staff / using SSO List on Town website	GIS Query	GIS Query	GIS Query	Town Staff	Town Staff / Based on "Sewer Model Update (2021)", areas identified as "surcharged"	Town Staff	Town Staff / Used Asset Wastewater and Stormwater Asset Management Program, December 2020, C-6 Probability of Failure Map, pipes listed as High/Very High	
Scoring Criteria			Yes = 3 (problem outfall) No = 0	Yes = 3 No = 0	Frequent = 3 Occasional = 2 None = 0	Poor = 3 Fair = 2 Good = 0	High = 3 Medium = 2 Low = 1	High = 3 Medium = 2 Low = 1	Yes = 3 No = 0	Yes = 3 Possible = 2 No = 0	Yes = 3 No = 0	TBD			Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	
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CLPD-001	O121	Colcord Pond	0	0	0	2	1			2	0		5	Low	No	No	No	No	No	No	No	No	0
CLPD-002		Colcord Pond	0	3	0	2	3		0	0	3		11	High	No	No	No known pipes	No known pipes	No	No	No	No	1
DBBK-001	O143	Dearborn Brook	0	3	0	0	1			0	0	Road Drainage, Undeveloped Area, No Sewer	4	Excluded	No	No	No	No	No	No	No	No	0
DBBK-010	O095	Dearborn Brook	0	3	0	0	1			0	0		4	Low	No	No	No	No	No	No	No	No	0
EXRV-001	O105	Exeter River	0	0	0	0	1			0	0		1	Low	No	No	No	No	No	No	No	Yes	1
EXRV-010	O103	Exeter River	0	0	0	0	1			0	0		1	Low	No	No	No	No	No	No	No	Yes	1
EXRV-020	O028	Exeter River	0	0	0	0	2		3	0	0	Dry Weather Flow, See 8/17 Inspection	5	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	2
EXRV-030	O114	Exeter River	0	0	0	0	2		3	0	0	SSO in Vicinity (11/2012)	5	Low	No	No	No	No	No	No	No	No	1
EXRV-040	O026	Exeter River	0	0	0	0	2		3	0	0	Dry Weather Flow, See 8/17 Inspection	5	Low	No	No	Yes	Yes	No	Yes	No	Yes	5
EXRV-050	O116	Exeter River	0	0	0	0	2			0	0		2	Low	No	No	No	No	No	No	No	Yes	1
EXRV-060	O023	Exeter River	0	0	0	0	3		3	0	0		6	Low	No	No	Yes	No	No	No	No	No	2
EXRV-070	O024	Exeter River	0	0	0	0	3		3	0	0		6	Low	No	No	Yes	N	No	No	No	Yes	3
EXRV-080	O025	Exeter River	3	0	0	0	3		3	0	0	Dry Weather Flow & Visual Indicators, See 8/17 Inspection	9	Problem	No	No	Yes	Yes	No	No	No	No	3
EXRV-090	O045	Exeter River	0	3	0	0	1			0	0		4	Low	No	No	Yes	No	No	No	No	No	0
EXRV-100	O090	Exeter River	0	3	0	0	1			0	0		4	Low	No	No	Yes	No	No	No	No	No	1
EXRV-110	O089	Exeter River	0	3	0	0	1			0	0		4	Low	No	No	Yes	No	No	No	No	No	1
EXRV-130	O042B	Exeter River	0	3	0	0	1			0	0		4	High	No	No	No	No	No	No	No	No	0
EXRV-140	O042A	Exeter River	0	3	0	0	1			0	0	Dry Weather Flow, See 7/17 Inspection	4	High	No	No	Yes	Yes	No	No	No	No	2
EXRV-150	O080	Exeter River	0	3	0	0	1			0	0		4	High	No	No	Yes	No	No	No	No	No	2
EXRV-160	O043	Exeter River	0	3	0	0	1			0	0		4	High	No	No	Yes	No	No	No	No	No	1
EXRV-170	O044	Exeter River	0	3	0	0	1			0	0		4	High	No	No	No	No	No	No	No	No	0
EXRV-180	O056	Exeter River	0	3	0	3	1			0	0	Dry Weather Flow, See 7/17 Inspection	7	High	No	No	Yes	Yes	No	No	No	No	3
EXRV-190	O081	Exeter River	0	3	0	3	1			0	0	Dry Weather Flow, See 8/17 Inspection, Could be Excluded	7	High	No	No							0
Interconnection 1		DOT's MS4	0	3	0	0	1			0	0		4	Low	No	No	No	No	No	No	No	No	0
Interconnection 2		DOT's MS4	0	3	0	0	1			2	0		6	Low	No	No	No	No	No	No	No	No	0
Interconnection 3		DOT's MS4	0	3	0	0	1			2	0		6	Low	No	No	No	No	No	No	No	No	0
LTRV-001	O088	Little River	0	3	0	2	1			0	0	Visual Indicators, See 7/17 Inspection	6	Low	No	No	Yes	No	No	No	No	No	1
LTRV-010	O087	Little River	0	3	0	2	1			0	0		6	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
LTRV-020	O086	Little River	0	3	0	2	1			0	0		6	Low	No	No	Yes	No	No	No	No	No	1
LTRV-030	O022	Little River	0	3	0	2	2		3	0	0	Dry Weather Flow, See 7/17 Inspection	10	High	No	No	Yes	Yes	No	No	No	No	3
LTRV-031		Little River	0	3	0	2	2		0	0	0	Dry Weather Flow, See 7/17 Inspection	7	High	No	No	No	No	No	No	No	No	1
LTRV-040	O109	Little River	0	3	0	2	2			0	0		7	Low	Yes	No	No	No	No	No	No	No	1
LTRV-050	O046	Little River	0	3	0	2	1			0	0		6	Low	Yes	No	Yes	No	No	No	No	No	3
LTRV-055	O041B	Little River	0	3	0	2	1			0	0		6	Low	No	No	No	No	No	No	No	No	0
LTRV-060	O041A	Little River	0	3	0	2	1			0	0		6	Low	No	No	No	No	No	No	No	No	0
LTRV-070	O040	Little River	0	3	0	2	1			0	0	Dry Weather Flow, See 7/17 Inspection	6	Low	No	No	Yes	Yes	No	No	No	No	2
LTRV-080	O117	Little River	0	3	0	2	1			0	0		6	Low	No	No	No known pipes	No known pipes	No	No	No	No	0
LTRV-090	O118	Little River	0	3	0	2	1			0	0		6	Low	No	No	No known pipes	No known pipes	No	No	No	No	0
LTRV-100	O119	Little River	0	3	0	2	1			0	0		6	Low	No	No	No known pipes	No known pipes	No	No	No	No	0
LTRV-110	O106	Little River	0	3	0	2	1			0	0		6	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
LTRV-120	O021	Little River	0	3	0	2	3		3	0	0		11	High	No	No	Yes	Yes	No	No	No	No	3
LTRV-130	O075	Little River	0	3	2	2	1			0	0	Dry Weather Flow & Visual Indicators, See 8/17 Inspection	8	Low	No	No	No	No (Missing some elevation data)	No	No	No	No	0
LTRV-140	O020	Little River	0	3	0	2	3			0	0		8	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
LTRV-150	O076	Little River	0	3	0	2	1			0	0		6	Low	No	No	No	No	No	No	No	No	0
LTRV-160	O019	Little River	0	3	0	2	2			0	0		7	Low	No	No	Yes	Yes	No	No	No	No	2
LTRV-170	O074	Little River	0	3	0	2	1			0	0	Visual Indicators, See 7/17 Inspection	6	Low	No	No	No	No	No	No	No	No	0
LTRV-180	O073	Little River	0	3	0	2	1			0	0		6	Low	No	No	Yes	No	No	No	No	No	1

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Scoring Criteria			Yes = 3 (problem outfall) No = 0	Yes = 3 No = 0	Frequent = 3 Occasional = 2 None = 0	Poor = 3 Fair = 2 Good = 0	High = 3 Medium = 2 Low = 1	High = 3 Medium = 2 Low = 1	Yes = 3 No = 0	Yes = 3 Possible = 2 No = 0	Yes = 3 No = 0	TBD			Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	
Outfall ID (dvw_id / WP_IDDE_OF_ID)	Old Outfall ID	Receiving Water	Previous Screening Results Indicate Likely Sewer Input?	Discharging to Area of Concern to Public Health?	Frequency of Past Discharge Complaints	Receiving Water Quality?	Density of Generating Sites?	Age of Development/Infrastructure?	Historic Combined Sewers or Septic?	Aging Septic?	Culverted Streams?	Additional Characteristics	Score	Priority Ranking	History of SSO in the catchment area, including, but not limited to, due to rain events, high water table and blockages	Common or twin-invert manholes serving storm and sanitary sewer	Common trench construction serving both storm sewer and sanitary sewer alignments	Crossing of storm and sanitary sewer where sewer is shallower than storm drain	Sanitary sewer alignments known or suspected to have been constructed with an underdrain system	Inadequate sanitary sewer level of service resulting in regular surcharging, customer back-ups, or frequent customer complaints	Area formerly (with-in last 20 years) served by combined sewer systems	Area with known infrastructure defects and leaking	Total SVFs
LTRV-190	O018	Little River	0	3	0	2	1			0	0	Dry Weather Flow, See 8/17 Inspection	6	Low	No	No	Yes	No	No	No	No	No	1
LTRV-200	O009	Little River	0	0	0	2	2			0	0		4	Low	No	No	Yes	Yes	No	No	No	No	2
LTRV-210	O008	Little River	0	0	0	2	1	3		0	0		6	Low	No	No	Yes	Yes	No	No	No	No	2
LTRV-220	O007	Little River	0	0	2	2	1			0	0	Pet Waste, See 7/17 Inspection	5	Low	No	No	Yes	Yes	No	No	No	No	2
LTRV-230	O006	Little River	0	0	0	2	1			0	0		3	Low	No	No	Yes	Yes	No	No	No	No	2
LTRV-240	O005	Little River	3	0	0	2	1			3	0		9	Problem	No	No	Yes	Yes	No	No	No	No	2
LTRV-250	O094	Little River	0	0	0	2	1			0	0		3	Low	No	No	Yes	No	No	No	No	No	1
LTRV-260	O058A	Little River	0	0	0	2	1			0	0	Dry Weather Flow, See 7/17 Inspection	3	Low	No	No	Yes	Yes	No	No	No	No	2
LTRV-270	O059B	Little River	0	0	0	2	1			0	0	Dry Weather Flow, See 8/17 Inspection	3	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
LTRV-280	O093	Little River	0	0	0	2	1			0	0	Dry Weather Flow, See 7/17 Inspection	3	Low	No	No	Yes	Yes	No	No	No	No	2
LTRV-290	O058	Little River	0	0	0	2	1			0	0	Dry Weather Flow & Visual Indicators, See 8/17 Inspection	3	Low	No	No	Yes	No	No	No	No	No	1
LTRV-300	O051	Little River	0	0	0	2	1			2	0		5	Low	No	No	No	No	No	No	No	No	0
LTRV-310	O120	Little River	0	0	0	2	1			0	0		3	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
NRBK-001	O001	Norris Brook	0	0	0	0	1			0	0		1	Low	No	No	Yes	Yes	No	No	No	No	1
NRBK-010	O004	Norris Brook	3	0	0	0	2			3	2		10	Problem	No	No	Yes	Yes	No	No	No	Yes	4
NRBK-020	O032	Norris Brook	0	0	0	0	2			0	0	Possibly not an outfall	2	Low	No	No	No known pipes	No known pipes	No	No	No	Yes	1
NRBK-030	O078	Norris Brook	0	0	0	0	3			3	0	Dry Weather Flow, See 8/17 Inspection	6	Low	No	No	Yes	Yes	No	No	No	No	3
NRBK-040	O123	Norris Brook	0	0	0	0	3			3	0		6	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	2
NRBK-050	O061	Norris Brook	3	0	2	3	3			0	0	SSOs in Vicinity & Visual Indicators, See 8/17 Inspection	11	Problem	Yes	No	Yes	Yes	No	No	No	No	4
PKBK-001	O091	Perkins Brook	0	3	0	0	1			2	0		6	Low	No	No	No	No	No	No	No	No	0
SQRV-001	O098	Squamscott River South	0	0	0	3	1			0	0		4	High	No	No	No	No	No	No	No	No	0
SQRV-010	O003A	Squamscott River South	0	3	0	3	1			0	0	Dry Weather Flow, See 8/17 Inspection	7	High	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
SQRV-020	O003B	Squamscott River South	0	3	0	3	1			0	0	Road Drainage, No Dwellings, No Sewer	7	High	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
SQRV-030	O003C	Squamscott River South	0	3	0	3	1			0	0	Road Drainage, No Dwellings, No Sewer	7	High	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
SQRV-040	O003D	Squamscott River South	0	3	0	3	1			0	0	Road Drainage, No Dwellings, No Sewer	7	High	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
SQRV-050	O003E	Squamscott River South	0	3	0	3	1			0	0		7	High	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
SQRV-060	O003F	Squamscott River South	0	3	0	3	1			0	0	Road Drainage, No Dwellings, No Sewer	7	High	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
SQRV-070	O003G	Squamscott River South	0	3	0	3	1			0	0	Road Drainage, No Dwellings, No Sewer	7	High	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
SQRV-080	O003H	Squamscott River South	0	3	0	3	1			0	0	Road Drainage, No Dwellings, No Sewer	7	High	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
SQRV-090	O002	Squamscott River South	0	3	0	3	2	3	3	0	0		14	High	No	No	Yes	Yes	No	No	No	Yes	4
SQRV-100	O003I	Squamscott River South	0	3	0	3	1			0	0		7	High	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
SQRV-110	O003J	Squamscott River South	0	3	0	3	1			0	0		7	High	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1
SQRV-120	O003K	Squamscott River South	0	3	0	3	1			0	0		7	High	No	No	Yes	No (Missing some elevation data)	No	No	No	Yes	2
SQRV-130	O003L	Squamscott River South	0	3	0	3	1			0	0		7	High	No	No	Yes	No	No	Yes	No	Yes	3
SQRV-140	O003M	Squamscott River South	0	3	0	3	1			0	0		7	High	No	No	Yes	No	No	No	No	Yes	2
SQRV-150	O010	Squamscott River South	3	3	2	3	3	3	3	0	3		23	Problem	Yes	No	Yes	Yes	No	No	No	Yes	5
SQRV-160	O003N	Squamscott River South	0	3	0	3	1			0	0		7	High	No	No	No	No	No	No	No	Yes	1
SQRV-170	O047	Squamscott River South	0	3	0	3	3	3	3	0	0		15	High	No	No	Yes	Yes	No	Yes	No	Yes	5
SQRV-180	O071	Squamscott River South	0	3	2	3	3	1		0	0	SSO in Vicinity (11/2012)	12	High	No	No	Yes	No	No	No	No	No	1

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Outfall ID (dvw_id / WP_IDDE_OF_ID)	Old Outfall ID	Receiving Water	Previous Screening Results Indicate Likely Sewer Input?	Discharging to Area of Concern to Public Health?	Frequency of Past Discharge Complaints	Receiving Water Quality?	Density of Generating Sites?	Age of Development/Infrastructure?	Historic Combined Sewers or Septic?	Aging Septic?	Culverted Streams?	Additional Characteristics	Score	Priority Ranking	History of SSO in the catchment area, including, but not limited to, due to rain events, high water table and blockages	Common or twin-invert manholes serving storm and sanitary sewer	Common trench construction serving both storm sewer and sanitary sewer alignments	Crossing of storm and sanitary sewer where sewer is shallower than storm drain	Sanitary sewer alignments known or suspected to have been constructed with an underdrain system	Inadequate sanitary sewer level of service resulting in regular surcharging, customer back-ups, or frequent customer complaints	Area formerly (with-in last 20 years) served by combined sewer systems	Area with known infrastructure defects and leaking	Total SVFs	
SQRV-190	O029	Squamscott River South	0	3	2	3	2		3	0	3		16	High	No	No	Yes	Yes	No	No	No	No	3	
SQRV-200	O072	Squamscott River South	0	3	0	3	1			0	0		7	Low	No	No	No known pipes	No known pipes	No	No	No	No	0	
SQRV-210	O104	Squamscott River South	0	3	0	3	3		3	0	0		12	High	No	No	No	No	No	No	No	No	1	
SQRV-220	O030	Squamscott River South	0	3	0	3	2			0	0		8	High	No	No	Yes	No	No	No	No	Yes	2	
TLRV-001	O053	Taylor River - Ash Brook	0	0	0	0	1			0	0	Dry Weather Flow, See 7/17 Inspection	1	Low	No	No	Yes	Yes	No	No	No	No	2	
TLRV-010	O068	Taylor River - Ash Brook	0	3	0	0	1			0	0		4	Low	No	No	Yes	No	No	No	No	No	1	
TLRV-020	O069	Taylor River - Ash Brook	0	3	0	0	1			0	0		4	Low	No	No	Yes	No	No	No	No	No	1	
UNBK-001	O027	Unnamed Brook - To Exeter River	0	3	0	0	2		3	0	0		8	Low	No	No	Yes	Yes	No	No	No	No	3	
UNBK-010	O038	Unnamed Brook - To Exeter River	0	3	0	0	1			0	0		4	Low	No	No	Yes	No	No	Yes	No	Yes	3	
UNBK-020	O039A	Unnamed Brook - To Exeter River	0	3	0	0	1		3	0	0		7	Low	No	No	Yes	No (Missing some elevation data)	No	Yes	No	Yes	4	
UNBK-030	O100	Unnamed Brook - To Exeter River	0	3	0	0	1		3	0	0		7	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	2	
UNBK-040	O083	Unnamed Brook - To Exeter River	0	3	0	0	1			0	0		4	Low	No	No	Yes	No	No	No	No	No	1	
UNBK-050	O039B	Unnamed Brook - To Exeter River	0	3	0	0	1		3	0	0		7	Low	No	No	Yes	No	No	No	No	No	2	
UNBK-060	O039C	Unnamed Brook - To Exeter River	0	3	0	0	1			0	0	Dry Weather Flow, See 8/17 Inspection	7	Low	No	No	Yes	Yes	No	Yes	No	No	4	
UNBK-070	O070	Unnamed Brook - To Exeter River	0	3	0	0	1			0	0		4	Low	No	No	Yes	No	No	No	No	No	1	
UNBK-080	O052	Unnamed Brook - To Exeter River	0	3	0	0	1			0	0		4	Low	No	No	Yes	No	No	No	No	Yes	2	
UNBK-090	O077	Unnamed Brook - To Exeter River	0	3	0	0	1			0	0		4	Low	No	No	Yes	Yes	No	No	No	No	2	
UNBK-100	O067	Unnamed Brook - To Exeter River	0	3	0	0	2			0	0		5	Low	No	No	Yes	No	No	No	No	No	1	
UNBK-110	O048A	Unnamed Brook - To Exeter River	0	3	0	0	1			0	0		4	Low	No	No	Yes	No	No	No	No	No	1	
UNBK-120	O048B	Unnamed Brook - To Exeter River	0	3	0	0	1			0	0		4	Low	No	No	Yes	No	No	No	No	No	1	
UNBK-130	O049	Unnamed Brook - To Exeter River	0	0	0	0	1			2	0		3	Low	No	No	No	No	No	No	No	No	0	
UNBK-140	O049B	Unnamed Brook - To Exeter River	0	0	0	0	1			2	0		3	Low	No	No	No	No	No	No	No	No	0	
UNCLPD-010	O122	Unnamed Brook	0	0	0	0	1			2	0		3	Low	No	No	No	No	No	No	No	No	0	
UNEXRV-001	O057	Unnamed Brook	0	0	0	0	1			0	0	Dry Weather Flow & Visual Indicators, See 12/17 Inspection	1	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1	
WWCK-001	O031A	Wheelwright Creek	0	3	0	0	2		3	2	0	Visual Indicators, See 8/17 Inspection	10	High	No	No	Yes	No (Missing some elevation data)	No	No	No	No	2	
WWCK-010	O031B	Wheelwright Creek	0	3	0	0	1		3	0	0		7	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	2	
WWCK-020	O112	Wheelwright Creek	0	3	0	0	1		3	0	0		7	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	2	
WWCK-030	O111	Wheelwright Creek	0	3	0	0	3			0	3	Dry Weather Flow & Visual Indicators, See 8/17 Inspection	9	Low	No	No	Yes	No	No	No	No	No	2	
WWCK-040	O082	Wheelwright Creek	0	3	0	0	2			0	0	Dry Weather Flow & Visual Indicators, See 8/17 Inspection	5	Low	No	No	Yes	No	No	No	No	No	1	
WWCK-050	O017A	Wheelwright Creek	3	3	0	0	3		3	0	0	Visual Indicators, See 8/17 Inspection	12	Problem	No	No	Yes	No (Missing some elevation data)	No	No	No	No	2	
WWCK-060	O017B	Wheelwright Creek	3	3	0	0	3		3	0	3	Visual Indicators, See 8/17 Inspection	15	Problem	No	No	No	No	No	No	No	No	No	1
WWCK-070	O017D	Wheelwright Creek	3	3	0	0	3		3	0	0	Visual Indicators, See 8/17 Inspection	12	Problem	No	No	Yes	Yes	No	No	No	No	3	
WWCK-080	O017C	Wheelwright Creek	0	3	0	0	3		3	0	0		9	Low	No	No	Yes	N (Missing some elevation data)	No	No	No	No	2	
WWCK-090	O016	Wheelwright Creek	0	3	0	0	3		3	0	0		9	High	No	No	Yes	Yes	No	No	No	No	2	
WWCK-100	O011-A	Wheelwright Creek	3	3	0	0	3		3	0	0	Sheen Observed, See 8/17 Inspection	12	Problem	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1	
WWCK-110	O145	Wheelwright Creek	3	3	0	0	3		3	0	0	Dry Weather Flow, See 8/17 Inspection	12	Problem	No	No	No	No	No	No	No	No	1	
WWCK-120	O144	Wheelwright Creek	0	3	0	0	1		0	0	0	Road Drainage, Undeveloped Area, No Sewer	4	Excluded	No	No	No	No	No	No	No	No	0	
WWEXRS-001	O033	Wheelwright Creek - Exeter Reservoir	0	3	0	0	1		3	0	0		7	Low	No	No	Yes	Yes	No	Yes	No	No	4	
WWEXRS-010	O034	Wheelwright Creek - Exeter Reservoir	0	3	0	0	1			0	0		4	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1	
WWEXRS-020	O035	Wheelwright Creek - Exeter Reservoir	0	3	0	0	1			0	0		4	Low	No	No	Yes	No (Missing some elevation data)	No	No	No	No	1	
WWEXRS-030	O036	Wheelwright Creek - Exeter Reservoir	0	3	0	0	1			0	0		4	Low	No	No	Yes	No	No	No	No	No	1	
WWEXRS-040	O037	Wheelwright Creek - Exeter Reservoir	0	3	0	0	1			0	0	Visual Indicators, See 8/17 Inspection	4	Low	No	No	Yes	Yes	No	No	No	No	2	

Outfall ID (dpw_id / WP_IDDE_OF_ID)	Old Outfall ID	Receiving Water	Previous Screening Results Indicate Likely Sewer Input? ¹	Discharging to Area of Concern to Public Health? ²	Frequency of Past Discharge Complaints	Receiving Water Quality ³	Density of Generating Sites ⁴	Age of Development/ Infrastructure ⁵	Historic Combined Sewers or Septic? ⁶	Aging Septic? ⁷	Culverted Streams? ⁸	Additional Characteristics	Score	Priority Ranking	History of SSO in the catchment area, including, but not limited to, due to rain events, high water table and blockages	Common or twin-invert manholes serving storm and sanitary sewer	Common trench construction serving both storm sewer and sanitary sewer alignments	Crossing of storm and sanitary sewer where sewer is shallower than storm drain	Sanitary sewer alignments known or suspected to have been constructed with an underdrain system	Inadequate sanitary sewer level of service resulting in regular surcharging, customer back-ups, or frequent customer complaints	Area formerly (with-in last 20 years) served by combined sewer systems	Area with known sanitary sewer infrastructure defects	Total SVFs
Information Source			Outfall Inspections and screening/ sampling results	GIS Maps	Town Staff	Impaired Waters List	Land Use/GIS Maps, Aerial Photography	Land Use Information, Visual Observation	Town Staff, GIS Maps	Land Use, Town Staff	GIS and Storm System Maps	Other			Town Staff / using SSO List on Town website	GIS Query	GIS Query	GIS Query	Town Staff	Town Staff / Based on "Sewer Model Update (2021)", areas identified as "surcharged"	Town Staff	Town Staff / Used Asset Wastewater and Stormwater Asset Management Program, December 2020, C-6 Probability of Failure Map, pipes listed as High/Very High	
Scoring Criteria			Yes = 3 (problem outfall) No = 0	Yes = 3 No = 0	Frequent = 3 Occasional = 2 None = 0	Poor = 3 Fair = 2 Good = 0	High = 3 Medium = 2 Low = 1	High = 3 Medium = 2 Low = 1	Yes = 3 No = 0	Yes = 3 Possible = 2 No = 0	Yes = 3 No = 0	TBD			Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No		
Outfall ID (dpw_id / WP_IDDE_OF_ID)	Old Outfall ID	Receiving Water	Previous Screening Results Indicate Likely Sewer Input? ¹	Discharging to Area of Concern to Public Health? ²	Frequency of Past Discharge Complaints	Receiving Water Quality ³	Density of Generating Sites ⁴	Age of Development/ Infrastructure ⁵	Historic Combined Sewers or Septic? ⁶	Aging Septic? ⁷	Culverted Streams? ⁸	Additional Characteristics	Score	Priority Ranking	History of SSO in the catchment area, including, but not limited to, due to rain events, high water table and blockages	Common or twin-invert manholes serving storm and sanitary sewer	Common trench construction serving both storm sewer and sanitary sewer alignments	Crossing of storm and sanitary sewer where sewer is shallower than storm drain	Sanitary sewer alignments known or suspected to have been constructed with an underdrain system	Inadequate sanitary sewer level of service resulting in regular surcharging, customer back-ups, or frequent customer complaints	Area formerly (with-in last 20 years) served by combined sewer systems	Area with known infrastructure defects and leaking	Total SVFs
Scoring Criteria:																							
¹ Previous screening results indicate likely sewer input if any of the following are true:																							
- Odorous or visual evidence of sewage.																							
- Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and bacteria levels greater than the water quality criteria applicable to the receiving water, or																							
- Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and detectable levels of chlorine																							
² Outfalls/interconnections that discharge to or in the vicinity of any of the following areas: public beaches, recreational areas, drinking water supplies, or shellfish beds																							
³ Receiving water quality based on latest version of New Hampshire Department of Environmental Services (NHDES) Integrated List of Waters																							
- Poor = Waters with approved TMDLs (Category 4a Waters) where illicit discharges have the potential to contain the pollutant identified as the cause of the impairment																							
- Fair = Water quality limited waterbodies that receive a discharge from the MS4 (Category 5 Waters)																							
- Good = No water quality impairments																							
⁴ Generating sites are institutional, municipal, commercial, or industrial sites with a potential to contribute to illicit discharges (e.g., car dealers, car washes, gas stations, garden centers, industrial manufacturing, etc.)																							
⁵ Age of development and infrastructure:																							
- High = Industrial areas greater than 40 years old and areas where the sanitary sewer system is more than 40 years old																							
- Medium = Developments 20-40 years old																							
- Low = Developments less than 20 years old																							
⁶ Areas once served by combined sewers but have been separated, or areas once served by septic systems but have been converted to sanitary sewers.																							
⁷ Aging septic systems are septic systems 30 years or older in residential areas.																							
⁸ Any river or stream that is culverted for distance greater than a simple roadway crossing.																							

Illicit Discharge Removal Report



**Permit Year 4 Annual Report
New Hampshire Small MS4 General Permit
Reporting Period: July 1, 2021 – June 30, 2022
Town of Exeter**

Illicit Discharge Removal Report

On Thursday June 2, 2022 NH DES spill response and members of the Exeter DPW responded to a report of an oil slick in the Squamscott river coming from the stormwater outfall (SQRV-150) at Swazey Parkway. We had experienced heavy rains the night before. NH DES spill response deployed an oil spill containment boom at the outfall. DPW staff help to locate a hydrocarbon source at the Phillips Exeter Academy dining hall loading dock. Some unreported fuel spill had occurred, and the stormwater catch basins adjacent to the loading dock had a visible sheen in them. The following day PEA had Clean harbors onsite to clean out the catch basins.

The image features a minimalist design with a white background. A dark blue vertical bar runs along the right edge. A light blue horizontal bar crosses the page from the left edge to the dark blue bar. The text "PTAP Report" is positioned in the center-right area, overlapping the light blue bar and the dark blue vertical bar.

PTAP Report

Exeter, NH PTAPP BMP Accounting and Tracking Report Permit Year 4

State	NEW HAMPSHIRE
Municipality	EXETER
Permit Type	MS4
Permit Number	
Major Watershed	N/A
TP Load Reduction Target	N/A
TN Load Reduction Target	N/A
TSS Load Reduction Target	N/A

Table 1. Project Summary Credit for EXETER, NEW HAMPSHIRE

Project Type	Removed Phosphorus Load (lb/yr)	Removed Nitrogen Load (lb/yr)	Removed Sediment Load (lb/yr)
Structural	2.88	24.64	784
Non-Structural	0.01	0.24	0
Land Use Conversion	0	0	0
Total	2.89	24.88	784

Table 2. Structural Project Summary for EXETER, NEW HAMPSHIRE

Project ID	BMP Type	BMP Storage Capacity (ft ³)/ Filter Depth (in.)	Phosphorus BMP Efficiency (%)	Nitrogen BMP Efficiency (%)	Sediment BMP Efficiency (%)	Removed Phosphorus Load (lb/yr)	Removed Nitrogen Load (lb/yr)	Removed Sediment Load (lb/yr)	Impervious Area Treated (ac)	Runoff Depth (in.)
1. BrambleMeadows	BIORETENTION	5096	63	40	100	0.26	1.18	92.18	0.21	6.69
2. BrambleMeadows	INFILTRATION BASIN	5100	96.2	99	100	0.57	4.19	131.68	0.3	4.68
3. McFarland Ford Storage Lot	POROUS PAVEMENT	17413	78	79	97	1.06	9.05	278.21	0.76	6.31
4. McFarland Ford Storage Lot	INFILTRATION TRENCH	492	97.04	99.52	100	0.26	2.25	56.61	0.15	0.9
5. Lary Lane	INFILTRATION BASIN	600	56.96	73.37	82.92	0.73	7.97	225.32	0.72	0.23

Table 3. Non-Structural Project Summary for EXETER, NEW HAMPSHIRE

Project ID	BMP Type	BMP Storage Capacity	Phosphorus BMP Efficiency (%)	Nitrogen BMP Efficiency (%)	Sediment BMP Efficiency (%)	Removed Phosphorus Load (lb/yr)	Removed Nitrogen Load (lb/yr)	Removed Sediment Load (lb/yr)	Impervious Area Treated (ac)	Runoff Depth (in.)
1. Bramble Meadows	CATCH BASIN CLEANING	N/A	2	6	0	0.01	0.24	0	0.28	N/A

Table 4. Land Use Conversion Project Summary for EXETER, NEW HAMPSHIRE

There are no land use conversion projects.