

TOWN OF EXETER, NEW HAMPSHIRE
TOTAL NITROGEN CONTROL PLAN ANNUAL REPORT FOR 2021

1. BACKGROUND

This 2021 Total Nitrogen Control Plan Annual Report was prepared for the Town of Exeter, New Hampshire in order to comply with the requirements of AOC 13-010, Article IV.E. The AOC stipulates that the following items be addressed:

- The pounds of total nitrogen discharged from the WWTF during the previous calendar year (*refer to Section 2.1 of this annual report*).
- A description of the WWTF operational changes that were implemented during the previous calendar year (*refer to Section 2.2 of this annual report*).
- The status of the development of a total nitrogen NPS and storm water point source accounting system (*refer to Section 2.3 of this annual report*).
- The status of NPDES MS4 activities (*refer to Section 2.4 of this annual report*).
- The status of the development of the non-point source and stormwater point source Nitrogen Control Plan (*refer to Section 2.5 of this annual report*).
- A description and accounting of the activities conducted by the Town as part of its Nitrogen Control Plan (*refer to Section 2.6 of this annual report*); and
- A description of all activities within the Town during the previous year that affect nitrogen loading to the Great Bay Estuary. The annual report shall include sufficient information such that the nitrogen loading change to the watershed associated with these activities can be quantified upon development of the non-point source/point source storm water accounting system (*refer to Section 2.7 of this annual report*).

In addition, this report is intended to support the evaluations that were completed in September 2018 Nitrogen Control Plan and the future evaluations due in December 2023 (Engineering Evaluation), including: documenting total nitrogen, dissolved oxygen, *chlorophyll a* and macroalgae concentration trends in the Squamscott River and downstream waters; documenting non-point source and stormwater point source reduction trends towards allocation targets; and documenting that appropriate mechanisms are in place to ensure continued progress.

2. SUMMARY OF AOC STIPULATED ITEMS

2.1. Total Pounds of Nitrogen Discharged from the WWTF in Previous Calendar Year

Attachment 1 summarizes the total pounds and total tons of nitrogen discharged from the WWTF for the calendar year as well as the annual average total nitrogen value measured at the Squamscott River “GRBCL” sampling location, located just downstream of Newfields WWTF at Chapman’s Landing and at the Squamscott River “GRBSQ” sampling location, located at the mouth of the Squamscott River.

2.2. Operational Changes at the WWTF

This year resulted in additional changes at the WWTF as a result of the construction activities over the past several years. Additionally, the nitrogen removal process was optimized in 2021 by altering the Micro-C dosing procedure in the aeration tanks. The addition of Micro-C occurred from late March to early October. Staff found that by

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increasing the dose rate at the head of the tank in the pre-anoxic zone and adding a lesser volume to the post anoxic zone they were able to maximize nitrogen removal.

The progress and status of the multi-year construction projects are summarized below:

- The WWTF Upgrades (Contract No. 1)
 - Final completion was granted December 31, 2020. Operations continue to be refined and effluent TN is lower (better) than the design goals.

- The Forcemain Upgrades (Contract No. 2)
 - Final completion was granted on May 22, 2020.

- The Main Pump Station Upgrades (Contract No. 3)
 - Final completion was granted on August 30, 2019.

- WWTF Lagoon 1 Sludge Removal (Contract No. 4)
 - This project involved removing the majority of the legacy sewage sludge from Lagoon 1 and preparing it for ultimate disposal.
 - Substantial completion was granted September 25, 2020.
 - Final completion was granted on October 20, 2020.

- WWTF Lagoon Sludge Removal (Contract No. 5)
 - This project involves off-site disposal of the sludge removed from Lagoon 1 in Contract 4, as well as removal and off-site disposal of additional legacy sewage sludge from Lagoon 2.
 - Bidding documents were advertised in May 2021.
 - Bids were received on June 21, 2021.
 - Contract was awarded on July 16, 2021.
 - Approximately 7,000 wet tons from Lagoon 1 (Contract 4) was hauled and disposed of at Englobe in Canada. Approximately 410 dry tons of sludge was dredged from Lagoon 2 for on-site geotube dewatering over Winter 2021-2022. The sludge will be hauled off-site and disposed in 2022.
 - The project is in winter shutdown.
 - Substantial completion is anticipated in Summer 2022.
 - Final completion is anticipated in Summer 2022.

2.3. Development of Total Nitrogen NPS & Stormwater Point Source Accounting

2.3.1. PTAPP/PTAP Participation

The Town of Exeter has been actively participating in the Great Bay Pollution Tracking and Accounting Pilot Project (PTAPP), which was established by and led by NHDES and EPA, since its inception. PTAPP was originally established to enable coordination on nitrogen tracking and accounting for the Great Bay region. This program was recently renamed to the Great Bay Pollution Tracking and Accounting Project (PTAP). PTAP has made progress towards developing shared

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approaches and tools within the participant Great Bay communities. PTAP is in the Implementation Phase now. A summary of the 2021 activities is provided below along with the 2021 Exeter PTAP Report found in **Attachment 3**.

2.4. Status of NPDES MS4 Activities

The Town submitted an MS4 Annual Report, which summarizes the activities undertaken during the permit year for compliance with permit conditions outlined in the 2017 Small MS4 General Permit, on September 28, 2021.

Additionally, Wright-Pierce was retained to conduct quarterly SWPPP inspections of the DPW complex in compliance with the 2017 NH Small MS4 General Permit. During 2021, SWPPP inspections were completed on April 13, June 25, September 2, and December 20.

2.5. Status of NPS and Stormwater Point Source Nitrogen Control Plan

The Town completed and submitted its 2019 Nitrogen Control Plan in accordance with the AOC. The Nitrogen Control Plan integrated and built upon the point source and non-point source content that was developed in the Wastewater Facilities Plan (WP, March 2015) and the WISE Report (Geosyntec, et.al., December 2015). The Nitrogen Control Plan implementation items are summarized in Section 2.5 below. The Town is securing funding through the annual appropriations process to continue with implementation items.

Other Nitrogen Control Plan related activities that the Town completed this year include:

- Arbor Day Tree Planting at Gilman Park (7 maple trees)planted
- Memorial Tree planting at Park Street Common (3 trees planted)
- Collaborated with Main Street School kindergarten team to offer a Story Walk and Milkweed Planting event.
- Donated soil and 75 milkweed plants to the Lincoln Street School pollinator garden program
- Offered a free milkweed seed grab and go planting kit at the Exeter Library
- Distributed lawn care magnets at the Town Clerk's desk. Approximately 100 were picked up by residents.
- The "Sustainable Exeter" section was updated on the Town's website which details activities the Town is involved with as well as a section from Resolution to Revolution which identifies things residence can do to promote a sustainable future (See **Attachment 5**).
- Hosted virtual Gardening for Wildlife native plant program with Pollinator Pathways NH.
- Promoted the opportunity for residents to participate in a statewide clean-up program called The Great NE Clean Up hosted by Nature Groupie. A group of 17 volunteers participated locally. Trash clean-up was logged through the app Litterati. Two of the Exeter volunteers were the top contributors on April 18th. They cleaned up trash

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at the Industrial Drive trail area (along Norris Brook), the roadside from Brickyard Pond to Hobart Street, and Powder Mill Rd along the Exeter River.

- The Natural Resource Planner organized a clean-up at the Morrissette property, a 30-acre riverside conservation parcel. An uncounted number of volunteers collected trash. DPW staff collected the trash bags and larger items for disposal.
- Adopted a street tree ordinance with planting and pruning specifications, emphasis on native species, consultation with Tree Committee before removal of any significant trees (>20" DBH) and establishes a memorial tree program.
- The Town supported a \$50,000 allocation to the conservation fund to support future land acquisitions. The Conservation Commission has developed a list of prioritized parcels based on natural resources and incorporated the values identified in the water resources supplement to the Coastal Conservation.
- VRAP sampling only occurred on one date in 2021 due to repeated equipment malfunction.
- The Natural Resource Planner participates in a bimonthly [Coastal Adaptation Workgroup](#) (CAW) and CAW municipal discussion group (CAW Talks). Relevant topics in 2020 included living shoreline projects, climate-related migration, excessive drought/heat, groundwater rise, regional approaches to climate preparedness by other Seacoast communities.
- The Natural Resource Planner participates on the [Coastal Land Use Guide](#) steering committee.
- The Town's "Healthy Lawns Clean Water" Facebook page has 158 followers (peak post reach of 119). The Town's "Conservation Commission" Facebook page has 1,022 followers (peak post reach of 13.9k). These pages share relevant posts including Pet Waste (2); Fertilizer/Healthy Lawns/Native Plants (46); Septic (2); Shoreline Clean Up (3); Waste Reduction (5); River/Water Quality (2).

2.6. Description and Accounting of the Activities Conducted by the Town as part of its Nitrogen Control Plan

The Nitrogen Control Plan implementation items are described in Section 6 of the Nitrogen Control Plan and are outlined below.

- Complete WWTF Upgrades: *Completed in 2020.*
- Complete WWTF Lagoon 1 Sludge Removal: *Completed in 2020*
- Complete Main Pump Station Upgrades: *Completed in 2019.*
- Complete Forcemain Upgrades: *Completed in 2020.*
- WWTF Operational Strategies: *On-going, as described above.*
- Implement Stormwater Control Measures: *On-going through annual funding appropriations.*
 - For projects that go through the Planning Board, BMP Operations & Maintenance manuals must be submitted to the Exeter Department of Public Works (DPW): *On-going*
 - DPW tracking private CB cleanings and street sweeping: *On-going*

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- Town evaluating Capital Improvement Projects (CIPs) where stormwater BMPs can be installed: *On-going*
- Implement Leaf Litter and Organic Waste Collection Program (**Attachment 5**): *On-going*.
- Implement Shoreland Protection and Land Conservation: *On-going*.
- Develop Preliminary Storm Drain Asset Management Plan: *Completed in 2020. Public presentation was made to the Select Board via Zoom.*
- Removal of Great Dam: *Completed in 2016.*
- Implement Tracking and Accounting: *On-going*.
- Implement Fertilizer Regulations: *Completed in 2009, 2016 and 2019.*
- Implement Site Plan and Subdivision Regulations: *Completed in 2018.*
- Monitor Water Quality: *The Nitrogen Control Plan (Appendix B) collected the available monitoring data. New data from NHDES was collected and saved for future review/interpretation.*
- Review EPA Water Quality Monitoring Data: *New data from EPA from 2018 and 2019 was collected and saved for future review/interpretation.*
- Coordinate with NHDES/Watershed Allocation: *Exeter will continue to coordinate with NHDES on this matter.*
- Submit AOC Engineering Evaluation: *This report is due in September 2024. No specific activity on this report was completed in 2021.*

2.7. Description of activities conducted which affect nitrogen in the Great Bay Estuary

Numerous activities were conducted in Town which affects nitrogen in the Great Bay Estuary. The activities are described below and are organized by municipal department.

2.7.1. Coordination between Departments

As noted above, the Town is required to develop a total nitrogen tracking and accounting system as a part of the AOC. There are three departments that are responsible for managing, monitoring and/or approving activities which impact the total nitrogen load – either increasing or decreasing – to the Great Bay Estuary. The Planning Department is primarily responsible for new developments (e.g., buildings, private roads, etc.), the Building Department is primarily responsible for monitoring the status of construction of development (e.g., housing, commercial, etc.) and the Public Works Department is primarily responsible for public infrastructure (e.g., WWTF, public roads, sewers, storm drains, etc.). The table below summarizes the responsibility for tracking.

Status of “Primary Areas of Responsibility Tracking”

Public Works Department	Planning and Building Departments
WWTF activities and upgrades	New and modified septic systems
Changes in Infiltration/Inflow	New and modified private WWTFs
Changes in impervious cover (public)	New connections to the sewer system
Changes in stormwater BMPs (public)	Changes in stormwater BMPs (private)
Changes in turf management (public)	Changes in turf management (private)
Changes in ordinances (e.g., stormwater)	Changes in ordinances (e.g., zoning)
Maintenance and mapping of infrastructure	Conversion of existing landscape

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Public Works Department	Planning and Building Departments
Facilities Planning	Changes in impervious cover (development)
Industrial Pre-treatment program	
Grease trap program	

2.7.2. Planning and Building Departments

The Building Department issued a total of 16 Certificates of Occupancy for parcels which had development/re-development. In summary, these parcels resulted in approximately 129,900 square feet of new impervious area and 4 new sewer connections. Of the 9 projects with new impervious area, 4 included Best Management Practices (BMPs, including gravel wetlands, rain gardens detention basins, and infiltration trenches) that addressed approximately 114,050 square feet of the total impervious area. The Building Department and NHDES also issued approvals for the construction of 3 new septic systems and the reconstruction of 9 septic systems in 2021. The Nitrogen Tracking Summary as well as PTAP reports for developments which have received a certificate of occupancy are included as **Attachment 2**. Three projects were submitted through the PTAP web-based tool in 2021 (reports included as **Attachment 3**).

Rain barrels were available for residents to purchase. 51 rain barrels were sold to 35 distinct households in 2021, increasing the household reach from 9 in the prior year. All rain barrels were distributed with Healthy Lawns Clean Water Magnet which have five easy steps for water-quality friendly lawn care.

2.7.3. Department of Public Works

The Department of Public Works conducted the following efforts in 2021:

- PTAP Reports for all Public Works activities are included as **Attachment 3**.
- MS4 Annual Report is included as **Attachment 4**.
- Continued outreach and education through the following efforts are included in **Attachment 5**.
 - “Think Blue Exeter” program website.
 - “Septic Smart” program informative display in town offices and pamphlets.
 - “What’s Flushable?” NHDES program pamphlets.
 - “Every Drop Pet Waste” pledges were posted out at 3 trailheads (Raynes, Oaklands, HS) where pet waste stations are located (see below). Residents can log a pledge to pick up their pet waste and it is tracked by the Piscataqua Region Estuaries Partnership Every Drop program. 0 Exeter residents submitted a pledge.
 - Postings made on the Town of Exeter, NH Public Works Facebook page.
- Continued their “Pet Waste” initiative through the continued upkeep of pet waste stations. There are 19 pet waste stations available throughout the Town for use by the public (see **Attachment 6**).
- Town staff, consultants and legal counsel expended significant time and effort to review and comment on the Final Great Bay Total Nitrogen General Permit. The

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Town submitted a Notice of Intent to opt into the Final General permit on March 16, 2021. Additionally, the Town submitted to EPA a voluntary Adaptive Management Plan included as **Attachment 7**.

- The Director of Public Works represents the Town of Exeter on the Municipal Alliance for Adaptive Management (MAAM) and is a member of the Executive Committee. Participated in meetings on April 29, June 24, November 4 and December 2, 2021. The Town Engineer represented the Town at the MAAM meeting on September 9.
- The Sump Pump Removal Program is still on going. The Town received a \$75k NHDES Planning Grant to develop projects for I/I reduction using the Westside Drive neighborhood as a pilot project. For 2021 the Town has been working with Underwood Engineers to perform groundwater studies and resident surveys in the Westside Drive neighborhood. In the Fall of 2021 Underwood submitted a conceptual plan to improve drainage, water lines and roadways in the neighborhood.
- Wastewater inspected 38 of 54 commercial grease traps. Inspectors continued to have limited access to food establishments and assisted living facilities due to the Covid 19 pandemic. An emphasis was placed on self-inspection and accurate record keeping, as well as educating restaurant staff on the importance of grease trap maintenance.
- In December of 2021 the Exeter Wastewater Treatment Plant was selected as the 2021 EPA Regional Wastewater Treatment Plant Operation and Maintenance Excellence Award recipient for the state of New Hampshire. They will be accepting the award at the upcoming NEWEA conference.
- During 2021 the Exeter Wastewater Plant discharged a daily average Total Nitrogen value of 4.6 mg/L, resulting in an average of 67.34 lbs/day of Total Nitrogen.
- Highway continued street sweeping and catch basin cleaning programs in 2021. Approximately 500 cubic yards of material were removed from the roadways via sweeping. Street sweepings are stored at the Town sand pit to mix with compost, and do not discharge to receiving waters. A total of 396 catch basins were cleaned.
- Approximately 36,392 linear feet of sanitary sewer was jetted including high maintenance areas. The Department purchased a new sewer inspection camera to replace its older one with hopes of increasing the amount of televised inspection for 2022.
- As part of the Salem St Area Utility Replacement project 1,671 linear feet of 8-inch sewer line was replaced along with 6 manhole structures.
- In October 2021 the Wastewater Treatment Plant Senior Operator was promoted to the DPW's Engineering Technician position. The Department is actively interviewing candidates to fill the Senior Operator position.
- Water & Sewer has continued to work with the Exeter River Coop Mobile Home Park to address the issue of excessive I/I and stormwater being discharged to the public collection system. In December 2021 the Mobile Home Park's consultant notified the Town that the Park will be receiving ARPA funding for water and sewer utility upgrade projects to address the issue.

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- DPW conducted quarterly SWPPP/SPCC inspections of the Public Works facility in 2021.
- The Director of Public Works participated in Piscataqua Region Estuaries Partnership (PREP) Management Committee quarterly meetings: January 12, 2021 via Zoom (for the 2020 4th quarter meeting postponed from Dec 2020); March 16, 2021 via Zoom; June 15, 2021 via Zoom; September 14, 2021 via Zoom; December 14, 2021 via Zoom.
- The Director of Public Works co-chaired the Piscataqua Region Monitoring Collaborative (PRMC) meeting on July 6, 2021 via Zoom.
- The Director of Public Works participated on the advisory committee for “Resilience and Positive Feedbacks: Water Quality Management and Eelgrass Health in the Great Bay Estuary, NH/ME” (in short “Eelgrass Resilience”), a 3-year collaborative research project grant funded by National Estuarine Research Reserve System (NERRS) with Dr. William McDowell as principal investigator. Participated in multiple office hour sessions on Oct. 21 and Oct. 27, 2021 and reviewed the Nov. 5 session recording.
- In addition to the certifications listed above, all public works employees and Operators enrolled in classes and were awarded certifications to stay up to date with their licenses.
- Approximately 50% of catch basins/drains to the Squamscott River were re-stenciled “Drains to River”. Markings were placed outside of the travelling lanes to stay legible.
- Each Town resident was permitted to have up to twelve bags of leaves picked up for free in the Spring and Fall of 2021, and they were able to drop leaves off at the Exeter transfer station. The leaves were composted, and residents are allowed to use the compost for lawn/garden fertilization.
- Each Town resident was permitted to have one Christmas Tree picked up for free in the Winter of 2021.
- Began investigating the willingness and financial implications of offering a private sewer service replacement program in conjunction with the Salem St Area Utility Replacement project. This program would provide neighborhood residents an opportunity to replace their sewer services from within 5 feet of the foundation to the Town owned portion. Services would be replaced by the Salem St project contractor at an affordable rate. Approximately 52 parcels could be affected with this inflow and infiltration removal program.
- Proceeding with a Watershed Assistance Grant to construct a regional stormwater quality BMP on Winter St.
- A consultant prepared an educational Pre- vs. Post TN report for a 12-lot subdivision which included stormwater BMPs and residential septic systems.
- The Town has received preliminary approval for a Watershed Assistance Grant to explore nitrogen reduction efforts for the voluntary Adaptive Management Plan.

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Areas of focus will be on fertilizers, septic systems and stormwater water quality BMPs.

- The Town completed dry weather stormwater sampling per the requirements of the MS4 permit.

LIST OF ATTACHMENTS

Attachment 1: Exeter WWTF Annual Total Nitrogen Load Table and Figures

Attachment 2: Exeter Nitrogen Tracking Summary Table

Attachment 3: Exeter PTAP Reports

Attachment 4: MS4 Annual Report

Attachment 5: Education & Outreach Flyers

Attachment 6: Pet Waste Station Location Map

Attachment 7: Adaptive Management Framework Proposal (July 2021)

Attachment 1

Exeter WWTF Annual Total Nitrogen Load Table and Figures

EXETER WWTF - TOTAL ANNUAL NITROGEN LOAD TO SQUAMSCOTT RIVER																
															GRBCL	GRBSQ
WWTF EFFLUENT - TOTAL ANNUAL NITROGEN LOAD															Squamscott R.	Squamscott R.
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Load	Load	Total Nitrogen	Inorganic Nitrogen
	(lbs/mn)	(lbs/mn)	(lbs/mn)	(lbs/mn)	(lbs/mn)	(lbs/mn)	(lbs/mn)	(lbs/mn)	(lbs/mn)	(lbs/mn)	(lbs/mn)	(lbs/mn)	(lbs/yr)	(tons/yr)	(mg/l)	(mg/l)
Days per month	31	28	31	30	31	30	31	31	30	31	30	31			NHDES	NERRS
Past Years																
2003-2008	-	-	-	-	-	-	-	-	-	-	-	-	85,400	42.7	0.77	-
2009-2011	-	-	-	-	-	-	-	-	-	-	-	-	83,600	41.8	0.71	-
2012	8,457	7,830	9,303	8,151	11,590	7,633	4,338	2,235	2,312	6,349	6,222	11,745	86,164	43.1	0.83	0.26
2013	10,700	9,082	13,913	8,681	9,029	12,500	10,852	7,165	3,971	5,203	8,611	11,270	110,976	55.5	0.82	0.39
2014	10,198	8,321	9,439	6,754	6,643	6,803	6,680	8,014	4,565	5,037	10,906	12,981	96,342	48.2	0.68	0.37
2015	10,441	8,630	13,638	12,249	7,454	12,009	10,911	9,024	6,667	6,980	6,644	8,713	113,359	56.7	0.88	0.35
2016	10,751	10,554	11,538	8,765	8,714	6,858	9,769	6,856	2,645	6,070	9,799	13,340	105,658	52.8	0.74	0.37
2017	15,725	11,922	10,346	13,973	12,885	11,578	12,042	10,431	7,350	10,082	11,141	10,989	138,465	69.2	0.64	0.46
2018	15,401	11,972	12,855	13,344	8,780	9,659	10,252	5,786	5,647	8,217	12,241	9,572	123,725	61.9	0.74	0.33
2019	10,880	11,874	14,348	12,418	12,276	10,416	3,296	1,707	1,833	2,116	1,808	4,473	87,446	43.7	no data available	no data available
2020	3,723	3,124	3,493	3,774	2,632	1,303	1,373	1,160	1,216	1,139	1,595	3,041	27,572	13.8	no data available	0.21
2021	3,254	2,972	2,716	1,146	1,522	1,065	2,602	1,530	1,613	2,045	2,418	1,632	24,515	12.3	no data available	no data available

Previous Year (2020)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Monthly Avg Flow (mgd)	1.85	2.41	1.83	2.40	1.80	1.16	1.08	0.98	1.01	1.03	0.93	1.89	-	-
Avg TN Conc. on Sample Day (mg/l)	7.8	5.6	7.2	6.3	5.7	4.5	4.5	4.6	4.8	4.3	5.3	6.2	-	-
Avg TN Load on Sample Day (lb/d)	120	111	115	125	84	43	48	37.2	40.6	36.5	65.2	98	-	-
Load - Flow Basis	3,733	3,153	3,409	3,785	2,654	1,307	1,257	1,166	1,214	1,146	1,234	3,031	-	-
Load - Load Basis	3,714	3,094	3,577	3,762	2,610	1,299	1,488	1,153	1,218	1,132	1,956	3,050	-	-
Load - Average	3,723	3,124	3,493	3,774	2,632	1,303	1,373	1,160	1,216	1,139	1,595	3,041	27,572	13.8

Current Year (2021)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Monthly Avg Flow (mgd)	1.70	1.61	1.81	1.76	1.73	1.33	2.14	1.69	1.79	1.55	2.10	1.66	-	-
Monthly Avg TN Conc. (mg/l)	7.4	7.9	5.8	2.6	3.4	3.2	4.7	3.5	3.6	5.1	4.6	3.8	-	-
Monthly Average TN Load	3,254	2,972	2,716	1,146	1,522	1,065	2,602	1,530	1,613	2,045	2,418	1,632	24,515	12.3

NOTES:

1. Red font indicates data from effluent composite sampler, TN measured directly. Multiple sampling days are averaged (2013 data to present)
2. Per the 2009 NHDES document, "Numeric Nutrient Criteria for the Great Bay Estuary," for days with multiple samples, the highest Squamscott River TN value was utilized.
3. Monthly Avg Flow is taken from Town Monthly MORs from the average of column "EFF Total" (Column H)
4. Avg TN Load on Sample Day calculated by calculating the load on each sample day and taking the average of the sample days (TN EFF mg/L * Flow EFF Total (MGD) * 8.345 lb/gal.
5. Sample location is identified as GRBCL, located just downstream of the Newfields Wastewater Treatment Facility.

SOURCES:

1. 2003-2011 WWTF TN Loading values are from the 2012 Environmental Data Report (PREP).
2. The 2003-2013 Squamscott River TN Concentration values are derived from the UNH Jackson Estuarine Laboratory Tidal Water Quality Monitoring Program.
3. The 2014 Squamscott River TN Concentration value was derived from the UNH Tidal Water Quality Monitoring Program and samples were taken at the Chapmans Landing on the Squamscott River.
4. The 2015 Squamscott River TN Concentration values are derived from the 2015 Great Bay Watershed Quality Monitoring Program.
5. GRBSQ TN is the average of the "NH4 plus NO2/NO3" monthly grab samples collected through the NERRS program.
6. GRBSQ TN data for 2020 is the sum of organic and inorganic nitrogen data from NHDES Environmental Monitoring Database.

Attachment 2
Exeter Nitrogen Tracking Summary Table

EXETER NITROGEN TRACKING SUMMARY TABLE
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 Wright-Pierce, January 2022

Category Parcel	Address	Zoning District	Residential, Commercial or Industrial	Sewered Parcel	Wastewater						Stormwater			Land Use					
					Septic System Type	Septic System <200m from Surface Water	Septic System Install Year	Rebuilt, New or No Change?	Permitted Bedrooms for Septic System	Design Flow (GPD)	Structural BMPs Installed	Non-Structural BMPs Installed	Land Converted to Turf/Grass (SF)	Forest Removed (SF)	Wetlands Filled (SF)	Existing Impervious Cover Removed (SF)	New Impervious Cover Created (SF)	Amount of New Impervious Cover that is Disconnected (SF)	Land Converted to Agriculture Fields / Pastures (SF)
032-024	11 Cragmere Heights	R-1	Residential	N	Adv EnviroSeptic ¹	N	2021	New	4	400	-	-	-	4,370	-	-	4,370	4,370	-
093-002	32 Drinkwater Road	R-1	Residential	N	See 2020	-	-	-	-	-	-	-	-	-	-	-	1,050	1,050	-
069-32	7 Hampton Road Units 1 & 2	NP	Residential	Y	-	-	-	-	-	360	-	-	-	-	-	-	1,430	1,430	-
066-001	89 Holland Way	CT	Commercial	N	EnviroSeptic ¹	Y	2020	New	0	650	1	-	22,000	89,400	-	-	67,400	67,400	-
097-003	54 Kingston Road	R-1	Residential	N	EnviroSeptic ¹	N	2020	New	4	600	1	-	-	5,540	-	-	5,540	5,540	-
063-093	Bramble Meadows	R-2	Residential	Y	-	-	-	-	-	1,440	6	-	9700	15,000	-	-	21,250	21,250	-
047-008	24 Willey Creek Road Unit 101	C-3	Residential	Y	-	-	-	-	-	3,200	6	-	30530	55530	-	-	25,000	25,000	-
104-070	Cypress Circle	R-2	Residential	Y	-	-	-	-	-	2,160	-	-	-	-	-	-	-	-	-
075-017-0026	33 Blackford Drive	R-1	Residential	N	Infiltrator	N	2021	Rebuilt	4	600	-	-	-	-	-	-	-	-	-
017-004	67 Old Town Farm Road	RU	Residential	N	Stone and Pipe	N	2021	Rebuilt	3	450	-	-	-	-	-	-	-	-	-
097-040	10 Pickpocket Road	R-1	Residential	N	EnviroSeptic ¹	Y	2021	Rebuilt	4	600	-	-	-	-	-	-	-	-	-
015-003-0009	6 Chapman Way	RU	Residential	N	Stone and Pipe	N	2021	Rebuilt	4	600	-	-	-	-	-	-	-	-	-
021-036-0004	4 Sinclair Drive	RU	Residential	N	EnviroSeptic ¹	Y	2021	Rebuilt	4	600	-	-	-	-	-	-	-	-	-
013-001-0001	98 Beech Hill Road	RU	Residential	N	Stone and Pipe	N	2021	Rebuilt	5	750	-	-	-	-	-	-	-	-	-
060-080-0001	1 Deerhaven Drive	R-1	Residential	N	Stone and Pipe	N	2021	Rebuilt	4	600	-	-	-	-	-	-	-	-	-
101-008-0002	122 Kingston Road	R-1	Residential	N	EnviroSeptic ¹	N	2020	Rebuilt	3	450	-	-	-	-	-	-	2,350	2,350	-
018-001	60 Beech Hill Road	RU	Residential	N	Stone and Pipe	N	2020	Rebuilt	3	450	-	-	-	600	-	-	1,600	1,600	-
Totals									42	13,910	14	0	62,230	170,440	0	0	129,990	129,990	0
Key:			Unknown						New Septic	1,650	gpd								
			None						New Sewer	7,160	gpd								
			#	Known															

¹Neither EnviroSeptic system reports to effectively remove Nitrogen.

Attachment 3
Exeter PTAP Reports

BrambleMeadows
Submission ID 122
Approval Status Submission Approved
Approval Status Changed Fri, 09/24/2021 - 14:39
Map No. 63
Lot No. 93
Property Owner Harbor Street Limited Partnership
Project Street Address Spruce Street
This project is for a municipality No
This project is inside MS-4 Permit Area Yes
Project is within the 200 meter coastal zone or stream buffer zone No
Discharges to an impaired waterbodyNo
Offsite mitigation No
By submitting this form, I certify all information is true and correct to the best of my knowledge and professional judgement. Yes
Approval Changed By jmates
Town Exeter
Land Use Type Medium-Density Residential
Last Updated By jmates
Report Submitted By smitty0615
Last Updated On Fri, 09/24/2021 - 14:39
Report Submitted Mon, 05/18/2020 - 13:20

Impervious Surface Management Table - Structural BMPs

Structural BMP	Impervious Surface Managed (ac)	Runoff Volume Storage at Design Capacity (ft ³)	Design Storm Depth (")	Infiltration Rate (in/hr)
Bio-filtration	0.21	5096.00	2.0	1.02
Infiltration/Surface Infiltration	0.30	5100.00	2.0	1.02
Total Impervious Cover (acres)	0.00			
Total Management (acres)	0.51			
Effective Impervious Cover (acres)	-0.51			

Impervious Surface Management Table - Non-Structural BMPs

Non-Structural BMP	Amount	Unit	Description
Catch Basin Cleaning	3.00	Number of CB Cleaned	1 manhole on site and 2-existing CB's one at Brentwood Rd & 1 at Spruce St

Land Use Conversion Table

Soils		Existing Conditions			Future Conditions		
Hydrologic Group	Acres	Land Use Type	Acres	Impervious and/or Paved Surfaces Acres	Land Use Type	Acres	Impervious and/or Paved Surfaces Acres
B/C	4.96	Open Space	4.96	0.00	Residential	4.96	0.51
Totals	4.96		4.96	0		4.96	0.51

Wastewater Management Table

Existing Conditions			Future Conditions		
Management Option	Discharge (GPD)	Description	Management Option	Discharge (GPD)	Description
Undeveloped	0.00		Sewered	2250.00	All homes connected to municipal sewer
Totals	0			2250	

Palmer & Sicard office

Submission ID 119

Approval Status Submission Approved

Approval Status Changed Fri, 09/24/2021 - 14:30

Map No. 66

Lot No. 1

Property Owner Palmer & Sicard, Inc

Project Street Address Holland Way

This project is for a municipality No

This project is inside MS-4 Permit Area Yes

Project is within the 200 meter coastal zone or stream buffer zone No

Discharges to an impaired waterbodyNo

Offsite mitigation No

By submitting this form, I certify all information is true and correct to the best of my knowledge and professional judgement. Yes

Approval Changed By jmates

Town Exeter

Land Use Type Commercial and Industrial

Last Updated By jmates

Report Submitted By smitty0615

Last Updated On Fri, 09/24/2021 - 14:30

Report Submitted Mon, 03/02/2020 - 11:11

Impervious Surface Management Table - Structural BMPs

Structural BMP	Impervious Surface Managed (ac)	Runoff Volume Storage at Design Capacity (ft ³)	Design Storm Depth (")	Infiltration Rate (in/hr)
Gravel Wetland	1.44	5547.00	2.0	0
Total Impervious Cover (acres)	0.00			
Total Management (acres)	1.44			
Effective Impervious Cover (acres)	-1.44			

Impervious Surface Management Table - Non-Structural BMPs

Non-Structural BMP	Amount	Unit	Description
BMP Operation and Maintenance	0.00		Per UNH stormwater Center Specifications
Catch Basin Cleaning	5.00	Number of CB Cleaned	Inspect 1-2 times per year (sediment in sump <2")

Land Use Conversion Table

Soils		Existing Conditions			Future Conditions		
Hydrologic Group	Acres	Land Use Type	Acres	Impervious and/or Paved Surfaces Acres	Land Use Type	Acres	Impervious and/or Paved Surfaces Acres
C	14.63	Forest	14.63	0.00	Commercial/Institutional	14.63	1.44
Totals	14.63		14.63	0		14.63	1.44

Wastewater Management Table

Existing Conditions			Future Conditions		
Management Option	Discharge (GPD)	Description	Management Option	Discharge (GPD)	Description
Not Applicable	0.00		Innovative Septic System	650.00	Enviro-Septic
Totals	0			650	

McFarland Ford Storage Lot

Submission ID 151

Approval Status On Hold

Approval Status Changed Fri, 09/24/2021 - 14:31

Map No. 51

Lot No. 14-1, 17

Property Owner McFarland Ford Sales Inc.

Project Street Address 151 Portsmouth Ave

This project is for a municipality No

This project is inside MS-4 Permit Area No

Project is within the 200 meter coastal zone or stream buffer zone No

Discharges to an impaired waterbodyNo

Offsite mitigation No

By submitting this form, I certify all information is true and correct to the best of my knowledge and professional judgement. Yes

Approval Changed By jmates

Town Exeter

Land Use Type Commercial and Industrial

Hydrologic Unit Code (HUC)-10 0106000308 – Exeter Squamscott River

Last Updated By jmates

Report Submitted By Erik Poulin

Last Updated On Fri, 09/24/2021 - 14:31

Report Submitted Mon, 04/05/2021 - 15:21

Impervious Surface Management Table - Structural BMPs

Structural BMP	Impervious Surface Managed (ac)	Runoff Volume Storage at Design Capacity (ft ³)	Design Storm Depth (")	Infiltration Rate (in/hr)
Porous Pavement	0.76	17413.00	1.0	2.41
Infiltration Trench	0.15	492.00	1.0	2.41
Total Impervious Cover (acres)	0.00			
Total Management (acres)	0.91			
Effective Impervious Cover (acres)	-0.91			

Impervious Surface Management Table - Non-Structural BMPs

Non-Structural BMP	Amount	Unit	Description
BMP Operation and Maintenance	0.00		Operation and Maintenance Manual to provide information on each BMP on site.

Land Use Conversion Table

Soils		Existing Conditions			Future Conditions		
Hydrologic Group	Acres	Land Use Type	Acres	Impervious and/or Paved Surfaces Acres	Land Use Type	Acres	Impervious and/or Paved Surfaces Acres
A	0.16	Commercial/Institutional	0.16	0.00	Commercial/Institutional	0.16	0.07
C	3.26	Commercial/Institutional	3.26	0.00	Commercial/Institutional	3.26	0.77
Totals	3.42		3.42	0		3.42	0.84

Wastewater Management Table

Existing Conditions			Future Conditions		
Management Option	Discharge (GPD)	Description	Management Option	Discharge (GPD)	Description
Totals	0			0	

Attachment 4
MS4 Annual Report

**New Hampshire Small MS4 General
Permit**

Annual Report

Town of Exeter

Permit Year 3

Reporting Period: July 1, 2020 to June 30, 2021

EPA NPDES Permit Number: NHR041007

Certification

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

Printed Name	<input type="text" value="Russell Dean"/>
Title	<input type="text" value="Town Manager"/>
Signature	<input type="text"/>
Date	<input type="text" value="9/28/2021"/>

Contact Information

Primary MS4 Program Manager Contact Information:

Name: Jennifer Mates, PE
Title: Assistant Town Engineer
Department: Public Works
Street Address: 13 Newfields Road
Exeter NH 03833
Email: jmates@exeternh.gov
Phone Number: (603) 418-6431

Small MS4 Authorization

The following annual report, which serves as a self assessment, is intended to document on the activities undertaken over the **reporting period from July 1, 2020 through June 30, 2021** in accordance with the Notice of Intent (NOI). The NOI can be found at the following website:

<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 Program (SWMP) and Illicit Discharge Detection and Elimination (IDDE) Plan. These documents can be found at the following website or physical location and will be referred to throughout this report:

SWMP:

https://www.exeternh.gov/sites/default/files/fileattachments/public_works/page/38331/2019.06_exeternh_swmp.pdf

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

MCM 1 - PUBLIC EDUCATION AND OUTREACH

BMP 1: Pet Waste Brochures/Pamphlets

Document Name and/or Web Address:

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

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

See Attachment for Facebook Post "Lifetime Post Total Reach"

See Attachment for Additional Public Participation

Description:

Distribution and promotion of "Every Drop" postcards or flyers with proper pet waste management, impacts of improper management, pet waste ordinance, and disposal requirements messaging. May include a 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.

In Permit Year 3, the Town continued to use the same "Every Drop" flyer as in Permit Year 1. Flyers were made available at the Town Clerk and Public Works Department offices. Pet waste education and outreach information was posted on the Public Works Department Facebook page with a link to the Think Blue Exeter website, which includes the Every Drop flyer and pledge. A "Think Blue: Pet Waste" poster, which included the "Every Drop" QR code and website, was displayed at the regional Household Hazardous (HHW) Collection event to be viewed by the people waiting to drop off their waste. There were 168 households from Exeter who attended the HHW event and are assumed to have seen the poster. See Attachment for Additional Public Participation for a copy of the Pet Waste poster displayed at the HHW event. There were no "Every Drop" pledges received for Exeter in Permit Year 3. As an additional method to assess the measurable goal, the "Lifetime Post Total Reach" for social media posts in Permit Year 3 related to BMP 1 were tallied. The one Pet Waste posts had a "Lifetime Post Total Reach" of 390.

Targeted Audience:

Residents, businesses, institutions, and commercial facilities

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".

Message Date:

Annually in spring and throughout the permit year

BMP 2: Clean Water/Healthy Lawns Brochures/Pamphlets

Document Name and/or Web Address:

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 “Lifetime Post Total Reach”

Description:

Distribute Clean Water/Healthy Lawns information. The following is a summary of Healthy Lawns Clean Water efforts in Permit Year 3:

- Healthy Lawns Clean Water magnets were made available at the Town Clerk’s office. Approximately 100 were picked up by residents.
- Healthy Lawns Clean Water program sold 51 rain barrels to 35 distinct households. A Healthy Lawn Clean Water magnet was provided to each household with their rain barrel purchase. This is an increase in household reach from 9 in the previous year.
- The Healthy Lawns Clean Water Facebook page has 158 followers as of September of 2021.
- The Healthy Lawns Clean Water Facebook page continued to post new content. The Town created four unique posts on the Healthy Lawns Clean Water Facebook page with an average reach of 15.5.
- Content from the Healthy Lawns Clean Water Facebook page was shared to the Public Works Department Facebook page.

The Town continued engagement on social media and continued interest in rain barrels through sales. As a method to assess the measurable goal, the “Lifetime Post Total Reach” for social media posts in Permit Year 3 related to BMP 2 were tallied. The 39 Healthy Lawns Clean Water posts had a “Lifetime Post Total Reach” of 12,317.

Targeted Audience:

Residents, businesses, institutions, and commercial facilities

Measurable Goal(s):

To see an increased awareness of proper fertilizer use.

Message Date:

Annually in the spring

BMP 3: Development Regulations Fact Sheet Brochures/Pamphlets

Document Name and/or Web Address:

https://www.exeternh.gov/sites/default/files/fileattachments/planning_board/page/14051/withcover2019_for_spr_app.pdf

Description:

Distribute Regulations Fact Sheet to developers when they inquire about new land development projects. In Permit Year 2, the Town decided to rely on the checklist in the Planning Board applications for outreach to developers rather than distributing a separate regulations fact sheet. This approach was discussed and reviewed with NHDES. There were 16 Planning Board applications submitted during Permit Year 2. **This BMP has been achieved.**

Targeted Audience:

Developers

Measurable Goal(s): To see an increased awareness of the local, state, and federal stormwater regulations.

Message Date:

Permit Year 2

BMP 4: Advertise Green SnoPro Certification Website

Document Name and/or Web Address: <https://www.exeternh.gov/publicworks/road-treatment-and-snow-removal>

<https://www.des.nh.gov/land/roads/road-salt-reduction>

See Attachment for BMP 8

See Attachment for Facebook Post “Lifetime Post Total Reach”

Description:

Advertise Green SnowPro Certification webpage to increase participation in program. The Green SnowPro Certification was advertised on the Public Works Department “Road Treatment and Snow Removal” webpage under “Road Salt Reduction Program”. The webpage provided a link to the NHDES Road Salt Reduction program website, which has a link to the Green SnowPro Certification webpage. Green SnowPro flyers were also provided with the industrial site education to 17 businesses.

The Exeter Conservation Commission also promoted the Green SnowPro certification through a post on their Facebook page on December 18, 2020. The post referenced how being Green SnowPro certified provides staff training on salt reduction techniques that protect water quality from excess chloride, and encouraged local businesses to seek Green SnowPro certified contractors. As a method to assess the measurable goal, the “Lifetime Post Total Reach” for the social media post in Permit Year 3 related to BMP 4 was tallied. The one post had a “Lifetime Post Total Reach” of 137. **This BMP has been achieved.**

Targeted Audience:

Industrial, commercial, and institutional facilities

Measurable Goal(s):

To see an increased number of facilities with Green SnowPro winter staff or contractors at facilities.

Message Date:

Permit Year 3

BMP 5: Septic Smart Displays/Posters/Kiosks

Document Name and/or Web Address:

Think Blue Exeter: <https://www.exeternh.gov/bcc/think-blue-septic-system-maintenance>

Get Pumped Brochure: <https://www4.des.state.nh.us/nh-ms4/wp-content/uploads/2019/04/get-pumped-community-brochure-final.pdf>

See Attachment for BMP 5

See Attachment for Facebook Post “Lifetime Post Total Reach”

See Attachment for Additional Public Participation

Description:

Utilize Septic Smart posters to encourage residents to inspect and maintain their septic systems each year. In Permit Year 3, the Septic Smart posters were displayed at the Town Office and Exeter Public Library for the week of September 15, 2020 to promote Septic Smart Week. Additionally, the Town posted information during Septic Smart week on the Public Works Department and Conservation Commission Facebook pages, and the Think Blue Exeter website includes a septic system maintenance page with similar information. A Septic Smart poster was also displayed at the regional HHW Collection event to be viewed by the people waiting to drop off their waste. There were 168 households from Exeter who attended the HHW event and are assumed to have seen the poster. See Attachment for Additional Public Participation for a copy of the Septic Smart poster displayed at the HHW event.

Approximately 1,000 “Get Pumped” brochures were mailed to properties with septic systems in Exeter in June of 2021. The brochure was included with a cover letter from the Public Works Department and the Exeter-Squamscott River Local Advisory Committee encouraging homeowners to follow the guidelines outlined in the brochure. Three people called the Assistant Town Engineer with follow-up questions. As a method to assess the measurable goal, the “Lifetime Post Total Reach” for social media posts in Permit Year 3 related to BMP 5 were tallied. The seven Septic System posts had a “Lifetime Post Total Reach” of 1,400.

Targeted Audience:

Residents with septic systems

Measurable Goal(s):

To see an increase in septic system testing/maintenance.

Message Date:

Annually in the fall during Septic Smart week.

BMP 6: Leaf and Yard Waste Collection

Document Name and/or Web Address:

See Attachment for Facebook Post “Lifetime Post Total Reach”

See Attachment for Additional Public Participation

Description:

Post notices of leaf and yard waste collection. In Permit Year 3, notices were posted on the town’s website, social media, and the local paper. There has been no apparent increase in the disposal of leaf and yard waste observed at the transfer station. As a method to assess the measurable goal, the “Lifetime Post Total Reach” for social media posts in Permit Year 3 related to BMP 6 were tallied. The 10 Leaf/Yard Waste posts had a “Lifetime Post Total Reach” of 3,657

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 168 households from Exeter who attended the HHW event and are assumed to have seen the poster. See Attachment for Additional Public Participation for a copy of the “Rake It or Leave It?” poster displayed at the HHW event. The poster provided information on the importance of proper disposal of leaf and yard waste and also included a notice regarding Exeter Fall Leaf Pick-up.

Targeted Audience:

Residents, businesses, institutions, and commercial facilities

Measurable Goal(s):

To see an increase in the disposal of leaf and yard waste at the transfer station.

Message Date:

Annually in the spring and fall

BMP 7: Exeter Conservation Commission’s Guest Speaker Night

BMP will progress in accordance with the accepted NOI and is scheduled for Permit Year 4.

BMP 8: Stormwater Pollution Prevention for Industrial Sites Flyer

Document Name and/or Web Address:

See Attachment for BMP 8

Description:

Distribute a Stormwater Pollution Prevention for Industrial Sites flyer by mail to industrial facilities. During Permit 3, industrial site education materials, including Green SnowPro and stormwater pollution control flyers, were sent to 17 industrial businesses.

This BMP has been achieved.

Targeted Audience:

Industrial facilities

Measurable Goal(s): To see an increase in awareness of stormwater pollution prevention practices at industrial facilities.

Message Date: Permit Year 5

Additional Public Education and Outreach

The Exeter Conservation Commission Facebook page has 996 followers as of September of 2021, with an average reach of 260. The Conservation Commission had 160 posts relevant to MS4, including CC/CC Partner Event (37), Clean Ups (2), Energy Efficiency (8), Sea Level Rise/Flooding (3), Lawn Reduction/Native Plantings (31), Rain Barrels (3), Fertilizer/Salt Reduction (3), Rain Barrels (3), Septic (4), Tree Planting (5), Waste Reduction (5), and Yard Waste (2).

The Town aired several water quality/pollution prevention themed Public Service Announcements, including Septic Smart videos, which support BMP 5, on local access cable (Channel 98 and 22) in between programming on a rotating slideshow. It is estimated each of the titles below played at least 100-500 times during Permit Year 3:

- Don't Overload Your Commode
- Don't Strain Your Drain
- Shield Your Field
- Think at the Sink
- Instream Flow

Exeter TV also has several water quality/pollution Public Service Announcements and NHDES videos that can be viewed on-demand on the Exeter TV website:

PSAs: https://videoplayer.telvue.com/player/LyAOBTaTsmn_CnwjwcB5-VoxQtyoKR1P/playlists/7852/media/397540?sequenceNumber=1&autostart=false&showtabssearch=true

NHDES Videos: https://videoplayer.telvue.com/player/LyAOBTaTsmn_CnwjwcB5-VoxQtyoKR1P/series/3362/media/397540?sequenceNumber=1&autostart=false&showtabssearch=true

MCM 2 - PUBLIC PARTICIPATION

BMP 9: Public Review of Stormwater Management Program (SWMP)

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.

BMP 10: Public Participation in SWMP Development

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 Permit Year 3.

BMP 11: Shoreline/Waterbody

The Conservation Commission advertised the opportunity for residents to participate in a statewide clean-up program. The Great NE Clean-Up hosted by Nature Groupie. A group of 17 volunteers participated locally. Trash clean-up was logged through the app Litterati. Two of the Exeter volunteers were the top contributors on April 18, 2021. They cleaned up trash at the Industrial Drive trail area (along Norris Brook), the roadside from Brickyard Pond to Hobart Street, and Powder Mill Rd along the Exeter River. Trash bags, gloves, and vests were available at the Public Works Department office, and collected trash could be disposed of at the transfer station or collected by Public Works Department staff.

The Planning Department organized a clean-up at the Morrissette property, a 30-acre riverside conservation parcel. An uncounted number of volunteers collected trash. Public Works Department staff collected the bags of trash and larger items for disposal.

Additional Public Participation

A regional Household Hazardous Waste (HHW) Collection event was held at the Exeter Public Works Garage on October 17, 2020, with participation for Exeter of 168 households. Posters were displayed at the HHW Collection event to promote BMP 1 (Pet Waste Brochures/Pamphlets), BMP 5 (Septic Smart Displays/Posters/Kiosks), and BMP 6 (Leaf and Yard Waste Collection). See Attachment for Additional Public Participation for a report on the HHW Collection event as well as the posters to promote BMPs 1, 5, and 6.

MCM 3 – ILLICIT DISCHARGE DETECTION AND ELIMINATION

BMP 12: Sanitary Sewer Overflow (SSO) Inventory

The SSO inventory has been updated. In Permit Year 3, there was one SSO identified and cleaned up/removed on December 17, 2020, which was reported to EPA and other government agencies, as required. The list of SSOs is available at: <https://www.exeternh.gov/publicworks/combined-sewer-sanitary-sewer-overflows>.

BMP 13: Storm Sewer System Map

Phase 1 mapping of all known stormwater infrastructure has been completed in accordance with the accepted NOI. The map is continually updated as new information is available, and is in progress in accordance with the accepted NOI.

BMP 14: Written IDDE Program Development

A written IDDE plan has been developed. **The BMP is considered complete.**

BMP 15: Implement IDDE Program

The Town hired a consultant (Wright-Pierce) to update the initial outfall inventory and priority ranking included in the IDDE Plan. The primary update was to ensure all outfalls discharging to impaired waters were ranked as either “problem” or “high” priority. To accomplish this, receiving waterbody identifications were added to the initial outfall inventory and priority ranking. This resulted in 23 outfalls changing ranking to “high” priority. No catchment investigations were conducted during Permit Year 3.

No illicit discharges were identified or reported during Permit Year 3. As noted in Permit Year 2, an overflow pipe at a private sewer pump station that discharges to a private ditch was discovered. The Sewer Department worked with the owners to get the problem corrected. The overflow pipe was capped inside of the pump station.

BMP 16: Implement Employee Training

An IDDE training was held on September 22, 2020 at the Dover DPW Complex. The training was for the Town of Exeter Water & Sewer and Highway Department managers and foremen, and hosted by UNH and City of Dover. Training records are included in Appendix G of the IDDE Plan. A video addressing the issues associated with stormwater, common pollutants of concern, how to identify an illicit discharge, and general IDDE sampling protocols is being prepared by NHDES. The video is anticipated to be finalized and available to permittees in Permit Year 4.

BMP 17: Conduct Dry Weather Screening

During Permit Year 3, the Town hired a consultant (Geosyntec) to perform dry weather outfall sampling between October 5, 2020 and October 9, 2020. In addition, two outfalls were sampled by another consultant (Hoyle Tanner) as part of a construction project on September 1, 2020 and December 3, 2020. The following is a summary of the screening/sampling:

- Number of dry weather outfalls/interconnections screened during Permit Year 3: 24
- Percentage of total outfalls/interconnections screened to date: 86%
- Number of dry weather samples collected and analyzed during Permit Year 3: 9
- The sampling results are attached to the annual report.
- The updated inventory and ranking of outfalls/interconnections is attached to the annual report.

As shown in the sampling results for the October of 2020 sampling, some of the outfalls had parameters that exceeded some of the benchmark values; however, the results were not indicative of an illicit discharge with a sewage input. Additional dry weather screening may be conducted at these locations during future catchment investigations, if deemed necessary. As shown in the sampling results for the September and December of 2020 sampling conducted as part of a construction project, some of the parameters were detected; however, the results were not indicative of an illicit discharge with a sewage input.

As part of the update to the initial outfall inventory and priority ranking (described under BMP 15), a third party review of the outfall sampling program was conducted, which identified several outfalls were missed in the initial round of screening: 18 outfalls were not screened, 9 outfalls were flowing during dry weather and not reinspected, and 7 outfalls were inspected during dry weather, were not flowing, but showed indicators of a potential non-stormwater discharge (i.e. odor, color, turbidity, floatables, oil sheen, etc.). The 18 outfalls not initially inspected will be inspected during the remaining portion of fiscal year 2021 (October of 2021). The other outfalls will be prioritized for reinspection during fiscal year 2022, which includes the second half of Permit Year 4 and the first half of Permit Year 5.

BMP 18: Conduct Wet Weather Screening

No wet weather screening was conducted in Permit Year 3. Wet weather screening will progress in accordance with the accepted NOI and is scheduled to begin in Permit Year 4.

BMP 19: Ongoing Screening

Ongoing screening will progress in accordance with the accepted NOI (upon completion of catchment investigations and illicit discharge removal and confirmation).

BMP 20: IDDE Regulations

The existing Storm Drainage Ordinance prevents illegal discharges to the drainage system, with fines. The ordinance has been reviewed and did not require modification for compliance with the 2017 NH Small MS4 General Permit. **This BMP has been achieved.**

MCM 4 – CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

BMP 21: Sediment and Erosion Control Ordinance

The Town of Exeter will rely on the Site Plan Review and Subdivision Regulations as a regulatory mechanism to require the use of sediment and erosion control practices at construction sites. The Site Plan Review and Subdivision Regulations were amended in April of 2018 to meet the provisions of the 2017 NH Small MS4 General Permit. The Site Plan Review and Subdivision Regulations for the Town of Exeter can be found at: https://www.exeternh.gov/sites/default/files/fileattachments/planning_board/page/14051/2021_site_subdivision_regs_amended_1-14-21.pdf. **This BMP has been achieved.**

BMP 22: Site Plan Review Procedures

The Town of Exeter relies on the Site Plan Review and Subdivision Regulations, which outline the site plan review procedures. The Site Plan Review and Subdivision Regulations were amended in April of 2018 to meet the provisions of the 2017 NH Small MS4 General Permit. The Site Plan Review and Subdivision Regulations for the Town of Exeter can be found at: https://www.exeternh.gov/sites/default/files/fileattachments/planning_board/page/14051/2021_site_subdivision_regs_amended_1-14-21.pdf.

During Permit Year 3, 7 Site Plan Review and 5 Subdivision Applications were received by the Planning Department and reviewed by the Technical Review Committee.

BMP 23: Procedures for Site Inspection and Enforcement of Erosion and Sediment Control Measures

The Town of Exeter contracts with a local engineering firm (Underwood Engineers) to perform site inspections of erosion and sediment control measures during construction. Written site plan review and construction site inspection and enforcement procedures are included in Appendix 4.1 of the Town’s SWMP.

The Town of Exeter conducts construction site inspections on all projects that get Planning Board approval, and since the trigger for Planning Board approval is less than an acre, the Town does not track the number of sites greater than an acre, rather they track and inspect all projects that required Planning Board approval. During Permit Year 3, 11 sites were inspected with a total of 94 inspections completed. Approximately 8 inspections were completed per site, with some sites receiving more inspections. No formal enforcement action was needed; several contractors needed to be reminded about maintaining silt fence and stabilized construction exits. Deficiencies noted during inspections were corrected by the contractor within a few days of the inspection.

BMP 24: Construction and Site Waste Controls

The Town of Exeter incorporated requirements for construction operators to control onsite wastes into the Site Plan Review and Subdivision Regulations, which were amended in April of 2018 to meet the provisions of the 2017 NH Small MS4 General Permit. The Site Plan Review and Subdivision Regulations for the Town of Exeter can be found at:

https://www.exeternh.gov/sites/default/files/fileattachments/planning_board/page/14051/2021_site_subdivision_regs_amended_1-14-21.pdf. **This BMP has been achieved.**

MCM 5 – POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

BMP 25: Post-Construction Ordinance

The Town of Exeter will rely on the Site Plan Review and Subdivision Regulations as a regulatory mechanism to address post-construction stormwater management. The Site Plan Review and Subdivision Regulations were amended in April of 2018 to meet the provisions of the 2017 NH Small MS4 General Permit. The Site Plan Review and Subdivision Regulations for the Town of Exeter can be found at:

https://www.exeternh.gov/sites/default/files/fileattachments/planning_board/page/14051/2021_site_subdivision_regs_amended_1-14-21.pdf. **This BMP has been achieved.**

BMP 26: Street Design and Parking Lot Guidance Report

Deliverables will progress in accordance with the accepted NOI and are scheduled for Permit Year 4.

BMP 27: Green Infrastructure Report

Deliverables will progress in accordance with the accepted NOI and are scheduled for Permit Year 4.

BMP 28: List of Municipal Retrofit Opportunities

Deliverables will progress in accordance with the accepted NOI and are scheduled for Permit Year 4. The following is a summary of progress made toward this BMP during Permit Year 3:

The University of New Hampshire, in cooperation with the New Hampshire Department of Environmental Services, developed pollutant loading (hot spot) spreadsheets for Seacoast Stormwater Coalition and the New Hampshire Lower Merrimack Valley Stormwater Coalition member communities, including Exeter. The pollutant loading spreadsheets will be used to help identify and prioritize potential municipal retrofit opportunities. The Town also identified several locations for potential BMPs and/or retrofits within their largest drainage area (Lincoln Street subwatershed), and applied for a 319 grant for a BMP on Winter Street.

BMP 29: As-built Plans for On-site Stormwater Controls

The Town of Exeter will rely on the Site Plan Review and Subdivision Regulations for procedures to require submission of as-built plans from private development projects. The Site Plan Review and Subdivision Regulations were amended in April of 2018 to meet the provisions of the 2017 NH Small MS4 General Permit. The April of 2018 amendments also included the requirement for long term inspection and maintenance (I&M) to ensure the long-term effectiveness of approved stormwater practices (Section 9.5.2), which requires the applicant to establish a mechanism to provide for ongoing I&M. The mechanism is to include an I&M manual as well as to annually document the inspections in a written form (inspection log, maintenance log, and I&M checklist) and submit the documentation to the Exeter Public Works Department. The Site Plan Review and Subdivision Regulations for the Town of Exeter can be found at: https://www.exeternh.gov/sites/default/files/fileattachments/planning_board/page/14051/2021_site_subdivision_regs_amended_1-14-21.pdf. **This BMP has been achieved.**

As part of the effort to standardize the long-term operation and inspection submission requirements across all New Hampshire MS4 communities, as well as standardize any non-compliance actions taken by the municipality, the Seacoast Stormwater Coalition is in the process of working with a selected engineering group (VHB) to develop standardized resources, guidance and an inspection template municipalities can use to better promote, track, and enforce the implementation of best management practices for privately-owned parking areas and drainage infrastructure. The standardized resources are anticipated to be finalized in Permit Year 4.

The number of as-built drawings received in Permit Year 3: 1

MCM 6 – GOOD HOUSEKEEPING AND POLLUTION PREVENTION FOR PERMITTEE OWNED OPERATIONS

BMP 30: Parks and Open Spaces Operations and Maintenance (O&M) Procedures

Written Parks and Open spaces O&M procedures are included in Appendix 6.1 of the Town's SWMP. There were no changes to report during Permit Year 3. **This BMP has been achieved.**

BMP 31: Buildings and Facilities Operations and Maintenance (O&M) Procedures

Written Buildings and Facilities O&M procedures are included in Appendix 6.1 of the Town's SWMP. There were no changes to report during Permit Year 3. **This BMP has been achieved.**

BMP 32: Vehicles and Equipment Operations and Maintenance (O&M) Procedures

Written Vehicles and Equipment O&M procedures are included in Appendix 6.1 of the Town's SWMP. There were no changes to report during Permit Year 3. **This BMP has been achieved.**

BMP 33: Inventory Town-owned Parks and Open Spaces, Buildings and Facilities, and Vehicles and Equipment

An inventory of town-owned parks and open spaces, buildings and facilities, and vehicles and equipment are included in Appendix 6.1 of the Town's SWMP. There were no changes to report during Permit Year 3. **This BMP has been achieved.**

BMP 34: Infrastructure Operations and Maintenance (O&M) Procedures

Written infrastructure O&M procedures are included in Appendix 6.1 of the Town's SWMP. As part of the catch basin cleaning optimization (see BMP 35), Section 5.1 Catch Basin Cleaning Program of Appendix 6.1 was revised in May of 2021. **This BMP has been achieved.**

BMP 35: Catch Basin Cleaning Program

The current schedule for catch basin cleaning is to clean approximately half of the catch basins each year, with the goal of ensuring catch basin sumps are not more than 50 percent full. Catch basin cleanings are stored at the Town sand pit and mixed with compost; catch basin cleanings do not discharge to receiving waters.

In Permit Year 3, the Town hired a consultant (Wright-Pierce) to develop a catch basin optimization plan to improve the effectiveness of the Town's catch basin cleaning program. The catch basin optimization plan summarized the analysis of catch basin cleaning records from 2017 to 2020 and provided recommendations for optimizing catch basin cleaning, including actions of conducting additional cleaning for catch basins with sumps identified as greater than 50 percent full for two consecutive cleanings, if the source of the excessive sediment loading cannot be identified. The inspection form was updated to improve data collection during Permit Year 3, and additional funding was requested for catch basin cleaning in fiscal year 2022. During Permit Year 3, catch basin

cleaning was conducted from June 21, 2021 to June 30, 2021. The following is a summary of catch basin cleaning completed:

Permit Year 3 Catch Basin Cleaning Summary	2021
Total Town Maintained Catch Basins (town-wide)	1,570
Catch Basins Cleaned and Inspected	396
Catch Basin Inspected Only	0
Total Sediment Removed (ft ³)	~3,800 +/-

BMP 36: Street Sweeping Program

The Town of Exeter sweeps streets and municipally-owned parking lots a minimum of two times per year (spring and fall), and generally sweeps 30 hours a week from early March to late November; however, the sweeper was out-of-service for 8 weeks (June and July of 2021) as a result of a major breakdown. During Permit Year 3, the number of lane-miles swept could not be reported because the GPS tracking information was not available (company that provides this service went out of business). Approximately 500 cubic yards of material were removed, which is less than usual as a result of the sweeper being out of service. Street sweepings are stored at the Town sand pit to mix with compost, and do not discharge to receiving waters.

BMP 37: Winter Road Maintenance Program

The Town of Exeter follows the guidance of the Green SnowPro certification for optimizing salt spreading operations. The salt storage pile at the Department of Public Works (DPW) Complex is enclosed to reduce runoff into storm drains and waterbodies. A winter road maintenance program has been established with a goal of reducing salt usage and included in Appendix 6.1 of the Town’s SWMP.

BMP 38: Stormwater Treatment Structures Inspection and Maintenance Procedures

Town-operated treatment units are typically inspected and maintained annually; however, in Permit Year 3 BMPs were not inspected and maintained because funding was cut due to COVID-19. An inventory of municipally-owned or operated structural BMPs and written inspection and maintenance procedures are included in Appendix 6.1 of the Town’s SWMP.

BMP 39: Stormwater Pollution Prevention Plan (SWPPP)

A SWPPP is implemented for the DPW Complex. The Town hired a consultant (Wright-Pierce) to conduct the quarterly site inspections at the DPW Complex. During Permit Year 3, three site inspections were conducted (December 11, 2020, April 13, 2021, and June 25, 2021). Corrective action for Oil Water Separator #2 was taken to prevent it from surcharging by removing a partial plug from the outlet of the oil water separator to the existing sewer line. A sump pump may be installed in a downstream manhole, if the problem persists.

TMDLS AND WATER QUALITY LIMITED WATERS

The list of receiving waters, outfalls, and impairments was reviewed as part of BMP 15. No updates were made to the relevant impairments or TMDLs; however, the number of outfalls discharging to the receiving waters was updated accordingly (see attached MS4 Outfall Summary).

Bacteria/Pathogens

Outfalls to these receiving waters were ranked as high priority for the IDDE implementation during the update to the initial outfall inventory and priority ranking (relevant BMP: 15). For the status of other relevant BMPs in the SWMP that address enhanced BMPs for Bacteria/Pathogens, refer to BMPs 1 and 5.

Nitrogen

Outfalls to these receiving waters were ranked as high priority for the IDDE implementation during the update to the initial outfall inventory and priority ranking (relevant BMP: 15). For the status of other relevant BMPs in the SWMP that address enhanced BMPs for Nitrogen, refer to BMPs 1, 2, 6, 25, 28, 30, 31, and 36.

The Town of Exeter through its participation in the Seacoast Stormwater Coalition and continued involvement with the NHDES Pollutant Tracking and Accounting Project (PTAP) satisfies the tracking and accounting requirement of the municipally-owned structural BMPs listed in Attachment 1 to Appendix H. The 2020 PTAP municipal report for Exeter is attached to the annual report (see Attachment for TMDL and Water Quality Limited Waters – Nitrogen).

Solids, Oil and Grease (Hydrocarbons), or Metals

Outfalls to these receiving waters were ranked as high priority for the IDDE implementation during the update to the initial outfall inventory and priority ranking (relevant BMP: 15). For the status of other relevant BMPs in the SWMP that address enhanced BMPs for Solids, Oil and Grease (Hydrocarbons), or Metals, refer to BMPs 35 and 36.

Chloride

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.

ADDITIONAL INFORMATION

Monitoring or Study Results

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

DESCRIPTION OF ANY CHANGES IN IDENTIFIED BMPS OR MEASURABLE GOALS

The Town of Exeter has implemented activities in accordance with the approved NOI. All BMPs and measurable goals as outlined in the approved NOI are appropriate.

It should be noted that the description of BMP 1 was expanded with more detail as included in the annual report (Permit Year 1).

In Permit Year 2, BMP 3 Development Regulations Fact Sheet Brochures/Pamphlets was modified by relying on the Town's checklist in the Planning Board applications for outreach to developers rather than distributing a separate regulations fact sheet to developers.

ACTIVITIES FOR THE NEXT REPORTING PERIOD

The Town of Exeter will continue to implement activities in accordance with the approved NOI and as noted in the Annual Report.

Attachment 5
Education and Outreach Flyers

COVID-19 Updates & Other News



Making Exeter Sustainable



Exeter has consistently been recognized as a progressive community for our proactive land use management. We aim to continue this trend in 2020 with more focused effort to further improve our sustainability, and highlight some of those initiatives below. We recognize we are only part of the picture and that we all as individuals, have an important role to play in this effort. As such, we also highlight steps we can all take as individuals to support this initiative. By working collaboratively we know we can forge a more...

~ **MAKING EXETER SUSTAINABLE** ~

SUSTAINABLE INITIATIVES

[Sustainable Planning & Reports](#)



Rising sea levels, storm surges and altered weather regimes make our community susceptible in many ways to the changing climate. Through our planning efforts we have been, and will continue to incorporate climate resilient recommendations in a variety of ways.

[Read more](#)



[Rebates and Tax Credits for Sustainability](#)

The information below was pulled together by the [Exeter Energy Committee](#) to inform residents of Exeter about the available rebates and tax credits related to energy and sustainability.

[Read more](#)



[Climate Related Documents](#)

In October 2020, we hosted a Climate Workshop to provide an overview of key climate related resources and help staff and board members envision how to use them in their respective roles. The resources are linked below. This workshop was made possible through assistance by UNH Cooperative Extension and NH Sea Grant, funded, in part, by NOAA's Office for Coastal Management under the Coastal Zone Management Act in conjunction with the NH Department of Environmental Services Coastal Program.

[Read more](#)

[2020 UNH Sustainability Fellowship Update](#)

In 2020, Exeter was selected as one of 18 mentor organization across New England, to host a UNH Sustainability Fellow. Rachel Nadolny joined us and prepared the attached Municipal Operations Greenhouse Gas Emissions Inventory Report. We are thankful for our partnership with the UNH Sustainability Institute, the opportunity to work with Rachel, and look forward to implementing these recommendations.

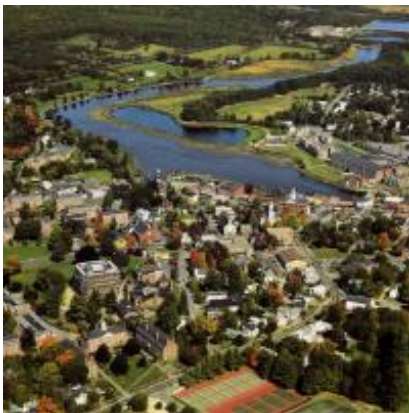
[Read more](#)



2018 Climate Open House

In 2018, in collaboration with Rockingham Planning Commission, Exeter hosted a Climate Open House aimed at informing residents on our climate resiliency efforts.

[Read more](#)



Sustainability Advisory Committee

Mission: To guide the development of sustainability policies and practices for the Town of Exeter that simultaneously promote a healthy environment, strong community connections, and economic vitality; including the establishment of the Town of Exeter Sustainability Office.

[Read more](#)



Energy Committee

The purpose of the Energy Committee is to review various energy programs available to the Town of Exeter. The committee may make recommendations to the Select Board and town meeting for potential implementation.

[Read more](#)



FROM RESOLUTION TO REVOLUTION

- A SUSTAINABLE EXETER INVOLVES YOU! -

As a municipality, we are only part of the picture. That is why, first and foremost we believe that sustainability starts with actions we personally take in our own lives.

[Read more](#)



2021 Earth Day Green Minute || Exeter, NH Boards In Action

Exeter is getting greener! Hear "one-minute" highlights from Exeter Sustainability Officer Dave Sharples and various town committees working to make

Exeter a greener place to be.

[Read more](#)

Supporting Documents

 [Mr. Fox Composting Flyer \(209 KB\)](#)

Planning & Sustainability

[About Our Department](#)

[Capital Improvement](#)

Making Sustainable Exeter

Master Plan

Current & Upcoming Projects

FAQ's

Useful Links

PB Applications

CONTACT INFORMATION

10 Front Street
Exeter, NH 03833
Phone: 603-773-6112
Alternate: 603-778-0591 ext. 112
Fax: 603-772-4709

Hours:

Monday - Friday
8:00AM - 4:30

[View Full Contact Details](#)

[Home](#) | [Staff Login](#) | [Intranet](#)

10 Front Street Exeter, NH 03833

Jacob Shactman

From: Nils Larson <nl Larson@exeternh.gov>
Sent: Tuesday, January 11, 2022 9:03 AM
To: Jacob Shactman
Subject: Fwd: Updates from Exeter Public Works

----- Forwarded message -----

From: Exeter, NH Public Works <publicworks@exeternh.gov>
Date: Fri, Oct 22, 2021 at 3:15 PM
Subject: Updates from Exeter Public Works
To: Town of <everyone@exeternh.gov>



We skipped last week's updates... did you miss us?! We're back with some important messages!

A message from the Exeter Health Department: Recently the Health Dept. has received reports of gastrointestinal illness including one confirmed report of Giardia. While the source of the exposure has not been confirmed, the affected individuals reported drinking from the Jailhouse Spring in common. The Jailhouse Spring is not regularly tested and the Exeter Health Dept. warns users to drink at their own risk. If you are feeling ill with any gastrointestinal symptoms, please contact your PCP.

Exeter Health Dept: (603) 773-6132

Transfer Station Extended Hours: From Oct. 15th through Dec. 15th the Transfer Station will be operating on the extended schedule:

Hours Oct 15th - Dec 15th:

Tuesday: 9 am - 1 pm

Friday: 9 am - 2:30 pm

Saturday: 8 am - 2:30 pm

Sunday: Noon - 4 pm

[Transfer Station](#)

Flushing Water Mains: The Water Department will flush water mains during the weeks of October 24th to November 12th. Flushing will be performed at night during the first week, and during the day for 2 weeks. Night flushing will be from 9 pm to 7 am, and Daytime flushing will be 7:30 am to 2:30 pm.

[Flushing Info](#)

Fall Leaf Pick-up: Fall curbside leaf pick-up will occur Nov. 22nd - 27th (Thanksgiving week). Waste Management picks up leaves and grass twice each year (spring & fall). The collection is limited to 12 leaf bags (must be biodegradable paper bags) per residence. Leaves and grass can also be taken to the Transfer Station during normal hours of operation (no permit required & leaves do not need to be bagged).

[Curbside Collection](#)



Salem St Area Utilities Improvement Project: We are really excited we were able to kick off construction this season starting on Oak! Excavation began this week and will continue on Oak and Forest in the coming weeks and we will update you when we shift to additional areas of the neighborhood.

[Salem St Project Site](#)

Halloween: Exeter's Trick-or-Treat will be Sunday, October 31, 2021 from 4 pm - 7 pm! [Trick or Treat](#)

[Events](#)



We're Hiring! Are you or someone you know in search of a rewarding job where you can make a difference in the community? Take a look the Town of Exeter vacancies and get started on the application process!

[Town of Exeter Job Board](#)

We hope you enjoyed this week's updates. Have a great fall weekend!

Trisha Allen

Did you know?!

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. So please PICK UP after your PET!

[Think Blue](#)



COVID-19 Updates & Other News



Christmas Tree Pick-up



Christmas trees are typically picked up curbside by 7 am on your regular pick-up day during the first full week in January (3rd - 7th). Snowstorms may cause a delay in pick-up. All decorations, including garland, must be removed. Tree pick-up does not include wreaths. Local farms may also be interested in your tree to feed their goats!



Think Blue: Pet Waste



→ Pet Waste

- Harmful to waterways
- Rain washes pet waste into stream and rivers
- Contains excess nitrogen and disease-causing organisms

→ You Can Help

- Clean up after your pet
- Always carry a pet waste bag
- Dispose of bag in the garbage or any of the 19 pet waste disposal stations in Town
- Commit to “Scoop the Poop”

EVERY DROP

Small Changes. Big Difference.



Your town wants to hear from you! Visit stateofourestuaries.org/everydrop/doody

→ Resources

- **Exeter, NH Think Blue: Pet Waste**
<https://www.exeternh.gov/bcc/think-blue-pet-waste>
- **Exeter, NH Dog License**
<https://www.exeternh.gov/townclerk/dog-license>
- **NHDES Pet Waste Outreach Campaign**
https://www.des.nh.gov/organization/divisions/water/wmb/coastal/scoop_the_poop.htm
- **State of the Estuaries**
<https://stateofourestuaries.org/everydrop/petpledge/>

Contact: Town of Exeter, NH 10 Front St Exeter, NH 03833 (603) 772-6112



YOUR SEPTIC SYSTEM IS YOUR RESPONSIBILITY

Do Your Part Be SepticSmart

On a Septic System?

When's the last time you thought about it?

Did You Know?

Common Household leaks can add hundreds of extra gallons of water everyday, stressing your septic system.

Overloading your septic system with water is a leading cause of failure.

Save water and support your septic system's health. For the long-term care of your system, have your septic tank inspected and pumped out by a licensed septic tank contractor as needed (on average every three to five years).

Know your part, be
SepticSmart!

Learn more at:

www.epa.gov/septicSMART



U.S. Environmental Protection Agency

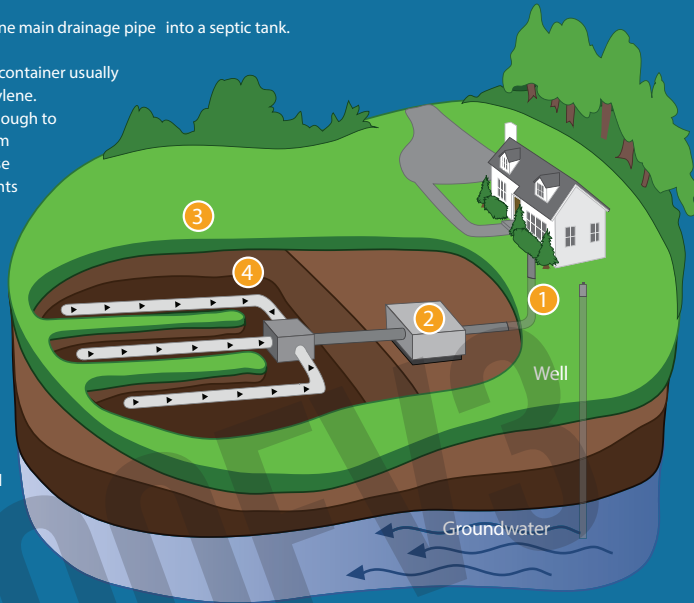


FAILING SEPTIC SYSTEMS IS A MAJOR WATER QUALITY CONCERN IN THE GREAT BAY WATERSHED

How does a septic system work?

This is a simplified overview of how a septic system works.

- 1 All water runs out of your house from one main drainage pipe into a septic tank.
- 2 The septic tank is a buried, water-tight container usually made of concrete, fiberglass or polyethylene. Its job is to hold the wastewater long enough to allow solids to settle down to the bottom (forming sludge), while the oil and grease floats to the top (as scum). Compartments and a T-shaped outlet prevent the sludge and scum from leaving the tank and traveling into the drainfield area.
- 3 The liquid wastewater then exits the tank into the drainfield. If the drainfield is overloaded with too much liquid, it will flood, causing sewage to flow to the ground surface or create backups in toilets and sinks.
- 4 Finally, the wastewater percolates into the soil, naturally removing harmful bacteria, viruses, and nutrients.



HOW A SEPTIC SYSTEM WORKS AgriLIFE EXTENSION FOR MORE INFO

Wastewater Source (House)

The source of wastewater is the domestic water used in homes, schools or businesses that the treatment system serves. Domestic wastewater is water discharged from plumbing fixtures, appliances, toilets, baths, laundry and the dishwasher. Wastewater is typically 99.9% liquid.

Overview

To Septic Tank To Aerobic System

HOW A SEPTIC SYSTEM WORKS AgriLIFE EXTENSION FOR MORE INFO

To House

Conventional Septic System Final Treatment and Dispersal

This is the final step in removing contaminants from the wastewater. Gravity flow systems are the most widely used and least expensive, and they require the least amount of operation and maintenance. The dispersal of the wastewater is typically a standard subsurface drain field. This consists of gravel filled trenches, plastic chambers or plastic pipe installed underground to hold the wastewater leaving the tanks until it can seep into the surrounding soil. The soil provides most of the wastewater treatment. Microbes living in the soil break down solids and kill bacteria and pathogens in the wastewater.

Final Treatment and Dispersal

Septic System Pretreatment

HOW A SEPTIC SYSTEM WORKS AgriLIFE EXTENSION FOR MORE INFO

To House

Conventional Septic System Pretreatment

In the pretreatment portion of a septic system, many of the contaminants are removed from the wastewater in order to prepare it for final treatment and discharging to the environment. The main unit of the pretreatment portion of the system is the tank - commonly called a septic tank. Septic tanks are used to settle out solids and partially treat wastewater before it reaches the distribution system. Many of the septic tanks used now are 2 compartment tanks. Multiple tanks can improve sludge and scum removal. Sludge are solids that fall to the bottom of the tanks and scum is the fat, oils and grease that float on the top of the water in the tank. Tanks should be pumped every 2 - 3 years.

Final Treatment and Dispersal

Septic System Pretreatment

HOW A SEPTIC SYSTEM WORKS AgriLIFE EXTENSION FOR MORE INFO

To House

Conventional Septic System Final Treatment and Dispersal

When a septic system is not properly maintained or if it fails, untreated domestic wastewater can back up into the house or leach out through the drain field. The untreated water could also reach the groundwater, river, stream or lake. If numerous septic tanks in an area are failing, the waste can become a major source of pollution.

Final Treatment and Dispersal

Septic System Pretreatment

Your septic system is part of your home and your responsibility!

An illustration of three cartoon dogs. On the left is a reddish-brown dog with floppy ears. In the middle is a black and white dog with yellow markings on its face and legs. On the right is a small light blue dog with black markings on its face. Above each dog is a speech bubble. The first bubble is yellow and says 'I POOP'. The second is teal and says 'YOU SCOOP'. The third is orange and says 'GOT IT?'.

I POOP

**YOU
SCOOP**

GOT IT?

EVERY DROP

Small Changes. Big Difference.



We love our dogs! But dog waste carries harmful bacteria that can make our waters unsafe for drinking or swimming. So always pick it up and throw it in the trash!

EVERY DROP

Small Changes. Big Difference.

Take the Pledge to Scoop the Poop!

Visit stateofourestuaries.org/everydrop/petpledge or just scan the QR code to let your town know that you're doing your part by scooping the poop!



Many NH towns have over 1,000 dogs living in them, and each dog "goes" once or twice a day. That's a lot of poop! Not only is it gross when it's left around, but it can be dangerous. Harmful bacteria and parasites - such as Giardia or Salmonella - that lives in pet waste, can come in contact with other people and pets or wash into nearby waterways or storm drains. **Picking up our dog's waste and throwing it out is a small change that can make a big difference in keeping our waters clean.**

5 Small Changes that Make a Big Difference:

1. Always carry a plastic bag when you walk your dog.
2. Always pick up that poop.
3. Always dispose of it in a trashcan.
4. Never put bagged or unbagged waste in a storm drain.
5. Take the Pledge to tell your town you're making a difference!

The Hidden COST



A recent survey shows that towns have spent an average of **\$40,500** dealing with unflushable items in sewer systems.



The replacement cost of a typical residential leach field is **\$6,000-15,000**

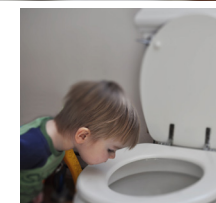
This brochure was developed by:



des.nh.gov



What's FLUSHABLE?



What's FLUSHABLE?



A toddler will tell you that *everything* is flushable... but what you *think* is flushable could be costing you money!

Product labels can be misleading. Some items that claim to be “flushable” can clog sewer and septic systems and can end up costing you a pretty penny.

“Flushable” does NOT mean it is SAFE for your septic system or sewer.

“Disposable” items ARE NOT flushable and should be placed in the trash.

The bottom line:
ONLY

Human waste and toilet paper
ARE FLUSHABLE

The DO NOT FLUSH List:



Diapers
Cigarettes
Paper Towels
Cotton Swabs
Feminine
Hygiene
Products

Toys
Dental Floss
Facial Tissues
Wipes

BMP	Post Message	Posted	Lifetime Post Total Reach	Permalink
Public Works FB Page				
15	<p>In an effort to improve the sewer service reliability and reduce the utility cost, the Town will be conducting smoke testing of the sanitary sewer & drainage systems, in the Salem Street Area Neighborhood, to identify sources of where ground surface waters enters the sewer system. These efforts will be starting the week of July 13th. Very rarely does smoke enter any buildings as a result of these tests. This process will include the use of a special non-toxic smoke that will leave no residuals or stains, and has no effect on plant or animal life. The smoke has a distinctive odor but the visibility and odor will only last a few minutes where there is adequate ventilation. We apologize for any inconvenience and thank you for your cooperation. Should you have any questions, please contact Matthew Berube at the Exeter Water & Sewer Department at (603) 773-6157.</p> <p>https://www.exeternh.gov/publicworks/salem-street-area-utility-improvement-project</p>	7/8/20 12:20 PM	426	https://www.facebook.com/ExeterNHPublicWorks/posts/2245176862295867
2	<p>Water Ban Rain Barrels🌧️ Saving water for essential uses, such as fire suppression, drinking, cooking, sanitation and cleaning of clothes and dishes is paramount. A temporary ban of non-essential uses such as watering lawns, washing vehicles outdoors and hosing down the driveway is key to conserving water supplies until enough rain is received to replenish water sources. Let the lawn go dormant and use a commercial car wash facility that practices water recycling. Conserve water for your outdoor essential needs by making a rain barrel. Get creative and share your ideas below. Your idea might spark interest in others! https://www.youtube.com/watch?v=g0y0BmEFUcs</p>	8/26/20 6:11 AM	517	https://www.facebook.com/ExeterNHPublicWorks/posts/2303142423165977
2	<p>Before the rain starts it might be a great idea to put out any empty bucket, bin, or jug you have to collect rain from today's expected showers! Get creative and share your idea in the comments if you'd like! 🌧️ Your idea might spark interest in others! #conservewater #drought</p>	8/29/20 4:44 AM	522	https://www.facebook.com/ExeterNHPublicWorks/posts/2306491196164433
5	<p>FOG --- Keep FAT, OIL, and GREASE out of your drain!</p>	9/15/20 7:15 AM	321	https://www.facebook.com/ExeterNHPublicWorks/posts/2326955044118048
5	<p>Please do not flush these items no matter what toilet you are using! As part of Septic Smart week we would like to remind you that these items can wreak havoc on private septic and public utility systems. The only items that are flushable are: Bodily functions Toilet paper Regardless of what the packaging states. "Flushable wipes" are not suitable to be flushed down the toilet simply because they do not break down as quickly and as easily as toilet paper does.</p>	9/16/20 10:09 AM	333	https://www.facebook.com/ExeterNHPublicWorks/posts/2328326697314216
5	<p>Septic Sam wants to remind you to pump your septic tank every 3-5 years to help maintain its lifespan! #SepticSmart</p>	9/17/20 8:21 AM	258	https://www.facebook.com/ExeterNHPublicWorks/posts/2329370513876501
	<p>Mark your calendars and register! Household Hazardous Waste Day will be October 17th from 8am - 1pm. Tickets must be purchased in advance to ensure the event follows social distancing guidelines. Participants will be asked to remain in their vehicles at all times.</p> <p>https://www.exeternh.gov/publicworks/household-hazardous-waste-day</p>	9/21/20 9:44 AM	1147	https://www.facebook.com/ExeterNHPublicWorks/posts/2333799240100295
6	<p>Important Dates to Remember!📅🗓️📅🗓️Household Hazardous Waste Day 10/17/2020 8am - 1pm Pre-registration is REQUIRED⚠️🗓️Fall Curbside Leaf Pick-up 11/23 - 11/28 🗓️📅 Outdoor Water Ban remains which includes residents on private wells. 🗓️📅 Transfer Station Extended Hours will begin 10/15 - 12/15 Reach out if you have any questions! publicworks@exeternh.gov www.exeternh.gov/publicworks</p>	10/1/20 4:38 AM	232	https://www.facebook.com/ExeterNHPublicWorks/posts/2345347462278806
6	<p>Make sure your rakes and leaf bags are ready! Fall leaf collection will be during the week of Thanksgiving! Raking is a great activity to work up your appetite for the holiday! 🍂🍂🍂 Curbside Fall leaf pick-up week will be during the week of November 23rd - 28th. Leaves will be picked up on your regular pick-up day if it falls Monday through Wednesday. Thursday's route will be complete Friday, and Friday's route will be complete on Saturday due to the holiday.</p> <p>https://www.exeternh.gov/publicworks/fall-leaf-pick-0</p>	10/1/20 5:00 AM	215	https://www.facebook.com/ExeterNHPublicWorks/posts/2337217896425096

BMP	Post Message	Posted	Lifetime Post Total Reach	Permalink
6	Lots of activity at Public Works (as usual). Check out our upcoming events and information! Have you registered for this year's Household Hazardous Waste Day? Not just for Exeter residents. Read on for other towns invited and share! https://www.exeternh.gov/publicworks/household-hazardous-waste-day-registration-required Are you geared up and ready to rake those leaves? Fall curbside leaf pick-up will be during the week of Thanksgiving this year. https://www.exeternh.gov/publicworks/fall-leaf-pick-0 Outdoor water ban continues. Recent rain storms have not accumulated enough rain to replenish groundwater levels. https://www.exeternh.gov/publicworks/outdoor-water-ban-consume-water Construction in the Train Station driveway will be closed Oct 13-15th. Please park along Lincoln Street to access the Train Station. https://www.exeternh.gov/publicworks/train-station-parking-lot-driveway-closed	10/9/20 5:46 AM	293	https://www.facebook.com/ExeterNHPublicWorks/posts/2354614624685423
7	The 8am time slot is sold out with a few spots remaining for 9am. You must register for this year's Household Hazardous Waste Day in order to attend. The event may sell out! https://www.exeternh.gov/publicworks/household-hazardous-waste-day-registration-required	10/13/20 10:28 AM	257	https://www.facebook.com/ExeterNHPublicWorks/posts/2359056907574528
7	Do you have any of these items listed? If you do, now's your chance to get rid of it! There is still time to reserve your spot at Household Hazardous Waste Day tomorrow... book quickly so your preferred time isn't sold out! https://www.exeternh.gov/publicworks/household-hazardous-waste-day-registration-required	10/16/20 10:32 AM	1751	https://www.facebook.com/ExeterNHPublicWorks/posts/2362718883874997
	Hazardous Waste Day only comes once each year! You can still purchase tickets online to help with the contactless payments/check-in.	10/17/20 7:43 AM	100	https://www.facebook.com/ExeterNHPublicWorks/posts/2363791780434374
15	We are seeking public input from the residents in this neighborhood about any stormwater or sewer concerns or issues. A public input session will be held on Wed, Oct. 28th at 6:30 pm via Zoom. Attendees on Zoom will be able to ask questions or make comments. https://www.exeternh.gov/publicworks/westside-drive-area-utility-improvement-project-public-input-session	10/23/20 1:09 PM	772	https://www.facebook.com/ExeterNHPublicWorks/posts/2371545092992376
6	Curbside fall leaf pick-up will be next week (November 23rd - 28th). Leaves will be picked up on your regular pick-up day, Monday through Wednesday. Thursday's route will be complete Friday, and Friday's route will be complete on Saturday. Waste Management picks-up leaves curbside twice each year (spring & fall). Bags must be biodegradable paper leaf bags and placed curbside by 7 a.m. on your pick-up day. There is a 12 leaf bag limit per residence. Bags are available to purchase at local hardware or grocery stores. In addition, leaves can be taken directly to the Transfer Station (no permit required) during hours of operation. Leaves brought to the Transfer Station or collected curbside are composted. Compost is available to residents free of charge! https://www.exeternh.gov/publicworks/fall-leaf-pick-0	11/17/20 7:25 AM	253	https://www.facebook.com/ExeterNHPublicWorks/posts/2401429870003898
6	Thanksgiving Week Updates: 🗑️ Curbside fall leaf pick-up will occur this week on your regular pick-up day unless your pick-up day is Thanksgiving Day and Friday. Thursday's route will be complete on Friday and Friday's route will be complete on Saturday (1 day delayed). 🗑️ Same goes for Trash and Recycle pick-up. Thursday's route will be complete on Friday and Friday's route will be complete on Saturday (1 day delayed). Waste Management trash trucks complete their route picking up leaves first, and then they come back to pick-up blue bags. The Public Works Office will be closed for Thanksgiving and Thanksgiving Friday. The Transfer Station will be open on Thanksgiving Friday. We hope you have a Happy and safe Thanksgiving week!	11/23/20 7:48 AM	980	https://www.facebook.com/ExeterNHPublicWorks/posts/2408010879345797
6	Christmas Tree pick-up will be during the week of January 4th on your regular pick-up day, BUT if you want something fun to do with your tree check out the Wildlife Tree trail project Great Bay National Estuarine Research Reserve is organizing! Info: 🌲🌲🌲 https://www.exeternh.gov/publicworks/christmas-tree-pick	12/30/20 9:56 AM	546	https://www.facebook.com/ExeterNHPublicWorks/posts/2444689699011248
2	Once again the Exeter NH Conservation Commission is participating in the Rain Barrel program! To order a rain barrel visit... www.greatamericanrainbarrel.com/community/ #waterconservation	3/8/21 9:10 AM	378	https://www.facebook.com/ExeterNHPublicWorks/posts/2514501225363428

BMP	Post Message	Posted	Lifetime Post Total Reach	Permalink
6	<p>Curbside leaf pick-up will be during the week of April 19th on your regular pick-up day. Leaves must be in biodegradable paper leaf bags curbside by 7am on your pick-up day to ensure they are not missed. There is a 12 leaf bag max per household. If you miss leaf pick-up you can bring leaves to the Transfer Station, permits are not required and leaves do not need to be bagged for drop-off. 🗑️🗑️🗑️</p> <p>https://www.exeternh.gov/publicworks/curbside-collection</p>	3/23/21 8:30 AM	306	<p>https://www.facebook.com/ExeterNHPublicWorks/posts/2530503030429914</p>
1	<p>A friendly reminder... 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. When walking your dog, always carry a plastic bag and clean up after your pet (grocery store bags & old newspaper bags work just fine). Use the bag like a glove, pick up the pet waste, turn the bag inside out and around the waste, tie the bag and dispose in the garbage. Don't place pet waste in storm drains or hose pet waste toward storm drains as they drain directly to local waterways. Clean up pet waste from your yard. You can either flush it down the toilet or dispose of it in the trash. Follow the NH Department of Agriculture's Best Management Practices for manure management if you have farm animals. We have 19 pet waste disposal systems available for when you are walking your pet in town! #ms4community</p> <p>https://www.exeternh.gov/bcc/think-blue-pet-waste</p>	4/8/21 5:00 AM	390	<p>https://www.facebook.com/ExeterNHPublicWorks/posts/2525369707609913</p>
	<p>Thank you Exeter Dispatchers!</p>	4/12/21 5:29 AM	248	<p>https://www.facebook.com/ExeterNHPublicWorks/posts/2550506321762918</p>
2	<p>Excess lawn chemicals like fertilizers, weed, and bug killers run off lawns when they are overwatered or applied before a rainstorm. These products pollute our water and can be harmful to your family, especially children, and pets. 🌱 Choose the right seeds based on your conditions. ⚙️ Set the mower blades at 3" & leave the grass clippings (clippings on your lawn are a free source of fertilizer! As clippings decompose they release nitrogen, the most common nutrient lawns need to grow. 🚫 Don't blow your clippings into the street or storm drains. Clippings in the street or storm drains can pollute our rivers and streams. 💧 Water wisely - If needed, water only once or twice per week with a deep soaking (1-1.5 inches) in the cool hours of the morning. 🌱 Use Fertilizer properly and only when needed. A simple soil test will tell you if your lawn needs fertilizer. UNH Cooperative Extension has inexpensive test kits for purchase. 🚫 Never apply fertilizer before it rains and if you water it in, be sure not to overwater. 🍂 Fall is the time of year when grass puts energy into growing its root system and is often the best time to fertilize your lawn. 🌱 Be sure you read the fertilizer products and follow the application instructions and use slow-release fertilizers. 🌱 Grow a thick lawn to keep weeds out. Remove thatch and overseed with the proper grass seed to help your grass out-compete the weeds. 🌱 If necessary, spot treat with weed killers or insect killers. Never apply them to your entire lawn. By following these simple steps, you can have a beautiful yard and still THINK BLUE! 💧 #ms4community</p> <p>https://www.exeternh.gov/bcc/think-blue-lawn-care</p>	4/13/21 5:00 AM	307	<p>https://www.facebook.com/ExeterNHPublicWorks/posts/2525203110959906</p>
11	<p>Gather your neighbors and celebrate Earth Day (April 22nd) with roadside clean-up from April 12th - 23rd. 🌍🌍🌍 Swing by the Public Works Office to pick up trash bags, vests, and gloves. Then let us know where to pick up the trash bags ~ 603-773-6157 or publicworks@exeternh.gov. Share your efforts by using #CleanupExeter and tag us on Facebook or Instagram (ExeterNHPublicWorks). Exeter Sustainability Advisory News #cleanupExeter</p>	4/13/21 8:35 AM	384	<p>https://www.facebook.com/ExeterNHPublicWorks/posts/2551712981642252</p>
11	<p>Very excited to already have had 3 residents stop by to pick up bags and gloves yesterday! These folks were headed to Cass St, Kathleen Dr, Linden St, Park St, Swazey Parkway, and Water St to pick up litter!</p>	4/14/21 4:16 AM	276	<p>https://www.facebook.com/ExeterNHPublicWorks/posts/2552466058233611</p>
6	<p>Curbside leaf pick-up is next week! Be sure to pick up bio-degradable paper leaf bags at local retailers!</p>	4/15/21 5:52 AM	277	<p>https://www.facebook.com/ExeterNHPublicWorks/posts/2553420374804846</p>

BMP	Post Message	Posted	Lifetime Post Total Reach	Permalink
11	Happy Earth Day! 🌍🌱♻️🗑️ If you'd like to take action to protect Mother Earth (and clean up our town), please join our roadside spring cleanup initiative! All you need to do is swing by the Public Works office to pick up trash bags, gloves, and a high visibility vest if you'd like, fill the bags and let us know where we can pick them up! This would be a perfect school vacation week activity! #cleanupexeter #EarthDay2021 https://www.exeternh.gov/publicworks/lets-clean-our-town	4/22/21 4:18 AM	404	https://www.facebook.com/ExeterNHPublicWorks/posts/2560417757438441
2	Tip Tuesday: Excess lawn chemicals like fertilizers, weed and bug killers run off lawns when they are overwatered or applied before a rainstorm. These products pollute our water and can be harmful to your family, especially children and pets. 🌱 Choose the right seeds based on your conditions 🌱 Set the mower blades at 3", and leave the grass clippings 🌱 Do not blow your clippings into the street or storm drains 🌱 Water wisely - If needed, water only once or twice per week with a deep soaking (1-1.5 inches) in the cool hours of the morning 🌱 Use Fertilizer Properly and only when needed - A simple soil test will tell you if your lawn needs fertilizer. UNH Cooperative Extension has inexpensive test kits for purchase. 🌱 Never apply fertilizer before it rains and if you water it in, be sure not to overwater. 🌱 Fall is the time of year when grass puts energy into growing its root system and is often the best time to fertilize your lawn. Be sure you read the fertilizer products and follow the application instructions and use slow-release fertilizers 🌱 Grow a thick lawn to keep weeds out. Remove thatch and overseed with the proper grass seed to help your grass out-compete the weeds. 🌱 If necessary, spot treat with weed killers or insect killers. Never apply them to your entire lawn. You can have a beautiful yard and still THINK BLUE! #ms4 #ms4community https://www.exeternh.gov/bcc/think-blue-lawn-care	5/11/21 6:31 AM	436	https://www.facebook.com/ExeterNHPublicWorks/posts/2578886412258242
Conservation Commission FB Page				
4	Did you know Exeter's winter maintenance staff is Green SnowPro certified? This provides our Highway department staff training on salt reduction techniques that protect our water quality from excess chloride! If you own a local business or manage property, seeking out Green SnowPro certified contractors can grant you liability protection against damages arising from snow and ice conditions under RSA 508:22. #ms4community	12/18/20 6:53 AM	137	https://www.facebook.com/permalink.php?story_fbid=3564811493604462&id=473302939422015
2	With temperatures in the decline its a great time to start planning your pollinator garden. Here is a great resources shared by Pollinator Pathways NH.	11/30/20 1:24 PM	101	https://www.facebook.com/permalink.php?story_fbid=3519283918157220&id=473302939422015
2	This Thursday, Audubon presents Gardening for Climate Change.	11/2/20 3:31 AM	80	https://www.facebook.com/permalink.php?story_fbid=3442352445850368&id=473302939422015
2	Tonight! Learn how to attract and sustain pollinators year round.	10/29/20 6:18 AM	63	https://www.facebook.com/permalink.php?story_fbid=3431796730239273&id=473302939422015
2	Now is a great time to disperse seed for pollinator friendly plants. Whether you have seeds to share or not, join us this Saturday and leave with a garden in your pocket! #pollinatorpathwaysnh	10/14/20 1:35 PM	126	https://www.facebook.com/permalink.php?story_fbid=3392268467525433&id=473302939422015
2	Join the movement! Is a portion of your yard helping to provide food for pollinators? Including native grasses, perennials, and annuals to even a small portion of your yard can make a big difference in supporting pollinators. Join us to create a connected pathway of food corridors throughout Rockingham County! Message us today to add your property and help this movement grow. For resources on how to encourage pollinators on your property give Pollinator Pathways NH a 'LIKE'.	10/14/20 6:05 AM	173	https://www.facebook.com/permalink.php?story_fbid=3392253867526893&id=473302939422015
2	Are you looking to establish or enhance your pollinator garden?	10/8/20 7:15 AM	166	https://www.facebook.com/permalink.php?story_fbid=3374622915956655&id=473302939422015

BMP	Post Message	Posted	Lifetime Post Total Reach	Permalink
7	A beautiful walk yesterday planning for today's kids Trail Exploration with Exeter Parks and Recreation. This program runs on Thursday's until November 7th.	10/8/20 6:54 AM	205	https://www.facebook.com/permalink.php?story_fbid=3374565115962435&id=473302939422015
5	Be #SepticSmart! Regularly inspecting these systems can prevent problems from escalating into bigger expenses. Learn more about the public health, environmental, and economic benefits of a well-maintained septic system at https://www.epa.gov/septic	9/18/20 7:31 AM	146	https://www.facebook.com/permalink.php?story_fbid=3301957866556494&id=473302939422015
5	Here are 10 easy ways to be #SepticSmart!	9/17/20 7:23 AM	125	https://www.facebook.com/permalink.php?story_fbid=3301931429892471&id=473302939422015
5	As part of Septic Smart Week here are some tips for how to avoid creating costly problems for your septic system.	9/16/20 7:21 AM	114	https://www.facebook.com/permalink.php?story_fbid=3301926126559668&id=473302939422015
5	It's #SepticSmart week! When was the last time you had your septic system inspected?	9/15/20 6:57 AM	103	https://www.facebook.com/permalink.php?story_fbid=3301917183227229&id=473302939422015
2	Do you support pollinators in your yard? Share your enthusiasm by adding a sign and help grow this trend. Don't forget to send us your info and we will put you on our pollinator pathways map.	8/16/20 8:00 AM	177	https://www.facebook.com/permalink.php?story_fbid=3210747229010892&id=473302939422015
2	Will you be at the pollinator garden tour in Kingston tonight?	8/12/20 6:35 AM	81	https://www.facebook.com/permalink.php?story_fbid=3198868920198723&id=473302939422015
2	Just 2 days away! Register to tour the Kingston library pollinator garden.	8/10/20 8:05 AM	67	https://www.facebook.com/permalink.php?story_fbid=3144892385596377&id=473302939422015
2	Draw design inspiration from the Kingston library pollinator garden. This is a limited capacity event to register soon!	8/5/20 8:04 AM	119	https://www.facebook.com/permalink.php?story_fbid=3144889802263302&id=473302939422015
2	Are you interested in supporting pollinators but aren't quite sure what to plant? UNH Cooperative Extension has a wonderful resource designed to show how to plant season-long color! Click the link below for more information! https://extension.unh.edu/resources/files/Resource005973_Rep8387.pdf	7/30/20 8:27 AM	557	https://www.facebook.com/permalink.php?story_fbid=3162260023859613&id=473302939422015
11	We've already had some residents from Exeter participating in the Great New England Clean Up! So far I think we are #2 on the leaderboard! There is still time to add more! Download litterati and log your trash clean up activities! Visit NatureGroupie for tips and tricks!	4/19/21 11:01 AM	156	https://www.facebook.com/permalink.php?story_fbid=3895943303824611&id=473302939422015
11	Spring spruce up!!! While you pick up litter, help us learn more about litter hot spots by logging your trash with the app Litterati as part of the #greatnecleanup.	4/14/21 11:33 AM	111	https://www.facebook.com/permalink.php?story_fbid=3881974385221503&id=473302939422015
2	There are just a few days left to place your orders! Orders must be complete by midnight April 11th which is this coming Monday. 🌱🌻🌸	4/9/21 7:00 AM	96	https://www.facebook.com/permalink.php?story_fbid=3866748053410803&id=473302939422015
2	A fantastic underwater look at the critters that rely on vernal pools for breeding. We have heard wood frogs "quacking" in a few spots in town. How about you?	3/31/21 11:07 AM	208	https://www.facebook.com/permalink.php?story_fbid=3835923963159879&id=473302939422015
2	Want to get to know our pollinators? Pollinator Pathways NH has just the workshop for you!	3/29/21 12:21 PM	128	https://www.facebook.com/permalink.php?story_fbid=3830714687014140&id=473302939422015

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2	We've mentioned how important perennial plants in your garden are to native bees but how do you manage your perennials best for their benefit? This is an excellent graphic from Xerces Society. Click for full graphic: https://www.pollinatorsnativeplants.com/uploads/1/3/9/1/13913231/stemnestingbeesweb.pdf?fbclid=IwAR0pRiJ9aiDQ6sdD-ldGUSdaY0_42EWvmV6CtmA-qgiNIOU-lx2pIHnkZY	3/26/21 7:08 AM	1652	https://www.facebook.com/permalink.php?story_fbid=3821542291264713&id=473302939422015
2	Did you know that 1/4 inch of rain on the average roof can fill as many as 3 rain barrels? Less than 30 days left to order yours.	3/19/21 7:31 AM	175	https://www.facebook.com/permalink.php?story_fbid=3803114826440793&id=473302939422015
2	Some great native plant recommendations from Wellington Gardens.	3/11/21 5:53 AM	114	https://www.facebook.com/permalink.php?story_fbid=3781232021962407&id=473302939422015
2	This is a great presentation about why choosing native plants for our yards has potential to have a huge ecological impact. To find native plants based on how important they are to the local food web you can visit National Fish and Wildlife Federation's Native Plant Finder #PollinatorPathwaysNH, #nativeplants https://youtu.be/bDUJQB3GVT4	3/9/21 9:57 AM	204	https://www.facebook.com/permalink.php?story_fbid=3776731105745832&id=473302939422015
2	Need another good reason why we play an important role for pollinators? Check out this article in Seacoastonline about the role of urban and suburban areas in providing food for pollinators: "This study measured how much nectar is produced in urban and suburban areas and found that individual home gardens produced much more nectar (85% of the nectar produced in towns and cities) than parks and larger public plantings. Another interesting finding was that the nectar supply from these residential gardens was more diverse than nectar from farmland and nature reserves. The more diverse the nectar supply, the greater diversity of pollinating insects that can be supported." #PollinatorPathwaysNH	3/6/21 7:05 AM	200	https://www.facebook.com/permalink.php?story_fbid=3766433593442250&id=473302939422015
2	March 19th and 20th is the NH Master Gardener's Spring Symposium. Join them virtually to learn about creating healthy soils, how to use your yard to enhance the natural ecosystem, meet some spring plants in NH and more!	3/5/21 9:06 AM	84	https://www.facebook.com/permalink.php?story_fbid=3764239573661652&id=473302939422015
2	Announcing our 2021 Rain Barrel Program! Collecting rainwater helps reduce storm water runoff and offers you a free source of water for your gardens. To order, visit https://www.greatamericanrainbarrel.com/community/ Choose the Exeter NH Community Program. Be sure to note Covid-related pick up details. #ms4community, #PollinatorPathwaysNH, Exeter, NH Public Works, Exeter TV, Town of Exeter, NH, Exeter Energy Committee, NH, Exeter Sustainability Advisory News	3/5/21 8:31 AM	835	https://www.facebook.com/permalink.php?story_fbid=3766654006753542&id=473302939422015
6	In the winter, its wonderful to see birds darting in and out, eating the seeds that still remain in our natural areas. Bring that enjoyment home this year by skipping the fall clean up in your yard. Not only does it divert organic waste from our landfills, it also retains important food sources for birds and the leaf litter and stems provide winter homes for many pollinators including native bees. #PollinatorPathwaysNH, #MS4Community	3/4/21 8:17 AM	235	https://www.facebook.com/permalink.php?story_fbid=3764177193667890&id=473302939422015
7	On Wednesday the Town's Natural Resource Planner Kristen Murphy led a snowshoe hike to the Little River Conservation Area. The group enjoyed winter views of the Little River and lots of wildlife sign. If you want to explore this hidden gem, the easiest access point is via Garrison Lane off Brentwood Rd. A trail map and more information is available at trailfinder.info	2/25/21 5:05 PM	213	https://www.facebook.com/permalink.php?story_fbid=3744228448996098&id=473302939422015
7	Some photos from yesterday's youth hike.	2/18/21 12:33 PM	194	https://www.facebook.com/permalink.php?story_fbid=3722244057861204&id=473302939422015
7	The youth hike group had a great time at Raynes Farm yesterday. To the delight of all, the kids spotted a bobcat exploring the frozen marsh! There are still a few spots for our family hike next Wednesday. The fresh snowfall expected this weekend may afford some great wildlife tracking opportunities! Contact Exeter Parks and Recreation to register before space fills up!	2/18/21 9:23 AM	258	https://www.facebook.com/permalink.php?story_fbid=3721900481228895&id=473302939422015

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2	Great tips!	2/16/21 9:34 AM	198	https://www.facebook.com/permalink.php?story_fbid=3717138495038427&id=473302939422015
2	Join Vicki Brown for this fund presentation about small changes you can make to improve the quality of habitat for wildlife in your yard...large or small, Vicki has great tips!	2/15/21 5:06 AM	147	https://www.facebook.com/permalink.php?story_fbid=3714343235317953&id=473302939422015
2	Tune in and learn from the comfort of your home...dreaming dreams of gardens.	2/4/21 4:33 PM	120	https://www.facebook.com/permalink.php?story_fbid=3688344857917791&id=473302939422015
2	The New Year is a great time to sow native seeds. The Wild Seed Project shares these tutorials. The comment section also has a great idea of using 1/2 gallon milk containers as your pot. Pollinator Pathways NH	1/2/21 6:49 AM	143	https://www.facebook.com/permalink.php?story_fbid=3602632806488997&id=473302939422015
2	The nursery catalog is out! Get yours and add native plants to your landscaping.	12/18/20 3:25 PM	212	https://www.facebook.com/permalink.php?story_fbid=3565759733509638&id=473302939422015
2	Love this idea Rockingham County Conservation District!	12/10/20 7:24 AM	107	https://www.facebook.com/permalink.php?story_fbid=3544527652299513&id=473302939422015
6	Don't be like this conservation land abutter. Not only is this a poor practice, it's also considered illegal. We counted 3 Christmas trees in this wetland alone. Make a plan to properly dispose of or recycle your Christmas tree and #thinkblueexeter. Remember clean water starts with you!	12/8/20 9:27 AM	320	https://www.facebook.com/permalink.php?story_fbid=3539710002781278&id=473302939422015
2	Next Wednesday our friends at Pollinator Pathways NH are hosting a wildflower/bird/butterfly walk in Brentwood lead by Evy Nathan. Don't miss it!	6/25/21 9:37 AM	85	https://www.facebook.com/permalink.php?story_fbid=4087264414692498&id=473302939422015
2	It's pollinator week! Are you spending time in your yard or garden? Join this community science effort to help map bumble bees. There are only 3 records for our entire state. Let's help put Exeter on the map! Visit https://www.bumblebeewatch.org/	6/23/21 9:51 AM	108	https://www.facebook.com/permalink.php?story_fbid=4081702545248685&id=473302939422015
2	Free native plant seeds. You do not need to be a Kingston resident.	6/22/21 6:31 PM	71	https://www.facebook.com/permalink.php?story_fbid=4079862545432685&id=473302939422015
2	It's easy to support pollinators.	6/12/21 11:30 AM	162	https://www.facebook.com/permalink.php?story_fbid=4053102494775357&id=473302939422015
2	Pollinator week is coming up. Check out this free virtual event to learn about their important roles and how you can help!	6/4/21 1:16 PM	72	https://www.facebook.com/permalink.php?story_fbid=4031164953635778&id=473302939422015
2	Well we missed World Bee Day by a few hours but word has it that our Milkweed Seed Ball Grab and Go pollinator kits flew off the shelves at the Library. We can't wait to see mini-milkweed gardens popping up all around town! Thank you to former CC member Ginny Raub for such a popular idea! Happy (belated) World Bee Day!	5/21/21 9:14 AM	158	https://www.facebook.com/permalink.php?story_fbid=3989681981117409&id=473302939422015
2	The Exeter Conservation Commission in support of Pollinator Pathways NH is offering a free "Grab and Go" milkweed seed ball kit at the Exeter Public Library NH. Pick up yours today and help monarch by creating your own backyard habitat. No library card is needed. Below Emma and Reilly are picking out theirs.	5/12/21 4:55 AM	3168	https://www.facebook.com/permalink.php?story_fbid=3961325207286420&id=473302939422015

BMP	Post Message	Posted	Lifetime Post Total Reach	Permalink
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BMP	Description	Posts	
1	Pet Waste	390	
2	Fertilizer, Healthy Lawn/Clean Water	12,317	
4	Green SnowPro	137	
5	Septic Systems	1,400	
6	Leaf/Yard Waste	3,657	
7	Conservation Commission guests and events	2,878	
11	Cleanups - shoreline/waterbody	1,331	
15	IDDE	1,198	
	Total	23,308	

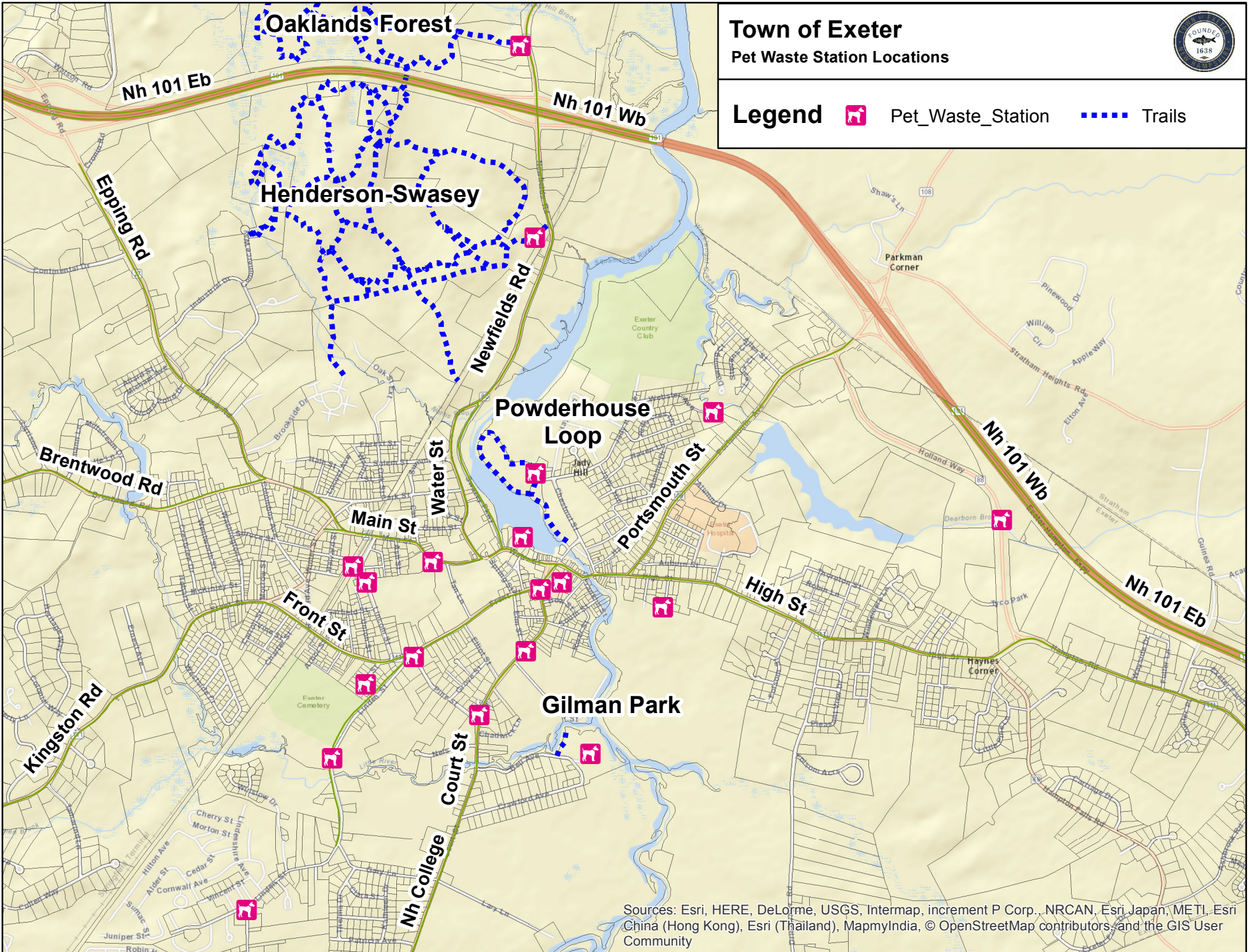
Attachment 6
Pet Waste Station Location Map

Town of Exeter

Pet Waste Station Locations



Legend Pet_Waste_Station Trails



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Attachment 7
2021 Adaptive Management Proposal

ADAPTIVE MANAGEMENT FRAMEWORK PROPOSAL

Town of Exeter, New Hampshire

INTRODUCTION

The United States Environmental Protection Agency (USEPA) Region 1 issued a Great Bay Total Nitrogen General Permit for Wastewater Facilities in New Hampshire (National Pollutant Discharge Elimination System [NPDES] General Permit: NHG58A000) for 13 eligible wastewater treatment facilities (WWTFs). The General Permit was issued on November 24, 2020 and became effective beginning on February 1, 2021.

The General Permit establishes total nitrogen effluent limitations, monitoring requirements, reporting requirements, and standard conditions. The discharge of all pollutants other than nitrogen from these WWTFs is authorized by each WWTF's respective individual NPDES permit. USEPA developed the General Permit, as part of an Adaptive Management Framework (AMF), to comprehensively regulate nitrogen loads from the 13 WWTFs on a watershed-wide scale. The General Permit also incorporates an innovative and adaptive approach to achieve reductions in total nitrogen loads to the Great Bay estuary through a combination of mandatory load limits at the WWTFs and voluntary nonpoint source nitrogen reductions.

The General Permit is only one aspect of the AMF; other elements include ambient monitoring, pollution tracking, reduction planning, and review. Implementing an adaptive management approach would include collaboration among USEPA, the State of New Hampshire, and public and private stakeholders. This needed collaboration entails participating in the following:

- Monitoring ambient water quality in the Great Bay
- Tracking loads of total nitrogen
- Planning for overall source reductions
- Evaluating a load-based threshold, 0.32 milligrams per liter (mg/L) instream total nitrogen criterion, or other threshold for demonstrating attainment of water quality standards
- Establishing a timeline for completing a total nitrogen total maximum daily load (TMDL) for the Great Bay

This detailed proposal demonstrates the Town of Exeter's (the Town) election to opt into the voluntary AMF option.

BACKGROUND

The Town understands the value of the Great Bay Estuary as a resource for New Hampshire seacoast communities. The Town has been working diligently to improve water quality to the receiving waters and ultimately to the Great Bay. The Town is committed to continuing these efforts and is looking for additional opportunities to further improve water quality from point and nonpoint sources. As summarized in this section, the Town is very familiar with nitrogen control plans (NCPs), tracking and accounting, and monitoring water quality, which are all parts of the voluntary AMF. As part of the development of an NCP in 2018, the Town included an AMF that the Town has been working under since the development of the plan. The Town hopes to build upon the efforts completed to date and to gain a better understanding on how these efforts have and will continue to affect water quality.

Since 2003, the Town has been regulated under the NPDES municipal separate storm sewer system (MS4) permit. The MS4 permit regulates stormwater point source discharges in the urbanized area of the town (as defined by the US Census). The Town has submitted Annual Reports¹ under the 2003 permit from 2004 through 2018. In 2017, a new MS4 permit was issued to replace the 2003 permit, with an effective date of July 1, 2018. The Town has been complying with this permit and submitting Annual Reports² to USEPA since 2019.

Under the MS4 program, the Town conducts public education and outreach, illicit discharge detection and elimination, and construction site plan review and inspections. The Town also regulates post-construction stormwater management on private development and conducts catch basin cleaning, street sweeping, and collects yard debris, organic waste, and leaf litter. As part of the Town's catch-basin cleaning program, the Town hires a subcontractor to clean catch basins annually. The goal of the catch basin cleaning program is to ensure that sumps are no greater than 50% full. Under the street sweeping program, the Town sweeps all curbed streets at least twice per year. The Town provides enhanced street sweeping on a weekly basis in the downtown area (approximately 4.4 miles). The Town also provides enhanced sweeping of public parking lots and parking lots at municipal buildings monthly. These parking lots include the municipal parking lots on Bow Street, 36 Water Street, Center Street, Front and Railroad Square, and 58 Lincoln Street. Parking lots are swept at municipal facilities, including the surface water treatment plant, public library, parks and recreation complex, waterfront park, town offices, senior citizens center, Department of Public Works, safety complex, Swasey pavilion, and the parks and recreation shed.

In 2012, the Town was issued a NPDES Wastewater Discharge permit³ to establish minimum effluent discharge requirements at the WWTF. The NPDES permit required a seasonal rolling average effluent total nitrogen of 3.0 mg/L. In June 2013, USEPA issued an Administrative Order on Consent (AOC),⁴ which provides the Town with an interim seasonal rolling average effluent total nitrogen limit of 8.0 mg/L and provides a compliance schedule to achieve numerous specific tasks, as summarized below:

- *"...the Town shall begin tracking all activities [that the Town should reasonably be aware of, e.g., activities that involve a Town review/approval process or otherwise require a notification to the Town] within the Town that affect the total nitrogen load to Great Bay Estuary. This includes, but is not limited to, new/modified septic systems, decentralized wastewater treatment facilities, changes to the amount of effective impervious cover, changes to the amount of disconnected impervious cover [including pavement and buildings], conversion of existing landscape to lawn/turf and any new or modified Best Management Practices." (Article D.1)*
- *"...the Town shall begin coordination with the NHDES, other Great Bay communities, and watershed organizations in NHDES's efforts to develop and utilize a comprehensive subwatershed-based tracking/accounting system for quantifying the total nitrogen loading changes associated with all activities within the Town that affect the total nitrogen load to the Great Bay Estuary." (Article D.2)*

¹ [2003 MS4 Permit Annual Reports](#)

² [2017 MS4 Permit Annual Reports](#)

³ [2012 Final NPDES Permit](#)

⁴ [2013 Administrative Order on Consent](#)

- *“...the Town shall begin coordination with the NHDES to develop a subwatershed community-based total nitrogen allocation.” (Article D.3)*
- *Nitrogen Control Plan: “By September 30, 2018, submit to USEPA and the NHDES a total nitrogen non-point source and point source stormwater control plan (“Nitrogen Control Plan”), including a schedule of at least five years for implementing specific control measures as allowed by state law to address identified non-point source and stormwater Nitrogen loadings in the Town of Exeter that contribute total nitrogen to the Great Bay Estuary, including the Squamscott River. If any category of de-minimis non-point source loadings identified in the tracking and accounting program are not included in the Nitrogen Control Plan, the Town shall include an explanation of any such exclusions. The Nitrogen Control Plan shall be implemented in accordance with the schedules contained therein.” (Article D.4)*
- *Engineering Evaluation: “By September 30, 2024, the Town shall submit an engineering evaluation that includes recommendations for the implementation of any additional measures necessary to achieve compliance with the NPDES Permit, or a justification for leaving the interim discharge limit set in place (or lower the interim limit to a level below 8.0 mg/l but still above 3.0 mg/l) beyond that date. Such justification shall analyze whether:*
 - a) Total nitrogen concentration in the Squamscott River and downstream waters are trending towards nitrogen targets (Footnote 3: The Town shall account for precipitation in the trend analysis and baseline measurement.).*
 - b) Significant improvements in dissolved oxygen, chlorophyll a, and macroalgae levels have been documented; and*
 - c) Non-point source and stormwater point source reduction achieved are trending towards allocation targets and appropriate mechanisms are in place to ensure continued progress.” (Article E.2)*

In 2013, the Town began developing a Wastewater Facilities Plan to identify the most cost-effective on-site solution for the Town to meet their permit obligations and design an upgrade to its 3.0-million-gallon-per-day WWTF, which discharged approximately 300 pounds (lb) of total nitrogen per day into the Squamscott River. The upgrade focused on improved treatment performance and nitrogen reduction to meet the interim seasonal rolling average effluent total nitrogen limit of 8.0 mg/L, with the potential to achieve an effluent total nitrogen limit between 3.5 and 5 mg/L with the use of supplemental carbon.

Since 2013, in accordance with the AOC, the Town has prepared Total Nitrogen Reports⁵ that summarize how activities affect the total nitrogen load to the Great Bay Estuary. The Town began tracking in 2014, as required by the AOC. Initially, the Town developed its own tracking and accounting system, which was used for the 2014 to 2018 Annual Report submittals. But, since 2018, the Town has been coordinating with the New Hampshire Department of Environmental Services (NHDES) and other municipalities to track and account for total nitrogen using the Pollutant Tracking and Accounting Program (PTAP). PTAP started in 2015 and was developed by NHDES and University of New Hampshire (UNH), with significant input from USEPA, the Town, and other Great Bay municipalities. Per the PTAP

⁵ [Total Nitrogen Reports](#)

website, PTAP “will result in the creation of guidelines and recommendations for tracking and accounting systems and identify potential tools that will enable municipalities to perform a quantitative assessment of pollutant load reductions associated with nonpoint source management activities in the Great Bay region.” (<https://www.unh.edu/unhsc/ptapp>). The Town began using the PTAP system in February 2018, once it was completed by NHDES/UNH.

From 2013 to 2015, the Town participated in an integrated planning effort with the Towns of Stratham and Newfields. As part of this integrated planning effort, the *Water Integrated for the Squamscott Exeter (WISE) Preliminary Integrated Plan*⁶ was developed to establish a more cost-effective and sustainable means to meet future permitting compliance needs and improve water quality in the watersheds of the Squamscott and Exeter Rivers, and ultimately the Great Bay. This proposed approach, which is consistent with the *USEPA Integrated Municipal Stormwater and Wastewater Planning Approach Framework*,⁷ provided implementation strategies that balanced upgrades to the WWTF with nonpoint and point source stormwater control measures in an effort to reduce existing and future nitrogen loads to the watersheds of the Squamscott and Exeter Rivers and achieve other water quality objectives.

In 2015, the Town began the preliminary design phase for the WWTF and Main Pump Station. In January 2016, the final design phase began.

In 2018, the Town prepared an NCP⁸ to comply with its AOC. The NCP established the land uses and sources of total nitrogen from nonpoint sources from the town. These land uses and sources are summarized in **Table 1** below. The Town developed these specific load-based estimates for the town, to allow the Town to track and account for changes in land use and application of best management practices. Understanding the developed land uses and sources of total nitrogen to the Great Bay helps the Town target what management practices and strategies would be most appropriate at improving water quality. The NCP outlined a series of point source and nonpoint source strategies that the Town would implement to improve water quality. The Town envisions that this AMF proposal will build upon the NCP and strategies to improve water quality.

Table 1. Total Nitrogen Delivered Load by Land Use/Source (Wright-Pierce & Horsley Witten, 2018)

Land Use/Source	Delivered TN Load from Pervious Surfaces (lb/yr)	Delivered TN Load from Impervious Surfaces (lb/yr)	Total Delivered TN Load (lb/yr)
Developed Land Uses/Sources			
Agriculture	822	0	822
Commercial, Services, and Institutional	797	1,569	2,367
Industrial	73	244	318
Industrial and Commercial Complexes	152	274	426
Mixed Development Uses	0	2	2
Outdoor	704	30	734
Residential	4,836	354	5,190

⁶ [2015 WISE Preliminary Integrated Plan](#)

⁷ June 2012, USEPA Memo: Integrated Municipal Stormwater and Wastewater Planning Approach Framework

⁸ [2018 Nitrogen Control Plan](#)

Land Use/Source	Delivered TN Load from Pervious Surfaces (lb/yr)	Delivered TN Load from Impervious Surfaces (lb/yr)	Total Delivered TN Load (lb/yr)
Transportation, Communications, and Utilities	1,043	1,422	2,464
Septic	-	-	8,898
Groundwater (Non-septic)	-	-	15,559
SUBTOTAL			36,780
Undeveloped Land Uses/Sources			
Barren	138	20	158
Forest	2,524	0	2,524
Transitional	151	1	152
Water	0	0	0
Wetland	873	0	873
SUBTOTAL			3,707
TOTAL (lb/yr)			40,487
TOTAL (tons/yr)			20.2

lb/yr: pounds per year

TN: total nitrogen

In June 2019, the Town completed construction of the WWTF upgrade, Main Pump Station, and dual force mains for a total project cost of approximately \$54 million. The WWTF upgrade included a four-stage Bardenpho process with a supplemental carbon storage and feed system. Through operation and optimization at the WWTF, the Town has been able to achieve average effluent nitrogen concentration less than 5 mg/L (approximately 66 lb of total nitrogen per day) through the permitted growing season. This improvement in effluent total nitrogen represents a significant reduction (~ 80%) in total nitrogen loading to the Great Bay, accounting for reducing the load reduction of total nitrogen to Great Bay by approximately 240 lb per day, which equates to an approximately 87,000 lb per year.

The Town remains authorized to discharge under an expired 2012 Individual Permit, which has been administratively continued, at the WWTF. The Town will remain covered under this permit until USEPA issues an individual permit for the other water quality parameters not covered under the General Permit. At such time, the Town will receive an authorization to discharge under the General Permit.

Even though the Town is not covered under the General Permit, they have elected to join the Municipal Alliance for Adaptive Management (MAAM) and participate on the Executive Board as an at-large member. In an effort to better understand and accomplish water quality monitoring and improvement in the Great Bay watershed, MAAM was formed in the winter and spring of 2021 in order to facilitate and enhance community collaboration, stakeholder input, resource sharing, expertise, and efficient use of investment.

The Town is preparing this voluntary AMF to show their commitment to reducing total nitrogen and to ensure that when they are authorized to discharge, they will continue to make improvements in water quality.

Asset Management Program

In 2015, the Town worked with stakeholders to develop a Climate Adaptation Plan for Exeter (CAPE).⁹ The CAPE project modeled potential future flooding impacts for various storm events (25-, and 100-year storms) with and without storm surge along the town's freshwater and tidal rivers. As part of the project, the storm drain network was modeled using the best available data and each major outfall drainage area was delineated. The results demonstrated the potential impacts of those storm events on road flooding and storm drain network performance, as well as the economic impact on infrastructure and loss of wetland and salt marsh habitat.

Since the development of this model, the Town has hired an independent consultant to evaluate the 10-year storm event to identify areas of town where infrastructure is undersized. The Town has also used the model to assess areas where infrastructure improvements are being proposed to determine if excess capacity is needed in the storm drain system to accommodate current and future storm events. The Town also updates their storm drain network to fill in data gaps as they evaluate and upgrade areas of the town.

In December 2020, the Town completed a Wastewater and Stormwater Asset Management Program,¹⁰ which was funded by a \$60,000 Clean Water State Revolving Fund loan. As part of this project, the Town updated and expanded the storm drain network inventory files, created an ArcGIS-based system that allows the Town to integrate various sources of data to allow more efficient planning and analysis, and developed an asset-replacement schedule to serve as a template for capital improvement planning.

Inflow and Infiltration Efforts

Reducing inflow and infiltration (I/I) reduces the amount of total nitrogen load from the WWTF to the Squamscott River and reduces the dilution of the waste, which makes it easier to denitrify. In 2013, the Town completed a *Phase III Inflow and Infiltration Evaluation* (Phase III report) that identified a \$26 million allowance needed to address I/I peak flows and sewer deficiencies. This plan also served at the Town's Combined Sewer Overflow (CSO) Long-Term Control Plan (LTCP). The Phase III report built on previous I/I work (Phase I and II) and focused on investigating the sanitary sewer system to reduce flow/CSO volume. The plan recommends that the Town periodically reassess and update the program performance and reassess prior to upgrading the WWTF.

One recommendation in the Phase III plan included investigation work in the Jady Hill area of town. It was the first project recommended by the LTCP to remove extraneous I/I from the sewer collection system. Flow monitoring prior to the project estimated that annual I/I volume of 43 million gallons. To reduce public and private I/I source, the Town replaced 7,600 linear feet of sewer mains, 2,700 linear feet of sewer services within the right-of-way (ROW), and 3,200 linear feet of private sewer services outside the ROW. The costs to the sewer fund equated to \$3.4 million. Based on post-construction flow monitoring, annual I/I was reduced by 79% resulting in the removal of 34 million gallons yearly. The Jady Hill project finished construction in August 2013.

In 2017, the Town created a LTCP update to simplify, condense, and update the CSO LTCP portion of the Phase III plan. The plan was updated to reflect work the Town had completed to reduce flow/CSO

⁹ [2015 CAPE](#)

¹⁰ [2020 Wastewater and Stormwater Asset Management Program](#)

volume, including WWTF planning, Jady Hill, improved sewer/CSO flow metering, and removal of inflow connections.

A few of the I/I projects that the Town is currently working on are summarized below.

Salem Street Area Utility Improvement Project

In 2010, the Town established a water and sewer main rehabilitation program as part of its annual Capital Improvement Program (CIP). One example of a project completed through this program includes the water main improvements for Washington Street, which were approved in 2016 and construction completed in 2018. The water and sewer mains in the Salem Street area neighborhood are some of the oldest in town. The mains on Forest, Hale, Locust, Oak, Park (partial), Salem, Wadleigh, Walnut, and Warren Streets require significant improvements. Some of the water mains in this neighborhood were identified as being undersized and in poor condition in the 2015 Water Asset Management Plan prepared for the Town by an independent consultant. In 2014 the drain lines were televised and found to be in good condition but many of the catch basins in poor condition and needing to be replaced. The sewers in the neighborhood are old clay pipes with joint separations and tree root intrusions, subject to occasional blockages that require jetting and cleaning by Town forces.

This project has been in the planning stage for several years and is listed in the Town's current 2020-2025 CIP. The project will replace approximately 5,600 feet of water mains, upgrading them from 4" and 6" to 6" and 8" mains, based on the hydraulic analysis. Approximately 2,825 feet of sewers will be replaced with PVC pipe sized to meet projected sewer flows in the area. Catch basins will be replaced, as needed, based on prior inspections and additional investigations completed in the spring of 2020. The design will be completed in fiscal year 2020 with construction planned in fiscal year 2021.

Westside Drive Area Utility Improvement Project

The Westside Drive neighborhood was identified in the CSO LTCP as a high contributor of I/I. The Town is in the conceptual design phase to develop a plan for municipal infrastructure improvements within the Westside Drive neighborhood. This work is part of the Town's ongoing work to provide reliable utility services to residents.

Manhole and Pipe Rehabilitation

The Town allocates funding for manhole and pipe rehabilitation to replace infrastructure with hydraulic issues. Since 2017, the Town has relined approximately 4,300 linear feet of pipe and 7 manholes.

Septage Receiving

As part of the 2015 Wastewater Treatment Facilities Plan, the Town explored acceptance of septage flows. Septage is highly concentrated sludge from septic tanks or boat pump-outs. It was estimated that the non-sewered buildings in town generate approximately 650,000 gallons per year of septage, which was being disposed of at the Hampton WWTF. The Wastewater Treatment Facilities Plan identified septage as a possible revenue source for the Town.

Currently, the Town accepts approximately 250,000 gallons of septage per month from the town, Stratham, Newfields, Brentwood, East Kingston, and Kensington. The septage is used as a carbon source to improve denitrification at the WWTF. Prior to receiving septage from these communities, the septage went to Epping or Hampton.

Sump Pump Redirection Program

The Town developed and implemented a Sump Pump Redirection Program targeted at educating residents about the need to disconnect sump pumps discharging to the sewer system and direct them to vegetated areas on their properties. Residents had five years from the start of the program to redirect sump pumps away from the sewer system network.

Monitoring Efforts

Instream monitoring is an important element in the AMF. The following discusses three programs that can be integrated into the AMF program.

WISE Water Quality Monitoring Program

In 2015, The Town collaborated with the WISE project team, UNH and Piscataqua Regional Estuaries partnership (PREP) regarding scoping, budgeting, and implementing a Great Bay water quality monitoring program. Sampling data, including total nitrogen, was collected at 15 locations (8 watershed and 7 estuarine locations) in the Great Bay watershed.

Exeter River Watershed Association Volunteer River Assessment Program (VRAP)

The Town Planning Department staff regularly participate in VRAP. Bimonthly sampling is conducted at 9 locations throughout town. Further, in the past the Town has purchased equipment to assist VRAP in their efforts.

Piscataqua Regional Estuaries Partnership (PREP)

Since 2016, the Town has provided funding (approximately \$87,000) to PREP, which is part of USEPA's National Estuary Program. The National Estuary Program is a joint local/state/federal program established under the Clean Water Act with the goal of protecting and enhancing nationally significant estuarine resources. PREP receives funding from USEPA and is hosted and administered by the School of Marine Science and Ocean Engineering at the UNH.

The Town Public Works Director is an active member and co-chair of the Piscataqua Region Monitoring Collaborative. The purpose of this group is to discuss existing environmental monitoring programs in the Great Bay and Hampton-Seabrook estuaries and watersheds, sharing upcoming opportunities and challenges. The Town Public Works Director is also an active member on PREP's Management Committee. The Management Committee is PREP's principle governing body with the primary function of developing and implementing the Comprehensive Conservation and Management Plan.

The Town has been active and participated in discussions with the other seacoast communities about watershed scale efforts, including nonpoint source pollution tracking and this AMF proposal. The Town will continue to collaborate with the other seacoast communities to ensure that planning and implementation efforts are based on science, forward thinking, and what's best for the Great Bay.

Seacoast Stormwater Coalition

The Assistant Town Engineer is an active participant in the Seacoast Stormwater Coalition. The Coalition is made up of regulated communities under the Phase II MS4 Permit. Communities use this platform to collaborate and share resources to effectively work together to comply with the MS4 Permit.

Stormwater Regulations

The Town has Site Plan and Subdivision Regulations¹¹ that were revised in 2018 to include updates to the post-construction stormwater management requirements to be consistent with the State, MS4 Permit, and AOC requirements. Under these regulations, applicants for both new and redevelopment projects are required to provide treatment of runoff from impervious surfaces to achieve at least 80% removal of total suspended solids and at least 60% removal of both total nitrogen and total phosphorus.

These regulations ensure that as private development moves forward in the town, water quality improvements are being made to existing impervious cover through the redevelopment process and new development projects are providing water quality treatment for changes in land cover.

Fertilizer Efforts

In 2018, the Town formed the Healthy Lawns – Clean Water Initiative.¹² The initiative is supported by members from the Planning Board, Water/Sewer Committee, Conservation Commission, and the public. The initiative was formed to educate the public of ways they can reduce nitrogen pollution in our water ways by managing for healthy lawns with less impact to our water quality. The committee also worked to develop zoning ordinance amendment that limit fertilizer use in the shoreland protection district and aquifer protection district. These amendments were supported by the voters of the town and adopted in 2019.

The Town created “Water Quality Friendly Lawn Care” magnets, which were handed out at the Town Clerk’s office window. Approximately 70 were handed out to residents.

Further, New Hampshire State Statute (RSA: 431) as modified in 2013 states that no turf (lawn) fertilizer sold at retail shall exceed 0.9 lb per 1,000 square feet of total nitrogen per application when applied according to the instructions on the label. Furthermore, no turf fertilizers sold at retail shall exceed 0.7 lb per 1,000 square feet of soluble nitrogen per application when applied according to the label. This new law applies to synthetic (manufactured) fertilizers, natural inorganic fertilizers (from a mineral nutrient source), and natural organic fertilizers (derived from either plant or animal products). The guaranteed analysis of a lawn fertilizer is listed on the product label. Nitrogen sources and their solubility are listed individually.¹³

Under the New Hampshire Shoreland Protection Act, fertilizer cannot legally be applied to vegetation or soils located within 25 feet of the reference line of any public waters. Adjacent to any public water beyond 25 feet, slow or controlled release fertilizer may be used, but must be applied by horticultural

¹¹ [2021 Site Plan and Subdivision Regulations](#)

¹² [Exeter’s-healthy-lawns-clean-water-initiative](#)

¹³ [unh-nh-turf-law-fact-sheet.pdf](#)

professionals who have a pesticide application license issued by the New Hampshire Department of Agriculture.¹⁴

Slow or controlled release fertilizer means fertilizer that is guaranteed, as indicated on the package label, to contain the following:

- At most 2% phosphorous
- A nitrogen component which contains at least 50% slow release nitrogen

Structural Stormwater Best Management Practices

In 2017, the Town conducted a study in the Lincoln Street subwatershed¹⁵ (Phase I), the largest storm drainage network in the Town, to identify locations for installing stormwater best management practices (BMPs) to provide water quality treatment from existing impervious cover. In 2018, the Town completed Phase II¹⁶ in the Lincoln Street subwatershed. The studies identified a suite of 18 BMPs at 8 locations with a potential to remove 900 lb per year of total nitrogen by treating 125 acres.

Since the development of the Lincoln Street subwatershed studies, the Town has been conducting additional investigation and design work to take the conceptual designs to final design and construction. After additional investigations, not all conceptual BMPs identified in the Lincoln Street subwatershed studies were found to be viable options due to on-site constraints. The Town is currently preparing a 319 Grant to design and construct a structural stormwater BMP to treat stormwater from portions of Winter and Front Streets.

In 2018, during the reconstruction of Lincoln Street, the Town installed 3 media filters and 144 linear feet of perforated pipe between catch basins to promote infiltration. These practices provide water quality treatment of existing impervious cover along Lincoln Street.

Further, the Town continues to use the model developed as part of the CAPE project to inform locations where further investigations should be conducted. These areas reflect locations where infrastructure may be undersized for conveying current and future storm events.

Septic Systems

Periodically, the Town sends an annual letter to its residents reminding them about proper maintenance of septic systems. Included with that annual letter is a flyer from NHDES on septic system maintenance.

The Town also sets up an annual informative display about the Septic Smart program in town offices and at the library. The display includes flyers and septic maintenance information for residents.

Pet Waste Station Program

The Town operates a Pet Waste Station Program (bags and disposal containers). The Town supplies pet waste bags and maintains the disposal containers at 19 locations throughout Town. The Town maintains a map of these locations¹⁷

¹⁴ [Protected Shoreland FAQ | NH Department of Environmental Services](#)

¹⁵ [2017 Lincoln Street Subwatershed Plan Phase I](#)

¹⁶ [2018 Lincoln Street Subwatershed Plan Phase II](#)

¹⁷ [Think Blue Pet Waste](#)

PROPOSAL

This AMF Proposal describes the steps, activities, and measures that the Town will take to improve water quality from nonpoint sources into Great Bay from the town during this General Permit term. As outlined in the General Permit, this AMF Proposal is broken up into five areas (A through E):

- A. Ambient Water Quality Monitoring
- B. Track Reductions and Additions of Total Nitrogen
- C. Overall Source Reduction
- D. Load Based Threshold
- E. Completion of a total nitrogen TMDL

The Town's proposed approach for each of these categories is outlined in the sections below. This proposal will be a living document that will be reviewed, updated, and modified (as needed) annually to reflect the current understanding of the Great Bay and the progress made by the Town and other relevant parties. The updates and modifications will be informed based upon the outcomes from implementing the efforts outlined in this proposal and collaborating with MAAM, the other seacoast communities, and key stakeholders (PREP, NHDES, and USEPA). The Town believes that the collaborative approach will provide the most efficient and streamlined use of limited resources (time and money) and avoid unnecessary duplication of efforts.

A. AMBIENT WATER QUALITY MONITORING IN GREAT BAY

Part 3-1.a. of the General Permit recommends an outline of an approach to monitor the ambient water quality in the Great Bay estuary to determine project trends.

Under this AMF Proposal, the Town will continue to fund and work closely with PREP to support PREP's annual and long-term monitoring initiatives. The Town will continue to participate on PREP's Management Committee for elected term as well as co-chair the Piscataqua Regional Monitoring Collaborative. The Town will review and provide comments on PREP's ambient water quality monitoring program to ensure that the monitoring program meets regulatory compliance needs of the Town. The Town will work with PREP to gather a better understanding of the direct outcomes from the monitoring program including annual raw data output, annual summary reports and long-term trend reports.

B. TRACK REDUCTIONS AND ADDITIONS OF TOTAL NITROGEN

Part 3-1.b. of the General Permit recommends an outline of the method(s) to track reductions and additions of the total nitrogen over the course of the permit.

The Town has been tracking reductions and additions of total nitrogen since 2014, as required by the AOC. Initially, the Town developed its own tracking and accounting system, which was used for the 2014–2018 Annual Report submittals. However, since 2018, the Town has been coordinating with NHDES and other municipalities to track changes in land use and quantify implementation of nonpoint source BMPs through PTAP.

Under this AMF Proposal, the Town will continue to track the implementation of nonpoint and point source efforts to reduce total nitrogen loads. The Town will estimate the reductions and additions of total nitrogen from developed lands and present this information annually. The Town anticipates tracking the efforts outlined in **Section C** below.

The Town will continue to work with NHDES, UNH, other Great Bay communities, and consultants to develop a tracking and accounting system to perform a quantitative assessment of pollutant load reductions. Currently, PTAP does not have the capability to estimate nitrogen loads. If PTAP does not have these capabilities before the first annual report is due, the Town is committed to calculating estimates in the reductions in total nitrogen using methods provided by USEPA in the 2017 New Hampshire MS4 Permit and using the best available load reduction estimates.

C. OVERALL SOURCE REDUCTION

Part 3-1.c. of the General Permit recommends an outline or plan for overall source reductions of total nitrogen over the course of the General Permit.

Under this AMF Proposal, the Town will implement point and nonpoint source reduction strategies to reduce total nitrogen. Annually, the Town will review the strategies implemented and update the list to reflect progress.

Point Source Reduction Strategies

A variety of measures to reduce wastewater point source nitrogen will be evaluated as part of this AMF Proposal. The strategies evaluated and a description of how the Town will implement these strategies is summarized in **Table 2**.

Table 2. Proposed Point Source Reduction Strategies

STRATEGY	DESCRIPTION OF IMPLEMENTATION
WWTF Optimization	The Town will continue to evaluate WWTF modification and process optimization techniques for additional reduction of total nitrogen from the WWTF effluent.
Inflow and Infiltration	The Town will implement recommendations from the 2013 Phase III I/I Plan and 2017 CSO LTCP. Projects will include Westside Drive and Salem Street. The Town will continue to fund pipe and manhole rehabilitation projects aimed at reducing inflow and infiltration.
Sump Pump Redirection Program	The Town will revisit the Sump Pump Redirection Program and re-educate residents about the program and develop potential enforcement measures. The Town will evaluate if the program needs to be implemented in other areas of town.
Septage Receiving	The Town will continue to receive septage from the town, Stratham, Newfields, Brentwood, East Kingston, and Kensington to assist with the denitrification process at the WWTF.

Nonpoint Source Reduction Strategies

A variety of measure to reduce nonpoint source (stormwater and groundwater) nitrogen will be evaluated as part of this AMF Proposal. The strategies evaluated, the targeted land use/source, and a description of how the Town will implement these strategies is summarized in **Table 3**.

Table 3. Proposed Non-point Source Reduction Strategies

STRATEGY	TARGET LAND USE/SOURCE	DESCRIPTION OF IMPLEMENTATION
Fertilizer and Turf Management Program	Pervious Developed Land	<p>The Town will develop and implement a fertilizer outreach and education program targeted at reducing the application of fertilizer and using turf management best practices. The Town will apply this outreach program to both Town staff and departments as well as to the public. The Town will develop education materials as well as conduct workshops for the public.</p>
Post-Construction Regulations	Impervious	<p>The Town recently updated their Site Plan and Subdivision regulations to incorporate post-construction stormwater controls optimized for the removal of nitrogen. All private development stormwater projects that require a Site Plan or Subdivisions approval will be required to reduce total nitrogen by 60%.</p> <p>The Town will ensure during the Site Plan and Subdivision Review process that applicants are meeting the regulatory requirements. The Town currently uses a third-party consulting firm to review applications and provide the Town and applicants specific comments regarding the stormwater post-construction requirements.</p> <p>The Town will track and account for the implementation of post-construction stormwater BMPs on private development.</p>
Land Use Regulation Review	Impervious	<p>The Town will review current land use regulations and explore changes that will result in less nitrogen loading into the environment. These strategies may include, but not limited to, providing incentives for redeveloping existing parcels, requiring advanced septic systems in areas not serviced by municipal sewer, and increasing the required nutrient removal rates by stormwater BMPs.</p> <p>The Town will review current land use regulations to determine barriers to low impact develop in street design, parking lot guidelines and green infrastructure best management practices.</p>
Pet Waste Station Program	Pervious Developed Land Impervious	<p>Continue to implement Pet Waste Station Program by supplying pet waste bags and removing pet waste from disposal containers.</p>
Infrastructure Maintenance Program	Impervious	<p>The Town will develop and implement a program detailing the activities and procedures to maintain storm drainage infrastructure in a timely manner. The program will include routine inspections, cleaning, and maintenance of catch basins to maintain 50% free-storage capacity in the catch basin sump.</p> <p>The Town will continue to operate and maintain a vacuum truck and clean catch basins.</p>
Catch Basin Replacement Program	Impervious	<p>The Town will develop a program to replace catch basins in the Town with sumps that are less than the recommended 3-foot sump to provide water quality pretreatment. The Town has a significant number of catch basins in the town with inadequate sumps.</p> <p>This program would provide additional sediment storage capacity in these catch basins and allow the Town to effectively remove sediment prior to discharging to the receiving water.</p> <p>The Town anticipates replacing on average 25 catch basins per year, during the General Permit term.</p>

STRATEGY	TARGET LAND USE/SOURCE	DESCRIPTION OF IMPLEMENTATION
Organic Waste and Leaf Litter Collection Program	Developed Pervious Impervious	<p>The Town will gather, remove, and properly disposal of landscaping wastes, organic debris, and leaf litter from impervious roadways and parking lots. The gathering and removal will occur immediately after any landscaping activities.</p> <p>The Town will dispose of these materials at the Town Transfer Station.</p>
Enhanced Street/Pavement Cleaning Program	Impervious	<p>The Town will continue implementing its enhanced sweeping program to clean all curbed impervious cover (i.e., directly connected impervious cover) and parking lots, at least two times per year (spring and fall), with targeted weekly sweeping in the downtown area and monthly sweeping of parking lots.</p> <p>The Town will use a high-efficiency, regenerative air-vacuum sweeper to implement the program.</p>
Septic System Program	Septic	<p>The Town will investigate the feasibility of an incentive-based private septic system replacement/upgrade program. The Town anticipates developing a loan forgiveness program, where private property owners could borrow the cost difference between a traditional system and an advanced treatment system for targeted nitrogen removal.</p> <p>As part of the program, the Town will develop a map of locations of current septic systems within 250 feet of a receiving water. The Town will incorporate outreach and education to the property owners in these areas and make them aware of this program. The Town will also conduct outreach during the Site Plan and Subdivision review process for new development or redevelopment projects.</p> <p>Following development of the program, the Town will evaluate next steps for implementation of the program.</p>
Stormwater Structural BMP Construction	Impervious	<p>The Town will continue to investigate conceptual BMPs identified as part of the Lincoln Street subwatershed studies. The Town will implement the structural stormwater BMP in the Winter Street/Front Street area. Following the construction of this project, the Town will evaluate the process for selection, design, and construction of additional structural stormwater BMPs and determine next steps based on lessons learned.</p> <p>The Town will also evaluate capital improvement projects and identify locations where stormwater retrofits could be implemented to improve water quality from Town-owned impervious cover.</p>
Evaluate Town-Owned and Right-of-Way Properties for Stormwater Structural BMP Sites	Impervious	<p>The Town will conduct a town-wide assessment, like the one conducted in the Lincoln Street subwatershed, for implementation of structural stormwater BMPs to reduce the frequency, volume, and pollutant loads of stormwater discharges.</p> <p>The Town will develop a town-wide plan that identifies conceptual BMP locations and designs for retrofitting existing impervious cover. The Town may use this plan to systematically retrofit and treat existing impervious cover.</p>

STRATEGY	TARGET LAND USE/SOURCE	DESCRIPTION OF IMPLEMENTATION
Atmospheric Deposition	Pervious Impervious	<p>The Town will work with USEPA and NHDES to understand how levels of nitrogen from atmospheric deposition are changing over time.</p> <p>The Town will account for changes in the atmospheric load as part of the tracking and accounting framework on an annual basis (or as data becomes available).</p>

D. LOAD-BASED THRESHOLD

Part 3-1.d. of the General Permit recommends an inclusive and transparent process for comprehensively evaluating any significant issues regarding the science and methods relating to the permit, including the choice of a load-based threshold of 100 kilograms per hectare per year (kg ha⁻¹ yr⁻¹) versus any other proposed threshold, including a concentration-based threshold of 0.32 mg/L.

The Town will allocate funds for an independent consultant to attend collaborative meetings to discuss the development of a load-based threshold. Town will review monitoring initiatives; implement nonpoint and point source projects targeted at reducing total nitrogen in the Great Bay; track and account implementation efforts; and revise this AMF Plan to ensure that the efforts the Town is taking will have the greatest benefit to water quality. The Town is committed to working with MAAM, USEPA, NHDES, PREP, and watershed stakeholders to ensure that the science and recommended next steps for continued improvement in water quality of the Great Bay and its tributaries are understood.

E. COMPLETION OF TMDL

Part 3-1.c. of the General Permit recommends a proposed timeline for completing a TMDL for total nitrogen in Great Bay and for submitting it to USEPA for review and approval.

The Town will allocate funds for an independent consultant to attend collaborative meetings to discuss the develop of a timeline for completion of a TMDL or an alternative approach. Town will review monitoring initiatives; implement nonpoint and point source projects targeted at reducing total nitrogen in the Great Bay; track and account implementation efforts; and revise this AMF Plan to ensure that the efforts the Town is taking will have the greatest benefit to water quality. The Town is committed to working with MAAM, USEPA, NHDES, PREP, and watershed stakeholders to ensure that the science and recommended next steps for continued improvement in water quality of the Great Bay and its tributaries are understood.