STORMWATER MANAGEMENT PLAN (SWMP)

Rockland, MA

September 2024 Update

ENVIRONMENTAL PARTNERS
— An Apex Company —

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SECTION 1 BACKGROUND

SECTION 1.1 STORMWATER REGULATION

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

SECTION 1.2 PERMIT PROGRAM BACKGROUND

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

SECTION 1.3 STORMWATER MANAGEMENT PLAN (SWMP)

The Stormwater Management Plan (SWMP) describes and details the activities and measures that will be implemented to meet the terms and conditions of the 2016 MS4 Permit. The SWMP accurately describes the permittees' plans and activities. The document should be updated and/or modified during the permit term as the permittee's activities are modified, changed or updated to meet permit conditions. Additionally, MS4 reports (Operations and Maintenance Plan, Illicit Discharge Detection and Elimination Plan, etc.), annual reports, and inspection reports should be attached to the SWMP as appendices. Thus, the SWMP should act as a living document that records the permittee's planned and completed progress toward meeting the MS4 Permit requirements.

The main elements, or minimum control measures (MCMs) of the stormwater management program are (1) a public education program in order to affect public behavior causing stormwater pollution, (2) an opportunity for the public to participate and provide comments on the stormwater program (3) a program to effectively find and eliminate illicit discharges within the MS4 (4) a program to effectively control construction site stormwater discharges to the MS4 (5) a program to ensure that stormwater from development projects entering the MS4 is adequately controlled by

the construction of stormwater controls, and (6) a good housekeeping program to ensure that stormwater pollution sources on municipal properties and from municipal operations are minimized. The hyperlinks provided in **Appendix A** offer additional information and supporting documents related to the MS4 Permit and the aforementioned minimum control measures.

SECTION 1.4 TOWN SPECIFIC MS4 BACKGROUND

The Town must give special consideration to and meet eligibility requirements for their discharges to be able to apply for coverage under the General Permit. Eligibility will be determined based on three categories: Endangered Species Act, National Historic Preservation Act, and Water Quality Impaired Waters. The Town must establish that discharges from its storm drain system do not adversely impact endangered species, critical habitats, and historic properties to be covered by the General Permit. Furthermore, the Town must identify all receiving waters that have been classified as Water Quality Impaired Waters by the Massachusetts Department of Environmental Protection (MassDEP). The Town of Rockland and its surrounding water bodies are shown in **Figure 1: System Locus**. The Notice of Intent (NOI) for coverage under the Small MS4 General Permit was submitted to EPA and MassDEP on September 28, 2018. A copy of the NOI is provided in **Appendix B**.

In December of 1986, a fuel storage tank at the former South Weymouth Naval Air Station was overfilled and approximately 6,000 gallons of jet fuel flowed over land, some of which entered a storm drain that discharged to French Stream. Fuel from this spill traveled off site through French Stream to Rockland. The EPA determined that offsite areas impacted by the spill were adequately remediated. It was concluded that past and current exposures to surface water and sediment in French's Stream through recreational use are not likely to result in adverse health effects. Cancer distribution patterns in Rockland were reviewed for the years 1982 – 1994 and for the years 1995 – 1998, and no unusual geographic concentrations of contamination-associated cancer types were noted.

SECTION 2 SWMP COMPONENTS

SECTION 2.1 PARTIES INVOLVED IN IMPLEMENTATION

Stormwater programs in the Town of Rockland are currently the responsibility of the Highway Superintendent, David Taylor Jr. The Town has not yet created/staffed a stormwater committee. However the current departments involved in stormwater management are listed in the table below. The members have prioritized detailed goals and concerns regarding the implementation of a stormwater program. A draft schedule and budget have been developed in effort to comply with the NPDES Permit. The draft schedule is attached as **Appendix C**.

Table 2-1: List of Parties Responsible for SWMP Implementation

Name	Title	Department
David Taylor Jr.	Superintendent	Highway Department
Megan Fountaine	Clerk Laborer - Stormwater	Highway Department
Robyn Day	Administrative Assistant	Sewer Department
Delshaune Flipp	Health Agent	Board of Health
Kristel Cameron	Water Superintendent	Water Department
Charlene Judge	Member	Conservation Commission
Michael Corbett	Chairman	Planning Board
Lori Wolfe	Director of Marketing & Communications	North and South Rivers Watershed Association (NSRWA)

SECTION 2.2 DOCUMENTATION REGARDING ENDANGERED SPECIES

To comply with part 1.9.1 of the NPDES Permit, the Town has attached documentation in **Appendix D** supporting Rockland's eligibility determination of Criterion C regarding federal Endangered and Threatened Species and Critical Habitat Protection. Criterion C states that, "determination is made by EPA, or by the applicant and affirmed by EPA, that the stormwater discharges and discharge related activities will have "no affect" on any federally threatened or endangered listed species or designated critical habitat under the jurisdiction of the USFWS." In this case, USFWS provided a letter in place of a concurrence letter for informal consultation.

The attachments in **Appendix D** include the aforementioned letter, as well as the results of the Information for Planning and Consultation (IPaC) environmental review process. Using the IPaC environmental review process, one endangered species has been identified within Rockland's boundaries: the Northern Long-Eared Bat. This species does not have critical habitats designated within the Town, and the MS4 Permit will not adversely affect the listed species within the MS4 area.

SECTION 2.3 DOCUMENTATION REGARDING HISTORIC PROPERTIES

The Town has attached documentation in **Appendix E** supporting their eligibility determination regarding Historic Properties, in compliance with part 1.9.2 of the Permit. This document, Appendix D of the Massachusetts General MS4 Permit, includes information supporting Rockland's determination as Criterion A, stating that the discharges do not have the potential to cause effects on historic properties.

Historic site considerations will be evaluated further as part of the design/permitting of new/retrofit BMPs proposed for implementation as part of MS4 compliance. Regarding the National Historic Preservation Act, under 36 CFR 800, this facility is an existing facility authorized by the previous Permit and is not undertaking any activity involving subsurface land disturbance less than 1 acre. This MS4 Permit will have "no potential to cause effects," in accordance with 36 CFR 800.3(a)(1).

SECTION 2.4 DOCUMENTATION REGARDING DISCHARGES

Attached in **Appendix F** is the documentation for tracking any new or increased discharges granted by MassDEP in compliance with part 2.1.2 of the Permit. Currently, the Town of Rockland has no new and/or increased discharges. The Town will document any new and/or increased discharges on the form provided in **Appendix F** and include project specific information regarding best management practices implemented for those discharges. A sample discharges form is provided in **Appendix F**.

SECTION 2.5 SANITARY SEWER OVERFLOW (SSO) INVENTORY

In the event of an overflow or bypass, a notification must be reported within 24 hours by phone to MassDEP, EPA, and other relevant parties. The verbal notification should be followed up with a written report following MassDEP's Sanitary Sewer Overflow (SSO)/Bypass notification form within five calendar days of the time you become aware of the overflow, bypass, or backup.

The Town will maintain an inventory of all known locations where SSOs have discharged to the MS4, if any are found. This inventory shall include SSOs resulting from inadequate conveyance capacities, or where interconnectivity of the storm and sanitary sewer infrastructure allows for connection of flow between the systems. A SSO inventory form is provided in **Appendix G** and is updated annually. The inventory includes the following information:

1. Location (approximate street crossing/address and receiving water, if any);
2. A clear statement of whether the discharge entered a surface water directly or entered the MS4;
3. Date(s) and time(s) of each known SSO occurrence (i.e., beginning and end of any known discharge);
4. Estimated volume(s) of the occurrence;
5. Description of the occurrence indicating known or suspected cause(s);
6. Mitigation and corrective measures completed with dates implemented; and
7. Mitigation and corrective measures planned with implementation schedules.

SECTION 2.6 IDDE PROGRAM AND BYLAWS

The Town's IDDE Plan was developed during the first year of the new MS4 Permit (June 2019). The IDDE program is detailed in **Section 3.3**. The Town's current Stormwater Management and Erosion Control and Illicit Discharge Bylaw is provided in **Appendix H**.

SECTION 2.7 SEDIMENT AND EROSION CONTROL PROCEDURES

Written procedures for the Town's site inspections and enforcement of sediment and erosion control procedures in accordance with part 2.3.5 of the MS4 Permit, Construction Site Stormwater Runoff Control, are detailed in the **Sections 3.4** and **3.5**. This information includes the party responsible for site inspections and implementation of procedures.

SECTION 2.8 PUBLIC DRINKING WATER SUPPLY SOURCES PROTECTION

The Town has developed practices in effort to avoid or minimize impacts to surface public drinking water supply sources. These efforts are detailed in **Section 3.6**,. The Town plans to prioritize the enforcement of the existing stormwater pollution prevention plans.

SECTION 2.9 ACTIVITIES TO MONITOR DISCHARGES

The Town identified discharges within public drinking water supply source areas and gave priority to outfall inspections and screening required of the Minimum Control Measures in **Section 3.0**.

SECTION 2.10 ANNUAL PROGRAM EVALUATION

To comply with part 4.1 of the MS4 Permit, the Town annually self-evaluates compliance with the terms and conditions of the MS4 Permit and submits each self-evaluation as part of the Fiscal Year annual report. The NPDES Phase II Small MS4 General Permit Annual Reports for Fiscal Year 2018 through the most recent Fiscal Year are attached in **Appendix I**.

SECTION 3 MINIMUM CONTROL MEASURES

In an effort to reduce pollutants and comply with part 2.3 of the MS4 Permit, the Town focuses on the following six (6) minimum control measures detailed in this section. These sections describe the Town's practices to comply with each control measure, the responsible person(s) or party of each practice, and the goal(s) for each BMP of each control measure. The BMPs for each of the six (6) minimum control measures are outlined in the forms provided in Appendix J.

SECTION 3.1 PUBLIC EDUCATION AND OUTREACH

The Town implemented an education program that includes educational goals based on stormwater issues of significance within the MS4 area. The ultimate objective of a public education program, MS4 Permit part 2.3.2, is to increase knowledge and change behavior of the public so that the pollutants in stormwater are reduced.

The Town implemented a public education program as required by the 2003 Permit and continued that program with the necessary adjustments to meet the additional requirements of the 2016 MS4 Permit.

The program includes the education of the following four (4) audiences: (1) residents, (2) businesses, institutions (churches, hospitals), and commercial facilities, (3) developers (construction), and (4) industrial facilities.

Section 3.1.1 Background

Responsible parties for public education and outreach efforts include the Highway Department, Sewer Department, IT Department, Board of Health, Planning Board, Conservation Commission, and the North & South Rivers Watershed Association (NSRWA). The Town of Rockland has implemented several actions in efforts to reach public education and outreach goals. The Town continues to support the NSRWA Greenscapes Program. Educational outreach through Greenscapes Program continues in addition to developing additional materials to meet requirements of the stormwater permit with NSRWA. The Town of Rockland's website continues to be updated with additional stormwater information.

Section 3.1.2 Best Management Practices

I. Distribution of a minimum of two (2) educational messages over the permit term to the required audiences, as listed below.
    a. Residents
        i. Publish outreach materials; distribute new resident packets to residents within Wetland Protection Areas.
        ii. Develop/maintain stormwater website and/or utilize Town social media for outreach. Provide specific information directed towards residents.

b. Businesses, Institutions, and Commercial Facilities
    i. Include stormwater information in permit materials.
    ii. Develop/maintain stormwater website and/or utilize Town social media for outreach. Provide specific information directed towards businesses, institutions, and commercial facilities.
c. Developers (Construction)
    i. Include stormwater information in permit materials. Review and update application forms to meet the new requirements.
    ii. Develop/maintain stormwater website and/or utilize Town social media for outreach. Provide specific information directed towards developers.
d. Industrial Facilities
    i. Distribute stormwater information to industrial groups based on zoning and property use.
    ii. Develop/maintain stormwater website and/or utilize Town social media for outreach. Provide specific information directed towards industrial facilities.

SECTION 3.2 PUBLIC INVOLVEMENT AND PARTICIPATION

The objective of the public involvement and participation control measure, permit part 2.3.3., is for the Town to provide the public with opportunities to engage in activities that promote good stormwater practices. The public has also been given the chance to review the SWMP and its implementation.

Section 3.2.1 Background

Responsible parties for public involvement and participation efforts include the Highway Department and the Sewer Department. The Town continues to conduct community cleanup days, fund outfall testing by the Rockland Senior High School environmental club, and support NSRWA stream bank cleaning days.

Section 3.2.2 Best Management Practices

I. Public Review
    a. Allow annual review of the SWMP and posting of the SWMP on the Town website.
II. Public Participation
    a. Allow the public to comment on stormwater management plan annually.
    b. Continue to fund two rounds of water quality sampling of priority water bodies.
    c. Continue annual community cleanup days and stream bank cleaning events with NSRWA.

SECTION 3.3 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE) PROGRAM

The Town has implemented an IDDE program, per MS4 Permit part 2.3.4, to find and eliminate non-stormwater discharge sources. Procedures have been implemented to fix any prevalent issues in the Town's storm sewer system. There are 67 outfall structures that discharge to the Town of Rockland's MS4 area. These outfall structures are displayed on Town's inventory of outfall structures are shown in **Figure 4: Stormwater System Map**. Below, **Table 3-1** lists the Town's impaired waters, the impairments per water body, and any associated final Total Maximum Daily Load (TMDL) report numbers. Impairments will be discussed further in **Section 4**.

Table 3-1: Impaired Waters, TMDLs and Impairments

Water Body Name	Segment ID	Category	Impairment(s)	Associated Approved TMDL
Old Swamp River	MA74-03	4a	• (Fish Passage Barrier*) • Escherichia Coli (E. Coli) • Fecal Coliform	
Cushing Brook	MA94-40	5	• Escherichia Coli (E. Coli)	
French Stream	MA94-03	5	• Dissolved Oxygen • Escherichia Coli (E. Coli) • Fecal Coliform • Fish Bioassessments • Phosphorus, Total	E. Coli and Fecal Coliform TMDL No. 61718
Studleys Pond	MA94151	5	• Fecal Coliform	

Category 4a Waters – impaired water bodies where TMDL is completed.
Category 5 Waters – impaired water bodies that require a TMDL.
"Approved TMDLs" are those that have been approved by EPA as of the date of issuance of the Massachusetts 2022 List of Integrated Waters (May 2023).
* TMDL not required (non-pollutant).

Section 3.3.1 Background

Responsible parties for IDDE efforts include the Highway Department, Sewer Department, Planning Board, Board of Health, and Conservation Commission. Town stormwater infrastructure has been mapped in GIS and will continue to be updated when new features are installed and when connectivity is refined.

The Town has developed and implemented an IDDE program. The IDDE program is outlined in the IDDE Plan, finalized in June 2019. The Town has verified drainage connectivity mapping and continues to update outfall and catchment information and screening results.

The Town continues to comply with local bylaws, state and federal requirements. The IDDE bylaws are continuing to be enforced and there have not been any violations within the past year. Continued local bylaw enforcement has been performed and no violations have been found within the last year.

Section 3.3.2 Best Management Practices

I. Legal Authority
   a. The IDDE program shall include adequate legal authority to prohibit illicit discharges; investigate suspected illicit discharges; eliminate illicit discharges, including discharges from properties not owned by or controlled by the MS4 that discharge into the MS4 system; and implement appropriate enforcement procedures and actions. Adequate legal authority consists of a currently effective ordinance, bylaw, or other regulatory mechanism. This ordinance, bylaw, or other regulatory mechanism was a requirement of the 2003 MS4 Permit and was required to be effective by May 1, 2008.

II. SSO Inventory
   a. Develop SSO Inventory Database within one year of effective permit date that logs historical SSOs that have occurred in the last five (5) years, as discussed in further detail in **Section 2.5**.
      i. Coordinate with Highway Department for tracking of any future septic or SSOs.

III. Storm Sewer System Map
   a. Update map within two (2) years of effective date of permit and complete full system map 10 years after effective date of permit.
      i. Make an electronic and physical copy of the map available to the public via the stormwater website and Rockland Town Hall.
      ii. Map/verify 10% of system per year during permit Years 1-10.
         1. Phase I will be focused on during Years 1 and 2, while Phase II will be focused on during Years 3 through 10.
      iii. Integrate system map updates with planned sewer expansion projects.
      iv. Cross reference drainage information to ensure mapping is as accurate as possible.
      v. Map/verify country drainage – (e.g. scuppers), in addition to outfall pipes.

IV. Written IDDE Program Development
   a. Develop and complete written IDDE program within one year of effective permit date. **The IDDE was drafted in 2019 and is updated as needed, approximately annually**. The IDDE Plan is attached as **Appendix K** and is available at Rockland Town Hall.

V. Implement IDDE Program
   a. Implement catchment investigations according to program and permit conditions within 18 months of the effective date of the Permit.
      i. Continue to enforce bylaw.
      ii. Draft and implement stormwater management regulations.
      iii. Coordinate water quality monitoring with dry weather screening
         1. The new monitoring system should include surveying for illicit discharge detection.

VI. Employee Training – **Training occurs annually.**
    a. Coordinate annual stormwater training and incorporate with training required in Section 6.2.IV.B.
VII. Dry Weather Screening **- Screening is complete.**
    a. Conduct screening in accordance with outfall screening procedure and permit conditions.
        i. Screen 25% of outfalls per year during permit Years 2-5.
VIII. Conduct Wet Weather Screening
    a. Conduct screening in accordance with outfall screening procedure and permit conditions and as determined by dry weather screening results, within 10 years of effective Permit date.
    b. To identify areas with higher potential for illicit connections, the permittee shall identify the presence of any of the following System Vulnerability Factors (SVFs):
        i. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages;
        ii. Common or twin-invert manholes serving storm and sanitary sewer alignments;
        iii. Common trench construction serving both storm and sanitary sewer alignments;
        iv. Crossings of storm and sanitary sewer alignments where the sanitary system is shallower than the storm drain system;
        v. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
        vi. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints;
        vii. Areas formerly served by combined sewer systems;
        viii. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.
IX. Conduct ongoing screening as necessary, and upon completion of the IDDE program.
X. Continue to eliminate illicit discharge violations and update regulations.

SECTION 3.4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

The Town must implement a program focused on controlling stormwater runoff from construction sites. The program shall minimize or eliminate erosion on site and maintain the site so that the sediment is not transported in stormwater or allowed to discharge to a water of the U.S. through the Town's MS4, as stated in part 2.3.5 of the Permit.

Section 3.4.1 Background

The Town of Rockland has adopted construction site stormwater runoff measures and has continued to enforce local, state, and federal bylaws. A protocol is being developed for submitting as-built drawings electronically and incorporating those files into the Town's GIS system.

Section 3.4.2 Best Management Practices

I. Site Inspection and Enforcement of Erosion and Sediment Control (ESC) Measures.
    a. Complete written procedures of site inspections and enforcement procedures within one year of effective date of the Permit.
        i. Recommend standards and practices for town inspection procedures. Seek input from relevant town groups (e.g. Conservation, Planning, etc.)
        ii. Develop inspection form that includes ESC measures and integrate them with existing Town forms.

II. Site Plan Review
    a. Complete written procedures of site plan review and begin implementation within one (1) year of the effective date of the Permit.
        i. Include site plan review workflow chart with permit applications.
        ii. Review current Town procedure regarding when a Construction General Permit (CGP) is needed.
            1. CGP required for disturbance of one (1) acre or greater

III. Erosion and Sediment Control Ordinance
    a. Adoption of requirements for construction operators to implement a sediment and erosion control program within one (1) year of the effective date of the Permit.
        i. Set limit of one (1) acre before project requires inspection by Town official.
            1. Coordinate limits and requirements with fill/extraction permits.
    b. Update all Town forms with erosion and sediment control checklist.

IV. Waste Control
    a. Adoption of requirements to control wastes, including but not limited to, discarded building materials, concrete truck wash out, chemicals, litter, and sanitary wastes within one (1) year of the effective date of the Permit.
        i. Incorporate into the Town's general conditions for building permit and/or site plan review.
        ii. Review and modify Town bylaw to meet new requirements.

V. Construction Inspection
    a. Address dam structural assessment findings and conclusions

SECTION 3.5 POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

The objective of an effective post construction stormwater management program, part 2.3.6 of the Permit, is to reduce the discharge of pollutants found in stormwater to the MS4 through the retention or treatment of stormwater after construction on new or redeveloped sites and to ensure proper maintenance of installed stormwater controls.

Section 3.5.1 Background

The Town of Rockland has adopted post-construction stormwater management regulations based on IDDE bylaws. Ongoing enforcement of bylaws continues. The Highway Department, Planning Board, Board of Health, and Conservation Commission are all responsible for stormwater management in new and redevelopment.

Section 3.5.2 Best Management Practices

I. Post-Construction Ordinance
    a. The Town shall develop or modify, as appropriate, an ordinance or other regulatory mechanism within two (2) years of the effective date of the permit.

II. As-Built Plans for On-Site Stormwater Control
    a. Require submission of electronic data for as-built drawings (e.g. PDF, AutoCAD, GIS) within two (2) years of completed construction.
        i. O&M certification should include contact and contract information for contractors that perform O&M on the private BMPs.

III. Inventory and Priority Ranking of MS4-Owned Properties That May Be Retrofitted with BMPs
    a. Conduct detailed inventory of MS4 owned properties and rank for retrofit potential within four (4) years of permit effective date.
        i. Inventory Town parcels for existing stormwater BMPs and identify opportunities for GI/LID retrofits.
            1. Include schools, parks, recreation facilities, police/fire/EMS, libraries, public works, and town administrative offices.

IV. Allow Green Infrastructure
    a. Within four (4) years of permit effective date, develop a report assessing existing local regulations to determine the feasibility of making green infrastructure practices allowable when appropriate site conditions exist
        i. Review bylaws and applications to incorporate green infrastructure and low impact development language as needed.
        ii. Educate the public on green infrastructure through existing BMP retrofits/demonstration projects.

V. Street Design and Parking Lot Guidelines
    a. Within four years of permit effective date, develop a report assessing requirements that affect the creation of impervious cover. The assessment will help determine if

changes to design standards for streets and parking lots can be modified to support low impact design options

i. Publish street design and parking lot guidelines on stormwater website.

VI. Ensure any stormwater controls or management practices for new development and redevelopment will prevent or minimize impacts to water quality.

a. Within two (2) years of permit effective date, adopt, amend, or modify regulation mechanisms to meet permit requirements.

i. Review rules and regulations and modify as needed. Include evaluation of subdivision/redevelopment requirements to keep stormwater runoff onsite and for long-term operations and management of private BMPs.

ii. Continue to implement Post-Construction Site Runoff Control Bylaw.

SECTION 3.6 GOOD HOUSEKEEPING AND POLLUTION PREVENTION FOR TOWN - OWNED PROPERTIES

An operations and maintenance program must be implemented by the Town for Town-owned properties. The program shall focus on preventing or reducing pollutant runoff and protecting water quality from Town operations.

Section 3.6.1 Background

The Town of Rockland has developed and implemented an O&M Plan, which is attached as **Appendix L**. In addition, the Town has developed Stormwater Pollution Prevention Plans (SWPPPs) for the Highway Department Facility and Recycling Center.

The Town of Rockland conducts annual sweeping of all streets, approximately 60 miles of roadway sweeping, with high visibility and high traffic areas swept twice. The roads are checked regularly and swept as needed to control silts. Catch basins are cleaned semi-annually. The lack of sand from snow and ice operations reduces the need for semi-annual collections.

Hazardous waste collection takes place annually. Additionally, the Town Recycling Center offers waste oil and anti-freeze collection to Town residents as well as access to Household Hazardous Waste events in other South Shore Recycling Cooperative communities. The Town also offers a 24/7 prescription drug drop off receptacle to minimize pharmaceutical waste from entering the groundwater.

The Town completes annual inspections of its inventory of stormwater best management practices. In addition, the Town completed an inventory and stormwater audit of all Town-owned facilities, is attached as **Appendix N**.

The Highway Department, Conservation Commission, and Board of Health are responsible for pollution prevention BMPs.

Section 3.6.2 Best Management Practices

I. Create written O&M procedures for parks and open spaces, buildings and facilities, and vehicles and equipment within two years of permit effective date.
    a. Develop standards of practice for O&M of each public facility and combine in Town O&M Manual.

II. Inventory all Town-owned parks and open spaces, buildings and facilities (including their storm drains), and vehicles and equipment within two (2) years of the permit effective date.
    a. Develop a capital improvement plan that deals with flood prevention measures and water quality improvements.
        i. Coordinate implementation with Section 5.2.II of the Permit.

III. Establish and implement program for repair and rehabilitation of MS4 infrastructure within two (2) years of the permit effective date.
    a. Inspect assets and assess condition to develop program
    b. Review annual budget to set aside funding.

IV. Stormwater Pollution Prevention Plan (SWPPP) For Maintenance Garages, Recycling Centers and Other Waste-Handling Facilities. – **SWPPPs are complete, and implementation is ongoing.**
    a. Develop plan within two (2) years of permit effective date.
    b. Schedule annual employee training.
        i. Look into workshop and speaking opportunities and seek formal training for all departments
    c. Develop an asset management system to process complaints, permits, inspections, and maintenance.
    d. Continue to implement improved recycling standards and requirements.
        i. Advertise rigid plastic and antifreeze recycling to the public. Enforce new standards for private haulers.

V. Catch Basin Cleaning – **Implementation is ongoing.**
    a. Develop and implement a catch basin cleaning schedule with a goal of ensuring no catch basin is more than 50% full.
    b. Document catch basins inspected and cleaned, including total mass removed and proper disposal.
    c. Ensure that all catch basins are cleaned annually and develop reporting and record keeping procedures for cleaning and for repair of damaged catch basins.

VI. Street Sweeping Program – **Implementation is ongoing.**
    a. Sweep streets (rural and uncurbed exceptions apply) a minimum of once a year in the spring.
    b. Each annual report shall include the number of miles cleaned and volume or mass of material removed. Continue to implement street sweeping program.

VII. Road Salt Use Optimization Program
    a. Develop and implement winter road maintenance procedures including use and storage of salt and sand.
    b. Minimize the use of salts
        i. Calibrate spreaders to reduce salt use.

c. Ensure snow is not disposed into waters.
d. Continue working on salt reduction strategies.

VIII. Inspections and maintenance of stormwater treatment structures – **Implementation is ongoing.**
   a. Establish and implement inspection and maintenance procedures for annual inspections/maintenance.
   b. Continue documenting catch basin and outfall inspection/condition data.

IX. Hazardous Waste Collection
   a. Host annual Household Hazardous Waste Days as part of South Shore Recycling Cooperative

X. Waterbody Cleanup
   a. Continue to remove debris from Town streams and brooks when necessary.

SECTION 4 WATER QUALITY BASED REQUIREMENTS

In compliance with the Clean Water Act (CWA), each state must administer a program to monitor and assess the quality of its surface and groundwater. Section 305(b) process of the CWA entails assessing each use for rivers, lakes, and coastal waters, and causes and sources of impairment are identified wherever possible. Section 303(d) of the CWA along with the regulations at 40 CFR 130.7 requires states to identify those water bodies that are not expected to meet surface water quality standards (SWQS) after the implementation of technology based controls and prioritize them for the development of TMDLs. A TMDL establishes the maximum amount of pollutant that may be introduced into a water body and still ensure attainment and maintenance of water quality standards. The 303(d) List of Impaired Waters (303(d) List) lists each waterbody in one (1) of the following five (5) categories:

Category 1.	Unimpaired and not threatened for all designated uses;
Category 2.	Unimpaired for some uses and not assessed for others;
Category 3.	Insufficient information to make assessments for any uses;
Category 4.	Impaired or threatened for one or more uses, but not requiring the calculation of a TMDL; or
Category 5.	Impaired or threatened for one or more uses and requiring a TMDL.

Waters listed in Category 5 constitute the 303(d) List and are to be reviewed and approved by the EPA. **Table 3-1: Impaired Waters**, TMDLs and Impairments details the Town's Category 4 and 5 waterbodies. The Town's watersheds with impairments are attached as **Figure 3: Town Watersheds and** an overall map of the Town's stormwater system is attached as **Figure 4: Stormwater System Map**.

SECTION 4.1 BACKGROUND

Best management practices aim to improve and mitigate stormwater water quality impairments. This program will focus on impaired waters requiring a TMDL in the South Coastal Watershed, shown on **Figure 3: Town Watersheds**.

There are three (3) Category 5 water segments and waterbodies in Rockland requiring a TMDL.

1) Cushing Brook (MA94-40) is a 3.1-mile segment, which straddles the eastern part of Town, and has an impairment for Escherichia coli (E. coli). There are three (3) outfalls that discharge to this water segment.
2) French Stream (MA94-03) is a 5.8-mile segment, which straddles the western part of Town, and has impairments for dissolved oxygen, E. coli, fecal coliform, fish bioassessment and total phosphorus. A quarter of the outfalls in town discharge to the French Stream. The Rockland wastewater treatment facility (WWTF) is near this segment – the IDDE efforts will focus on any E. coli, fecal coliform, and phosphorus sources upstream of the WWTF. In the 2022 Integrated List of Waters, finalized May 2023, French Stream no longer has an impairment for Whole Effluent Toxicity (WET) and has thus been removed from **Table 3-1**.

3) Studleys Pond (MA94151) is a 25-acre waterbody that is in the western part of town, between St. Patrick's Cemetery and Spring Lake Cemetery. French Stream runs along the eastern perimeter of the pond. It has an impairment of fecal coliform and as of August 2024, has three (3) outfalls discharging into the waterbody.

There is one (1) Category 4a (TMDL is completed) water segment in Rockland.

1) The Old Swamp River (MA74-03) is a 4.60-mile segment, which straddles the northern part of Town, and has an impairment for E. coli, fish passage barrier and fecal coliform. As of August 2024, four (4) outfalls discharge to this water segment.

Most of the Town outfalls are located within the South Coastal Watershed. This area can be seen in **Figure 4: Town Watersheds**. The South Coastal Watershed has an approved TMDL for bacteria and pathogens. These impairments require the Town to follow the specific requirements listed under **Appendix H** to mitigate bacteria and pathogen discharges from the MS4 to the respective watershed. The remaining outfalls are located within the Boston Harbor: Weymouth and Weir Watershed. This watershed also has a watershed-wide EPA approved TMDL for bacteria and pathogens.

The Town of Rockland is partially within the Taunton River Watershed, but there are currently no existing MS4 discharges within the watershed that are less than 100 feet from a waterbody.

SECTION 4.2 ADDITIONAL IMPAIRMENT REQUIREMENTS

Section 4.2.1 Public Education and Outreach

A. Bacteria or Pathogens - **Implementation is ongoing annually.**
    1. Distribute an annual message that encourages the proper management of pet waste, including noting any existing ordinances where appropriate.
    2. Disseminate educational materials to dog owners at the time of issuance or renewal of dog license, or other appropriate time.
    3. Provide information to owners of septic systems about proper maintenance in any catchment that discharges to a water body impaired for bacteria or pathogens.
B. Phosphorus - **Implementation is ongoing annually.**
    1. Distribute an annual message in the spring (March/April) timeframe that encourages the proper use and disposal of grass clippings and encourages the proper use of slow-release and phosphorus-free fertilizers.
    2. Distribute an annual message in the summer (June/July) timeframe encouraging the proper management of pet waste, including noting any existing ordinances where appropriate.
    3. Distribute an annual message in the fall (August/September/October) timeframe encouraging the proper disposal of leaf litter.
    4. Deliver an annual message on each of these topics, unless the Town determines that one of more of these issues is not a significant contributor of phosphorus to discharges from the MS4.

Section 4.2.2 Stormwater Management in New Development and Redevelopment

A. Phosphorus
    1. Include a requirement that new development and redevelopment stormwater management BMPs be optimized for phosphorus removal.
    2. Retrofit inventory and priority ranking under 2.3.6.1.b shall include consideration of BMPs that infiltrate stormwater where feasible.

Section 4.2.3 Good Housekeeping and Pollution Prevention

A. Phosphorus
    1. Establish procedures to properly manage grass cuttings and leaf litter on Town property, including prohibiting blowing organic waste materials onto adjacent impervious surfaces.
    2. Increase street sweeping frequency of all municipal owned streets and parking lots subject to Permit part 2.3.7.a.iii. near impaired waters to a minimum of two (2) times per year, once in the spring (following winter activities such as sanding) and at least once in the fall (September 1 - December 1; following leaf fall).

Section 4.2.4 Illicit Discharge

A. Bacteria or Pathogens
    1. Implement the illicit discharge program required by the Permit. Catchments draining to any water body impaired for bacteria or pathogens shall be designated either Problem Catchments or High Priority in implementation of the IDDE program.

Section 4.2.5 Additional Requirements (Phosphorus)

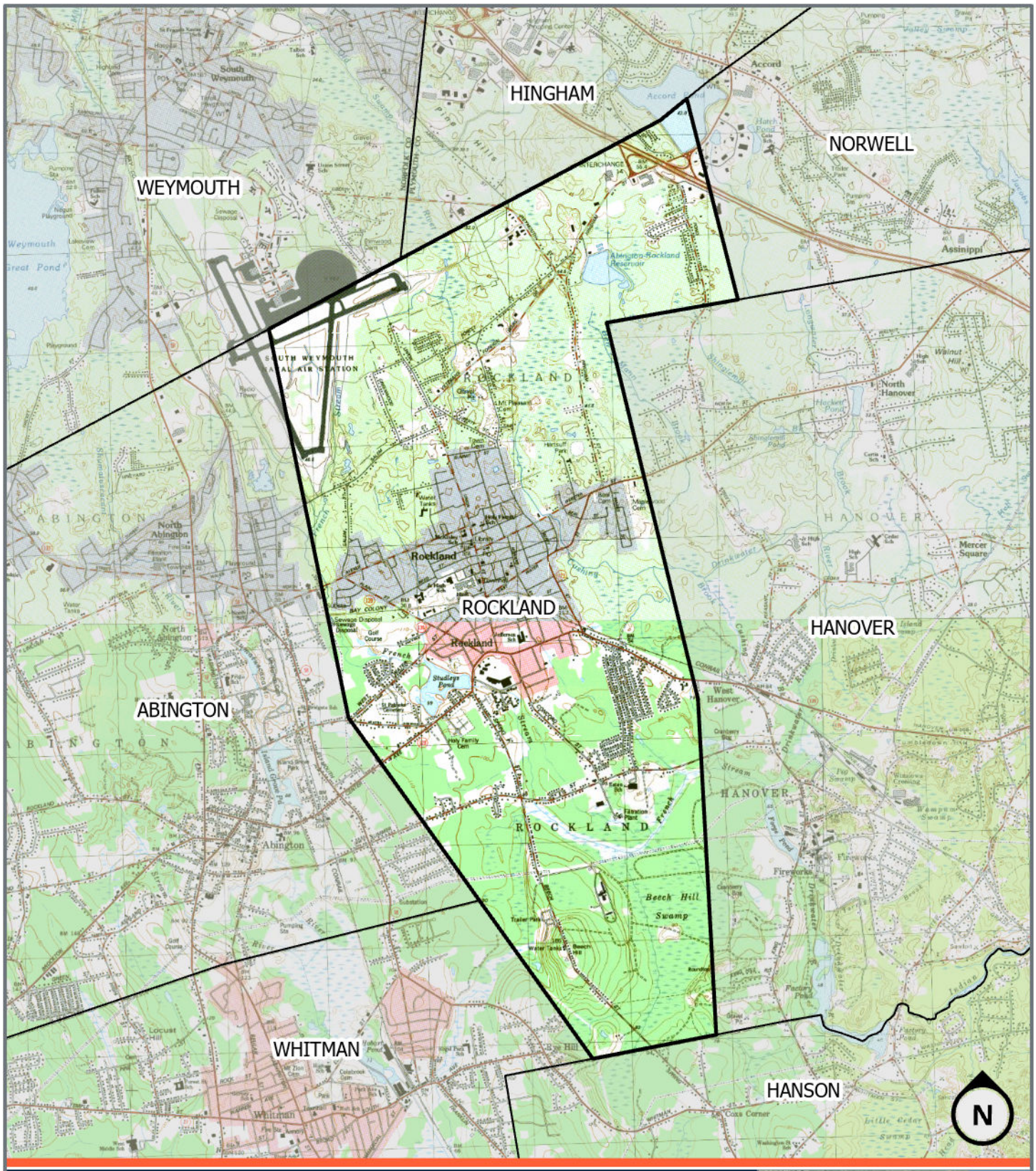
A. Phosphorus
    1. Complete a Phosphorus Source Identification Report within four (4) years of the permit effective date. The report shall include the following elements:
        i. Calculation of total MS4 area draining to the water quality limited water segments or their tributaries, incorporating updated mapping of the MS4 and catchment delineations produced pursuant to part 2.3.4.6
        ii. All screening and monitoring results pursuant to part 2.3.4.7.d, targeting the receiving water segment(s)
        iii. Impervious area and Directly Connected Impervious Areas (DCIA) for the target catchment
        iv. Identification, delineation, and prioritization of potential catchments with high phosphorus loading
        v. Identification of potential retrofit opportunities or opportunities for the installation of structural BMPs during redevelopment, including the removal of impervious areas
    2. Submit the final Phosphorus Source Identification Report to EPA as a part of the Year 4 annual report.

3. Evaluate all Town-owned properties identified as presenting retrofit opportunities or areas for structural BMP installation under permit part 2.3.6.d. ii. or identified in the Phosphorus Source Identification Report that are within the drainage area of the impaired water or its tributaries within five years of the permit effective date.
4. Provide a listing of planned structural BMPs and a plan and schedule for implementation in the Year 5 annual report.
5. Install a minimum of one (1) structural BMP as a demonstration project within the drainage area of the water quality limited water or its tributaries within six (6) years of the permit effective date. The demonstration project shall be installed targeting a catchment with high phosphorus load potential.
6. Install the remainder of the structural BMPs in accordance with the plan and schedule provided in the Year 5 annual report.
7. Track and estimate the phosphorous removal of any structural BMPs listed in Table 3 of Attachment 3 to Appendix F already existing or installed in the regulated area by the Town or its agents consistent with Attachment 1 to Appendix H. For each structural BMP document the BMP type, total area treated by the BMP, the design storage volume of the BMP and the estimated phosphorus removed in mass per year by the BMP in each annual report.

At any time during the Permit term, the Town may be relieved of additional requirements in Appendix H applicable to it when in compliance with the requirements in Appendix H.

FIGURE 1

System Locus



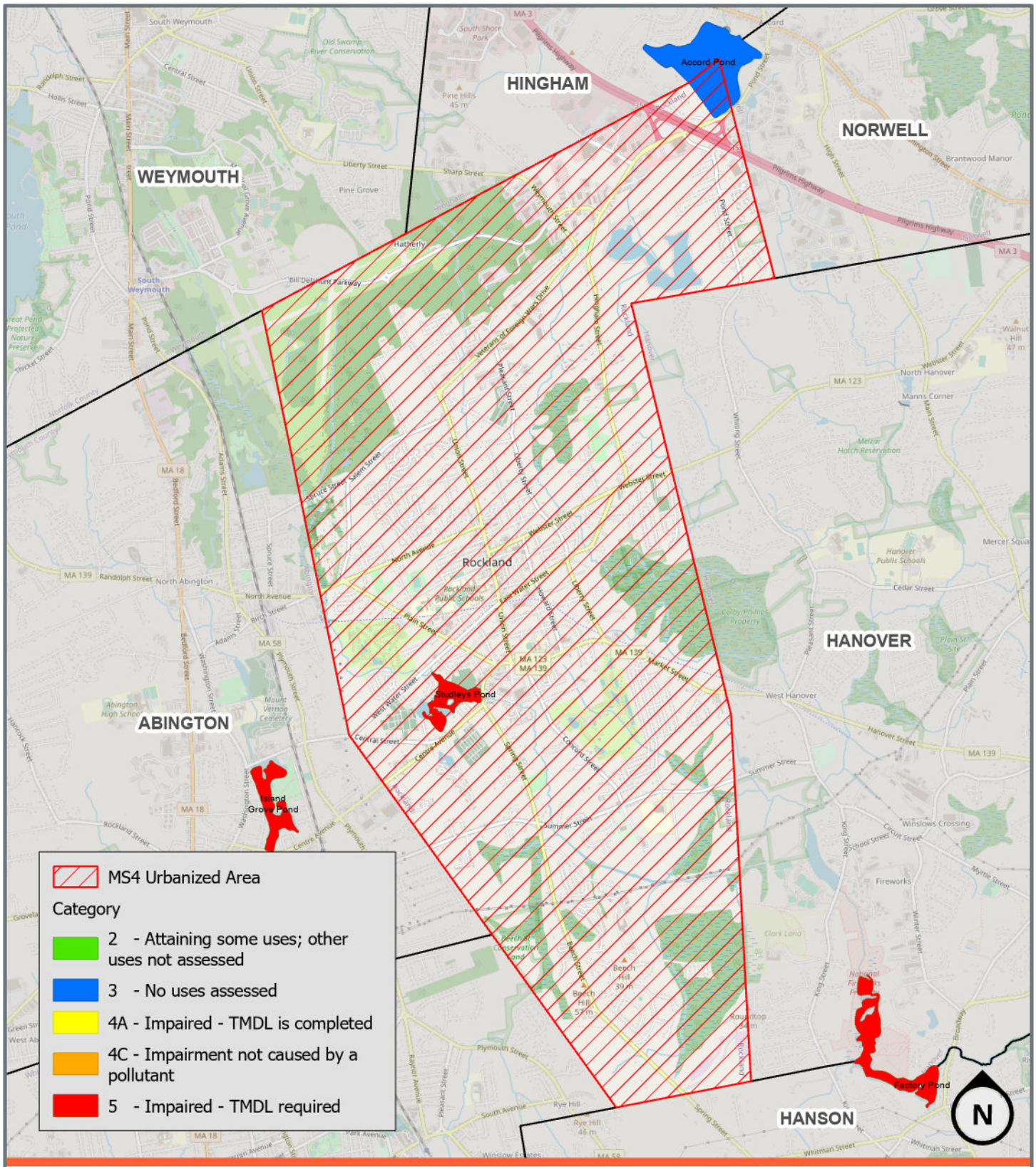
ENVIRONMENTAL PARTNERS
— An Apex Company —

Figure 1
System Locus
Rockland, Massachusetts

0 5,000 10,000
Feet

FIGURE 2

MS4 Urbanized Areas



ENVIRONMENTAL PARTNERS
— An Apex Company —

Figure 2
MS4 Urbanized Areas
Rockland, Massachusetts

0 5,000 10,000
Feet

FIGURE 3

Town Watersheds

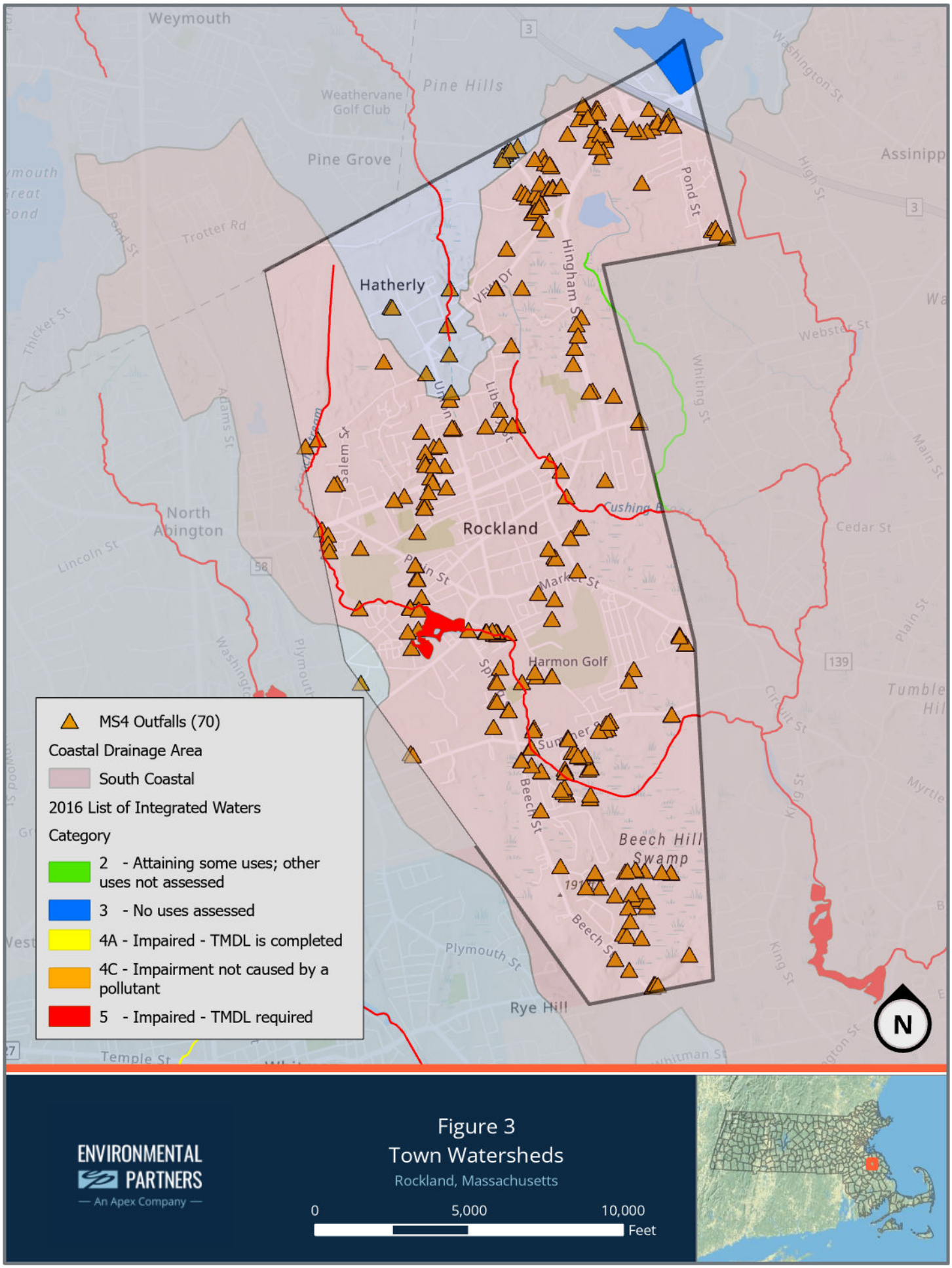

Weymouth
Pine Hills
Weathervane Golf Club
Pine Grove
Assinipp
Trotter Rd
Pond St
Hingham St
Hatherly
View Dr
Webster St
Whiting St
Salem St
Union St
Liberty St
North Abington
Rockland
Cushing Brook
Cedar St
Lincoln St
Adams St
Main St
Plain St
Market St
Harmon Golf
Circuit St
Tumble Hill
Beech St
Beech Hill Swamp
Plymouth St
Rye Hill
King St
Myrtle
Temple St
MS4 Outfalls (70)
Coastal Drainage Area
South Coastal
2016 List of Integrated Waters
Category
2 - Attaining some uses; other uses not assessed
3 - No uses assessed
4A - Impaired - TMDL is completed
4C - Impairment not caused by a pollutant
5 - Impaired - TMDL required
N
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Figure 3
Town Watersheds
Rockland, Massachusetts
0
5,000
10,000
Feet

FIGURE 4

Stormwater System Map

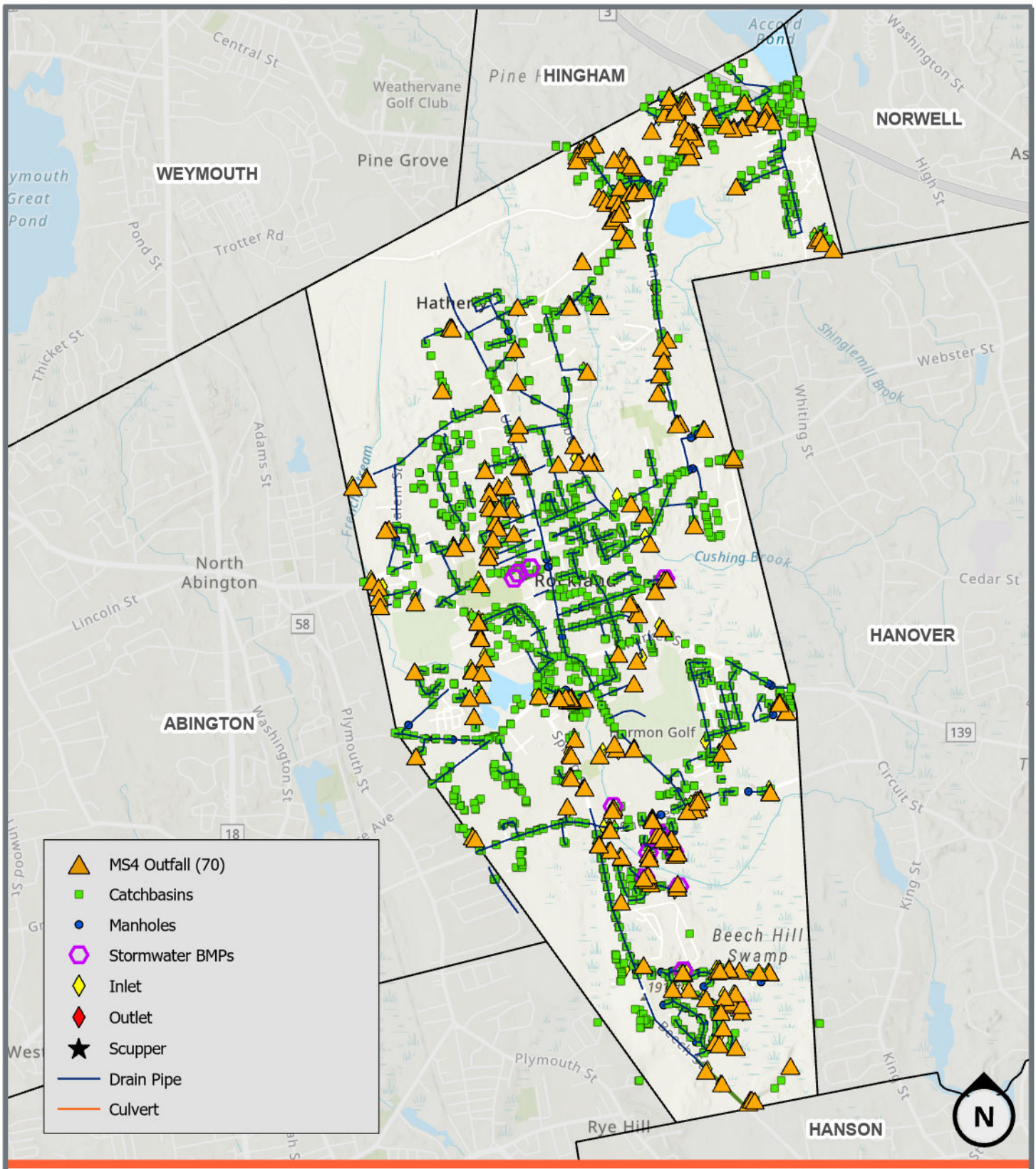

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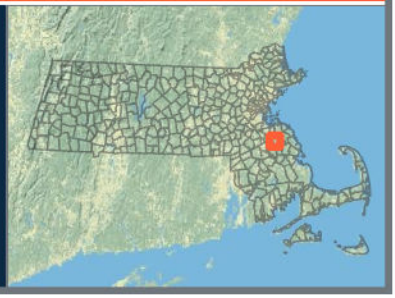
Figure 4
Stormwater System
Rockland, Massachusetts

0 5,000 10,000
Feet



APPENDIX A

MA MS4 Hyperlinks and References

APPENDIX B

Notice of Intent

APPENDIX C

Permit Schedule

APPENDIX D

Endangered Species and Critical Habitats Protection Documents

APPENDIX E

MA MS4 General Permit – Appendix D – Historic Properties Documents

APPENDIX F

New or Increased Discharges Tracking Log

APPENDIX G

SSO Inventory

APPENDIX H

Current Stormwater Bylaws

APPENDIX I

Annual Reports (Years 1-5)

APPENDIX J

Minimum Control Measures BMPs

APPENDIX K

Operations and Maintenance (O&M) Plan

APPENDIX L

Illicit Discharge Detection and Elimination (IDDE) Plan

APPENDIX M

Stormwater Pollution Prevention Plans (SWPPPs)

APPENDIX N

Municipal Facility Audit Report

APPENDIX O

BMP Observation Reports

APPENDIX P

Year 4 MCM Memos

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