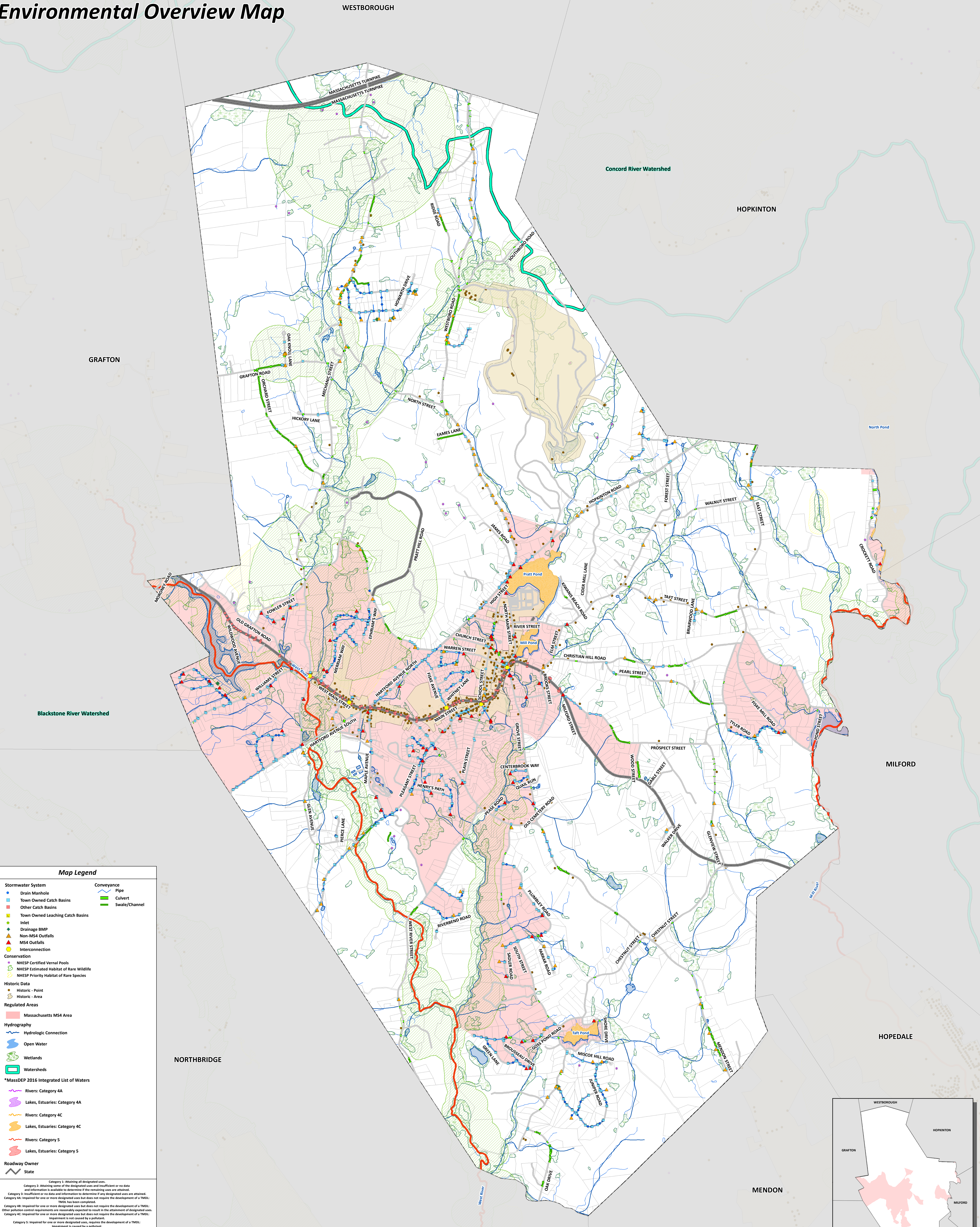


APPENDIX A

- Environmental Overview Map

Town of Upton, Massachusetts

Environmental Overview Map



Map Legend

Stormwater System

- Drain Manhole
- Town Owned Catch Basins
- Other Catch Basins
- Town Owned Leaching Catch Basins
- Inlet
- Drainage BMP
- Non-MS4 Outfalls
- MS4 Outfalls
- Interconnection

Conveyance

- Pipe
- Culvert
- Swale/Channel

Conservation

- NHESP Certified Vernal Pools
- NHESP Estimated Habitat of Rare Wildlife
- NHESP Priority Habitats of Rare Species

Historic Data

- Historic - Point
- Historic - Area

Regulated Areas

- Massachusetts MS4 Area

Hydrography

- Hydrologic Connection
- Open Water
- Wetlands
- Watersheds

***MassDEP 2016 Integrated List of Waters**

- Rivers: Category 4A
- Lakes, Estuaries: Category 4A
- Rivers: Category 4C
- Lakes, Estuaries: Category 4C
- Rivers: Category 5
- Lakes, Estuaries: Category 5

Roadway Owner

- State

Category 1: Attaining all designated uses.

Category 2: Attaining some of the designated uses and insufficient or no data and information is available to determine if the remaining uses are attained.

Category 3: Insufficient or no data and information to determine if any designated uses are attained.

Category 4A: Impaired for one or more designated uses but does not require the development of a TMDL.

Category 4B: Impaired for one or more designated uses but does not require the development of a TMDL.

Category 4C: Impaired for one or more designated uses but does not require the development of a TMDL.

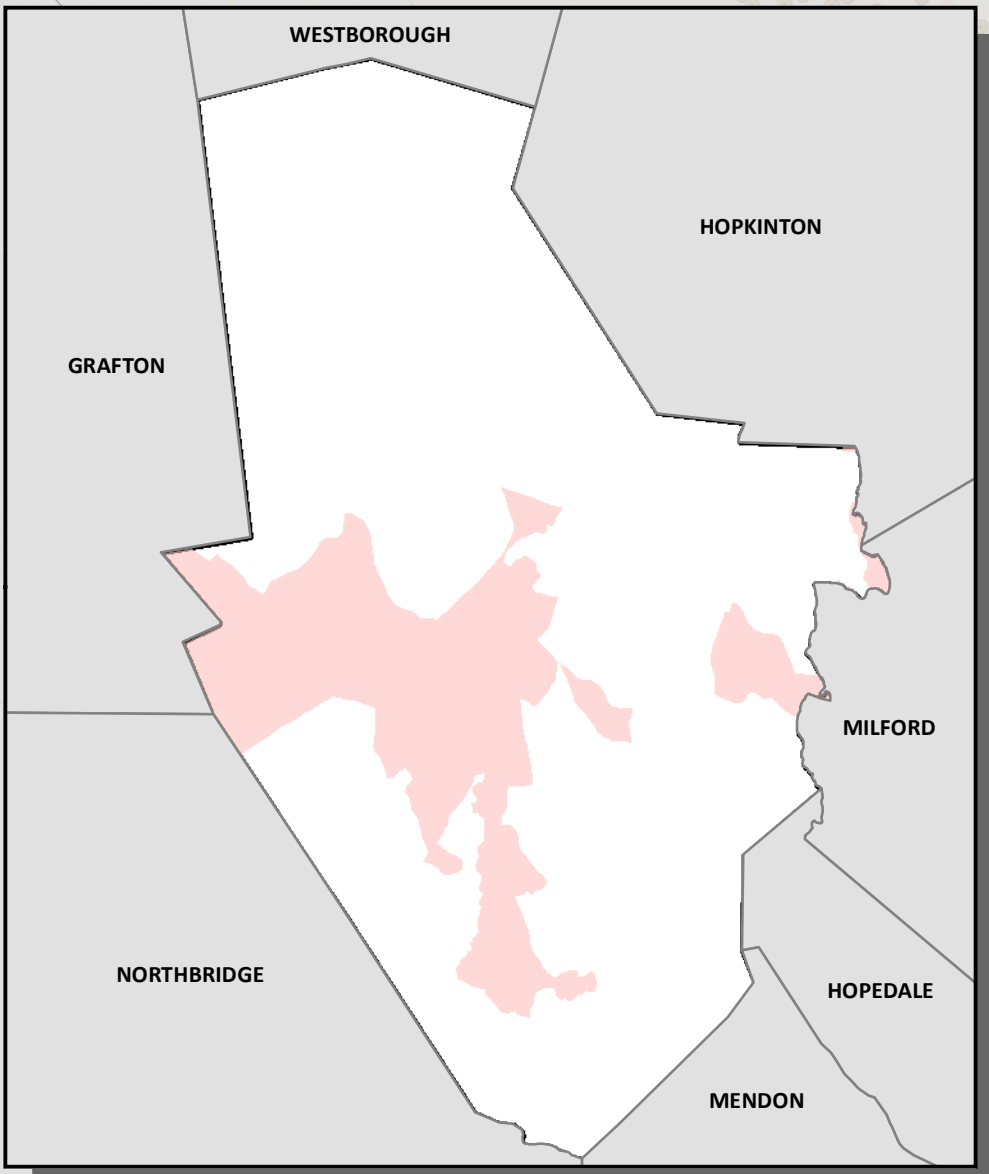
Category 5: Impaired for one or more designated uses, requires the development of a TMDL.

Impairment is caused by a pollutant.

Issue Date: June 2021
This Map is Intended for Planning Purposes Only



0 0.3 0.6 Miles



APPENDIX B

- **Reporting Forms**

MCM Procedures, Inspection Forms, & Reporting Logs

- MCM 1: Public Education and Outreach
 - Reporting Log
- MCM 2: Public Involvement & Participation
 - Reporting Log
- MCM 3: IDDE Program
 - Reporting Summary Logs
- MCM 4: Construction Site Runoff Control
 - Site Inspection Log
 - Site Inspection Form
 - Stormwater Site Plan Review
- MCM 6: Good Housekeeping
 - Catch Basin Cleaning
 - Street and Parking Lot Sweeping
 - Winter Road Maintenance Procedure
 - Stormwater Treatment Structures Inspection & Maintenance
 - Stormwater BMP Inspection Form – Surface Structures
 - Stormwater BMP Inspection Form – Subsurface Structures

MCM 1: PUBLIC EDUCATION AND OUTREACH LOG

Reporting Period: _____ – _____

| BMP # | Title/Description | Audience | Responsible Party | Method of Delivery | Date | Record of Measurable Goal* |
|-------|---|--------------------------|--|-------------------------------|------|----------------------------|
| 1.9 | Management of Pet Waste: Dog License | Residents | DPW Director/Communications Dept./CMRSWC | Distributed with Dog Licenses | | |
| 1.10 | Lawn Care: grass clippings & fertilizer | Residents & Bus/Inst/Com | DPW Director/Communications Dept./CMRSWC | Mail and post to website | | |
| 1.11 | Management of Pet Waste | Residents & Bus/Inst/Com | DPW Director/Communications Dept./CMRSWC | Post to website | | |
| 1.12 | Disposal of Leaf Litter | Residents & Bus/Inst/Com | DPW Director/Communications Dept./CMRSWC | Mail and post to website | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

*May include: # distributed, attendees, web page hits, social media likes, etc.

Note: See section 7.1 of SWMP for BMP reporting descriptions and requirements.

MCM 2: PUBLIC INVOLVEMENT & PARTICIPATION LOG

Reporting Period: _____ – _____

RECORD OF SWMP AND ANNUAL REPORT POSTING FOR PUBLIC REVIEW

| Date | Responsible Party | Public Notice Provided | Location of Posting | Record of Measurable Goal* |
|------|-------------------|------------------------|---------------------|----------------------------|
| | | | | |
| | | | | |
| | | | | |

*May include: web page hits, requests to view printed document, # of comments received

RECORD OF PUBLIC COMMENTS

| Date | Comment From | Received Via | Comment |
|------|--------------|--------------|---------|
| | | | |
| | | | |
| | | | |

RECORD OF PUBLIC PARTICIPATION ACTIVITIES

| Date | Responsible Party | Public Notice Provided | Activity | Record of Measurable Goal* |
|------|-------------------|------------------------|----------|----------------------------|
| | | | | |
| | | | | |
| | | | | |

*May include: # of participants, attendees, and/or quantity of cleanup achieved

Note: See section 7.2 of SWMP for BMP reporting descriptions and requirements.

MCM 3: IDDE PROGRAM REPORTING SUMMARY LOG

The Town has completed a written IDDE Plan which includes detailed reporting forms to document IDDE efforts. These can be found in Storm Water Management Plan Volume 2. The Town will keep a summary log for annual reporting as follows:

Reporting Period: _____ - _____

EMPLOYEE TRAINING

| Date | # of Attendees | Location | Presenter | Topic/Discussion Items |
|------|----------------|----------|-----------|------------------------|
| | | | | |
| | | | | |

SSO INVENTORY

| Report # | Date | Reporter | Location | Status & Comments |
|----------|------|----------|----------|-------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

ILLICIT DISCHARGE INVENTORY

| Report # | Date | Reporter | Location | Status & Comments |
|----------|------|----------|----------|-------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

STORM SEWER MAPPING UPDATES

| Type | Date | Updated by | Location | Description |
|------|------|------------|----------|-------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

OUTFALL SCREENING AND SAMPLING

| Dry/Wet | Date(s) | Inspector | Location(s) | Comments |
|---------|---------|-----------|-------------|----------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

CATCHMENT INVESTIGATIONS

| Category | Date(s) | Inspector | Location | Description/Results |
|----------|---------|-----------|----------|---------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Note: See section 7.3 of SWMP for BMP reporting descriptions and requirements.

MCM 4: CONSTRUCTION SITE RUNOFF CONTROL - INSPECTION

The Town has developed a Stormwater Bylaw and accompanying Stormwater Management Regulations that require site inspections of all projects that cause disturbance of more than 5,000 square feet up to 1 acre (43,560 square feet) of land. Inspections will be recorded using the Construction Site Inspection Form (attached). The Town will keep a log of all inspections and enforcement actions for annual reporting as follows:

CONSTRUCTION SITE INSPECTION LOG

Reporting Period: _____ – _____

| Report # | Date | Inspector | Project/Location | Status & Comments |
|----------|------|-----------|------------------|-------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Note: See section 7.4 of SWMP for BMP reporting descriptions and requirements.

CONSTRUCTION SITE ENFORCEMENT ACTION LOG

Reporting Period: _____ - _____

| Project/Location | Date | Action Taken | Status & Comments |
|------------------|------|--------------|-------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Note: See section 7.4 of SWMP for BMP reporting descriptions and requirements.

MCM 4: CONSTRUCTION SITE INSPECTION FORM

Report No. _____

The Town has developed a Stormwater Bylaw and accompanying Stormwater Management Regulations that require site inspections of all projects that cause disturbance of more than 5,000 square feet up to 1 acre (43,560 square feet) of land. Record all inspections using this form and provide an entry in site inspection log (and enforcement action log if applicable) for annual reporting.

| | | | | | | | |
|-----------------------------------|----------------------------------|------------------------------------|---------------------------------------|-------------------------------------|--|------------|--|
| Project: | | | | Date: | | Last Insp: | |
| Location: | | | | Arrive: | | Leave: | |
| Operator: | | | | Site Rep: | | | |
| Inspector: | | | | | | | |
| Type | <input type="checkbox"/> Regular | <input type="checkbox"/> Pre-Storm | <input type="checkbox"/> During Storm | <input type="checkbox"/> Post Storm | | | |
| Recent Rainfall: | | | | Current Weather: | | | |
| Description of Current Site Work: | | | | | | | |
| Add. Info: | | | | | | | |

EROSION AND SEDIMENT CONTROL MAINTENANCE/ACTION REQUIRED: ☐ YES ☐ NO
(Inspect for all applicable controls listed – ECB = Erosion Control Barrier)

| Control | Condition | Required Action | Completed (by) | Date |
|--|-----------|-----------------|--------------------------|------|
| <input type="checkbox"/> SWPPP Report(s) | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Adjacent Street | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Const. Access Dr. | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Perimeter ECB | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Outside ECB | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Sediment Basin(s) | | | <input type="checkbox"/> | |
| <input type="checkbox"/> CB Protection | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Stockpiles | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Exposed Soils | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Exposed Slopes | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Outlet(s) | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Receiving Waters | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Other | | | <input type="checkbox"/> | |

CONSTRUCTION WASTE CONTROL MAINTENANCE/ACTION REQUIRED: ☐ YES ☐ NO
(Inspect for all applicable controls listed)

| Control | Condition | Required Action | Completed (by) | Date |
|--|-----------|-----------------|--------------------------|------|
| <input type="checkbox"/> Trash/Litter | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Dumpsters | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Fueling Areas | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Sanitary Facilities | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Dewatering | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Haz Mat Storage | | | <input type="checkbox"/> | |

SITE PHOTOS

MCM 4: CONSTRUCTION SITE RUNOFF CONTROL - STORMWATER SITE PLAN REVIEW

The Town has developed a Stormwater Bylaw and accompanying Stormwater Management Regulations to address post-construction stormwater runoff from all new development and redevelopment sites of all projects that disturb more than 5,000 square feet up to 1 acre (43,560 square feet) of land. Site plans will be reviewed for compliance with the Ordinance and regulations based on the attached checklist. The Town will keep record of site plan reviews in each annual report as follows:

SITE PLAN REVIEW LOG

Reporting Period: _____ - _____

| Project/Location | Filing Date | Reviewer | Requirements Met | Project Status |
|-----------------------|-------------|----------|---|----------------|
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |

Note: See section 7.4 of SWMP for BMP reporting descriptions and requirements

STORMWATER SITE PLAN REVIEW CHECKLIST

SUBMISSION REQUIREMENTS LAND DISTURBANCE REVIEW (10,000 SF – ½ ACRE (21,780 SF))

- ☐ Completed application form with original signature of all owners
- ☐ Narrative describing proposed work including existing site conditions, proposed work, and methods to mitigate stormwater impacts
- ☐ Payment of application and review fees
- ☐ One 24x36, one half size, and electronic PDF of plans including:
 - o Existing features
 - o Proposed work & limits of disturbance
 - o Erosion & sediment controls
 - o Illicit discharge compliance statement

SUBMISSION REQUIREMENTS LAND DISTURBANCE PERMIT (>1/2 ACRE) OR HIGHER POTENTIAL POLLUTANT LOAD

- ☐ Complete application with owners signature
- ☐ List of Abutters within 300' certified by the Assessor's Office
- ☐ Narrative describing proposed work including existing site conditions, proposed work, and methods to mitigate stormwater impacts
- ☐ Generic legal ad (in Word format) soliciting public comments with instructions
- ☐ Payment of application and review fees
- ☐ One (1) copy of each application form and the list of abutters filed with the Town Clerk
- ☐ One 24x36, one half size, and electronic PDF of:
 - o Existing features
 - o Proposed work & limits of disturbance
 - o Stormwater Management Plan
 - o Erosion & sediment control plan (3 copies)
 - o Operation & maintenance plan
 - o Illicit discharge compliance statement

STORMWATER MANAGEMENT PLAN

- ☐ MassDEP Stormwater checklist with supporting calculations meeting standards
- ☐ Stamped and Signed by MA P.E.
- ☐ Identify TMDLs/ Impairments
- ☐ Soil mapping and test data
- ☐ Existing & proposed uses and conditions
- ☐ Wetland resources/proposed impervious area/aquifer protection zones/earthwork within 4' of seasonal high groundwater
- ☐ Drain pipes/catch basins/easements
- ☐ LID/BMP techniques
- ☐ No adverse downgradient impacts

EROSION & SEDIMENT CONTROL PLAN

- ☐ Minimize/phase clearing
- ☐ Perimeter barrier controls
- ☐ Slope controls as necessary
- ☐ Stone construction entrance
- ☐ Stockpile areas
- ☐ Protection of infiltration basins/systems
- ☐ Catch basin protection
- ☐ List of easements
- ☐ SWPPP if > 1 acres

OPERATION & MAINTENANCE PLAN

- ☐ Follows MassDEP Stormwater checklist & standard

PERFORMANCE & DESIGN STANDARDS

- ☐ 1" (.8" Redevelopment) runoff retained and/or;
- ☐ 90% (80% Redevelopment) TSS removal
- ☐ 60% (50% Redevelopment) Phosphorus removal
- ☐ Offsite Mitigation (if necessary)
- ☐ Hydraulic calculations TR-55 and TR-20
- ☐ 24 hour rainfall from NRCS
- ☐ Drain pipes to accommodate 25 year storm
- ☐ Pipe velocities 3-10 ft/sec
- ☐ Culverts 50-year storm
- ☐ Deep sump/offline catch basins
- ☐ Stormwater basins to accommodate 100 year storm w/ 1' freeboard
- ☐ Swale velocities < 5fps
- ☐ Access for maintenance
- ☐ Minimize area of disturbance

MCM 5: POST CONSTRUCTION STORMWATER MANAGEMENT IMPLEMENTATION LOG

Reporting Period: _____ - _____

| Project/Location | Filing Date | Reviewer | Requirements Met | Project Status |
|-----------------------|-------------|----------|---|----------------|
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |
| | | | <input type="checkbox"/> LIDs <input type="checkbox"/> SW Design Regs <input type="checkbox"/> As-built <input type="checkbox"/> Long-term O&M | |
| Description/Comments: | | | | |

Note: See section 7.4 of SWMP for BMP reporting descriptions and requirements.

MCM 6: GOOD HOUSEKEEPING - CATCH BASIN CLEANING

Purpose

The purpose of this this procedure to optimize routine inspections, cleaning and maintenance of catch basins with a goal that the frequency of routine cleaning will ensure that no catch basin at any time will be more than 50 percent full.

According to the Permit an excessive sediment or debris loading is a catch basin sump more than 50 percent full. A catch basin sump is more than 50 percent full if the contents within the sump exceed one half the distance between the bottom interior of the catch basin to the invert of the deepest outlet of the catch basin.

Procedure:

As part of routine inspections/cleaning events, debris levels in catch basins will be recorded if the basin is found to be more than 50% full– See tracking form on page 2.

Records from consecutive inspections/cleaning events will be compared to identify basins that may need to be cleaned more or less frequently than once per year.

Inspection and maintenance for catch basins located near construction activities (roadway construction, residential, commercial, or industrial development or redevelopment) will be prioritized. Clean catch basins in such areas more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings.

If a catch basin sump is more than 50 percent full during two consecutive cleanings the Town will investigate the contributing drainage area for sources of excessive sediment loading, and address the source or clean the catch basin more frequently. Actions taken will be described in the annual report.

In cases where a catch basin inspection or cleaning reveals abnormal, non-natural discoloration or detection of petroleum and/or chemical odors, the crew performing the inspection and cleaning shall notify supervisors for proper handling of hazardous materials and the Town should implement protocols outlined in their Illicit Discharge Detection & Elimination (IDDE) Plan.

The Town will ensure proper storage of catch basin cleanings prior to disposal or reuse such that they do not discharge to receiving waters. These materials should be managed in compliance with current MassDEP policies:
<http://www.mass.gov/eea/agencies/massdep/recycle/regulations/management-of-catch-basin-cleanings.html>

Record Keeping

The Town keeps records of catch basin cleaning performed and report annually as follows:

CATCH BASIN CLEANING LOG

Reporting Period: _____ – _____

| Date Range | Location(s) | # CBs Cleaned | Volume of Cleaning |
|------------|-------------|---------------|--------------------|
| | | | |
| | | | |
| | | | |
| | | | |

RECORD OF CATCH BASINS FOUND TO BE MORE THAN 50% FULL AT CLEANING

Reporting Period: _____ – _____

Inspector: _____

Sheet _____ of _____

| CB ID | Date | Address | Location Description |
|-------|------|---------|----------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

MCM 6: GOOD HOUSEKEEPING - STREET AND PARKING LOT SWEEPING

Purpose

The purpose of this procedure is to ensure that all municipal streets and parking lots are swept in accordance with Permit conditions.

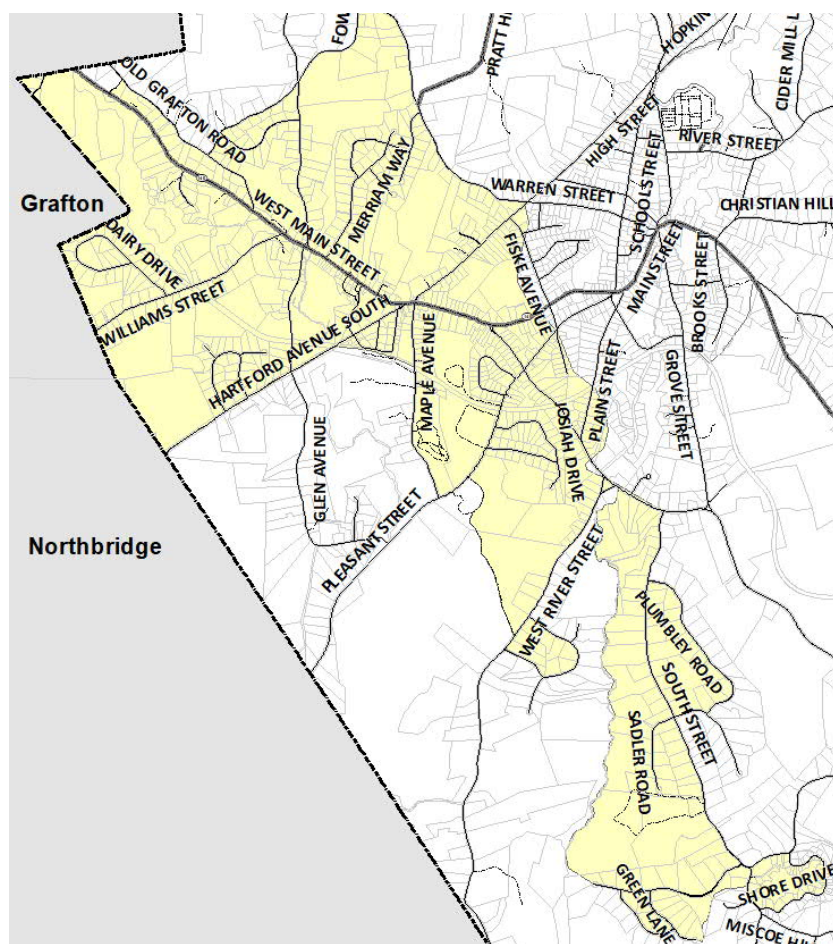
Procedure

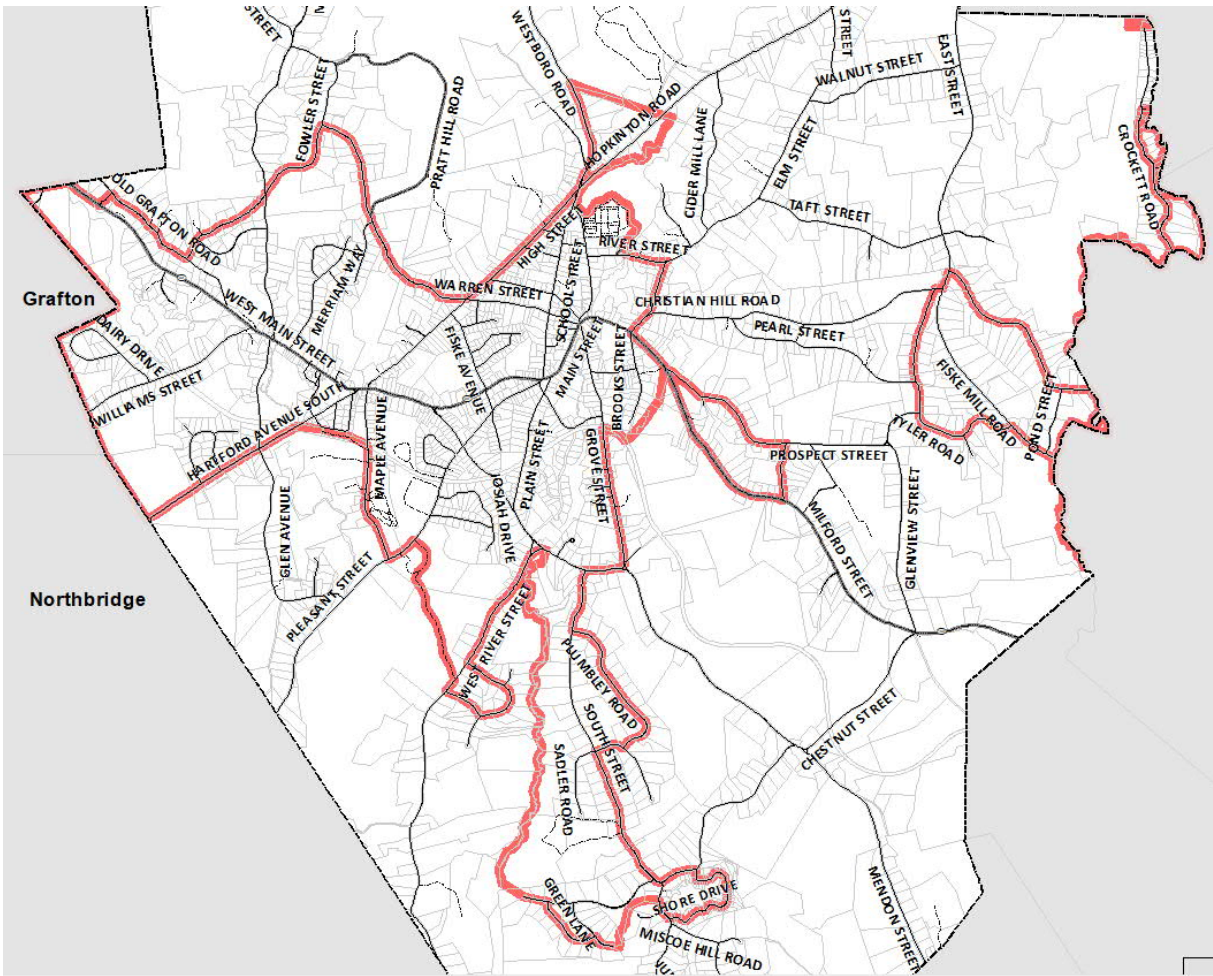
All streets within the MS4 area shall be swept and/or cleaned a minimum of once per year in the spring (following winter activities such as sanding), with the exception of rural uncurbed roads with no catch basins or high speed limited access highways. Sweeping frequency is to be increased as necessary to target areas with potential for high pollutant loads for solids, oil and grease, and metals. See Map of MS4 area requiring once/year sweeping outlined in red (next page).

In areas that discharge to certain nutrient-impaired waters, sweeping must be performed a minimum of two times per year, once in the spring (following winter activities such as sanding) and at least once in the fall (Sept 1 – Dec 1; following leaf fall). In Upton this applies to tributary areas of the West River (MA51-11 & MA51-12) due to phosphorus impairment. The West River is a tributary to the Blackstone River. See Map of area requiring twice/year sweeping in yellow (below).

The Town will ensure proper storage of street sweepings prior to disposal or reuse such that they do not discharge to receiving waters. These materials should be managed in compliance with current MassDEP policies:

<http://www.mass.gov/eea/agencies/massdep/recycle/regulations/management-of-catch-basin-cleanings.html>





Record Keeping

The Town keeps records of sweeping performed and report annually as follows:

SPRING

| Date Range | Area | Volume of Cleaning | # lots |
|------------|------|--------------------|--------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

FALL

| Date Range | Area | Volume of Cleaning | # lots |
|------------|------|--------------------|--------|
| | | | |
| | | | |

OTHER

| Date Range | Area | Volume of Cleaning | # lots |
|------------|------|--------------------|--------|
| | | | |
| | | | |

MCM 6: GOOD HOUSEKEEPING - WINTER ROAD MAINTENANCE PROCEDURE

Purpose

The purpose of this policy is to provide information to meet MS4 Permit requirements on the procedures followed by the Highway Division during any snow or ice event throughout the winter season on Town owned roads. The DPW reserves the right to modify any plan as needed to adjust to various circumstances that a storm might present and provides detailed plowing information and snowstorm procedures on their website. The DPW Director will be responsible for carrying out this policy to satisfy the Permit. Parking during snow removal shall comply with Upton's winter parking ban as referenced and described on the Highway Division website.

Priorities

1. The first priority is to ensure that police, fire and medical emergency equipment can move safely on Town streets.
2. The second priority is to open main and secondary roads for use by the public.
3. The third priority is to open residential streets.
4. The fourth priority is to open all schools, public facilities, and clear sidewalks used to walk to schools/businesses/public transportation.

Materials Used

With safety as the priority, the Town's goal is to minimize the use of salt and sand through optimization of application. This is achieved through the use, where practicable, of automated application equipment, anti-icing and pre-wetting techniques, implementation of pavement management systems, and alternate chemicals. The types of materials used by the DPW are detailed below.

- Rock Salt (Sodium Chloride): Salt is used to expedite the melting of snow and ice from the street surface and also to keep the ice from forming a bond to the street surface.
- Sand: Sand is used as an abrasive for traction on slick roadways.
- Other Materials: The Town may choose to use alternative chloride-containing materials used to treat paved surfaces for deicing, including sodium chloride, calcium chloride, magnesium chloride, and brine solutions.

Materials Storage

All salt, sand and deicing compounds are properly stored under cover to ensure they are not exposed to precipitation or otherwise carried to a catch basin, resource area or waterbodies. Diversion berms and good housekeeping practices shall be used to minimize runoff from storage areas.

Application and Equipment Calibration

Each piece of application equipment owned by the Town is calibrated prior to the winter season. Salt application shall be calibrated to dispense at minimum rates while maintaining safety rates (EPA guidance recommends 200 pounds per mile lane). Trucks equipped with pre-wetting brine tanks are calibrated to dispense at minimum rates while maintaining safety rates (EPA guidance recommends 8 gallons of pre-wet liquid to 1 ton of salt, to be varied based on temperature).

Snow Disposal

The MS4 Permit prohibits snow disposal into waters of the United States. Snow disposal activities, including selection of appropriate snow disposal sites, will adhere to the Massachusetts Department of Environmental Protection Snow Disposal Guidance, Guideline No. BWR G2015-01 (Effective Date: December 21, 2015).

Record Keeping

The Town maintains records of prioritized plow routes, miles of roads plowed annually, the quantity of salt and other materials used annually, and equipment calibration records.

MCM 6: GOOD HOUSEKEEPING - STORMWATER TREATMENT STRUCTURES INSPECTION & MAINTENANCE

Purpose

The following establishes inspection and maintenance frequencies and actions for permittee-owned stormwater treatment structures (excluding catch basins) which shall be inspected annually at a minimum.

Procedure

| BMP Description | Required Action |
|---|---|
| Water Quality Unit (Oil/Grit Separator) | Remove accumulated oils, grease and sediments |
| Proprietary Separator | Inspect and clean units according to manufacturers' recommendations |
| | Remove sediments & debris |
| Leaching Catch Basin | Remove sediments & debris |
| | Rehabilitate the basin if it fails due to clogging |
| Bio-retention Areas & Rain Garden | Remove sediments & debris |
| | Mow and/or mulch |
| | Replace vegetation if needed |
| | Remove Invasive species as needed |
| Extended Dry Detention Basin | Inspect outlets |
| | Mow upper stage, sides slopes, embankment & spillway |
| | Remove trash and debris |
| | Remove sediments from basin |
| Water Quality Swale | Make sure vegetation is adequate and slopes are not eroding, check for rilling and gullying, ponding and sedimentation |
| | Mow 3"-6" |
| | Remove sediments & debris |
| | Repair eroded areas if needed |
| | Re-seed as necessary |
| Infiltration Basin | Inspection for settlement, erosion, tree growth on embankments, condition of riprap and turf, ponding and sedimentation |
| | Mow the buffer area, side slopes, and basin bottom if grassed floor |
| | Inspect and clean pretreatment devices associated with the basin |
| | Remove sediments & debris |
| Infiltration Trench | Inspect the trench 24 hours or several days after a rain event |
| | Mow top of trench if is grassed |
| | Inspect and clean pretreatment BMPs, check inlets and outlets for clogging |
| | Remove sediments & debris |
| Infiltration Chamber | Inspect Inlets |
| | Remove sediment from pretreatment BMPs |
| | Remove sediments & debris |
| Porous Pavement | Vacuum sweep or Power wash surface |

Record Keeping

Inspection and maintenance of municipal stormwater structures will be recorded using the Stormwater BMP Inspection Form (attached). The Town will keep a log of inspections and report on the condition and maintenance performed in each annual report as follows:

STORMWATER TREATMENT STRUCTURE (BMP) INSPECTION LOG

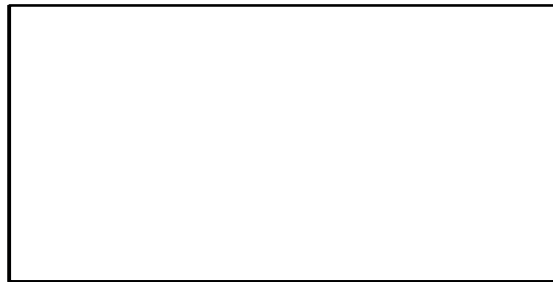
Reporting Period: _____ – _____

| Report # | Date | Inspector | BMP/Location | Status & Comments |
|----------|------|-----------|--------------|-------------------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

STORMWATER BMP INSPECTION FORM – SURFACE STRUCTURES

| | | | | | |
|------------------|---|---|--|--|------|
| BMP ID: | | | | | |
| Location: | | Length | ±ft. | Depth | ±ft. |
| Description: | | Top Width | ±ft. | Bot Width | ±ft. |
| Type: | <input type="checkbox"/> Detention | <input type="checkbox"/> Retention | <input type="checkbox"/> Infiltration | <input type="checkbox"/> Bioretention | |
| | <input type="checkbox"/> Swale | <input type="checkbox"/> Infiltration Trench | <input type="checkbox"/> Other | | |
| Inspector: | | | | Date: | |
| Recent Rainfall: | | | | | |
| Notes: | | | | | |

LOCATION MAP



MAINTENANCE REQUIRED: ☐ YES ☐ NO

(Inspect for all problems listed – provide information for required maintenance only)

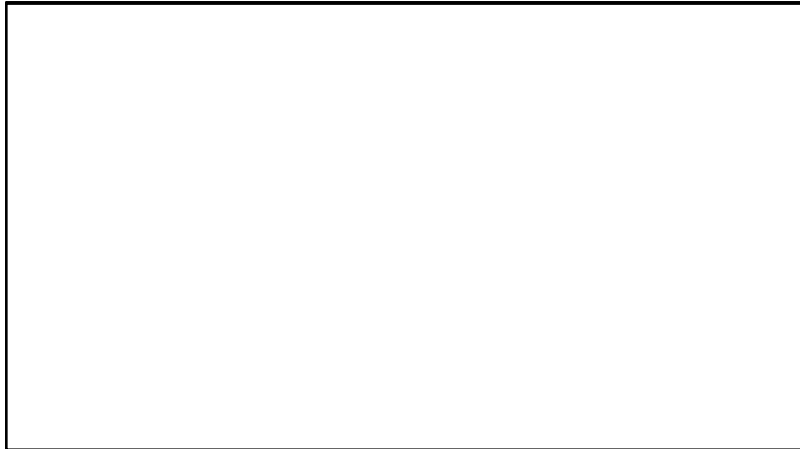
| Problem | Description | Quantity (±) | Completed (personnel) | Date |
|---|-------------|--------------|--------------------------|------|
| <input type="checkbox"/> Sediment/Debris | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Vegetation | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Erosion | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Water Pond | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Sediment Forebay | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Outlet Struct | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Intlet | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Outlet | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Riprap | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Check Dam | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Access | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Fence | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Other | | | <input type="checkbox"/> | |

BMP PHOTOS

STORMWATER BMP INSPECTION FORM – SUBSURFACE STRUCTURES

| | | | | | |
|------------------|--|--|--------------------------------------|-------------------|------|
| BMP ID: | | | | | |
| Location: | | Cover/Grate size | ±ft. | Cover/Grate shape | ±ft. |
| Description: | | Structure Diameter | ±ft. | Depth | ±ft. |
| | | Structure Material | | | |
| Type: | <input type="checkbox"/> Oil-Grit Separator | <input type="checkbox"/> Proprietary Structure | <input type="checkbox"/> Leaching CB | | |
| | <input type="checkbox"/> Infiltration Chamber/Pipe | <input type="checkbox"/> Sand Filter | <input type="checkbox"/> Other | | |
| Inspector: | | | Date: | | |
| Recent Rainfall: | | | | | |
| Add. Info: | | | | | |

LOCATION MAP



MAINTENANCE REQUIRED: ☐ YES ☐ NO

(Inspect for all problems listed – provide information for required maintenance only)

| Problem | Description | Quantity (±) | Completed (personnel) | Date |
|--|-------------|--------------|--------------------------|------|
| <input type="checkbox"/> Grate/Cover | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Structure | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Hood/Trap/Insert | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Pipes & Joints | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Ladder | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Sediment/Debris | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Vegetation/Roots | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Contaminants/Pollution | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Infiltration Capability | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Discharge | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Fence | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Access | | | <input type="checkbox"/> | |
| <input type="checkbox"/> Other | | | <input type="checkbox"/> | |

BMP PHOTOS

APPENDIX C

- **Delegation of Authority Letter**



TOWN OF UPTON, MASSACHUSETTS

DEPARTMENT OF PUBLIC WORKS

September 26, 2019

MEMO TO FILE:

Re: Documentation for delegation of "Authorized Representative" for NPDES **2016 Massachusetts** Small Municipal Separate Storm Sewer System (MS4) General Permit

This document serves to affirm that **the Director of Public Works** has responsibility for the operation of the MS4 and is hereby designated as an authorized person for signing all reports including but not limited to the Stormwater Management Plan (SWMP), Stormwater Pollution Prevention Plans (SWPPPs), inspection reports, annual reports, monitoring reports, reports on training, and other information required by the General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4) in **Massachusetts** for **the Town of Upton**. This authorization cannot be used for signing a NPDES permit application (e.g., Notice of Intent (NOI)) in accordance with 40 CFR 122.22).

By signing this authorization, I confirm that I meet the following requirements to make such a designation as set forth in Part B.11 of Appendix B of the Small MS4 General Permit:

For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official.

"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."

Derek S. Brindisi
Town Manager

September 26, 2019

TOWN MANAGER
Derek S. Brindisi

DIRECTOR OF PUBLIC WORKS
Dennis E. Westgate Jr.
One Main Street • Suite 13 • Upton, MA 01568
T: 508.529.3067 • F: 508.529.1001