

**Municipality/Organization:** Southwick  

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**EPA NPDES Permit Number:** MAR041022  

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**MassDEP Transmittal Number:** W-045481  

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**Annual Report Number & Reporting Period:** Year 11  
April 1, 2013 – March 31, 2014  

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**NPDES PII Small MS4 General Permit  
Annual Report  
(Due: May 1, 2014)**

**Part I. General Information**

**Contact Person:** Randal D. Brown, P.E. **Title:** DPW Director  

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**Mailing Address:** 454 College Highway, Southwick, MA 01077  

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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 gather and evaluate 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.

**Signature:** Randal Brown  
**Printed Name:** Randal Brown  
**Title:** DPW Director  
**Date:** 4-28-14

## **Part II. Self-Assessment**

The Town of Southwick has completed the required self-assessment and has determined that our municipality is in compliance with our Stormwater Management Program and permit conditions. The Town has aggressively mapped outfall locations throughout the Town as well as implemented Cartographic mapping for the Town. In 2012, the Town purchased and started implementing VUEWorks web-based work and asset management software as part of the effort to improve work order assignment, prioritization, tracking and documentation of Southwick's infrastructure. Southwick continues to publicize stormwater-related issues and encourages active participation by townspeople in addressing pollution and stormwater issues. The Town adopted by-laws that address the NPDES requirements while considering the existing regulations and procedures that address stormwater management at the March 15, 2008 and March 16, 2009 Town Meetings. The Southwick Stormwater and Floor Drain Bylaws and the Illicit Connection Bylaw were approved by Town voters at the March 15, 2008 Town Meeting. The Public Sewer Connections Bylaw was adopted May 12, 2003. The Sanitary Sewer Regulations were adopted on January 15, 2009, which also include specific stormwater prohibition provisions. The Town actively enforces these by-laws.

### **Acronyms Used in the Following Pages:**

BOS = Board of Selectmen  
Con Com = Conservation Commission  
CRC = Citizens Restoring Congamond  
DPW = Department of Public Works  
LMC = Lake Management Committee  
PB = Planning Board  
PRC = Parks & Recreation Commission  
PVPC = Pioneer Valley Planning Commission

**Part III. Summary of Minimum Control Measures**

**1. Public Education and Outreach**

| <b>BMP ID #</b> | <b>BMP Description</b>   | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b>                              | <b>Progress on Goal(s) – Permit Year 11</b><br>(Reliance on non-municipal partners indicated, if any)   | <b>Planned Activities</b>                                       |
|-----------------|--------------------------|--------------------------------------|--|---|---|
| 1A<br>Revised   | Classroom Education      | School District                      | Incorporate Water Quality into curriculum              | Program dropped due to school funding cuts.   | Continue to seek support for funding to restore school program. |
| 1B<br>Revised   | Westfield Evening News   | Con Com / BOS                        | Publish stormwater / water quality information 1x/year | Drinking water results are published annually.  | Publish stormwater / water quality information once per year.   |
| 1C<br>Revised   | Newspaper Press Releases | BOS                                  | Publish stormwater / water quality information 2x/year | Newspaper articles published on Town Clean-up Day, Drug Take Back Day, Annual Lake Clean-up, sewer system expansion and installation progress and on-going drainage projects. | Publish stormwater / water quality information twice per year.  |
| 1D<br>Revised   | Local Cable Access       | BOS                                  | Post stormwater / water quality information 2x/year    | Taped and televised re-runs of “Town Cleanup” and “Annual Lake Cleanup” Please refer to BMP 2C.   | Post stormwater / water quality information twice per year.     |
| 1E              | Lakeside Kiosks          | LMC                                  | Post stormwater / water quality information 2x / year  | Handout information on exotic species to boaters launching at two State Boat Ramps. Also, “No Weeds In / No   | Post stormwater / water quality information twice per year.     |

|         |                   |     |   |  |   |
|---------|-------------------|-----|---|--|---|
| Revised |                   |     |   | <p>Weeds Out" and "Do not feed waterfowl" signs posted at boat ramps. A Visitor Information Center is also present to provide information to the general public. Applicable Town Bylaw and CMR information is also posted on a kiosk at the North Boat Ramp.</p>   |   |
| IF      | Community Website | BOS | Post stormwater / water quality information 2x / year | <p>CRC and Commonwealth of Massachusetts websites are linked through the Town's website; LMC, Con Com and Community Preservation Committee also have pages on the Town website. The DPW webpage also includes information on Highway Division activities including catch basin repairs and cleaning, street sweeping and roadside cleanup. Town Cleanup Day was publicized on the Town website. These pages will continue to be expanded to include more stormwater information as the program develops.</p> | Post stormwater / water quality information twice per year. |
| Revised |                   |     |   |  |   |

**1a. Additions**

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|--|--|--|--|--|--|
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## 2. Public Involvement and Participation

| BMP ID #      | BMP Description                  | Responsible Dept./Person Name | Measurable Goal(s)                           | Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)   | Planned Activities  |
|---------------|----------------------------------|-------------------------------|--|---|---|
| 2A<br>Revised | Wetland Cleanup                  | Southwick Rotary / Con Com    | Support interested groups with trash pickup. | During 2013, the Southwick Rotary sponsored four highway clean-ups along College Highway, averaging 9 participants and 15 to 20 bags per cleanup. Con Com sponsored a major cleanup that resulted in ~15 cubic yards of trash picked up. All trash collected was disposed of at the transfer station. The 2013 Green & Clean Day was focused on South Longyard Road (3 mi) and netted 50 – 70 bags of general trash, several bags of roofing shingles, scrap metal, many tires and other roadside litter. | Continue to support interested groups by collecting trash bagged by participants. |
| 2B<br>Revised | Student Water Quality Monitoring | School Department             | Conduct water quality sampling and analysis  | The schools are still unable to continue lake water sampling program due to budget cuts. However, LMC and CRC volunteers continue to take and analyze numerous water samples during the year.   | Continue to seek support for funding to restore school program.                   |
| 2C            | Annual Lake Clean-Up             | CRC                           | Conduct Clean-Up Day                         | The CRC and LMC annual clean-up of Lake Congamond occurred on June 15,  | Hold lake clean-up day in Summer 2014.  |

|               |                                    |     |  |   |   |
|---------------|------------------------------------|-----|--|---|---|
| Revised       |                                    |     |  | <p>2013 in which 14 volunteers removed downed trees and debris from Canal Brook (lake outlet). One trailer load of logs (~25 tons) and 4 truckloads of debris were removed. An additional lake cleanup was conducted by LMC volunteers to remove 2 to 3 tons of broken / rotted docks and debris from the shoreline. DPW workers transported the materials to the disposal site.</p> <p>LMC continued to maintain ~25 trash receptacles at public access points to Lake Congamond.</p>  | <p>Continue to maintain trash receptacles at public access points to Lake Congamond.</p>  |
| 2D<br>Revised | Lakeside Maintenance               | LMC | Maintain trash receptacles at Lake Congamond | <p>Water quality sampling &amp; analysis was conducted monthly at Lake Congamond. Analyses include: temperature, pH, dissolved oxygen, conductivity, phosphorus, and chlorophyll. The Town's consultant prepared a detailed report summarizing the findings and recommendations. The Canal Restoration Subcommittee is in the process of developing a lake monitoring and action plan for long-term lake improvements. LMC volunteers obtained FY2014 funding for lake level and temperature sensors, a weather station and data loggers. Volunteers installed lake sensors and parts of the weather station before winter set in. The plan is to complete the weather station along with system wiring once the weather turns favorable.</p> | <p>Continue water quality sampling and analysis. A consultant has been retained by the Town to perform a detailed study of lake conditions and to make long term recommendations. In addition, the LMC spawned a Canal Restoration Subcommittee that was approved by the BOS on 3/22/11 to address long term canal and lake water quality improvements.</p> |
| 2E<br>Revised | Volunteer Water Quality Monitoring | CRC | Conduct water quality sampling and analysis  |   |   |

|         |                       |     |   |   |  |
|---------|-----------------------|-----|---|---|--|
| Revised | Weir Gate Replacement | LMC | Replace wood stop logs on Canal Brook (lake outlet) with sliding weir gates | LMC volunteers sought and received Southwick/Suffield funding for replacing wood stop logs with two stainless steel double-slide weir gates. These gates allow for underflow to reduce canal water stagnation or rising to reduce lake flooding during extreme storm events when the canal (outlet) tends to backflow into the lakes. | Inspect and maintain gates in operational order. |
|---------|-----------------------|-----|---|---|--|

**2a. Additions**

|  |                               |                     |                                |  |   |
|--|-------------------------------|---------------------|--------------------------------|--|---|
|  | Town-Wide Clean-Up            | CRC / Con Com / DPW | Conduct Town-Wide Clean-up Day | The Rotary Club sponsored 4 clean-ups on College Highway in 2013.  | The Rotary Club plans to continue its work on College Highway via the "Adopt a Highway" program. A 2014 town-wide cleanup is currently being planned. |
|  | Plantings for Erosion Control | Scouts              | Plant trees to control erosion | The Scout's primary project for 2013 is creating a raised walk access to Great Brook behind Southwick Town Hall.   | Continue to encourage Scouts to continue plantings in this area as well as other areas in Town in need of erosion control.                            |
|  | Household Hazardous Waste Day |                     |                                | The Board of Health typically hosts a household hazardous waste disposal once per year. The 2013 Household Hazardous Waste Collection day was held on October 12, 2013. The Southwick Police Department and Board of Health sponsored a Drug Take Back Day on April 28, 2013. Four large boxes of prescription drugs were collected. | Continue to seek funds to hold household hazardous waste disposal and Drug Take Back Day events for residents.  |

### 3. Illicit Discharge Detection and Elimination

| BMP ID #      | BMP Description                   | Responsible Dept./Person Name | Measurable Goal(s)      | Progress on Goal(s) – Permit Year 11<br>(Reliance on non-municipal partners indicated, if any)  | Planned Activities  |
|---------------|-----------------------------------|-------------------------------|-------------------------|---|---|
| 3A<br>Revised | Mapping Stormwater Outfalls       | DPW                           | Develop map of outfalls | The Town/DPW contracted the services of Cartographic, who mapped the Town for the Assessor's Office, mapped the catch basins and outfalls in the Town, along with the entire water and sewer system. This system, along with GPS and data system were made fully operational in 2008. The DPW acquired and is implementing Asset Management Software that will greatly enhance the ability to map and track stormwater system components, work orders and actions.  | Continue to update system as necessary and map additional outfalls as found. Continue to implement asset management software. |
| 3B<br>Revised | Develop Illicit Discharge Program | DPW                           | Draft Plan              | DPW has an existing Curtain Drain/ Foundation Drain Policy allowing connection to catch basin and another bylaw that prohibits discharging of sump pumps into the street or catch basins. Periodic inspections are conducted by DPW for presence of gray water or bacteria, which would result in disconnection from the system. Through storm drain outfall mapping process, potential illicit connections (sump pumps) continue to be identified and addressed. Townspeople voted to approve the new Illicit Discharge and Floor Drain Bylaws at the March 15, 2008 Special Town Meeting. | Revise procedures/ plan as necessary in future.   |



|               |                          |         |   |   |  |
|---------------|--------------------------|---------|---|---|--|
| 3C<br>Revised | Non-Stormwater By-Law    | BOS/DPW | Draft by-law.                             | During the March 2008 Town Meeting, the Town adopted an Illicit Connections By-Law regulating illicit connections and discharges to the storm drain system.   | Enforce existing by-law.   |
| 3D<br>Revised | Illegal Dumping          | DPW     | Perform regular patrols/cleanup           | DPW performed regular patrols and cleaned up illegal dumped trash. Police have ticketed those found responsible for illegal dumping. The DPW continues to pull Transfer Station Permits for violating Transfer Station policies and/or dumping trash along the road.    | Continue to perform regular patrols/cleanup.   |
| 3E<br>Revised | Water Quality Monitoring | BOH     | Regular sampling at beach sites in summer | BOH performed weekly sampling at Town Beach when open from June through August 2013. The Town Beach was closed to swimming for 7 days during 2013 for high E. coli counts. Middle and South Ponds were treated with copper sulfate for an algae bloom on August 1 2013. | Continue to perform weekly water quality monitoring at beaches during summer months. |
| Revised       |                          |         |   |   |  |

**3a. Additions**

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#### 4. Construction Site Stormwater Runoff Control

| BMP ID #      | BMP Description             | Responsible Dept./Person Name | Measurable Goal(s)       | Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)  | Planned Activities   |
|---------------|-----------------------------|-------------------------------|--------------------------|--|--|
| 4A<br>Revised | Construction Run-Off By-Law | PB / Con Com / DPW            | Draft By-Law             | The Town, with the assistance of PVPC, drafted a by-law which was approved by Town voters at the March 16, 2009 Special Town Meeting. Building Department is distributing information packages on NPDES construction and requiring builders to sign off on receipt of package. Planning Board and DPW are also informing developers of NPDES requirements and have incorporated proof of NPDES NOI submittal and development of SWPPP as permitting requirement.           | Continue to work with developers to incorporate BMPs during construction activities. |
| 4B<br>Revised | Plan Review                 | PB / Con Com / DPW            | Enforcement under by-law | Continued plan review per new by-laws.   | Continued inspection / reporting under new by-law.                                   |
| 4C            | Inspection / Reporting      | DPW / PB / Con Com            | Enforcement under by-law | Continued inspection / reporting under new by-laws. Town officials have worked with developers to ensure compliance with required BMPs during construction. A consultant was hired to oversee stormwater management, etc on a new development. The developer has been cited and fined by Con Com for violations and the violations continue to be corrected when identified. DPW cited 3 property owners for illegal discharges that have been corrected. Con Com issued 3 | Continued inspection / reporting under new by-law.                                   |

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| Revised |  |  |  |  | citations/fines for stormwater violations. |  |
| Revised |  |  |  |  |  |  |

**4a. Additions**

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**5. Post-Construction Stormwater Management in New Development and Redevelopment**

| BMP ID #      | BMP Description                    | Responsible Dept./Person Name | Measurable Goal(s)       | Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)   | Planned Activities                                 |
|---------------|------------------------------------|-------------------------------|--------------------------|---|--|
| 5A<br>Revised | Post-Construction Runoff By-Law    | PB / Con Com / DPW            | Draft By-Law             | The Town, with the assistance of PVPC, drafted a by-law which was approved by Town voters at the March 16, 2009 Special Town Meeting. | Continue to monitor need for updating bylaws.      |
| 5B<br>Revised | Construction Site Plan Review      | PB / Con Com / DPW            | Enforcement under By-Law | Continued plan review per new by-law.   | Continued inspection / reporting under new by-law. |
| 5C<br>Revised | Stormwater System Maintenance Plan | PB / Con Com / DPW            | Enforcement under By-Law | Continued inspection / reporting under new by-law.  | Continued inspection / reporting under new by-law. |
| Revised       |                                    |                               |                          |   |  |
| Revised       |                                    |                               |                          |   |  |

**5a. Additions**

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**6. Pollution Prevention and Good Housekeeping in Municipal Operations**

| <b>BMP ID #</b> | <b>BMP Description</b>                 | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b>               | <b>Progress on Goal(s) – Permit Year II</b><br>(Reliance on non-municipal partners indicated, if any)   | <b>Planned Activities</b>  |
|-----------------|--|--------------------------------------|---|---|--|
| 6A<br>Revised   | Municipal Maintenance Activity Program | DPW / PRC                            | Evaluate and draft additional polices   | All roads swept as part of spring cleanup. Some are swept 2x/year. All catch basins are vacuumed 1x/year after sweeping, some 2x/year (by lakes).   | Continue with annual sweeping and catch basin cleaning program. Draft new policies as necessary.                                   |
| 6B<br>Revised   | Training of all Municipal Activities   | DPW                                  | Initial good housekeeping training      | In-house training is done for new hires or anyone transferring within DPW. Good housekeeping training attended by Town Officials, maintenance and DPW staff on April 4, 2013.   | Conduct good housekeeping training. Training session for Town Officials, maintenance and DPW staff is scheduled for April 3, 2014. |
| 6C<br>Revised   | Catch Basin Cleaning Program           | DPW                                  | Clean 90% of catch basins annually      | Town purchased its own vacuum/jet rodder truck in 2005 and now performs catch basin maintenance with DPW employees. 100% of town catch basins within the entire town were cleaned in the months of May through October, 2013. | Clean at least 90% of catch basins in 2014.  |
| 6D<br>Revised   | Street Sweeping & Cleaning             | DPW                                  | Sweep 90% of the streets annually       | 100% of paved town streets within the entire town were swept in the months of April, May and June, 2013. Approximately 10% of streets within urbanized area were swept twice.   | Sweep at least 90% of streets in 2014.   |
|                 | Prescription & Pill Collection         | SPD                                  | Try to host one collection day per year | New program initiated in 2013 sponsored by Southwick Police   | Sponsor event during 2014.   |

Revised

Department & Board of Health.

**6a. Additions**

|                          |                          |         |  |  |  |
|--------------------------|--------------------------|---------|--|--|--|
|                          | Exotic Aquatics<br>Bylaw | LMC     |  | <p>Townpeople voted 11/30/99 to accept LMC proposed "No Weeds In/No Weeds Out" Town bylaw that addresses boats launching on Congamond Lakes – Ramp</p> <p>Attendants inspect boats entering/leaving ramps. DCR summer employee helped pass out info and educate boaters during summer 2011. New Visitor Center has lots more information available to public.</p>  | <p>Continue reminding public, boat inspection process &amp; giving out handouts on preventing spread of nuisance aquatics. Depending on FY2015 budget, DCR hopes to supply summer employees in 2014 to assist in monitoring boats in/out of ramps and educate users.</p> |
| Stormwater<br>Management |                          | LMC/DPW |  | <p>LMC began seeking Town Funds &amp; matching grants in 1995 to address erosion, sedimentation, etc. LMC received grants in 1995, 1997, 1999, 2001 &amp; 2008 for various catch basin, erosion control, sedimentation chambers, etc. New 65-space public parking area designed &amp; built in 1998 adjacent to boat ramp with 100% of stormwater sheet flowing onto grassy area where it percs naturally into ground. The Town &amp; PVPC obtained S319 and municipal funding to implement stormwater quality improvements along Congamond Ponds. This work included 16 BaySeparators, 2 detention/infiltration ponds, and 9 grassed swales that address 16 major stormwater outfalls on the Congamond Ponds.</p> | <p>Continue seeking funding for projects in watershed. Work with PVPC (S319 project manager), consulting engineering company, and contractor to implement BMP's.</p>   |

|                               |         |  |   |
|-------------------------------|---------|--|---|
| Stormwater Management (cont.) | DPW     | <p>Banks of infiltrators with emergency overflow were added to an outfall by the Rail Trail that served a small development and another local street. Two business expansion projects, a large park project and one new development have installed separators and infiltrators as recommended by the Town. In 2012, the DPW added a new deep sump catch basin, a deep sump DMH and rip-rap swale to help clean stormwater and reduce erosion on an existing outfall on Depot Street. A major DPW stormwater management project followed by paving on Nicholson Hill Road was completed. The project included 18 deep sump catch basins, 3 StormCeptors, infiltrators, plunge pools &amp; curtain drains.</p> | <p>Continue to seek opportunities to upgrade stormwater infrastructure to improve water quality. The LMC &amp; DPW are working with PVPC to seek another S319 Grant in 2014 to help address other stormwater problematic areas and outfalls into Congamond.</p> |
| Waterfowl Bylaw               | LMC     | <p>Townpeople voted 3/14/02 to accept LMC proposed "Do Not Feed Waterfowl" Town bylaw that setup fines for feeding waterfowl. Ramp Attendants hand out literature on "why" not to feed waterfowl &amp; LMC installed "Do Not Feed Waterfowl" signs at ramps &amp; public areas. Compliance is nearly 100% without having to issue fines.</p>   | <p>Continue reminding ramp users &amp; public on benefits of not feeding waterfowl (besides fines).</p>   |
| Nutrient Reduction            | LMC/DPW | <p>The LMC/DPW sponsored an "Organic Landscapes Workshop" held at Town Hall on 3/23/10. The 22 attendees heard information presented by PVPC on how to have green lawns without nasty chemicals.</p>   | <p>Depending on funding availability, conduct outreach on nutrient management.</p>  |

|  |                          |     |                                |   |  |
|--|--------------------------|-----|--------------------------------|---|--|
|  | Waste Oil and Antifreeze | DPW |                                | <p>Added waste oil &amp; antifreeze collection depot for recycling at the Transfer Station. Residents may bring in motor oil, hydraulic oil, and antifreeze.</p> <p>Contracted with new local e-cycling firm that recycles more types of electronics; Contracted with "Read Tree" for recycling of books; Contracted with Salvation Army for on-site collection boxes for clothing, shoes, etc.</p>   | <p>Continue to collect waste oil and antifreeze from residents.</p> <p>Continue searching for more recycling firms for more materials and products recycling.</p>                              |
|  | Recycling                | DPW | Increase recycling             | <p>Redesigned stormwater detention system and outfall at Lexington Circle subdivision. Implemented recommended design changes, including raising overflow invert, adding pipe, four drop-manholes to dissipate flow energy, plunge pool and secondary settling basin to existing outfall. Added one new deep sump catch basin and replaced one shallow sump basin with deep sump structure along with berm and paved swales at Foster Road/Matthews</p> <p>Road intersection to reduce road edge erosion, eliminate flooding and erosion problems, while increasing sand/silt storage capacity in those structures.</p> | <p>Maintain proper operation of updated Lexington Circle detention pond and outfall per O&amp;M.</p> <p>Continue replacing old shallow/no sump catch basins with new deep sump structures.</p> |
|  | Stormwater               | DPW | Reduce erosion, flows and TMDL |   |  |

**7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>**

| BMP ID #      | BMP Description                 | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|---------------|---------------------------------|-------------------------------|--------------------|---|--------------------|
| 7A<br>Revised | No TMDL for waters in Southwick |                               |                    |   |                    |
| Revised       |                                 |                               |                    |   |                    |

**7a. Additions**

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**7b. WLA Assessment**

**Part IV. Summary of Information Collected and Analyzed**

- The Town notes the high involvement of its citizens and various community and lake organizations in improving town-wide environmental conditions.
- Ten weekly water samples were collected and analyzed for coliform at the Town Beach located in South Pond during the 2013 beach season. The beach was closed five times (total 7 days) for E. coli test samples exceeding 235 colonies/100 ml. South Pond and Middle Pond were also treated for an algae bloom during 2013.
- Extensive water analysis by a consultant during 2009 showed the mean levels of total phosphorus ranging from 24 ppb to 103 ppb depending on depth and width (of the three) ponds. Phosphorus levels greater than 50 ppb are indicative of eutrophic conditions and indicate that the Congamond lakes are being impacted by stormwater runoff from roads and/or waterfront properties. Extensive water testing was performed by volunteers during 2013 and that data is being used by the Canal Restoration Subcommittee as part of their long-term planning efforts.



**Part V. Program Outputs & Accomplishments (OPTIONAL)**

(Since beginning of permit coverage unless specified otherwise by a \*\*, which indicates response is for period covering April 1, 2013 through March 31, 2014)

**Programmatic**

|  | (Preferred Units) | Response                     |
|--|-------------------|------------------------------|
|  | (y/n)             | Y & N (See note left)        |
| Stormwater management position created/staffed – Currently being covered by DPW, Con Com & Board of Health – Long range staffing and necessary funding being assessed. Con Com hired an outside consultant under MGL 44§ 53G to perform peer reviews of new subdivision stormwater management plans. DPW secured \$30K funding in FY2012 for Asset Management software that will aid in identifying, categorizing tracking and servicing parts of the stormwater utility. The system was procured. Training and customizing of the product to reflect Southwick’s needs continues on an ongoing basis. |                   |                              |
| Annual program budget/expenditures **  | (\$)              | 25,000                       |
| Total program expenditures since beginning of permit coverage  | (\$)              | Unknown                      |
| Funding mechanism(s) (General Fund, Enterprise, Utility, etc)  |                   | General Fund<br>+S319 Grants |

**Education, Involvement, and Training**

|  |              |                    |
|--|--------------|--------------------|
| Estimated number of property owners reached by education program(s)  | (# or %)     | 20%                |
| Stormwater management committee established  | (y/n)        | Y                  |
| Stream teams established or supported – LMC Canal Brook Restoration Subcommittee was formed in March 2012. | (# or y/n)   | Y                  |
| Shoreline clean-up participation or quantity of shoreline miles cleaned **                                 | (y/n or mi.) | 5-6 miles/ yr      |
| Shoreline cleaned since beginning of permit coverage   | (mi.)        | 30 – 40 miles      |
| Household Hazardous Waste Collection Days  |              | Normally 1x / year |

|   |               |    |
|---|---------------|----|
| <ul style="list-style-type: none"> <li>▪ days sponsored **</li> <li>▪ community participation ** (Waste oil/antifreeze and latex paint taken at Transfer Station)</li> <li>▪ material collected **</li> </ul> | (#)           |    |
| School curricula implemented May be restored pending funding restoration by regional school district  | (# or %)      |    |
|   | (tons or gal) |    |
|   | (y/n)         | NA |

**Legal/Regulatory**

|   | <i>In Place</i><br>Prior to<br>Phase II | <i>Reviewing</i><br>Existing<br>Authorities | Drafted | Draft<br>in<br>Review | Adopted   |
|---|---|---|---------|-----------------------|-----------|
| <b>Regulatory Mechanism Status (indicate with "X")</b>    |   |   |         |                       |           |
| ▪ Illicit Discharge Detection & Elimination               |   |   |         |                       | 3/15/2008 |
| ▪ Erosion & Sediment Control                              |   |   |         |                       | 3/16/2009 |
| ▪ Post-Development Stormwater Management                  |   |   |         |                       | 3/16/2009 |
| <b>Accompanying Regulation Status (indicate with "X")</b> |   |   |         |                       |           |
| ▪ Illicit Discharge Detection & Elimination               |   |   |         |                       | 3/15/2008 |
| ▪ Erosion & Sediment Control                              |   |   |         |                       | 3/16/2009 |
| ▪ Post-Development Stormwater Management                  |   |   |         |                       | 3/16/2009 |

**Mapping and Illicit Discharges**

|  | (Preferred Units) | Response |
|--|-------------------|----------|
| Outfall mapping complete   | (%)               | 100%     |
| Estimated or actual number of outfalls   | (#)               | ~225     |
| System-Wide mapping complete (complete storm sewer infrastructure) Structure locations GPS'd, flows paths not completed – New Asset Management system should be installed in June 2012 and stormwater data collected will repose in this new system. | (%)               | 100%     |
| <b>Mapping method(s)</b>   |                   |          |
| ▪ Paper/Mylar  | (%)               |          |
| ▪ CADD   | (%)               |          |

|   |                     |      |
|---|---------------------|------|
| ■ GIS   | (%)                 | 100% |
| Outfalls inspected/screened **  | (# or %)            | ~200 |
| Outfalls inspected/screened (Since beginning of permit coverage)                    | (# or %)            | 100% |
| Illicit discharges identified **  | (#)                 | 2    |
| Illicit discharges identified (Since beginning of permit coverage)                  | (#)                 | ~40  |
| Illicit connections removed ** Owner notified 2x; Fines to follow if not corrected. | (#); and (est. gpd) | 0    |
| Illicit connections removed (Since beginning of permit coverage)                    | (#); and (est. gpd) | ~32  |
| % of population on sewer  | (%)                 | 25   |
| % of population on septic systems   | (%)                 | 75   |

### Construction

|  | (Preferred Units) | Response |
|--|-------------------|----------|
| Number of construction starts (>1-acre) ** (Adjacent ANR lots total >1 acre are not covered by regs)     | (#)               | 23       |
| Estimated percentage of construction starts adequately regulated for erosion and sediment control **     | (%)               | 100      |
| Site inspections completed ** (3 <sup>rd</sup> party weekly site reviews for TOS + DPW & Con Com reviews | (# or %)          | ~12      |
| Tickets/Stop work orders issued ** Con Com & DPW issued STOP WORK at two sites                           | (# or %)          | 2        |
| Fines assessed/collected ** Fines issued by Con Com  | (# and \$)        | \$0/\$0  |
| Complaints/concerns received from public **  | (#)               | ~2       |

### Post-Development Stormwater Management

|  |          |     |
|--|----------|-----|
| Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control | (%)      | 80  |
| Site inspections (for proper BMP installation & operation) completed **  | (# or %) | ~25 |
| BMP maintenance required through covenants, escrow, deed restrictions, etc.  | (y/n)    | Y   |
| Low-impact development (LID) practices permitted and encouraged  | (y/n)    | Y   |
|  |          |     |
|  |          |     |

### Operations and Maintenance

|  |                |                           |
|--|----------------|---------------------------|
| Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **           | (times/yr)     | Ix / year                 |
| Average frequency of catch basin cleaning (commercial/arterial or other critical streets) ** | (times/yr)     | Ix / year                 |
| Qty of structures cleaned **   | (#)            | ~1,100                    |
| Qty. of storm drain cleaned **   | (%, LF or mi.) | ~200'                     |
| Qty. of screenings/debris removed from storm sewer infrastructure **                         | (lbs. or tons) | 700-800 tons (dry weight) |
| Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **             | (location)     | Town landfill / compost   |

|   |                         |           |
|---|-------------------------|-----------|
| Basin Cleaning Costs  |                         |           |
| • Annual budget/expenditure (labor & equipment)** Part of DPW overall tasks/budget                                | (\$)                    | ~\$60,000 |
| • Hourly or per basin contract rate ** Performed in-house since 2005; Estimate is for 2 DPW workers and vac truck | (\$/hr or \$ per basin) | ~\$125/hr |
| • Disposal cost** (Performed in-house since 2005, estimated vac cost if contracted out)                           | (\$)                    | ~\$30,000 |
| Cleaning Equipment  |                         |           |
| • Clam shell truck(s) owned/leased  | (#)                     | 0         |
| • Vacuum truck(s) owned/leased  | (#)                     | 1         |
| • Vacuum trucks specified in contracts  | (y/n)                   | 0         |
| • % Structures cleaned with clam shells **  | (%)                     | 0         |
| • % Structures cleaned with AquaTech B10 **   | (%)                     | 100       |

|   |                |                    |
|---|----------------|--------------------|
| (Preferred Units)   |                | Response           |
| Average frequency of street sweeping (non-commercial/non-arterial streets) **           | (times/yr)     | Ix / year          |
| Average frequency of street sweeping (commercial/arterial or other critical streets) ** | (times/yr)     | Ix / year          |
| Qty. of sand/debris collected by sweeping **  | (lbs. or tons) | 1,200 – 1,300 tons |

| Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **                  | (location)         | Town landfill / compost |
|---|--------------------|-------------------------|
| Annual Sweeping Costs   |                    |                         |
| • Annual budget/expenditure (labor & equipment)** Contracted cost plus in-house trucking) | (\$)               | \$60,000                |
| • Hourly or lane mile contract rate **  | (\$/hr. or in mi.) | \$119/hr                |
| • Disposal cost**   | (\$)               |                         |
| Sweeping Equipment  |                    |                         |
| • Rotary brush street sweepers owned/leased   | (#)                | 0                       |
| • Vacuum street sweepers owned/leased   | (#)                | 0                       |
| • Vacuum street sweepers specified in contracts   | (y/n)              | Y                       |
| • % Roads swept with rotary brush sweepers **   | %                  | 100                     |
| • % Roads swept with vacuum sweepers **   | %                  | 0                       |

|  |             |    |
|--|-------------|----|
| Reduction (since beginning of permit coverage) in application on public land of:<br>("N/A" = never used; "100%" = elimination) |             |    |
| ▪ Fertilizers  | (lbs. or %) | NA |
| ▪ Herbicides   | (lbs. or %) | NA |
| ▪ Pesticides   | (lbs. or %) | NA |
| Integrated Pest Management (IPM) Practices Implemented   | (y/n)       |    |

|  | (Preferred Units)   | Response   |
|--|---|--|
| Average Ratio of Anti-/De-Icing products used **<br>(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas) | % NaCl<br>% CaCl <sub>2</sub><br>% MgCl <sub>2</sub><br>% CMA<br>% Kac<br>% KCl<br>% Sand | 25% NaCl<br>0% CaCl <sub>2</sub><br>0% MgCl <sub>2</sub><br>0% CMA<br>0% Kac<br>0% KCl<br>75% Sand |
| Pre-wetting techniques utilized **   | (y/n or %)  | N  |
| Manual control spreaders used **   | (y/n or %)  | Y (2)  |
| Zero-velocity spreaders used **  | (y/n or %)  | Y (3)  |
| Estimated net reduction or increase in typical year salt/chemical application rate   | (±lbs/ln mi. or %)  | N/C  |
| Estimated net reduction or increase in typical year sand application rate **   | (±lbs/ln mi. or %)  | N/C  |
| % of salt/chemical pile(s) covered in storage shed(s)  | (%)   | 100  |
| Storage shed(s) in design or under construction  | (y/n or #)  | N  |
| 100% of salt/chemical pile(s) covered in storage shed(s) by May 2008   | (y/n)   | Y  |
|  |   |  |
|  |   |  |

### Water Supply Protection

|   |          |     |
|---|----------|-----|
| Storm water outfalls to public water supplies eliminated or relocated                             | # or y/n | N/A |
| Installed or planned treatment BMPs for public drinking water supplies and their protection areas | # or y/n | N/A |
| • Treatment units induce infiltration within 500-feet of a wellhead protection area               | # or y/n | N/A |