

Municipality/Organization: Southwick
EPA NPDES Permit Number: MAR041022
MassDEP Transmittal Number: W-045481
Annual Report Number & Reporting Period: Year 14
April 1, 2016 – March 31, 2017

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2016)

Part I. General Information

Contact Person: Karl Stinehart Title: Chief Administrative Officer
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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: Karl J. Stinehart
Printed Name: Karl J. Stinehart
Title: CAO
Date: 4/27/17

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 mapped outfall locations throughout the Town as well as implemented Cartographic mapping for the Town. Southwick is currently mapping additional stormwater infrastructure such as catch basins to address future permitting requirements. 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 Construction and Post-Construction Bylaws were approved by Town voters at the March 16, 2009 Town Meeting. The Town actively enforces these by-laws. The final section of the sewer interceptor was completed in 2014, allowing Southwick to increase its flow to 500,000 GPD from the 175,000 GPD cap. Southwick is in the process of awarding the contract to build a new sewer pump station and connect the schools to the Town Sewer System. Southwick is also in the process of identifying other neighborhoods that could benefit from a sewer expansion project. The factors being considered include housing density, age, small lots, high water table, septic system failure rates, proximity to the lakes and aquifer, and economic development. The Town continues to seek funding to improve the water quality of Congamond Ponds and to improve stormwater management.

Acronyms Used in the Following Pages:

SB = Select Board

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

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2018, the Town of Southwick will focus on compliance with the new requirements of the 2016 MA Small MS4 General Permit (assuming support and resources from SB and other Town departments), including assessment of existing stormwater practices, policies, and Town-wide stormwater-related programs, preparation of the Notice of Intent, and implementation of Best Management Practices to address the permit requirements for each Minimum Control Measure.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
1A Revised	Classroom Education	School District	Incorporate Water Quality into curriculum	Program dropped due to school funding cuts.
1B Revised	Westfield Evening News	Con Com / SB	Publish stormwater / water quality information 1x/year	Drinking water results are published annually.
1C Revised	Newspaper Press Releases	SB	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.
1D Revised	Local Cable Access	SB	Post stormwater / water quality information 2x/year	Taped and televised re-runs of “Town Cleanup” and “Annual Lake Cleanup” Please refer to BMP 2C.
1E Revised	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 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.
1F Revised	Community Website	SB	Post stormwater / water quality information 2x / year	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.

1a. Additions

1G	CT River Stormwater Committee	DPW/PVPC	Participate in regional stormwater committee	The Town continued its active membership in the CT River Stormwater Committee that is chaired by Patty Gambarini at PVPC (see attached annual report).
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IH	Dog Licensures	DPW	Publish stormwater / water quality information 1x/year	As Town residents paid for their annual Dog Stickers, they were given a flyer with information on a link for a survey on pet waste. The survey is intended to educate dog owners about the impacts of pet waste on water quality. Doggie bag dispensers were handed out with the survey information.
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2. Public Involvement and Participation

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2018, the Town of Southwick will focus on compliance with the new requirements of the 2016 MA Small MS4 General Permit (assuming support and resources from SB and other Town departments), including assessment of existing stormwater practices, policies, and Town-wide stormwater-related programs, preparation of the Notice of Intent, and implementation of Best Management Practices to address the permit requirements for each Minimum Control Measure.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
2A	Wetland Clean-Up	Southwick Rotary / Con Com	Support interested groups with trash pickup.	During 2016, the Southwick Rotary sponsored four highway clean-ups along College Highway, averaging 10 participants per cleanup. A total of 10 - 12 bags of trash were cleaned up from the roadside during each event. All trash collected was disposed of at the transfer station. The 2016 Green & Clean Day was held on 4/16/2016 and some 25 volunteers netted 50 large bags of general trash, along with tires, roofing shingles, scrap metal, several mattresses and other roadside litter.
Revised				
2B	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.
Revised				
2C	Annual Lake Clean-Up	CRC	Conduct Clean-Up Day	The CRC and LMC annual clean-up of Lake Congamond occurred on June 17, 2016 in which 7 volunteers removed ~6 cubic yards of debris (floating debris, dock parts) from the Lake. Southwick DPW workers transported dock debris to the disposal site. Other volunteers cleared Babb’s Beach of weeds and debris. Suffield DPW workers transported the materials to the disposal site. In accordance with the Order of Conditions, LMC contracted with Solitude Lake Management to remove several beaver dams that were clogging Canal Brook that is the only viable outlet for Congamond.
Revised				
2D	Lakeside Maintenance	LMC	Maintain trash receptacles at Lake Congamond	LMC continued to maintain ~25 trash receptacles at public access points to Lake Congamond.
Revised				
2E	Volunteer Water Quality Monitoring	CRC	Conduct water quality sampling and analysis	Water quality sampling & analysis was conducted monthly at Lake Congamond. Analyses include: temperature, pH, dissolved oxygen,

Revised				conductivity, phosphorus, and chlorophyll. The Town's consultant prepared a detailed report summarizing the findings and recommendations for short, medium and long-term actions required to improve Congamond water quality. The Canal Restoration Subcommittee is in the process of developing a lake monitoring and action plan for the recommended long-term lake improvements. LMC volunteers obtained FY2017 Town funding for processing alum treatment engineering & permitting, along with additional lake monitoring equipment and testing services. Suffield has also committed an additional \$20K in FY2017 funding to lake water quality improvements. The LMC is currently seeking \$850K state funding to implement the actual alum treatment on this Commonwealth of Massachusetts Great Pond.
2F	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.
Revised				

2a. Additions

2G	Town-Wide Clean-Up	CRC / Con Com / DPW	Conduct Town-Wide Clean-up Day	The Rotary Club sponsored 3 clean-ups on College Highway in 2016. An average of 10 volunteers per cleanup removed 10 - 12 bags of trash from the roadside at each event. The 2016 Green & Clean Day was held on 4/16/2016 and some 25 volunteers netted some 50 large bags of general trash, along with tires, several mattresses, roofing shingles, scrap metal, and other roadside litter.
2H	Plantings for Erosion Control	Scouts	Plant trees to control erosion	The Scouts have essentially completed a raised walk access to Great Brook behind Southwick Town Hall. Final work by Scout volunteers is anticipated once school is out for the year.
2I	Household Hazardous Waste Day			The Board of Health typically hosts a household hazardous waste disposal every other year; however, due to funding constraints household hazardous waste day was last held in 2013. A commercial hazardous waste disposal facility was setup in neighboring Westfield during 2014, and continues to be open for residents use year-round. The Southwick Police Department added a Drug Kiosk in 2013 at the police station so it can be accessed 365 days per year. The Southwick Fire Dept. offers needles/sharps collection at their office..
2J	Storm Drain Labeling	DPW/ Westfield River Watershed Association	Label catch basins	During 2014-15, Westfield River Watershed Association spearheaded an effort to label storm drains with "NO DUMP" markers. Over 1,000 labels were made for Southwick and volunteers installed them in 2015.

3. Illicit Discharge Detection and Elimination

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BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
3A 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.
3B 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 continue to be identified and addressed. Townspeople voted to approve the Illicit Discharge and Floor Drain Bylaws at the March 15, 2008 Special Town Meeting.
3C Revised	Non-Stormwater By-Law	SB/DPW	Draft by-law.	During the March 2008 Town Meeting, the Town adopted an Illicit Connection By-Law regulating illicit connections and discharges to the storm drain system.

3D	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.
Revised				
3E	Water Quality Monitoring	BOH	Regular sampling at beach sites in summer	BOH performed weekly sampling plus interim sampling (total 8 samples) at Town Beach when open from the last week in June through mid-August 2016. The Town Beach was closed for the season on August 21 due to lack of personnel. The Town/Lake Management Committee has contracted the services of Ken Wagner (Water Resource Services) to provide assessment and guidance for long-term water quality improvements for Congamond. Volunteers have taken literally thousands of data points over the years and an LMC member has created spreadsheets and analyzed same, along with Ken Wagner. More specific data was taken during 2016 in order to “fill in” the missing information that Ken needs to complete his analysis and provide recommendations for future actions. Ken first issued a draft report and the final report was issued on 5/2/16. Ken is now working on designing and permitting the recommended alum treatment.
Revised				

3a. Additions

3F	Outfall Monitoring			As part of the LMC’s data gathering for the consultant, wet and dry weather samples were taken at 8 stormwater outfalls into Congamond. This data has been added to the spreadsheets.
3G	Sediment Analysis			As part of the LMC’s data gathering for the consultant, coring samples of the muck at the bottom of the lake and Canal Brook were taken and analyzed by an independent lab. All levels were below typical sediment standards and Massachusetts regulatory limits.
3H	Stormwater Data Collection and Mapping Application	DPW	On-line mapping and data integration	The Town entered into an Agreement with Wright-Pierce to develop an online-mobile integrated data collection and mapping application services, in conjunction with six other neighboring communities.

4. Construction Site Stormwater Runoff Control

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BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
4A	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 informing developers of NPDES requirements and have incorporated proof of NPDES NOI submittal and development of SWPPP as permitting requirement.
Revised				
4B	Plan Review	PB / Con Com / DPW	Enforcement under by-law	Continued plan review per by-laws.
Revised				
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 by the DPW to oversee stormwater management, etc. on a new major state road project. Developers continue to be cited and fined if necessary by Con Com for violations and the violations continue to be corrected when identified.
Revised				

4a. Additions

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

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2018, the Town of Southwick will focus on compliance with the new requirements of the 2016 MA Small MS4 General Permit (assuming support and resources from SB and other Town departments), including assessment of existing stormwater practices, policies, and Town-wide stormwater-related programs, preparation of the Notice of Intent, and implementation of Best Management Practices to address the permit requirements for each Minimum Control Measure.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
5A	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.
Revised				
5B	Construction Site Plan Review	PB / Con Com / DPW	Enforcement under By-Law	Continued plan review per by-law.
Revised				
5C	Stormwater System Maintenance Plan	PB / Con Com / DPW	Enforcement under By-Law	Continued inspection / reporting under by-law.
Revised				

5a. Additions

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6. Pollution Prevention and Good Housekeeping in Municipal Operations

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2018, the Town of Southwick will focus on compliance with the new requirements of the 2016 MA Small MS4 General Permit (assuming support and resources from SB and other Town departments), including assessment of existing stormwater practices, policies, and Town-wide stormwater-related programs, preparation of the Notice of Intent, and implementation of Best Management Practices to address the permit requirements for each Minimum Control Measure.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
6A	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).
Revised				
6B	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 March 31, 2016.
Revised				
6C	Catch Basin Cleaning Program	DPW	Clean 90% of catch basins annually	100% of town catch basins within the entire town were cleaned in the months of May through October 2016.
Revised				
6D	Street Sweeping & Cleaning	DPW	Sweep 90% of the streets annually	100% of paved streets within the entire town were swept in the months of April 2016.
Revised				
6E	Prescription & Pill Collection	SPD	Try to host one collection day per year	In 2013, the Police Dept. added a MedReturn Drug Collection Unit in their lobby for 24/7 public access.
Revised				

6a. Additions

6F	Exotic Aquatics Bylaw	LMC		Townspesople voted 11/30/99 to accept LMC proposed “No Weeds In/No Weeds Out” Town bylaw that addresses boats launching on Congamond Lakes – Ramp Attendants inspect boats entering/leaving ramps. DCR summer employee helped pass out info and educate boaters during summer 2011. The Visitor Center has more information available to public.
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6G	Stormwater Management	LMC/DPW		LMC began seeking Town Funds & matching grants in 1995 to address erosion, sedimentation, etc. LMC received grants in 1995, 1997, 1999, 2001 & 2008 for various catch basin, erosion control, sedimentation chambers, etc. New 65-space public parking area designed & built in 1998 adjacent to boat ramp with 100% of stormwater sheet flowing onto grassy area where it percs naturally into ground. The Town & 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.
6G (cont.)	Stormwater Management (cont.)	DPW		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 & curtain drains. During 2015, DPW completed several significant stormwater projects: Replaced deteriorating and underperforming drainage along Iroquois Drive, Woodside Circle, Charles Johnson Road, and Fred Jackson Road; plugged an overflow from a marsh that flowed directly into Congamond Lakes; reconstructed Bugbee Road including all new drainage; and rebuilt and/or replaced several catch basins at several locations throughout Town. The DPW/Town continues to promote infiltration as applicable. During 2016 the DPW addressed erosion and local flooding issues on Lakeview Street and Will Palmer Road. In addition, DPW mandated roof-water infiltration on new construction sites.
6H	Waterfowl Bylaw	LMC		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 & LMC installed "Do Not Feed Waterfowl" signs at ramps & public areas. Compliance is nearly 100% without having to issue fines.
6I	Nutrient Reduction	LMC/DPW		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.
6J	Waste Oil and Antifreeze	DPW		Residents may bring in motor oil, hydraulic oil, and antifreeze to the waste oil & antifreeze collection depot for recycling at the Transfer Station.
6K	Recycling	DPW	Increase recycling	Contracted with local e-cycling firm that recycles electronics; Contracted with "Reading Tree" for recycling of books; Contracted with Salvation Army for on-site collection boxes for clothing, shoes, etc.

6L	Stormwater BMPs	DPW	Reduce erosion, flows and TMDL	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/Mathews Road intersection to reduce road edge erosion, eliminate flooding and erosion problems, while increasing sand/silt storage capacity in those structures. During 2016, 3 new deep sump catch basins and infiltrators were added to address a local flooding and erosion issue on Lakeview Street. Also, 6 new deep sump catch basins, macadam berm, and a rip-rapped swale was added to address a local flooding & erosion issue on Will Palmer Road.
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7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

Per Part I.D.3. of the General Permit, “if the MS4 is required to implement storm water waste load allocation provisions of the TMDL, the permittee must assess whether the WLA is being met through implementation of existing storm water control measures or if additional control measures are necessary. The permittee’s assessment of whether the WLA is being met is expected to focus on the adequacy of the permittee’s storm water controls (implementation and maintenance), not on the response of the receiving water.” Southwick’s MS4 discharges into waterbodies within the Long Island Sound watershed, which has a Final TMDL for Total Nitrogen. Because the TMDL is for a pollutant likely to be found in storm water discharges from Southwick’s MS4, our Stormwater Management Program includes the following existing stormwater control measures, as reported in the above Annual Report, that address total Nitrogen:

- Community Website (BMP 1F)
- CT River Stormwater Committee (BMP 1G)
- Wetland Clean-Up (BMP 2A)
- Annual Lake Clean-Up (BMP 2C)
- Lakeside Maintenance (BMP 2D)
- Label Storm drains (BMP 2J)
- Construction Reviews (BMP 4B, BMP 4C, BMP 5B)
- Municipal Maintenance Activity Program (BMP 6A)
- Training of All Municipal Maintenance Activities (BMP 6B)
- Catch Basin Cleaning Program (BMP 6C)
- Street Sweeping and Cleaning (BMP 6D)
- Stormwater Management (BMP 6G)
- Nutrient Reduction (BMP 6I)
- Stormwater BMPs (BMP 6L)

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.
- The Board of Health performed weekly sampling plus interim sampling (total 8 samples) at the Southwick Town Beach located on South Pond during the 2016 beach season, from June through mid-August 2016. There were no beach closures during the normal Town Beach season. The Town Beach was closed for the season on August 14 due to insufficient staff availability and an algae bloom was treated in late August 2016.
- 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 were measured in all three ponds throughout the 2015 season and showed top levels as high as 0.025 to 0.030 mg/L and bottom levels as high as 0.080 to 0.450 mg/L. Phosphorus levels greater than 50 ppb (0.050 mg/L) are indicative of eutrophic conditions and indicate that the Congamond lakes are being impacted by stormwater runoff from roads and/or waterfront properties. Water testing was performed by a contractor and volunteers during 2015. That data and decades of data were compiled into a spreadsheet and analyzed by a Lake Management volunteer. The Town contracted with consultant limnologist Ken Wagner (Water Resource Services) to further analyze the data and make recommendations for additional data and future efforts needed to improve water quality. The Town is reviewing recommendations and working towards funding and implementing recommendations.

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, 2016 through March 31, 2017)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed – Currently being covered by DPW, Con Com, Town Planner, Building Inspector & Board of Health – Long range staffing and necessary funding being assessed. Con Com hired an outside consultant under MGL Ch. 44 §53G to perform peer reviews of new subdivision stormwater management plans.	(y/n)	Y & N (See note left)
Annual program budget/expenditures **	(\$)	100,000
Total program expenditures since beginning of permit coverage	(\$)	Unknown
Funding mechanism(s) (General Fund, Enterprise, Utility, etc.)		General Fund, Chapter 90 +S319 Grants

Education, Involvement, and Training

(Preferred Units) Response

Estimated number of property owners reached by education program(s)	(# or %)	20%
Stormwater management committee established	(y/n)	N
Stream teams established or supported – LMC Canal Brook Restoration Subcommittee 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.)	50 – 60 miles
Household Hazardous Waste Collection Days		Year-long program
<ul style="list-style-type: none"> ▪ days sponsored ** Town of Southwick partnered with New England Disposal Technologies (NEDT) to provide a year-long Household Hazardous Waste Collection Program, in which Southwick residents were able to dispose of up to \$20 worth of certain hazardous waste items at NEDT’s facility in Westfield, MA once every 12 months at no charge. 	(#)	
<ul style="list-style-type: none"> ▪ community participation ** (Waste oil/antifreeze and latex paint taken at Transfer Station) 	(# or %)	
<ul style="list-style-type: none"> ▪ material collected ** 	(tons or gal)	
School curricula implemented (may be restored pending funding restoration by regional school district)	(y/n)	NA

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	Adopted
Regulatory Mechanism Status (indicate with “X”)					
<ul style="list-style-type: none"> ▪ Illicit Discharge Detection & Elimination 					3/15/2008
<ul style="list-style-type: none"> ▪ Erosion & Sediment Control 					3/16/2009
<ul style="list-style-type: none"> ▪ Post-Development Stormwater Management 					3/16/2009
Accompanying Regulation Status (indicate with “X”)					
<ul style="list-style-type: none"> ▪ Illicit Discharge Detection & Elimination 					3/15/2008
<ul style="list-style-type: none"> ▪ Erosion & Sediment Control 					3/16/2009
<ul style="list-style-type: none"> ▪ 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 installed in 2014 and stormwater data collected will repose in this new system.	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened **	(# or %)	~50%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	100%
Illicit discharges identified **	(#)	2
Illicit discharges identified (Since beginning of permit coverage)	(#)	~42
Illicit connections removed ** Owner notified; Fines to follow if had not been corrected.	(#); and (est. gpd)	2
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	~42
% of population on sewer (added 3 residential units to system during 2016)	(%)	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)	(#)	0
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100
Site inspections completed ** (3 rd party weekly site reviews for TOS + DPW & Con Com reviews	(# or %)	~3
Tickets/Stop work orders issued ** Con Com & DPW cited three sites	(# or %)	3
Fines assessed/collected ** Fines issued by Con Com	(# and \$)	\$0/\$0
Complaints/concerns received from public **	(#)	~1

Post-Development Stormwater Management

	(Preferred Units)	Response
Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	90
Site inspections (for proper BMP installation & operation) completed **	(# or %)	~5
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

	(Preferred Units)	Response
Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr.)	1x / year
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr.)	1x / year
Qty. of structures cleaned **	(#)	~1,100
Qty. of storm drain cleaned **	(%, LF, or mi.)	~500 LF
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	600-700 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 \$/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
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr.)	1x / year
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr.)	1x / year
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	1,000 – 1,200 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)	(\$)	\$35,000
• Hourly or lane mile contract rate **	(\$/hr. or ln 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: ("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)	
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	94% NaCl 0% CaCl ₂ 1% MgCl ₂ 0% CMA 0% Kac 0% KCl 5% 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 %)	25% reduction from prior year
Estimated net reduction or increase in typical year sand application rate **	(±lbs./ln mi. or %)	95% reduction from prior year
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
Storage shed(s) in design or under construction - Due to a grant through the Massachusetts Office of Environmental and Energy Affairs, the Town received funding to construct a new salt shed at the DPW Garage. The new structure was ready for use for the 2016/17 winter season.	(y/n or #)	Y

100% of salt/chemical pile(s) covered in storage shed(s) by May 2008 – New structure installed in 2016.	(y/n)	N

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	NA
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	NA
<ul style="list-style-type: none"> • Treatment units induce infiltration within 500-feet of a wellhead protection area 	# or y/n	NA