

Municipality/Organization: Belmont, MA

EPA NPDES Permit Number: MAR021074

MassDEP Transmittal Number: W-041153

**Annual Report Number
& Reporting Period:** April 1, 2017 – March 31, 2018

**NPDES PII Small MS4 General Permit
Annual Report
(Due: May 1, 2018)**

Part I. General Information

Contact Person: Jay Marcotte Title: Director of Public Works

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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: _____

Printed Name: Patrice Garvin

Title: Town Administrator

Date: _____

Part II. Self-Assessment

The Town of Belmont has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for the development of an Attitude Survey. The Town of Belmont is committed to achieving all of the BMP goals set forth herein and will continue efforts to reach full compliance.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
1-1	<i>Develop Stormwater Web Page on Town Web Site</i>	Belmont Office of Community Development, Belmont Department of Public Works, Belmont Webmaster	<ol style="list-style-type: none"> 1. Develop a Stormwater Web Page linked to the home page of the Town's web site. Post information on stormwater related issues and programs. 2. Update web page on a regular basis 	The Stormwater Web Page was updated with stormwater related activities within the Town.	Stormwater related information will continue to be posted on the website.
Revised					
1-2	<i>Post Information on Town Hall Bulletin Boards</i>	Belmont Office of Community Development, Belmont Department of Public Works, Belmont Webmaster	<ol style="list-style-type: none"> 1. Track the publications & information posted on Bulletin Board's each year 2. Post electronic versions on Belmont Stormwater Web Page 	The Town has posted information on the Bulletin Boards relative to stormwater related issues and activities.	Informational material relative to stormwater related issues and activities will be posted throughout the year.
Revised					
1-3	<i>Distribute Educational Flyers with Community Newsletter</i>	Belmont Office of Community Development, Belmont Department of Public Works, Belmont Webmaster	<ol style="list-style-type: none"> 1. Track the number of flyers distributed each year 2. Post electronic versions of flyers on Belmont Stormwater Web Page 	The distribution of flyers was discontinued.	The Town will periodically evaluate the effectiveness of re-establishing this practice.
Revised			The Town has discontinued the community newsletter. Therefore, the educational flyer will be distributed with the municipal light electric bill.		

1a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
1-4	<i>Provide Stormwater Information at “Meet Belmont”</i>	Belmont Office of Community Development, Belmont Department of Public Works	1. Provide stormwater information at the annual “Meet Belmont” event for newcomers and current residents.	A Meet Belmont event was held on August 29, 2017, the DPW and Office of Community Development provided stormwater related information.	A Meet Belmont event is currently not scheduled for 2018.
Revised					
1-5	<i>Provide Stormwater Information at Environmental Fair</i>	Belmont Office of Community Development, Belmont Department of Public Works	1. Provide stormwater information to residents at the Environmental Fair.	The Environmental Fair was not held in 2017.	An Environmental Fair is currently not planned for 2018.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
2-1	Public Review of Town's Stormwater Management Program	Belmont Board of Selectmen, Belmont Office of Community, Development Belmont Department of Public Works, Belmont Webmaster	<ol style="list-style-type: none"> 1. Obtain public input on draft SWMP 2. Finalize SWMP and make the final SWMP accessible to the public on the Town's website. 	Completed in Permit Year 1.	No activities are planned.
Revised					
2-2	A-B-C Stormwater Flooding Board to Address Issues in the Little River and Alewife Brook Areas	Belmont Board of Selectmen, Belmont Webmaster	<ol style="list-style-type: none"> 1. Execute the Environmental Joint Powers Agreement 2. A-B-C Stormwater Flooding Board to meet throughout the permit term 3. Information and Status of Board's activities to be reported on Town Web Site 	A representative from the Town is part of the Board and provided reports of meetings and activities to the Town's Board of Selectmen. Efforts of the Board focused on developing future studies and obtaining funding to conduct studies.	A representative from the Town will continue to be part of the Board and provide a report of meetings and activities.
Revised					
2-3	Sponsor Storm Drain Stenciling Program	Belmont Department of Public Works, Belmont Conservation Commission	<ol style="list-style-type: none"> 1. Identify areas for storm drain stenciling 2. Track number of storm drains stenciled 3. Track number of volunteers involved in stenciling activity 4. Summarize the condition of the inlets based on information from volunteers 5. Publicize storm drain stenciling event(s) on web site, on Town Hall Bulletin Boards and via a press release to local newspaper 	The DPW previously completed stenciling of catch basins with pre-manufactured markers.	No activities are planned.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
2-4	<i>Conduct Attitude Surveys</i>	Belmont Office of Community Development	<ol style="list-style-type: none"> 1. Develop Survey. 2. Send a press release explaining the stormwater awareness survey to the local newspapers. 3. Track the number of completed surveys. 4. Compile surveys in order to gauge any change in attitude/behavior regarding stormwater issues. 	Due to staffing limitations, the survey was not conducted.	A survey will be developed and conducted.
Revised					

2a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
2-5	<i>Conduct Lawn Care/Landscaping Survey in Spy Pond Watershed</i>	Belmont Office of Community Development	<ol style="list-style-type: none"> 1. Develop and distribute survey. 2. Send a press release explaining the lawn care/landscaping survey to local newspapers. 3. Track the number of completed surveys. 4. Compile surveys to develop future educational outreach materials. 	Completed in Permit Year 3.	No activities are planned.
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
3-1	Outfall Location Map	Belmont Department of Public Works Belmont Office of Community Development	<ol style="list-style-type: none"> 1. Develop a schedule for outfall verification and outfall identification activities. 2. Perform and track the outfall verification and outfall identification activities as scheduled. 	The Town updated the outfall location map as required.	The Town will update the outfall location map as improvements are conducted.
Revised					
3-2	Develop and Adopt a Stormwater By-Law	Belmont Board of Selectmen Belmont Town Counsel Belmont Department of Public Works Belmont Office of Community Development	<ol style="list-style-type: none"> 1. Draft the Stormwater By-Law. 2. Adopt Stormwater By-Law 3. Post Stormwater By-Law on Town's Stormwater Web Site 	The Stormwater Management and Erosion Control By-Law was approved and finalized On September 29, 2014.	No activities are planned.
Revised					
3-3	Implement an Illicit Discharge Detection and Elimination Plan	Belmont Department of Public Works Belmont Office of Community Development	<ol style="list-style-type: none"> 1. Track and prioritize new potential problem areas. 2. Track the number of illicit connections found. 3. Track the number of illicit connections eliminated. 4. Verify the elimination of illicit connections. 	The Town continued comprehensive stormwater sampling for all sub-catchment areas discharging to the Mystic River Water Shed. All outfalls were sampled for E. coli, ammonia, surfactants and chlorine. Follow-up investigations were conducted in areas tributary to Winn's Brook and Wellington Brook.	Investigations will continue in the Mystic River Watershed, with focus on the Winn's Brook and Wellington Brook sub-catchment areas.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
3-4	Conduct Infiltration/Inflow Removal from Sanitary Sewer System	Belmont Office of Community Development	<ol style="list-style-type: none"> 1. Implement construction contract to remove private inflow. 2. Track results of private inflow removal. 3. Post information on I/I Private Inflow Removal project on Stormwater Web Page and in Town Newsletter. 	No work was conducted as part of the Inflow/Infiltration removal program. However, sewer repairs were conducted as part of the 2017 Pavement Management Program that repaired defects removing inflow and infiltration sources.	The Town will develop a Private Sector Inflow Removal (PSIR) study/plan for removal of private sector inflow sources town wide. The focus will be to identify and disconnect sump pumps from sanitary sewer system.
Revised					

3a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
3-5	Development and Modeling of Sanitary and Drainage System GIS Database	Belmont Office of Community Development	<ol style="list-style-type: none"> 1. Locate all sanitary and drainage system structures (including outfalls) using GPS. 2. Incorporate record information into GIS database. 3. Perform modeling of sanitary and drainage systems. 4. Prepare Technical Memorandum prioritizing areas for future study and rehabilitation. 	The sewer and storm drain models and GIS databases continue to be updated.	The sewer and storm drain models and GIS databases will continue to be updated.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
3-6	<i>Evaluation of sanitary and drainage systems in areas proposed under pavement management program</i>	Belmont Office of Community Development	<ol style="list-style-type: none"> 1. Clean and TV inspect sewer and drainage within roadways proposed for reconstruction under Town’s pavement management program (PMP). 2. Evaluate and identify portions of system that need rehabilitation or replacement. 3. Implement recommendations in conjunction with pavement management program in these areas. 	2017 PMP rehabilitation was completed. Sanitary sewer and storm drain investigations in support 2018 PMP commenced in April 2018.	2018 PMP sewer and storm drain rehabilitation is anticipated to be completed in 2018. Further sanitary sewer and storm drain investigations are anticipated in support of the 2019 PMP.
Revised					
3-7	<i>Evaluation of Illicit Sewer Connections to Storm Drains in Wellington Brook Watershed</i>	Belmont Office of Community Development	<ol style="list-style-type: none"> 1. Sample storm drain outfalls in the Wellington Brook watershed. 2. Clean and TV inspect drainage systems in areas where illicit sewer connections are identified. 3. Eliminate the illicit connections. 4. Verify the elimination of illicit connections. 	The Wellington Brook Watershed is included in the IDDE Plan as described in BMP ID # 3-3. Dry-weather and wet-weather sampling, CCTV and dyed-water testing were conducted.	Additional sampling and investigations are planned for the Wellington Brook Watershed to identify illicit connections
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
4-1	Construction Site Inspection and Enforcement	Belmont Building Division	<ol style="list-style-type: none"> 1. Develop Site Inspection Form consistent with requirements of Stormwater By-Law 2. Perform and track inspections. 3. Track enforcement actions resulting from inspections. 	The Stormwater By-Law was approved and finalized in September 2014. Site inspection requirements is address in the By-Law.	No activities are planned.
Revised					

4a. Additions

No additions to report at this time.

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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
5-1	<i>Update Site Plan Review Process</i>	Belmont Board of Selectmen Belmont Planning Board Belmont Office of Community Development	<ol style="list-style-type: none"> 1. Review Draft Stormwater By-Law to determine what, if any Site Plan Review procedures should be modified or added. 2. If necessary, adopt revisions to Zoning By-Law. 3. If changes adopted, post Zoning By-Law revisions on Town's Web Site. 	The Stormwater By-Law was approved and finalized in September 2014. A Site Plan Review is included as part of the permitting process.	No activities are planned.
Revised					

5a. Additions

No additions to report at this time.

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
6-1	Training Program for Belmont DPW Staff	Belmont Department of Public Works	<ol style="list-style-type: none"> Continue to provide annual training sessions of all DPW personnel involved with the site operations to ensure compliance with the SPCC Plan. Train all new DPW employees in accordance with the training program requirements. Track employee participation in training and keep all records in a central location with the DPW Administration throughout the permit term. 	Annual training was completed.	Annual training will be provided.
Revised					
6-2	Catch Basin Cleaning Program	Belmont Department of Public Works	<ol style="list-style-type: none"> Clean all catch basins on an annual basis Document annual cleaning activities and keep all records in a central location with the DPW Administration throughout the permit term. 	Annual cleaning of all catch basins was completed.	Annual cleaning of all catch basins will be conducted.
Revised					
6-3	Street Sweeping Program	Belmont Department of Public Works	<ol style="list-style-type: none"> Perform street sweeping of all municipal and private roadways in Town at least 3 times/year. Perform one of the street sweepings in the spring to remove winter debris. Track street sweeping activities and keep records in a central location with the DPW Administration throughout the permit term. 	Street sweeping of all streets was conducted twice. The business district was swept twice weekly from April to November.	Street sweeping of all streets will be conducted twice next year. The business district will be swept twice weekly from April to November.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
6-4	Vehicle & Equipment Maintenance and Cleaning Policy	Belmont Department of Public Works	<ol style="list-style-type: none"> 1. Conduct weekly routine visual inspections and comprehensive written inspections on a quarterly basis. Utilize inspection sheets and document inspections in accordance with the SPCC Plan. 2. Inspection records should be kept in a central location with the DPW Administration throughout the permit term. 	The Town conducted inspections in accordance with the Spill Prevention Control and Countermeasure Plan.	The Town will continue to conduct inspections in accordance with the Spill Prevention Control and Countermeasure Plan.
Revised					
6-5	Landscaping and Lawn Care	Belmont Department of Public Works	<ol style="list-style-type: none"> 1. Continue to train DPW employees in “green landscaping” techniques. Document and keep records of employee training in a central location with the DPW Administration throughout the permit term 	The Town continues to train employees in “green landscaping” techniques and implement their existing landscaping and lawn care practices.	The Town will continue to train employees in “green landscaping” techniques and to implement existing landscaping and lawn care practices.
Revised					
6-6	Road Salt Application and Storage	Belmont Department of Public Works	<ol style="list-style-type: none"> 1. Perform routine inspections of salt storage site to determine if salt pile is covered. Document inspections and keep records in a central location with the DPW Administration throughout the permit term. 	The Town conducted routine inspections of the salt storage and salt pile area.	The Town will continue to conduct routine inspections of the salt storage and salt pile area.
Revised					
6-7	Hazardous Material Storage	Belmont Department of Public Works	<ol style="list-style-type: none"> 1. Continue to conduct and document routine inspections of the areas containing oil in accordance with to the Spill Prevention Control and Countermeasure Plan. Keep records of inspections in a central location with the DPW Administration throughout the permit term. 	The Town conducted and documented routine inspections in accordance with the Spill Prevention Control and Countermeasure Plan.	The Town will continue to conduct and document routine inspections in accordance with the Spill Prevention Control and Countermeasure Plan.
Revised					

6a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
6-8	<i>Construct Structural BMP's in area tributary to Spy Pond</i>	Belmont Office of Community Development	1. Construct some deep sump catch basins and baffle tanks near Spy Pond.	Completed in Permit Year 2.	No activities are planned.
Revised					
6-9	<i>Workshops on landscaping and non-point source pollution</i>	Belmont Office of Community Development	1. Conduct workshops	Completed in Permit year 2.	No activities are planned.
Revised					

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

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	(y/n)	
Annual program budget/expenditures **	(\$)	
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	Adopted
Regulatory Mechanism Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					
Accompanying Regulation Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					

Mapping and Illicit Discharges

	(Preferred Units)	Response
Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened **	(# or %)	
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	
Illicit discharges identified **	(#)	
Illicit discharges identified (Since beginning of permit coverage)	(#)	
Illicit connections removed **	(#); and (est. gpd)	
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	
% of population on sewer	(%)	
% of population on septic systems	(%)	

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	
Site inspections completed **	(# or %)	
Tickets/Stop work orders issued **	(# or %)	
Fines collected **	(# and \$)	
Complaints/concerns received from public **	(#)	

Post-Development Stormwater Management

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

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	
Qty of structures cleaned **	(#)	
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	
• Disposal cost**	(\$)	
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	
• Vacuum truck(s) owned/leased	(#)	
• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	
• % Structures cleaned with vector **	(%)	

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	

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

	(Preferred Units)	Response
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	
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	

Water Supply Protection

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