

Municipality/Organization: Town of Yarmouth, MA/DPW

EPA NPDES Permit Number: MAR041176

MassDEP Transmittal Number: W-035324

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

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

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Title: DPW Director

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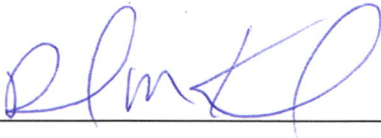
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Certification:

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: Daniel Knapik

Title: Town Administrator

Date: May 1, 2018

Part II. Self-Assessment

The Town of Yarmouth has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions. Several large ongoing projects in Yarmouth that relate directly to stormwater and water quality but are not listed below in any of the sections include:

1. Yarmouth continued work on the Parker's River Restoration Project, which includes the widening of the Route 28 Bridge and improving the Seine Pond tidal flow and water quality. The widening of the Parker's River Bridge will provide many benefits including improved tidal flushing and ecological health of the Parker's River estuary, a new improved bridge and related streetscape amenities along Route 28, and reduced nitrogen loading. A portion of the Community Preservation Act (CPA) funds allocated at the 2016 Annual Town Meeting were successfully utilized as matching funds to obtain a \$663,044 grant from the National Oceanic and Atmospheric Administration (NOAA). The Town continued to work with Louis Berger Group, Inc. on bridge design and permitting. The 100% bridge design plans have been submitted and permitting is expected to be completed in early 2018. It is anticipated that the project will begin construction in the fall of 2018.
2. Several years ago, Yarmouth applied for and received a grant through the Cape Cod Commission for a "Does It Make Sense" (DIMS) Study of a potential Stormwater Management Utility for the Town. The initial workshops were a great success, were well received by the Board of Selectmen and the general public and resulted in the backing of the idea of a possible development of a stormwater fee. However, the poor economy prevented this utility fee from moving forward. The Town has since begun appropriating \$200,000 per year for its Stormwater Management Program to address the new (2017) MS4 permit requirements.
3. For many years, the Town has been working with the Army Corps of Engineers to improve the flushing of Run Pond which is going eutrophic. The initial studies have been completed, and we will continue to search for funds to complete the project construction. In 2013, the DPW installed leaching drainage facilities within the Run Pond Watershed and these facilities have decreased the amount stormwater runoff that enters Run Pond.
4. Yarmouth was the first Cape town to use porous pavement to address stormwater infiltration adjacent to a wetland, including the Long Pond Drive sidewalk replacement project referenced in previous annual reports. The porous pavement installed over the years has been working wonderfully and has pleased abutters and conservationists alike. In 2015, we hired VHB, Inc. to design sidewalks using porous pavement on Camp Street (outlets #T-199 & 200) and Bayview Street (outlet #T-211).
5. Yarmouth continued working with its consultant on compliance towards the new MS4 permit, including drafting the NOI under the new permit for discussion with Town staff, performing a regulatory review and recommendations, and public outreach.
6. In 2011, the Town purchased and installed ArcPublisher software so that we can now share all of our drainage map information by publishing a drainage map on the Town's public drive. Other departments can view the map using free ArcReader software.
7. Obtained a CZM CPR grant to assess existing stormwater BMPs to design retrofits capable of providing additional resiliency related to climate change. Under this grant, Yarmouth assessed about 12 high-priority locations and developed several conceptual designs to serve as a starting point for further design. A final design, consisting of a retrofitted leaching catch basin to provide additional storage in a shallower configuration for use in areas of higher groundwater, was completed and can be transferred to hundreds of locations within the Town.

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 – Permit Year 16
1-1	Educational Flyer/Door Hanger	DPW/Highway Colby/Kelley	Distribute 300 copies – impaired watersheds first.	The use of door hangers has been discontinued due to staff constraints and in favor of less labor intensive public outreach methods. Continued cooperation with other Cape towns to share any Phase II related information. Continued participation in the County Coastal Resources Committee.	Continue working with Cape towns on common stormwater issues by joining the Cape Cod Stormwater Group (aka Project Storm).
Revised	<i>Educational Materials (subject broadened)</i>		<i>Work with other Cape towns to develop educational materials and share information.</i>	The Town and CEI presented “How You Can Help Protect Water Quality” to residents at a Community Conversations events at the Yarmouth Senior Center on July 21, 2017.	
1-2	Annual Public Meeting	DPW/Selectmen Colby	Hold public meeting.	Stormwater information discussed at Board of Selectmen Meeting as part of Section 208 Plan and Town sewerage discussions - meetings are televised on local cable channel. See 2-2 and 2-3.	Continue to discuss stormwater at Board of Selectmen meetings.
Revised					
1-3	Posting of Outlet Maps	DPW/IT Engineer/Barrow	Display for 1 month per year.	Mapping of known drainage infrastructure and outlet drainage areas is complete in GIS. See 3-2.	Continue to update/publish GIS drainage system map with new information as it is obtained.
Revised			<i>Complete outlet mapping.</i>		
1-4	Add to Town Web Page	IT Director S. McInnes	Add stormwater information.	The Town’s website was updated in 2016.	Evaluate additional website updates to incorporate Yarmouth’s proposed SWMP under the new permit.
Revised	<i>Add to CCC Web Page.</i>		<i>Add to CCC Web Page.</i>		
1-5	Household Hazardous Waste Collection	Water and Waste Management Divisions Colby	Hold Annual Collection.	Two Household Hazardous Materials collections were held: one on July 22, 2017 and one on October 7, 2017. Ads placed in newspaper and flyers distributed. See 2-5.	Continue with collection days as budget allows.
Revised	<i>Regional Household Haz Waste Collection with Barnstable</i>		<i>Participate in regional collection days.</i>	Additionally, three community clean-up events were held in 2017, including: 1) Yarmouth Annual Community Clean-up Day in April; 2) a COASTSWEEP event to collect trash along Bass River and south coast beaches in October and 3) the inaugural Prune the Parks day in December.	

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 – Permit Year 16
2-1 Revised	Encourage Public Participation	DPW/Highway Colby/Kelley	Complaint log set-up. <i>Purchase software.</i>	The most recent website updates include the addition of the program <i>Request Tracker</i> , which allows the public to report concerns to the Town through the website. The Town also purchased new asset management software (Utility Cloud), which allows for enhanced tracking and documentation of the management of assets such as catch basin cleaning.	Continue to provide the online <i>Request Tracker</i> to the public. Incorporate concerns into asset management tracking as appropriate.
2-2 Revised	Stormwater Management Committee (SMC) <i>Name change to: Integrated Water Resources Planning Committee (IWRPC)</i>	DPW Colby	Appoint Committee.	SMC goals given to existing committee – the Integrated Water Resources Planning Committee (IWRPC) made up of Town residents, businessmen, and employees. The Committee is no longer active; however, the Town continues to discuss stormwater issues at public Board of Selectmen meetings and has developed an in-house Stormwater Management Team comprised of the DPW Director, Town Engineer, Highway Superintendent and Conservation Agent to oversee and implement a Stormwater Management Program under the new permit	The Stormwater Management Team will continue to work with its consultant to develop and implement its SWMP.
2-3 Revised	Annual Public Meeting	DPW/Selectmen Colby	Hold public meeting.	Stormwater information discussed at Board of Selectmen Meeting as part of Section 208 Plan and Town sewerage discussions - meetings are televised on local cable channel. See 1-2.	Continue to discuss stormwater at Board of Selectmen meetings.
2-4 Revised	Storm Drain Decals	DPW/Highway Colby/Kelley	Install 50 drain decals/year.	Due to budget and staff constraints, storm drain decals were not installed this year.	Install decals near catch basins in impaired watersheds as budget and resources allow.
2-5 Revised	Household Hazardous Waste Collection	Water and Waste Management Divisions Colby	Hold Annual Collection.	Two Household Hazardous Materials collections were held: one on July 22, 2017 and one on October 7, 2017. Ads placed in newspaper and flyers distributed. See 1-5. Additionally, three community clean-up events were held in 2017, including: 1) Yarmouth Annual Community Clean-up Day in April; 2) a COASTSWEEP event to collect trash along Bass River and south coast beaches in October and 3) the inaugural Prune the Parks day in December.	Continue with collection days as budget allows.

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 – Permit Year 16
3-1 Revised	Storm Drain Outlets ID	DNR K. von Hone	Inspect impaired watersheds.	All regulated MS4 outfalls were most recently inspected and documented for dry weather flows between 2012 and 2014. Over the past 20+/- years, DNR staff has also worked with DMF and the Town Conservation Administrator to inspect impaired watersheds. Two (2) CPR grants have been used to inspect and inventory Bass River outlets. Nothing new in 2017.	DNR staff to continue its inspection program as funds allow. Future outfall inspections will be conducted under the new permit.
3-2 Revised	Drain Network Mapping	DPW/IT Engineer/Barrow	Complete outlet inventory.	Yarmouth's Town-owned drainage network is mapped and watersheds to each MS4 drainage outlet are delineated.	Continue updating MS4 drainage network map as new information becomes available.
3-3 Revised	Illicit Discharge ID	DPW/Con.Com. Engineer/ Administrator	Inspect outlets during dry weather.	All regulated MS4 outfalls were most recently inspected and documented for dry weather flows between 2012 and 2014. No dry weather flows observed.	Future outfall inspections will be conducted under the new permit.
3-4 Revised	Illicit Discharge Enforcement	Con. Com./Health Administrator/ Murphy	Review existing by-laws and regulations. <i>Con. Com. strengthen by-law, rules and regulations.</i>	Although review indicated that the Town had adequate ability to enforce illicit discharge removal, April 07 Town Meeting approved additional by-law for Conservation Commission. CCC reviewed/commented, edits made, and final rules & regulations adopted January 5, 2009. A draft IDDE Plan was developed to incorporate the requirements of the new permit.	Conservation Commission will continue to enforce new rules and regulations.
3-5 Revised	Town Employee Training	DPW/Highway Colby/Kelley	Hold annual training session. <i>Develop training program.</i>	Training of Department heads performed on April 3, 2017 regarding the requirements and responsibilities of the upcoming MS4 permit. Training presentation on good housekeeping, spill response, etc., prepared for DPW staff. Informal training is performed relative to routine maintenance. See 6-2.	Continue informal training when opportunities arise. Use training presentation to train DPW staff.

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 – Permit Year 16
4-1 Revised	Con. Com. By-law Review Change <i>Add By-law</i>	Con. Com. Administrator	Review By-law. <i>Add By-law.</i>	Ad-hoc committee (Con.Com., Planning, Eng’g) drafted by-law and new rules/regulations. April 07 Town Meeting approved by-law. No Zoning or Subdivision Regulation changes needed. CCC reviewed/commented, edits made, and final rules & regulations adopted January 5, 2009. Our consultant reviewed all stormwater regulations in 2017 and provided initial recommendations for changes to comply with the new permit requirements and to promote “green” development.	Conservation Commission will continue to enforce new rules and regulations. Continue to work with consultant on regulatory review and updates as needed to comply with new permit.
4-2 Revised	Zoning By-law Review/Change	Planning Williams	Review Zoning By-law.	No Zoning By-law changes were needed for compliance with the 2003 permit. Our consultant reviewed all stormwater regulations in 2017 and provided initial recommendations for changes to comply with the new permit requirements and to promote “green” development.	Continue to work with consultant on regulatory review and updates as needed to comply with new permit.
4-3 Revised	Subdivision Regulation Review/Change	Planning Williams	Review Subdivision Rules/Regulations.	No Subdivision Rules and Regulation changes were needed for compliance with the 2003 permit. Our consultant reviewed all stormwater regulations in 2017 and provided initial recommendations for changes to comply with the new permit requirements and to promote “green” development.	Continue to work with consultant on regulatory review and updates s needed to comply with new permit.
4-4 Revised	Construction Inspection	Building Comm <i>Con. Com. Administrator</i>	Review Zoning by-law. <i>Adopt Con. Com. rules/regulations.</i>	Ad-hoc committee (Con.Com., Planning, Eng’g) drafted by-law, and new rules and /regulations. April 07 Town Meeting approved by-law. CCC reviewed/commented, edits made, and final rules & regulations adopted January 5, 2009.	Conservation Commission will continue to enforce new rules and regulations. Continue to work with consultant on regulatory review and updates as needed to comply with new permit.

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 – Permit Year 16
5-1 Revised	Con. Com. By-law Review Change <i>Add By-law</i>	Con. Com. Administrator	Review By-law. <i>Add By-law.</i>	Ad-hoc committee (Con.Com., Planning, Eng’g) drafted by-law and new rules/regulations. April 07 Town Meeting approved by-law. No Zoning or Subdivision Regulation changes were needed to comply with the 2003 permit. CCC reviewed/commented, edits made, and final rules & regulations adopted January 5, 2009. Our consultant reviewed all stormwater regulations in 2017 and provided initial recommendations for changes to comply with the new permit requirements and to promote “green” development.	Conservation Commission will continue to enforce new rules and regulations. Continue to work with consultant on regulatory review and updates as needed to comply with new permit.
5-2 Revised	Zoning By-law Review/Change	Planning Williams	Review Zoning By-law.	No Zoning By-law changes were needed for compliance with the 2003 permit. Our consultant reviewed all stormwater regulations in 2017 and provided initial recommendations for changes to comply with the new permit requirements and to promote “green” development.	Continue to work with consultant on regulatory review and updates as needed to comply with new permit.
5-3 Revised	Subdivision Regulation Review/Change	Planning Williams	Review Subdivision Rules/Regulations.	No Subdivision Rules and Regulation changes were needed for compliance with the 2003 permit. Our consultant reviewed all stormwater regulations in 2017 and provided initial recommendations for changes to comply with the new permit requirements and to promote “green” development.	Continue to work with consultant on regulatory review and updates as needed to comply with new permit.
5-4 Revised	Post-Construction Inspection	Building Comm <i>Con. Com. Position vacant</i>	Review Zoning by-law. <i>Adopt Con. Com. rules/regulations.</i>	Ad-hoc committee (Con.Com., Planning, Eng’g) drafted by-law, and new rules and regulations. April 07 Town Meeting approved by-law. CCC reviewed/commented, edits made, and final rules & regulations adopted January 5, 2009. Our consultant reviewed all stormwater regulations in 2017 and provided initial recommendations for changes to comply with the new permit requirements and to promote “green” development.	Conservation Commission will continue to enforce new rules and regulations. Continue to work with consultant on regulatory review and updates as needed to comply with new permit.

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 – Permit Year 16
6-1 Revised	Develop BMP Policy Guide	DPW Colby	Prepare and print guide. <i>Work thru CCC to develop guide.</i>	Evaluated developing a BMP guide specific to the Cape and determined it was not necessary. Rely on DEP Stormwater Management Policy and other guides such as “Coastal Stormwater Management Through Green Infrastructure: A Handbook for Municipalities” 2014. Keeping up with innovative BMPs such as the EPA funded nitrogen removal BMPs installed on the Cape in 2015. Under a CZM grant, prepared conceptual designs for three stormwater BMPs to treat roadway runoff for nitrogen and bacteria removal. and to design and install one BMP.	Continue to work with other Cape towns and attend pertinent seminars to increase BMP knowledge.
6-2 Revised	Town Employee Training	DPW/Highway Colby/Kelley	Hold annual training session. <i>Develop training program.</i>	Training presentation on good housekeeping, spill response, etc., prepared for DPW staff. Informal training is performed relative to routine maintenance. See 3-5.	Continue informal training when opportunities arise. Use new training presentation to train DPW staff.
6-3 Revised	Coordinate with Con. Com.	DPW/Con.Com Kelley/ Administrator	Hold annual update meeting.	Annual meeting held, and numerous project-specific meetings and field visits held. Con.Com. attended April 3, 2017 training/meeting regarding Yarmouth’s Stormwater Management Program and has been an active participant in the generation of the program and associated Town regulations.	Hold annual meeting, and numerous project-specific meetings and field visits as needs arise.
6-4 Revised	Hazardous Materials Storage Program	Health Division B. Murphy	License and inspect all businesses.	Licensed about 180 and inspected/contacted most businesses.	License and inspect/contact businesses.
6-5 Revised	Used Oil Recycling	DPW/Highway Colby/Kelley	Burn all used oil to heat garages.	Burned all Town-produced used oil at Waste Management and Highway Divisions to heat Town garages. Also, recycled 4,100 gallons of used motor oil received from residents.	Burn all Town-produced used oil at Waste Management and Highway Divisions to heat Town garages.

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 15 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 16
7-1	Boat Pump-out Program	DNR K. von Hone	Provide boat pump-out service.	Replaced 1995 pump-out boat with new 23' pump-out boat in 2015 and continue to offer pump-out services at the land-based pump-out station located at Packet Landing in Bass River. Collected and properly disposed over 2,200 gallons of wastewater from vessels using this free pump-out service.	Maintain and operate the boat pump-out facilities.
Revised			<i>Construct permanent boat pump-out facility on Bass River.</i>		
7-2	Street Sweeping Program	DPW/Highway Colby/Kelley	Annually sweep roads in impaired watersheds.	Town swept all Town-owned roads and parking lots.	Sweep all town-owned roads in regulated urbanized areas in accordance with new permit.
Revised					
7-3	Catch Basin Cleaning Program	DPW/Highway Colby/Kelley	Clean 200+/- priority catch basins/year.	Inspected over 1,100 storm drains and cleaned over 590 storm drains.	Inspect and clean (if needed) priority town-owned catch basins within regulated urbanized areas and Town wetland watersheds.
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 – Permit Year 16
7-4	Improve Drain Outlet Quality	DPW Colby	Improve quality of 2 drain outlets/year.	Continued to prioritize stormwater discharges into embayments and estuaries for future removal as funds allow. Installed 30 leaching galleys up stream of the Run Pond outlet thereby reducing flow to the wetland.	Continue to apply for available grants to improve drainage outlets through removal/reduction of discharges. The Town will apply for a CZM CPR grant to construct the Gleason Avenue BMP and to design another stormwater BMP on Bayview Street.
Revised				Using Town and CZM CPR grant funds, completed three conceptual designs that the Town could implement during roadway improvement projects to treat roadway runoff (nitrogen and bacteria). Advanced the roadway intersection of Pawnee Road and Nauset Lane to final design and constructed the stormwater BMP in June 2017. Received another CZM CPR grant to advance another of the three conceptual designs to a final design status. This included final design of a hybrid bioretention and underground gravel wetland cell at the southeast corner of Gleason Avenue, capable of removing nitrogen and bacteria from stormwater. Final design was completed in March 2017.	
7-5	Encourage MHD Action (<i>Now MDOT</i>)	DPW Colby	Share Information.	Paid for design plans meeting MDOT requirements for drainage leaching facilities to leach stormwater on to Town property from State Route 28 (at Bass River). MDOT contractor finalized installation of system in 2012.	Continue to collaborate with MDOT as opportunities arise.
Revised					

Part IV. Summary of Information Collected and Analyzed

Information provided above in Part III.