

Municipality/Organization: Orleans, MA

EPA NPDES Permit Number: MAR041146

MaDEP Transmittal Number: W-035744

**Annual Report Number
& Reporting Period:** No. 6: March 08-March 09

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Mark Budnick

Title: Manager, Highway Department

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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: John F. Kelly

Title: Town Administrator

Date: May 1, 2009

At the time of our NOI the Town of Orleans permit eligibility in regards to the protection of Historic Properties was listed as pending. From investigations in permit year 6 it was concluded that the MS4 discharges within the Town of Orleans do not adversely affect properties listed on the National Register of Historic Places and historical sites in Town.

Part II. Self-Assessment

The Town of Orleans has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for the following provisions:

Public Education and outreach:

A.1: Develop and Broadcast VIA PA CATV Storm water Video; This goal was not achieved in Permit Year 6. Town purchased Storm water Video late in Permit Year 6 but it was not received by the end of Permit Year 6 and has not been received as of the date of this report. Once received, the goal for Permit Year 7 is to broadcast the video frequently on the PA CATV channel.

A.5: Education flyers: The goal for Permit Year 6 was not achieved. Flyers purchased near end of Permit Year 6 to be distributed in permit year 7. It should be noted that the additional BMP to our Public Education, A.6 was achieved in Permit Year 6. Additional BMP, A.7 to be added to goals for Year 7

Illicit Discharge and Detection:

C1: Storm Water System Mapping and Database development: The goal to complete the storm water mapping database was not entirely achieved in Permit Year 6. A thorough investigation of all available information on outfalls was utilized to locate ALL outfalls with GPS and put into GIS data base. Any mapping of storm water sewer systems feeding outfalls was compiled and compared to drainage information already existing in the GIS database. Approximately 50% of catch basins known to not already be in the GIS database were located with GPS and entered into database. It should be noted that paper files of most drainage systems existed in prior Permit year 1. The goal of this BMP was to develop a GPS storm water database. Due to budget constraints, the Trimble GIS locator was not purchased until Permit Year 6 enabling the Town to cost effectively collect data. The goal for Permit Year 7 is to complete GPS location of all storm sewer catch basin and storm water system component information for input into GIS database.

The Town has taken steps to contract with a consultant to assist in achieving this goal.

C.2 Review existing bylaws. The intent of the Storm Water Bylaws that were adopted in May 2008 was to prohibit all discharges to municipal storm sewer systems. Review of Storm Water Bylaws in comparison to the requirements of the section 122.34(b)3 of the phase II rule, showed that language in bylaw may not be specific enough to ensure the prohibition of misconnections and illicit discharges and meet the intent of the Phase II rule. Further review of bylaw to be performed in Permit Year 7 with goal to amend the

Storm Water Bylaw if deemed necessary.

C.3 Identify and Document Illicit Connections: The permit year 6 goal to develop a formal IDDE plan was not achieved. This will be a primary goal for permit year 7. As noted above, in permit year 6, all known outfalls were located and monitored for presence of flow when locating. The outfall location work was not coordinated to be done during “dry weather” but will be used to prioritize and coordinate our dry weather outfall monitoring program in permit year 7. The Town continued to monitor for unusual flow conditions during our annual catch basin cleaning operations.

Notable Accomplishments:

In Permit Year 6 the Town awarded a \$95,000 contract for storm water remediation project for Crystal Lake.

D.2, E1: Drainage and Erosion and Sediment Control bylaws were adopted at Town Meeting in May 2008

Additions to program in permit year 6 report:

F6: Nutrient Loading reduction: To reduce maximum nutrient loading the Town has taken on long term planning for municipal sanitary sewers. As an immediate action to reduce nutrients, the Town has adopted an Organic Based Land Management Program for Town properties in accordance with NOFA guideline for Town properties. See BMP F.6

F.7 Trash Management. This BMP was in original SWPPP but found that activities towards this BMP were not noted in prior year reports. The Town maintains a proactive trash management program. Trash collection on all roadways, and town landings is performed by the Highway Department. The Parks Department manages all trash collection activities at all Town Parks and Beaches. Trash is collected daily from all Landings and Beaches and sensitive area on a daily basis during summer season.

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7 and beyond
A.1 Revised	Develop and Broadcast Via PA CATV Storm Water Video	Mark Budnick, Highway Manager	One per year – in conjunction with County Group	Town recently purchased the “After the Storm” video to be shown on the Towns cable channel. At the time of this report, the town had not yet received the video.	Continue broadcasting of “After the Storm” Video. Seek other related informational storm water related announcements on Cable channel.
A.2 Revised	Household Hazardous Waste Control	Mark Budnick, Highway Manager	Annual HHW Collection	Reciprocal HHW collections are held with the Town of Eastham. Collection day in Eastham was held on July 19th and in Orleans on September 20th	Annual collection days to held again in Eastham and Orleans on July 18 th and Sept. 19 th respectively.
A.4 Revised	Web Page Information	Mark Budnick & Peter VanDyck, IT Coordinator	Short Article – one per year	Additional links and articles placed on website.	Continue development of web page. Provide short annual articles.
A.5 Revised	Education Flyers	Mark Budnick, Highway Manager	Distribute 2 per year at Transfer Station	Obtained handouts for distribution at Transfer Station and Town Facilities in year 7	Research new ideas and continue to distribute Educational material. Distribute handouts at Transfer Station and place in Town Facilities

1a. Additions

A.6	Other Public Education In Year 6	Mark Budnick, Highway Manager		“The Orleans Blue Pages “Water Quality protection booklet developed by the Orleans Pond Coalition was distributed to residents made available at Town Hall. Pet Waste Pollution Awareness Posters were displayed at local Veterinary Hospitals and Kennels. Other posters displayed at community facilities.	Continue to look for informative sources for public awareness.
A.7	Storm Drain Stenciling	Mark Budnick, Highway Manager	Stencil storm drains leading to critical priority outfalls.	Purchased markers and stencils and identified initial locations for year 7 activities	Will work with Town Water Quality Task force volunteers or other community groups to stencil drains

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7 and beyond
B.1 Revised	Water Quality Monitoring Program	Water Quality Task Force	Ongoing	Water quality monitoring has been performed over the year. Task force meets once per month.	Continue monitoring water quality
B.2 Revised	Estuaries Program	Director of Planning and Development	Ongoing	Ongoing study. Town continued work on developing a comprehensive wastewater management plan (CWMP) to achieve compliance with TMDL's stated in MEP report for Pleasant Bay	Anticipate water quality reports for all town estuaries in 2009. Work on CWMP to continue.
Revised					
Revised					
Revised					

2a. Additions

B.3	Storm Drain Stenciling	Mark Budnick, Highway Manager	Stencil storm drains in downtown area and other at systems leading to critical priority outfalls.	Purchased markers and stencils and identified initial locations for year 7 activities	Will work with Town Water Quality Task force volunteers or other community groups to stencil drains
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B.4	Outfall Monitoring	Mark Budnick Hwy Manager	Perform dry weather outfall monitoring of all outfalls that were initially observed to have flow during the GIS locating.	During the GIS locating of outfalls, some outfalls were observed to have flow. These were identified.	Will work with Town Water Quality Task Force and/or Pond's Coalition volunteers to perform dry weather monitoring.
B.5	Maintain Animal Waste collection Bags in key areas of concern	Orleans Pond Coalition		"Mutt Mitts" had been installed in earlier plan years but were not noted. Maintenance of these devices continued in year 6.	Continued maintenance of "Mutt Mitts"

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7 and beyond
C.1 Revised	Storm Water System Mapping and Database Development	Mark Budnick, Highway Manager	Comprehensive town-wide survey by year 2 – as funding allows	All outfalls were located with GPS and placed in GIS database. Organized mapping of MS4s related to outfalls. 50% of missing information located with GIS.	Complete GIS database development of all MS4s. Consultant to provide support in GIS data base development.
C.2 Revised	Review Existing By-Laws	Director of Planning and Development	Review existing by-laws and adopt storm water ordinance FY06	Storm Water Ordinances and Sedimentation/Erosion control by-laws. Were adopted at May 2008 Town Meeting.	Continue monitoring and enforcement of ordinance and bylaws Review of
C.3 Revised	Identify and Document Illicit Connections	Mark Budnick, Highway Manager	Review C.1 results, finalize database by Year 4	Ongoing.	Continue review of mapping results and identification during catchbasin cleaning and pipe cleaning and inspection. Develop formal plan that incorporated both drainage Maintenance and Illicit discharge and detection. D
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7 and beyond
D.1 Revised	Review Existing By-Laws	Director of Planning and Development	Review existing by-laws and adopt construction ordinance	Town adopted the Drainage and Erosion and Sediment control bylaws at Town meeting in May 2008	Enforce bylaws.
D.2 Revised	Propose amendments and articles at Town Meeting	Director of Planning and Development	Spring 06 Ongoing	Town adopted the Drainage and Erosion and Sediment control bylaws at Town meeting in May 2008	Will continue to evaluate effectiveness of bylaws and amend if necessary

4a. Additions

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6 and beyond
E.1	Review Existing By-Laws	George Meservey, Director of Planning and Development	Review existing by-laws and adopt Runoff Control Ordinance F	Town adopted the Drainage and Erosion and Sediment control bylaws at Town meeting in May 2008. Any plans for significant development is reviewed for compliance through the Site Plan Review committee.	Will continue to evaluate effectiveness of bylaws and amend if necessary
Revised					
E.2	Propose amendments and articles at Town Meeting	George Meservey, Director of Planning and Development	Ongoing	See E.1	Will continue to evaluate effectiveness of bylaws and amend if necessary
Revised					
Revised					
Revised					

5a. Additions

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7 and beyond
F.1	Street Sweeping	Mark Budnick, Highway Manager	Annual winter cleanup and as-necessary	All streets were swept at least once, many more than once during the year. 800 tons of street sweepings were collected during the year.	Continue Annual street sweeping program
Revised					
F.2	Catch Basin Cleaning	Mark Budnick, Highway Manager	Clean all basins in town on yearly rotating schedule	All basins received an annual cleaning. 375 tons of catch basin cleanings were collected during the year.	Continue Annual catch basin cleaning program
Revised					
F.3	Develop Drainage System Improvement Plan	Mark Budnick, Highway Manager	Prepare Capital Plan Article for FY06	Ongoing Capital Plan includes allotment for drainage improvements. Annual construction plan for water quality Improvements projects developed annually.	Continue funding in Capital plan. Continued remediation of outfalls and instituting BMPs.
Revised					
F.4	Propose Amendments and Articles at Town Meeting	Mark Budnick, Highway Manager	Prepare Capital Plan Article for FY10	See comment F.3	See comment F.3
Revised					
F.5	Maintain Animal Waste collection Bags in key areas of concern		Prepare Capital Plan Article for FY10	“Mutt Mitts had been installed in earlier plan years but were not noted. Maintenance of these devices continued in year 6.	Continued maintenance of “Mutt Mitts”
Revised					
		Orleans Pond Coalition			

6a. Additions

F.6	Nutrient loading reductions	Paul Fulcher Parks and Beaches Superintendent	Implement Organic based Land Management Program	As an immediate action to reduce nutrients, the Town has adopted a Organic Based Land Management Program in accordance with NOFA guideline for Town properties	Continue towards reducing maximum daily nutrient loading. Continue organic based land management program
F.7	Trash Management	Mark Budnick Highway Dept Paul Fulcher Parks and Beaches	Maintain a proactive trash collection program	Departments maintain and active Trash collection program at all Town properties	Continue proactive Trash Management program

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7 and beyond
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Beach monitoring performed by Town of Orleans Health Department was collected in Permit year 6

Orleans Water Quality data was collected again in Permit year 6.

Data available upon request.