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Municipality/Organization: Orleans, MA

EPA NPDES Permit Number: MAR041146

MADEP Transmittal Number: W-035744

Annual Report Number & Reporting Period: No. 1: March 03-March 04

1st Year

MAY 05 2005

MUNICIPAL ASSISTANCE UNIT

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Robert L. Bersin, P.E. Title: Manager, Highway Department

Telephone #: 508-240-3790 Email: rbersin@town.orleans.ma.us

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: April 6, 2005

Part II. Self-Assessment

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

Part II.F Failed to submit annual report on or before May 1, 2004.

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 1 (Reliance on non-municipal partners indicated, if any) | Planned Activities -- Permit Year 2 |
|----------------|---|--|---|---|---|
| A.1 Revised | Develop and Broadcast Via PA CATV Storm Water Video | Robert L. Bersin, P.E., Highway Manager | One per year – in conjunction with County Group | No progress | County Group to produce 60 second radio broadcast in lieu of CATV broadcast |
| A.2 Revised | Household Hazardous Waste Control | Robert L. Bersin, P.E., Highway Manager | Annual HHW Collection | Collection day held September 18, 2004 | Annual collection day |
| A.3 Revised | Education Flyers | Robert L. Bersin, P.E., Highway Manager | Distribute 2 per year at Transfer Station | Flyers distributed at Transfer Station | Continue flyer distribution |
| A.4 Revised | Web Page Information | Robert L. Bersin, P.E. & Peter Vandyck, IT Coordinator | Short Article – one per year | Highway Department web page not yet fully developed by Town. | Continue development of web page. Once developed, provide short annual article. |
| Revised | | | | | |

1a. Additions

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2. Public Involvement and Participation

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 2 |
|----------------|----------------------------------|--------------------------------------|--|---|--|
| B 1 Revised | Water Quality Monitoring Program | Water Quality Task Force | Ongoing for past ten years | 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 for past 2 years of 3 year study | Ongoing sampling and study. | Anticipate water quality reports for all town estuaries by middle of 2006. |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

2a. Additions

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3. Illicit Discharge Detection and Elimination

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 2 |
|----------|---|--|--|--|--|
| C.1 | Storm Water System Mapping and Database Development | Robert L. Bersin, P.E., Highway Manager & Americorps | Comprehensive town-wide survey by year 2 – as funding allows | Mapping by Americorps volunteers is complete. Work on database is ongoing – approximately 25% of data has been included in the database. | Apply for MA Office of Coastal Zone Management grant money to assist in database development. Complete database development. |
| Revised | | | | | |
| C.2 | Review Existing By-Laws | Director of Planning and Development | Review existing by-laws and adopt storm water ordinance FY06 | No progress. | Draft storm water ordinances and sedimentation/erosion by-laws. Prepare for Town Meeting in Spring 2006. |
| Revised | | | | | |
| C.3 | Identify and Document Illicit Connections | Robert L. Bersin, P.E., Highway Manager | Review C.1 results, finalize database by Year 4 | Ongoing, as database is also in development stage. Two illicit connections have been identified and remediated. | Continue review of mapping results. |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

3a. Additions

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4. Construction Site Stormwater Runoff Control

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 2 |
|----------|---|--------------------------------------|--|--|---|
| D.1 | Review Existing By-Laws | Director of Planning and Development | Review existing by-laws and adopt construction ordinance FY 06 | Drafted ordinance for control of construction-related stormwater runoff. | Anticipate adoption of ordinance by selectmen by the end of the 2004 calendar year. |
| Revised | | | | | |
| D.2 | Propose amendments and articles at Town Meeting | Director of Planning and Development | Spring 06 | Drafted ordinance. | Anticipate adoption of ordinance by selectmen by the end of the 2004 calendar year. |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

4a. Additions

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

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 2 |
|----------|---|---|---|--|--|
| E.1 | Review Existing By-Laws | George Meservey, Director of Planning and Development | Review existing by-laws and adopt Runoff Control Ordinance FY06 | No progress. | Develop runoff control ordinance to prevent runoff and erosion after construction projects. Prepare for Town Meeting in Spring 2006. |
| E.2 | Propose amendments and articles at Town Meeting | George Meservey, Director of Planning and Development | Spring 06 | No progress. | Prepare for Town Meeting in Spring 2006. |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

5a. Additions

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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 1 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 2 |
|----------|---|---|--|---|--|
| F.1 | Street Sweeping | Robert L. Bersin, P.E., Highway Manager | Annual winter cleanup and as-necessary | All streets were swept at least once, many more than once during the year. 894 tons of sand were collected during FY04. | Annual street sweeping |
| Revised | | | | | |
| F.2 | Catch Basin Cleaning | Robert L. Bersin, P.E., Highway Manager | Clean all basins in town on yearly rotating schedule | All basins received an annual cleaning. 250 tons of catch basin cleanings were collected during FY04. | Annual catch basin cleaning |
| Revised | | | | | |
| F.3 | Develop Drainage System Improvement Plan | Robert L. Bersin, P.E., Highway Manager | Prepare Capital Plan Article for FY06 | Ongoing. \$2.5-million article is currently being developed. | Continue preparation for FY06. |
| Revised | | | | | |
| F.4 | Propose Amendments and Articles at Town Meeting | Robert L. Bersin, P.E., Highway Manager | Spring 06 | No progress. | Prepare for Town Meeting in Spring 2006. |
| Revised | | | | | |
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6a. Additions

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 1 (Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 2 |
|----------|-----------------|-------------------------------|--------------------|--|------------------------------------|
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

7a. Additions

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7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

No storm water sampling has been completed.
 Current storm water assessment of Town Cove watershed will recommend sampling protocol.
 Beach monitoring performed by Town of Orleans Health Department.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

| | | |
|--|-------|--|
| Stormwater management position created/staffed | (y/n) | |
| Annual program budget/expenditures | (\$) | |
| | | |
| | | |

Education, Involvement, and Training

| | | |
|---|-----------------------------|--|
| Estimated number of residents 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.) | |
| Household Hazardous Waste Collection Days | | |
| <ul style="list-style-type: none"> ▪ days sponsored ▪ community participation ▪ material collected | (#) (%) (tons or gal) | |
| School curricula implemented | (y/n) | |
| | | |
| | | |

Legal/Regulatory

| | In Place Prior to Phase II | Under Review | Drafted | 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

| | | | | |
|--|-------------------|--|--|--|
| Outfall mapping complete | (%) | | | |
| Estimated or actual number of outfalls | (#) | | | |
| System-Wide mapping complete | (%) | | | |
| Mapping method(s) | | | | |
| ▪ Paper/Mylar | (%) | | | |
| ▪ CADD | (%) | | | |
| ▪ GIS | (%) | | | |
| Outfalls inspected/screened | (# or %) | | | |
| Illicit discharges identified | (#) | | | |
| Illicit connections removed | (#) (est. gpd) | | | |
| % of population on sewer | (%) | | | |
| % of population on septic systems | (%) | | | |
| | | | | |
| | | | | |

Construction

| | | |
|---|------------|--|
| 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 completed | (# or %) | |
| Estimated volume of stormwater recharged | (gpy) | |
| | | |
| | | |

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) | |
| Total number of structures cleaned | (#) | |
| Storm drain cleaned | (LF or mi.) | |
| Qty. of screenings/debris removed from storm sewer infrastructure | (lbs. or tons) | |
| Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.) | | |
| Cost of screenings disposal | (\$) | |
| | | |
| | | |
| 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) | |
| Cost of sweepings disposal | (\$) | |
| Vacuum street sweepers purchased/leased | (#) | |
| Vacuum street sweepers specified in contracts | (y/n) | |
| | | |
| | | |

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|--|-------------|--|
| Reduction in application on public land of: (“N/A” = never used; “100%” = elimination) | | |
| ▪ Fertilizers | (lbs. or %) | |
| ▪ Herbicides | (lbs. or %) | |
| ▪ Pesticides | (lbs. or %) | |
| | | |
| | | |

| | | |
|--|---|--|
| Anti-/De-Icing products and ratios | % NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand | |
| Pre-wetting techniques utilized | (y/n) | |
| Manual control spreaders used | (y/n) | |
| Automatic or Zero-velocity spreaders used | (y/n) | |
| Estimated net reduction in typical year salt application | (lbs. or %) | |
| Salt pile(s) covered in storage shed(s) | (y/n) | |
| Storage shed(s) in design or under construction | (y/n) | |
| | | |
| | | |