



## Town of Orleans

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Highway  
Department /  
Transfer Station  
Manager,  
Mark Budnick

## FAX TRANSMITTAL FORM

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Name: Mark Budnick

Title: Highway Department / Transfer Station Manager

Remarks:

ATTACHED IS THE PHASE II STORMWATER

ANNUAL REPORT FOR 2006

PLEASE CONTACT ME WITH ANY

QUESTIONS OR COMMENTS.

Date : JANUARY 26, 2007

This is page 1 of 14

**Municipality/Organization:** Orleans, MA

**EPA NPDES Permit Number:** MAR041146

**MaDEP Transmittal Number:** W-035744

**Annual Report Number**

**& Reporting Period:** No. 3: March 2005-March 2006

## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

**Contact Person:** Mark Budnick

**Title:** Highway Dept. Superintendent

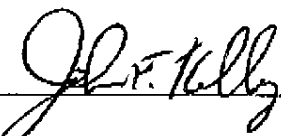
**Telephone #:** 508-240-3790

**Email:** mbudnick@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:**

01/26/07

## **Part II. Self-Assessment**

The Town of Orleans has not submitted the NPDES Phase II Small MS4 General Permit Annual Report since Year 1. In April of 2005, the Highway Department Manager , Bob Bersin, left the Town of Orleans. Mr. Bersin was responsible for many of the BMP activities outlined in the General Permit. In the transition to the new Highway Department Manager, Mark Budnick, the Annual Report was inadvertently overlooked.

In general, moderate progress has been made on the goals. Housekeeping and pollution prevention activities are performed regularly. Adoption of construction-site runoff ordinances is anticipated at an upcoming meeting with the selectmen. In the transition between Highway Department Superintendents, the responsibility for the stormwater database development has become unclear. This issue will be resolved in the upcoming year in hopes of achieving more progress on the database development. Public education and outreach goals are not being reached to the anticipated level. It is hoped that with the completion of some of the other goals, public education can receive more attention.

## 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 3<br>(Reliance on non-municipal partners indicated, if any)                                                            | Planned Activities – Permit Year 4                                                                                 |
|----------------|----------------------------------------------------|------------------------------------------------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| A.1<br>Revised | Develop and Broadcast VIA PA CATV Stormwater Video | Mark Budnick, Highway Dept.                                | One per year – in conjunction with County Group | No progress.                                                                                                                                             | Will Broadcast stormwater related video on VIA PA CATV or provide link to stormwater related video on Town website |
| A.2<br>Revised | Household Hazardous Waste Control                  | Mark Budnick, Highway Dept.                                | Annual HHW Collection                           | Collection day held September 16, 2006 in Orleans. Town residents can also participate in Eastham's HHW collection day, which was held on July 15, 2006. | Annual collection day.                                                                                             |
| A.3<br>Revised | Education Flyers                                   | Mark Budnick, Highway Dept.                                | Distribute 2 per year at Transfer Station       | No progress.                                                                                                                                             | Distribute at transfer station.                                                                                    |
| A.4<br>Revised | Web Page Information                               | Mark Budnick, Highway Dept.; Peter VanDyck, IT Coordinator | Short Article – one per year                    | No progress.                                                                                                                                             | Provide links to stormwater related sites on Town website.                                                         |
| 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 3<br>(Reliance on non-municipal partners indicated, if any)                                                                                       | Planned Activities – Permit Year 4                                                                    |
|----------------|----------------------------------|---------------------------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| B.1<br>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<br>Revised | Estuaries Program                | George Meservey, Planning Dept. |                            | MEP Report released for Pleasant Bay. The Town is in the process of developing a comprehensive wastewater management plan (CWMP) to achieve compliance with TMDLs stated in report. | Reports for Nauset Estuary and Cape Cod Bay creeks expected in July 2007. Work on CWMP is continuing. |
| 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 3<br>(Reliance on non-municipal partners indicated, if any)                                             | Planned Activities – Permit Year 4                                                |
|----------------|----------------------------------------------------|-----------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| C.1<br>Revised | Stormwater System Mapping and Database Development | Mark Budnick, Highway Dept., Americorps | Comprehensive town-wide survey by year 2 as funding allows   | Mapping by Americorps volunteers was completed in Year 1. Application for grant money to assist in database development was not received. |                                                                                   |
| C.2<br>Revised | Review Existing By-Laws                            | George Mesurvey, Planning Dept.         | Review existing by-laws and adopt stormwater ordinance FY06. | No progress.                                                                                                                              |                                                                                   |
| C.3<br>Revised | Identify and Document Illicit Connections          | Mark Budnick, Highway Dept.             | Review C.1 results, finalize database by Year 4.             | Ongoing. Illicit connections are noted during annual catchbasin cleaning. Identified connections are remediated.                          | Continue review of mapping results and identification during catchbasin cleaning. |
| 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 3<br>(Reliance on non-municipal partners indicated, if any)                                                                                           | Planned Activities – Permit Year 4             |
|----------|-------------------------------------------------|---------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| D.1      | Review Existing By-Laws                         | George Mesurvey, Planning Dept. | Review existing by-laws and adopt construction ordinance FY06 | Sediment control requirements for construction project are listed in the Town's draft Street Access Regulations, which are currently awaiting a public hearing with Board of Selectmen. | Anticipate adoption of ordinance by selectmen. |
| Revised  |                                                 |                                 |                                                               |                                                                                                                                                                                         |                                                |
| D.2      | Propose amendments and articles at Town Meeting | George Mesurvey, Planning Dept. | Adoption of ordinance.                                        | Drafted ordinance.                                                                                                                                                                      | Anticipate adoption of ordinance by selectmen. |
| Revised  |                                                 |                                 |                                                               |                                                                                                                                                                                         |                                                |
| Revised  |                                                 |                                 |                                                               |                                                                                                                                                                                         |                                                |
| 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 3<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 4                                                          |
|----------|-------------------------------------------------|--------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| E.1      | Review Existing By-Laws                         | George Meservy, Planning Dept. | Review existing by-laws and adopt Runoff Control Ordinance FY06 | No progress.                                                                                  | Develop runoff control ordinance to prevent runoff and erosion after construction projects. |
| Revised  |                                                 |                                |                                                                 |                                                                                               |                                                                                             |
| E.2      | Propose amendments and articles at Town Meeting | George Meservy, Planning Dept. |                                                                 | No progress.                                                                                  | See above.                                                                                  |
| Revised  |                                                 |                                |                                                                 |                                                                                               |                                                                                             |
| Revised  |                                                 |                                |                                                                 |                                                                                               |                                                                                             |
| 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 3<br>(Reliance on non-municipal partners indicated, if any)                                                                                                                                                                                                                                                              | Planned Activities – Permit Year 4                                                                                                                                |
|----------------|-------------------------------------------------|--------------------------------|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| F.1<br>Revised | Street Sweeping                                 | Mark Budnick,<br>Highway Dept. | Annual winter cleanup and as-necessary               | All streets were swept at least once, some more than once. 141 tons of sand was documented (although the scale at the Transfer Station was not functioning during several months of the year due to construction activities).                                                                                                                              | Annual street sweeping. The Town is in the process of applying for a Beneficial Use Determination for using street sweeping in berm construction at the landfill. |
| F.2<br>Revised | Catchbasin Cleaning                             | Mark Budnick,<br>Highway Dept. | Clean all basins in town on yearly rotating schedule | All basins received an annual cleaning. 112 tons of catchbasin cleanings were documented (although the scale at the Transfer Station was not functioning during several months of the year due to construction activities). The Town received a Beneficial Use Determination approval for using catchbasin cleaning for berm construction at the landfill. | Annual catchbasin cleaning.                                                                                                                                       |
| F.3<br>Revised | Develop Drainage System Improvement Plan        | Mark Budnick,<br>Highway Dept. | Prepare Capital Plan Article for FY06                | Capital Plan in May 2005 allotted \$500,000 for drainage improvements, with more money each year.                                                                                                                                                                                                                                                          |                                                                                                                                                                   |
| F.4<br>Revised | Propose Amendments and Articles at Town Meeting | Mark Budnick,<br>Highway Dept. |                                                      | See comments for F.3                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                   |

### 6a. Additions

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**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 3<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 4 |
|----------|-----------------|-------------------------------|--------------------|-----------------------------------------------------------------------------------------------|------------------------------------|
| Revised  |                 |                               |                    |                                                                                               |                                    |
| Revised  |                 |                               |                    |                                                                                               |                                    |
| Revised  |                 |                               |                    |                                                                                               |                                    |
| Revised  |                 |                               |                    |                                                                                               |                                    |
| Revised  |                 |                               |                    |                                                                                               |                                    |
| Revised  |                 |                               |                    |                                                                                               |                                    |

**7a. Additions**

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**7b. WLA Assessment**

## Part IV. Summary of Information Collected and Analyzed

## 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                               |               |  |
| ▪ days sponsored                                                        | (#)           |  |
| ▪ community participation                                               | (%)           |  |
| ▪ material collected                                                    | (tons or gal) |  |
| School curricula implemented                                            | (y/n)         |  |
|                                                                         |               |  |
|                                                                         |               |  |

**Legal/Regulatory**

|                                                           | In Place<br>Prior to<br>Phase II | Under<br>Review | Drafted | Adopted |
|-----------------------------------------------------------|----------------------------------|-----------------|---------|---------|
| <b>Regulatory Mechanism Status (indicate with "X")</b>    |                                  |                 |         |         |
| ▪ Illicit Discharge Detection & Elimination               |                                  |                 |         |         |
| ▪ Erosion & Sediment Control                              |                                  |                 |         |         |
| ▪ Post-Development Stormwater Management                  |                                  |                 |         |         |
| <b>Accompanying Regulation Status (indicate with "X")</b> |                                  |                 |         |         |
| ▪ 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           | (%)               |  |
| <b>Mapping method(s)</b>               |                   |  |
| ▪ Paper/Mylar                          | (%)               |  |
| ▪ CADD                                 | (%)               |  |
| ▪ GIS                                  | (%)               |  |
| Outfalls inspected/screened            | (# or %)          |  |
| Illicit discharges identified          | (#)               |  |
| Illicit connections removed            | (#)<br>(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)          |  |
|                                                                                      |                |  |
|                                                                                      |                |  |

|                                                                                        |             |  |
|----------------------------------------------------------------------------------------|-------------|--|
| 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<br>% CaCl <sub>2</sub><br>% MgCl <sub>2</sub><br>% CMA<br>% Kac<br>% KCl<br>% 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)                                                                                     |  |
|                                                          |                                                                                           |  |
|                                                          |                                                                                           |  |