

**Municipality/Organization:** City of Beverly, MA

**EPA NPDES Permit Number:** MAR041181

**MassDEP Transmittal Number:** W-040371

**Annual Report Number  
& Reporting Period:** April 1, 2007 – March 31, 2008

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## **NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2008)**

### **Part I. General Information**

**Contact Person:** Roland Adams

**Title:** Stormwater Coordinator

**Telephone #:** 978 921 6000

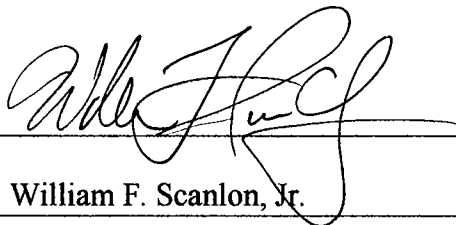
**Email:** radams@beverlyma.gov

**Mailing Address:** 191 Cabot St Beverly MA. 01923

### **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:** William F. Scanlon, Jr.

**Title:** Mayor

## Part II. Self-Assessment

The City of Beverly has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions. The Stormwater Committee believes we have made good progress relative to specific BMP's. Refer to the report for details by BMP.

The Summary of Minimum Control Measures Tables that follow have as titles "Progress on Permit Year 4"—this should read and we are reporting on "Progress on Permit **Year 5**". "Planned Activities-Permit Year 5" is not valid as the permit expires. This item is not completed except when we have programs in place that have long lead times.

### 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 4<br>(Reliance on non-municipal partners indicated, if any)                                                                                        | Planned Activities – Permit Year 5                                 |
|----------|----------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 1-1      | Article/brochure about stormwater in the annual Consumer Confidence Report | Engineering Dept              | Article(s) published in the CCR annually distribution to all residents | Article in 2006 Water Quality Report distributed summer 2007                                                                                                                         | Article in 2007 Water Quality Report to be distributed Summer 2008 |
| Revised  |                                                                            |                               |                                                                        |                                                                                                                                                                                      |                                                                    |
| 1-2      | Stormwater education program for school children                           | Engineering Dept.             | Integration of stormwater program to school curriculum                 | No change from Year 4. No actual classroom discussions in Year 5.                                                                                                                    |                                                                    |
| Revised  |                                                                            |                               |                                                                        |                                                                                                                                                                                      |                                                                    |
| 1-3      | Public Education and protection                                            | Health Dept.                  |                                                                        | Beach test results for summer 2007 posted on <a href="http://www.state.maus/dph">www.state.maus/dph</a> and a link on this site to Beverly site. Test results also posted at library |                                                                    |
| Revised  |                                                                            |                               |                                                                        |                                                                                                                                                                                      |                                                                    |
| 1-4      | Educate dog owners about picking up dog waste                              | Recreation Dept               | Revise Fact Sheet-Mail with dog license                                | New dog ordinance with pet waste information in a mailing to Beverly households                                                                                                      |                                                                    |
| Revised  |                                                                            |                               |                                                                        |                                                                                                                                                                                      |                                                                    |
| 1-5      | Install and maintain pet waste clean-up signs at parks                     | Recreation Dept               |                                                                        | Signs ordered to be installed before summer 2008                                                                                                                                     |                                                                    |
| Revised  |                                                                            |                               |                                                                        |                                                                                                                                                                                      |                                                                    |
| 1-6      | Annual update of SWMP at a televised City Council Meeting                  | Engineering Dept              | Annual update of SWMP given years 3-5                                  | City Council adoption of new Ordinance—Stormwater—April 22, 2008                                                                                                                     |                                                                    |
| 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 4<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|----------|--------------------------------------------------------------------|-------------------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------|
| 2-1      | Form Stormwater Advisory Committee                                 | Engineering Dept              | Committee formed first year and meet annually         | Committee formed and met 3 times                                                              |                                    |
| Revised  |                                                                    |                               |                                                       |                                                                                               |                                    |
| 2-2      | Comply with State public notification guidelines at MGL Ch.39s.23B | Planning Dept                 | Notice posted City Hall & Library                     | Meetings posted                                                                               |                                    |
| Revised  |                                                                    |                               |                                                       |                                                                                               |                                    |
|          | Stencil up to 25 catch basin's with don't dump message             | Public Services & Recreation  | Up to 25 catch basins stenciled per year in years 2-5 | 150 Storm Drains cleaned and labeled-Eagle Scout Project                                      |                                    |
| 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 4<br>(Reliance on non-municipal partners indicated, if any)                                                                                                                                               | Planned Activities – Permit Year 5 |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| 3-1      | Map Stormwater Outfalls                                                                                                                                | Engineering Dept              | GIS map of outfalls created in the first year                                                          | Completed                                                                                                                                                                                                                                   |                                    |
| Revised  |                                                                                                                                                        |                               |                                                                                                        |                                                                                                                                                                                                                                             |                                    |
| 3-2      | Review and amend City's ordinance to prohibit illicit discharges and connections, and to require inspection of new construction for correct connection | Planning Dept                 | Create an illicit discharge and connection ordinance for City Council adoption                         | Stormwater Ordinance including illicit discharge adopted by City Council April 22, 2008. City bylaws require 2 week period before Mayor can sign. Expected to be signed week of May 5.                                                      |                                    |
| Revised  |                                                                                                                                                        |                               |                                                                                                        |                                                                                                                                                                                                                                             |                                    |
| 3-2      | Conduct dry weather outfall screening                                                                                                                  | Public Services               | Screen outfalls in Years 1&2, percent of outfalls screened                                             | Outfalls mapped and inspected. Those from observation requiring sampling have been sampled. Results have been coordinated with Salem Sound Data (public activist group) and Horslet Witten data (Regional consultant). Final report issued. |                                    |
| Revised  |                                                                                                                                                        |                               |                                                                                                        |                                                                                                                                                                                                                                             |                                    |
| 3-4      | Develop and implement plan to identify and remove non-stormwater discharges                                                                            | Public Services               | Prioritize outfalls in Year 3. Number of illicit connections found and removed throughout Years 4 & 5. | None removed year 5.                                                                                                                                                                                                                        |                                    |
| Revised  |                                                                                                                                                        |                               |                                                                                                        |                                                                                                                                                                                                                                             |                                    |
| 3-5      | Create a GIS for the stormwater collection system                                                                                                      | Engineering Dept              | GIS stormwater collection system will be completed by the end of second year of permit period          | Completed                                                                                                                                                                                                                                   |                                    |
|          |                                                                                                                                                        |                               |                                                                                                        |                                                                                                                                                                                                                                             |                                    |

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### 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 4<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|----------|---------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------|
| 4-1      | Erosion Sediment Control (ESC) ordinance for construction sites greater than 1 acre in area | Planning Dept                 | Develop draft ordinance in Year 1. Present to City Council starting in Year 2, implement thereafter.                                                                                                                                                                                           | Completed                                                                                     |                                    |
| Revised  |                                                                                             |                               |                                                                                                                                                                                                                                                                                                |                                                                                               |                                    |
| 4-2      | Require a waste management plan at construction sites greater than 1 acre in area           | Planning & Engineering        | Amend planning regulations to require a plan development for each construction site greater than 1 acre                                                                                                                                                                                        | Completed-Component ESC                                                                       |                                    |
| Revised  |                                                                                             |                               |                                                                                                                                                                                                                                                                                                |                                                                                               |                                    |
| 4-3      | Consider public input on project greater than 1 acre in area                                | Planning Dept                 | Public review and comment procedure; newspaper notification and signs posted at each construction site.                                                                                                                                                                                        | Completed-Component ESC                                                                       |                                    |
| Revised  |                                                                                             |                               |                                                                                                                                                                                                                                                                                                |                                                                                               |                                    |
| 4-4      | Inspect erosion and sediment controls on projects greater than 1 acre in area               | Planning & Engineering        | Develop a procedure for conducting inspections by end 2 <sup>nd</sup> year. Begin inspections in 3 <sup>rd</sup> year. Develop procedures for reviewing monthly reports from site operators by end of 3 <sup>rd</sup> year. Require monthly inspections reports by end of 4 <sup>th</sup> year | Completed-Component ESC                                                                       |                                    |
|          |                                                                                             |                               |                                                                                                                                                                                                                                                                                                |                                                                                               |                                    |



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#### 4a. Additions

|     |                               |                  |                                                               |           |  |
|-----|-------------------------------|------------------|---------------------------------------------------------------|-----------|--|
| 4-5 | Drainage Alteration Ordinance | Engineering Dept | Ordinance requiring permit if grade modified more than 2 feet | Completed |  |
|     |                               |                  |                                                               |           |  |

## 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 4<br>(Reliance on non-municipal partners indicated, if any)                                         | Planned Activities – Permit Year 5 |
|----------|--------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| 5-1      | Develop an ordinance to apply standards 2,3,4,7 and 9 of the Mass Stormwater Policy to the entire City | Planning Dept.                     | Develop draft ordinance by end year 2. Present to City Council. | Adopted by City Council April 22, 2008. City bylaws require 2 week period before Mayor can sign. Expected to be signed week of May 5. |                                    |
| Revised  |                                                                                                        |                                    |                                                                 |                                                                                                                                       |                                    |
| 5-2      | Specify a stormwater BMP manual to be used for consistent design and performance standards             | Planning & Engineering Depts.      | BMP Manual selected by year 2                                   | Included BMP 5-1                                                                                                                      |                                    |
| Revised  |                                                                                                        |                                    |                                                                 |                                                                                                                                       |                                    |
| 5-3      | Develop an ordinance that ensures long-term maintenance of structural BMP's.                           | Planning, Health & Public Services | Develop draft ordinance by end year 2. Present to City Council  | Included BMP 5-1                                                                                                                      |                                    |
| 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 4<br>(Reliance on non-municipal partners indicated, if any)                      | Planned Activities – Permit Year 5 |
|----------|------------------------------------------|-------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------|
| 6-1      | Identify sensitive receptors within City | Engineering & Public Services | Inventory created and staff notified in Year 2                                                                 | Completed-Map created sensitive receptors                                                                          |                                    |
| Revised  |                                          |                               | Identify sensitive receptors and provide training to Public Service Employees                                  |                                                                                                                    |                                    |
| 6-2      | In-house employee training program.      | Public Services               | Number/percent of employees who receive stormwater related training once every two years during permit period. | Continuing to train pesticide licensed employees annually.                                                         |                                    |
| Revised  |                                          |                               |                                                                                                                |                                                                                                                    |                                    |
| 6-3      | Hazardous Materials Inventory & Training | Public Services               | Number of employees trained every two years; inventory of hazardous materials updated annually                 | Motor pool employees trained for housekeeping measures relative to waste oils, etc and operation of fueling depot. |                                    |
| Revised  |                                          |                               |                                                                                                                |                                                                                                                    |                                    |
| 6-4      | Street sweeping                          | Public Services               | Percent of roads swept annually.                                                                               | All streets swept 3 times per year with commercial areas getting swept as much as two times per week.              |                                    |
| Revised  |                                          |                               |                                                                                                                |                                                                                                                    |                                    |
| 6-5      | Storm drain maintenance                  | Public Services               | Number of catch basins cleaned annually                                                                        | Cleaned 828 Catch Basins.                                                                                          |                                    |
| Revised  |                                          |                               |                                                                                                                |                                                                                                                    |                                    |

|         |                                       |                 |                                                                                                                                                                                |                                                                                                                                                                        |  |
|---------|---------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 6-6     | Roadway deicing                       | Public Services | Investigate alternative deicers & spreaders every other winter starting Year 1. Year 2 maintain records on deicer dispensing & spreader calibration                            | Purchased new truck with computerized, ground-speed controlled sander. All trucks, as replaced, will be fitted with same unit.                                         |  |
| Revised |                                       |                 |                                                                                                                                                                                |                                                                                                                                                                        |  |
| 6-7     | Minimize impacts from vehicle washing | Public Services | Secure funding                                                                                                                                                                 | Facility under consideration—dependent on funding.                                                                                                                     |  |
| Revised |                                       |                 |                                                                                                                                                                                |                                                                                                                                                                        |  |
| 6-8     | Park and Landscape maintenance        | Public Services | Number of employees trained in second year and records of herbicide/fertilizer used annually. Year 3 initiate discussions with the School Dept. to reduce chemical application | Dispensers of herbicide/fertilizers are licensed. License requirement is continuing education. Total 5 employees. School Department does not dispense on their fields. |  |
| Revised |                                       |                 |                                                                                                                                                                                |                                                                                                                                                                        |  |
| 6-9     | Hazardous Waste Day                   | Health Dept.    | Investigate locations and cost alternatives for holding a household hazardous waste collection and develop a program in year 2. Present to council in Year 3.                  | Hazardous Waste Day April 28                                                                                                                                           |  |
| Revised |                                       |                 |                                                                                                                                                                                |                                                                                                                                                                        |  |

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

| <b>BMP ID #</b> | <b>BMP Description</b> | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b> | <b>Progress on Goal(s) – Permit Year 4</b><br>(Reliance on non-municipal partners indicated, if any) | <b>Planned Activities – Permit Year 5</b> |
|-----------------|------------------------|--------------------------------------|---------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Revised         |                        |                                      |                           |                                                                                                      |                                           |
| Revised         |                        |                                      |                           |                                                                                                      |                                           |
| Revised         |                        |                                      |                           |                                                                                                      |                                           |
| Revised         |                        |                                      |                           |                                                                                                      |                                           |
| Revised         |                        |                                      |                           |                                                                                                      |                                           |
| Revised         |                        |                                      |                           |                                                                                                      |                                           |

**7a. Additions**

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**7b. WLA Assessment**

**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 4<br>(Reliance on non-municipal partners indicated, if any) | Planned Activities – Permit Year 5 |
|----------|-----------------|-------------------------------|--------------------|-----------------------------------------------------------------------------------------------|------------------------------------|
| 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)

(Since beginning of permit coverage unless specified otherwise by a \*\*, which indicates response is for period covering April 1, 2006 through March 31, 2007)

##### Programmatic

|                                                               | (Preferred Units) | Response             |
|---------------------------------------------------------------|-------------------|----------------------|
| Stormwater management position created/staffed                | (y/n)             | y                    |
| Annual program budget/expenditures **                         | (\$)              | In Dept Budget       |
| Total program expenditures since beginning of permit coverage | (\$)              | In Dept Budget       |
| Funding mechanism(s) (General Fund, Enterprise, Utility, etc) |                   | General & Enterprise |
|                                                               |                   |                      |

##### Education, Involvement, and Training

|                                                                            |               |                   |
|----------------------------------------------------------------------------|---------------|-------------------|
| Estimated number of property owners reached by education program(s)        | (# or %)      | Thru mailing 100% |
| Stormwater management committee established                                | (y/n)         | Y                 |
| Stream teams established or supported                                      | (# or y/n)    | N                 |
| Shoreline clean-up participation or quantity of shoreline miles cleaned ** | (y/n or mi.)  | N                 |
| Shoreline cleaned since beginning of permit coverage                       | (mi.)         | N                 |
| Household Hazardous Waste Collection Days                                  |               |                   |
| ▪ days sponsored **                                                        | (#)           | 1                 |
| ▪ community participation **                                               | (# or %)      | 100%              |
| ▪ material collected **                                                    | (tons or gal) | 30+ drums         |

|                              |       |   |
|------------------------------|-------|---|
| School curricula implemented | (y/n) | Y |
|                              |       |   |

### Legal/Regulatory

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

### Mapping and Illicit Discharges

|                                                                    | (Preferred Units)       | Response |
|--------------------------------------------------------------------|-------------------------|----------|
| Outfall mapping complete                                           | (%)                     | 100%     |
| Estimated or actual number of outfalls                             | (#)                     | 522      |
| System-Wide mapping complete (complete storm sewer infrastructure) | (%)                     | 100%     |
| Mapping method(s)                                                  |                         |          |
| ▪ Paper/Mylar                                                      | (%)                     |          |
| ▪ CADD                                                             | (%)                     |          |
| ▪ GIS                                                              | (%)                     | 100%     |
| Outfalls inspected/screened **                                     | (# or %)                | NA       |
| Outfalls inspected/screened (Since beginning of permit coverage)   | (# or %)                | 38%      |
| Illicit discharges identified **                                   | (#)                     | 0        |
| Illicit discharges identified (Since beginning of permit coverage) | (#)                     | 1        |
| Illicit connections removed **                                     | (# ); and<br>(est. gpd) | 0        |

|                                                                  |                        |     |
|------------------------------------------------------------------|------------------------|-----|
| Illicit connections removed (Since beginning of permit coverage) | (#); and<br>(est. gpd) | 1   |
| % of population on sewer                                         | (%)                    | 92% |
| % of population on septic systems                                | (%)                    | 8%  |

### Construction

|                                                                                                      | (Preferred Units) | Response |
|------------------------------------------------------------------------------------------------------|-------------------|----------|
| Number of construction starts (>1-acre) **                                                           | (#)               | 1        |
| Estimated percentage of construction starts adequately regulated for erosion and sediment control ** | (%)               | 100%     |
| Site inspections completed **                                                                        | (# or %)          | 2        |
| Tickets/Stop work orders issued **                                                                   | (# or %)          | 0        |
| Fines collected **                                                                                   | (# and \$)        | 0        |
| Complaints/concerns received from public **                                                          | (#)               | 0        |
|                                                                                                      |                   |          |
|                                                                                                      |                   |          |

### Post-Development Stormwater Management

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

### Operations and Maintenance

|                                                                                              |                   |     |
|----------------------------------------------------------------------------------------------|-------------------|-----|
| Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **           | (times/yr)        | 1   |
| Average frequency of catch basin cleaning (commercial/arterial or other critical streets) ** | (times/yr)        | 1   |
| Qty of structures cleaned **                                                                 | (#)               | 828 |
| Qty. of storm drain cleaned **                                                               | (%, LF or<br>mi.) | N/A |

|                                                                                  |                |            |
|----------------------------------------------------------------------------------|----------------|------------|
| Qty. of screenings/debris removed from storm sewer infrastructure **             | (lbs. or tons) | 246.4 tons |
| Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) ** | (location)     | Landfill   |

|                                                   |                         |               |
|---------------------------------------------------|-------------------------|---------------|
| Basin Cleaning Costs                              |                         |               |
| • Annual budget/expenditure (labor & equipment)** | (\$)                    | Est. \$25,000 |
| • Hourly or per basin contract rate **            | (\$/hr or \$ per basin) | \$10.00       |
| • Disposal cost**                                 | (\$)                    | Est. \$8,000  |
| Cleaning Equipment                                |                         |               |
| • Clam shell truck(s) owned/leased                | (#)                     | 2             |
| • Vacuum truck(s) owned/leased                    | (#)                     | 1             |
| • Vacuum trucks specified in contracts            | (y/n)                   | N             |
| • % Structures cleaned with clam shells **        | (%)                     | 99%           |
| • % Structures cleaned with vector **             | (%)                     | 1%            |

|                                                                                         |                    |               |
|-----------------------------------------------------------------------------------------|--------------------|---------------|
|                                                                                         | (Preferred Units)  | Response      |
| Average frequency of street sweeping (non-commercial/non-arterial streets) **           | (times/yr)         | 3             |
| Average frequency of street sweeping (commercial/arterial or other critical streets) ** | (times/yr)         | 3 to 100      |
| Qty. of sand/debris collected by sweeping **                                            | (lbs. or tons)     | 356.4 tons    |
| Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **                | (location)         | Landfill      |
| Annual Sweeping Costs                                                                   |                    |               |
| • Annual budget/expenditure (labor & equipment)**                                       | (\$)               | Est. \$20,000 |
| • Hourly or lane mile contract rate **                                                  | (\$/hr. or ln mi.) | N/A           |
| • Disposal cost**                                                                       | (\$)               | Est. \$4,000  |
| Sweeping Equipment                                                                      |                    |               |
| • Rotary brush street sweepers owned/leased                                             | (#)                | 1             |
| • Vacuum street sweepers owned/leased                                                   | (#)                | 0             |
| • Vacuum street sweepers specified in contracts                                         | (y/n)              | N             |
| • % Roads swept with rotary brush sweepers **                                           | %                  | 100%          |
| • % Roads swept with vacuum sweepers **                                                 | %                  |               |

Reduction (since beginning of permit coverage) in application on public land of:  
 ("N/A" = never used; "100%" = elimination)