

Part II. Self-Assessment

The Stormwater Committee completed a self-assessment at the March 11, 2014 Committee Meeting. Details of the planwere reviewed and we believe the City is in compliance with the 2003 permit.

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 10 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------------|--|-------------------------------|--|--|-------------------------|
| 1-1 Revised | Article/brochure about stormwater in the annual Consumer Confidence Report | Engineering Dept. | Article published in the Water Quality Report annually distributed to all residents | Article in 2012 Water Quality Report distributed summer 2013 | Continue |
| 1-2 Revised | Stormwater education program for school children | Engineering Dept. | Integration of stormwater program in school curriculum Contracted with Greenscapes for outreach | Greenscapes publications at various locations, at “Touch a Truck” public youth event and City/Recreational web sites | Continue as appropriate |
| 1-3 Revised | Public Education and protection | Health Dept. | Beach sampling report to public | Sampling at 11 beaches during the summer season and results posted on Mass. Dept. of Public Health and City of Beverly websites. | Continue |
| 1-4 Revised | Educate dog owners about picking up dog waste | | Recreation Dept. | Greenscapes—“Scoop it” brochure and add message to City web sites. Recreation Dept. brochure with rules/regulations mailed 3 times/year. Also Recreational & Beverly Dog Park Committee web sites. | Continue |
| 1-5 Revised | Install and maintain pet waste clean-up signs at parks | Recreation Dept. | | Signs updated at Lynch Park with Carry in/Carry out program. Signs at other parks updated as required. | Continue |
| 1-6 Revised | Annual update of SWMP at televised City Council Meeting | Engineering Dept. | Annual update | Not completed—waiting new permit as vehicle | Continue as appropriate |

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 8 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------------|---|-------------------------------|----------------------|--|--------------------|
| 2-1 Revised | Form Stormwater Advisory Committee | Engineering Dept. | Form Committee | Committee formed by City Ordinance | Continue |
| 2-2 Revised | Comply with State public notification guidelines at MGL Ch 39c23B | Planning Dept. | Public Notice | Public notice of Committee meetings | Continue |
| 2-3 Revised | Stencil up to 25 catch basins with do not dump message | Public Services | Stencil catch basins | Community Service Volunteer was identified, but did not complete by report deadline | Continue |
| Revised | | | | | |
| Revised | | | | | |
| Revised | | | | | |

2a. Additions

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|------------------------------|--------------|-------------------|--|----------|
| Medication Take Back Program | Health Dept. | Collection Events | Medication collection day April 26 | Continue |
| Mercury Recovery Program | Health Dept. | Drop off facility | Products containing mercury can be dropped off at the Health Dept. and Dawson's Hardware | Continue |

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|--|---|----------------|---|--|----------|
| | Butt Bin and Water Canteen Borrow Program | Planning Dept. | Provide bins for cigarette disposal and water canteens at public events | Farmers Market, art events and other community events. | Continue |
|--|---|----------------|---|--|----------|

3. Illicit Discharge Detection and Elimination

| BMP ID # | BMP Description | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------------|--|-------------------------------|--|---|--------------------|
| 3-1 Revised | Map Stormwater Outfalls | Engineering Dept. | Map outfalls | Completed—GIS database updated as needed | Continue to update |
| 3-2 Revised | Review and amend City's Ordinance to prohibit illicit discharges and connections, and to require inspection of new construction for correct connection | Planning & Engineering Depts. | Create an illicit discharge and connection ordinance | Component in the Ordinance—“Stormwater Management and Construction Site Ordinance” adopted May 12, 2008. Sanitary Sewer connections inspected at connection | Completed |
| 3-3 Revised | Conduct dry weather outfall screening | Public Services | Sample outfalls | Outfalls mapped and inspected. Those from observation requiring sampling are sampled—sampling also done by local activist group—Salem Sound Coastwatch | Continue |
| 3-4 Revised | Develop and implement plan to identify and remove non-stormwater discharges | Public Services | Illicit connection removed | Remove as found | Continue |
| 3-5 Revised | Create a GIS for the stormwater collection system | Engineering Dept. | GIS Stormwater System | Completed and updated as require | Continue to update |
| 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 8 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------------|---|-------------------------------|----------------------------------|--|--------------------|
| 4-1 Revised | Erosion Sediment Control (ESC) Ordinance for construction sites greater than 1 acre in area | Planning Dept. | Create and adopt an ordinance | Component in the Ordinance—“Stormwater Management and Construction Site Ordinance” adopted May 12, 2008. | Completed |
| 4-2 Revised | Require a waste management plan at construction sites greater than 1 acre | Planning & Engineering | Create and adopt an ordinance | Component in the Ordinance—“Stormwater Management and Construction Site Ordinance” adopted May 12, 2008. | Completed |
| 4-3 Revised | Consider public input on project greater than 1 acre | Planning Dept. | | Completed | Continue |
| 4-4 Revised | Inspect erosion and sediment controls on projects greater than 1 acre | Planning & Engineering | Inspection of construction sites | Inspections at milestones—continuing on an “as need” basis | Continue |
| 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 8 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------------|---|------------------------------------|--------------------------------|---|--------------------|
| 5-1 Revised | Develop an ordinance to apply standards 2,3,4,7 and 9 of the Mass. Stormwater Policy to the entire City | Planning | Develop and adopt an Ordinance | Component in the Ordinance— “Stormwater Management and Construction Site Ordinance” adopted May 12, 2008. | Completed |
| 5-2 Revised | Specify a stormwater BMP manual to be used for consistent design and performance standards | Planning & Engineering | Specify a manual | Completed—Stormwater Management, Stormwater Policy Handbook, Volumes 1&2 | Completed |
| 5-3 Revised | Develop an Ordinance that ensures long term maintenance of structural BMP’s | Planning, Health & Public Services | Develop and adopt an Ordinance | Component in the Ordinance— “Stormwater Management and Construction Site Ordinance” adopted May 12, 2008. | Completed |
| 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 8 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------------|--|-------------------------------|--------------------|---|--------------------|
| 6-1 Revised | Identify sensitive receptors within the City | Engineering & Public Services | | Completed | Continue |
| 6-2 Revised | In house employee training program | Public Services | | Continuing to train pesticide licensed employees | Continue |
| 6-3 Revised | Hazardous Material Inventory & Training | Public Services | | Motor pool employees trained for housekeeping measures relative to waste oils etc. and operation of fueling depot | Continue |
| 6-4 Revised | Street Sweeping | Public Services | | All streets swept 3 times per year with commercial/critical areas swept more frequently | Continue |
| 6-5 Revised | Storm Drain Maintenance | Public Services | | Catch basins city wide cleaned once per year | Continue |
| 6-6 Revised | Roadway deicing | Public Services | | Trucks purchased after 2008 with computerized ground speed controlled sander. All trucks as replaced to be fitted with similar units. | Continue |
| 6-7 Revised | Minimize impacts from vehicle washing | Public Services | Secure funding | Facility under consideration—dependent on funding | |

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|----------------|------------------------------|-----------------|----------------------------|---|----------|
| 6-8 Revised | Park & Landscape maintenance | Public Services | | Dispensers of herbicide/fertilizers are licensed. License requirement includes continuing education. Total 5 employees | Continue |
| 6-8 Revised | Hazardous Waste Day | Health Dept. | Annual Hazardous Waste Day | Hazardous waste day was held- April 26, 2014. Also by agreement Beverly Residents can dispose of material at Salem's hazardous waste day | Continue |

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 8 (Reliance on non-municipal partners indicated, if any) | Planned Activities |
|----------|-----------------|-------------------------------|--------------------|--|--------------------|
| Revised | | | | | |
| 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, 2010 through March 31, 2011)

Programmatic

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

Education, Involvement, and Training

| | | |
|--|---------------|---------------|
| Estimated number of property owners reached by education program(s) | (# or %) | 100% |
| Stormwater management committee established | (y/n) | Y |
| Stream teams established or supported | (# or y/n) | Y |
| Shoreline clean-up participation or quantity of shoreline miles cleaned ** | (y/n or mi.) | Y |
| Shoreline cleaned since beginning of permit coverage | (mi.) | |
| Household Hazardous Waste Collection Days | | |
| ▪ days sponsored ** | (#) | 2- with Salem |
| ▪ community participation ** | (# or %) | |
| ▪ material collected ** Data for 2013 event—not available for 2014 event | (tons or gal) | 3315 gal. |
| School curricula implemented | (y/n) | Y |
| • Change is Simple Program | | |

Legal/Regulatory

| Regulatory Mechanism Status (indicate with "X") | In Place Prior to Phase II | Reviewing Existing Authorities | Drafted | Draft in Review | Adopted |
|--|----------------------------|--------------------------------|---------|-----------------|---------|
| ▪ 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 | (#) | Discharge point 548 |
| System-Wide mapping complete (complete storm sewer infrastructure) | (%) | 100% |
| Mapping method(s) | | |
| ▪ Paper/Mylar | (%) | |
| ▪ CADD | (%) | |
| ▪ GIS | (%) | 100% |
| Outfalls inspected/screened ** | (# or %) | |
| Outfalls inspected/screened (Since beginning of permit coverage) | (# or %) | 37% |
| Illicit discharges identified ** | (#) | |
| Illicit discharges identified (Since beginning of permit coverage) | (#) | 2 |
| Illicit connections removed ** | (#); and (est. gpd) | |
| Illicit connections removed (Since beginning of permit coverage) | (#); and (est. gpd) | 2 |

| | | |
|-----------------------------------|-----|-----|
| % of population on sewer | (%) | 92% |
| % of population on septic systems | (%) | 8% |

Construction

| | (Preferred Units) | Response |
|--|-------------------|----------|
| Number of construction starts (>1-acre) ** | (#) | 4 |
| Estimated percentage of construction starts adequately regulated for erosion and sediment control ** | (%) | 100% |
| Site inspections completed ** | (# or %) | 11 |
| Tickets/Stop work orders issued ** | (# or %) | None |
| Fines collected ** | (# and \$) | None |
| Complaints/concerns received from public ** | (#) | None |
| | | |
| | | |

Post-Development Stormwater Management

| | | |
|--|----------|-----|
| Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control | (%) | 100 |
| Site inspections (for proper BMP installation & operation) completed ** | (# or %) | 3 |
| BMP maintenance required through covenants, escrow, deed restrictions, etc. | (y/n) | Y |
| Low-impact development (LID) practices permitted and encouraged | (y/n) | Y |
| | | |
| | | |

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 ** | (#) | 3500 |
| Qty. of storm drain cleaned ** | (%, LF or mi.) | 400 LF |
| Qty. of screenings/debris removed from storm sewer infrastructure ** | (lbs. or tons) | 576 Ton |

| Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) ** | (location) | Landfill via BUD |
|--|------------|---------------------|
|--|------------|---------------------|

| | | | |
|---|-------------------------|--|---------|
| Basin Cleaning Costs | | | |
| • Annual budget/expenditure (labor & equipment)** | (\$) | | 30,000 |
| • Hourly or per basin contract rate ** | (\$/hr or \$ per basin) | | 10/each |
| • Disposal cost** | (\$) | | 15,000 |
| Cleaning Equipment | | | |
| • Clam shell truck(s) owned/leased | (#) | | |
| • Vacuum truck(s) owned/leased | (#) | | 1 |
| • Vacuum trucks specified in contracts | (y/n) | | N |
| • % Structures cleaned with clam shells ** | (%) | | 99 |
| • % Structures cleaned with vacor ** | (%) | | 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) | 60 |
| Qty. of sand/debris collected by sweeping ** | (lbs. or tons) | 505 Ton |
| Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) ** | (location) | Landfill via BUD |
| Annual Sweeping Costs | | |
| • Annual budget/expenditure (labor & equipment)** | (\$) | 10,000 |
| • Hourly or lane mile contract rate ** | (\$/hr. or ln mi.) | NA |
| • Disposal cost** | (\$) | 15,000 |
| 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 ** | % | 0 |

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

| | | |
|--|-------------|--------------|
| ▪ Fertilizers | (lbs. or %) | Same as Last |
| ▪ Herbicides | (lbs. or %) | |
| ▪ Pesticides | (lbs. or %) | |
| Integrated Pest Management (IPM) Practices Implemented | (y/n) | Y |

(Preferred Units) Response

| | | |
|--|---|--------------|
| Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas) | % NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand | Same as Last |
| Pre-wetting techniques utilized ** | (y/n or %) | Y |
| Manual control spreaders used ** | (y/n or %) | 60% |
| Zero-velocity spreaders used ** | (y/n or %) | N |
| Estimated net reduction or increase in typical year salt/chemical application rate | (±lbs/ln mi. or %) | Same as Last |
| Estimated net reduction or increase in typical year sand application rate ** | (±lbs/ln mi. or %) | NA |
| % of salt/chemical pile(s) covered in storage shed(s) | (%) | 100 |
| Storage shed(s) in design or under construction | (y/n or #) | N |
| 100% of salt/chemical pile(s) covered in storage shed(s) by May 2008 | (y/n) | Y |
| | | |
| | | |

Water Supply Protection

| | | |
|---|----------|--|
| Storm water outfalls to public water supplies eliminated or relocated | # or y/n | |
|---|----------|--|

| | |
|---|----------|
| Installed or planned treatment BMPs for public drinking water supplies and their protection areas | # or y/n |
| Treatment units induce infiltration within 500-feet of a wellhead protection area | # or y/n |

[Type a quote from the document or the summary of an interesting point. You can position the text box anywhere in the document. Use the Drawing Tools tab to