

**Municipality/Organization:** Massachusetts Highway Department

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**EPA NPDES Permit Number:** pending

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**MaDEP Transmittal Number:** W-040919

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**Annual Report Number**

**& Reporting Period:** **No. 2: April 04-March 05**

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## **NPDES PII Small MS4 General Permit Annual Report**

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

Contact Person: Mr. Henry Barbaro

Title: Supervisor of Wetlands & Water Resources

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#### Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:

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Printed Name: John Cogliano

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Title: MassHighway Commissioner

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Date:

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## Part II. Self-Assessment

MassHighway has completed the required self-assessment and has determined that the MS4 is in compliance with all permit conditions, except for the following provisions:

- I.B.2(e)(vi) MassHighway's permit eligibility with regard to the Endangered Species Act was pending at the time of our NOI submission. Until discharges are located as part of the mapping program, MassHighway can not request review from the National Marine Fisheries Service. MassHighway is not currently aware of any discharges which are impacting federal or state-listed endangered species habitat. As discharges are identified as part of the drainage inventory they will be reviewed for compliance with the endangered species program.
- I.B.2(g) MassHighway's permit eligibility with regard to the National Historic Preservation Act was pending at the time of our NOI submission. Until discharges are located as part of the mapping program, MassHighway can not request review from the State Historic Preservation Officer. MassHighway is not currently aware of any discharges which are impacting historic properties. As discharges are identified as part of the drainage inventory they will be reviewed for compliance with protection of historic properties.

MassHighway received a letter dated February 3, 2004 indicating that the SWMP received was administratively deficient with regard to the three following items:

1. the requirements for preparation of a storm sewer system map that minimally shows the location of all outfalls and the names of receiving waters;
2. the requirement for a regulatory mechanism to effectively prohibit illicit discharges; and
3. the NOI certification signature (i.e., must be signed by the MassHighway Commissioner).

MassHighway met with EPA and DEP many times throughout the year and submitted a revised SWMP and NOI to EPA and DEP on March 31, 2005. MassHighway is still waiting for a response from the review of this document and/ or issuance of the permit. MassHighway feels that each of the three items above was addressed in the revised submittal and hope that a permit will be issued shortly. The items in Part III of this report reflect the BMPs included in the revised submittal.

## 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) – Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities - Permit Year 3
1A	MassHighway Training Assistance Program (MTAP)	MTAP	Continue MTAP Program	<p>Existing program that continues to provide training programs for MassHighway.</p> <p>MTAP provided ½ day seminars for MA Dept. of Conservation and Recreation (DCR) on Snow &amp; Ice Control Operations including spreader calibration and review of alternative equipment and methods for snow and ice control. Two seminars were provided with the following number of DCR employees attending:</p> <p>2/24/05 – Boston – 14 attendees 3/07/05 – Boston – 7 attendees</p>	Continue to provide training programs.
1B	Baystate Roads	Baystate Roads	Continue Baystate Roads Program	<p>Existing program that continues to provide training programs for MassHighway.</p> <p>Baystate Roads sponsored a “Snow &amp; Ice Control” Training Seminar for MassHighway employees during Fall 2004. The training agenda included: spreader calibration, deicing materials, plowing, and the effects of sanding on the environment. Four seminars were provided with the following number of MassHighway employees attending:</p> <p>10/19/04 – Northampton – 73 attendees 10/21/04 – Andover – 96 attendees 10/28/04 - Worcester – 71 attendees 10/27/04 – Taunton – 82 attendees</p>	Continue to provide training programs.

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1B (cont'd)	Baystate Roads	Baystate Roads	Continue Baystate Roads Program	Baystate Roads also sponsored a "Snow & Ice" seminar for DPW snowplow drivers. These ½ day seminars focused on spreader calibration, alternative equipment and methods for snow and ice control. Three seminars were performed with the following attendees: 11/2/04 – Concord – 25 attendees 11/12/04 – Palmer – 20 attendees 11/23/04 – Lynn – 30 attendees	Continue to provide training programs.
1C-1	MassHighway Web Site	IT/ Environmental	Add Environmental Division web page to MassHighway web site.	Measurable goal completed in Permit Year 1.	Measurable goal complete.
1C-2	MassHighway Website	IT/ Environmental	Solicit public input and publicize storm water related initiatives using web page.	The MassHighway website includes a link for contacting the Highway Department via email. Emails received are reviewed and directed to the appropriate department.	Measurable goal complete.
1E	Educational Seminars for CIM members	Construction Division	Provide educational seminars for CIM members on CGP Permit coverage and environmental compliance.	Measurable goal complete in Permit Year 1.	Measurable goal complete.

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1F	MassHighway/ Municipal Tie-In Review Process	Environmental/ Districts	Develop communication mechanism re: MassHighway drainage that discharges to a local MS4. Develop review process for addressing those concerns. Notify other MS4s of process.	<p>MassHighway has developed an Illicit Connection Prohibition Policy – prohibiting illicit discharges to the MassHighway storm water system.</p> <p>MassHighway is in the process of updating the Drainage Tie-In Standard Operating Procedure (SOP).</p>	<p>The Prohibition Policy will soon be finalized, submitted to the Chief Engineer and Commissioner and then issued to the Department in Permit Year 3.</p> <p>Complete the Drainage Tie-In SOP. Once the Drainage Tie-In SOP is completed, the sub-committee that prepared the SOP will begin to develop a program for working with the municipalities when an existing discharge from a MassHighway drainage system to a municipal system (or vice-versa) is identified.</p>

### 1a. Additions

1G	River and Stream Signs	Traffic Operations	Install signs identifying rivers and streams crossed by MassHighway roads.	MassHighway has installed 57 signs identifying river and stream crossings in Permit Year 2.	MassHighway will continue to install signs in areas identified by Mass. Riverways Program.
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## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities - Permit Year 3
2A	Project Related Public Notification and Public Participation Requirements	Environmental	Continue compliance with federal and state public notification and public participation requirements including but not limited to Wetlands Protection Act, Clean Water Act 401 Water Quality Certification, Army Corps of Engineers 404 Permit, and MEPA/NEPA.	MassHighway continues to comply with federal and state public notification and public participation requirements.	MassHighway will continue to comply with federal and state public notification and public participation requirements.
2B	Adopt-a-Highway	Adopt-a-Highway	Continue to support program.	MassHighway continues to support this program.	MassHighway will continue to support this program.
2C	Project Clean	Project Clean	Continue to support Project Clean.	MassHighway continues to support this program. During Permit Year 2, MassHighway responded to 2,057 citizen calls regarding debris pick-up.	MassHighway will continue to support this program.
2D-1	MassHighway Web Site	IT/ Environmental	Post Storm Water Management Plan (SWMP) to web site.	Measurable goal complete.	Revised SWMP will be posted to web site once approved by EPA and DEP.
2D-2	MassHighway Web Site	IT/ Environmental	Post annual reports to the web site.	Permit Year 1 annual report is posted on the Environmental Division web page for public access.	Permit Year 2 annual report will be posted to the Environmental Division web page for public access.

### 2a. Additions

	No additions				
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### 3. Illicit Discharge Detection and Elimination

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Year 2</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities - Permit Year 3</b>
3A	Rest Area Leases	Environmental/ Right-of-Way	Develop electronic drainage requirements language for incorporation in Rest Area lease agreements where rest area is being redeveloped.	Submission of drainage information is now a standard condition on all new MassHighway Rest Area leases.	Measurable goal complete.
3B-1	Drainage Inventory	Environmental/ Construction/ Planning/ IT Division	Develop and implement specification for securing drainage information from future construction and redevelopment projects.	Measurable goal finalized in March 2005 submission of SWMP.	Develop specification.
3B-2	Drainage Inventory	Environmental/ IT/ Districts	Map drainage discharges within urbanized areas.	Measurable goal finalized in March 2005 submission of SWMP.	Development of methods for collecting data. Training of staff. Begin mapping discharges.
3C-1	Illicit Connection Prohibition Policy	Environmental	Submit Illicit Drainage Connection Policy to Chief Engineer and Commissioner for issuance to Department.	Development of Illicit Drainage Connection Policy.	Issuance to Department.
3C-2	Drainage Tie-In Standard Operation Procedure (SOP)	Environmental	Prepare an internal draft of a revised drainage tie-in SOP. Submit to Chief Engineer.	MassHighway has begun to prepare an internal draft of a revised Drainage Tie-In SOP. The revised SOP includes language to prohibit illicit connections and discharges. The development of this SOP has been delayed by development of the Prohibition Policy.	Complete revised Drainage Tie-In SOP and submit to Chief Engineer for signature and issuance to Department.
3D	Illicit Connection Review	Environmental/ Districts	Review twenty discharges each permit year for potential illicit connections.	Measurable goal finalized in March 2005 submission of SWMP.	Discuss potential locations for review with District staff. Identify 20 discharges for review and complete.

**3a. Additions**

	No additions				
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#### 4. Construction Site Stormwater Runoff Control

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Year 2</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities - Permit Year 3</b>
4A	MassHighway Department Highway Design Manual	Environmental/ Construction/ Projects	Continue to comply with erosion and sediment control requirements indicated in manual.	All MassHighway projects continue to be designed in compliance with this manual.  MassHighway is currently beginning the process of updating this manual. As part of this update, a separate Drainage Manual, which references the MassHighway Storm Water Handbook, will be prepared.	All MassHighway projects will continue to be designed in compliance with this manual.  Continue preparation of a Drainage Manual separate from the Highway Design Manual. MassHighway anticipates that the Drainage Manual will be completed by the end of the permit term.
4B	MA DEP Stormwater Management Policy	Environmental/ Construction/ Projects	Continue to meet criteria in Policy for projects subject to Wetlands Protection Act (WPA).	MassHighway designs continue to comply with the Stormwater Management Policy when projects are subject to the WPA or within urbanized areas.	MassHighway designs will continue to comply with the Stormwater Management Policy when projects are subject to the WPA or within urbanized areas.
4C	NPDES Construction General Permit	Construction	Comply with general permit requirements.	MassHighway and the Contractors filed NOIs for new projects. SWPPPs for the projects were prepared by the Contractor as part of the Contract. A Special Provision/ Pay Item will be included in all new construction contracts to cover the preparation of the SWPPP by the contractor.	MassHighway will continue to file NOIs for new projects. Contractors will continue to prepare SWPPPs as required by the Special Provision/ Pay Item in all new construction contracts.
4D	Other State Environmental Regulations or Policy	Environmental/ Construction/ Projects	MassHighway projects will continue to be designed and constructed in accordance with all applicable state and federal environmental regulations or policy (e.g. Wetlands Protection Act, 404).	The Environmental Division reviews all projects at the 25% design stage to determine what environmental permits are required. The District Environmental Engineer or equivalent District construction staff person attends all pre-construction meetings with the selected contractor to review permit requirements for the project.	The process of design review and pre-construction coordination will continue.

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4E	MassHighway Storm Water Handbook	Environmental/ Construction/ Projects	Design projects in urbanized areas in compliance with Handbook	MassHighway requires that all new construction and redevelopment activities undertaken by MassHighway, or by others that are funded in whole or in part by MassHighway, comply with the Handbook.	MassHighway will require that all new construction and redevelopment activities undertaken by MassHighway, or by others that are funded in whole or in part by MassHighway, comply with the Handbook.
4F	Standard Specification for Highway and Bridges	Environmental/ Construction/ Projects	Continue to include erosion and pollution prevention controls in construction contracts.	Inclusion of such controls is standard practice for construction contracts issued by MassHighway.	Such controls will continue to be included in construction contracts issued by MassHighway.
4G	MassHighway Research Needs Program	Environmental/ Construction	Continue support of the NETC research committees. Continue to pursue applicable research projects.	MassHighway continues to support this program and be an active member on two research committees:  1. Measuring Pollutant Removal Efficiencies of Stormwater Treatment Units  2. Wood Fiber Attenuation of Roadway Runoff	MassHighway will continue to support this program and remain active with research committees.

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4H	NPDES Phase II Notice	Construction Division	Develop and distribute a Notice from the MassHighway Chief Engineer to all pre-qualified Construction Contractors regarding the NPDES Phase II Construction Requirements.	Notice was not issued. MassHighway disseminated information through Construction Industries of Massachusetts and felt that meeting with individual contractors at pre-construction meetings was a more effective method of distributing information regarding NPDES requirements.	Measurable goal removed.
<i>Rvsd</i>	<i>Pre-Construction Meeting Review of NPDES requirements</i>	<i>District Environmental Staff</i>	<i>District Environmental Staff Review NPDES requirements at the applicable pre-construction meetings. These meetings include outlining the requirements of the Construction General Permit and identify the roles and responsibilities of MassHighway and the Contractor.</i>	<i>MassHighway met with Contractors subject to the CGP at the pre-construction meeting and reviewed the NPDES requirements.</i>	<i>MassHighway will continue to review the NPDES requirements with Contractors at the pre-construction meeting.</i>
4I	Contract Bid Item and Special Provision for Storm Water Pollution Prevention Plans (SWPPPs)	Construction Division/ Contracts	Prepare a Contract Bid Item and Special Provision for inclusion in construction contracts to be advertised for bids which exceed the one-acre disturbance threshold.	Measurable goal complete.	Measurable goal complete.
4J	Field Guide on Erosion Prevention and Sediment Control	Construction Division/ Chief Engineer	Prepare field guide and issue to Resident Engineers	Continuing to develop field guide. Completion date moved to end of third year of permit term.	Complete development of field guide including internal review and issuance to Resident Engineers.

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4K	Storm Water Pollution Prevention Plan (SWPPP) Template	Construction Division/ Districts	Prepare a SWPPP template for use by Contractors on MassHighway construction projects. Implement use of the template on all appropriate MassHighway projects. Once contractors begin to use the template, it may be revised if necessary to address input received internally and from agencies. Ultimately the template will be converted into a computer program.	The SWPPP template continues to be in development.	Complete final draft and circulate for internal MassHighway review.
4L-1	Training	Construction Division	Conduct annual Erosion Prevention and Sediment Control Training for MassHighway Construction Personnel.	The Environmental and Construction Divisions conducted Erosion Prevention and Sediment Control Training for Resident Engineers and field staff during the winter of 2005. The training included review of environmental regulatory programs, including the CGP, and common erosion control problems and solutions. A total of 267 staff members attended this training. District 1 2/8/05 3/2/05 District 2 2/14 & 2/16/05 District 3 3/31 & 4/6/05 District 5 3/3/05	MassHighway will include training on Erosion Prevention and Sediment Control in the annual training seminars given each winter. The training will also include updates on the MS4 permit and the Construction General Permit and MassHighway's new programs/requirements which have been developed in the previous year.
4L-2	Training	Bay State Roads/ Construction Division	Sponsor and conduct Erosion and Sediment Control Workshop and Vendor Exhibit.	Goal indicated for Permit Year 3.	MassHighway will sponsor and conduct an Erosion and Sediment Control Workshop and Vendor Exhibit in the winter of 2005/2006.

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4M	Erosion and Sediment Control Field Tests	Construction Division/ Districts/ Landscaping	Perform field tests of new erosion and sediment control materials on MassHighway projects. Create and distribute memo internally summarizing materials effectiveness and recommended use.	MassHighway has begun to identify projects which would be appropriate for performing field tests.	MassHighway will implement field tests.
4N	Construction Bulletins	Construction Division	Issue annual construction bulletins to each District regarding storm water issues.	A guidance memorandum on the required contents of a SWPPP developed by Contractors was issued by the Deputy Chief Engineer for Construction to the District Construction Engineers and staff and the District Environmental Engineers in April 2004.	Deputy Chief Engineer for Construction to issue annual construction bulletin to District Construction Engineers and staff And District Environmental Engineers.

#### 4a. Additions

	No additions				
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## 5. Post-Construction Stormwater Management in New Development and Redevelopment

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Year 2</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities - Permit Year 3</b>
5A	MassHighway Storm Water Handbook	Environmental	Secure DEP ratification for MassHighway Storm Water Handbook.	Measurable goal complete. Ratification was received on May 7, 2004 from MA DEP.	Measurable goal complete.
5B-1	MassHighway Roadway Maintenance Program	Maintenance	Continue to implement MassHighway maintenance program.	MassHighway continues to conduct maintenance on its roadways.	MassHighway will continue to conduct maintenance on its roadways.
5B-2	MassHighway Roadway Maintenance Program	Construction/ Planning Division	Include Best Management Practices in drainage inventory database submission requirements.	Measurable goal scheduled to begin in Permit Year 3.	As the Drainage Information Specification (3B-1) is developed, it will include securing information regarding BMPs on projects.
5C	Technology Acceptance and Reciprocity Partnership (TARP)	Environmental	Continue to participate in TARP program	MassHighway continues to participate in this program.	MassHighway will continue to participate in this program.
5D	Stormwater Innovative Technology Evaluators (SITEs)	Environmental	Continue to participate in SITEs Committee which evaluates innovative BMPs.	MassHighway continues to participate in this program.	MassHighway will continue to participate in this program.
5E	Highway Runoff Contaminant Model	Env. Div. Consultant	Develop and calibrate contaminant loading model.	MassHighway has recently initiated the project with a Notice to Proceed issued on August 17, 2004.	MassHighway has authorized the UGS to begin the development of the loading model based on stormwater data collected from 8 sites.
5F-1	BMP Maintenance Manual	Environmental/ Maintenance	Develop BMP Maintenance Manual to be used as a field guide by maintenance personnel.	MassHighway has begun to solicit input from district maintenance staff on the format and contents of the manual.	MassHighway will continue to develop the maintenance manual.

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5G	Right of Way Parcel Evaluation	Environmental	Develop and implement a program of evaluating parcels which are candidates for disposal by MassHighway for their potential in siting storm water BMPs.	Measurable goal scheduled to begin in Permit Year 3.	MassHighway will begin to develop evaluation program.

### 5a. Additions

	No additions.				
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## 6. Pollution Prevention and Good Housekeeping in Municipal Operations

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Year 2</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities - Permit Year 3</b>
6A-1	Source Control	Project Clean/ Operations	Continue to support Project Clean.	MassHighway continues to support this program.	MassHighway will continue to support this program.
6A-2	Source Control	Adopt-a-Highway/ Operations	Continue to support Adopt-a-Highway program.	MassHighway continues to support this program.	MassHighway will continue to support this program.
6A-3	Source Control	Environmental/ Districts	Continue to support Deicing and Reduced Salt Areas Programs.	MassHighway continues to support these programs.  MassHighway submitted the Draft GEIR for deicing practices for review in June 2004.	MassHighway will continue to support the Deicing and Reduced Salt Areas Programs.  MassHighway will submit the revised GEIR for deicing practices to MEPA in Permit Year 3.
6A-4	Source Control	HELP/ Operations	Continue to support Highway Emergency Locator Program (HELP).	MassHighway continues to support this program.	MassHighway will continue to support this program.
6A-5	Source Control	Environmental	Continue development of Vegetation Management Plan (VMP)	Measurable goal complete.	Measurable goal complete.
6A-6	Source Control	Planning	Continue to support MassHighway HOV program.	MassHighway continues to support this program	MassHighway will continue to support this program.
6A-7	Source Control	Planning	Continue to support alternative transportation through technical funding and assistance.	MassHighway continues to support this program.	MassHighway will continue to support this program.



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6A-8	Source Control	Highway Design	Continue to support highway safety through safety design standards, hazard signage and electronic variable message signs, and rumble strips.	MassHighway continues to support this program.	MassHighway will continue to support this program.
6A-9	Source Control	Environmental	Continue support of Toxics Use Reduction (TURA) program.	MassHighway continues to support this program.	MassHighway will continue to support this program.
6B-1	Employee Training	MTAP/ Baystate Roads	Continue to support MTAP and Baystate Roads program.	MassHighway continues to support these programs. Specific programs sponsored by these programs are discussed in BMP 1A and 1B.	MassHighway will continue to support these programs.
6B-2	Employee Training	Environmental	Continue Facility Handbook Training	MassHighway provided annual “Environmental Awareness Training” to maintenance facility personnel regarding spill prevention and good housekeeping practices (e.g., proper storage and handling of materials, O&M of drainage systems, and snow and ice control). These trainings were conducted in October and November 2004. The following number of MassHighway employees attended from each district District 1 = 48 attendees District 2 = 36 attendees District 3 = 33 attendees District 4 = 85 attendees District 5 = 91 attendees	MassHighway will again provide annual training to maintenance facility personnel regarding good housekeeping practices and spill prevention in Permit Year 3.

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6B-3	Employee Training	Highway Operations/ MTAP/ Baystate Roads	Continue Snow and Ice Program Training.	<p>MassHighway provided annual training internally and through MTAP programs on the latest techniques, equipment and material available for snow and ice removal. These trainings were conducted in the Fall of 2004 by the District Snow and Ice Engineers. Topics discussed included: deicing materials, including liquid CaCl<sub>2</sub>, specifications for materials, equipment types (state and hired), spreader rates and calibration, weather services and information, and snow and ice control methods for reduced salt areas. The annual training was attended by 48 MassHighway employees.</p> <p>MTAP provided ½ day seminars for MA Dept. of Conservation and Recreation (DCR) on Snow &amp; Ice Control Operations including spreader calibration and review of alternative equipment and methods for snow and ice control. Two seminars were provided with the following number of DCR employees attending:  2/24/05 – Boston – 14 attendees  3/07/05 – Boston – 7 attendees</p> <p>Baystate Roads sponsored a “Snow &amp; Ice Control” Training Seminar for MassHighway employees during the fall of 2004. The training agenda included: spreader calibration, deicing materials, plowing, and the effects of sanding on the environment. Four seminars were provided with the following number of MassHighway employees attending:  10/19/04 – Northampton – 73 attendees  10/21/04 – Andover – 96 attendees  10/28/04 - Worcester – 71 attendees  10/27/04 – Taunton – 82 attendees</p>	MassHighway will again provide annual training internally and through MTAP programs on the latest techniques, equipment and material available for snow and ice removal.

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6B-3 (cont'd)	Employee Training	Highway Operations/ MTAP/ Baystate Roads	Continue Snow and Ice Program Training.	Baystate Roads also sponsored a “Snow & Ice” seminar for DPW snowplow drivers. These ½ day seminars focused on spreader calibration, alternative equipment and methods for snow and ice control. Three seminars were performed with the following attendees: 11/2/04 – Concord – 25 attendees 11/12/04 – Palmer – 20 attendees 11/23/04 – Lynn – 30 attendees	MassHighway will again provide annual training internally and through MTAP programs on the latest techniques, equipment and material available for snow and ice removal.
6B-4	<i>Employee Training</i>	<i>Highway Operations</i>	<i>Continue Equipment and Vehicle Safety Training.</i>	<i>These topics are included in the other training programs including the “Environmental Awareness Training” discussed in BMP 6B-2 above. Therefore, MassHighway requests that this BMP be deleted from the SWMP program.</i>	<i>Measurable goal removed.</i>
6C-1	Maintenance	Districts	Continue maintenance activities for storm water system.	MassHighway continued to maintain the highway system through catch basin cleaning contracts, street sweeping and regular drainage system maintenance.	MassHighway will continue to maintain the highway system through catch basin cleaning contracts, street sweeping and regular drainage system maintenance
6C-2	Maintenance	Districts	Continue maintenance activities and practices discussed in Environmental Facility Handbooks for maintenance/ material storage yards.	MassHighway continues to maintain environmental compliance at their maintenance facilities by employing MassHighway’s EMS system and in accordance with each facility’s Environmental Facility Handbook.	MassHighway will continue to maintain environmental compliance at their maintenance facilities by complying with each facility’s Environmental Facility Handbook.
6D	Waste Disposal	Districts	Continue proper waste disposal practices.	MassHighway and its contractors continue to properly dispose of waste.	MassHighway and its contractors will continue to properly dispose of waste.

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Year 2</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities - Permit Year 3</b>
6E-1	Good Housekeeping/ Pollution Prevention Program Evaluation	Environmental	Evaluate existing Good Housekeeping/ Pollution Prevention Programs to determine additional or revised activities which would increase effectiveness and usefulness of the programs. Year 1: Training Programs (MTAP, Baystate Roads, Facility Handbook, Snow and Ice Program, and Equipment and Vehicle Safety)	<p><b>MTAP</b> – Continued to work with MTAP to develop a seminar on the Storm Water Handbook and NPDES SWMP for Permit Year 3.</p> <p><b>Baystate Roads</b> – Measurable goal complete.</p> <p><b>Facility Handbook</b> – Annual training seminar will continue as discussed in BMP 6B-2.</p> <p><b>Snow and Ice Program</b> – Annual training as discussed in BMP 6B-3.</p>	<p><b>MTAP</b> – Seminar scheduled for April 2005.</p> <p><b>Baystate Roads</b> – Measurable goal complete.</p> <p><b>Facility Handbook</b> – Measurable goal complete.</p> <p><b>Snow and Ice Program</b> – Measurable goal complete.</p>
6E-2	Good Housekeeping/ Pollution Prevention Program Evaluation	Environmental	Evaluate Source Control Programs - litter and chemical use reduction (Project Clean, Adopt-a-Highway, Deicing and Reduced Salt Areas, VMP, Toxics Use Reduction) to determine additional or revised activities which would increase effectiveness and usefulness of the programs in regards to storm water and good housekeeping measures.	Personnel from MassHighway's Environmental Division met with personnel from Project Clean, Adopt-a-Highway, Deicing and Reduced Salt Areas, VMP, and Toxics Use Reduction programs to determine if there are opportunities for improving or revising program activities regarding storm water or MS4 related issues. MassHighway determined that these programs are providing important storm water value as they are being implemented and that no changes are necessary.	Measurable goal complete.

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Year 2</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities - Permit Year 3</b>
6F-1	Catch Basin Inspection and Maintenance Record System	Environmental/ Maintenance/ Districts	Collect data for three years on the accumulation of debris for representative areas, and determine if the current inspection and cleaning schedule should be altered for particular areas. The schedule will target areas that are in greatest need of cleaning.	MassHighway has begun to develop a work plan for this study. Due MassHighway's focus on revising the SWMP to address EPA and DEP comments during Permit Year 2, implementation of the catch basin monitoring program was not started in Permit Year 2. The review of catch basin accumulation will begin in Permit Year 3 and continue for 3 years, until the end of the Permit Term.	MassHighway will implement the data collection program and begin monitoring.
<i>Revised</i>	<i>Catch Basin Inspection and Maintenance Frequency Review Program</i>			<i>Since the drainage database will no longer focus on mapping the entire drainage system (will instead map all outfalls within urbanized area within the shorter time frame of the end of the permit term), this BMP will no longer include using the database for tracking catch basin inspection and maintenance(see BMP 6F-4 below). Therefore, the name of the BMP was revised to reflect this revision.</i>	
6F-2	<i>Catch Basin Inspection and Maintenance Frequency Review Program</i>	Environmental/ Maintenance/ Districts	Upon completion of the review, update Catch Basin Cleaning SOP, if necessary.	<i>MassHighway is requesting removal of this measurable goal for this Permit Term. Since this goal is dependent upon completion of the CB monitoring program, the update of the Catch Basin Cleaning SOP will be initiated in the second permit term.</i>	<i>Measurable goal removed.</i>
6F-3	<i>Catch Basin Inspection and Maintenance Frequency Review Program</i>	Districts	Implement SOP in each of the five districts.	<i>MassHighway is requesting removal of this measurable goal for this Permit Term. Since this goal is dependent upon completion of the CB monitoring program, the update of the Catch Basin Cleaning SOP will be initiated in the second permit term.</i>	<i>Measurable goal removed.</i>

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Year 2</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities - Permit Year 3</b>
6F-4	<i>Catch Basin Inspection and Maintenance Frequency Review Program</i>	Environmental/ Maintenance/ Districts	Once drainage inventory is created for an area, add future catch basin cleaning information.	<i>MassHighway inadvertently retained this goal in the latest version of the SWMP. In order to meet the EPA deadline of mapping all discharges by the end of the first permit MassHighway will focus on mapping only discharges from the stormwater system and not performing a full drainage system inventory. Therefore, this measurable goal is no longer applicable.</i>	<i>Measurable goal removed.</i>

#### 6a. Additions

	No 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) – Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities - Permit Year 3
7D	Environmental Site Data Form	Environmental/Construction	MassHighway has prepared this form to review potential impacts of a project to a variety of resource areas as part of compliance with the NPDES Construction and MS4 general permit. This form includes review of discharges for potential impact to waterbodies with approved TMDLs.	The information needed to complete the SWPPP overlaps with the environmental impact information that MassHighway currently envisions will be included in the Site Data Form. Therefore, completion of this form has been delayed in order to explore ways of either coordinating completion of these two forms or creating one form that would be submitted at the 25% Design Stage.	Since completion of the SWPPP template is not slated until Spring 2006 (end of Permit Year 3), this measurable goal will not be implemented until Permit Year 4.
	See attached table with description of measures to meet TMDL recommendations.				

### 7a. Additions

	No additions				
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### 7b. WLA Assessment

Projects within a watershed with an approved TMDL are most likely subject to the Wetlands Protection Act (WPA). MassHighway projects which are subject to the WPA strive to meet the WPA's Stormwater Policy to the greatest extent possible. Meeting the requirements of the Stormwater Policy should provide sufficient water quantity and quality controls to reduce pollutant loading to the impaired waterbodies. The attached table tracks the projects within approved TMDL watersheds and summarizes the controls implemented to meet the TMDL requirements. New design and construction projects which are proposed within a TMDL watershed will incorporate measures to meet the TMDL requirements.

#### **Part IV. Summary of Information Collected and Analyzed**

MassHighway did not implement any programs which collect or analyze information during Permit Year 2.

#### **Part V. Program Outputs & Accomplishments (OPTIONAL)**

MassHighway's accomplishments during the second permit year are summarized in Part 1- 4 of this annual report.