

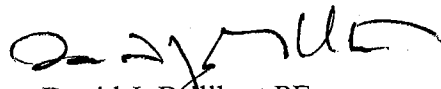
NPDES Phase II MS4 General Permit Annual Report

I. General Information

Organization:	NH Department of Transportation (NHDOT)
EPA NPDES Permit Number:	NHR043001
Annual Report Number and Reporting Period:	No. 5: May 1, 2007 to April 30, 2008
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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.



David J. Brillhart PE
Assistant Commissioner,
New Hampshire Department of Transportation

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II. Self Assessment

The New Hampshire Department of Transportation (Department) is committed to developing, implementing a program to reduce the discharge of pollutants from the Department's regulated Small MS4s to the maximum extent practicable, with the goals of protecting water quality and satisfying the water quality requirements of the Clean Water Act and state water quality standards while providing a safe and efficient transportation system for the public.

During this fifth year of the permit, the Department has continued to further its efforts in three principal areas including (1) continuing to map and inventory the drainage infrastructure along state-maintained roadways in the MS4 communities (Min. Measure 3); (2) continuing to enhance its erosion control project review and contractor oversight program (Min Measure 4); and (3) increasing its employee training with respect to winter maintenance activities and enhancing its salt usage efficiency (Min. Measure 6),

Relative to mapping, the Department has made substantial progress this past year by completing nearly 80 % or roughly 498 of the estimated 627 state-maintained miles in the urbanized areas. Drainage structures were mapped in the field with assistance from the District Maintenance personnel using GPS equipment. Basic structure attributes were recorded including structure type (i.e., catch basin, outfall, etc.) as well as size, material type and condition, and whether there are potential problem areas that require further review. With this rate of progress, the Department believes that the entire roadway drainage system in urbanized areas can be mapped by the end of 2009. The general priorities for mapping have been the Seacoast Region, the major Interstates and the roadway miles in watersheds targeted or identified as needing a TMDL to address use impairments associated with chloride. Most of the roadway miles in the Seacoast region and in the TMDL watersheds have been completed with the exception of the Turnpikes System. The Department has also updated its list of water bodies that receive runoff from state-maintained roadways in urbanized areas. This list includes additional information with regard to any water quality impairments. This updated list is included in Appendix A of this Annual Report.

The Bureau of Environment has continued to strengthen its role in coordinating erosion control planning, review and inspections for all the Department's projects. For some of the larger projects, the Department has been coordinating with DES Wetland and Watershed Management personnel to insure consistency with the erosion control planning, contractor SWPPP development and monitoring efforts for all of the Department's projects. The Department has improved its review of construction SWPPPs prepared by contractors and has recently required turbidity monitoring in adjacent streams for larger construction sites.

Although separate but very much related to the MS4 Program, the Department has investigated and is beginning to utilize some innovative stormwater treatment BMPs into its major roadway design projects including the proposed I-93 and Route 125 Improvement Projects. In working with NHDES and as part of the issuance on the 401 Water Quality Certificates for each of these projects, the Department has committed to performing pollutant loading analyses for each roadway segment incorporating treatment measures to maintain no net

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increase in the post-construction pollutant loads attributed to highway runoff. As a result of this process, several innovative BMP designs, including gravel wetlands and infiltration trenches have been included in recent roadway designs as well as recent road construction projects. The Department has been working with the UNH Stormwater Center to review and comment on BMP designs, particularly gravel wetlands.

In addition, the Department has continued to improve its employee training program as part of Minimum Measure 6 (formerly Min. Measure 1C). The Department feels that employee training provides the necessary "knowledge infrastructure" for pollution prevention as well as the other five measures (Minimum Measures 1-5). The Department has instituted more extensive Snow and Ice Control training for its Highway Maintenance personnel to improve its efficiency in the use of deicing materials

The Department has also strived to increase its public education and outreach efforts through press releases, public notices and additional posting of information on its web site. The Department has also increased its effort to get more public input in the planning phases of specific projects as well as the regional transportation planning aspects through public meetings (Min Measure #2).

The Department has completed this self-assessment and has determined that our agency is in general compliance with all permit conditions and continues to work toward completing measurable goals set out initially in the NOI.

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III. Summary of Minimum Control Measures

This section is formatted as follows:

NPDES Minimum Control Measure

<u>Code</u>	<u>Description</u>
BMP	BMP Description
TEAM	Responsible Team/ Bureau Name
GOAL	Measurable Goal
PROG	Progress on Goal(s) Permit Year 5 (2006-2007)
ACTION	Planned Activities Year 6 (2008-2009)

1. Public Education and Outreach

1A. Nonpoint Source Stormwater Display

BMP	Showcase the Department's Nonpoint Source Stormwater Table at 6 NH State Fairs annually, and other appropriate locations (e.g. schools)
TEAM	Bureau of Highway Maintenance and Bureau of Environment
GOAL	Note the approximate number of events that the Department's stormwater table was viewed.
PROG	In this 5th permit year, the Stormwater / NPS presentation table was displayed at the major New Hampshire State Fairs, highlighting water resource protection and other natural resources through the state. The table illustrates various Department activities related to bridges, roadways, sand and salt operations, patrol sheds, and active construction sites.
ACTION	The Department anticipates using the improved stormwater display table for presentations at local schools, and other appropriate audiences in addition to the state fairs.

1B. Meetings / Presentations with Professional, Private, and Public Organizations

BMP	The Department will continue to attend and/or assist in organizing appropriate stormwater related presentations and workshops with both public and private organizations.
TEAM	Bureau of Environment
GOAL	In general, members of Department's Bureau of Environment personnel try to attend two to three stormwater related workshops each year to remain up to date on stormwater issues and regulatory changes. The total number of presentations/meetings, its focus and the target audience for each workshop will be reported each year.
PROG	This past year, the Department coordinated with NHDES in hosting a stormwater workshop on May 1, 2007 to discuss stormwater issues and regulations within the state. In addition, the Department's BOE personnel attended the NHDES' Land Resource Management

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Workshops that were held in February and March to provide updates on recent or proposed regulatory changes. The Department recently teamed with ACEC-NH to host a Technical Transfer Conference on April 18, 2008 in Concord, NH with a ½ day session dedicated to innovative Stormwater Management issues.

ACTION Continue to provide or assist in hosting or supporting presentations to both public and private organizations.

1C New England Transportation Compensatory Mitigation Conference

BMP The Department will continue meeting with the surrounding New England states to coordinate programs and share information.

TEAM Bureau of Environment

GOAL Meet at least annually. The Department will prepare a conference report of the individual meetings summarizing the topics discussed, materials distributed and follow-up on action items noted.

PROG The Department's Environmental personnel last met with other New England Transportation Agency environmental staff at the Northeast Transportation Mitigation Workshop that hosted by the Department on May 9, 2006. This workshop provided an opportunity to collaborate on common issues regarding stormwater and other environmental matters.

ACTION Continue to meet and coordinate with other New England State Agencies to share information and efforts relative to stormwater issues. It is anticipated that the next meeting will be held in Vermont sometime within a year.

1D Develop Appropriate Media Campaign

BMP Increase public education and outreach efforts through additional public announcements and information sharing using the available media options including the Department's web site.

TEAM Commissioner's Office and Bureau of Environment

GOAL The Department will focus on informing the traveling public on the Department's activities through press releases, media contacts and public meetings

PROG The Department's Public Information Officer continues to work with various NH media outlets i.e., NHPR, WMUR (channel 9) and state newspapers to distribute public information regarding the Department's activities. In the past year, numerous press releases were posted to highlight or provide notice on various activities including transportation planning and proposed roadway improvements. The Department has worked with WMUR (Channel 9) and Union Leader newspaper to inform the traveling public about the Department's purchase and use of new road salt spreaders ("Schmitz" spreaders) that "pre-wet" the road salt prior to application. The incorporation of this technology follows the 2005 rollout of the use of salt brine for anti-icing applications. The

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Department also teamed with the Department of Safety for a series of Public information ads on Winter Driving.

ACTION The Department's Public Information Officer will continue to inform and educate the public through local media outlets on Department activities related to pollution prevention actions.

1E Development Partnerships

BMP Encourage and facilitate development of mutually beneficial partnerships.

TEAM Bureau of Environment

GOAL Document the partnerships that are formed.

PROG The Department has been actively pursuing and formulating important partnerships with such groups as the NH Association of General Contractors, the UNH T2 group and the NH Chapter of the American Council of Engineering Companies (ACEC). For the past two years, Department has teamed with ACEC-NH to host a Technical Transfer Conference in April in Concord, NH. This conference is geared toward increasing awareness of new technologies and techniques for pollution prevention, stormwater management as well other interests. This year's conference on April 18, 2008 included a whole section on stormwater management and will provide an update on BMP design and performance data in coordination with the UNH Stormwater Center.

ACTION The Department will continue to support the efforts of the NH Stormwater Center, ACEC, AGC and others to distribute and exchange the latest information on stormwater treatment design.

1F Grant Opportunities

BMP Review opportunities to apply for project grants to mitigate water quality impairments from roadway runoff. Program projects for this purpose to meet grant requirements

TEAM Bureau of Environment

GOAL Note the project type, location, and whether the committee selected the project. If project is selected, report on the status.

PROG As part of the reauthorization of the FHWA SAFETEA-LU 23 USC 101(a)(35), STP Funds are now available for projects that address existing water quality problems associated with highway runoff. In addition as part of the IDDE Program, the Department plans to use ODD Funds to help pay for the design and installation of the infiltration device planned for the Hampton Beach outfall that was found to elevate bacteria levels. Previously, District 6 received a NOAA Coastal Zone Restoration grant to assist in the storm drain mapping in the Seacoast area.

ACTION The Department will continue to work toward identifying suitable projects and available funding sources.

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1G Special Events

BMP	Research the types of special events (ex. Earth Day, local fairs, Wild NH, etc) and determine appropriate involvement.
TEAM	Bureau of Environment
GOAL	Note the event and the type of involvement from the Department. Note the number of events per year.
PROG	The BOE personnel will occasionally participate in special events to display the new Stormwater Demonstration Table or discuss the Department's activities to minimize and prevent stormwater related impacts. Most recently, BOE personnel have made several visits and display presentations to area schools. The Department will also meet with watershed association groups when invited or as issues arise.
ACTION	The Department will continue to look for appropriate events in which to participate and will contact other events groups such as the Department of Agriculture, NH Fair Association, NH DRED and others.

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2. Public Participation and Involvement

2A Sponsor A Highway Program

BMP	Local businesses and volunteer groups will adopt a roadway segment to periodically clean up trash and debris in return for a free sign highlighting the business or group. District personnel help by collecting filled trash bags along the route.
TEAM	Bureau of Highway Maintenance and Bureau of Turnpikes
GOAL	Document quantity of roadside material collected on an annual basis.
PROG	The Program continues to represent one of the most successful programs for public participation with over 450 different volunteer groups participating in collecting trash on over 1,500 miles of roadway. Since the Program began in 1994, over 235,000 bags of trash have been collected. (See Appendix B for Program Data). The Department also supports the Annual Coastal Cleanup Event by picking up and disposing the trash bags that were filled by volunteers along the coastal beaches. The Department has over the years covered the cost of hauling and disposing of the collected trash.
ACTION	The Department will continue supporting these programs and providing annual data.

2B Department Public Meetings

BMP	The Department continues to provide opportunities for public input and involvement on specific projects through Public Informational Meetings, as well as Public Hearings. These meetings engage the public in specific discussions of stormwater management issues.
TEAM	Bureau of Environment, Bureau of Highway Design, and Bureau of Bridge Design
GOAL	Coordinate with the Environmental Project Managers and document the number of public meetings that occurred within the regulated communities. Document any water quality issues that were brought to the Department's attention.
PROG	The Department continues to schedule and promote public meetings related to new projects. For these meetings the Department solicits public input about water quality and stormwater issues. Where proposed projects are located in a Small MS4 community, local stormwater coordinators are specifically invited to these meetings to discuss stormwater issues. The Department has also attending the Salt Reduction Workgroup meeting associated with the Chloride TMDLs in the southern part of the State.
ACTION	BOE personnel and District staff will continue to solicit input at public meetings and work with Lake Associations and NHDES regarding water quality problems and addressing stormwater management aspects for all of its projects statewide.

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2C Seek Relevant Information from Public Officials

BMP	Notify and request input on stormwater or other environmental issues from municipal officials, regional planning commissions and other State Agencies by sending out initial notification letters and environmental report documents during the project planning phase.
TEAM	Bureau of Environment
GOAL	Incorporate any comments and concerns into the project design documents that were received through these letters during the project development phase. Municipal and regional officials are asked specifically to express and comment of water quality concerns and stormwater management issues related to proposed roadway projects. The letter provides a mechanism to discuss concerns at the local level and address existing as well as potential issues through the design and construction of new storm drain systems. The most recent example relates to the New London Park and Ride facility where a number of comments were received from the Lake Sunapee Protective Association and the Town of New London.
PROG	The BOE will continue to use to interact with local (including stormwater coordinator), state, and federal officials to solicit water quality concerns.
ACTION	BOE will continue to follow-up with discussions with design and construction staff as needed.

2D The Department's Website

BMP	Expanding the use of its web site to promote public involvement and participation with regard to stormwater issues.
TEAM	Office of Information Technology and Bureau of Environment
GOAL	Keep the existing website current.
PROG	The Department continues to add new project information, reference documents, and links to its current main website as a means of disseminating public information. For some of the larger, multi-year projects such as the I-93 project, separate project specific web sites have been created to host project related environmental documents and studies. The site would include stormwater related documents and NPDES Phase II resources.
ACTION	As time allows, Bureau of Environment staff will continue to add technical guidance, or project related stormwater related information into the main Department's website.

3. Illicit Discharge Detection and Elimination

3A Review/Incorporate Recent IDDE SOP Manual developed by Seacoast Coalition Group

BMP	The Seacoast Stormwater Coalition of regulated communities had contracted with a consultant to develop a Standard Operating Procedures Manual for IDDE investigations and Good
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	Housekeeping/Pollution Prevention measures which was completed in Nov. 2006.
TEAM	Bureaus of Environment and Highway Maintenance.
GOAL	The BOE has coordinated with District Personnel to review recent guidance documents.
PROG	The Department did not accept the document because it was oriented towards the municipal user.
ACTION	The Department plans to continue its IDDE program in selected areas through an Environmental Management System tailored to the Departments needs.

3B Drainage Permits

BMP	Review and update the drainage connection assessment and approval letters used by District Personnel to allow property owners to connect or contribute runoff to the Department's storm drain system. Additional language will be included to address concerns about non-stormwater and illicit discharges.
TEAM	Bureau of Highway Maintenance and Attorney General's Office
GOAL	BOE will coordinate with District Personnel to explain purpose and intent of changes. The revised approval letter will be used for new drainage connections.
PROG	The Department is currently reviewing the existing regulation with the Attorney Generals Office.
ACTION	Continue to process and coordinate with AG office to finalize the drainage connection approval letters.

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3C Drainage Map

BMP	Map the entire Department maintained drainage system located within the regulated Small MS4 communities.
TEAM	Bureau of Environment and Bureau of Highway Design.
GOAL	Maintain sufficient progress to complete mapping of entire MS4 drainage system by May 2009.
PROG	The Department has continued to make substantial progress in mapping its drainage system (including inlets, storm drains and outfalls) within the urbanized areas and identifying all receiving waters. The Department estimates that it has mapped approximately 80 % of its stormwater system within Small MS4 communities. This compares to just 45 % of the system at end of 2006. The Seacoast Region is essentially complete and the Department is focusing its efforts on completing storm drains along major interstates. The Department has now identified and mapped the receiving water bodies associated with the Department's maintained roadways in the urbanized area. See Appendix A. The list also indicates whether the water body is listed as impaired (base on the 2006 NHDES 303(d) list). See Appendix C for mapping examples.
ACTION	The Department plans to continue its mapping effort in 2008 in order to achieve the goal.

3D Illicit Detection and Elimination Program

BMP	Detect and eliminate illicit discharges and/or connections from the Department storm drain system. The Department will prioritize future IDDE efforts with consideration to 303(d) impaired water bodies, public water supplies, and recreational areas.
TEAM	Bureaus of Environment and Highway Maintenance.
GOAL	Review all outfalls associated with waters that are impaired with bacteria (<u>E. coli</u> , <u>Enterococcus</u>).
PROG	The Department investigated 80 mapped outfalls during the summer of 2006. Each outfall was investigated to detect illicit connections through photo-documentation and testing of any dry weather discharges. Through this effort, the Department discovered elevated bacteria levels in the discharge from a major outfall on Hampton Beach. Through a collaborative effort among DES, the Town, and the Department extensive smoke testing of the storm drain system was conducted to try to identify the contributing source or illicit connection. No source was found. We believe the bacteria levels are linked to the residual debris and trash contained within existing catch basin sumps draining to the outfall. The Department proposes to install an infiltration chamber to treat the discharge from this outfall and reduce the direct discharge to the beach.
ACTION	The Department will continue to investigate mapped outfalls focusing on water bodies on the 303 (d) list of impaired water bodies. The Department will continue to maintain records of all

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outfall investigations. The BOE will coordinate with the District Maintenance personnel to assist in the outfall investigations. The focus last year was to complete the mapping effort. The Department plans to line up the mapping with the 303(d) list once it receives guidance from DES on pollutants of concern from highway facilities

4. Construction Site Runoff Control

4A Stormwater Pollution Prevention Plan Review

BMP	Continue to review comment and approve project-specific SWPPPs developed by contractors for the Department's projects.
TEAM	Bureaus of Environment and Construction
GOAL	Review, update and document the approval process of the project-specific SWPPPs.
PROG	The Department continues to strengthen its requirements for site erosion control and review on construction projects. The Department has developed a detailed checklist to insure contractors are including the minimum requirements of the CGP in their SWPPPs and improves the process for Erosion and Sediment (E&S) control review. The Department has also developed a new database to track milestones of ongoing projects that have SWPPPs. The Department has been actively involved with the review and development process of the proposed Rule Revisions with the DES Site Alteration Program, which is setting new standards for erosion control. The Department has incorporated elements of EPA's SWPPP template to help streamline the process and educate contractors and maintain consistency on the level of details required to maintain compliance with the Program requirements.
ACTION	The Department is continuing to develop a model template to institute electronic submittals for district maintenance personnel for maintenance activities.

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4B Educate New Erosion Control Inspectors

BMP	Educate new contractors on the expectations for inspections and erosion control maintenance.
TEAM	Bureaus of Environments and Construction
GOAL	Identify new contractors and erosion control inspectors that have not worked with the Department as SWPPPs are submitted and inspectors are listed, to insure typical protocols and BMPs are implemented.
PROG	The Department has sent a "Letter of Expectations and Goals" to SWPPP site monitors to make them aware of the need to evaluate the effectiveness of SWPPP BMPs in the field, to document ineffective practices, and to educate designers on potential problems with BMPs. On some of the larger projects, the Department has recently requested contractors to conduct turbidity monitoring to insure BMP effectiveness.
ACTION	The Department will continue to review SWPPPs and work with contractors and inspectors in the field and evaluate their success or failure. The Department is reviewing DES's recent general guidance for conducting turbidity monitoring, BMP inspection and BMP maintenance plans. When finalized, these procedures will be provided to contractors and erosion control inspectors as needed on a project-by-project basis.

4C Roadway Maintenance Activities

BMP	Coordinate with the Division of Operations and others as appropriate, with regard to erosion control issues as part of maintenance activities.
TEAM	Bureau of Environment and Bureau of Highway Maintenance
GOAL	Coordinate with Highway Maintenance personnel with planning and field review of erosion control BMPs.
PROG	The BOE has expanded its review of erosion control BMPS to other divisions outside of the Construction Bureau. Through this expanded coordination, BOE believes that the Department's roadway maintenance is becoming more consistent across the various Districts in the State.
ACTION	The Department is looking to implement EPA's model SWPPP template for use by the Department maintenance personnel in developing their SWPPPs for their projects.

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4D Stormwater Management Erosion and Sedimentation Control Reference Manuals

BMP	Continue utilizing the stormwater management erosion and sedimentation control manuals.
TEAM	Bureau of Environment
GOAL	Review manuals and reference materials to ensure that they remain in compliance with all Federal and State regulations.
PROG	The Department has updated its "Construction Manual" to be the general guidebook for all Department activities related to construction projects, including erosion and sediment control. The Department has also completed the update to the manual "The Department Guidelines for Temporary Erosion and Sediment Control and Stormwater Management". Future updates will be conducted as necessary as new information or BMPs become available or adopted. As an example, the Department has recently begun to experiment with the use of compost socks as a sediment control barrier instead of silt fences. When adopted, new specs for compost socks will be added to the Manual.
ACTION	The Department will review EPA's model SWPPP template and DES' recent Interim Guidance for Constructing Stormwater BMPs and update erosion control design guidance accordingly. The Department will continue to monitor and become familiar with the proposed NHDES Site Alteration Rule changes, which are expected in late 2008.

4E Meetings with EPA Region 1 and NHDES

BMP	Meet with EPA Region 1 and NHDES on an as needed basis to discuss water quality issues associated with construction-related activities.
TEAM	Bureau of Environment
GOAL	Prepare/file a conference report of any meeting noting agenda, attendees, points of interest and any action items.
PROG	There are essentially no updates or changes to this BMP.
ACTION	The Department will continue to keep open communication with NHDES and EPA Region 1 relative to construction-related issues.

4F Project Design

BMP	Appropriate drainage and erosion control measures including project planning, phasing and sequencing will continue to be a major focus as part of the roadway improvement design phase. Review all projects currently in the design phase.
TEAM	Bureau of Environment, Bureau of Highway Design and Bureau of Bridge Design
GOAL	Meet regularly with the BOE Environmental Managers and the Highway Design Project Managers to discuss and document

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	proposed projects with respect to stormwater runoff and water quality BMPs that are needed and will be employed.
PROG	As mentioned above, the Department has been involved in NHDES proposed rule change process for their Site Alteration Program, which began in Oct. 2005. The proposed rules are not expected to be finalized until 2008 but are intended to upgrade and strengthen the erosion control requirements and stormwater BMP design criteria. The Department has also been coordinating DES Wetlands and Watershed Management Bureau personnel on SWPPP review on major projects such as the I-93 project.
ACTION	The BOE will continue to coordinate with erosion control equipment suppliers to provide updates and workshops to help educate design and maintenance personnel on the latest products for erosion control measures.

4G Specifications

BMP	Review the current specifications and compare to the 2003-2008 Construction General Permit (CGP). Make revisions as appropriate.
TEAM	Bureau of Environment and Bureau of Highway Design
GOAL	Continue to review and maintain up to date construction specifications regarding stormwater Best Management Practices.
PROG	The Construction specifications were recently updated in April 2005 and have been fully implemented. From time to time, new individual specifications are developed as needed for new erosion control or stormwater management BMPs.
ACTION	The Department plans to develop new construction specifications for gravel wetland design procedures, use of compost for sediment barriers and to address the recent 401 water quality requirements for pollutant loading and turbidity monitoring. The Department plans to conduct a more comprehensive review of the construction spec in 2008 following the anticipated revisions to DES' Alteration of Terrain Program.

4H Construction School

BMP	Provide the Bureau of Construction personnel with training or updates on stormwater issues and/or NPDES Phase II issues.
TEAM	Bureau of Environment and Bureau of Construction
GOAL	The Department again did a Construction School Program highlighting the requirements of the MS4 Program.
PROG	The Construction School is an effective training forum to educate personnel on the basic elements of the MS4 Program. More recently, the Department has hosted more focused workshops on the design and tools for stormwater treatment working with UNH Stormwater Center and local equipment suppliers.
ACTION	The Department will continue to periodically assess the need for NPDES-related workshops for its employees. The Bureau of

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Environment will continue to revise and prioritize the education and outreach needs of the Department.

5. Post Construction Runoff Control

5A Review Stormwater BMP Designs for Proposed Projects

BMP	Develop a consistent internal review process to evaluate the designs and needs of proposed water quality BMPs that would be included in new construction projects relative to sensitivity of the receiving waters.
TEAM	Bureau of Environment, Bureau of Highway Maintenance, Bureau of Construction, and Bureau of Bridge Design
GOAL	Establish a review process to evaluate BMPs designs on proposed projects to insure consistency with recent guidance criteria. Document and follow-up as required.
PROG	The review process for stormwater BMP design has been done on an as needed and project-by-project basis. The Department has been coordinating with NHDES on their Interim Guidance documents that were released a year ago regarding pollutant loading analyses and BMP design. This Interim Guidance language is essentially the same as the pending requirements for the Alteration of Terrain Program regulations. The Department has incorporated the Interim Guidance into the design process as new roadway designs are initiated. The I-93 project has become a test case for developing a review and coordination process. Other projects such as the NH Route 125 project in Plaistow-Kingston, others requiring Water Quality Certifications and projects within urbanized MS4 areas will be reviewed.
ACTION	The Department will continue to coordinate with DES to better understand the intent of the new regulations and the latest BMP designs, and implement them in projects.

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5B Develop Data Base to Maintain Inventory Stormwater BMPS and Manage Drainage Infrastructure Assets

BMP	Develop a database to allow tracking and scheduling of routine maintenance procedures on stormwater treatment structures
TEAM	Bureau of Highway Maintenance, Bureau of Turnpikes and Bureau of Bridge Maintenance.
GOAL	The Department has developed a central GIS database of stormwater treatment structures.
PROG	The Department plans to determine methods that track efforts used to maintain the systems. The process is expected to begin in the summer of 2008.
ACTION	The Department will also research available software packages to identify programs that can be used to schedule and track maintenance needs based on GIS attribute data.

5C Standardize Routine Roadway and BMP Maintenance Procedures

BMP	Develop and implement Standard Operating Procedures manual to be utilized as a guide for maintenance personnel in maintaining stormwater BMPs.
TEAM	Bureau of Highway Maintenance, Bureau of Construction and Bureau of Environment.
GOAL	Develop a Department SOP manual preferable a durable pocket-sized field manual to outline standard maintenance protocols for various BMPs.
PROG	A couple of years ago, the Department produced a manual entitled, BMPs for Routine Maintenance Activities, which has been used by maintenance personnel to conduct maintenance activities in an environmentally sound manner.
ACTION	The Department will continue to work on developing an Environmental Management System.

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5D Enhance/ Replace / Upgrade Roadway and Drainage Culverts to Rectify Observed Sediment and other Pollutant Source Areas

BMP	Coordinate with Watershed Groups, Lake Assoc., etc. to address Erosion Control Issues Related to Existing Roads and Culvert Washouts in Environmental Sensitive Areas.
TEAM	Bureau of Highway Maintenance and Bureau of Environment
GOAL	To address complaint-based or other known pollutant source issues related to the Department drainage in a timely manner to satisfy stakeholders and minimize water quality impacts.
PROG	The Department has responded and coordinated with various watershed groups in the state to address known problem areas. As discussed earlier, the Department is planning to design/install a major infiltration basin at Hampton Beach to reduce direct surface discharge with elevated bacteria levels from a culvert outfall from a nearby parking lot.
ACTION	The Department will continue to coordinate with resource agencies and volunteer groups as water quality issues are brought to their attention.

6. Pollution Prevention / Good Housekeeping

6A Managing Assets for Transportation Systems (MATS)

BMP	Continue to inventory and incorporate the Department drainage system in the MATS system to enable management and maintenance of the drainage related assets. This BMP will no longer rely on a MATS based inventory but will utilize a GIS based system instead (see below).
TEAM	Bureau of Highway Maintenance, Office of Information Technology and Bureau of Finance and Contracts
GOAL	Complete mapping inventory of drainage systems and develop procedures to capture maintenance activities in the MATS system or MATS like system.
PROG	The Department is using a GIS based system to maintain an inventory of the storm drain infrastructure. Currently, the MATS system is not as well suited for tracking "NPDES-related assets". However, the Department is working with other datasets that are similar to the drainage data. We hope to apply the knowledge gained by integrating these assets datasets within MATS to the drainage dataset.
ACTION	The Department will continue to work toward integrating drainage system components into a GIS system with the MATS system. The Department will research the available software to identify appropriate software packages that can integrate GIS attribute data to real-time work activities.

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6B Roadside Litter Removal Program

BMP	Remove roadside litter from all Department maintained roads
TEAM	Bureau of Highway Maintenance and Bureau of Turnpikes.
GOAL	Maintain a level of roadside cleanliness that is considered acceptable to the public based on the number of complaints received or lack thereof regarding litter.
PROG	Roadside litter removal is part of the Department maintenance program and is done throughout the year. Actual quantities of material are not typically calculated. There are no major changes to this BMP.
ACTION	Continue removing roadside litter from all Department roadways.

6C Coastal Cleanup

BMP	Continue to support the annual Coastal Cleanup Program by collecting and disposing of the filled trash bags and other debris.
TEAM	Bureau Highway Maintenance
GOAL	Coordinate with District personnel to pickup trash bags and collected debris following each event.
PROG	In Fall 2007, District 6 collected the bags of litter left along the roadside along the NH Route 1 corridor.
ACTION	Continue to assist in the debris pickup and disposal in support of this program.

6D Employees Training

BMP	The Department will continue providing appropriate presentations to Department staff relative to stormwater issues and the NPDES Phase II program.
TEAM	Bureaus of Environment, Highway Maintenance and Commissioner's Office
GOAL	A total number of presentations/meetings and the target audience within the reporting year will be documented. A follow-up on identified issues will be noted and required actions identified.
PROG	The Department has held a number of internal training sessions focused on pollution prevention. The Department met with maintenance personnel to implement the Maintenance Decision Support System (MDSS). MDSS ties the Department's winter maintenance activities to characteristics of the roadway and to assist on how to plow and treat New Hampshire highways to minimize salt, fuel and personnel use.
ACTION	The Department will continue to update and modify training to Department Personnel. The Bureau of Environment will note the training needs and prioritize those needs for subsequent training sessions.

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6E Guidance Materials

BMP	Update guidance documents and evaluate the need for additional guidance.
TEAM	Bureau of Environment
GOAL	Update the guidance document and summarize the changes. Note any additional guidance materials that have been or will be developed.
PROG	The Department has deployed a new internal guidance document, BMPs for Routine Roadway and Railway Maintenance Activities, for use by all Maintenance Districts and Operations bureaus as an educational reference tool and for performing roadside maintenance and being sensitive to environmental issues. The Bureau of Environment also prepared an internal guidance document entitled "The Department Guidelines for Temporary Erosion and Sedimentation control and Stormwater Management."
ACTION	The BOE will continue to refine and adopt procedures, and provide employee training to implement standardized procedures statewide.

6F Winter Maintenance Activities

BMP	Review current procedures and determine ways to reduce salt use through the use of more efficient application procedures and/or technologies.
TEAM	Commissioner's Office, Bureaus of Highway Maintenance, Turnpikes and Environment
GOAL	Document current practices and make recommendations relative to new technologies. Meet with appropriate Department personnel to review current deicing procedures.
PROG	The Department has been working closely with the Salt Reduction Working Group to identify feasible measures to reducing salt use both at the state and municipal level. In this past year, the Department has been using "Schmitz" spreaders, which pre-wet road salt just prior to application. The "pre-wet" process activates the salt, which improves its effectiveness. In addition, four roadway weather information stations (RWIS) were installed in MS4 areas and a total of 11 RWIS stations statewide. The RWIS data is being fed into the Maintenance Decision Support System (MDSS) to help reduce the unnecessary dispensing of salt.
ACTION	The Department will continue to aggressively pursue and experiment with various methods to reduce its salt usage including annual training of its employees and implantation on new technologies. The Department will continue to participate in the Salt Reduction Working Group, which provide a means to exchange technical information to other users and stakeholders.