Municipality/Organization:	University of New Hampshire
EPA NPDES Permit Number:	NHR042001
MaDEP Transmittal Number:	N/A
Annual Report Number & Reporting Period:	No. 4: March 06-March 07

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Bradford Manning **Title:** Director - Office of Environmental Health & Safety

Telephone #: 603-862-4041 **Email:** bmanning@cisunix.unh.edu

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: Bradford Manning

Printed Name: Bradford Manning

Title: Director, Environmental Health and Safety

Date: April 30, 2007

Part II. Self-Assessment

The University of New Hampshire has completed the required self-assessment and has determined to the best of our knowledge that our organization is in compliance with the various parts of our NPDES permit.

Part III. Summary of Minimum Control Measures

1) PUBLIC EDUCATION AND OUTREACH

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
1	**Production and Distribution of Informational Publications**	B. Manning	Distribution to Faculty and Student Population; Evaluation of Public Comments	In progress - see bulleted item(s) below.	Continue creating and distributing informational resources.

2007

- Mantz, E. "Keeping our Water Clean." Campus Journal. UNH Media Relations. March, 2007. The Campus Journal is distributed to more than 1,600 subscribers.
- "Storm Water Management Showcase." (19" x 31") displayed at the UNH Memorial Union Building from March through April 2007.
- Printed and distributed copies of the "UNH Storm Water Brochure" to UNH faculty, staff, and students. (UNH Office of Environmental Health and Safety, 2006).

2006

- Mantz, E. "No Dumping: Drains to Bay." Campus Journal. UNH Media Relations. April, 2006. The Campus Journal is distributed to more than 1,600 subscribers.
- Updated the UNH Storm Water Management website to include a downloadable/printable map of the campus catch basin system. January, 2006.
- "Storm Water Management Showcase." (19" x 31") displayed at the UNH Memorial Union Building through July, 2005.
- The UNH Storm Water Management Plan brochure is distributed to new employees during the monthly UNH Human Resources – New Employee Orientation. A total of 350 new employees received the brochure.

2005

- Yates, S. "Storm Water Management Program Progresses." Campus Journal. Volume XLII, Number 13. UNH Media Relations. January 1, 2005.
- Leonard, D. "New Center Tackles Storm Water Management." Campus Journal. Volume XLII, Number 10. UNH Media Relations. November 12, 2004.
- A link to the UNH Storm Water Management Plan is included in the UNH Human Resources, New Employee Orientation Handbook, titled "Getting Started @ UNH."
- "Storm Water Management Showcase." (19" x 31") displayed at the UNH Memorial Union Building from January 1, 2005 through May 31, 2005.

2004

- UNH Storm Water Management Pamphlet December 2003.
- Letter dated January 15, 2004, from John Aber, Vice President for Research and Public Service and Brad Manning, Director of Environmental Health and Safety, distributed to the UNH Community.
- Reed, J. "EHS Targets Pollutants in University Storm Water System." Campus Journal. Volume XLI, Number 22. UNH Media Relations. January 30, 2004.
- Public Forum Held on Storm Water Management." Campus Journal. Volume XLI, Number 27. UNH Media Relations. March 5, 2004.
- Public Forum Held on Storm Water Management." Campus Journal. Volume XLI, Number 28. UNH Media Relations. March 12, 2004.
- "Storm Water Management Showcase." (19" x 31") displayed at the UNH Memorial Union Building from February 23, 2004 through March 31, 2004.

1) PUBLIC EDUCATION AND OUTREACH (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
2	**Production and Distribution of Informational Video**	B. Manning	Completion of Video Post-Production; Scheduling of Public Viewing; and Notice of Availability to Requesting Organizations	In progress - see bulleted item(s) below.	Look for additional venues to distribute storm water videos and continue to broadcast movie at UNH.

2007

- Posted the "Storm Water Runoff - There is no Away!" video online at http://www.unh.edu/ehs/videos.htm. (Seacoast Storm Water Coalition, 2003).
- Posted the "UNH Protecting Our Water" video online at http://www.unh.edu/ehs/videos.htm. (UNH and the Seacoast Storm Water Coalition, 2005).

2006

- A portion of the video, "Storm Water @ UNH." (DVD Video) can be viewed on the UNH Center for Storm Water Technology Evaluation and Verification (CSTEV) website (http://www.unh.edu/erg/cstev/). Created by the Office of Environmental Health and Safety, University of New Hampshire Video Services, Volunteer Storm Water Committee, and the Seacoast Storm Water Coalition. 2004. This site has been viewed over 8,800 times since 2004.

2005

- "Storm Water Runoff, There is No Away," (VHS Video) accepted for broadcast on NHPTV (Channel 4) – Summer 2004.
- "Storm Water @ UNH." (DVD Video) Created by the Office of Environmental Health and Safety, University of New Hampshire Video Services, Volunteer Storm Water Committee, and the Seacoast Storm Water Coalition. 2004. Distributed to UNH Catvision and Channel 3.
- "Storm Water @ UNH." (DVD Video) Created by the Office of Environmental Health and Safety, University of New Hampshire Video Services, Volunteer Storm Water Committee, and the Seacoast Storm Water Coalition. 2004. Shown to Dr. Aaron Margolin's Microbiology 806 (Virology) class. Spring 2005.

2004

- "Storm Water Runoff, There is no Away." (VHS Video) Created by the Office of Environmental Health and Safety, University of New Hampshire Video Services, and Seacoast Storm Water Coalition. 2003.
- "Storm Water Runoff, There is no Away." Broadcasted for public viewing on the UNH Catvision (Channel 3 and Channel 27) and the Town of Durham's Community Access Television Channel.
- "Storm Water @ UNH." (DVD Video) Created by the Office of Environmental Health and Safety, University of New Hampshire Video Services, Volunteer Storm Water Committee, and the Seacoast Storm Water Coalition. 2004.

1) PUBLIC EDUCATION AND OUTREACH (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
3	**Development of a Storm Water Program Link on the UNH Website**	B. Manning	Completion of Website Link	In progress - see bulleted item(s) below.	Continue updating the UNH Storm Water Management website with the latest storm water information available.

2007
- Updated the downloadable/printable maps on the UNH Storm Water Management website to reflect changes due to construction projects, etc. April 2007.
- Continued to update the storm water management plan website with revised BMP program information.

2006
- Updated the UNH Storm Water Management website to include a downloadable/printable map of the campus catch basin system. January, 2006.
- Continued to update the storm water management plan website with revised BMP program information.

2005
- Updated storm water website to link all UNH Storm Water programs and policies.
- Included all BMPs on the UNH Storm Water Management website.
- Linked to the New Hampshire Estuaries Project (NHEP) website.
- Linked to the Center for Marine Biology/Department of Natural Resources (Professor Steve Jones) website.
- Linked to the Center for Storm Water Technology Evaluation and Verification (CSTEV).

2004
- http://www.unh.edu/ehs/stormwater/
- Provides comprehensive information on UNH Storm Water Management program, EPA/UNH publications, related campus research projects on storm water and other resources.

2) PUBLIC PARTICIPATION / INVOLVEMENT

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
4	**Public Notification Meeting**	B. Manning	Holding of Public Meeting	In progress - see bulleted item(s) below.	Continue posting public information bulletins on website and in UNH campus news publications.

2007
- Continued to participate in the monthly public forums with the New Hampshire Seacoast Storm Water Coalition.

2006
- Continued to participate in the monthly public forums with the New Hampshire Seacoast Storm Water Coalition.

2005
- Held bi-monthly public forums with the Seacoast Storm Water Coalition.
- Manning, B. "Storm Water Management - Catch Basin Stenciling Project." Presented at the Getting in Step Workshop on Conducting Effective Storm Water Outreach and Education. Manchester, NH. April 1, 2004.

2004
- "Public Forum Held on Storm Water Management." Campus Journal. Volume XLI, Number 27. UNH Media Relations. March 5, 2004.
- "Public Forum Held on Storm Water Management." Campus Journal. Volume XLI, Number 28. UNH Media Relations. March 12, 2004.
- "Public Forum on Storm Water Management" held on March 31, 2004 from 10:00 AM until noon in the UNH Holloway Commons.

2) PUBLIC PARTICIPATION / INVOLVEMENT (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
5	**Establishment of a Volunteer Committee**	B. Manning	Establishment of Committee; Semester Events	In progress - see bulleted item(s) below.	Continue scheduling community-related events through OEHS and the VSW Committee.

2007
- There were no changes to report this year.

2006
- There were no changes to report this year.

2005
- Sponsored an on-site visit of the Center for Storm Water Technology Evaluation and Verification (CSTEV) at UNH and invited Seacoast Storm Water Coalition members to attend. November 17, 2004.

2004
- Establishing the volunteer storm water committee and recruiting members since December 6, 2002.
- http://www.unh.edu/ehs/stormwater/vswc.html
- Committee sponsored Public Forum held on 3/31/04.
- OEHS and VSW Committee coordinated lecture on Solid Waste Environmental Management Planning to College of Natural Resources (which included information on the UNH Storm Water Management program) on December 2, 2003.

2) PUBLIC PARTICIPATION / INVOLVEMENT (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
6	**Stenciling of Catch basins**	B. Manning	All CBs Stenciled	In progress - see bulleted item(s) below.	Continue to install permanent drain markers on catch basins identified in the UNH Storm Water Sewer System Map.

2007

- Purchased and installed 250 permanent storm catch basin drain markers, indicating "No Dumping – Drains to Bay" from Almatek Industries in Summer 2006.
- Conducted field verification of the UNH Storm Water Sewer System Map for catch basin locations. New or inaccurately marked catch basins were noted and reported to the Facilities Geographical Information Systems division for correction. Summer 2006.
- Interns in the Office of Environmental Health and Safety stenciled over 200 catch basins at UNH in summer 2006.

2006

- Installed 500 permanent storm catch basin drain markers, indicating "No Dumping – Drains to Bay" from Almatek Industries. Installation completed over Summer 2005.
- Purchased 200 additional permanent storm catch basin drain markers, indicating "No Dumping – Drains to Bay" from Almatek Industries. Installation will begin in Summer 2005.
- Installed 180 of the additional permanent storm catch basin drain markers, indicating "No Dumping – Drains to Bay" from Almatek Industries. Installation completed over Summer 2005.
- Conducted field verification of the UNH Storm Water Sewer System Map for catch basin locations. New or inaccurately marked catch basins were noted and reported to the Facilities Geographical Information Systems division for correction. Summer 2005.

2005

- Purchased 500 permanent storm catch basin drain markers, indicating "No Dumping – Drains to Bay" from Almatek Industries. Installation will begin in Spring 2005.

2004

- "Storm Water Management Catch Basin Stenciling Project." PowerPoint Presentation. March, 2004.
- "Storm Drain Stenciling to Build Storm Water Awareness in NH's Estuarine Communities." Final Report to the New Hampshire Estuaries Project. Submitted by Julia Peterson (NH Sea Grant) on June 30, 2003.
- Julia Peterson and 4H Teen Conference Volunteers stenciled 103 catch basins (19% of all catch basins) at UNH in late June of 2003.

3) ILLICIT DISCHARGE DETECTION AND ELIMINATION

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
7	**Development of a Storm Sewer System Map**	M. Hayes	Completion of Site Plan	In progress - see bulleted item(s) below.	Continue to validate system map catch basin and outfall locations through visual field observations.

2007

- UNH GIS updated the Storm Water Sewer System map to include additional catch basin and outfall locations and the piping that connects these units as stated in BMP ID 6. June, 2006.

2006

- UNH GIS updated the Storm Water Sewer System map to include additional catch basin and outfall locations and the piping that connects these units as stated in BMP ID 6. June, 2005.

2005

- UNH GIS has updated the original Storm Water Sewer System map to include additional catch basin and outfall locations and the piping that connects these units.
- UNH GIS is creating an electronic map of the UNH storm water sewer system to be published n the UNH Storm Water Management Program website.

2004

- Storm Sewer System Map for use in Compliance with the EPA Mandated Illicit Discharge Report completed circa. September 2003.

3) ILLICIT DISCHARGE DETECTION AND ELIMINATION (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
8	**Development of Policy Prohibiting Illicit Discharges**	M. Hayes	Completion and Implementation of Policy	In progress - see bulleted item(s) below.	Review and update the Storm Water Illicit Discharge Procedures as needed (include Town of Durham Storm Water Ordinance if approved).

2007

- The Town of Durham's draft ordinance was recently reviewed by Stone Environmental Consulting (using a NHDES grant) to identify its relative effectiveness and redundancies with existing Town regulations and ordinances. The Town of Durham will be evaluating this information and is expected to revise the draft ordinance accordingly. To satisfy the Phase II regulations, the Town of Durham is preparing to adopt an ordinance before May 2008.

2006

- Contacted the Town Engineer regarding the status of the "Town of Durham Storm Water Ordinance" on August 12, 2005. The Town Engineer responded that the Ordinance is still going through Town Attorney review.

2005

- Re-evaluated and updated the UNH Storm Water Illicit Discharge Procedures on March 1, 2005. This document includes IDDE preparation, drainage system, investigation and summary of findings.
- Contacted the Town Engineer regarding the status of the "Town of Durham Storm Water Ordinance" on March 8, 2005. The Town Engineer responded that the Ordinance is going through Town Attorney review and should be before the Town Council in June 2005.

2004

- DRAFT – "Durham Storm Water Ordinance." Prepared by and for Town of Durham, Public Works Department, on December 22, 2003.
- UNH Storm Water Illicit Discharge Procedures written and approved by UNH Facilities Maintenance. Copy on file in OEHS.

3) ILLICIT DISCHARGE DETECTION AND ELIMINATION (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
9	**Development and Implementation of an IDDE Plan**	M. Hayes	Completion and Implementation of Plan	In progress - see bulleted item(s) below.	Storm water sewer system drainage will be further evaluated for illicit connections by dry weather, smoke or fluorescent dye testing as needed.

2007

- UNH "Illicit Discharge Detection and Elimination (IDDE) Program: Preliminary Summary of Findings – Peripheral Campus" written by the UNH Facilities Information Technology GIS Division. April 19, 2007.
- Continued to update Storm Water Geo-databases to reflect changes in storm water network as the result of new construction and renovation projects.

2006

- UNH "Illicit Discharge Detection and Elimination (IDDE) Program: Preliminary Summary of Findings – Peripheral Campus" written by the UNH Facilities Information Technology GIS Division. April 13, 2006.
- Continued to update Storm Water Geo-databases to reflect changes in storm water network as the result of new construction and renovation projects.

2005

- "Illicit Discharge Detection and Elimination (IDDE) Program Implementation Report" written by the UNH Facilities Information Technology GIS Division. July 1, 2004.
- "Illicit Discharge Detection and Elimination (IDDE) Program – Summary of Findings" written by the UNH Facilities Information Technology GIS Division. April 15, 2005.
- Letter of Enforcement issued to campus vendors who were illegally discharging into the storm water sewer system. September 2004.

2004

- Surface storm water drainage network components will be field validated using Global Positioning Systems (GPS). All outfalls will be field identified (marked) and assigned to water quality technicians for dry-weather qualitative/quantitative sampling. Field reference data materials and water quality sampling documentation for qualitative/quantitative assessments will be prepared for and provided to all water quality technicians prior to the IDDE testing.

3) ILLICIT DISCHARGE DETECTION AND ELIMINATION (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
10	**Provide Informational Materials to Employees and Public**	M. Hayes	Inclusion in Informational Packet	See **BMP-1** for progress.	Continue to provide informational material to campus community and general public.

2007

- Mantz, E. "Keeping our Water Clean." Campus Journal. UNH Media Relations. March, 2007. The Campus Journal is distributed to more than 1,600 subscribers.
- "Storm Water Management Showcase." (19" x 31") displayed at the UNH Memorial Union Building from March through April 2007.
- Printed and distributed copies of the "UNH Storm Water Brochure" to UNH faculty, staff, and students. (UNH Office of Environmental Health and Safety, 2006).
- The UNH Storm Water Management Plan brochure is distributed to new employees during the UNH Human Resources – New Employee Orientation. More than 400 new employees received the brochure.

2006

- Mantz, E. "No Dumping: Drains to Bay." Campus Journal. UNH Media Relations. April, 2006. The Campus Journal is distributed to more than 1,600 subscribers.
- Updated the UNH Storm Water Management website to include a downloadable/printable map of the campus catch basin system. January, 2006.
- The UNH Storm Water Management Plan brochure is distributed to new employees during the UNH Human Resources – New Employee Orientation. A total of 350 new employees received the brochure.

2005

- Yates, S. "Storm Water Management Program Progresses." Campus Journal. Volume XLII, Number 13. UNH Media Relations. January 1, 2005.
- Manning, B. and Tardie, P. "Illicit Discharge Detection and Elimination Efforts at UNH." Presented to the Seacoast Coalition Storm Water Committee on 7/28/04.

3) ILLICIT DISCHARGE DETECTION AND ELIMINATION (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
11	**Assessment of Non-Storm Water Discharges**	M. Hayes	Identification and Elimination of Contributing Allowable NSWDs	In progress	Continue to assess and identify allowable NSWDs to the MS4 and assess for potential contaminant contribution.

2007

- The presence of allowable (as listed by US EPA) NSWDs to the UNH storm water sewer system continued to be assessed for potential contaminant contribution and none were documented. A list of allowable non-storm water discharges is included in the UNH Storm Water Illicit Discharge Procedures.

2006

- The presence of allowable (as listed by US EPA) NSWDs to the UNH storm water sewer system continued to be assessed for potential contaminant contribution and none were documented.

2005

- A list of allowable non-storm water discharges is included in the UNH Storm Water Illicit Discharge Procedures. March. 2005.

4) CONSTRUCTION SITE RUNOFF CONTROL

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
12	**Development of a Construction Site Erosion and Sediment Runoff Control Policy**	L. Van Dessel	Completion and Implementation of Policy	In progress - see bulleted item(s) below.	Review and update policy as needed.

2007

- Received copies of the SWPPP and NOI for the new Demeritt Circle/Forest Park II, Southeast Residential Community construction project that was regulated under the EPA requirement for storm water construction permit.

2006

- Received copies of the SWPPP for the new Kingsbury Hall construction project that was regulated under the EPA requirement for storm water construction permit.
- Received copies of the SWPPP and NOI for the new Gables Residence Halls construction project that was regulated under the EPA requirement for storm water construction permit.

2005

- Construction Site Erosion and Sediment Runoff Control Policy reviewed and updated by Facilities Design and Construction in April 2005.
- Received copies of the SWPPP for two construction projects and NOI for one project over one acre in size that falls under the EPA requirement for storm water construction permit.

2004

- Policy has been written and approved by Facilities Design and Construction (copy on file in OEHS).

4) CONSTRUCTION SITE RUNOFF CONTROL (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
13	**Public Notification and Comment**	L. Van Dessel	Documentation and Follow-up	In progress - see bulleted item(s) below.	Review and update procedures as needed.

2007
- Public notification and comment procedures in place and addressed for each applicable construction project.

2006
- Public notification and comment procedures in place and addressed for each applicable construction project.

2005
- Public notification and comment procedures reviewed and updated by Facilities Design and Construction in April 2005.
- Public notification and comment process implemented for co-generation project currently being built by EMCOR.

2004
- Procedures for Public Notification and Comment have been written and approved by Facilities Design and Construction (copy on file in OEHS).

4) CONSTRUCTION SITE RUNOFF CONTROL (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
14	**On-Site Inspection and Enforcement**	L. Van Dessel	100% Compliance	No action required at this time.	Continue to implement on-site inspection and enforcement procedures for applicable construction projects.

2007

- Representatives from outside contractors with construction SWPPPs in place for applicable construction projects at the UNH Campus conduct regular inspections of construction site to ensure compliance with the individual SWPPP.

2006

- Representatives from outside contractors with construction SWPPPs in place for applicable construction projects at the UNH Campus conduct regular inspections of construction site to ensure compliance with the individual SWPPP.

2005

- Representatives from two outside contractors with construction SWPPPs conduct regular inspections of construction site to ensure compliance with the individual SWPPP.

5) POST-CONSTRUCTION RUNOFF CONTROL

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
15	**Development of a Post-Construction Runoff Control Policy**	L. Van Dessel M. Hayes	Completion and Implementation of Policy; Annual Inspection and Review Schedule	In progress - see bulleted item(s) below.	Review and update procedures as needed.
	2007 • Storm water treatment structures installed at UNH Campus during continuing construction projects have been and continue to be inventoried as they become operational. **2006** • Storm water treatment structures installed at UNH Campus during continuing construction projects have been and continue to be inventoried as they become operational. **2005** • Post Construction Runoff Control Policy reviewed and updated by Facilities Design and Construction in April 2005. • Storm water treatment structures installed at various construction site locations have been inventoried and are operational. **2004** • Procedures for On-Site Inspection and Enforcement have been written and approved by Facilities Design and Construction (copy on file in OEHS).				

6) POLLUTION PREVENTION / GOOD HOUSEKEEPING

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
16	**Development of a Comprehensive Operations and Maintenance Plan**	M. Hayes	Completion and Implementation of Plan	No action required at this time.	Continue development and implementation of COMP.

2007

- The UNH Facilities Department is adopting the State of New Hampshire's "Guidelines and Standard Operating Procedures -- Illicit Discharge Detection and Elimination and Pollution Prevention/Good Housekeeping for Stormwater Phase II Communities in New Hampshire." April, 2007.
- The UNH Grounds and Roads Department applied approximately 700 tons of salt and tons of a sand/salt mixture to campus parking lots, roadways, sidewalks, etc. from November 2006 to March 2007.
- The UNH Housing Department applied approximately 2000 lbs of ice melt and 1000 lbs salt/sand mixture at Forest Park; approximately 3550 lbs of ice melt (Blue Shark) and 200 lbs salt/sand mixture at the Gables dormitories; and approximately 1000 lbs of ice melt (Blue Shark) and 100 lbs salt/sand mixture at Woodside Apartments.
- UNH hired New England Catch Basin Cleaners, LLC to clean 300 catch basins were cleaned. Approximately 50 tons of sand was removed from these structures.
- UNH has hired Ruel Street Sweeping, LLC to conduct street sweeping of all parking lots, streets, pedestrian boulevards, etc. for sand, trash, cigarette filters, and other non-point sources of pollution for May 2007.

2006

- UNH is participating in the development of the New Hampshire Seacoast Storm Water Coalition's Guidelines and Standard Operating Procedures Manual for possible adoption by Facilities Support Services. Fall 2005/Spring 2006.
- UNH hired New England Catch Basin Cleaners, LLC to perform a comprehensive clean-out of all catch basins identified on the UNH Storm Water Sewer System Map. More than 500 catch basins were cleaned. In addition, the company provided a list of catch basins for which they recommended annual cleaning and a separate list of basins that need to be repaired. September 2005.
- UNH hired Ruel Street Sweeping, LLC to conduct street sweeping of all parking lots, streets, pedestrian boulevards, etc. for sand, trash, cigarette filters, and other non-point sources of pollution. May 2005.
- UNH Facilities Support Services reduced the quantity of sand that was applied to campus parking lots, streets, and walkways to approximately 50 tons (from approximately 200 tons the previous year).

2005

- Completed the draft UNH Storm Water Management Operations and Maintenance Plan in March 2005.

6) POLLUTION PREVENTION / GOOD HOUSEKEEPING (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
17	**Development of a Materials Management and Recycling Policy**	M. Hayes	Completion and Implementation of Policy	No action required at this time.	Continue development and implementation of MMRP. Coordinate with the UNH Solid Waste Management Plan initiative.
	2007 • This program is under development. **2006** • This program is under development. **2005** • Revised and updated UNH Hazardous Waste Management Plan to communicate the methods UNH uses to properly manage hazardous waste. • Revised and updated UNH Integrated Contingency/Spill Prevention Control and Countermeasure Plan to reflect recent changes in EPA regulations. • Updated the UNH Chemical Environmental Management System to include an electronic radioactive materials inventory module. • Completed an analysis of solid waste streams at UNH by ranking each stream based on ten key criteria as stipulated in the UNH Solid Waste Environmental Management Plan. • Began the analysis of the UNH recycling program to collect data to be used in the development of a Comprehensive Materials Management Policy.				

6) POLLUTION PREVENTION / GOOD HOUSEKEEPING (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
18	**Facilities Employee Training Program**	M. Hayes	Completion and Implementation of Program	No action required at this time.	Continue to develop outline for training program and identify employees who require training.

2007

- Several UNH employees will be participating in a local "Illicit Discharge Detection & Elimination Workshop" on May 1, 2007 or May 24, 2007. Attendees will emerge with a formal, cost effective, workable IDDE program for their community in compliance with Federal Storm Water Phase II Regulations. These workshops are sponsored by the Seacoast Storm Water Coalition and are partially funded by a grant from the NH Estuaries Project and the NH Dept of Environmental Services as authorized by the US EPA pursuant to Section 320 of the Clean Water Act.
- An "official" Facilities Employee Training Program is still under development.

2006

- This program is under development.

2005

- Spill Prevention Control and Countermeasure (SPCC) training given to UNH Facilities, Housing and Farm employees.

6) POLLUTION PREVENTION / GOOD HOUSEKEEPING (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
19	**Community Outreach Program**	M. Hayes	Completion and Implementation of Program	See **BMP-1:** Storm Water Management Pamphlet.	Continue education efforts as outlined **BMP-1**.

2007

- Roseen, R. Ballestero, T. Houle, J. Avelleneda, P. Wildey, R. Briggs, J. "Storm Water Low-Impact Development, Conventional Structural, and Manufactured Treatment Strategies for Parking Lot Runoff Performance Evaluations Under Varied Mass Loading Conditions." Transportation Research Record: Journal of the Transportation Research Board, No. 1984, Transportation Research Board of the National Academies, Washington, D.C., 2006, pp. 135–147. 2006.
- Gillum, D. "Solid Waste Management and Minimization at UNH." Presented to four Natural Resources classes with more than 600 students in attendance in the 2006 fall semester and 2007 spring semester.
- Mantz, E. "Keeping our Water Clean." Campus Journal. UNH Media Relations. March, 2007. The Campus Journal is distributed to more than 1,600 subscribers.
- "Storm Water Management Showcase." (19" x 31") displayed at the UNH Memorial Union Building from March through April 2007.

2006

- Jones, S. and Houle, J. "Low Impact Storm Water Management Projects at the University of New Hampshire – Progress Report." April 24, 2006. See **Appendix A** for more information. The Center for Storm Water Testing and Evaluation (CSTEV) had nearly 9,000 hits from April 1, 2005 through March 31, 2006.
- Gillum, D. "Solid Waste Management and Minimization at UNH." Presented to an introductory Natural Resources class with more than 450 students in attendance in the 2006 spring semester.
- Mantz, E. "No Dumping: Drains to Bay." Campus Journal. UNH Media Relations. April, 2006. The Campus Journal is distributed to more than 1,600 subscribers.

2005

- Gillum, D. "Solid Waste Management and Minimization at UNH." Presented to an introductory Natural Resources class with more than 300 students in attendance in the 2005 spring semester.
- Knowlton, S. "Managing Waste at the Source." Presented to an introductory Natural Resources class with more than 300 students in attendance in the 2005 spring semester.
- Yates, S. "Storm Water Management Program Progresses." Campus Journal. Volume XLII, Number 13. UNH Media Relations. January 1, 2005.
- Yates, S. "New Center Tackles Storm Water Management." Campus Journal. Volume XLII, Number 10. UNH Media Relations. November 12, 2004.
- Pamphlet and link to UNH Storm Water Management Plan has been included in the UNH Human Resources, "New Employee Orientation Program and Handbook"
- "Storm Water Management Showcase." (19" x 31") displayed at the UNH Memorial Union Building from January 1, 2005 through May 31, 2005.

6) POLLUTION PREVENTION / GOOD HOUSEKEEPING (continued)

BMP ID	BMP	Responsible Person(s)	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Changes/Goals for Next Reporting Year
20	**Community Participation Program**	M. Hayes	Completion and Implementation of Program	See **BMP-5** for current progress.	Continue participation efforts for surface water monitoring activities.

2007

- UNH continues to participate in the monthly New Hampshire Seacoast Storm Water Coalition Meetings.
- Representatives from UNH attended the First Annual New Hampshire Statewide "Regional Storm Water Meeting" in Manchester, NH. May 9, 2006.

2006

- UNH is participating in the development of the New Hampshire Seacoast Storm Water Coalition's Guidelines and Standard Operating Procedures Manual for possible adoption by Facilities Support Services. Fall 2005/Spring 2006.

2005

- Sponsored an on-site visit of the Center for Storm Water Technology Evaluation and Verification (CSTEV) at UNH and invited Seacoast Storm Water Coalition members to attend. November 11, 2004.
- A link to the "College Brook Ecological Restoration Project" has been added to the UNH Storm Water Management Program website.

Part IV. Summary of Information Collected and Analyzed

2007

- Purchased and installed 250 permanent storm catch basin drain markers, indicating "No Dumping – Drains to Bay" from Almatek Industries in Summer 2006.
- Conducted field verification of the UNH Storm Water Sewer System Map for catch basin locations. New or inaccurately marked catch basins were noted and reported to the Facilities Geographical Information Systems division for correction. Summer 2006.
- Interns in the Office of Environmental Health and Safety stenciled over 200 catch basins at UNH in summer 2006.
- The UNH Office of Environmental Health and Safety had nearly 150,000 "hits" (people viewing the website) from April 1, 2006 through March 31, 2007.
- The following UNH departments purchased 50 lb containers of Ice Melt from Central Receiving:

DEPARTMENT	QUANTITY	DESCRIPTION
Housekeeping	55	(50# Pail) Ice Melt
Housing	54	(50# Pail) Ice Melt
Heating Plant	12	(50# Pail) Ice Melt
UNICCO	1	(50# Pail) Ice Melt
Elliott Alumni	4	(50# Pail) Ice Melt
Facilities	102	(50# Pail) Ice Melt
	228	
Facilities	50	(50# Bag) Calcium Chloride picked up from Handy Hardware

2006

- Over 680 permanent storm catch basin drain markers, indicating "No Dumping – Drains to Bay" from Almatek Industries.
- Four hourly employees were hired to apply the placards to the catch basins.
- A few storm water-related financial figures:
    - $2,500 allocated for storm water placarding supplies
    - $8,400 allocated for street sweeping
    - $27,973 allocated for basin cleanings
    - $7,525 allocated for hourly pay
    - $3,282 allocated for spill kit supplies
    - $2,480 allocated for Facilities GIS support
- The UNH Office of Environmental Health and Safety had nearly 200,000 "hits" (people viewing the website) from April 1, 2005 through March 31, 2006.

2005

- In addition to our stated BMPs in our SWMP, a grant has been given to UNH Natural Resources Professor Steve Jones to analyze "Low Impact Storm Water Management Programs at UNH." This grant was partially funded by the UNH Storm Water Management Program.
- $75,000 allocated for the implementation of Storm Water Management Program BMPs. Individual projects include:
    - $42,896.63 allocated for IDDE project.
    - $7,215.48 allocated for the Storm Drain Marker Project.
    - $3,541 allocated for the "Low Impact Storm Water Management Project."
    - $2,864 allocated for spill absorbent kits.
- Approximately 3,800 UNH students have seen "Storm Water Runoff, There is no Away," which was broadcasted for public viewing on UNH Catvision (Channel 3).

- Approximately 3,000 faculty and staff were provided the UNH Campus Journal publication that contained two articles providing updates to the campus community on the UNH Storm Water Management Program.

2004

- 3,124 Storm Water Management pamphlets were sent to the UNH community in January 2004.
    - 100 pamphlets printed in February 2004 for on-hand supply.
    - 500 pamphlets printed in March 2004 for upon-requests.
- 103 UNH catch basins (19% of all catch basins) were stenciled in late June of 2003.
- >800 undergraduate students were presented information about the UNH Storm Water Management Program on December 2, 2003 and April 22, 2004.
- Approximately 3,800 UNH students have seen "Storm Water Runoff, There is no Away," which was broadcasted for public viewing on UNH Catvision (Channel 3 and Channel 27).
- Approximately 5,500 UNH students have read an article about the UNH Storm Water Management Plan (in the dorm newspapers).

APPENDIX A

Low Impact Storm Water Management Projects at the University of New Hampshire Progress Report April 24, 2006

Project Summary

The University of New Hampshire is increasingly concerned about storm water management on the Durham campus. There is also a need in Seacoast municipalities to enhance and increase management of storm water in urban areas to reduce impacts to surface waters. The specific objective of this proposal is to demonstrate reductions in the discharge of storm water runoff from UNH-Durham campus properties. Through the use of pilot Low Impact Development (LID) integrated management practices UNH will help to champion new approaches in the region for reducing storm water runoff and improving the health of watershed areas.

LID systems have been constructed at two high-profile locations on UNH properties. Descriptive Signs have been developed and installed at LID locations and will be used to inform visitors and draw further attention to the sites via campus tours, open houses, classes, and workshops.

Rainwater Storage

Two 550-gallon Rainwater capture cisterns have been installed at the UNH Storm Water Center and at the UNH Jackson Estuarine Laboratory. Storm water runoff cisterns are roof water management devices. Cisterns provide on-site storm water retention capacity. On-site storage combined with later reuse of storm water provides an opportunity for water conservation along with the potential to significantly reduce utility costs. In addition a ¾ horsepower jet pump has been installed with each cistern to easily utilized captured rainwater.

Drip Irrigation

A drip irrigation system was installed at the UNH Storm Water Center to efficiently and easily utilize retained storm water. Five months of water accumulation and drip infiltration usage has been recorded. Cistern systems and drip irrigation system will be online again by mid-April 2006. Water accumulation and usage data generation will continue once the systems are on-line

Bioretention

Bioretention is a storm water management practice that treats storm water runoff flow using conditioned planting of biologic retention materials and landscaping. The bioretention concept is designed to detain and filter storm water runoff before polluting receiving waters.

A bioretention tree box filter has been installed at the Jackson Estuarine Laboratory to treat 8,750 square feet of impervious roof footage and 0.25 acres of impervious parking area.