

**Municipality/Organization:** Town of Amherst, NH

**EPA NPDES Permit Number:** NHR100000

**MaDEP Transmittal Number:** \_\_\_\_\_

**Annual Report Number & Reporting Period:** No. 3: March 03-May 05

MAY - 4 2005

## NPDES PII Small MS4 General Permit Annual Report

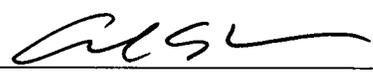
### Part I. General Information

**Contact Person:** Bruce W. Berry **Title:** Director of Public Works

**Telephone #:** (603) 673-2317 **Email:** bberry@amherstnh.gov

Certification:

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

**Signature:** 

**Printed Name:** Carl E. Weber

**Title:** Town Administrator

**Date:** April 27, 2005

## Part II. Self-Assessment

- II, (a) 2004 - The Town of Amherst has had a slow start addressing the requirements of Storm Water II. The first initial year was spent attending meetings to handle understanding the complete process. We are committed to these requirements and regulations and I was delighted to find during the review by engineers that information posted in the Public Works section of the town webpage unintentionally included educational information addressing long ways to go and we will stay the course. Limited volunteerism, and resources may require us to rethink our strategies, but the timetable is doable. We anticipate a local cable channel to be up and running by summer of 2004. This will become a valuable resource for spreading the

2005- very active Stormwater II committee meets monthly. Our chairperson has posted many Stormwater II links to the town web page.

- II, (b) Best Management Practices are under review by our Planning Board. More time is required to determine appropriate necessary actions and area departments.

2004 - In house improvements on town winter maintenance equipment such as groundspeed controls, liquid calcium systems (that lower the melt using less product), ground and air temperature sensing equipment mounted on vehicles, all for more appropriate winter maintenance with a goal of using winter maintenance products.

2005 - We continue to educate our Planning board on the necessity to formulate rules and regulations. Public Works is in its second year using a mash of alcohol distilleries. The voters authorized purchase of a second liquid deicing system for the 05-06 budget cycle.

- II, (c) Achieving our first year goals, became more challenging while trying to understand the process. This will impact our five year plan and necessitate Planning Board, Master Plan revision is underway with a goal of presenting it to the voters in 2005. The town is going through a reevaluation of the Department with a goal of increase time towards Code Enforcement with sites on site plan compliance and review and support Stormwater Phase

2005 – The process of developing and implementing rules and regulations covering pre and post construction activities are going a little slower. The Stormwater II Committee has made this their number one priority for the upcoming year.

- II, (d) We continue to collect data on our catch basins during annual cleaning. Illicit connections will be sought and properly documented during the cleaning of the position of culverts and catch basins.

2005 - Plans are to hire a summer intern dedicated to documentation of culverts, catch basins, and outfalls.

**Part III. Summary of Minimum Control Measures**

**1. Public Education and Outreach**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)</b>	<b>Planned Activities – Permit Year 2</b>	<b>Planned Activities – Goals Permit Year 3</b>
1.1	Education signage at voting	Public Works	4'X4" information poster display for town voting.		Broader base of assistance	Two years of posting s information yielded mi interest. The committe readjust our approach l other group settings
Revised	Education booth at 4 <sup>th</sup> of July festivities	Stormwater II committee	Brochures			
1.2	Information posting on town web page	Public Works Director	Develop and update progress on town managed road construction projects	Actual posting of information on the town webpage completed by outside source.	Update with new and additional information. Investigate and implement, dedicated page on town website to stormwater	Continued research by Stormwater Committee to our web designer ha quiet a few links
Revised	Update as time allows	2005-Stormwater II Committee	Electronic exposure through education			
1.3	General Education Brochure	Public Works & Education Committee	Develop and distribute to residents in 04-05	This is in progress now, the committee is working through a lot of information, and brochures will be developed and disbursed.	Handout brochures initially	Some brochures built c from news articles writ drinking water and Sto runoff related issues, e voting, events on the t
Revised						
1.4	Disburse Information to local contractors	Public Works Director and Land Use Manager	Educate private contractors in the importance of compliance	Verbal education at this point with compliance built into site plan review and follow-up with on site inspections.	Development and printing of formal education brochure designed for contractors with issuance at initial inquiry meeting.	Still working on develo brochure for contracto
Revised						
1.5	Coordinate information and program distribution within school network	Public Works Director, Conservation Commission	Develop curriculum to educate students. Fall / winter 04-05	Integrate into program currently presented to grammar school students on solid waste.	Begin to develop curriculum to be used to educate students.	Excellent volunteer pro place centered around First grade- awareness 2nd Grade- the rotten t landfills. 3 <sup>rd</sup> Grade, rer non-renewable resourc
Revised						

**1a. Additions**

1.6	Transfer Station waste stream management	Public Works Director and Solid Waste Committee	Improve facility and educate taxpayers			Household Hazardous information is posted on web page and the Solid Waste Committee is working on streamlining the facility
1.7	Series of articles written for Amherst Citizen. After being published the articles are posted on the town website	Committee Chair	Educate residents		April 13, 2004 Earth Day Articles June 8 <sup>th</sup> Lawn Pesticides and Water Pollution July 27 <sup>th</sup> Buying an Using Pesticides, Read the Fine Print Sept 14 Reduce Lawn Fertilizer Use	January 11 <sup>th</sup> Safe Winter Limited Salt Use Road Brush Up on your Winter Skills. Feb 8 <sup>th</sup> Article on commercial car wash vs washing in the yard.

**2. Public Involvement and Participation**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2	Planned Activities – Goals Permit Year 3
2.1	Stormwater Advisory Committee	Public Works Director and Road commissioners	Review and recommend improvements to SWMP	We are reviewing the initial report and are working on recommended improvements.	Submit recommended improvements to Conservation Commission and Planning Board for comments and feedback. Review, revise, and implement	Stormwater committee monthly, has started identifying areas of responsibility, activities of summer in
Revised 10/04		Representation from private sector and several town boards				
2.2	Removal of potential septic hazards from Baboosic Lake	Town Administrator and Health Department	Move failed septic systems from selected summer homes to community septic system	Approval by town after public hearings, approval of additional outside funding, in the process of the bidding stage, anticipate implementation this year.	Measure improvements to water quality, and seek expansion of program.	With the cooperation of Hampshire Department Environmental Service leaching fields are in process mains for 12 individual be completed by fall of DES approval for 12 a homes in the next phase Construction anticipate
Revised			Bid out in 04 implement by 05			

2.3 Revised	Catch Basin Stenciling	Public Works	Stencil priority by August of 04	The town maintains under 350 catch basins. During our annual cleaning in July, DPW staff will mark as each is cleaned	Monitor and re-stencil with public service announcement in local paper	Marking are done ann spring/early summer d basin cleaning
2.4 Revised	HHW Collection Events	Public Works Director and Nashua Regional Planning Commission	Better participation	Currently, there are five sponsored regional collection events. The Amherst Solid Waste Committee is reviewing this program and investigating a local collection event.	Continue to track participation of the regional event and work towards a more local collection.	Amherst continues to l regional collection. Th designated collection s Nashua. A local regior as state funding was cu continue to pursue fun
2.5 Revised	Education Committee	Public Works Director and Solid Waste task force committee	Booth at major events on the town common	An information booth manned by volunteers during events such as Forth of July	Consider comments received at public events and expand available information.	Education is on-going elementary schools, th Station, and on the wel Preparations for an inf booth at 4 <sup>th</sup> of July act town moves towards a access channel which s and running by this fal include information th
		This process now includes the Stormwater II Committee	Information posted at SP-2 voting in March 04			

**2a. Additions**

2.6	Roadside Cleanup in conjunction with Earth Day	Beth Woodbury Environmental Teacher at Souhegan High School and Public Works	Remove trash and floatables from shoulders of town roads			This is cooperative eff trash from the roadside students and public wc employees. This may t annual.

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2	Planned Activities – Goals Permit Year 3
3.1	Identify and map outfalls and receiving waters	Public Works & Pennichuck Water Works	Map all outfalls using a footage measuring devise and transpose onto map. Review information supplied by Pennichuck	All culverts and catch basins were marked with reflectors and delineator posts during fall 03. Additional DPW summer staff will start recording footage and relevant information and transpose it into data base and onto town tax map.	Continue measuring and mapping program	In cooperation with Ur New Hampshire one or with computer and map should be on board by
Revised			Actual stenciling has not started yet, we plan it to start in summer 04			
3.2	Dry weather screening of outfalls for illicit connections	Public Works	Screen all outfalls by Fall of 06	Continue field screening of outfalls concurrent with footage mapping by summer staff	Continue field screening of outfalls with measuring and mapping investigate any inappropriate findings for follow-up.	Continue screening, ou illicit connection traini scheduled for all Public employees this spring.
Revised						
3.3	Illicit connection information	Planning Board	Bring information to the attention of Planning Board	Partner with the Amherst Planning Board with documented illicit connection discharges to formulate ordinance	Follow through with necessary ordinance to 05 town meeting approval.	Stormwater committee working on ordinance for presentation to Plar
Revised						

#### 3a. Additions

3.4						

**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) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)</b>	<b>Planned Activities – Permit Year 2</b>	<b>Planned Activities – Goals Permit Year 3</b>
4.1	Construction Storm Water Pollution Prevention Plan	Planning Board & Public Works Director	Complete review of existing construction site runoff control	Public Works has set the example by implementing a Stormwater runoff control program for its own work.	Review existing rules and regulations, make necessary adjustments to existing documents for establishing water quality benchmarks, site inspection procedures, etc	Public Works offers in Planning Administrator reviewing construction the need for Storm wa prevention plans.
Revised						
4.2	Site plan review	Public Works Director, Planning Board, & Land use Manager	Take the process now in place (site plan review meeting) and put actions on paper	Create an interim policy from the site plan meetings that exist today.	Continue with interim policy and update as necessary	Department Heads me with Zoning Administ review site plans to be Planning Board hearin
Revised						
Revised						

**4a. Additions**


**5. Post-Construction Stormwater Management in New Development and Redevelopment**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2	Planned Activities – Goals Permit Year 3
5.1	Stormwater rules and regulations for sites over 43,560 square feet	Public Works, Engineering, Planning Board	Complete review of existing MS4 maintenance procedures. Complete formal procedures manual for conducting MS4 maintenance, include record keeping forms, best management practices, etc.	Start the review process with recommendations from public works and planning. Begin drafting rules and regulations to regulate post construction Stormwater management and illicit discharges.	Draft new rules and regulations for review and initiate the process for implementation.	This is a priority of the Committee. A meeting between Stormwater C and Board of Selectme Planning Board Repres and Town Council.
Revised			We have started slowly, this looks more like an 04-05 goal			
	Incorporate Best Management Practices into Town regulation Plan	Public Works Director, Planning Board, Town Counsel & Board of Selectmen	Complete update of Town’s regulations to include Best Management Practices.	Review existing Master Plan and draft recommended changes	Bring before the authority having jurisdiction for approval and implementation.	The Amherst Stormwa Committee is working be included in the town regulations. Looking at adopting N management guidance
Revised						
Revised						

**5a. Additions**


**6. Pollution Prevention and Good Housekeeping in Municipal Operations**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2	Planned Activities – Goals Permit Year 3
6.1 Revised	Document and Enhance Employee Training Procedures	Public Works Director	Complete review of existing programs and update of formal employee training manual	All employees are actively involved in UNH T-2 and Public Works Academy training. Department SOP's partially completed, plan to have first draft available for review by June 2004. SWMP in draft stage, train staff on content by July 04	Continue existing training programs and integrate new training and techniques to include SWMP and pollution prevention practices.	The Town of Amherst of Public Works hired Engineering of Manchu put on a training class employees.
6.2 Revised	Evaluate the use of Pesticides, sand, and salt	Director of Public Works	Complete review of existing procedures. Write formal procedures manual for handling and using pesticides, sand, and salt	One employee is certified as pesticide supervisor. Within the last three years, we have integrated new technology to minimize the impact of salt and sand on roads.	Complete the learning process of calibrating winter salt and sand equipment. Purchase of two replacement vehicles with ground speed controls.	Municipal parks and g including cemeteries a minimize spreading un amounts of fertilizers a pesticides. At March v taxpayers authorized p second environmental liquid deicer.
6.3 Revised	Catch basin cleaning	Director of Public Works	Clean every catch basin at least once a year	This practice started three summers ago, each and every catch basin is cleaned yearly or more frequently if needed.	Continue with this program	Each catch basin is cle per year. Catch basins monitored and addition happens when and if w
6.4 Revised	Street sweeping	Director of Public Works	Sweep winter debris from the streets	Existing policies account for approximately one quarter of the streets picked up each spring and the rest swept to the road edge and cleaned during a ten year ditching plan	Work towards budgeting additional monies to power pick-up sweep all town roads.	Street sweeping with p vacuum is an annual s The budget process ha to approximately one t Each year additional m added to increase the e rental.

**6a. Additions**


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

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)</b>	<b>Planned Activities – Permit Year 2</b>	<b>Planned Activities – Goals Permit Year 3</b>
Revised						
Revised						
Revised						
Revised						
Revised						
Revised						
Revised						

**7a. Additions**


**7b. WLA Assessment**

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

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

**Programmatic**

Stormwater management position created/staffed	No	No	No	
Annual program budget/ Expenditures	(\$20,000)	\$20,000 \$6,000	\$24,000 \$17,000	

**Education, Involvement, and Training**

Estimated number of residents reached by education program(s)	(15 %)			
Stormwater management committee established	(Yes)	Yes	Yes	
Stream teams established or supported	(No)			
Shoreline clean-up participation or quantity of shoreline miles cleaned	(No.)			
Household Hazardous Waste Collection Days				
▪ days sponsored	(5)	Regional	5	
▪ community participation	(05%)	05%	05%	
▪ material collected	(tons or gal)			
School curricula implemented	(y/n)	Grammar School	Grammar School	

**Legal/Regulatory**

In Place  
Prior to  
Phase II      Under  
Review      Drafted      Adopted

Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control		X		
▪ Post-Development Stormwater Management		X		
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination		X		
▪ Erosion & Sediment Control		X		
▪ Post-Development Stormwater Management		X		

**Mapping and Illicit Discharges**

Outfall mapping complete	(0%)	Unknown to date	
Estimated or actual number of outfalls	(#)		
System-Wide mapping complete	(0%)		
Mapping method(s)			
▪ Paper/Mylar	(0%)		
▪ CADD	(%)		
▪ GIS	(%)		
Outfalls inspected/screened	(# or 0%)		
Illicit discharges identified	(#) none		
Illicit connections removed	(#) none (est. gpd)		
% of population on sewer	(0%)	0%	0%
% of population on septic systems	(100%)	100%	100%

**Construction**

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

**Post-Development Stormwater Management**

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)			
Site inspections completed	(# or %)			
Estimated volume of stormwater recharged	(gpy)			

**Operations and Maintenance**

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(1time/yr)	1time/yr	1time/yr	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(1time/yr)	1time/yr	1time/yr	
Total number of structures cleaned	(340)	345	355	
Storm drain cleaned	(500 LF.)			
Qty. of screenings/debris removed from storm sewer infrastructure	(200 yards est.)	220 yards est	240 yards est.	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		recycle	recycle	
Cost of screenings disposal	(\$)			

Average frequency of street sweeping (non-commercial/non-arterial streets)	(1time/yr)	1time/yr	1time/yr	
Average frequency of street sweeping (commercial/arterial or other critical streets)	(1time/yr)	1time/yr	1time/yr	
Qty. of sand/debris collected by sweeping	(lbs. or tons)			
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)		Beneficial usage	
Cost of sweepings disposal	(\$)		\$8,000	
Vacuum street sweepers purchased/leased	(#)			
Vacuum street sweepers specified in contracts	(yes)	Outside hire	Outside hire	

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)				
▪ Fertilizers	(lbs. or %)		Tested for proper usage	
▪ Herbicides	(lbs. or %)		Tested for proper usage	
▪ Pesticides	(lbs. or %)		Tested for proper usage	

Anti-/De-Icing products and ratios All paved roads are treated with a 50/50 mix. Half of our equipment has ground speed controls, and pre-wetting tanks and one small truck is equipped with straight liquid deicing (50% mag chloride, 50% distillers brew) Ice-be-gone. All dirt roads are treated with one hundred percent ledge sand.	50 % NaCl 10 % CaCl <sub>2</sub> 03 % MgCl <sub>2</sub> % CMA % Kac % KCl 50 % Sand	50 % NaCl 10 % CaCl <sub>2</sub> 03 % MgCl <sub>2</sub> % CMA % Kac % KCl 50 % San
Pre-wetting techniques utilized	(yes)	Yes
Manual control spreaders used	(yes)	Yes
Automatic or Zero-velocity spreaders used	(yes)	Yes

Estimated net reduction in typical year salt application	Unknown at this time	We are able to keep status quo in spite of increased traffic loads
Salt pile covered in storage shed	(yes)	yes
Storage shed(s) in design or under construction	n/a	