4/24/12

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Municipality/Organization: Town of Amherst, NH

EPA NPDES Permit Number: NHR41001

MaDEP Transmittal Number:

Annual Report Number
& Reporting Period: No. 9: March 2003-May 2012

NPDES PII Small MS4 General Permit
Annual Report

Part I. General Information

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

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Certification:

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

Signature:

Printed Name: James O'Mara

Title: Town Administrator

Date: 4/18/12

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 and trying to get a handle understanding the complete process. We are committed to these requirements and regulations and I was delighted to find during the review phase by our consulting engineers that information posted in the Public Works section of the town webpage unintentionally included educational information addressing Stormwater II. We have a long ways to go and we will stay the course. Limited volunteerism, and resources may require us to rethink our strategies, but the timetable submitted in our permit package 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 word.

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

2006– Committee chairperson has authored a number of articles for our local newspaper covering such topics as the sins of vehicle washing, over fertilizing of lawns, etc.

2007 - After meetings with Town Attorney, and soliciting public input, Amherst's Stormwater Regulation was adoption by both the Board of Health and Planning Board.

2008 – The committee continues to educate both residents and contractors through printed articles and the town's community access channel and Town Stormwater Webpage.

2009 – Stormwater interns developed an educational Stormwater brochure, checked all GPS mapping of culverts, catch basins, and outfalls. Created a GIS showing locations of all inlets and catch basins, checked for illicit discharges.

2010 – Stormwater interns worked closely with CEI Engineering (a grant for the Stump Pond area with Pennichuck Water) to educated residents on reducing the use of fertilizers and the affects pet waste has on the environment.

2011 – Based on the Public Hearing hosted in Portsmouth in January 2009, Stormwater interns worked during the summer of 2010 on some of the basic anticipated draft requirements in the new permit and with better equipment tightened up some of the GPS culvert coordinates and used the new information to improve the Town's GIS Stormwater mapping. Interns worked on Stormwater Educational Outreach to employees at our Transfer Station

2012 – For the eighth summer (2011), the town has employed two engineering interns to assist in our Stormwater compliance. The town purchased more precise GIS measuring equipment and redid catch basins. The interns continued to work towards the anticipated goals of the upcoming permit.

II, (b) <u>Best Management Practices</u> are under review by our Planning Board. More time is required to determine appropriate necessary actions and areas of responsibility by various departments.

2004 - In house improvements on town winter maintenance equipment such as groundspeed controls, liquid calcium systems (that lower the melting temperature of salt and using less product), ground and air temperature sensing equipment mounted on vehicles, all for more appropriate winter maintenance with a goal towards less pollution by 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 magnesium chloride/leftover mash of alcohol distilleries. The voters authorized purchase of a second liquid deicing system for the 05-06 budget cycle.

2006 – In conjunction with school and civic groups the town has assisted in roadside cleanups. Voters approved a salt/sand storage facility whose layout will further minimize residue runoff. We continue our annual street sweeping and catch basin cleaning. DPW inspects erosion control systems for new public and private road construction. The Town of Amherst employs two licensed pesticide supervisors in different departments overseeing fertilizer and pesticide controls for the town and three school districts. We are assisted with soil analysis at the University of New Hampshire. Amherst voters supported Phase II of the Baboosic Lake Septic program adding as many as twenty additional users to the eleven already on the system. Interns completed mapping outfalls and receiving waters. Follow-up will take place this year along with dry weather screening.

2007 – Public Works is in it's forth year of magnesium chloride/leftover mash of alcohol distilleries, the area of use has been widened. We are up to seven trucks with onboard liquid calcium chloride (which improves/minimizes salt usage below 20 degrees) systems and five spreader trucks with groundspeed controls. Two replacement trucks approved by the voters this year will include groundspeed and calcium systems bringing the total to nine. Almost every winter maintenance vehicle is now equipped with ground/air temperature sensing equipment. Additional monies are in the operating budget to sweep roads expanding our pickup sweeping thus reducing wasted sand pollution into fish spawning areas. During the previous late summer, interns developed, designed, and installed markers at three quarters of our catchbasins.

2008 – The town approved a road repair budget increase sufficiently to place DPW on a ten year road maintenance schedule. Proper horizontal alignment and cross slope uses less winter road chemicals. The practice of cleaning catch basins and removing winter sand from roads is supported and continues. Summer activities for our interns will include remarking of catch basins and stream water reviews.

2009 – All catchbasins were cleaned the previous summer and a portion of roads were swept. The 2008-09 winter we switched from liquid calcium chloride to liquid magnesium chloride.

2010 – All catch basins were cleaned during the summer of 09 and a majority of the roads were swept in the spring for salt and sand. Approximately seventeen miles of roadside ditches were cleaned, stabilized, and reseeded.

2011 – All catch basins were cleaned this previous summer (2010). Approximately 3,000 yards of roadside shoulder buildup was removed and the edge re-stabilized.

2012 – Re-cleaned (2011) all catch basins and swept winter sand from fifty percent of our town roads. Oil spill kits are available and viable at the Public Works Garage and the Transfer Station, employees have been trained in their use. Erosion Control measures are implemented on all town construction projects.

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 a tighter timeframe. The Planning Board, Master Plan revision is underway with a goal of adopting it after hearings in 2007. The town is going through a reevaluation of the Zoning and Planning Department with a goal of increase time towards Code Enforcement with sites on site plan compliance and review and support Stormwater Phase II.

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

2006 – Stormwater II ordinance is going through legal review. During review, new construction plans are looked at for the following information, Stormwater Management Plan, Site Specific Plan, Stormwater Pollution Prevention Plan, and Notice of Intent filing. They are returned if the information is not included. Once the site plan is adopted by the Planning Board (with plan notations) enforcement becomes easier.

2007 – Stormwater regulations were adopted by the Amherst Planning Board, Board of Health, and Board of Selectmen.

2008 – The economy has slowed new construction; however we continue to educate contractors in the requirements of our Stormwater Regulation.
Through the winter months, the Nashua Regional Planning Commission (NRPC) has in conjunction with area school districts developed a Stormwater education module. The goal is to incorporate this into the school curriculum.
The Town of Amherst is participating in a NHDES Source Water Protection Grant Project awarded to Pennichuck Water Works for the Stump Pond Brook area.

2009 – At the completion of the first five years, we believe we have met the goals set forth.

2011 – Amherst participated in the January 2009 Portsmouth public hearing, while we await the new permit, through the summer, we moved forward with what we perceive to be some of the more basic and obvious requirements.

2012 – We have met the permit requirements, are in a holding pattern and await the new permit.

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

2006 – As discussed in II-b above, two summer interns mapped culvert locations and flow directions. This year we will follow up with dry weather screening, illicit discharges etc.

2007 – Data collected last year was recorded and put in report form. Ten suspected dry weather screening and illicit discharges were tested and were ruled out and recorded as non-threatening.

2008 – Summer interns will continue dry weather screening through the summer of 2008

2009 – Last summer's interns will return and while the new permit goes through its final review, they will start on the more generic requirements.

2010 – Some water sampling and dry weather screening was done, all catch basin decals were inspected and where appropriate, replaced

2011 - Interns checked catch basin decals and reviewed dry weather screening through the summer of 2010 and will continue do so through the summer of 2011.

2012 – Interns replaced worn catch basin decals, reviewed dry weather screening throughout the summer of 2011, and captured some wet samples for analysis, no illicit discharges were found.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	(Reliance on non-municipal partners indicated, if any)	Progress on Goal(s) – Permit Year 1	Planned Activities – Permit Year 2	Planned Activities – Progress on Goals Permit Year 3	Progress report on goals and activities for permit year 4	Progress report on goals and activities for permit year 5	Progress report on goals and activities for year 6 of five year permit	Progress report on goals and activities for year 7 of five	Progress report on goals and activities year 8 of five year permit	Progress repo. on goals and activities year 9 of five year permit
1.1	Education signage at voting	Public Works	4'X4" information poster display for town voting.		Broader base of assistance	Two years of posting similar information yielded minimal interest. The committee plans to readjust our approach by utilizing other group settings	Voter information was restricted by town Moderator information continues to flow at information booths set up at other town events. A report was filed in Town Report	Information was disseminated in conjunction with other information by the conservation commission at their Information table at the Town Forth of July Celebration	Volunteers staff booths at town events.	Volunteers continue to staff booths at town events. Town staff are working with the town of Merrimack and Pennichuck Water to educate citizens around Stump Pond	Hosted a public hearing on fertilizer with a County Extension Service Speaker	Information	Nothing new presented to voters
Revised	Education booth at 4th 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 our Stormwater Committee Chairperson to our web designer has generated quite a few links	Stormwater Committee Chairperson supplies our webmaster with information on a regular basis. Pet waste and water pollution Amherst DPW tries new snow and ice removal technology, explaining deicing spray program	New Stormwater information n the Town website is added as often as possible	www.amherstnh.gov/StormWater/floods.html and review the various titles.	Information is posted on town webpage (see year 5).	Information on Town Webpage and flyers/handouts at Town Hall.	The Town awaits the new permit after which new information will be posted on the town Webpage.	Town has a new webpage under construction and w will add new information as ofte as possible
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 out of reprints from news articles written about drinking water and Stormwater runoff related issues, earth day, voting, events on the town common	Education brochures continue to be available for distribution at several town locations	Education brochures continue to be available for distribution at several town locations including the Department of Public Works and Town Hall	Educational brochures and the town ordinance are available to residents and contractors at several town locations.	Stormwater interns developed a new brochure in Jan 2009	Interns went door to door in the Stump Pond area		
Revised											In anticipation of the new permit, section 2.3.2, the interns drafted brochures targeting a residential program, a business/residential/industrial program, a developers and construction program, and an industrial program.	New brochures were crafted and are available at the Amherst Town Hall	Brochures are available at Amhe Town Hall

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 development of brochure for contractors	Information is distributed during site plan review	Plans are to produce educational information about the Stormwater Regulation for dispersal as soon as possible	The ordinance is available to contractors both at the Amherst Town Hall and the Department of Public Works	Information is distributed during site plan review.	We are seeing limited new construction but information is distributed during permitting process	The downturn of the economy has produced limited new construction but information is provided during permitting process. Appropriate BMP's are implemented for all construction projects in town as required on Planning Board approved Stormwater Management Plans.	There is limited new construction but information is provided during the permitting process and BMP's are implemented throughout the process.
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 program in place centered around earth day. First grade- awareness of reusable 2nd Grade- the rotten truth about landfills. 3rd Grade, renewable and non-renewable resources.	Yearly, Peabody Mill Environmental Center works on this with younger children	Pollution information continues to be part of the curriculum; expansion through the Nashua Regional Planning Commission is being explored.	The Nashua Regional Planning Commission has taking the lead in developing Stormwater school curriculum. Town of Amherst financially supports the development of through a stipend.	The Town of Amherst supports through a stipend, the school education component developed by the Nashua Regional Planning commission.	Getting curriculum into the classroom continues to be challenging but is being aggressively pursued	The Nashua Regional Planning Commission assisted member towns by creating and disseminating stormwater curriculum to the Souhegan School district.	Assistance through the Nashua Regiona Planning Commission ended when the grant funding dissolved. We are now workin with assistance from Manchester Regiona Stormwater Coalitio and are attending their meetings.
Revised													

1a. Additions

1.6	Transfer Station waste stream management	Public Works Director and Solid Waste Committee	Improve facility and educate taxpayers		Household Hazardous Waste information is posted on the town web page and the Solid Waste Committee is working towards streamlining the facility	Facility renovations have been turned down by the voters for the second year in a row (lost by 7 votes) recycling continues at current levels. Plans are already underway by Solid Waste Task Force for next year.	The Amherst Solid Waste committee had increased its education efforts and recycling has increased. Renovations were approved by the voters this year, funds will be available in July and ground may break as early as October 2007. This is expected to further increase recycling	Amherst recycling has expanded to include glass and mixed paper. Last year we experienced a reduction in trash tonnage. Amherst DPW expects to break ground on facility renovations this spring.	The town completely merged its recycling and trash into "one stop dropping". Citizens now do everything within a 140 ft area.	The Transfer Station renovation continues to be a complete success. Trash tonnage is slowly dropping, and even in this tough economy, tonnage of some recyclables have remained constant and others have increased	Even in this difficult economy we continue to see an improvement in recycling and a slight decline in trash tonnage. Summer of 2010 Opaque plastic and steel cans were added to the recycling program	With continued economic decline, news print tonnage continues to drop however other recyclables are either holding their own or steadily increasing.

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 8th** Lawn Pesticides and Water Pollution **July 27th** Buying an Using Pesticides, Read the Fine Print Sept 14 Reduce Lawn Fertilizer Use	January 11th Safe Winter Driving on Limited Salt Use Roads Jan 14th Brush Up on your Winter Driving Skills. Feb 8th Article on commercial car wash verses washing in the yard.	Amherst General Quarterly 12/05 ➢ EPA Stormwater Requirements for Amherst a basic overview ➢ What's our trash problem ➢ Earth machines compost bins available Recycling articles ➢ The Importance of Recycling ➢ Recycling Trends ➢ Amherst Trash, Resource, Recovering & Recycling Amherst Citizen ➢ Pet waste and water pollution ➢ Safe winter driving on Limited salt use roads. ➢ Every day is earth day in Amherst –litter pickup	Amherst General Quarterly March 2007 ➢ Passage and implementation of the Stormwater Regulation ➢ Services offered by the Transfer station, benefits of improving the station ➢ There are articles in each Quarterly about Stormwater, Recycling, and other environmental issues 2006 Town Report ➢ Summary of the yearly activities for Stormwater II Committee and the Recycling and Solid Waste Task Force Amherst Citizen 11 April 2007 ➢ Household Hazardous Waste Season kicks off	Amherst Stormwater Phase II web site ➢ Floods ➢ Lawn care ➢ Gardening ➢ Pesticides ➢ Fertilizer ➢ Limited salt ➢ Roads ➢ Washing Cars ➢ Pet Waste ➢ Snow & Ice Conservation Commission information rack at Town Hall ➢ Fact Sheets on related topics like septic systems, wells, IPM and low chemical gardens and lawns 2007 Town Report ➢ Summary of the previous years Stormwater activities ➢ Summary of Solid Waste activities	Amherst Stormwater Phase II web site. Conservation Commission information rack at Town Hall 2008 & 2009 Town Reports	Amherst Citizen ➢ Pet waste and water pollution ➢ Safe winter driving on Limited salt use roads. Posted information on the town webpage.	No recent articles

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Initial Progress on Goal(s)	Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2	Planned Activities – Progress on Goals Permit Year 3	Progress report on goals and activities for permit year 4	Progress report on goals and activities for permit year 5	Progress report on goals and activities for year 6 of 5 year permit	Progress report on goals and activities for year 7 of the five year permit	Progress report on goals and activities for year 8 of the five year permit	Progress report on goals and activities for year 9 of the five year permit
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 meets monthly, has started identifying areas of responsibility, will oversee activities of summer intern.	Committee worked with CLD Engineering to develop a Stormwater ordinance. It is going through legal review and we anticipate implementation later this year	After the Committee met and reviewed the Regulation, the Committee finalized our Stormwater Regulation presented it for adoption by the appropriate Boards		The committee monitored progress through the final permit year.	The committee meets as needed, and awaits the new permit requirements.	The committee continues to await the new permit	The committee has suspended its activities until after the new permit is issued
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 New Hampshire Department Environmental Services the main leaching fields are in place. Force mains for 12 individual homes will be completed by fall of 2005. State DES approval for 12 additional homes in the next phase. Construction anticipated next year.	Town vote approved funds for Phase II which is already under design. We anticipate construction to start in the Fall	Phase II is out to bid, and town vote approved Phase III.	Nine homes, four of which are classified Tier 1, are connected as part of Phase 11. Thirteen Tier 1 homes are identified as part of Phase III. As soon as the contract is approved and awarded, construction can start.	Phase III was completed during the summer of 2008 bringing 35 homes on board. In March 2009, Amherst residents voted to fund engineering for phase IV.	Planning progress started on Phase IV with special town meeting approval in the summer 2009. Ground breaking started early spring of 2010	Phase IV funded by Stimulus moneys and user fees was completed adding nine more homes to the system.	Lake water quality continues to improve
Revised 2.2			Bid out in 04 implement by 05										
2.3	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	Markings are done annually in the spring/early summer during catch basin cleaning	Spring markings will continue during catch basin cleaning	Stormwater interns designed and installed vinyl markers @ 70% of our catch basins	As parts of this summer's work schedule all vinyl markers will be checked and replaced where necessary.	All vinyl markers were checked and replaced as needed	All vinyl markers were checked and replaced as needed	All Catch Basins were checked and vinyl markers were replaced as needed	With the exception of new catch basins installed by the Town late last year, all catch basins were checked and markers replaced as needed.
Revised													
2.4	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 be involved in regional collection. The approved designated collection site is in Nashua. A local regional site failed as state funding was cut. We will continue to pursue funding.	Amherst has continued its commitment to regional collections in Nashua. State funding cuts continue to plague any chance of local collections.	Amherst has continued its commitment to regional collections in Nashua. State funding cuts continue to plague any chance of local collections	Nashua Regional Planning Commission (NRPC) manages regional collections. We experienced our first localized collection and it was a huge success.	Nashua Regional Planning Commission will hold six hazardous waste events during calendar year 2009.	Nashua Regional Planning Commission will hold six hazardous waste events during calendar year 2010	Nashua Regional Planning Commission scheduled three hazardous waste collection events for Amherst residents and tentatively three additional events depending on funding (grants, town budgeting and user fees)	Each year, the Nashua Regional Planning Commission schedules collection events. In 2011 there were six, in 2012, there are five scheduled in Nashua NH and one in Milford NH, any of which, Amherst residents can attend
Revised													
2.5	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 in the elementary schools, the Transfer Station, and on the web. Preparations for an information booth at 4th of July activities. As the town moves towards a community access channel which should be up and running by this fall, we will include	Community access channel has become an active education tool exposing Amherst residents to Best Management Practices. A new information board located at the Amherst Transfer Station and booths staffed by volunteers at annual events help spread the word. Stormwater II	Community access channel has become and active education tool exposing Amherst residents to Best Management Practices. A new information board located at the Amherst Transfer Station and booths staffed by volunteers at annual events help spread the word. Stormwater II Committee members	Peabody Mill Environmental Center, offers in town educational programs, the NRPC is working on regional curriculum to be presented in area schools. The committee publishes articles in local papers and utilizes the community access channel.	Relevant information is run on the town's community access channel and education programs are offered at Peabody Mill Environmental Center	We continue to use the Transfer Station information board, the Community Access Channel, and coalition meetings	Programs are offered through the school district and the Peabody Mill Environmental Center	We utilize electronic media, and visual signage. Programs are offered through Peabody Mill Environmental Center and Environmental classes are taught through Souhegan High School.

Revised		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 effort to remove trash from the roadside using students and public works employees. This may become semi-annual.	This spring we will work with the Junior Women's Club who intends to solicit assistance from other volunteer organizations	This spring we will work with the Junior Women's Club who intends to solicit assistance from other volunteer organizations	The town continues work with volunteer supporting roadside efforts	The town works with volunteer groups for roadside cleanup within the budget availability	The town through It's DPW supports Volunteer groups Involved in roadside cleanup	DPW and volunteers assisted Souhegan High School students in a roadside cleanup program	Town Personnel and volunteers assisted Souhegan High School students in a roadside cleanup program.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – (Reliance on non-municipal partners indicated, if any)	Permit Year 1 Progress Activities	Planned Activities – Permit Year 2	Planned Activities – Progress on Goals Permit Year 3	Progress report on goals and activities for permit year 4	Progress report on goals and activities for permit year 5	Progress report on goals and activities for year 6 of five year permit	Progress report on goals and activities for year 7 of 5 yr permit	Progress report on goals and activities for year 8 of five year permit	Progress report on goals and activities for year 9 of five year permit
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 University of New Hampshire one or two interns with computer and mapping skills should be on board by end of May.	Two interns located outfalls and flow direction within the Stormwater area. Coordinates were marked by GPS and imposed on a map.	Culverts, catch basins, and outfalls will continue to be monitored, reviewed, and verified.	We believe we have met this goal. However, this summer's intern team will verify coordinates and culvert locations.	Interns rechecked GPS coordinates for culverts, outfalls, and rechecked mapping, developed GIS showing locations	This goal has been met	This goal has been met however, interns refined GPS coordinates with more precise equipment	This goal has been met
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, outfall and illicit connection training is scheduled for all Public Works employees this spring.	Interns will perform dry weather screening this summer	Nothing was found additional screening will be done this summer as needed.	Dry weather screening has yet to disclose any inappropriate findings. We will continue to investigate.	Amherst only has 35 homes on community septic and very few culvert and catch basin connections. The few that we have, have been reviewed. Dry weather screening completed during August 2008 no discharges detected	An additional ten homes are being added to the Community Septic, all others are on individual leach fields. We continue to review dry weather screening	44 Amherst homes (around Baboosic Lake) are on a 8 yr old town owned community septic, all others are individual leach fields. We continue to review dry weather screening.	There is one small town system around Baboosic Lake administered by the Town of Amherst. All other homes are on individual systems. We continue to monitor and implement dry weather screening where appropriate.
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 is still working on ordinance information for presentation to Planning Board	Some connections were identified during outfall mapping, follow-up with inspections will continue this summer	Water was tested in ten locations for Total Coliform and E. coli, all came back negative. Additional testing will be done as needed	We have not had negative findings but testing will continue as needed.	The town has limited community septic (less then 5 years old) and almost all of our culvert discharges are merely road crossing pipes	The town only has road crossing culvert pipes, and a community septic that supports 35 homes. We have not found any illicit connections.	Interns checked drainage outfalls throughout the summer and found no evidence of illicit connections	No illicit discharges found to date

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – (Reliance on non-municipal partners indicated, if any)	Planned activities Permit Year 1	Planned Activities – Permit Year 2	Planned Activities – Progress on Goals Permit Year 3	Progress report on goals and activities for permit year 4	Progress report on goals and activities for permit year 5	Progress report on goals and activities for year 6 of five year permit	Progress report on goals and activities for year 7 of five year permit	Progress report on goals and activities for year 8 of five year permit	Progress report on goals and activities for year 9 of five year permit
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 input to Planning Administrator after reviewing construction plans on the need for Storm water pollution prevention plans.	DPW Director meets regularly with the Director of Planning and Zoning to review plans and advises contractors if project disturbance necessitates a SWPPP	With the adoption of Amherst's Regulations, implementation by town officials under the Board of Selectmen, Board of Health, and Planning Board can begin	New construction has slowed considerably, one residential street in progress, making inspections and monitoring fairly easy.	New construction is all but nonexistent. The DPW Director meets on a regular basis with the Director of Planning and Zoning.	There is very little new construction but what we have is monitored through inspections. The DPW Director continues to meet with the Planning and Zoning Director	New construction is monitored through inspections by both DPW and independent engineering representing the town but paid by the developer	The Town has policies in place to inspect and monitor construction.
Revised		Amherst Planning Assistant											
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 regulations that exist today.	Continue with interim policy and update as necessary	Department Heads meet monthly with Zoning Administrator to review site plans to be included in Planning Board hearings.	DPW Director meets regularly with the Director of Planning and Zoning to review construction plans prior to Planning Board approval.	Department heads continue to review plan proposals prior to formal presentation at Planning and Zoning hearings. Additional site reviews will take place as needed after the Regulation is implemented.	DPW Director meets regularly with the Director of Planning and Zoning and other Department Heads to review construction plans prior to submittal to Planning Board.	DPW Director meets with Planning and Zoning Director to review any new or revised construction plans prior to Planning Board meetings.	DPW Director meets regularly with the Planning and Zoning Director to review plans	Public Works and Planning and Zoning meet regularly to review plans	Planning Director seeks inpute on all submitted construction requests
Revised													

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) – (Reliance on non-municipal partners indicated, if any)	Planned Activities Permit Year 1	Planned Activities – Permit Year 2	Planned Activities – Progress on Goals Permit Year 3	Progress report on goals and activities for permit year 4	Progress report on goals and activities for permit year 5	Progress report on goals and activities for year 6 of five year permit	Progress report on goals and activities for year 7 of five year permit	Progress report on goals and activities for year 8 of five year permit	Progress report on goals and activities for the year 9 of five year permit
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 Stormwater Committee. A meeting is scheduled between Stormwater Committee and Board of Selectmen with Planning Board Representation, and Town Counsel.	Stormwater regulations are being reviewed by Town Counsel.	The Stormwater Regulation has been adopted by the Planning Board, Board of Health, and Board of Selectmen.	From the prospective of implementation, a downturn in the economy allows us to educate developers and contractors in Stormwater Requirements.	The town adopted Stormwater regulations under the Board of Health. State of New Hampshire has not cleared the way for the town to easily develop enforcement and fines.	Inspected and monitored using both professional Engineer oversight, Planning and Zoning Director, and DPW Director	Inspections and construction monitoring is done by Professional Engineer, Planning and Zoning Director, and Public Works Director prior to releasing any construction bonds	In place
Revised			We have started slowly, this looks more like an 04-05 goal				As of this writing, town inspectors are only inspecting construction sites destined to be town roads.	This year, town officials will be working on construction site inspection SOP's	Policies are in place so development or redevelopment is inspected by Professional Engineers hired by the town but paid by the Developer.	The town does have rules and regulations in place requiring developers to pay for professional engineer oversight			
	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 Stormwater Committee is working on rules to be included in the town regulations. Looking at adopting NHDES best management guidance documents	Town of Amherst earmarked by town vote to fund money towards redoing the master plan. Public Works Director is drafting new road construction standards covering General construction standards, New road construction, Storm Drainage, Water distribution, & Sanitary sewers	Master Plan revision is underway. The Stormwater Regulation includes some BMP's; and more will be included in the forthcoming update of the Road Specifications.	The Master Plan is in its final stages of redevelopment	The consulting firm has finished their work on the master plan. It is now in review by the Planning Board.	The Stormwater Management plan was adopted through the Board of Health	Adopted and implemented	Adopted and implemented
Revised													

6. Pollution Prevention and Good Housekeeping in Municipal Operations

Estimated number of residents reached by education program(s)	15 %			15% but distributed town wide	40% through community access channel	40% through community access channel, 100% through mailers	This is difficult to measure. Information is run on the community access channel and brochures & handouts are available at town buildings	Eighty-five homes under the Stump Pond program. 40% of town residents under community access channel	Community Access channel covers approximately 40% of town, information is run on a regular basis	Difficult to measure, perhaps 35-40% through Community Access Channel Brochures are available in lobby of Town Hall
Stormwater management committee established	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Established, but with the new permit four behind schedule, it is difficult to keep momentum
Stream teams established or supported	No		supported	Interns	Interns	Interns	Summer Interns	Summer Interns	Summer Interns	Summer Interns
Shoreline clean-up participation or quantity of shoreline miles cleaned	No)				Yes-participation	Yes-participation	Yes-participation		Yes – participation	Yes - participation
Household Hazardous Waste Collection Days							April 18th Nashua May 2nd Milford June 4th Nashua Aug 1st Nashua Oct 3rd Nashua Nov 7th Nashua	April 24, Nashua May 8, Milford June 3 Nashua Aug 7, Nashua Oct 2, Nashua Nov 6, Nashua	April 23, Nashua May 7, Milford June 2, Nashua Aug 6, Nashua Oct 1, Nashua Nov 5, Nashua	April 14, Nashua May 5, Milford June 7, Nashua Aug 4, Nashua Oct 6, Nashua Nov 3, Nashua
▪ days sponsored	5 Regional	Regional	5	5 Regional	6 Regional	8 Regional	6 regional min	6 regional	6 Regional	6 Regional
▪ community participation	05%	05%	05%	2.0%	3.0%	9.7%	3%	2.5%	2%	72 households or 5.27% of the population
▪ material collected	tons or gal				3,713 lbs	7,336 lbs	3,260 lbs	5,891 lbs	5,959 lbs	4,980 lbs
School curricula implemented	Grammar School	Grammar School	Grammar School	Grammar School	Grammar School	Grammar School	Grammar School	Grammar School	Grammar & High School	Grammar & High School

Legal/Regulatory

	In Place Phase II	Review	**Prior to** Drafted	Adopted	**Under**
Regulatory Mechanism Status (indicate with "**X**")	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

	Progress on Goal(s) Permit Year 1	**Progress on Goals Permit Year 2**	Progress on Goals **Permit Year 3**	Progress on Goals for **Permit Year 4**	**Progress report on goals and activities for permit year 5**	**Progress report on goals and activities for year 6 of 5 yr permit**	**Progress report on goals and activities for year 7 of 5 year permit**	**Progress report on goals and activities for year 8 of 5 year permit**	**Progress report on goals and activities for year 9 of 5 year permit**
Outfall mapping complete			Partial 8/05		Yes	Yes	Yes	Yes	Yes
Estimated or actual number of outfalls						**550**+/-	**550** +/-	**550** +/-	**550** +/-
System-Wide mapping complete			Partial 8/05		Yes	Yes		Yes	Yes & updated
Mapping method(s)									
▪ Paper/Mylar			Paper		Paper	Paper, GIS	Paper, GIS	Yes	Paper, GIS
▪ CADD									
▪ GIS								Yes	
Outfalls inspected/screened			yes		Yes	Yes	Yes	Yes	Yes
Illicit discharges identified			3		None	None	None	None	None
Illicit connections removed					None	None	None	None	None
% of population on sewer		0%	0.0023	0.0025	0.25	0.28	0.28	0.3520%	0.020%
% of population on septic systems	(100%)	100%	99.9977%	99.9975	99.9970%	99.9972	99.9972%	99.98%	99.98%

Construction

	2003	2004	2005	2006	May 06 -May 07	May07-May 08	May 08-Present	May 09 - Present	May 2010 – Apr 2011	April 2011 - Present
Number of construction starts (>1-acre)			Two	Three	4	4	**4**	**29**		**5**
Estimated percentage of construction starts adequately regulated for erosion and sediment control			Two	Three	100%	100%	**100%**	**100%**	**100%**	**100%**
Site inspections completed			Two	-	4	60 (include road construction inspections)	132 (including road construction inspections)	413 (including road construction inspections	102 (including road construction inspections)	187 (including road construction inspections
Tickets/Stop work orders issued			0	-	-	**1**	**0**	**0**	**0**	**0**
Fines collected			0	-	-	0	0	0	0	0
Complaints/concerns received from public			0	1	0	5	**0**	**0**	**3**	**0**

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction Stormwater control	50%	75%	75%		100%	100%	100%	100%
Site inspections completed	50%	75% Presently regulated through State site specific as required by NHDES. Town authority limited until regulation in place	Municipal rules and regulations passed within the last two months, regular inspections have already started.	Regular inspections take place on all construction sites	Inspections are conducted regularly by town employees and contracted engineering firm	Inspections are conducted regularly by town employees and contracted engineering firm	Inspections of construction sites are conducted regularly by town employees and contracted engineering firm	Inspections are conducted regularly by town employees and contracted engineering firm

Estimated volume of Stormwater recharged									

Operations and Maintenance

	2003	2004	2005	2006	2007	May 2007 – May 2008	2008/09	2009 - 2010	2010-2011	2011-2012
Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	1time/yr	1time/yr	1time/yr	1 time /yr	1 time / yr	1 time per year usually in July	One time per year, annually in July	1 time / yr	Once annually, additional cleanings as needed	Once annually in July, additional cleanings as needed
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	1time/yr	1time/yr	1time/yr	1 time/ yr	1 time / year	1 time per year usually in July	All cleaned July of 09	1 time / yr	Once annually, additional cleanings as needed	1 time per year
Total number of structures cleaned	340	345	355	360	360	360	365	368	371	413
Storm drain cleaned	500 LF.			200 LF	200LF	200 LF	2,000 LF	200 LF	240 LF	
Qty. of screenings/debris removed from storm sewer infrastructure	200 yards est.	220 yards est	240 yards est.	210 yards estimated	200 yards estimated	200 yards estimated	220 cu yards estimated	200 yards estimated	240 cu yards estimated	200 cubic yards
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		recycle	recycle	recycle	Recycle	Recycle	Recycle	Recycle	Recycle	Recycle
Cost of screenings disposal							$15,000	$12,000	$1	

	2003	2004	2005	2006	2007	May 2007-May 2008	June 2008 – Present	April 2009 - present	April 2010 - Present	April 2011 to Present
Average frequency of street sweeping (non-commercial/non-arterial streets)	1time/yr	1time/yr	1time/yr	1 time/yr	1 time / year	1 time per year usually in May	One time per year usually in May	One time per year will be finished in May	One time per year usually in May	Once per year usually in May
Average frequency of street sweeping (commercial/arterial or other critical streets)	1time/yr	1time/yr	1time/yr	1 time/yr	1 time per year	1 time per year usually in May	One time per year usually in May	One time per year	One time per year usually in May	Once per year usually in May
Qty. of sand/debris collected by sweeping	lbs. or tons			1,000 yds	Less than 1,000 yards	Less than 1,000 yards	Less than 1,000 yards	Less than 1,000 yards	Less then 1,000 yards	Less then 1,000 yards
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	location		Beneficial usage	Beneficial usage	Beneficial usage	Beneficial usage	Beneficial usage	Beneficial usage	Beneficial usage	Beneficial usage
Cost of sweepings disposal			$8,000	$8,200	$13,000	$13,000 +-	$14,000	$14,000	$15,273.50	$16,500
Vacuum street sweepers purchased/leased				Not going to be done will continue to hire out	Capital Improvement plan does not support purchase	It is best left to be done by others	No equipment purchases passed by the voters in the last two years, must hire out	No plan to own at this time	Rental, no plans to purchase at this time	Capital Improvement plan does not support purchase
Vacuum street sweepers specified in contracts		Outside hire	Outside hire	Outside hire	Outside hire	Outside hire	Outside hire	Outside Hire	Outside hire	Outside hire

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)										
▪ Fertilizers			Tested for proper usage	Tested for proper usage	Soil tested annually	Soil tested annually as warranted	Soil tested annually for proper usage as warranted	Tested for proper usage	Soil testing prior to any application	Soil tested prior to application

▪ Herbicides			Tested for proper usage	Tested for proper usage	Tested for proper usage	Tested for proper usage as warranted	Tested annually for proper usage as warranted	Tested for proper usage	Soil testing prior to any application	Soil tested prior to application
▪ Pesticides			Tested for proper usage	Tested for proper usage	Tested for proper usage	Tested for proper usage as warranted	Tested annually for proper usage as warranted	Tested for proper usage	Testing prior to using	Soil tested prior to application

	2004	2005	2006	2007	May 07-May08	June 08 - present	Winter of 09-2010	Winter of 2010/11	Winter of 2011/12
Anti-/De-Icing products and ratios All paved roads are treated with a 50/50 mix. Almost all equipment has ground speed controls, and pre-wetting tanks and two small trucks are equipped with straight liquid deicing (50% mag chloride, 50% distillers brew) Ice-be-gone. All dirt roads are treated one hundred percent with sand.	50 % NaCl 10 % $CaCl_2$ 03 % $MgCl_2$ % CMA % Kac % KCl 50 % Sand	50 % NaCl 10 % $CaCl_2$ 03 % $MgCl_2$ % CMA % Kac % KCl 50 % San	50 % NaCl 10 % $CaCl_2$ 03 % $MgCl_2$ % CMA % Kac % KCl 50 % San	50% NaCl 10% $CaCl_2$ 03% $MgCl_2$ 0.0% CMA 0.0% Kac 0.0% KCl 50% Sand	50% NaCl 10% $CaCl_2$ 03% $MgCl_2$ 0.0% CMA 0.0% Kac 0.0% KCl 50% Sand	50% NaCl 00% $CaCl_2$ 13% $MgCl_2$ 0.0% CMA 0.0% Kac 0.0% KCl 50% Sand	50% NaCl 00% $CaCl_2$ 13% $MgCl_2$ 0.0% CMA 0.0% Kac 0.0% KCl 50% Sand	50% NaCl 00% $CaCl_2$ 13% $MgCl_2$ 0.0% CMA 0.0% Kac 0.0% KCl 50% Sand	50% NaCl 00% $CaCl_2$ 13% $MgCl_2$ 0.0% CMA 0.0% Kac 0.0% KCl 50% Sand
Pre-wetting techniques utilized	(yes)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Manual control spreaders used	(yes)	Yes	Yes	20% of equipment yes		Less than 10%	Less than 10%	Six	Yes - five
Automatic or Zero-velocity spreaders used	yes	Yes	Yes	80% of equipment yes	90% of equipment yes	90% percent	90+% percent	Eight	Nine
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	We are able to keep status quo in spite of increased traffic loads	Status quo	This was a record setting snow fall season, salt usage was up, but it was managed with automatic spreaders	Salt increased $8 per ton necessitating cutbacks, this was more then offset by increased sand usage, more overtime, fuel, and equipment costs	This was a mild winter so we used less. We have purchased the appropriate equipment to manage usage		All sanders are calibrated to minimize the use of salt. Liquid deicers are used to pre-wet salt/sand mix to lower melting temperature
Salt pile covered in storage shed	yes	yes	yes	Yes	Yes, however a warrant article for additional winter material storage failed to get voter approval	Yes, but the barn is far too small for a town the size of Amherst. Salt is hauled in all winter long.	Yes	yes	yes
Storage shed(s) in design or under construction	n/a		New additional storage under design	Additional storage still funded but not yet constructed	The funding referenced last year proved inadequate and additional funding was not approved	No	No	No	No, we purchase salt throughout the treatment season