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

EPA NPDES Permit Number: **NHR41001**

MaDEP Transmittal Number:

Annual Report Number & Reporting Period: **No. 14: March 2003-May 2017**

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 X 204 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: James O'Mara

Title: Town Administrator

Date:

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.

2013 – For the ninth summer (2012), the town has employed two engineering interns to assist in our Stormwater compliance. Interns finished mapping upgrading (new GIS equipment) for all culvert inlets, culvert outlets, catch basins, manholes and retention basins as started during the previous year. They also adjusted through use of Trimble hardware our collection data process.

2014 – Last year, the team of (2) interns updated our culvert and catch basin identification system and replenished the decals. They also created educational brochures and researched anticipated permit upgrades.

2015- Through the summer of 2014 Stormwater engineering inters employed under Amherst DPW upgraded ArcGIS mapping, Transfer Station permitting, reviewed (by canoe) the shores of Baboosic Lake and Souhegan River, upgraded education material, updated catch basin cleaning an documentation, and worked with NHDES and Baboosic Lake Association Outreach on water quality monitoring of Baboosic Lake.

2016 – Through the summer of 2015, Stormwater interns checked all catch basins for stenciling, performed water sampling to help update NHDES's 303d list and reviewed discharges

2017- During the summer of 2016, our single Stormwater intern sampled 303d sites, documented and submitted results to NHDES. He refined education material, mapping information, and inspected catch basins and outfalls.

II, (b) Best Management Practices 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.

2013 – Cleaned all catch basin (summer 2012) and with the use of an outside vendor swept fifty percent of our town roads.

2014 – Cleaned all catch basins (summer of 2013), with the help of an outside contractor, rebuilt several miles of roads, created closed drainage, and swept (picked up) 50% of our roads

2015 – All existing and new catch basins were cleaned (summer of 2014), approximately six lane miles of road were ditched and stabilized, summer interns established written BMP's for winter sand, salt, inhibited Calcium Chloride, vehicle & Equipment storage, and Stormwater maintenance.

2016 – Cleaned all catch basins, swept approximately one third of the town's roads, and reconstructed approximately five miles of existing roads

2017 – Last year (2016), all catch basins were cleaned, checked, and remarked, all curbed roads and road sections swept, approximately seven lane miles of road were ditched and stabilized, and new homeowner and business education brochures written and published.

II, (c) <u>Achieving our first year goals</u>, 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.

2013 – Stormwater Interns took advantage of newly purchased electronic equipment and refined the mapping coordinates and visually inspected all catch basins.

2014 – Goals of the first permit are completed and we await release of the new permit.

2015 – Goals of the first permit are completed, we continue to refine the requirements and await release of the new permit

2016 – Requirements of the first permit have been completed

2017 - (which is mostly the 2016 construction year) time was spent rechecking mapping and drainage coordinates, refining education brochures, and preparing for the next generation 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.

2013 – Interns checked all catch basins and replaced worn vinyl decals, gathered and stored IDDE data.

2014 – Interns checked all catch basins, replaced decals, worked on education materials, manned a public information booth at the Farmers market, and took water samples at the Transfer Station.

2015 - Interns reviewed and replaced all catch basin decals, improved education material, worked with the Baboosic Lake Association on water quality sampling, and took water samples for compliance at the Amherst Transfer Station.

2016 – a lot of time was spent this past summer collecting water samples and analyzing data around Baboosic Lake and the Souhegan River (both impaired waterbodies and listed on DES's 303-d list) plus sampling soils from street sweeping and catch basin cleaning.

2017 – during the summer of 2016 our intern continued with water sampling collection, analysis results, and reporting. Much of the data has been used to update Amherst's impaired 303d waterbody listings with NHDES.

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 report on goals and activities year 9 of five year permit	Progress report on goals and activities year 10 of 5 yr. permit	Progress report on goals and activities year 11 of 5 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	Nothing new presented at voting	Nothing new presented at voting
Revised	Education booth at 4th of July festivities	Stormwater II committee	Brochures											New education brochures for Farmers market	A booth was set at Farmers Market
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 we will add new information as often as possible	There is a basic information posting on the webpage	Basic information posted on town webpage
Revised	Update as time allows	2005-Stormwater II Committee	Electronic exposure through education											DPW has new staffing and plans to improve and update the Stormwater website.	Revised as time allows
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,	Handout brochures initially	Some brochures built out of reprints from news articles written	Education brochures continue to be available for distribution at	Education brochures continue to be available for distribution at	Educational brochures and the town ordinance are available to residents and	Stormwater interns developed a new brochure in Jan 2009	Interns went door to door in the Stump Pond area				

Revised				and brochures will be developed and disbursed.		about drinking water and Stormwater runoff related issues, earth day, voting, events on the town common	several town locations	several town locations including the Department of Public Works and Town Hall	contractors at several town locations.		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 Amherst Town Hall	New educational brochures available at Town Hall and DPW are "Building new houses, make Stormwater work for you" "Construction Site Entrance Requirements" and "How to make your home Stormwater Friendly"	Interns created new brochures which are available at both Town Hall and DPW Building new houses? Make Stormwater work for you Proper sediment control installation for Contractors
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.	Besides the information listed above, additional information during the permitting process and plan review.	Available during permitting and site plan review
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,	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 Regional Planning Commission ended when the grant funding dissolved. We are now working with assistance from Manchester	Curriculum was developed regionally through the local planning commission for local schools	High School Environmental classes

Revised						renewable and non-renewable resources.							Regional Stormwater Coalition and are attending their meetings.	

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.	Transfer Station employees act as a resource to educate facility users. Even with the downturn in the economy, our recycling numbers seem to be slowly rising.	Even with the difficult economy, recycling numbers are strong and trash numbers have slowly declined over the last five years.

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	No recent recycling articles	No recent recycling 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	Progress report on goals and activities year 10 of 5 yr. permit	Progress report on goals and activities year 11 of 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	The committee is monitoring the progress EPA is making with the new permit and awaits the outcome	The committee is monitoring the status of the 2013 draft permit and awaits its outcome
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	It is not only disappointing, it is disturbing that the report prepared in 2011 for EPA utilized old data to configure TMDL's and does not include any of the 44 homes on the Baboosic Lake Septic system.	The town is in its ninth year of the Baboosic Lake system. 44 homes participate in the program and because of it and other corrective measures, lake quality has improved.
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.	All catch basins were checked and remarked with our vinyl decals	With our road reconstruction program, catch basins are added yearly. All existing basins are checked annually for decal condition and new basins are marked.
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 (NRPC) 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	The town takes advantage of it's regional hazardous waste program. through NRPC. In 2012, there were three spring and three fall events, Amherst residents had the opportunity to take advantage and use any of them.	Paint , solvents and thinners, lawn, garden, and household cleaners account for the majority of Amherst hazardous waste. We still participate in 6 scheduled events (under the NRPC), five in Nashua and one in Milford.
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 information there also	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 Committee members attend Nashua Regional Planning Commission Stormwater II coalition meetings.	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 attend Nashua Regional Planning Commission Stormwater II coalition meetings.	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.	Education is an ongoing event both with contractors and school children	Hazardous waste education is promoted through electronic and print media.
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 continue work with volunte supporting roadsid efforts	The town works wit volunteer groups fo roadside cleanup within the budget availability	The town through It's DPW supports Volunteer groups Involved in roadside cleanup	DPW and volunteer assisted Souhegan High School studen in a roadside cleanu program	Town Personnel and volunteers assisted Souhegan High School students in a roadside cleanup program.	Twenty signs were posted at various entrances to town stating "Keep Amherst clean and Appealing"	We work to support the Souhegan High School volunteer 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	Progress report on goals and activities year 10 of 5 yr. permit	Progress report on goals and activities year 11 of 5 yr. 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	This goal has been met, refined, and improved	This goal has been met, however we have upgraded collection equipment and will continue to refine the data
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 an 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.	We have and maintain one town owned system that services 44 homes, everything else is private individual systems	Less than 1% of town is connected to a sewer system constructed after 2005. All other dry weather screening relates to cellar drains and we continue to monitor those as they are identified
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	The Town owned system is less than ten years old and construction oversight was done by DPW, all closed drainage is also less than ten years old. Everything else in town is cross culvert pipes.	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**	**Progress report on goals and activities year 10 of 5 yr. permit**	**Progress report on goals and activities year 11 of 5 yr. 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.	The Amherst Community Development Director requests plan review, and the Town has policies in place to inspect and monitor new construction.	The Community Development Director requests plan review, and we have programs and policies in place to monitor new 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 impute on all submitted construction requests	The Community Development Director forwards all construction proposals/plans for review prior to Planning Board meetings	Construction plans are forwarded and reviewed prior to Planning Board meetings and approval

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	Progress report on goals and activities year 10 of 5 yr. permit	Progress report on goals and activities year 11 of 5 yr. 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	In place and implemented	Rules and regulations 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	Town of Amherst earmarked by town vote to fund money towards redoing the master plan. Public Works Director is drafting new road construction	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	Adopted and implemented	Adopted an d implemented

Revised						documents	standards covering General construction standards, New road construction, Storm Drainage, Water distribution, & Sanitary sewers								

6. Pollution Prevention and Good Housekeeping in Municipal Operations

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 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	Progress report on goals and activities year 10 of 5 yr. permit	Progress report on goals and activities year 11 of 5 yr. permit
6.1	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 Department of Public Works hired CLD Engineering of Manchester, NH to put on a training class for highway employees.	Along with group training of Stormwater awareness, each employee at the Public Works Academy is exposed to basic Wastewater collection and treatment, Basic water transmission and treatment, Basic Roads and drainage, Solid and Hazardous waste. Planning and Zoning Technical Assistant was trained/certified level 1 Waste Water Tech. Stormwater Committee members attended 1st annual Regional	All Public Works employees are regularly trained through the UNH Technology Transfer Center. One public works employee (for a total of two Town employees) was trained/certified as a Treatment Facility Operator, Grade 1-OIT.	Our level 1 NH Waste Water Technician worked with Engineers and other technical people during the construction of Phase II Baboosic Lake Septic. Administrative employees regularly participate in Nashua Region Stormwater Coalition meetings Administrative employees attended Phase II Illicit Discharge Detection & Elimination, Construction Site Management & Pollution	All highway employees have been trained in basic waste water collection and treatment. Stormwater interns reviewed S.O.P. manual for DPW employees. We employ 2 level I NH Waste Water technicians	CLD Engineering taught a Stormwater awareness class to DPW employees Administrative employees regularly participate in Nashua Region Stormwater Coalition meetings We employ 2 level I NH Waste Water technicians	Six employees take annual solid waste training. Two DPW employees are level 1 wastewater technicians. One DPW employee recertifies annually for Pesticides. All employees attend UNH T-2 classes.	We employ 2 level 1 NH Waste water technicians. One DPW Foreman holds Pesticide Supervisors license with NH Department of Agriculture. Supervisory staff has established a relationship with and attend meeting sponsored by Manchester Regional Stormwater Coalition. Oil spill clean-up training for transfer station employees by interns.	We employ one level 1 NH Waste Water technician and have one pending. One DPW Foreman holds Pesticide Supervisors license with NH Dept. of Agriculture Supervisory staff attends regular meeting with both Manchester and Nashua Regional Stormwater Coalitions.	CLD Engineering taught a 4 hour Stormwater awareness class to DPW employees which included erosion preventative measures. Buildings and Grounds Foreman is licensed in pesticide Supervisors license Director attends coalition work sessions in both Manchester and Nashua

Revised							Stormwater meeting		Prevention Training (4/08) Administrative employees participate in US EPA Stormwater Program's Webcast Series						
6.2	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 grounds, including cemeteries are tested to minimize spreading unnecessary amounts of fertilizers and pesticides. At March voting, taxpayers authorized purchase of second environmentally friendly liquid deicer.	Our state certified pesticide supervisor manages our program within state guidelines. The town continues to support the majority of our equipment upgrades and improvements.	Winter deicing equipment is calibrated each fall to minimize product usage. The town continues to employ a state certified pesticide supervisor	Our State Certified Pesticide supervisor does soil sampling of town cemeteries and commons. We have a number of "no salt roads" treated with sand and other products. We continue to purchase new technology to minimize salt usage where possible.	The town is partnering with Pennichuck Water works in the Stump Pond area with Comprehensive Environmental Inc. to educate residents about lawn fertilizers	Through the Stump Pond project, the town distributed brochures discussing pesticides. Our State Certified Pesticide supervisor does soil sampling of town cemeteries and commons.	Soil sampling is performed annually by the DPW Certified Pesticide supervisor. We continue to use metering devices for road salt and sand	80 percent of town snow fighting equipment is equipped with ground speed controls and liquid deicers. We analyze soil sampling on parks and commons prior to applying fertilizer or pesticides Received formal training in salt use reduction	Town equipment is set up with ground speed controls and liquid deicers. Sanders are calibrated. Soils are sampled and analyzed prior to using fertilizers or pesticides	Sanders are calibrated annually As reported earlier, trucks are purchased with liquid deicers and groundspeed systems. Soils are sampled prior to applying fertilizers and /or pesticides
Revised															
6.3	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 cleaned once per year. Catch basins are monitored and additional cleaning happens when and if warranted.	Each catch basin is cleaned yearly. New catch basins are constructed and engineered not to allow stagnant water to pool	All municipal catch basins are cleaned a minimum of one time per year usually in July. Additional cleanings are performed as needed.	All catch basins are cleaned a minimum of one time per year and additional cleaning are done as warranted.	Catch basins are cleaned annually, more often when necessary.	Catch Basins are cleaned during the summer and more often if necessary	All catch basins are cleaned each summer and more often if necessary	All catch basins are cleaned annually and more often if necessary. In 2011, 42 new catch basins were added during road reconstruction minimizing runoff	All Catch Basins are cleaned annually and more often if necessary	All catch basins are cleaned annually
Revised														In 2012, 14 new catch basins were added during road reconstruction	In 2013 added 17 new catch basins during road reconstruction
6.4	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 pickup vacuum is an annual spring event. The budget process has expanded to approximately one third of town. Each year additional monies are added to increase the equipment rental.	Streets are swept yearly both with vacuum and sweep to the side systems. Future budget plans continue for total vacuuming.	Streets are swept each spring. 30% with a hired vacuum sweeper (funding increased by one third in 08) and the balance (70%) with town owned (sweep to the side of the road) equipment. This includes school parking lots and other school facilities	All of the "no salt" roads are swept with hired equipment in the spring along with the center of town and many subdivisions. More rural roads, the sand is swept to the road edge.	The town does not own a pickup sweeper. We sweep as often as scheduling allows and as much as the budget allows.	Street sweeping is done in the spring by an outside contractor	Street sweeping is done annually by an outside contractor	Street sweeping is done annually on fifty percent of town roads	Street sweeping is done annually by an outside contractor on 50 percent of town roads	The town continues to sweep approximately 50 % of its roads using an outside contractor
Revised															
Revised															

Programmatic

	Measurable goal	**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 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**	**Progress report on goals and activities year 10 of 5 yr. permit**	**Progress report on goals and activities year 11 of 5 yr. permit**
Stormwater Management Position Created/staffed				Handled by others	Part time	Summer interns	Summer interns	Summer Interns	Summer Interns	Part time summer interns	Part time summer interns	Part time summer interns
Annual program budget/ Expenditures	Secure funding	$20,000 $6,000	$24,000 $17,000	$20,000 $19,000	$10,000 $16,000	$14,000 Estimate $10,000	$14,000 This line will be overspent	$14,000	Wages - $16,800 Projects – $10,000	Wages - $11.005 Projects – $10,000	Wages - $11,005 Projects - $10,000	Wages - $11,005 Projects - $10,000

Education, Involvement, and Training

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	Difficult to measure Training/teaching brochures are available both at Town Hall and DPW	Difficult to measure Training/teaching brochures are available both at Town Hall and DPW
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	Established and awaiting new permit	Established and awaiting new permit
Stream teams established or supported	No		supported	Interns	Interns	Interns	Summer Interns	Summer 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	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	April 20, Nashua May 4, Milford June 6, Nashua Aug 3 Nashua Oct 5, Nashua Nov 2, Nashua	April 19, Nashua May 3, Milford June 5th Nashua Aug 2nd, Nashua Oct 4th, Nashua Nov 1st, Nashua
▪ days sponsored	5 Regional	Regional	5	5 Regional	6 Regional	8 Regional	6 regional min	6 regional	6 Regional	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	93 homes	143 households
▪ material collected	tons or gal				3,713 lbs	7,336 lbs	3,260 lbs	5,891 lbs	5,959 lbs	4,980 lbs	5,803 lbs.	6,220 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	Grammar and High School	Grammar and High School

Legal/Regulatory

	In Place Phase II	**Prior to** Review	Drafted	**Under** Adopted	
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**	**Progress report on goals and activities year 10 of 5 yr. permit**	**Progress report on goals and activities year 11 of 5 year permit**
Outfall mapping complete			Partial 8/05	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Estimated or actual number of outfalls						**550+/-**	**550 +/-**	**550 +/-**	**550 +/-**	**555 +/-**	**572+-**
System-Wide mapping complete			Partial 8/05		Yes	Yes		Yes	Yes & updated	Yes and updated	Yes and updated yearly
Mapping method(s)											
▪ Paper/Mylar			Paper		Paper	Paper, GIS	Paper, GIS	Yes	Paper, GIS	Paper, & GIS	Paper & GIS
▪ CADD											
▪ GIS								Yes			
Outfalls inspected/screened			yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Illicit discharges identified			3		None	None	None	None	None	None	None
Illicit connections removed					None	None	None	None	None	None	None
% of population on sewer		0%	0.0023	0.0025	0.0025	0.0028	0.0028	0.003520%	0.003520%	0.003520%	0.003520%
% of population on septic systems	(100%)	100%	99.9977%	99.9975	99.9970%	99.9972	99.9972%	99.98%	99.98%	99.9965	99.9965%

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	April 2012 - Present	April 2013 Present
Number of construction starts (>1-acre)			Two	Three	4	4	**4**	**29**		**5**	**7**	**7**
Estimated percentage of construction starts adequately regulated for erosion and sediment control			Two	Three	100%	100%	**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	58 Site inspections 149 road inspections	101 Sites 39 Inspections
Tickets/Stop work orders issued			0	-	-	**1**	**0**	**0**	**0**	**0**	**0**	**0**
Fines collected			0	-	-	0	0	0	0	0	0	0
Complaints/concerns received from public			0	1	0	5	**0**	**0**	**3**	**0**	**0**	**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%	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	Inspections 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	2012 - 2013	2013-Apr 2014
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	Once annually in July, additional cleaning as needed	Once annually in July, additional cleaning 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	One time per year	One time per year
Total number of structures cleaned	340	345	355	360	360	360	365	368	371	413	441	458
Storm drain cleaned	500 LF.			200 LF	200LF	200 LF	200 LF	200 LF	240 LF			458
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	220 cubic yards	325 cubic yards estimated
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		recycle	recycle	recycle	Recycle	Recycle	Recycle	Recycle	Recycle	Recycle	Recycle	Recycling after material testing
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	April 2012 to Present	April 2013 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	Once per year usually in May	One per year starting in mid-April
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	Once per year usually in May	Once annually in April or 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	Less than 1,000 yards (12,000 Lbs.)	Less than 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	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	$15,400	$18,050
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	Capital Improvement plan does not support purchase at this time	Capital Improvement plan does not support purchase at this time
Vacuum street sweepers specified in contracts		Outside hire	Outside hire	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	Soil tested prior to 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	Soil tested prior to 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	Soil tested prior to application	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	Winter of 2012/13	Winter of 2013/14

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	50% NaCl 00% CaCl2 13% MgCl2 0.0% CMA 0.0% Kac 0.0% KCl 50% Sand	50% NaCl 00% CaCl2 13% MgCl2 0.0% CMA 0.0% Kac 0.0% KCl 50% Sa
Pre-wetting techniques utilized	(yes)	Yes	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	Yes - five	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	Nine	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	All sanders are calibrated to minimize the use of salt. Liquid deicers are used to pre-wet salt/sand mix to lower melting temperature	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	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	No additional storage space for salt is planned	Not at this time

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 report on goals and activities for permit year 12 of 5 year permit (2014-15)	Progress report on goals and activities for permit year 13 of 5 year permit (2015-16)	Progress report on goals and activities for permit year 14 of 5 year permit (2016-17)
1.1	Education signage at voting	Public Works	4'X4" information poster display for town voting.		Nothing new presented at voting		Nothing new presented at voting
Revised	Education booth at 4th of July festivities	Stormwater II committee	Brochures		Did not have available staff to perform this valuable function in 2014	Stormwater brochures are available for handout both at Town Hall and Public Works	Town Hall is used as a comfort station during 4th of July festivities, educational handouts ae available within the lobby
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.	Town webpage was updated	The town webpage was completely redone in 2015	A Stormwater section under DPW details Committee duties and assignments
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.	Brochures from previous years were supplied to NH Department of Environmental Services. Brochures were also distributed to the following Amherst locations. Town Hall, Town Library, Public Works, & Peabody Mill Environmental Center	Brochures developed by Stormwater interns continue to be available at various town facilities	Second generation educational brochures were written during the summer of 2016 and are available both at DPW and 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 onsite inspections.	Contractor brochures are made available during permitting process at Community Development	Information continues to be available at the Community Development office for contractors throughout the town permitting process	As stated last year, education material is available for dissemination through the Community Development office during site plan and building permit applications.
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.	Several years ago, Amherst participated (through funding) in a regional program which developed curriculum for High School Environmental classes		

1a. Additions

1.6	Transfer Station waste stream management	Public Works Director and Solid Waste Committee	Improve facility and educate taxpayers	In 2014 we generated Trash – 2,889.55 tons recycling - 831.09 tons	In 2015 we generated Trash – 2,775.01 tons recycling – 818.22 tons	In 2016 we generated Trash = 2,772.63 tons Recycling = 822.61 tons
1.7	Series of articles written for Amherst Citizen. After being published the articles are posted on the town website	Committee Chair	Educate residents	Recycling & Trash tonnage by commodity is posted at the Transfer Station & updated yearly	A sign acquired through a grant from NH the Beautiful lists all types of recyclables collected in Amherst with space to fill in how many tons of each	Each year's DPW section of its annual town report is dedicated to how residents can improve and/or reduce solid waste. Within town guidelines, information is also posted on the town's webpage

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Initial Progress on Goal(s)	Progress report on goals and activities for permit year 12 of 5 year permit (2014-15)	Progress report on goals and activities for permit year 13 of 5 year permit (2015-16)	Progress report on goals and activities for permit year 14 of 5 year permit (2016-17)
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.	The advisory committee is monitoring the status of the pending permit and awaits its outcome		The town is going through its annual committee reappointments with special consideration being given to the new permit.
Revised 10/04		Representation from private sector and several town boards			The Public Works and Community Development directors participate in regional meetings both in Manchester and Nashua		The Public Works, Community Development, and Asst. Public Works Directors have attended regional Stormwater meetings
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.	The town is in its tenth year of Baboosic Lake Septic with 44 homes participating in the program. Last March, voters approved the phasing of a new Stormwater/Baboosic Lake Septic position to pursue additional funding and expand the system	Baboosic Lake Community septic added one additional home to the system. This system is the most expensive non-tax supported program. The new Environmental Coordinator will be searching for new grant funding	The 45 homes on the Baboosic Lake septic system continues to positively impact water quality
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	The town is in its fifth year of road improvements including additional closed drainage systems. All existing basins are checked annually for decal condition and new basins are marked. Decals state "Only Let Rain, Down the Drain"	As part of our road reconstruction program closed drainage and new catch basins are being added yearly. We are now at 375 which are cleaned annually.	During road reconstruction, we added 14 additional catch basins to our closed drainage system bringing the total to 389 all of which were cleaned at least once in the 2016 season.
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.	Amherst participates in six scheduled regional hazardous waste collection events (5 in Nashua & one in Milford)	The Nashua Regional Planning Commission regional hazardous waste collection program has added one additional event. Amherst residents can choose any of three locations for the seven annual sponsored events	Amherst residents have the opportunity to attend any of the following regional Household Hazardous events. **Nashua NH** 4/22 – 6/1 – 8/5 – 10/7 and 11/4 **Milford NH** 5/6 **Pelham NH** 8/26
Revised							The Pelham event was added this year
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 Fourth of July	Hazardous Waste is promoted through the community access channel, town webpage, and town report.	Counseling on hazardous waste alternatives is made available to residents	The Nashua Regional Household Hazardous Waste webpage provides education on ways to reduce the amount of HHW purchased www.nashuarpc.org/hhw
Revised		This process now includes the Stormwater II Committee	Information posted at SP-2 voting in March 04	Revised			

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	We continue to work with and support the school volunteer roadside cleanup program	The Town of Amherst Department of Public Works supports volunteer roadside cleanup efforts.	Public Works supports volunteer organizations who organize cleanup efforts.

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)	Progress report on goals and activities for permit year 12 of 5 year permit (2014-15)	Progress report on goals and activities for permit year 13 of 5 year permit (2015-16)	Progress report on goals and activities for permit year 14 of 5 year permit (2016-17)
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.	By upgrading our electronic technology we have: Continued upgrading mapping Mapped potential IDDE location for review Added new map layer detailing underground Stormwater pipe connections. Distinguished between town owned culverts and those that belong to homeowners (driveway culverts) Added a map layer displaying only culvert outfalls that dump directly into the Baboosic Lake and Souhegan River watersheds.	Amherst continues to identify and document any non-storm related water sources. Culvert locations (inlet & discharge) have been mapped.	DPW has identified and documented outfalls and receiving waters within the MS-4 boundaries
Revised			Actual stenciling has not started yet, we plan it to start in summer 04		Stenciling is ongoing (yearly repairs)	Each basin is checked yearly and vinyl decals are replaced as needed	Catch basins are checked during annual cleaning and vinyl decals are replaced as needed
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	Catch Basin and culverts are investigated for any water discharge during dry weather periods. Any water that runs during a dry weather period is investigated further.	Our septic connections at Baboosic Lake are ten years old or less and there are limited cross culverts. The balance of the town have individual septic systems.	Over ninety –nine percent of all septic's in Amherst are single home systems. Cellar and perimeter drains are constantly monitored.
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	No illicit discharges found to date	No illicit discharges found to date	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)	Progress report on goals and activities for permit year 12 of 5 year permit (2014-15)	Progress report on goals and activities for permit year 13 of 5 year permit (2015-16)	Progress report on goals and activities for permit year 14 of 5 year permit (2016-17)
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.	The Amherst Community Development Director requests Department Head plan review, and we have programs and policies in place to monitor new construction	Rules and regulations are in place to limit pre and post construction runoff.	Rules, regulations, and policies in place to limit pre and post construction runoff
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.	Construction plans are forwarded by The Community Development Director for review prior to Planning Board meetings and approvals issued.	Department heads review site plans prior to approval by Planning Board	Subdivision regulations under rewrite review

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)	Progress report on goals and activities for permit year 12 of 5 year permit 2014-15)	Progress report on goals and activities for permit year 13 of 5 year permit (2015-16)	Progress report on goals and activities for permit year 14 of 5 year permit (2016-17)
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.	Rules and regulations in place	Rules and regulations are in place	Rules and regulations in place but with the pending new permit they are under review
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	Town wide, adopted and implemented, for DPW, the following practices were reviewed; Winter sand storage, Salt storage, Inhibited liquid Calcium Chloride storage, Vehicle and equipment storage & Stormwater maintenance.	The Amherst Department of Public Works follows best management practices, stores its salt/sand mix under cover, manages its liquid deicer and is working within budget limitations to protect vehicles and equipment from the elements.	Under review process

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – (Reliance on non-municipal partners indicated, if any)	Progress report on goals and activities for permit year 12 of 5 year permit (2014-15)	Progress report on goals and activities for permit year 13 of 5 year permit (2015-16)	Progress report on goals and activities for permit year 14 of 5 year permit (2016-17)
6.1	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	Town staff attend Stormwater coalition meetings both in Nashua and Manchester Transfer Station employees attend annual certification classes Buildings and Grounds Foreman is licensed pesticide Supervisor Staff trained in Wastewater Public Works employees attend UNH training classes	The Amherst Public Works Director chairs the Nashua Stormwater coalition and attends Manchester Stormwater coalition meetings. We send employees to appropriate training and certification classes.	Done on an annual basis
6.2	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.	Sanders are calibrated annually All vehicles are purchased with "groundspeed controls" to minimize waste Liquid deicer is used to lower melting temp & reduce wasted salt Soils are sampled prior to applying fertilizer or pesticides	Sanders are calibrated annually Taxpayers support purchasing appropriate add-on winter maintenance equipment to protect the environment.	The Town of Amherst invests in and upgrades vehicles and equipment with the best technology available to minimize salt and sand usage. Our on staff pesticide supervisor works with our Conservation Commission and NHDES prior to any pesticide usage
Revised							

6.3	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.	As of this writing, we have 372 catch basins which are cleaned annually and more often if needed. Part of Amherst's road reconstruction program is to increase closed drainage and reduce erosion and runoff through drainage sumps	395 catch basins are cleaned annually (more frequently if/when needed)	During road reconstruction, when appropriate, closed drainage replaces open drainage. We now clean 752 catch basins annually (more frequent if an when needed)
6.4	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	The town does not own a sweeper and must sub that work out. Approximately 33.06 miles of 113 town road miles were picked up by mechanical sweeping.	All curbed streets, streets in the center of town, and streets around the lake are swept annually in May	All curbed streets, streets in the center of town, no salt sensitive areas, and roads around Baboosic Lake are swept annually in May.

Programmatic

	Measurable goal	**Progress report on goals and activities for permit year 12 of 5 year permit (2014-15**	**Progress report on goals and activities for permit year 13 of 5 year permit (2015-16)**	**Progress report on goals and activities for permit year 14 of 5 year permit (2016-17)**
Stormwater Management Position Created/staffed		Part-time summer interns (engineering students)	A Deputy Public Works director / Environmental Coordinators position has been funded and interviews are scheduled. Plan to continue with one intern this summer	The Deputy Public Works director's position was filled August 2016 and our attention to Stormwater detail has improved greatly. A summer Stormwater intern help wanted ad is posted
Annual program budget/ Expenditures	Secure funding	Wages - $11,005 Projects - $10,000	Wage - $85,000 Projects - $10,000	Wage - $85,000+- Projects - $10,000

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	Measurable goal	**Progress report on goals and activities for permit year 12 of 5 year permit (2014-15)** (Reliance on non-municipal partners indicated, if any)	This continues to be difficult to measure. Training/teaching brochures are available at DPW & Town Hall	Approximately three quarters of town residents have cable access to community channel, balance can access webpage	This is difficult to quantify, but approximately 3,500 households have the ability to review programs
Stormwater management committee established			Established and awaiting new permit	Board of Selectmen are in the process of reappointing the Stormwater committee	Committee appointed and will expand as the new permit is implemented.

Stream teams established or supported			Summer Interns		Internal staffing
Shoreline clean-up participation or quantity of shoreline miles cleaned					
Household Hazardous Waste Collection Days			Saturday April 18th Saturday May 2nd Thursday June 4th Saturday Aug 1st Saturday Oct 3rd Saturday Nov 11th	Saturday, April 23rd Saturday, May 07th Thursday, June 02nd Saturday, August 06th Saturday, October 01st and Saturday, November 05th	Saturday, April 22nd Saturday, May 06th Thursday, June 01st (3PM – 7PM) Saturday, August 05th Saturday, August 26th Saturday, October 07th Saturday, November 04th
▪ days sponsored			Six Regional	Six regional (7 events)	Seven regional (7 events)
▪ community participation			86 homes	116 homes represented	154 Amherst homes represented
▪ material collected			4,862 lbs.	5,824 lbs.	7,294 Lbs.
School curricula implemented			Grammar and High School		Grammar, High School, & Peabody Mill Environmental Center

Legal/Regulatory

	In place Phase II	**Review**	**Prior to draft**	**Under adoption**	
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

	Progress report on goals and activities for permit year 12 of 5 year permit (2014-15)	Progress report on goals and activities for permit year 13 of 5 year permit (2015-16)	Progress report on goals and activities for permit year 14 of 5 year permit (2016-17)
Outfall mapping complete	Yes	Yes	Yes
Estimated or actual number of outfalls	572+-	572+-	572+-
System-Wide mapping complete	Yes and updated yearly	Yes and updated yearly	Yes and tweaked or updated yearly
Mapping method(s)			
▪ Paper/Mylar	Paper & GIS	Paper & GIS	Paper and GIS
▪ CADD			
▪ GIS			
Outfalls inspected/screened	Yes	Yes	Yes
Illicit discharges identified	None	None	None
Illicit connections removed	None	None	None
% of population on sewer	0.003520%	0.003520%	0.003525%
% of population on septic systems	99.9965%	99.9965%	99.9960

Construction

Number of construction starts (>1-acre)	April 2014 to present - ONE	April 2015 to present - ONE	April 2016 to present -
Estimated percentage of construction starts adequately regulated for erosion and sediment control	100%	0	1
Site inspections completed	1	0	0
Tickets/Stop work orders issued	0	0	0
Fines collected	0	0	0
Complaints/concerns received from public	0	0	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction Stormwater control	100%	100%	100%
Site inspections completed	Inspections are conducted regularly by town employees and contracted engineering firm	0	1
Estimated volume of Stormwater recharged		0	0

Operations and Maintenance

	Progress report on goals and activities for permit year 12 of 5 year permit (2014-15)	**Progress report on goals and activities for permit year 13 of 5 year permit (2015-16)**	**Progress report on goals and activities for permit year 14 of 5 year permit (2016-17)**
Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	Once annually in July, additional cleanings as needed	Once annually in July, additional cleaning as needed	Once annually in July, additional cleanings as needed.
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	One time per year	Once per year	Annually
Total number of structures cleaned	372	395	752
Storm drain cleaned	Yes as needed	Yes as needed	Yes, as needed
Qty. of screenings/debris removed from storm sewer infrastructure	285 cubic yards estimated	262 cubic yards estimated	305 estimated cubic yards (estimated)
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	Recycled after material testing	Recycled after material testing	Recycled after material testing
Cost of screenings disposal	$220	$220	$240

Average frequency of street sweeping (non-commercial/non-arterial streets)	Once annually in April or May by private contractor	Once annually in April or May by private contractor	Once annually usually in April or May (private contractor through competitive bid)
Average frequency of street sweeping (commercial/arterial or other critical streets)	Once annually in April or May by private contractor	Once annually in April or May by private contractor	Once annually usually in April or May (private contractor through competitive bid)
Qty. of sand/debris collected by sweeping	Less than 1,000 yards	Approximately 1,000 yards annually	Approximately 1,000 cu. Yds. annually
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	Beneficial use	Beneficial use	Beneficial use (after testing)
Cost of sweepings disposal	$15,922.50	$11,648	$5,605
Vacuum street sweepers purchased/leased	Capital Improvement Plan does not support purchase at this time	No	No, hired out
Vacuum street sweepers specified in contracts	High reach broom type with high dumping reach as defined in NHDOT state contract,	No, broom sweepers are used under state bid contracts	No
Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)			
▪ Fertilizers	Soil tested prior to application		Soil tested prior to application
▪ Herbicides	Soil tested prior to application		Soil tested prior to application
▪ Pesticides	Soil tested prior to application		Soil tested prior to application
Anti-/De-Icing products and ratios Except for 16 "no salt roads" 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). All dirt roads are treated one hundred percent with sand.	Winter of 2014-15 50% NaCl 00% CaCl2 13% MgCl2 0.0%CMA 0.0%Kce 0.0KCL 50% salt	Winter of 2014-15 50% NaCl 00% CaCl2 13% MgCl2 0.0%CMA 0.0%Kce 0.0KCL 50% salt	Winter of 2015-16 50% NaCl 00% CaCl2 13% MgCl2 0.0%CMA 0.0%Kce 0.0KCL 50% sand
Pre-wetting techniques utilized	Yes	Pre-wetting on board and part of sanders	Yes, pre-wetting systems on each sander which pre-wets salt/sand mix during spreading

Manual control spreaders used	Yes – five	Yes- 3	Five
Automatic or Zero-velocity spreaders used	Yes – Nine	Yes - 11	Yes - nine
Estimated net reduction in typical year salt application	All sanders are calibrated to minimize the use of salt and onboard liquid deicers are used to pre-wet salt/sand mix to lower melting temperature. Each year approximately five miles of road are reconstructed. A smooth flat road scrapes cleaner using less deicers	All sanders are calibrated yearly to minimize the use of salt and onboard liquid deicers are used to pre-wet salt/sand mix to lower melting temperature and minimize wasting salt . Each year approximately five miles of road are reconstructed. A smooth flat road scrapes cleaner using less deicers	Sanders are calibrated yearly, On board groundspeed controls and liquid deicing “pre-wet” systems lower melting temperature and minimize salt waste. Over the last seven years, the town has reconstructed approximately forty miles of roads which requires less treatment to scrape clean.
Salt pile covered in storage shed	Yes	Yes	Salt stored in a building and replenished often
Storage shed(s) in design or under construction	Not at this time	No	The shed is undersized but there are no strategic plans to change our current system