

5/2/13

P

Municipality/Organization: Town of New Castle

EPA NPDES Permit Number: NHR041022

MassDEP Transmittal Number: W-

**Annual Report Number
& Reporting Period:**

Year 10

April 1, 2012 – March 31, 2013

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2013)

Part I. General Information

Contact Person: Stephen Tabbutt

Title: Public Works Superintendent

Telephone #: (603) 431-6710 ext 13

Email: ncppcullen@comcast.com

Mailing Address: PO Box 367, New Castle, NH 03854

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: Lorn Buxton

Title: Chairman, New Castle Select Board

Date: May 1, 2013

Part II. Self-Assessment

The Town of New Castle, NH, has completed the required self-assessment and it is determined that Town is in compliance with all permit conditions.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
NC1-001 Revised	Quarterly Newsletter “Island Items”	Select Board, Pam Cullen All dept. heads	To include any article regarding storm water	Average 350 plus newsletters with periodic articles about storm water management and posted on town website as well. Newcastlenh.org	Continued newsletter available in both hard copy and on the town website.
NC1-002 Revised	Household Hazardous Waste Days	Town membership in 53-B	Increase number of hazardous waste	May and September collection days for selected towns/membership Attachments (2) Brochure for Hazardous Waste Days and totals for the collection	Continue tracking amount of waste and encouraging residents to make use of these two dates.
NC1-003 Revised	Pet Waste Management	Steve Tabbutt (Public Works) Police Dept.	Enforcement	Signs are posted regarding pet waste management along with periodic articles in town newspaper	Maintain enforcement and continue keeping the public informed
NC1-004 Revised	Rain Barrels	Conservation Commission	Continued sales and information	Offer information regarding rain barrels See attached flyers	Continue keeping public abreast of benefits of rain barrels
NC1-005 Revised	Town Website	Select Board and Pam Cullen	Page count	Website links to: Shoreline Homeowner’s Guide to Storm water Management Shoreland Protection Information Town Regs which includes Wetland Conservation District	Continue offering informative links
NC1-006	Town and City Magazine	Steve Tabbutt and Select Board	Dissemination of appropriate articles	Passing out of articles and possible information for the public (see attached article)	Continue monitoring articles pertinent for Public Works Board

[illegible]

1a. Additions

LESS IS MORE – Outdoor Watering

Reduce Wasted Water

Did You Know?

- * Outdoor water use can account for up to 50% of total water use for a home during the summer months.
- * Homes with automated irrigation systems are more likely to overuse outdoor water (i.e. wasted water running down sidewalk).
- * Over irrigation can damage plants or make them unhealthy.
- * Over-watered plants are more susceptible to disease and pest infestation.

What You Can Do:

- * **Collect rainwater in a rain barrel-** Placing a rain barrel beneath the gutters of a home can save about 1,300 gallons of water during the summer months, according to the city water department.
- * **Mulch -** Mulch holds moisture in the soil and prevents evaporation from soil surface. Fine-textured mulches (pine straw, mini nuggets, shredded hardwood) are more effective in conserving moisture than coarse-textured mulch. Apply to as large an area under the plant as possible. Consider putting 2-3 sheets of newspaper under mulch for added water retention.
- * **Deep Watering -** Shallow frequent watering encourages a weak root system and reduces plant tolerance of drought.
- * **Water Roots, not Leaves -** Wetting the foliage encourages diseases and results in water loss through evaporation.
- * **Hand-water newly planted trees, shrubs, and thirstier plants.** Again, deep watering is the best way to encourage strong root system and drought tolerance.
- * **Use Drip, Trickle or Soaker Hose -** Drip irrigation uses 50% less water than conventional sprinkler irrigation and applies water slowly and directly to root system.
- * **Use the Timer and Install a Rain Sensor on Irrigation System -** Rain Sensors are inexpensive extras that usually pay for themselves (in water savings) within 2 years.
- * **Depend on rainfall as main outdoor water source when possible.**

THE FOLLOWING INFORMATION IS BROUGHT TO YOU BY YOUR CONSERVATION COMMISSION WHICH IS OFFERING YOU A GREAT DEAL ON RAIN BARRELS!

Saving rainwater saves you money!

ORANGE COUNTY

There are many reasons to use a Rain Barrel!

- * **Many local governments** call for voluntary and sometimes mandatory water use restrictions during dry years or when development surpasses the water supply. By saving rainwater you can help reduce the amount of water drawn from local reservoirs, streams, and wells.
- * **Saving rainwater** helps control erosion and improve water quality. A one inch rain on an average sized roof produces 700 gallons of rainwater runoff. Lets imagine a town with 12,000 homes. From these residential rooftops alone, 8.4 million gallons of stormwater would rush over lawns, driveways, and streets to end up in a storm drain funneled to our streams and lakes. The excessive volume and force of this water if left uncontrolled causes extensive erosion.
- * **Water quality** is impacted by stormwater runoff which carries sediment, fertilizers, pesticides, animal waste, oils, gas additives, and other pollutants which can significantly impact water quality.
- * **Saving rainwater** and using it between rains or during dry spells, allows the water to soak into the ground. It also relieves some of the pressure on the public water systems during dry times.
- * **Your water bill and sewage bill** may be packaged together. If so, you are paying more for the sewage portion of your bill during the summer when the average household uses 40% of their water bill for lawn and garden purposes. You can lower your monthly water and sewage bills by saving rain water!
- * **Your house is an “impermeable surface”.** Rain would normally hit the ground where your house is and soak into the underground water table or enter a natural stream. Instead rainfall from most urban home roofs empties into the sewer system. During heavy rain, your house runoff combines with water from other houses, parking lots, and streets and may max out the sewer system. You become part of the solution decreasing contaminants in our streams and rivers by reducing storm water discharge from your yard.
- * **Rainwater is free “soft water”!** It contains no chlorine, lime or calcium. Because it tends to have fewer sediments and dissolved salts than municipal water, rain water is ideal for watering plants. They love the soft, chemical free water. The water in the barrels is at ambient temperature and will not shock the plants like cold well water or municipal water. It is excellent for washing the windows, car, and other household cleaning.

WHAT TO BRING:

- Oil Based Paints & Strippers
- Paint Thinner, Solvents, Stains
- Varnishes, Shellacs
- Fiberglass Resins
- Solvent Adhesives
- Lighter Fluid, Ether
- Antifreeze, Engine Degreaser
- Carburetor Cleaner, Brake Fluid
- Transmission Fluid, Car Wax
- Straight Waste Oil
- Gasoline, Diesel, Kerosene
- Poisons, Insecticides
- Weed Killers, Mothballs
- Wood Preservatives
- Pest Strips, Flea Powder
- Fiberglass Resins
- Photo Chemicals
- Furniture, Floor & Metal Polishes
- Oven, Toilet Bowl, Drain Cleaners
- Spot Removers, Dry Cleaning Solvents
- Septic Tank Degreasers
- Swimming Pool Chemicals
- Dry Cell Batteries
- Lead Compound, Mercury
- Pharmaceuticals
- Acids
- Alkali Bases
- Penta Brand Wood Preservative
- Pesticides containing 2,4-DT, Silvex

FEES CHARGED FOR THE FOLLOWING:

- FLOURESCENT TUBES—No charge
- TELEVISIONS—\$10.00
- COMPUTER MONITORS—\$10.00
- DESKTOP P.C.'S—\$10.00
- NOTEBOOK P.C.'S—\$10.00
- PRINTERS/SCANNERS/COPERS—\$10.00
- KEYBOARDS—\$5.00

HOUSEHOLD HAZARDOUS WASTE COLLECTION DAY

FOR THE TOWNS OF

HAMPTON, HAMPTON FALLS, KENSINGTON
FREMONT, NEW CASTLE, RYE, BRENTWOOD
SANDOWN, NORTH HAMPTON &
SOUTH HAMPTON

Date: Saturday May 19, 2012

Time: 8:00 a.m. through 12:00 Noon

Place: Old Hampton Court House
130 Winnacunnnet Rd
@Academy Ave
Hampton, NH

Date: Saturday September 22, 2012

Time: 8:00 a.m. through 12:00 Noon

Place: Highway Garage
Route 111A
Brentwood, NH

WHAT NOT TO

Latex paint (Latex paint is not hazardous when dry. Open cans of latex paint, leave open until all paint is dried out, then dispose of dried can and lid in garbage. To aid in drying large amounts, stir in some kitty litter.)

Ammunition, fireworks, explosives
Radioactive wastes
Gas grills/tanks
Infectious & biological wastes
Smoke detectors
Auto, other wet cell batteries
Tires
White goods

FOR MORE INFORMATION CALL:

Southeast Regional Refuse Disposal
District 53-B
964-5300

SPONSORED BY:
Southeast Regional Refuse Disposal
District 53-B

AND

New Hampshire Department of
Environmental Services

Driver's License Required as Proof of Residency

Quantity Limit per Car: 10 Gallons or 10 Pounds

While much of the water infrastructure is “out of sight,” it can’t be “out of mind,” as New Hampshire’s environment and economy depend too much on it.

New Hampshire residents are dependent on an array of infrastructure that moves, stores and treats water. To make this happen, cities and towns own and operate a lot of water infrastructure in New Hampshire. These municipal systems provide public drinking water, centralized wastewater, storm water and dam infrastructure.

Since October 2011, *New Hampshire Town and City* magazine has published four articles focused specifically on municipal water systems. The purpose is to highlight the importance these water assets provide for the protection of public health and safety, the environment, and in supporting economic growth and development in all of our 234 municipalities.

New Hampshire’s municipal infrastructure is largely underground and invisible to the public, and it rarely captures public attention unless it impacts the daily lives of citizens. We pour tap water into our glass and drink reassured that it is safe to drink. We flush our toilets and the waste simply vanishes. When it rains, contaminants are washed off rooftops, parking lots, and streets and this runoff is channeled through a series of catch basins, drains and underground pipes to places unknown. New Hampshire municipalities own a significant number of dams that provide recreational lakes, fire ponds, flood control and water supply storage. Yet the public pays very little attention to these basic water systems, that is, until a pipe bursts, the toilet clogs, the streets flood, or more tragically, a dam fails.

Adding to this problem of being out of sight and out of mind is the historic underpricing by municipalities for water and wastewater services. These rates should reflect the full cost of providing these services, including infrastructure renewal; however, this has not happened. The United States has one of the lowest water and wastewater rates in the world, and New Hampshire has rates that are far lower than what one would pay for cable TV or Internet services on a monthly basis. These services are routinely priced well below the full cost of sustainable operations. Graph 1 illustrates clearly how monthly sewer and water costs for New Hampshire households are priced well below the typical monthly costs for utility and telephone services.

Unquestionably, the public derives great benefits from municipal water infrastructure systems, including public health (*Clean drinking water and waste removal protect us from disease.*), public safety (*fire protection*), the environment (*healthy*

rivers, lakes, streams, ponds, wetlands and coastal resources), and our state and local economies (*recreation and tourism strongly linked to environment and water quality*). Recognizing the significant public benefits to a strong economy and healthy environment, a long-term sustainable funding solution for New Hampshire’s municipal water infrastructure is an absolute necessity.

Overview of New Hampshire’s Municipal Water Infrastructure

Public drinking water

There are 122 municipal public drinking water systems serving approximately 755,611 residents, or about 56 percent, of the state’s population. The remaining residents, 44 percent, rely on privately drilled or dug wells. According to the New Hampshire Department of Environmental Services (DES), about 39 percent of the state’s population is served by surface water (lakes and rivers) and 38 percent by groundwater. Another 23 percent are served by systems using both surface and groundwater sources.

Wastewater

Approximately 35 percent of the 234 cities and towns in New Hampshire provide centralized wastewater treatment services at the secondary, advanced, or no discharge treatment level. There are 73 municipal wastewater treatment facilities in New Hampshire. Nearly 65 percent of homes in New Hampshire’s cities and towns rely on individual septic systems for their waste disposal.

Stormwater

New Hampshire has 45 municipalities that are partially or fully regulated under EPA’s Small Municipal Separate Storm Sewer System or “MS4” permit. Under current MS4 permit conditions, municipalities are required to control stormwater pollutants to the “maximum extent practicable.” There are no federal loan funds designated specifically for stormwater infrastructure.

Dams

New Hampshire municipalities own and manage 358 dams that provide recreational lakes, fire ponds, flood control and water supply storage. DES estimates there are about 30 municipal dams in need of significant repair at a cost of about \$30 million. There are not federal or state grant or loan funds designated specifically for municipal dam maintenance and rehabilitation.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
NC2-001 Revised	Conservation Commission	Conservation Commission Steve Tabbutt	Controlling and monitoring projects Pursuing grants	Eradication of invasive species	Having volunteers with invasive plant removal
Revised	Storm Drain Stenciling	Steve Tabbutt	Maintaining stenciling on drains	Reviewing drains for stenciling	On going review
Revised	Adopt a highway program	Person sponsoring highway	Continuation of program	Supported by volunteers and their efforts	Continue to support volunteers
Revised	Beach clean up	Steve Tabbutt	Daily maintenance completed by town staff	Daily maintenance of the beach completed during the summer season	On going maintenance
Revised					
Revised					

2a. Additions



[Operations](#) > [Highway Maintenance](#) > [Sponsor-A-Highway](#)



Welcome to NHDOT Sponsor-A-Highway!

The Sponsor-A-Highway program provides an avenue for individuals, organizations and businesses to help the Department of Transportation maintain sections of roadside on New Hampshire's state highway system.

Caleb Dobbins
Sponsor-A-Highway Program

Since our Sponsor-A-Highway program began in 1994, thousands of volunteers representing over 700 groups have maintained over 1500 miles of New Hampshire roadside. In the process nearly 130,000 bags (donated by NHtheBeautiful.org) were filled with litter and removed from our roadsides! The value of our Sponsor-A-Highway program can be measured not only in financial savings to the taxpayers, but in the dedicated hours that hundreds of volunteers have unselfishly donated to keep New Hampshire beautiful for all of us.

Participation in New Hampshire's Sponsor-A-Highway program can include one or more of the following:

Sponsoring a section of Limited Access highway by partnering with an approved Maintenance Provider.

Sponsoring a section of Secondary Highway with maintenance by your group volunteers.

The New Hampshire Department of Transportation provides Sponsor-A-Highway volunteers with appropriate permits, litter bags and safety training at no cost. As a sponsor, you are recognized for your contribution with the placement of a "sponsored by" roadside sign on your section of highway.

This Web site is your resource for information on our Sponsor-A-Highway program. You should be able to find everything you need to join right here. If you still have questions, contact us.



How does the Sponsor-A-Highway program work and how can we get involved?

It's really quite easy for an individual or group to participate in New Hampshire's Sponsor-A-Highway program. Highways are divided into two categories ... [Limited Access highways](#) and [Secondary highways](#). For safety reasons, Limited Access highways require the use of "maintenance providers" to perform litter pickup while Secondary highway litter pickup can be done by the sponsoring group. Individuals or groups wishing to participate in the program can submit an application to the [Sponsor-A-Highway Coordinator](#)

of the district in which the desired section of highway to be adopted is located.

Once your application has been reviewed and approved, a written agreement will establish your group's participation in the Sponsor-A-Highway program.

For secondary highways, individuals or groups are required to sponsor at a minimum a section of highway approximately 2 miles in length, in both directions of travel. For limited access multi-lane highways, individuals or groups are required to

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised	Police Education	Steve Tabbutt	Educate all departments	Education of all town departments on illicit dumping during employee meetings	Continue to work with the individual departments
Revised	Septic System Mgt	Steve Tabbutt	Educate septic system users	Articles printed in local town newspaper. Brochures available at town hall.	Continue to provide information for the users
Revised					
Revised					
Revised					
Revised					
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
	Planning Board	Planning Board	Changes in Zoning	Approved at town meeting of May 2012	none
Revised					
	Building Inspections	Steve Tabbutt and Bldg Insp. Don Graves	Inspection of construction sites	Coordinate with Building Inspector on inspections	Continue regular inspections
Revised					
	Hay Bale and Silt Fence	Steve Tabbutt and Bldg Insp. Don Graves	Increase use of BMP	Coordinate with Building Inspector at construction areas.	Continue regular inspections
Revised					
Revised					
Revised					
Revised					

4a. Additions

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
	Monitor sites	Steve Tabbutt	Inspections	Reviewing all sites for any erosion and compromised areas	Continue reviewing
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

5a. Additions

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised	Park and beach inspections	Steve Tabbutt and Chris Pufhal	Daily inspections during the summer season	Regular inspections of town owned parks and beach areas.	Continue with present practice
Revised	Lawn Care	Steve Tabbutt, Conservation Comm./Bldg Inspector	Monitor areas	New zoning to regulate fertilizer.	Continue monitoring
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

6a. Additions

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

See enclosed report from SRRDD.

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2010 through March 31, 2011)

Programmatic

	(Preferred Units)		Response
	(y/n)		
	(y/n)		
	(y/n)		
Stormwater management position created/staffed			N
Annual program budget/expenditures **			None
Total program expenditures since beginning of permit coverage			None
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)			

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	100
Stormwater management committee established	(y/n)	N
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	Y
Shoreline cleaned since beginning of permit coverage	(mi.)	½ mile
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	2
▪ community participation **	(# or %)	N
▪ material collected **	(tons or gal)	See report
School curricula implemented	(y/n)	N

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	Adopted
▪ 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					
▪ Post-Development Stormwater Management					

Mapping and Illicit Discharges

	(Preferred Units)		Response
Outfall mapping complete	(%)		25
Estimated or actual number of outfalls	(#)		20 more/less
System-Wide mapping complete (complete storm sewer infrastructure)	(%)		100 % Sewer pump stations
Mapping method(s) Town Tax Maps			
▪ Paper/Mylar	(%)		
▪ CADD	(%)		Paper
▪ GIS	(%)		w/ ATMD
Outfalls inspected/screened **	(# or %)		w/ATMD
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)		3
Illicit discharges identified **	(#)		3
Illicit discharges identified (Since beginning of permit coverage)	(#)		
Illicit connections removed **	(#); and (est. gpd)		
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)		
% of population on sewer	(%)		83.4

% of population on septic systems	(%)	16.6
-----------------------------------	-----	------

Construction

	(Preferred Units) Response	
Number of construction starts (>1-acre) **	(#)	4
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100
Site inspections completed **	(# or %)	4
Tickets/Stop work orders issued **	(# or %)	0
Fines collected **	(# and \$)	None
Complaints/concerns received from public **	(#)	10

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections (for proper BMP installation & operation) completed **	(# or %)	
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	
Low-impact development (LID) practices permitted and encouraged	(y/n)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	1 year
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	None
Qty of structures cleaned **	(#)	40
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	1 ton
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Compost

Basin Cleaning Costs			
• Annual budget/expenditure (labor & equipment)**	(\$)		Non budgeted part of employee job description
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)		
• Disposal cost**	(\$)		
Cleaning Equipment			
• Clam shell truck(s) owned/leased	(#)		None
• Vacuum truck(s) owned/leased	(#)		n/a
• Vacuum trucks specified in contracts	(y/n)		
• % Structures cleaned with clam shells **	(%)		
• % Structures cleaned with vacor **	(%)		

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	None
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	None
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	None
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	None
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	None
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)	
■ Fertilizers	(lbs. or %)
■ Herbicides	(lbs. or %)
■ Pesticides	(lbs. or %)
Integrated Pest Management (IPM) Practices Implemented	(y/n)

(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used **	% NaCl 100 % Salt – 50 tons
(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand
Pre-wetting techniques utilized **	(y/n or %)
Manual control spreaders used **	(y/n or %)
Zero-velocity spreaders used **	(y/n or %)
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)
% of salt/chemical pile(s) covered in storage shed(s)	(%)
Storage shed(s) in design or under construction	(y/n or #)
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)
	Y

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	N
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	N
Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	N