

APR 30 2009

Municipality/Organization: Town of Danville

EPA NPDES Permit Number: NHR041004

MaDEP Transmittal Number: N/A

**Annual Report Number
& Reporting Period:** No. 6: May 1, 2008-April 30, 2009

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

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Certification:

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

Signature: 

Printed Name: Bruce Caillouette

Title: Road Agent

Date: 4-29-09

Part II. Self-Assessment

The Town of Danville Highway Department has continued to work hard to coordinate the local committees and the Town to address Stormwater Management. The Highway Department continues to meet with the Selectmen, Town Budget Committee to provide an update on progress. We have worked with the Forestry Committee members on tentatively hosting our fifth annual cleanup this year. We have hired a consulting engineering firm to assist us in working on compliance with all our various BMP's. The Highway Department continues to follow up on developments in the Town that are required to file their NOI's and regularly check the EPA website for that information.

The Town is continuing its work on public education. The Danville Highway Department currently publishes a newsletter that is distributed throughout the Town. An elementary public education program is slated to begin during 2009. We have a stormwater display at public functions of the Town. We distributed stormwater bookmarks and informational flyers with our tax bills this year. We have made stormwater education materials available at the Town Hall and Library.

The Town participated in the 5th annual roadside cleanup this year. Two Household Hazardous Waste (HHW) collection events are scheduled to be held in 2009. Danville participates in the HHW collection day with four other local towns and villages. All events are well advertised in the newspaper and on the Town's website.

The Town has completed storm drain system mapping of the entire town. All catch basins, outlets and culverts have been mapped by GPS and recorded on a GIS base map. Outfalls were inspected for structural integrity and monitored for possible illicit discharge. Dry weather flows found at three outfalls were sampled for water quality parameters. Results were in line with normal conditions indicating no obvious source of illicit discharge.

The Town has implemented Standard Operating Procedures (SOPs) for catch basin, outfall and BMP maintenance. The SOPs also include inspection and tracking procedures for Highway personnel to document findings. Winter snow removal and sand & salt application were also implemented. The Town is planning to sample catch basin cleanings in 2009 and analyze options for reuse of the material.

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1A Revised	Elementary School Education Program	Highway, Other Department Highway, Other Department and Consultant	Conduct annual activities for children.	Contacted Elementary School and worked with the Assistant Principal to establish preliminary classroom activities. A consultant was retained to assist in preparing classroom and other public education materials. The Consultant has prepared a Scope of Work to setup a classroom education program.	Continue to work with school personnel and consultant to establish a classroom education program. Incorporate the use of students with stormwater education activities through community service hours. Extend the use of students through other community service events such as participation in Hazardous Waste Collection Events and Earth Day.
1B Revised	Attend Meetings	All Departments	Hold and attend town committee meetings.	The Stormwater Program was discussed at an annual Budget Committee meeting. The Highway Department met with Town Selectmen twice during the permit period to discuss the progress of public education components and good housekeeping measures.	Continue to report the progress at these meetings and discuss the next steps for the program. Coordinate with other departments as needed.

1a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1C	General Education: Brochures, Flyers & Posters	Highway	Public distribution, # of brochures taken, # flyers mailed, and # places poster displayed.	The Highway Department publishes a number of flyers detailing proper disposal of hazardous waste, reducing pollutant loads in stormwater, pet waste disposal techniques and procedures for latex paint disposal. All flyers are available in the Town Hall. Many are sent home with schoolchildren to be given to parents. Approximately 10% of Danville's HHW participants were informed of the event through school flyers. Approximately 250 and 200 flyers were distributed at the May and October 2008 HHW events, respectively. Informational flyers and bookmarks were also included in tax bills. Posters were created to advertise the event, and are hung in the office of the Town Clerk and the library.	Continue to publish brochures, bookmarks and flyers. Track participation in events to determine effectiveness of the flyers.
Revised					
ID	Post Information on Town Website	Highway, Web Committee	Increase hits to the website.	Created links on the Town website advertising the hazardous waste events, roadside cleanup and ice storm cleanup.	Continue to update the highway website with information on stormwater. Explore the use of a hit counter to record number of hits to the website.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
2A	Develop News Articles	Highway, Other Department	Track number of articles and volunteers. Coordinate with BMPs 2C and 2D	Published articles with information on roadside trash pickup and household hazardous waste collections to solicit public input in April 2008. An article regarding stormwater and hazardous waste was published in the 2008 Town Report. Two articles regarding roadside trash pickup and ice storm brush cleanup were published in April 2009.	Continue to work on developing more news articles and track public involvement.
Revised			Track number of articles and volunteers. Coordinate with BMPs 2C and 2D. Publish results/information on collection events.		
2B	Meetings	All Departments	Meet with other Town departments. Set up meetings with other towns.	The Stormwater Program was discussed at an annual Budget Committee meeting. The Highway Department met with Town Selectmen four times during the permit period to discuss the progress of the Phase II program. The Town also coordinates with Plaistow, Atkinson, Hampstead and Kingston to plan the bi-annual Household Hazardous Waste events.	Discuss information at various department meetings to involve other departments in stormwater management. Meet with other towns to coordinate the Household Hazardous Waste days, as necessary.
Revised					

2a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
2C	Roadside Cleanups	Highway, Other Department	Annual cleanup held and amount of trash collected. Annual cleanup held. Record of amount of trash collected.	Roadside cleanups and cleanups of town properties were held in coordination with Earth Day on April 25. Approximately 50 Bags were distributed to residents for cleanup purposes. 30 bags of trash were collected. Posters were created to advertise the event, and are hung in the office of the Town Clerk and the library. Highway personnel were in the library on April 25 and distributed information to approximately 12 residents. 25 Earth Day coloring books and 40 clean water bookmarks were left at the library for residents. 25 bookmarks previously left at the library were taken by residents.	Continue roadside cleanups for Earth Day. Distribute more bags and information on Earth Day weekend at the local market and at the Forestry Walk. Track resident participation.
Revised					
2D	Household Hazardous Waste Collection Event	Highway, Other Department	Participate with other communities on biannual collection and track resident participation.	Participated with the Towns of Plaistow, Atkinson, Hampstead and Kingston in bi-annual Household Hazardous Waste events. Approximately 250 people attended the Spring 2008 event, and 200 people attended the Fall 2008 event. Danville resident participation was approximately 30% of these totals. Plaistow is hosting the May 2009 event and Danville is hosting the October 2009 event.	Continue to participate in both events. Track town resident participation and work on ways to increase participation such as better advertising.
Revised					
2E	Catch Basin Marking Program	Highway, Other Department	# volunteers, 25% marked each year.	All catch basins in the Town have been located and mapped with GPS coordinates. The Highway Department is currently looking into stencil designs.	Solicit volunteers to mark catch basins with DPW staff to identify discharges to waterways.
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3A	Map Culverts	Highway and Consultant	Locate all culverts and drainage systems within the Urbanized Area (UA). Generate system base map.	The Town hired an engineering firm to map stormwater structures within Town boundaries. A base map detailing both Urbanized Areas and non-urban areas was created. All culverts, catch basins and outfalls were mapped using a GPS unit. A total of 86 outfalls were located.	Continue to add additional outfalls and/or culverts as constructed in the Town.
Revised			Locate all culverts and drainage systems. Generate system base map.		
3B	Driveway Permits	Highway and Consultant	Update driveway permits.	Driveway permits were reviewed and updated to include information related to stormwater discharges. Permits are required for the construction of a driveway onto a town right-of-way, particularly when a culvert must be constructed to accommodate street drainage. The Town has received approximately 6 permit applications in 2008 and 1 in 2009.	Continue to update driveway permits to include information on dry weather flows and outline maintenance needs.
Revised			Update driveway permits and track number of permits.		
3C	Outfall Screening for Illicit Discharges	Highway	Locate and determine illicit discharges. # of outfalls screened, samples collected.	The Town hired an engineering firm to evaluate stormwater outfalls during dry weather. 100% of the Town's drainage system has been inspected. 4 dry weather flows were sampled. No illicit discharges were identified.	Continue to monitor and inspect outfalls and catch basins. If present, analyze dry weather flows from outfalls not previously sampled.
Revised					

3a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3D	Develop an Illicit Discharge Prohibition Ordinance	All Town Departments and Consultant	Ways to effectively prohibit discharges. Present ordinance at public meeting in 2009.	Local requirements were reviewed and a draft model ordinance was obtained.	Develop and implement an ordinance to prohibit illicit discharges.
Revised					
3E	Develop an IDDE Plan	Highway and Consultant	SOP in place by end of Permit Year 5.	SOPs were developed for catch basin and outfall inspection. Log sheets were developed for tracking inspection activities.	Continue to monitor and inspect outfalls and catch basins. Utilize SOPs during all applicable Highway operations. Record inspection events.
Revised	Develop Illicit Discharge Detection and Inspection SOPs				
3F	Incorporate Illicit Discharge Information into Public Education BMPs	Highway	IDDE information in public education BMPs annually.	The Town reviewed results of past IDDE activities and planned to use this information to update the public.	Provide public education information showing that all Town culverts and outfalls were inspected for illicit discharges and none were found. Inform public that all Town drainage structures were mapped. Evaluate options for incorporating into the website.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4A	Ordinances	Planning, Town Engineer, and Consultant	Ordinances to address construction issues.	Local requirements were reviewed and a draft model ordinance was obtained.	Develop and implement an ordinance for construction sites.
Revised					

4a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4B	Review of Construction Sites	Highway, Building Inspector and Town Engineer	Enforce NOI's and need for NOI's.	Reviewed EPA website for construction NOI's. Inspected construction sites and advised developers on what was needed to meet erosion and sediment control requirements. Reviewed and inspected driveway permits in conjunction with BMP 3B. 6 new construction projects began during 2008, and 1 during 2009 to date. The Town conducted approximately seven site inspections during Permit Year 6.	Continue to be proactive in the inspection of developments that are required to file a NOI and enforce construction site runoff controls. As of April, 2009, only 1 construction project is ongoing.
Revised	Review of Construction Sites and Driveway Permits				
4C	Establish a Procedure for the Receipt of Information Submitted by the Public	Highway and Planning	# calls received and record of follow-up actions.	Construction site issues are reported to the Highway Department and handled as needed. No calls or reports were received during Permit Year 6.	Coordinate with BMP 1D to advertise who to call for construction site issues. Provide contact information in appropriate publications and flyers.
Revised					
4D	Develop and Implement a Construction Site Inspection Program	Highway and Planning	Standardized form & record of inspections/follow-up actions.	Highway monitored all construction sites as outlined under BMP 4B.	Coordinate with BMPs 4A and 4B to develop a standardized construction site inspection program. Document all construction findings.
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) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
5A	Ordinances	Highway, Planning and Town Engineer	Set up and create ordinances. Ordinance at Public Meeting in 2009.	Local requirements were reviewed and a draft model ordinance was obtained.	Develop and implement an ordinance to meet the stormwater management requirements.
Revised					
5B	Routine Maintenance	Highway	Maintain culverts and general maintenances. Records of inspections and maintenance.	Located and mapped all culverts in the Town. Monitored culverts for blockages, especially during high rain flows. Removed blockages and repaired washouts as needed.	Continue to check all culverts and maintain as needed. Follow SOPs for maintenance/repair of outfalls. Record activities and incorporate into Control Measure 6.
Revised					

5a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
5C	Subdivision Review	Highway, Town Engineer, Building Inspector	Developer's compliance, record of plan review.	Checked developments for all control measures and verified after construction	BMPs that meet water quality criteria.
Revised					

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6A	Employee Training	Highway, Town Engineer and Consultant	Meet with all departments to establish what needs to be done. Record # of staff trained, types of training.	Reviewed existing training efforts and a sample curriculum for good housekeeping. Conducted a stormwater training session with DPW employees in October. Highway participated in outfall and storm drain mapping.	Conduct a training session for DPW employees. Complete training of the Highway Department and other Town employees.
Revised					

6a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6B	Clean Up Day	Highway, Forestry	Town roadways cleaned up from trash. Town roadways and forests cleaned of trash	The Highway Department held a successful roadside cleanup weekend in conjunction with Earth Day on April 25. Approximately 30 bags of trash were collected.	Will be holding the annual Earth Day roadside cleanup this year and will publish information in the newspaper regarding cleanup. The Forestry Department cleanup is tentatively scheduled for 2009.
Revised					
6C	Water Testing	Highway and Consultant	Water testing of drainage outfalls. Record # of samples collected and results.	Dry weather sampling was performed on three outfalls (four flows). Results were documented and recorded in a report prepared by the Town's consultant. None of the results violated water quality standards or indicated that an illicit discharge is present.	Continue to monitor outfalls and perform testing if a suspect discharge is found.
Revised					
6D	Household Hazardous Waste Cleanup Days	Highway	Assist with bi-annual household hazardous waste drop-off days.	Participated with Plaistow, Atkinson, Hamstead and Kingstown in a bi-annual household hazardous waste drop off. Approximately 250 people attended the Spring 2008 event, and	Continue to participate in events. Track resident participation and incorporate information on illegal dumping into handouts at future events.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
Revised				200 people attended the Fall 2008 event. Danville resident participation was approximately 30% of these totals. The Danville Highway Department will host the Fall 2009 event. Assisted at pickup events and collected of survey forms. These collections provide a proper waste disposal option for residents.	
6E	Evaluate Municipal Facilities and Operations & Develop BMPs	Highway and Consultant	Inspection results and BMPs.	The Town Hall, police department and highway garage parking areas were observed during rain events. No municipal facility has a closed drainage system.	Continue to inspect municipal facilities, particularly the highway garage, and address ways to reduce stormwater runoff. Develop BMPs to minimize existing or potential impacts to stormwater.
Revised					
6F	Storm Drain System Operation and Maintenance Plan	Highway and Consultant	Storm Drain System O&M Plan.	SOPs were developed for catch basin, outfall and BMP maintenance & repair. Winter SOPs including snow removal and sand & salt application were also implemented. Log sheets were developed for tracking maintenance activities.	Utilize SOPs during all applicable Highway operations. Record inspection and maintenance activities.
Revised	Storm Drain System SOPs and O&M Plan		Standard Operating Procedures and O&M Plan.		
6G	SOP for Flood Projects	Highway and Consultant	Written review process, record of projects.	N/A	Establish a procedure to ensure that water quality is considered when addressing flooding problems.
Revised					
6H	Sample Catch Basin Cleanings	Highway	Catch basin sediment sample.	The Town will analyze catch basin cleanings and explore options for reuse pending sampling results.	Sample the spring 2009 catch basin cleaning stockpile. Review the results and outline Danville's options for reuse and/or disposal.
Revised					

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
	N/A				
Revised					

7a. Additions

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7b. WLA Assessment

NH DES released the 2008 303d list (list of impaired waters) in September of 2008. The updated 303d list outlines several water in Danville that are impaired due to mercury from atmospheric deposition, consistent with those outlined in the Town's NOL. However, the 2008 list shows that Bartlett Brook is also impaired due to pH. Total Maximum Daily Load (TMDL) Reports were issued for Acid Lakes in NH and Mercury in the Northeast Region in September and October 2007, respectively. These TMDLs do not specifically address waters in Danville and, in general, develop regional recommendations for pollutant sources that contribute to atmospheric deposition. However, the Mercury TMDL, outlines that state regulatory controls will help to reduce mercury sources such as those contained in household products or wastes. The Town of Danville is currently addressing mercury sources in Town through the annual Household Hazardous Waste Collection events.

Part IV. Summary of Information Collected and Analyzed

86 stormwater outfalls have been mapped via GPS coordinates. Structure locations were imported into a GIS base map to form a complete map depicting all outfalls, culverts and catch basins within Town limits. All Town outfalls were also screened for potential illicit discharges. Flow was observed and field tested at three of the inspected outfalls. One outfall was fed by two flowing inlet pipes which were sampled separately. There were no unusual activities in the vicinity of the outfalls (i.e. vehicle washing, etc) or obvious sources of illicit discharges associated with any sampled outfall. Sources of dry weather flow are likely due to snow melt, high groundwater and perimeter yard drains. Laboratory tests for e.coli, ammonia, fluoride and chlorine did not reveal elevated concentrations at any outfall. Additional outfall inspections are ongoing; laboratory testing will be performed as needed.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures	(\$)	\$12,694.00
Total program expenditures since beginning of permit coverage	(\$)	General fund
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		

Education, Involvement, and Training

Estimated number of residents 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.)	N
Shoreline cleaned since beginning of permit coverage	(mi)	N
Household Hazardous Waste Collection Days		
<ul style="list-style-type: none"> days sponsored 	(#)	2/ co-sponsor w/other towns
<ul style="list-style-type: none"> community participation 	(%)	30% represented (estimated)
<ul style="list-style-type: none"> material collected 	(tons or gal)	Approximately 3 tons and 1000 gallons of material
School curricula implemented	(y/n)	N

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
<ul style="list-style-type: none"> Illicit Discharge Detection & Elimination 		X		
<ul style="list-style-type: none"> Erosion & Sediment Control 		X		

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

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100% of town
Estimated or actual number of outfalls	(#)	86
System-Wide mapping complete	(%)	100
Mapping method(s)		
▪ Paper/Mylar	(%)	-
▪ CADD	(%)	-
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	100%
Illicit discharges identified	(#)	0
Illicit connections removed	(#)	N/A
	(est. gpd)	
% of population on sewer	(%)	0%
% of population on septic systems	(%)	100%

Construction

Number of construction starts (>1-acre)	(#)	6 in 2008, 1 in 2009
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	7
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	0

Sweeping Equipment		0
• Rotary brush street sweepers owned/leased		
• Vacuum street sweepers purchased/leased		
• Vacuum street sweepers specified in contracts	(\$)	
• % Roads swept with rotary brush sweepers	(#)	
• % Roads swept with vacuum sweepers	(y/n)	
Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	N/A
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) practices implemented		
Anti-/De-Icing products and ratios		
	% NaCl	80%
	% CaCl ₂	
	% MgCl ₂	
	% CMA	
	% Kac	
	% KCl	
	% Sand	20%
Pre-wetting techniques utilized	(y/n)	N
Manual control spreaders used	(y/n)	Y
Zero-velocity spreaders used	(y/n)	N
Estimated net reduction or increase in typical year salt/chemical application rate		0%
Estimated net reduction or increase in typical year sand application rate		0%
% of salt/chemical pile(s) covered in storage shed(s)		100%
Storage shed(s) in design or under construction	(lbs. or %)	N*
100% of salt/chemical pile(s) covered in storage shed(s) by 2010	(y/n)	Y
*Monies are being placed into the Capital Reserve Account in preparation of building new storage facilities with ability to load inside of facility.	(y/n)	