

**Municipality/Organization: Town of Merrimac**

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**EPA NPDES Permit Number: MAR041209**

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**MaDEP Transmittal Number: W-045823**

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**Annual Report Number  
& Reporting Period:**

**No. 4: March 06-March 07**

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## **NPDES PII Small MS4 General Permit Annual Report**

### **Part I. General Information**

Contact Person: Robert Sinibaldi

Title: Chairperson – Board of Selectmen

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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:

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Printed Name:

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Title:

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Date:

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## **Part II. Self-Assessment**

**The Town of Merrimac has completed the required self-assessment and have determined that our municipality is in compliance with all permit conditions, except for the following provisions:**

### Part III. Summary of Minimum Control Measures

#### 1. Public Education and Outreach

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 4</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 5</b>
1A	Storm water education flyers	Board of Selectmen	Number of flyers dist. per year	Developed a plan of brochure distribution with aid of Water Department by distribution through the year.	Implement brochure distribution and record # of brochures.
Revised					
1B	Household Haz. Waste Event	Board of Selectmen	Pounds of waste collected	The Recycling Committee held a waste collection day	Hold a waste collection day
Revised					

#### 1a. Additions

1C	Bioretention area construction	Board of Selectmen	Amount of public education/involvement	Bioretention area construction at the Sweetsir School	Public education will be developed and implemented. Grade(s) of education to be developed with school officials.
1D	Stormwater educational web page on Town website.	Board of Selectmen	Implementation of web page	Researched materials for the stormwater educational web page.	Create web page.

## 2. Public Involvement and Participation

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 4</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 5</b>
2A	Storm Drain Stenciling	Board of Selectmen	Number of drains stenciled	Stenciled all stormdrains in town (629 total)	Monitor stenciled drains and stencil again if necessary.
Revised					
2B	Volunteer cleanup & monitoring	Board of Selectmen	# of volunteers & accomplishments	Boyscout troop held stream clean up day	Maintain volunteer groups
Revised					

### 2a. Additions

2C	Bioretention area construction	Board of Selectmen	Amount of public education/involvement	Bioretention area construction at the Sweetsir School	Public education will be developed and implemented. Grade(s) of education to be developed with school officials.
2D	Stencil educational session	Highway Department	# staff educated	Held a training session with Highway Department Staff (3 people)	

### 3. Illicit Discharge Detection and Elimination

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 4</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 5</b>
3A	Storm Drain System Map	Board of Selectmen	Identify & remove illicit discharges	All catchbasins hand sketched on GIS map for entire town	Determine outfall locations and computerize map if funds available
Revised					
3B	Ordinance prohibiting illicit discharges	Board of Health	Adoption of ordinance	Draft “Illicit Discharge Bylaw” General Bylaw produced.	Adopt General Bylaw
Revised					
3C	Plan to detect illicit discharges	Board of Selectmen	# of illicit discharges identified	Ongoing subdivision review by consulting engineer and ongoing observation by DPW personnel	Ongoing subdivision review by consulting engineer and ongoing observation by DPW personnel
Revised					

#### 3a. Additions


#### 4. Construction Site Stormwater Runoff Control

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 4</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 5</b>
4A	Ordinance for erosion & sediment control at construction sites	Board of Selectmen	Adoption of ordinance	Draft “Stormwater Management and Land Disturbance Bylaw” General Bylaw produced.	Adopt General Bylaw at Fall meeting
Revised					

##### 4a. Additions

4B	Low Impact Development (LID) regulations	Planning Board	Adoption of LID regulations and zoning amendments	Drafted regulations	Adopt LID regulations and zoning amendments at Fall meeting
4C	All NPDES inspection reports to the Planning Board	Planning Board	Reports to be submitted within NPDES time frames	NPDES report submission implemented	On-going report submission

## 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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
5A	Enforce MA DEP WPA Storm water management policy on sites >1 ac.	Board of Selectmen	Adoption of Site Plan review Zoning By-Law	Site Plan Review Bylaw in place	Update Bylaw with Low Impact Development regulations.
Revised					

### 5a. Additions

5B	Ordinance for post stormwater management	Board of Selectmen	Adoption of ordinance	Draft “Stormwater Management and Land Disturbance Bylaw” General Bylaw produced.	Adopt General Bylaw at Fall meeting

## 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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
6A	Develop municipal O&M plan	Highway Superintendent	# of structures/streets cleaned, amount of employee training	Ongoing structure and street cleaning	Maintain O&M
Revised					
6B	Upgrade inadequate drainage systems	Highway Superintendent	Number of upgrades per year	Swale upgrades: <ul style="list-style-type: none"> <li>• West Parish Lane</li> <li>• Birch Meadow Road</li> <li>• Bear Hill Road</li> <li>• Winter Street</li> </ul> Hill Side Ave subdrain installation (90 LF)	Continue upgrades
Revised					

### 6a. Additions




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

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 4</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 5</b>
N/A					
Revised					

**7a. Additions**


**7b. WLA Assessment**

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

- Research of Planning Board and Town records of street acceptance plans with as-builts showing stormwater collection systems.

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

##### Programmatic

Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures	(\$)	<b>10,500</b>

##### Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	<b>1</b>
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	<b>1</b>
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	


## Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with “X”)				
▪ Illicit Discharge Detection & Elimination			<b>X</b>	
▪ Erosion & Sediment Control			<b>X</b>	
▪ Post-Development Stormwater Management			<b>X</b>	
Accompanying Regulation Status (indicate with “X”)				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				

## Mapping and Illicit Discharges

Outfall mapping complete	(%)	<b>50</b>
Estimated or actual number of outfalls	(#)	<b>629 catchbasins</b>
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	<b>30</b>
▪ CADD	(%)	
▪ GIS	(%)	<b>20</b>
Outfalls inspected/screened	(# or %)	
Illicit discharges identified	(#)	
Illicit connections removed	(# ) (est. gpd)	
% of population on sewer	(%)	
% of population on septic systems	(%)	

## Construction

Number of construction starts (>1-acre)	(#)	<b>1 subdivision</b>
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	<b>100</b>
Site inspections completed	(# or %)	<b>*100±</b>
Tickets/Stop work orders issued	(# or %)	<b>1</b>
Fines collected	(# and \$)	
Complaints/concerns received from public	(#)	
<b>*All subdivisions are inspected by the Planning Board's consulting engineer and active Order of Conditions by the Conservation Commission Agent</b>		

## Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	<b>80</b>
Site inspections completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

## Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	<b>1</b>
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	<b>1</b>
Total number of structures cleaned	(#)	<b>530±</b>
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	<b>70± CY</b>
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		<b>Compost</b>
Cost of screenings disposal	(\$)	

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	<b>1</b>
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	<b>1</b>
Qty. of sand/debris collected by sweeping	(lbs. or tons)	<b>30± CY</b>
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	<b>Misc fill</b>
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	<b>1 town owned</b>
Vacuum street sweepers specified in contracts	(y/n)	

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % CMA % Kac % KCl % Sand	<b>80%</b>      <b>20%</b>
Pre-wetting techniques utilized	(y/n)	<b>No</b>
Manual control spreaders used	(y/n)	<b>Yes</b>
Automatic or Zero-velocity spreaders used	(y/n)	<b>No</b>
Estimated net reduction in typical year salt application	(lbs. or %)	<b>700± Ton</b>
Salt pile(s) covered in storage shed(s)	(y/n)	<b>Yes</b>
Storage shed(s) in design or under construction	(y/n)	<b>No</b>