

Municipality/Organization: Town of Framingham

EPA NPDES Permit Number: MA R041116

MaDEP Transmittal Number: W-041299

Annual Report Number

& Reporting Period: No. 8: March '10 – March '11

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Julian Suso

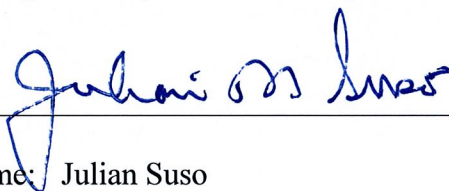
Title: Town Manager

Telephone #: 508-532-5400

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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: Julian Suso

Title: Town Manager

Date: 4/6/11

Part II. Self-Assessment

The Town of Framingham has completed the required self-assessment for Permit Year Seven and finds that our municipality is in compliance in general with the permit conditions.

Work continues on the second phase of the Town's Stormwater Master Plan, and is expected to be completed by the end of July 2011. It addresses issues and requirements of five sub-basins with a level of difficulty of problems next after the two sub-basins studied in the first phase. The five sub-basins include Angelica Brook, Jacobs Brook, Sucker Pond, Lokerville, and Cochituate Brook Sub-Basins. The plan looks at the hydrology of the watershed in these sub-basins, the infrastructure, and potential solutions for problems of flooding, capacity, water quality, and recharge. The Town is contracting the work to implement one of the recommended projects from the first phase of the master plan, namely replacement or rehabilitation of structures at high risk with high consequence of failure. The Town is also in the process of considering funding for the third phase of the Stormwater Master Plan. This phase will look at six additional drainage sub-basins, namely Hop Brook, Dunsell Brook, Old Towne Center, and 9/90. There are eleven remaining sub-basins after the Phase III study: North Saxonville, South Saxonville, Baiting Brook, Birch Meadow Brook, Square Meadow Brook, Cherry Meadow Brook, Willow Brook, North Reservoir, South Reservoir, Course Brook, and Wayside Inn.

The Town undertook several education and participation efforts, including:

- Coordinated river cleanups with the Lake Cochituate Water Council in Beaver Dam Brook May 2010, Cochituate Brook in July 2010, and Beaver Dam Brook in September 2010
- Neighborhood-wide notifications regarding illicit discharges as they occur, including SuAsCo materials in the notifications
- Planning for neighborhood educational survey of the Waushakum Pond area, focusing on pet waste and over-fertilization, to be implemented in the spring of 2011.
- Participated in Earth Day celebration, presented on Rain Gardens, April 2010
- Drain marking (third year) by the Framingham High School Environmental Club, May 2009
- Began coordinating with and encouraging local watershed groups, including: Lake Cochituate Watershed Council, Framingham Sierra Club, a group that hopes to form a Hop Brook watershed council, and Framingham State University student field projects.

The Town performed water quality monitoring and sampling at outfalls identified as high risk in the five sub-basins of the Phase II Stormwater Master Plan.

The Town provided significant comments on the draft Interstate, Merrimack and South Coastal Small MS4 permit in January, 2011 and again in March, 2011.

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 – Permit Year 9 and beyond
NA	Create uses for SuAsCo postcards	SuAsCo/ Framingham DPW	NA (none created for the 8 th permit year)	SuAsCo Postcards continue to be included in notifications that were mailed to neighborhoods where illicit discharges were observed by Town staff.	Continue public education as part of IDDE management program. Remainder to be determined for the next 5-year permit based on EPA requirements to be published.

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 – Permit Year 9 and beyond
NA	Continue Drain Marking Program	SuAsCo/ Framingham, DPW	NA (none created for the 8 th permit year)	Coordinated river cleanups with the Lake Cochituate Water Council in Beaver Dam Brook May 2010, Cochituate Brook in July 2010, and Beaver Dam Brook in September 2010 Began coordinating with and encouraging local watershed groups, including: Lake Cochituate Watershed Council, Framingham Sierra Club, a group that hopes to form a Hop Brook watershed council, and Framingham State University student field projects	To be determined for the next 5-year permit based on EPA requirements to be published.

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 – Permit Year 9 and beyond
NA	Continue implementation of IDDE bylaw and program.	DPW, with participation by Con Comm, Board of Health, Dept of Inspectional Services	<i>Implement IDDE outfall monitoring program.</i>	Monitoring and sampling to be performed at major outfalls in the Lokerville, Jacobs Brook, Cochrutuate, Angelica Brook, and Sucker Pond Sub-Basins. Samples will be taken, based on visual inspection, for: - temperature - pH - phosphorus - nitrogen (as ammonia) - detergents - chlorine.	Monitoring and sampling to be performed at major outfalls in the Old Town Center, Dunsdell Brook, Hop Brook, North and South Saxonville, and 9/90. Samples will be taken for: - temperature - pH - phosphorus - nitrogen (as ammonia) - detergents - chlorine Other activities to be determined for the next 5-year permit based on EPA requirements to be published.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Permit Year 9 and beyond
NA	Construction site runoff controls	Framingham DPW/Con Comm	Review, implement, inspect and enforce construction site runoff controls.	Plans that come before the Planning Board are reviewed using the Massachusetts DEP Stormwater Management Standards. These plans include all construction that falls under the requirements for the NPDES Phase II permit, whether it is near a wetland (as regulated by Massachusetts DEP) or not. Detailed stormwater impact analysis is required as part of this review.	Other activities to be determined for the next 5-year permit based on EPA requirements to be published.

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 – Permit Year 9 and beyond
NA	Implement Drainage Master Plan.	Framingham DPW/Comm	Continue implementation.	The second phase of the Stormwater Master Plan is under way, looking at the 5 sub-basins (Sucker Pond, Lokerville, Cochrane Brook, Jacobs Brook, and Angelica Brook).	Substantially complete the Phase II Stormwater Master Plan to be completed by July 31, 2011 Other activities to be determined for the next 5-year permit based on EPA requirements to be published.

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 – Permit Year 9 and beyond
NA	Evaluate CB Cleaning	Framingham DPW	Implement the Plan.	Effectively all catch basins in Town were cleaned this year, due to unusual funding availability. Additional: Provided stormwater training to Engineering DPW staff.	Return to normal operations (cleaning of one-third to one-half of all catch basins in Town per year) To be determined for the next 5-year permit based on EPA requirements to be published.

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 – Permit Year 9 and beyond
				DEP has not released the TMDL report and targets for the Sudbury River.	Once the TMDL report is released by DEP, develop plans to obtain the goals.

7b. WLA Assessment - Not applicable

Part IV. Summary of Information Collected and Analyzed

As part of the SWMP described in Part II of this report, drainage systems, outfalls, and receive waters were identified and a plan was developed for monitoring and maintenance of these drainage systems under the DPW's SWPPP.

Results of Water Quality monitoring and sampling at the Angelica, Jacobs Brook, Sucker Pond, Cochituate Brook, and Lokerville Sub-Basins are provided in the attached report. We will further assess the data and target the problem areas for water quality improvement in 2010.

A log of IDDE problems and resolutions is attached. One illicit discharge is being investigated.

**Town of Framingham - DPW/Engineering
2010 NPDES Outfall Sampling Results**

No.	Outfall Location	Day	Time	Total Chlorine (mg/L)	Free Chlorine (mg/L)	Hardness (mg/L as CaCO3)	Total Alkalinity (mg/L as CaCO3)	Ammonia (strips)	Detergents (Chemets)	Nitrogen Ammonia - DR890 (mg/L)	Reactive Phosphorus - DR890 (mg/L)
<i>Sucker Pond Sub-Basin</i>											
1	Hastings W of Pitt (Sucker Pond)	07/01/10	9:20am	NS							
2	Cochituate Rd (Sucker Pond)	07/01/10	9:35am	NS							
3	J. J. Brady Lane	06/24/10	12:00pm	0.0	0.0	250	20	0	0.50	0.33	0.26
4	Inlet at Flagg Dr. W of school	07/01/10	9:55am	0.0	0.0	120	20	0	0.10	0.01	0.16
5	Storybrook, N of Flagg Dr	07/01/10	10:45am	0.0	0.0	230	30	0	0.15	0.04	0.34
6	North of Main St, to Sudbury River	07/01/10	11:30am	0.0	0.0	250	20	0	0.20	0.06	0.18
<i>Cochituate Brook Sub-Basin</i>											
1	Brownlea Rd at Cochituate Brook	07/15/10	10:00am	0	0	200	30	0	0.25	0.07	0.05
2	Speen St, W upstream ~100 feet	07/15/10	10:55am	NS							
3	Arlene Dr. of Debra Lane	07/15/10	11:00am	0.0	1.0	100	70	0	0.15	NS	0.06
4	Cochituate Rd W of Mass Pike #1 (wetland culvert)	07/15/10	9:00am	NS							
5	Cochituate Rd W of Mass Pike #2 (drain outlet)	07/15/10	9:00am	0.0	0.0	200	40	0	1.50	0.07	0.05
<i>Jacobs Brook Sub-Basin</i>											
1	Summer St. W of Beacon St	07/15/10	12:10pm	0.0	0.0	120	80	0	0.25	NS	0.12
2	Cherry St between Cunningham & Campbell	07/15/10	11:40am	0.0	0.0	200	80	0	0.10	NS	0.12
3	Central St. opposite Fenwick St	07/15/10	12:45pm	0.0	0.0	200	80	0	0.15	NS	0.13
4	Prospect St. at Hemlock	07/01/10	12:30pm	NS							
5	Kellogg St at Sudbury River	07/22/10	12:30pm	NS							
<i>Lokerville Sub-Basin:</i>											
1	Dennison Ave. W of Concord St.	07/22/10	9:10am	NS							
2	Butterworth at Grant St - N outfall	06/24/10	11:00am	NS							
3	Butterworth at Grant St - S outfall	06/24/10	11:00am	NS							
4	Butterworth at Grant St - Main outfall	06/24/10	11:00am	0	0	200	20	0	0.15	0.05	0.30
5	Butterworth at Bishop St - Main outfall	06/24/10	11:25am	NS							
6	Wilson St (open channel)	06/24/10	10:20am	0	0	200	40	0	0.25	0.18	0.26
7	Arthur St at 3-pipe culvert (Town line)	06/24/10	9:00am	0	0	120	30	0	0.25	0.12	0.26
<i>Angelica Brook:</i>											
1	Lanewood Dr. S of Stanley	07/22/10	9:35am	NS							
2	Waveney Rd at Lanewood	07/22/10	9:45am	0	0.0	150	30	0	0.10	NS	0.32
3	Pleasant St near Waveney Rd	07/22/10	10:25am	NS							
4	Pleasant St at Belknap	07/22/10	10:35am	NS							
<i>9/90</i>											
1	Gates St at Framingham Country Club (Pond)	07/22/10	11:15am	0	0.0	140	30	0	0.50	0.00	0.03
2	Gates St at Framingham Country Club (pipe outfall)	07/22/10	11:25am	0	0.0	140	20	0	0.15	NS	0.29

Notes:

Nitrogen Ammonia test with Hach DR890 - Method 8155

Reactive Phosphorus (Orthophosphate) test with Hach DR890 - Method 8048, which is equivalent to EPA Method 365.2

Town of Framingham - DPW/Engineering
2010 NPDES Outfall Sampling Results

No.	Outfall Location	pH	Temp. (°F)	Notes
Sucker Pond Sub-Basin				
1	Hastings W of Pitt (Sucker Pond)		70	Dry outfall
2	Cochituate Rd (Sucker Pond)		70	No flow: pipe is halfway submerged.
3	J. J. Brady Lane	7.0	66	
4	Inlet at Flagg Dr. W of school	7.3	60	
5	Storybrook, N of Flagg Dr	7.0	60	
6	North of Main St, to Sudbury River	7.0	63	
Cochituate Brook Sub-Basin				
1	Brownlee Rd at Cochituate Brook	7.0	64	Upheaval in line at 2nd segment from outfall
2	Speen St, W upstream ~100 feet			Poison Ivy
3	Arlene Dr. of Debra Lane	8.4	68	Ammonia via strips = 0.0, DR890 not needed
4	Cochituate Rd W of Mass Pike #1 (wetland culvert)			Not accessible
5	Cochituate Rd W of Mass Pike #2 (drain outlet)	7.8	70	
Jacobs Brook Sub-Basin				
1	Summer St. W of Beacon St	7.0	61	Ammonia via strips = 0.0, DR890 not needed
2	Cherry St between Cunningham & Campbell	7.8	62	Ammonia via strips = 0.0, DR890 not needed
3	Central St. opposite Fenwick St	7.5	63	Ammonia via strips = 0.0, DR890 not needed
4	Prospect St. at Hemlock			Dry outfall
5	Kellogg St at Sudbury River			Dry outfall
Lokerville Sub-Basin:				
1	Dennison Ave. W of Concord St.			No Flow
2	Butterworth at Grant St - N outfall			No Flow
3	Butterworth at Grant St - S outfall			No Flow
4	Butterworth at Grant St - Main outfall	7.0	63	
5	Butterworth at Bishop St - Main outfall			Not done - determined not needed
6	Wilson St (open channel)	7.0	71	
7	Arthur St at 3-pipe culvert (Town line)	7.0	69	
Angelica Brook:				
1	Lanewood Dr. S of Stanley			Dry outfall
2	Waveney Rd at Lanewood	7.5	65	Ammonia via strips = 0.0, DR890 not needed
3	Pleasant St near Waveney Rd			Poison Ivy
4	Pleasant St at Belknap			Dry outfall
9/90				
1	Gates St at Framingham Country Club (Pond)	7.5	80	
2	Gates St at Framingham Country Club (pipe outfall)	7.0	78	Ammonia via strips = 0.0, DR890 not needed

Notes:

Nitrogen Ammonia test with Hach DR890 - Method
Reactive Phosphorus (Orthophosphate) test with Hi

Town of Framingham **Illicit Discharges or Connections**

Maintained by Department of Public Works - Engineering Division

Last update: March 31, 2011

Str. No.	Street	Applicable Authority	Status	Open Date	Problem and Resolution	Close Date	Notes
1	51 Mellen St	Con Com / DEP	Resolved	2/2/07	Illicit discharge to Town drain, discharging to wetland. Photo processing silver compounds	6/11/07	Reported to DEP, cleaned up under MCP, RTN 3-26580
2	115 Howe Street	DPW	Closed	5/18/07	Illicit connection from residence to catch basin. Catch basin is eroding. Area around CB eroded with private property drainage.	7/31/08	Fixed 2007, re-reported January 2008. Hwy fixed. Water is from sump drain, not illicit discharge
3	Centennial Place	DPW	Resolved	10/3/07	Outlet to wall southwest of dam - 15" clay pipe in stone wall (upstream of Colonna Bridge)	10/4/07	Sewer Overflow. Sealed by DPW, sewer backup in main trunkline repaired.
4	10 Snow Street	DPW	In Process	10/18/07	Parking lot catch basin was connected to drainage line in the fall of 2007, outfall to Beaver Dam Brook (American Rooters Suburban Athletic Club)		See hand-drawn sketch by B. McCarty. Engineering to follow up following IDDE regulations implementation
5	39 Grant	DPW	Resolved	1/4/08	GW pumping disconnected byowner from sewer at Sewer Dept's order. Potential illicit connection to drainage system	2/20/09	No drain line seen. Likely intermittently used after storm events.
6	683 Water Street	DPW-DEP	Resolved	1/28/08	Fuel tank leak from Frito-Lay panel truck - diesel fuel > 10 gallons	1/28/08	Adequately regulated under DEP RTN3-27465
7	31 Pershing Ave.	DPW	Closed	2/12/08	GW pump disconnected from sewer at Sewer Dept's order, led to discharge to street. DPW approved temporary discharge to CB on Vose. Connection not seen in subsequent visits. Assume handling on property	2/20/09	Needs to request permanent attachment to Town system.
8	30 Vose	DPW	Closed	2/21/08	GW pumping dumping into street	4/15/08	Stopped after DPW went out to investigate (source still unknown)
9	15 Flanagan Rd	DPW	In Process	2/20/08	GW pumping dumping into CB creating sinkhole		Highway Ops investigating. Engineering to follow up following IDDE regulations implementation
10	329 Singletary Rd	DPW	Resolved	3/7/08	Addition to structure cut into hillside, creating permanent GW pumping requirement	5/15/08	Town approved tie-in to drainage system
11	330 Concord St	DPW	Resolved	4/18/08	Illicit connection to sewer system. Sewer Dept. removed connection.	8/5/08	Town approved tie-in to drainage system
12	6 Woodward	DPW	Resolved	4/25/08	Drainage to Hastings from pool	7/31/08	Highway Ops removed connection
13	9 Aaron	DPW	Closed	3/19/08	Small black hose draining to street	2/15/09	No drain line seen by Highway on subsequent investigations
14	Burton Road	DPW	Closed	6/4/08	Small hose draining to street	2/15/09	No drain line seen by Highway on subsequent investigations
15	263 Hollis Street	DPW	Resolved	6/5/08	Hose draining washing machine to CB, reported by John DeLuca		Disconnected, sent to sewer
16	12 Charles	BoH	Resolved	6/26/08	Illegal dumping to catch basin in yard at illegal auto body shop	6/28/09	Citations from the BoH
17	3 Foley Dr	DPW	Resolved	7/3/08	Lines filled, probably roadway sediment. However, significant grass clippings and other items in catch basin at cul-de-sca	7/15/08	DPW Ops cleaned out, Notice sent to residents.
18	355 Singletary Rd	DPW	Resolved	7/30/08	Pipe discharging to roadway	1/5/09	Engineering sent notice to resident 1/5/09, Highway Ops will remove connection
19	Many Bantry/Pitt Rds	DPW	Resolved	11/7/08	CBs filled with bagged pet waste during CB cleaning	11/15/08	Engineering sent notice to residents
20	26 Whittier	BoH	Resolved	11/12/08	Sanitary Sewer backing up, overflowing into Drainage system	11/13/08	From BJ's. BoH had them call in cleaning and jetting company to clean drain lines. Lines cleaned before getting to street.
21	7-11 Oakvale Rd	DPW/ Con Com	Resolved	11/14/08	Dumping leaves and debris into wetland	11/16/08	Notice sent to residents from DPW and Con Com
22	38 Fay Rd	DPW	Resolved	12/10/08	Sewer backup uncovered illicit connection to sewer system. Sewer Dept. removed connection.	12/12/08	Engineering sent notice to residents, visited site, made recommendations for dry well
23	73 Indian Head Rd	DPW	Closed	1/7/09	Pipe discharging to roadway	3/10/11	Water is groundwater seepage from hillside. Recommendation for Highway to install catch basin to capture water to prevent safety hazards during winter freezes.
24	Worcester Rd	MHD	Closed	1/21/09	Sewer overflow	1/25/09	Referred to DEP and Mass Highway Dept

Town of Framingham
Illicit Discharges or Connections
 Maintained by Department of Public Works - Engineering Division

Last update: March 31, 2011

No.	Str. No.	Street	Applicable Authority	Status	Open Date	Problem and Resolution	Close Date	Notes
25	69	Londonderry Rd	DPW	Closed	12/1/08	Pipe discharging to roadway	2/15/09	Homeowner told to remove pipe. No drain line seen by Highway on subsequent investigations.
26	9	Aaron St	DPW	In Process	2/15/009	Pipe discharging to roadway	2/20/09	Owner warned of discharge. Will continue to monitor.
27	99 - Beaver Street 111		DPW	Resolved	2/25/09	Dumping leaves and debris into drainage swale	2/26/09	DPW notice sent to residents
28	115 Beaver Street		BOH & Con Com	Closed	4/3/09	Debris and trash near Beaver Dam Brook	4/3/09	Con Com Notice of Violation
29	Waverley St		DPW	Closed	4/16/09	Spill of transmission fluid	4/16/09	Discussed with owner of service station. Preventative measures were taken, education on methods for cleanup of spills.
30	Woodmere Rd		DPW	Closed	4/26/09	Pet Waste in CB near intersection with Belknap Rd	5/1/09	DPW notice sent to residents. Drain marking performed. DEP reported that the followup test results showed improvement in water quality.
31	32 Mary Agnes		DPW	Resolved	9/25/09	Sewer service broken, dumping sewage into drain lines	9/28/09	Sewer notified DEP of SSO, Line to be repaired by Sewer, homeowner
32	Waushakum		DPW	Closed	2/2/10	PVC pipe dumps onto sidewalk		Continue to monitor - appears to be only intermittent water from sump pump
33	485 Franklin		DPW	Closed	2/10/10	Kathleen Daniel Nursing Home - 508-872-8801 - PVC pipe travels under dumpster and then dumps into roadway	2/12/10	Notice sent to property owner from DPW
34	655 Belknap		DPW	Closed	2/2/10	Discharge from sump pump directly to street	2/8/10	Notice sent to residents from DPW
35	15 Hillside		DPW	Closed	3/3/10	Washout from gravel driveway to street	3/3/10	Notice sent to residents from DPW
36	15 Blandin Ave		BoH	In Process	2/2/11	Discharge seen from commercial lot , draining across East/South Street intersection		Investigate with BoH