

Municipality/Organization: Town of Framingham

EPA NPDES Permit Number: MA R041116

MaDEP Transmittal Number: W-041299

Annual Report Number

& Reporting Period: No. 11: March '13 – March '14

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Robert Halpin

Title: Town Manager

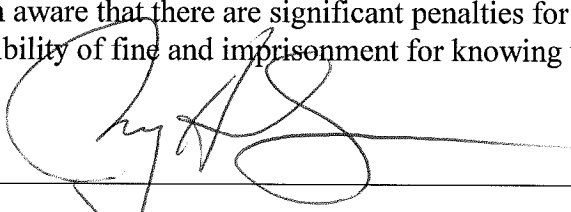
Telephone #: 508-532-5400

Email: rhalpin@Framinghamma.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: Robert Halpin

Title: Town Manager

Date:

4/1/2014

Part II. Self-Assessment

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

Work was completed on the third phase of the Town's Stormwater Master Plan in February 2014. It addresses issues and requirements of four sub-basins with a level of difficulty of problems next after the five sub-basins studied in the first and second phases. The four sub-basins include the Hop Brook, Dunsdell Brook, 9/90, and Old Town Center Sub-Basins. The plan looked 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 continuing to implement 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. There are ten 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, and Course Brook [Wayside Inn is outside the MS4 area].

The Town undertook several education and participation efforts, including:

- Neighborhood-wide notifications regarding illicit discharges as they occur, including SuAsCo materials in the notifications
- Provided educational materials at the Town's Earth Day (April 28, 2012) and Riverfest (June 24, 2012) celebrations.
- Gave a stormwater lecture at Framingham State University in April, 2013.
- Continued coordination with and encouraging local watershed groups, including: SuAsCo, OARS, Lake Cochituate Watershed Council, Framingham Sierra Club, and Framingham State University student field projects.

The Town performed water quality monitoring and sampling at outfalls identified as high risk in the sub-basins of Farm Pond and Beaver Dam Brook, and Wayside Inn.

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12 and beyond
NA	Continue to find uses for SuAsCo postcards. Participate in Earth Day and Riverfest.	SuAsCo/ Framingham DPW	NA (none created for the 11 th permit year)	SuAsCo Postcards continue to be included in notifications that were mailed to neighborhoods where illicit discharges were observed by Town staff. Stormwater Booth at Earth Day Celebration and at Riverfest. Give lecture at Framingham State University	Continue public education as part of IDDE management program. Continue participation in environmentally related events 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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12 and beyond
NA	Continue Drain Marking Program Provide support to local groups.	SuAsCo/ Framingham, DPW	NA (none created for the 11 th permit year)	Provided assistance to local groups	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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12 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 performed at major outfalls in the Farm Pond, Beaver Dam Brook, and Wayside Inn sub basins. Samples were taken, based on visual inspection, for: - temperature - pH - phosphorus (total) - nitrogen (as ammonia) - detergents - chlorine - bacteria (coliform) - conductivity - dissolved oxygen A more robust set of criteria was developed to determine problem areas.	Monitoring and sampling to be performed at major outfalls in the Lokerville, Jacobs Brook, Cochituate, Angelica Brook, and Sucker Pond sub basins. Samples will be taken for the parameters listed in the previous column. Follow-up sampling will be performed at 7 locations from Year 11 monitoring program to determine whether the problems are persisting. 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 11	Planned Activities – Permit Year 12 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 were reviewed using the Massachusetts DEP Stormwater Management Standards. These plans include all construction that fell under the requirements for the NPDES Phase II permit, whether it was near a wetland (as regulated by Massachusetts DEP) or not. Detailed stormwater impact analysis was 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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12 and beyond
NA	Implement Drainage Master Plan.	Framingham DPW/Comm	Continue implementation.	The third phase of the Stormwater Master Plan was completed February 2014, looking at 4 sub-basins (Hop Brook, Dunsell Brook, Old Town Center, and 9/90).	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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12 and beyond
NA	Evaluate CB Cleaning	Framingham DPW	Implement the Plan.	More than half the catch basins (CBs) in Town were cleaned this year. Jettied, cleaning and TV survey of lines especially identified as High Risk from the Phase III Stormwater Master Plan.	Return to normal operations (clean one-half of CBs per year) Other activities 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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12 and beyond
				DEP has not released the TMDL report and targets for the Sudbury River.	Once the TMDL report is released, develop plans to obtain the goals.

7b. WLA Assessment - Not applicable

Part IV. Summary of Information Collected and Analyzed

Results of Water Quality monitoring and sampling at the Farm Pond, Beaver Dam Brook, and Wayside Inn Sub Basins are provided in the attached report. We will further assess the data and target the problem areas for water quality improvement in 2014.

A log of IDDE problems and resolutions is attached. Several illicit discharges were investigated.

**Town of Framingham
Illicit Discharges or Connections**

Last update: March 21, 2013

Str. No.	Street	Applicable Authority	Status	Open Date	Problem and Resolution	Close Date	Notes
Permit Year 4 (2006 - 2007)							
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
Permit Year 5 (2007 - 2008)							
2	115 Howe Street	DPW	In Process	5/18/07	Illicit connection from residence to catch basin. Catch basin is eroding. Area around CB eroded with private property drainage.		Fixed 2007, re-reported January 2008. Hwy investigating
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 intermitently 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
Permit Year 6 (2008 - 2009)							
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 Hgts	DPW	Closed	1/7/09	Pipe discharging to roadway. Although this is an ongoing problem, it is only a safety issue as the discharge is groundwater. Therefore, it is not an illicit discharge issue.	2/25/12	This is an ongoing problem, which the DPW will resolve.
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**

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	Resolved	2/15/09	Pipe discharging to roadway. Owner warned of discharge.	2/20/09	No further discharge observed.
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
Permit Year 7 (2009 - 2010)							
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. The discharge is groundwater, therefore not an illicit discharge issue.		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
Permit Year 8 (2010 - 2011)							
35	15 Hillside	DPW	Closed	3/3/10	Washout from gravel driveway to street	3/3/10	Notice sent to residents from DPW
Permit Year 9 (2011 - 2012)							
36	138 Leland	BoH	Closed	3/22/11	BoH observed floor drain that may discharge to surface. Dye test performed that confirmed discharge to ground surface outside the building.	3/23/11	Owner closed drain (no longer in use).
37	Speen	DPW	Resolved	6/16/11	Septage flow into Cochituate Brook (reported by Brownlea Road resident). Sewer Department removed the blockage, and flow was restored.	6/17/11	Blockage in sewer pipe created backup out of manhole.
38	192 Irving Street	BoH	Ongoing	5/13/11	Citizen complaint of sheen in discharge pipe behind autobody operations. DPW investigated in May and June 2011. DPW and BoH investigated November 2011. BoH will cite owner for various deficiencies, however, no illicit discharge observed in any of the 3 visits (two during rainfall).		Owner advised to ensure that no oil or other discharge enter the catch basin on the property that drains to the swale behind the garage (the location observed by the complainant).
39	14 Louis W Farley Drive	DPW	Resolved	12/27/11	Discharge from sump pump directly to street. This is only a safety issue as the discharge is groundwater. Therefore, it is not an illicit discharge issue.	6/17/11	The homeowner installed additional dry wells on the property to reduce flow to the street.
40	749 Worcester Rd	DPW	Resolved	5/1/11	Discharge of oil or hazardous material discovered while excavating for deep sewer construction. Excavation was dewatered and soil removed per the URAM plan submitted to DEP.	12/21/11	Adequately regulated under DEP RTN3-26467
41	846 Concord St	DPW	Resolved	7/13/11	Discharge of oil or hazardous material discovered while excavating for deep sewer construction. Excavation was dewatered and soil removed per the URAM plan submitted to DEP.		Adequately regulated under DEP RTN3-2100
42	350 Irving Street	DPW	Resolved	1/19/12	Citizen complaint of "spraying some blue liquid all over the parking lot" and not containing roadway salt properly. No action taken.	2/28/12	The business owner sprays a solution of calcium chloride for dust suppression. The salt is stored in large bins with protective walls and roof over 200 feet from the brook, with two earthen berms protecting the brook.
Permit Year 10 (2012 - 2013)							
43	213 Bishop St	DPW	Closed	6/7/12	Citizen complaint of dumping a gallon of paint down a catch basin outside the residence at 213 Bishop Street	6/12/12	Notification sent to the neighborhood describing the incident and educating the residents regarding proper disposal.
44	Vaillencourt Dr.	DPW	Closed	6/18/12	Bagged pet waste at outfall near Hickey Drive	6/20/12	Notices sent to Vaillencourt, Hickey, and Ford Lane residents
45	18-20 Old Wood Rd	DPW	Closed	6/18/12	Debris in channel behind houses - tree limbs	6/20/12	Notices sent to two residences

Town of Framingham
Illicit Discharges or Connections

46	1372 Concord St	DPW	Closed	6/21/12	BoH observed sump pump from unoccupied house that may discharge non-GW liquids to surface.	6/26/12	Observed flow - appears clear, only operates in rain.
47	494 Franklin St	Con Com	Ongoing	6/28/12	Multiple discharges directly to the Sudbury River	11/14/12	NOI reviewed by Conservation Commission, addressing runoff from two major locations.
48	22 Hollis Street	BoH	Closed	7/3/12	Discharge from washing machine to floor drain to sump to SW drain	7/7/12	BoH cited property owner.
49	East / South Sts	DPW	Closed	9/10/12	Dumping of waste into area surrounding open channel	10/18/12	Notices sent to surrounding residences
50	Cherry Street	DPW	Closed	10/9/12	Dumping of waste into area surrounding open channel	11/8/12	Notices sent to surrounding residences
Permit Year 11 (2013 - 2014)							
51	52 Nixon Rd	Con Com	In process	3/1/13	Sediment spilling into roadway from construction		Cease and desist order sent to Contractor, Area cleaned.
52	69 Lowther Road	Bldg & Wire		4/16/13	Roof drain to street		Drain relocated to back of lot.
53	749 Edmands Rd	Bldg & Wire		6/12/13	Sediment spilling into roadway from construction		Cease and desist order sent to Contractor, Area cleaned.
54	23 Kingsbury Rd	DPW		1/2/14	Roof drain to street		Drain relocated to back of lot.
55	884 Waverly St	DPW		1/23/14	Roof drain to street		Drain relocated to side lot.
56	Learned Pond	Con Com		2/7/14	Fertilizer runoff into pond		Notification sent to properties abutting the pond

Town of Framingham - DPW/Engineering 2013 NPDES Outfall Sampling Results

No.	Size	Location- approximate	Day	Time	Water Temp. (°F) YSI Probe	Dissolved Oxygen (mg/L) YSI Probe	Conduc- tivity (mS/cm) YSI Probe	pH strips	Total Chlorine (ppm) strips	Free Chlorine (ppm) strips	Total Hardness (ppm) strips	Total Alkalinity (ppm) strips	Ammonia (mg/L) strips	Nitrate (mg/L) DR890	Detergents (ppm) Chemets	Toal Phosphorus (mg/L) Hach DR890	Coliform (MPN) Colilert	E. Coli (MPN) Colilert	Notes	Headwall Info
		EPA/Mass. Standard (warm water)			>83°F	<5.0 mg/L	>2.0	6.0-8.3	0.0	0.0	>2,000				>2.5	>0.4		see Note 8		
1	24	Shawmut @ Learned Pond	6-Jun	11:30	70	NA	NA	7	0	0	25	40	NA	NA	0.1	NA	NA	NA	See further sampling Sept. 4 2013	
1	24	Shawmut @ Learned Pond	4-Sep	8:50	73.5	7.8	0.42	7.2	0	0	25	40	0	0.3	0.1	<0.5	>2420	435.2	No flow. Sample taken from pond 10 ft off ditch	
1a	18	61 Lincoln St @ Learned Pond	6-Jun	11:00	76	NA	NA	6.8	0	0	25	60	0.1	NA	0.1	NA	NA	NA	7' long X 2'6" tall X 1' wide	
1a	18	61 Lincoln St @ Learned Pond	4-Sep	9:20	75.6	7.2	0.44	6.8	0	0	25	40	0	0.2	0.25	0.43	>2420	62.0	No flow. Sample taken from pond.	
1b	18	Beech St @ Learned Pond	4-Sep	9:35	75.2	7.5	0.44	6.8	0	0	25	40	0	0.2	0.1	0.24	>2420	198.9	No flow. Sample taken from pond.	
1c	18	Thurber St @ Learned Pond	4-Sep	9:45	75.2	7.3	0.44	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Dry outfall, no flow in 10 ft ditch to pond. Temp/DO/Cond taken in pond	
2	15	Brewster @ Farm Pond	24-Sep	11:00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Could not find - 1330 ft N of AST cage	
3	36	Henry St @ Farm Pond	4-Sep	10:40	72.1	7.0	0.97	7.2	0	0	120	80	0	0.1	0.1	0.39	>2420	113.0	No flow. Sample taken from pond.	Loc: South of 2nd yellow switch
4	24	Pearl/Proctor St @ Farm Pond	4-Sep	10:30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Dry outfall, no flow	
5	30	Park St @ Farm Pond	24-Sep	11:15	62.1	3.7	0.32	6.7	0	0	180	100	0.1	0.7	<0.1	0.7	>2420	435.2	Water clear, stagnant, no odor. Sample from trench	Headwall & trench in fair condition
6	30	Dudley @ Farm Pond (opp. Park Rd)	12-Sep	9:50	65.5	5.2	0.82	7.0	0	0	200	80	0	0.1	0.25	0.52	>2420	166.4	Low flow, sample taken instream below outfall	Headwall in good condition
7	18	Fountain/Dudley @ Farm Pond	12-Sep	10:20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Dry outfall, no flow in 200-ft dtich to pond.	Headwall in fair condition
8	18	78 Bethany @ Waushakum	12-Sep	10:45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Dry outfall, no flow in 60-ft dtich to pond.	Headwall in fair condition
9	12	Wood @ Waushakum	5-Sep	10:45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Could not access (need key)	
10	15	Lake Ave @ Waushakum	5-Sep	10:50	75.0	7.5	0.40	6.8	0	0	120	40	0	0.2	0.1	0.20	816.4	7.5	No flow. Sample taken from end of dock (pond)	
11	12	463 Hollis @ Waushakum	5-Sep	11:08	72.2	5.2	0.39	6.8	0	0	120	40	0	0.2	0.1	0.25	>2420	579.4	No flow from outfall. Sample taken from pond	
11a	Channel	Outlet of Waushakum Pond	5-Sep	11:27	74.0	7.4	0.40	7.2	0	0	200	60	0	0.3	0.1	0.33	>2420	12.2	Sample taken at entrance to outlet	
12	54	Tripp @ BDB (Beaver Dam Brook)	12-Sep	11:50	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Dry outfall, no flow in 20-ft dtich to brook.	Headwall in poor condition
12a	Channel	Beaver Dam Brook @Herbert St bridge	12-Sep	11:55	69.5	4.7	0.54	7.2	0	0	120	80	0	0.4	<0.1	0.84	>2420	165.8	Instream sample upstream of bridge, low flow.	
13	24	Herbert St @ BDB & Sud. Aqueduct	12-Sep	11:25	69.9	5.4	0.70	7.2	0	0	200	80	0	0.2	<0.1	0.41	>2420	164.4	Low flow, sample taken instream below outfall	Headwall in good condition
13a	Channel	Herbert St @BDB & Sud. Aqueduct	12-Sep	11:15	69.8	5.3	0.55	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Instream measurements, no sample taken	
14	24	Irving/Loring @ BDB	21-Aug	9:40	66.1	5.7	NS*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Could not reach Flow seen. Downstream measurements taken. Water cloudy	In abutment. In good shape
15	24	Roxanna @ BDB	21-Aug	9:50	67	5.1	NS*	7.6	0	0	150	80	0	0.6	0.1	5.5	>2420	524.7	Water Cloudy. Low flow	In good shape
16 A	12	Beaver St @ BDB	21-Aug	10:00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Could access - in bridge abutments.	Unknown
16 B	12	Beaver St @ BDB	21-Aug	10:00	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Could access - in bridge abutments.	Unknown
17	36	Coolidge/ Morton @ BDB (Park)	21-Aug	10:10	67	5.9	NS*	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	No flow	In good shape
18	48	Coolidge/ Morton @ BDB (Park)	21-Aug	10:30	68	7.8	NS*	7.6	0	0	200	80	0.1	0.8	0.15	0.25	>2420	69.1	Water Cloudy. Low flow	In good shape
19	24	Taralli Terrace @ BDB	21-Aug	10:50	67	5.9	NS*	7.6	0	0	200	60	0.1	0.3	0.15	0.41	>2420	248.1	Could access - in bridge abutments.	Unknown
19A	12	Willis @BDB	21-Aug	11:10	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	No flow from pipe.	None. CMP pipe outfall only.
20 A	48	Interfaith Terrace @ BDB	21-Aug	11:30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Could not access due to closed gates	
20 B	48	Interfaith Terrace @ BDB	21-Aug	11:30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Could not access due to closed gates	
22	20	Mellen Street and Cypress Street	24-Sep	10:45	58.1	6.3	58.1	6.8	0	0	250	60	0.1	1.7	0.1	1.7	1119.9	8.5	Low flow, sample outfall. Water clear no odor	Outfall ~100 ft from end of drvwy
23	12	End of Guild Rd	24-Sep	10:10	52.9	5.9	0.4	6.7	0	0	120	40	0	0.1	0.1	0.37	>2420	118.7	Outfall dry, sample taken from instream (Beaver Dam Brook). Water clear no odor.	
24	Channel	Near Mt. Wayte Ave & Dudley Rd	6-Jun	12:00	NA	NA	NA	7	0	0	120	100	0.25	NA	0.1	NA	NA	NA	Instream sample from bridge. Couln't take temp.	
25	12	Edgell at Cemetery Brook (201 Edgell)	5-Sep	8:50	62.6	7.2	1.46	7.2	0	0	250	80	0	0.7	0.15	0.53	>2420	435.2	Could not reach outfall. Sample from stream	Outfall inside culvert approx. 10ft
26	12	14-16 Arnold Rd	5-Sep	10:05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Outfall dry.	
27	60	Grove St at Turnpike (larger? x2)	5-Sep	10:20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Outfall dry. No access through fence	
28	Channel	East of 33 Parmenter Dr.	12-Sep	9:30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	Outfall dry.	

- Notes
- 1 All samples are dry weather samples. Samples taken instream are for informational purposes only and do no reflect condition of water in the outfall itself.
- 2 Values highlighted and underlined in maroon do not meet the IDDE or water quality standard (above or below as appropriate to the test).
- 3 From 314 CMR 4.06: All Waters in Framingham are Class B & warm water fisheries except Reservoir #3 (Foss) = Class A
- 4 *Conductivity probe not calibrated until 8/23/2013
- 5 Standards for temperature, dissolved oxygen, and pH are found in 314 CMR 4.00 "Massachusetts Surface Water Quality Standards".
- 6 From Table 45 in EPA's IDDE manual (October 2004):
- | | | | |
|------------------------|------------|--|----------------------|
| Ammonia Benchmark | >50 mg/L | Ammonia Instream potential problem level (Table 51): | 0.3 mg/L |
| Conductivity Benchmark | >2.0 mS/cm | Hardness Benchmark | >2,000 mg/L as CaCO3 |
- 7 From Table 48 in EPA's IDDE manual for detergents: Indicator of sanitary or wash water: > 0.25 ppm
- 8 From Table 50 in EPA's IDDE Manual: E.Coli typical standards:
- | | | | |
|---|---------------|--|---------------|
| Designated beach areas | 235 MPN/100mL | Lightly used full body contact rec area | 406 MPN/100mL |
| Moderately used full body contact rec. area | 298 MPN/100mL | Infrequently used full body contact rec area | 576 MPN/100mL |
- Standards from MassDEP standards - not from 310 CMR 4.00: Single sample limit 235 colonies/100 ml (freshwater only); geometric mean 126 colonies/100 ml (freshwater only)
- 9 From Table 51 in EPA's IDDE Manual: In-stream nutrient potential problem levels: Total Phosphorus 0.4 mg/L
- 10 NA = Not analyzed: Prior to 8/21/2013, samples not analyzed for DO, Conductivity, Nitrate, Total Phosphorus, or bacteria, due to lack of analytical equipment
- 11 NS = Not sampled