Municipality/Organization: Town of Weston

EPA NPDES Permit Number: MAR041068

MaDEP Transmittal Number: W-035252

Annual Report Number & Reporting Period: No. 10: March 2012-March 2013

# NPDES PII Small MS4 General Permit Annual Report

#### Part I. General Information

Contact Person:	Stephen R. Fogg, P.E.	Title:	Town Engineer
Telephone #:	781-786-5115	Email	fogg.s@westonmass.org

#### 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:	Imas Jander Ore
Printed Name:	Donna VanderClock
Title:	Town Manager
Date:	April 30, 2013

#### Part II. Self-Assessment

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

BMP 1-6, Outreach to Private Ways, has only been partially completed. The Town Engineer has been in communications with the Weston Roads Trust, which owns and manages several miles of private ways and their associated drainage systems.

BMP 2, Public Involvement and participation has not been achieved to the desired degree. Despite this, the passing of the Town of Weston Stormwater & Erosion Control By-law and Stormwater & Erosion Control Regulations has raised awareness levels in the building community.

# Part III. Summary of Minimum Control Measures

#### 1. Public Education and Outreach

BMP	<b>BMP Description</b>	Responsible	Measurable	Progress on Goal(s) –	Planned Activities –
ID #		Dept./Person	Goal(s)	<b>Permit Year 10 (12-13)</b>	<b>Permit Year 11 (13-14)</b>
		Name		(Reliance on non-municipal	
1 1	Elver to residents	SUASCO	Distribute to 75% of	Completed in year 1	
1-1	Figer to residents	WCC and SRF	residents	Completed in year 1	
Revised		SRF & RES			New Flyer to residents
1-2	Lesson Plan for Fifth Graders	SUASCO WCC and SRF	Lesson plan taught	Lesson plan continuing in schools. Lesson and activity	Lesson Plan to continue.
Revised	Plan to be taught in 4 <sup>th</sup> grade			for 4 <sup>th</sup> and 5 <sup>th</sup> graders on Stormwater runoff.	
1-3	Media Campaign	SUASCO	Media packet given	Article on Weston's water	Stormwater education
		WCC and SRF	to press	resources in Weston/Wellesley	article in local media spots.
Revised				magazine.	
1-4	Flyer to Businesses	SRF & RES	Distribute to 50% of	Mailed 165 letters/flyers	Send additional updates,
			businesses		memos, flyers
Revised			Distribute to 100 %		
			of businesses		
1-5	Video	SUASCO	Show video at		
		WCC and SRF	public meeting		
Revised	"Stormwater	SUASCO	Implement	Ad campaign displayed at	
	Matters Outreach		stormwater	informational meetings in	
	and Participation		advertising	spring 2011	
	Campaign"		campaign		

### 1a. Additions

1-6	Outreach to Private	DPW	Develop and send	Communications established	Follow up as necessary
	vv ays		correspondence to	and objectives stated with	
			road trusts and	Roads Trust	
			private way owners		
			about stormwater		
			issues		
1-7	Illicit Discharge	Stormwater	Hold public	Completed	none
	Detection and	Working	meeting to describe		
	Elimination By-	Group	proposed bylaw and		
	Law		regulations		
1-8	Public	Conservation	Make presentation	Two-Part Presentation to Env.	Continue as opportunities
	Presentations	Agent	to community	Science students at school.	arise; possible library
			groups about	Presentation to Boy Scouts at	presentation
			stormwater	Town Hall.	

1-9	Proposed by-law	Stormwater	Hold informational	By-law adopted at 2011	Continued outreach and
		Working	meetings and	Annual Town Meeting, May,	education around new by-
		Group	hearings on	2011	law
			proposed		
			stormwater and		
			erosion control by-		
			law		
1-10	Stormwater talk to	SRF	High School	Class visited DPW May, 2012	Class to visit again.
	High School		biology class	and April 2013	
			learned about		
			stormwater		
			pollution.		

#### 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (12-13) (Reliance on non-municipal	Planned Activities – Permit Year 11 (13-14)
2-1 Revised	Traveling Display	SUASCO WCC and SRF	3 months on display	None - Completed in year 1	Use display as opportunity arises. Display at Town Hall and/or other common area
2-2 Revised	Poster contest (5 <sup>th</sup> grade)	SUASCO WCC and SRF	Hold contest	Contest rules provided to School Dept.	None
2-3	Summit Event	SUASCO WCC and SRF	Hold local stormwater summit meeting	none	none
Revised					
2-4	Photo contest (High School)	SUASCO WCC and SRF	Hold contest	None	None – being considered for next permit cycle
Revised					
2-5	Super—summit event	SUASCO WCC and SRF	Participate in regional "super- summit"		
Revised	"Stormwater Matters Outreach and Participation Campaign"	SUASCO	Implement stormwater advertising campaign	Ad campaign displayed at informational meetings in spring, 2011.	

## 2a. Additions

2-6	Stream team survey	SRF and	Complete survey	None	Provide GIS mapping and
	of Seaverns Brook	stream team			complete survey
Revised	Stream team survey	Weston Girl	Complete survey	Survey completed, April 2008	
	of Hobbs Brook	Scouts			

2-7	Catch basin	SRF	Volunteer group(s)	completed in a previous year	Continue program to other
	stenciling program		to install 180		areas of Town
			storm drain		
			markers in		
			selected locations		

# 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (12-13) (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11 (13-14)
3-1	Stormwater System Mapping	DPW	Complete mapping of stormwater system over a 3 year period	None – completed during year 3	Completion of stormwater system mapping using GPS to construct pipe network
3-2	Dry weather screening of outfalls	DPW	Visual inspection/report of known outfalls, 33% each year	None – outfalls inspected during year 3	Re-inspect outfalls and document changes from last inspection
3-3	Illicit Discharge Elimination	DPW, Board of Health	Trace non- stormwater flows and eliminate within 1 year	none	Sample flowing outfalls using IDDE protocol
3-4	Water Quality Monitoring	Cambridge Water Supply	Obtain and review results of regular monitoring	Water quality data summary from CWS - See Attachment A	Same as prior years
3-5	Amend Stormwater regulations	DPW	Amended regulations adopted at 2003 Annual town Meeting	Goal met	
Revised			Amended regulations adopted at 2010 Annual Town Meeting	Goal met	
3-6	Septic System Monitoring Program	Board of Health	Develop, implement and enforce septic pumping	BOH not planning to institute mandatory pumping	
Revised			System in place to identify frequent pumping	Database created and in use; frequent pumping locations are investigated	
3-7	Dechlorination of New Water Mains	DPW - Water Div.	Use dechlorination tablets when flushing new mains	New water mains installed in two streets, and were dechlorinated before flushing.	As needed
3-8	Trench Dewatering Policy	DPW	Require siltation control on all trench dewatering projects	Siltation control specified on all capital projects; controls used on DPW projects	As needed

## 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (12-13) (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11 (13-14)
4-1	Erosion and Sediment Control Bylaw	Stormwater Working Group	Develop, implement and enforce bylaw	By-law adopted at Town Meeting, May 2011 Stormwater Management Permits reviewed and approved; construction projects monitored & inspected.	Continue full implementation of by-law and regulations
Revised	Implementation of by-law and regulations	Stormwater Permitting Authority(SWPA)	All projects meeting established thresholds of land disturbance required to obtain Stormwater Permit	Regulations and permit procedures in place November 2011;	Same as prior years
4-2	Planning Board review of projects	Planning Board	All projects reviewed for compliance with runoff control measures	All applicants are required to demonstrate that they are addressing stormwater runoff control during construction	Same as prior years
4-3	Conservation Commission review of projects	Conservation Commission	All projects reviewed for compliance with runoff control measures	All applicants are required to demonstrate that they are addressing stormwater runoff control during construction	Same as prior years
4-4	Street Opening permit process	DPW	Inspections conducted for compliance with Stormwater Regulations	DPW inspector assigned to this task	Inspections documented and reported in annual report – continue this program.
4-5	Building Permit process	See 4-1	See 4-1	Stormwater Permit must be approved before Building permit is issued.	

#### 4a. Additions

4-6	Stormwater	SWPA	Review all	Reviewed 100 Stormwater	Review as needed
	Management		applications;	Management Applications	
	Permit review of		conduct site		
	projects		inspections		

the progress of the aw.
prior years
to monitor
will not issue a Compliance until cant has d a post- ion stormwater s) inspection and a completed nce checklist
tc vo tc ca d io s) l a ca

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

# 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 10 (12-13) (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11 (13-14)
6-1	Street Sweeping	DPW	Sweep all public streets annually	All public streets swept at least once per year	Same as prior years
6-2	Catch Basin Cleaning	DPW	Clean all public catch basins annually	All public catch basins cleaned at least annually	Same as prior years
6-3	Drainage Improvement Projects	DPW	Incorporate structural BMPs into each project	Church Street project completed, including approx. 750 lin. ft. of drainage and road improvements, incorporating stormwater BMPs.	North Ave. drainage project; South side drainage project design (flood mitigation) 5 year capital plan tocontinue

6-4	DPW Housekeeping	DPW	Conduct environmental audit, implement	Completed	none
Revised	Environmental Management System	DPW	recc. Develop and Implement Environmental Management Swetem	Implementation of Stormwater Best Management Practices at new DPW facility opened February 2011	<b>Update maintenance</b> <b>program.</b> Continuing program
6-5	Roadway De-icing Program	DPW	Install computerized spreader controls; alt. dispensing equipment	Computerized controls installed; continue to track usage to achieve optimal application rate. Deicing applications rates have been reduced to 688 lbs./lane mile.	Continue to seek optimal levels to achieve balance between public safety and environmental impact
6-6	Waterway Maintenance	DPW	Clear waterways of debris, 3 year rotating basis	Notice of Intent filed with Conservation Commission for permit to do maintenance	Continuing project
Revised	Ditch maintenance	East Middlesex Mosquito Control Projec	Clear sediment from ditches	ditch clearing accomplished in one area	Identify and clean as time and budget allows
6a. A	dditions				
6-7	Employee Training Program	DPW	Provide all departments with training	Done for DPW staff as part of EMS program	
6-8	New DPW Facility	DPW	Incorporate Green Building Design into project	Construction completed and building opened Feb. 2011	Implementation of Stormwater Best Management Practices at

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

A summary of water quality monitoring results from Cambridge Water Supply (CWS) is included as Attachment A. In general the most recent data shows low levels of E-Coli bacteria compared to the range of concentrations measured at stream locations in prior sampling rounds. Weston has received no notification of specific water quality concerns from staff in the Watershed Protection Division of CWS. This agency has staff dedicated to monitoring water quality within the watershed on a daily basis.

Attachment B – Town of Weston DPW Sand/Salt Report 2012-13 which includes the amount of sand and salt used, number of treatments, and average loads per lane mile.

A tracking system was put in place in 2004 for private development stormwater BMPs that are reviewed and approved by the Town Engineer. This system was updated to incorporate the new Stormwater Permit provisions under the Stormwater and Erosion Control By-Law and Regulation. To date, approximately 350

new DPW facility opened February 2011; Continue Maintenance Program of

BMPs.

projects have been reviewed.

A Stormwater Engineer has been hired who reviews Stormwater Management Permit Applications for compliance with the new Town of Weston Stormwater & Erosion Control By-Law and Regulations. 100 Stormwater Permit Applications were submitted and reviewed in 2012.

# ATTACHMENT A

# CAMBRIDGE WATER SUPPLY – WATER QUALITY MONITORING SUMMARY



2012 Surface Water C	Quality Data, C	Veston										
Baseflow (no seconda	ry tributary o	or stormwater	samples i	n Weston, 20	)12)							
						DO						
				Water	SpC	(%Saturatio				Turbidity	Salinity	
SiteID	USGS ID	Date	Time	temp. (°C)	(μS/cm)	n)	DO (mg/L)	рΗ	Orp mV	(NTU)	PSS	
SB@VILES	01104370	2/7/2012	10:22:38	1.93	254	99.5	13.81	8.13	67	0.5	0.10	
SB@VILES	01104370	6/19/2012	10:15:00	15.83	294	91.1	9.06	7.16		NS	0.14	
SB@VILES	01104370	9/18/2012	10:14:18	14.00	335	90.2	9.31	7.41	90	NS	0.16	214.60
SB@VILES	01104370	11/6/2012	10:20:49	5.06	241	92.0	11.84	7.33	55	NS	0.11	153.90
RT 20	01104460	1/10/2012	11:00:11	2.21	514	100.5	13.83	7.83	80	3.4	0.20	
RT 20	01104460	6/12/2012	9:55:00	17.58	439	86.6	8.29	7.24		2.0	0.21	
RT 20	01104460	8/21/2012	10:17:23	21.01	569	87.2	7.78	7.06	112		0.27	364.0
RT 20	01104460	11/6/2012	11:00:03	6.22	393	88.9	11.09	7.21	52		0.18	251.4
SUMMER ST	01104475	1/10/2012	11:30:25	4.70	259	104.1	13.42	7.88	164	3.20	0.10	
SUMMER ST	01104475	6/12/2012	10:20:00	15.74	259	94.6	9.41	7.48		1.20	0.12	
SUMMER ST	01104475	8/21/2012	10:40:44	17.12	279	95.5	9.22	7.52	162		0.13	178.4
SUMMER ST	01104475	10/23/2012	10:28:02	12.18	243.6	92.9	10.01	7.52	125		0.11	155.9
MBS	01104453	2/7/2012	10:45:03	3.86	505	98.07	12.91	7.9	90	1.60	0.20	
MBS	01104453	6/19/2012	10:40:00	19.57	489	44.40	4.08	7		3.50	0.24	
MBS	01104453	9/18/2012	10:39:43	18.36	516	16.30	1.53	7	97		0.25	330.30
MBS	01104453	11/6/2012	10:44:10	7.15	371	41.20	5.03	7	103		0.17	237.20
HB@KG	01104440	2/21/2012	10:15:00	5.40	644	102.3	12.98	7.93	145	-0.4	0.3	
HB@KG	01104440	7/10/2012	9:34:51	22.80	699.8	92.6	7.97	7.31	133		0.3	447.8
HB@KG	01104440	9/25/2012	10:18:11	16.62	697.2	95.9	9.4	7.48	91		0.34	446.2
HB@KG	01104440	11/13/2012	10:56:52	11.01	643.4	94.7	10.49	7.35	94		0.31	411.7
INDUST BROOK	01104433	2/21/2012	10:01:51	2.70	2311	91.79	12.42	8.46	46	1.4	1.10	
INDUST BROOK	01104433	7/10/2012	9:16:24	18.30	1981	66.5	6.23	7.17	44		1.0	1268.0
INDUST BROOK	01104433	9/25/2012	10:03:50	13.51	1693	68.3	7.13	7.08	33		0.86	1083
INDUST BROOK	01104433	11/13/2012	10:38:41	12.37	1407	56.6	6.06	6.96	41		0.71	900.6

Air	BP						Total					
temp.	(mmHg	Staff	Discharge		NH3	ΤΚΝ	Phos.	Ortho Phos.	lab			
(°F)	)	Height	(inst. cfs)	Comments	(mg/L)	(mg/L)	(mg/L)	(mg/L)	number	Ca (mg/L)	Cl (mg/L)	Color (CU)
41	755	1.13	20.0		<0.05	<0.5	0.027	NS	2012-0635	14.6	52.4	26
66	764	0.65	5.1	quanta insitu, use l	0.082	<0.5	0.026	NS	2012-2974	19.2	62.7	46
57	762	0.43	1.7	USGS real-time wel	0.089	<0.5	0.015	NS	2012-4556	19.8	66.2	19
36	767	0.99	15.0		0.075	<0.5	0.024	NS	2012-5442	17.9	45.9	70
37.0	752	5.62	42.00	manta insitu, FDUP	0.082	<0.5	0.014	NS	2012-0172	22.5	120.0	28
68.4	763	5.02	12.00	Quanta insitu	0.087	<0.5	0.031	NS	2012-2848	23.3	101	48
75.4	762	5.69	46.00	manta2 insitu, no c	0.160	0.50	0.025	NS	2012-4068	26.2	142	31
37.4	767	5.29	25.00	SH, Q from WEB	0.100	<0.5	0.025	NS	2012-5445	21	89.2	61
39.7	752.0	0.54	1.00	manta insitu, onlin	0.19	<0.5	0.011	NS	2012-0174	18.9	29.7	12
69.8	763.0	0.44	0.60	quanta insitu, quar	0.17	<0.5	0.038	NS	2012-2849	18.7	38.7	20
76.3	762.0	0.32	0.26	manta2 insitu, obse	0.11	<0.5	0.032	NS	2012-4069	16.9	40.5	10
56.8	763.0	0.40	0.46		<0.02	<0.5	0.04	NS	2012-5215	16.3	31.5	22
42.6	755.00	96.42	3.50		0.063	<0.5	0.022	NS	2012-0636	21.3	129	41
67.5	764.00	96.32	1.50	quanta insitu, FDUI	0.084	0.770	0.02	NS	2012-2976	17.4	129	85
65.1	762.00	96.26	0.45	ORP sensor not cali	0.089	<0.5	0.015	NS	2012-4558	21.1	124	59
37.0	767.00	96.43	2.40	Discharge value we	0.210	0.690	<0.01	NS	2012-5443	15.7	87.2	110
36.0	765	1.08	2.78	vtracker, insitu mea	0.054	<0.5	0.016	NS	2012-0880	23.40	167	19
75.4	761	2.08	24.63	ırb, Q taken 7/11/1	<0.02	<0.5	0.014	NS	2012-3345	23.3	201	19
61.92	766	1.72	14.89	aken at 13:45, ORP	0.098	<0.5	0.021	NS	2012-4687	26.30	198	11
49.1	765	1.28	5.59	surement taken at 1	0.045	<0.5	0.021	NS	2012-5563	53.5	166	26
33.80	765	0.74	0.14	discharge estimate	0.24	<0.5	0.017	NS	2012-0879	84.70	659	13
74.7	761	0.68	0.07	Manta2 insitu, no t	0.33	0.86	0.024	NS	2012-3344	86	593	26
56.32	766	0.72	0.11	manta2 insitu, ORP	0.21	0.77	0.019	NS	2012-4686	74.60	491	27
48.74	765	1.80	8.54	Discharge estimate	0.27	0.52	0.052	NS	2012-5561	64.1	380	42

у								Alkalinity		Total		Lab	
(umhos/cm	E-Coli		NO3	NO2				(mg/L	Total Al	Coliform	Total Fe	Turbidity	UV254
)	(MPN)	Mn (mg/L)	(mg/L)	(mg/L)	Lab pH	Na (mg/L)	TOC (mg/L)	CaCO3)	(mg/L)	(MPN)	(mg/L)	(NTU)	(abs)
252	11	0.027	0.889	< 0.004	7.00	25.1	3.560	27.0	0.027	550	0.24	1.2	0.160
300	230	0.035	1.050	<0.004	7.13	34.7	6.420	34.5	0.048	7700	0.73	2	0.272
324	180	0.022	1.71	<0.004	7.12	39.6	3.700	37	0.006		0.186	0.63	0.14
237	36	0.031	0.64	<0.004	7.06	29.3	11.3	29	0.076	>2419.6	0.676	1.06	0.488
499	14	0.098	0.680	<0.01	7.280	79.00	4.45	28.0	0.029	610.0	0.535	1.68	0.17
439	120	0.16	0.74	<0.004	7.09	61.3	6.65	39.5	0.105	16000	1.2	2.94	0.267
554	110	0.184	0.267	<0.004	7.21	91.6	6.61	39	0.121	>2419.6	0.853	1.37	0.219
385	16	0.123	0.65	<0.004	7.06	54.2	9.72	35	0.064	2400	0.583	1.06	0.402
262	0	0.032	2.000	<0.01	7.52	27.6	2.320	36.0	0.028	610	0.260	1.08	0.083
273	25	0.025	1.4	<0.004	7.48	28	3.71	42	0.08	4100	0.5	1.23	0.134
290	52	0.012	2.53	<0.004	7.74	30.9	2.84	41.5	0.021	>2419.6	0.178	0.353	0.083
251	22	0.015	1.24	<0.004	7.47	24.8	4.79	43.5	0.027	>2419.6	0.237	0.309	0.153
494	1	0.037	1.080	<0.004	7.07	94.1	5.27	28	0.076	440	0.49	1.35	0.250
479	8.4	0.041	<0.005	<0.004	6.87	74.7	13.00	36	0.052	2700	0.80	2.17	0.469
491	71	0.101	< 0.005	<0.004	6.75	82.6	10.00	43	0.134		775	1.3	0.404
360	13	0.028	0.25	0.005	6.74	55.6	15.4	28	0.151	770	0.577	1.22	0.702
622	8.6	0.18	0.527	<0.004	7.17	82	3.23	29.5	0.019	610	0.305	1.65	0.112
674	58	0.167	<0.005	<0.004	7.34	106	4.12	27.5	0.055	>2419.6	0.444	1.04	0.142
654	73	0.10	0.014	<0.004	7.52	116	4.39	31	0.027	2000	0.256	0.548	0.093
632	40	0.436	0.162	<0.004	7.32	228	5.3	31.5	0.209	>24196	1.17	2.8	0.141
1950	1	0.392	0.988	<0.004	6.99	299	1.93	80.5	0.016	2400	0.58	1.96	0.086
1680	140	0.605	0.54	0.04	7.31	324	3.68	80.5	0.172	>2419.6	1.3	2.85	0.137
1470	99	0.360	0.554	0.01	7.25	271	4.97	85	0.024	>2419.6	1.06	3.74	0.144
1290	140	0.528	0.238	0.007	6.94	247	6.1	94	0.104	>24196	1.63	4.82	0.213

# ATTACHMENT B

THE TOWN OF WESTON DPW SAND/SALT REPORT 2012-2013 November 7, 2012 thru March 19, 2013

#### TOWN OF WESTON DPW SAND/SALT REPORT 2012-13 November 7, 2012 thru March 19, 2013

TRUCK #	DRIVER	ROUTE #	# of TREATMENTS	LOADS	LBS/Lane Mile	Total LBS
H10 *	Carlos Rivera	MID-EAST	50	82	703	984,000
H12 *	Chuck Surette	MID-WEST	46	81	729	972,000
H11*	Scott Richwein	SOUTH-EAST	42	61	601	732,000
H15*	Mike Page	SOUTH-WEST	49	98	774	1,176,000
S10 *	Kevin Tuttle	NORTH-EAST	32	41	641	492,000
S12 *	Joe Williams	NORTH-WEST	52	86	601	1,032,000
S14*	Andy Vienneau	NORTH	51	103	932	1,236,000
		SCHOOLS	28	33		396000
			Total Streets:	585		7,020,000
			Schools:	33		396,000
			Total Loads:	618		7,416,000
				LBS per Lane Mile	688	

6 Tons per Load 98.5 Linear Miles 197 Lane Miles

MATERIAL USED: 3,708 TONS 74.5 INCHES OF SNOW MATERIAL PURCHASED: 3,542 TONS 34 MAJOR DEICING EVENTS 6 PLOW EVENTS

\* Compu-Spread Equipped