

Municipality/Organization: Town of Holliston

EPA NPDES Permit Number: MAR041122

MaDEP Transmittal Number: W-041092

**Annual Report Number
& Reporting Period:** March 2016 – March 2017

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Jeff Ritter **Title:** Town Administrator

Telephone #: (508)429-0608 **Email:** ritterj@holliston.k12.ma.us

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: Jeffrey Ritter

Title: Town Administrator

Date: May 1, 2017

Part II. Self-Assessment

Stormwater and Land Disturbance By-Law. The Town's Stormwater and Land Disturbance By-Law (enacted in 2008) as well as amendments to the zoning by-law for earth removal, illicit discharge and compact residential development in the village center remain in place yet have not seen a lot of permitting because of the recession and slow development recovery. The Planning Board adopted regulations to implement the Stormwater Management and Land Disturbance By-Law in September 2008 and has not amended them to date. One Stormwater and Land Disturbance Permit was issued under the By-Law in 2016. The existing industrial facility is being retrofit for use as a regional collision center and parts distribution facility for Herb Chambers. Project engineers took special care in its planned retrofit of the existing drainage system, making multiple provisions for the automotive uses.

Other Local Regulations: Wetlands By-Law, Planning Board/Board of Health Rules and Regulations for Subdivisions and Site Plans. In May 2014, the Town Meeting adopted wholesale changes to the local wetland protection by-law. Approved by the Attorney General in Fall 2014, drafting and adoption of implementing regulations remains underway. In January 2014 and January 2015, the Planning Board adopted changes to its subdivision regulations incorporating additional Low Impact Development techniques for stormwater management and infrastructure construction as well as construction oversight. Site plan decisions were issued to retrofit a 1960's vintage service and gas station, a 23,000 s.f. classroom and storage facility for an existing industrial park tenant, a 23-space commercial parking lot, a vehicle and equipment storage facility and vehicle wash facility for a local asphalt company, parking lot retrofit and small industrial addition within Hopping Brook Industrial Park, and use of 36,000 s.f. for a medical marijuana production facility. Temporary erosion and sediment control measures were included in all permits, including several catch basin silt sacks, temporary stilling basins, and check dams. All permits include stormwater BMPs such as rain gardens and are designed for no net increase in stormwater rate or volume post- development. The Board of Health adopted a Floor Drain Regulation effective March 1, 2013 pursuant to MGL c. 111, s. 31 and 122. One application was processed under these regulations in 2016.

Central Mass. Mosquito Control Project. In conjunction with the Central Mass. Mosquito Control Project, the Highway Department completed phase 2 of planned Mudville drainage improvements and has been actively managing beaver dam removal in hotspots throughout the community that severely impact local waterways and the municipal stormwater system.

Hazardous Waste Collection. The Town remains a partner in the 11-community Charles River Household Hazardous Waste Coalition. Our next waste collection event is scheduled for July 2017. The collection day in July 2016 resulted in materials collected from 207 residents. The Town's annual expenditure on this event is approximately \$15,000.

General. In July 2014 the Town hired its first DPW Director. We as a staff continue to subscribe to publications such as Stormwater and Public Works as well as the Center for Watershed Management's newsletter. We also continue to participate, as do our volunteer and elected board members, in professional development training such as that offered through the Mass. Association of Conservation Commissions, Citizen Planner Training, Mass. Association of Planning Directors, American Planning Association, Mass. Highway

Association, Mass. Environmental Trust, Mass. Audubon, Charles River Watershed Association and New England Water Works Assoc. (located in Holliston).

Representatives in the Highway Department, Water Department, Planning Board, Conservation Commission, Building Department Board of Health and Selectmen's office continue to work together to discuss progress made on the program and establish new goals. Over the past year, we have made a lot of progress in the areas of self and public education as well as improving the physical plants at town owned facilities. In April 2013, the Town's new much-anticipated GIS system went live (SimpliCITY Mapping by People GIS) and is managed through the Fire Chief.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Current Permit Year
1A	Establish a classroom education program as well as cable updates on issues.	ConCom, Water, Fire/EMA, Schools	Provide information on basics of stormdrains, flooding, habitat protection, etc.	Continue Program. Added cable access TV educational programming (Safety and Environment). Conservation Agent mentored an environmental science class at Holliston High.	Continue Program. Continue cable access TV educational programming and announcements for cleanups, flooding programs, household hazardous materials days, etc..
1B	Distribute brochures and fact sheets to residents and businesses	ConCom, Selectmen, Planning Board		Continue distribution at meetings and via town mailings and at 'Celebrate Holliston' annual community event.	Update website as appropriate with links to regional resources.
1C	Publish articles on stormwater protection in local papers.	ConCom/Conservation Associates, Planning Board		Local 'Holliston Reporter' coverage of all Conservation Commission meetings and proposed by-law amendments.	Continuing as adjustments are contemplated. The Police Chief has proposed an enforcement mechanism for street flooding and illicit discharges to the MS4 which is under review.
1D	Develop stormwater section on town website	Selectmen	Website with links	Town website has an established stormwater management area. It can be accessed by going to www.townofholliston.us	Update website as necessary.
1E	Create stormwater educational display	Water Department/BOH	Active display area	Ongoing. Posters placed in land use section of Town Hall.	Ongoing. Construction Best Management Practices currently posted at www.townofholliston.us .

1a. Additions - none

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Current Permit Year
2A	Establish a stormwater hotline	Planning Board; Building Dept.& ConCom	Record number of calls	Covanta Energy/Transriver has established its own Holliston Transfer Station hotline.	Ongoing. Land use departments share this responsibility and make referrals as needed.

2B	Distribute stormwater educational material during public meetings	Selectmen, Planning Board, Con Com, Water Dept.		Stormwater information available on town website. Handouts available at two public counters.	Update website as necessary. Keep pamphlets current. 2012 include mosquito info, FEMA info, and household has. waste collection as well as medical waste disposal
2C	Conduct river and pond cleanups	ConCom and Highway Dept.	Conservation Associates undertaking cleanups of all waterways in the town as well as Trail Comm. clean-up of Upper Charles Trail	The Conservation Commission is investigating funding for long-term solution to Lake Winthrop water quality issues. Highway Dept. is working on stream clearing and culvert repair	Ongoing. Phase I study completed for Lake Winthrop Available for review. CPA monies being sought for FY18 to complete further study of impaired dams on three ponds deemed by DEP to be hazardous. Culvert repair completed in downtown residential (2 locations) as well as north end of Cedar Swamp watershed (Godwin Dr.).
2D	Mark storm drains	Highway	50% of drains marked by year 5	Will inspect stencils for clarity and re-paint as necessary	Inspect stencils for clarity and re-paint as necessary
2E	Native Tree/shrub planting program.	Planning Board, ConCom	Tree replacement	The Commission and PB require that native trees be used in wetland replication or remediation. The Conservation Associates continue to plant native species on conservation lands.	Planning Board site plan review and subdivision regs. as well as ConCom regs. now have native species preferences for private site development (commercial and residential).

2a. Additions – The Town will evaluate the feasibility of installing “No dumping” signs in areas prone to bulky item dumping, especially near the transfer station on Marshall Street. Dog Officers have been active in issuing non-criminal disposition fines with regard to dog waste and education regarding same (Town by-law provisions adopted in May 2005).

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (reliance on non-municipal partners indicated, if any)	Planned Activities – Current Permit Year
3A	Develop primary storm drain system map	Highway	100% of system mapped on GIS	Ongoing. As-builds of new residential subdivisions being actively solicited.	Continue to update as needed. Digital as-built drawings now required.
3B	Complete mapping of stormwater outfalls	Highway	All outfalls mapped by Year 5.	Ongoing.	100% complete.

3C	Illicit discharge prohibition bylaw	Planning Board, Board of Health		Currently under the jurisdiction of the Holliston Board of Health regulations.	Investigate strengthening regulations.
3D	Develop illicit discharge detection and elimination plan	Highway, Board of Health	Outfalls examined. Sources traced and documented	Will start inspections during dry season. Concentrating in priority areas. Extreme rainfall events in 2009 and 2010 resulted in some detection and elimination.	On-going, yearly inspections.

3a. Additions. Town trash contractors will continue to provide curbside pickup of leaves and yard wastes (ongoing annual). Information made available on local cable access television.

3E	Hold Annual Hazardous Waste Day (HHHW).	Selectmen	Annual event planned	We held a HHHW day last fall and part of a multi-town consortium. Tire collection was held in 12/11 in concert with the BOH and Central Mass. Mosquito control Project.	Ongoing annual participation. Last event in July 2016.
3G	Evaluate stormwater discharge to rare or endangered species habitats	ConCom	Locating habitats is an on-going process	MNHESP estimated habitat map shows certified vernal pools and estimated polygons. Vernal pool certification is ongoing.	Continue to participate and partner with Massachusetts Natural Heritage Program BioMap Project, especially in site development review.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Current Permit Year
4A	Develop erosion control bylaw	Planning Board, Building Inspector	Bylaw at Town Meeting by end of year 2.	Conservation Commission rules and regulations adopted 2005. Planning Board regulations strengthened 2007 and by-law adopted May 2008.	Implementation of by-law on-going. Regulations adopted include fee schedule and enforcement provisions. Activity and enforcement noted above.
4B	Establish a procedure for the receipt of information submitted by public	Planning Board, ConCom, Board of Health	Record number of phone calls and complaints	Information regarding all local regulations are currently on the Town website with links to other resources.	Interdepartmental referrals of land use issues for follow-up (BOH, ConCom, Planning Board and Building)
4C	Develop guidance for erosion controls	ConCom/ Planning Board	Inspection checklist and document inspections	Requirements are cited in Orders of Conditions for ConCom and decisions by Planning Board. Erosion controls are inspected by Agent(s) after installation.	Look to strengthen guidelines within by-laws and regulations.

4a. Additions – Consider by-law provisions limiting development on steep slopes. Inspect all projects that discharge to the MS4.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 8
5A	Develop stormwater management control bylaw	Planning Board, Building Inspector	Bylaw at Town meeting by end of year 2.	By-law adopted May 2008 as noted above in self-assessment. Several permits issued in 2011. Most projects exempt from by-law and subject to other regulations.	Investigate strengthening provisions through LID by-law or additional regulation amendments. Regulatory activity and enforcement noted above.
5B	Develop and implement inspection program	Planning Board, Highway, ConCom, Building Inspector	Copies of maintenance reports, inspections completed and results	O&M Plans are required for detention basins and stormwater systems for developments.	Inspected during sub-division installation and yearly thereafter. Reports to Highway Dept required for commercial sites. Ongoing. In 2012 Highway inspected and maintained all residential detention basin systems installed in past 20 years.
5C	Develop BMP design standards	Planning Board, Building Inspector	Improved bylaws as adopted	Adopted by Planning Board in 2007 and 2008 after a series of hearings.	Ongoing as BMP's are field-tested. Porous pavement being considered for park parking lot. Rain garden installed in Goodwill Park.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Current Permit Year
6A	Comply with DEP policy for vehicle washing at town owned facilities	Highway	Vehicle wash unit	The Highway Department has installed a vehicle wash point that incorporates a water recycling and filtration system. This facility is open to all town departments.	Done
6B	Ensure compliance for floor drain systems	Highway	Modification of floor drain systems	All town buildings with floor drain discharges have been plugged and are no longer used.	Done
6C	Evaluate and implement stormwater BMP for police station parking lot runoff	Police, Highway	Police station retrofit.	Renovations/construction underway to the Police Station.	Facility completed and occupied in 2009.

6D	Clean catch basins	Highway	Clean basins	On going program. All basins cleaned annually. Continue practice in place.	Yearly
6E	Sweep streets	Highway	Sweep Streets	On going program. All streets swept yearly and additionally as necessary. Continue practice in place.	Yearly
6F	Develop an inspection and maintenance plan	Highway	Records of inspections and maintenance.	Schedule posted at the Highway garage. Done routinely. Continue practice in place.	Yearly

6a. Additions

6I	Prevent stormwater contact with fueling station	Highway facility		Fuel blanket at the site and ongoing preventative measures in place.	Spill kits available
6J	Evaluate sediment loading to wetlands	Highway facility		Corrected with new washdown system which has been installed.	Completed. Monitoring.maintenance ongoing.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Current Permit Year
7A	Develop a water quality strategy for 303d waters	Highway, Selectmen	Strategy developed. Following lead of Charles River & SuAsCo Watershed Assocs.	Still in progress. September 2009 guidelines.	Continue to work with Assoc. No surface water quality monitoring is underway. Groundwater monitoring by the Water Dept. and BoH is ongoing in wellhead areas, the former landfill site and waste transfer station site
7B	Implement BMPs from Water quality strategies	Highway, Selectmen		Still in progress.	Ongoing. BMP installation permitted for Goodwill Park in the downtown area. As of 4/12 more than ½ improvements installed.

7a. Additions – none

7b. WLA Assessment

Through improvements at the Highway Department and with the addition of a new washdown unit, all town vehicles are now washed at the Highway Department. This will decrease the waste load allocation on many wetland areas in town including ones adjacent to the Highway Department, Fire Station, Police Department. Water Department Foundry office and Golf Course.

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	No (contract services, in-house staff meet collectively)
Annual program budget/expenditures	(\$10,000)	Approx. \$10,000 in Highway Dept. expenditure (Developer escrow accounts fund inspectors for private projects)

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(10 %)	Unknown – est. several hundred/yr
Stormwater management committee established	(y/n)	Yes
Stream teams established or supported	(# or y/n)	No – Highway, other staff and Conservation Assoc. org.

Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	N/A – Lake Winthrop beach area(s) by Rec. Dept. staff; Water Dept. staff monitors Stoddard Park on east side of Lake Winthrop as part of its daily water supply inspections.
Household Hazardous Waste Collection Days		
days sponsored	(#)/yr (min.)	Next scheduled for July 2016. Plus participation in area consortium. New tire collection added in 2011

▪ community participation	(%)	Varies. 80 tires were collected in 2012 and 110 in 2013 the event will continue to be repeated.
▪ material collected	(tons or gal)	Varies (2016 annual report available from Clean Harbors). Also medication collection day(s) have been added through the Police Dept. BOH currently manages sharps container sales.
School curricula implemented	(y/n)	Yes

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination	BOH regs for subdiv.	X		X
▪ Erosion & Sediment Control	BOH and ConCom regs	X		X
▪ Post-Development Stormwater Management	ConCom/ Planning Board regs	X		X

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100
Estimated or actual number of outfalls	(#)	300
System-Wide mapping complete	(%)	100
Mapping method(s)		
▪ Paper/Mylar	(%)	100
▪ CADD	(%)	100
▪ GIS	(%)	100
Outfalls inspected/screened	(# or %)	100% insp.
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	0
% of population on septic systems	(%)	100

Construction

Number of construction starts (>1-acre)	(#)	<10
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	80%
Site inspections completed	(# or %)	100%
Tickets/Stop work orders issued	(# or %)	2 (ConCom)

Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	<10

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	50%
Site inspections completed	(# or %)	50%
Estimated volume of stormwater recharged	(gpy)	Unsure

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1/yr
Total number of structures cleaned	(#)	2,600
Storm drain cleaned	(LF or mi.)	89 miles of roadway
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	340 cy
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Compost recycling
Cost of screenings disposal	(\$)	\$4,000
Grinding brush and stumps -3,400 cubic yards	(\$)	\$4,000
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	1/yr
Qty. of sand/debris collected by sweeping	(lbs. or tons)	175 cy
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Recycling Ctr.
Cost of sweepings disposal	(\$)	0
Vacuum street sweepers purchased/leased	(#)	0 (1 - mechanical)
Vacuum street sweepers specified in contracts	(y/n)	No

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	ALL ORGANIC MATERIAL USED	(lbs. or %) 50 %

▪ Herbicides	(lbs. or %)	100 %
▪ Pesticides	(lbs. or %)	100 %

Anti-/De-Icing products and ratios	NaCl, CaCl ₂ , MgCl ₂ CMA Kac, KCl, Sand	Salt only as specified by MHD/lane mile
Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	No
Estimated net reduction in typical year salt application	(lbs. or %)	15%
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	In place.