

Municipality/Organization: Town of Hull

EPA NPDES Permit Number: MAR041040

MassDEP Transmittal Number: W-046041

Annual Report Number Year 12  
& Reporting Period: April 1, 2014 – March 31, 2015

## NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2015)

### Part I. General Information

Contact Person: Joseph Stigliani

Title: Director, DPW

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Mailing Address: 9 Nantasket Ave, Hull, MA 02045

### 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: Philip Lemnios

Title: Town Manager

Date: 04/29/15



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

The Town of Hull has completed the required self-assessment for year 12 and we have determined that our municipality is in compliance with all permit conditions.

### 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 12 (Reliance on non-municipal partners indicated, if any)	
1.1	Stormwater Flyer to Community Residences	Stormwater Committee DPW	Development and Distribution of flyer	A Stormwater Management flyer is available at Town Hall, DPW, and on a separate “Stormwater Management” page on the Town’s Website.  (Attachment 1)	
Revised					
1.2	Identify and expand on stormwater, watershed, and water quality education in the School System (combined with previous 1.8)	Stormwater Committee, DPW, School Dept.	Implementation of curriculum.	The Hull Memorial Middle School provides environmental education to 6 <sup>th</sup> grade students through their Earth Science course. The Hull High School offers a number of science and environmental courses dealing with stormwater management as noted in attached program.  (Attachment 2)	
Revised					
1.3	Stormwater flyer and survey to community businesses	Stormwater Committee, Conservation Commission, Board of Health	Distribution or make available to all residents and businesses.	(See 1.1 and 1.4)	
Revised					
1.4	Identify and coordinate with local media sources to publicize press releases, meetings, and events	Stormwater Committee and DPW Director	Identify all local media sources, and maintain record of distribution.	Beginning in Year 4, the Town has been issuing press releases to educate the public about the need for proper stormwater management on a regular	

Revised				<p>basis. Frequently, this information is included in press releases about related subjects such as street sweeping.</p> <p>(Attachment 3)</p>	
1.5	Coordinate with local watershed groups on providing a series of lectures to community residents	Stormwater Committee, local watershed groups (i.e., WRWA & SPWA)	Record number of meetings and attendance at all such meetings if possible.	<p>The Town continues to work with local watershed and environmental groups to inform the public about stormwater management issues. Anne Herbst, the Hull Conservation Agent and member of the Town's Stormwater Committee frequently attends Weir River Watershed meetings.</p> <p>(Attachment 4)</p>	
Revised					
1.6	Consider posting signs at publicly accessible stormwater outfalls			<p>This BMP was determined to be inappropriate and deleted from plan. (However, see 1.9)</p>	
Revised					

1.7	Develop a Stormwater Awareness Package	Stormwater Committee, Board of Selectmen, Conservation Commission	Materials to be included in package compiled. Number of packages distributed.	<p>A "Stormwater Management" flyer/brochure is available at Town Hall and the DPW and a separate "Stormwater Management" page is available on the Town's Website.</p>	
Revised	<i>Combine with 1.2</i>	Combine with 1.2	Combine with 1.2	<p>(See Attachment 1)</p>	

1.8	Meet with local school officials annually to identify past activities and upcoming curriculum. Identify organizations that offer stormwater education resources.	Stormwater Committee, School Department	School Department official contacted, meeting conducted. Each school has designated contact. Organizations identified and contacted.	A representative of the School Department serves on the Town's "Stormwater Management Committee". (Also see 1.2 and 1.5)  (Attachment 5)	
Revised					
1.9	Develop Storm Drain Stenciling Program	DPW, Stormwater Committee, Conservation Commission, local watershed groups	Program developed, volunteers organized, basins identified and stenciled	The Town was never able to locate a suitable volunteer for the stenciling program. However, as an alternative the Town is now installing catch basin grates that are marked with "DUMP NO WASTE" and DRAINS TO WATERWAYS' stamped into the grate. All future grates installed in the Town will have this wording.  (Photo #1 & Diagram A)	
1.10	Make the Stormwater Management Plan available to the general public	Town Manager, Stormwater Committee	Develop a Plan. Make the Plan available at Town Hall, Library, and in schools as an environmental education resource. Consider putting the plan on the website.	The Town's Stormwater Management Plan, Notice of Intent, and Annual Reports are available at the Town Hall, DPW Office, and Hull Public Library.	
Revised					

1.11	Consider developing a Stormwater Management Web page informing citizens about SWMP waste disposal options, stormwater “friendly” practices, volunteering opportunities, and the status of local beaches	DPW, Conservation Commission, Stormwater Committee, Board of Health, Surf Riders Association	Web page developed. Consider links to other websites such as WRWA, MA DEP, and USEPA.	The Town has a Separate Stormwater Management Web page which it periodically updates and adds new links and information to as it becomes available.	
Revised	<i>Use website to post SWMP and annual report</i>			(See Attachment 1)	

## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	
2.1	Research possible resources available to the Town to assist in developing a storm-water public participation and outreach program	Town Manager, Conservation Commission, Stormwater Committee	Resources identified, public participation and outreach implemented.	In Year 12 the DPW met with a number of other Town Departments and local environmental groups to discuss and encourage public participation, outreach, and awareness of proper stormwater management. Community groups and committees the Town has interacted with include the Straits Pond Watershed Association, the Weir River Estuary Committee, the Hull Land Conservation Trust, the Water Resources Committee, the Hull Garden Club, and the Hull Boosters.	
Revised					
2.2	Start a local Storm-water Committee to assist in developing and implementing plan	Town Manager, DPW, Conservation Commission	Committee established, meetings conducted, plan developed, activities conducted.	In addition to the local groups noted in 2.1 above, representatives of the Town Departments serving on the Stormwater Committee have been meeting on a regular basis to discuss stormwater issues. These meeting are often conducted in conjunction with other meetings for related issues (i.e. Pre-disaster Mitigation/Community rating System, Beach Management Committee), as well as at biweekly Public Safety Department Head Meetings.	
Revised					
Revised					

2.3	Stormwater Plan Annual Meeting	Stormwater Committee	Annual meetings planned, noticed, conducted, minutes prepared. Number of attendees. Comments received, considered. (Plan Development, Final Plan, and Annual Report).	The Town of Hull's Stormwater Management Committee's Annual meeting was held on September 11, 2014 and a copy of the Annual Stormwater Meeting sign in sheet has been attached.  (Attachment 6)	
Revised					
2.4	Stormwater Traveling Exhibit	Stormwater Committee, School Department, local watershed groups	Consider working with schools and other organizations to develop exhibit. Displayed in several public locations. Prospects identified for future displays.	See BMP 2.6	
Revised					
2.5	Identify and coordinate with neighboring communities in the watershed who are implementing Stormwater Management Plans.	Town Manager, Board of Selectmen, Stormwater Committee	Communities identified and contacted. Coordination meeting. Multi-town programs planned and implemented.	The Town meets with representatives from other South Shore Communities regularly by attendance at Plymouth County Highway, South Shore Recycling Cooperative, Mass Tree Wardens Association, and other such group meetings. In addition the Hull DPW Director is in frequent contact with representatives of the neighboring Towns of Hingham and Cohasset concerning joint projects such as the management of the Straits Pond Culvert and Tide Gate, recycling, and storm water management.	

2.6.	<i>Coordinate with the School Department to promote stormwater awareness projects in the schools and then displaying these projects to the public.</i>	Town Manager, Conservation Commission, Stormwater Committee, School Department, DPW Director, local watershed groups.	School Dept. contacted and meeting scheduled. Possible projects identified. Projects completed and displayed in public buildings.	Hull High School Assistant Principal Scott Sivo was appointed to the Town's Stormwater Management Committee and environmental classes now are part of the High School curriculum.  (See Attachments 2 and 5)	
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Revised					
2.7	Develop Storm drain Stenciling Program	DPW, Storm-water Committee, WRWA, SPWA, Conservation Committee	Program developed, volunteers organized, basins identified and stenciled.	(See 1.9)	
Revised					
2.8	Coordinate with WRWA, SPWA, Surf Riders Association, Weir River Estuaries, and others to implement water quality monitoring and review results.	DPW, Storm-water Committee, Conservation Commission, High School, local watershed groups, Board of Health.	Meeting conducted, activities scheduled, conducted. Results reviewed, potential actions identified, implemented.	The Town partnered with the SPWA for Water Quality Monitoring of Straits Pond. This monitoring was put on hold while the tide gate and culvert/bridge was reconstructed. Due to a series of on-going problems with the gate controls and alarm system, this water quality monitoring has not yet resumed. However, water quality testing is	

Revised				<p>carried out by the Board of Health at all beach areas throughout the Summer. A summary of the testing is attached.</p> <p>(Attachment 7)</p>	
2.91	Identify and coordinate with potential volunteers, to include “neighborhood watch” groups, Boy and Girl Scout organizations, school groups/clubs, local and regional environmental advocates.	DPW, Conservation Commission, Stormwater Committee	Groups identified. Contact established, meetings conducted. Activities scheduled, conducted. Number of participating.	See BMP 1.5, 2.1 and 2.8	
Revised	<i>Combined with 2.8</i>	Combined with 2.8	Combined with 2.8		
2.10	Sponsor and support neighborhood, town wide, and beach clean up projects.	DPW, Town Manager, Conservation Commission, Stormwater Committee, CZMA, local watershed groups, Board of Health.	Groups identified. Contact established, meetings conducted. Activities scheduled, conducted. Number of events sponsored/supported, amount of material collected, number of volunteers participating.	Clean up events sponsored or supported in Year 12 include regular beach clean ups in accordance with the Town’s formal “Beach Management Plan”, the annual “Coast Sweep” clean up, and numerous neighborhood and local beach clean ups. In Year 12 the Town also sponsored an annual Beach Grass Planting Day. The Beach Management Plan was submitted with the Year 5 report.	
				(Attachments 8 and 9)	

2.11	Identify stormwater projects important to Hull Citizens (i.e. Straits Pond and Estuary Park projects) and assist in promoting and coordination volunteer efforts on these projects.	DPW, Conservation Commission, town Manager and Board of Selectmen, SPWA, Weir River Estuaries.	Projects identified, inventoried, and promoted. Local watershed groups are assisted. Number of volunteers assisting in projects.	In Year 12 the Town continued work on the Straits Pond/Richards Road Water Quality Improvement Project that was supported by citizens of Hull, Hingham, and Cohasset, and funded in part by a "319" Grant. The project is summarized in the attached brochure.	
				(See Attachment 21)	
Revised					

**2a. Additions**


**3. Illicit Discharge Detection and Elimination**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)	
3.1	Consider implementation of a GIS system to include the Storm Sewer System	DPW	Mapping completed, consider integration of asset management system	GIS system in place and all components of system located and mapped.	



3.4	Develop a program to record and investigate suspected illicit discharges.	DPW, Board of Health, Sewer Department, and Conservation Commission.	Program developed. Suspected illicit connections investigated. Source identified and scheduled for removal. Enforcement actions taken or referred to other entity such as police, Health Department, MA DEP or USEPA.	<p>The DPW staff have been trained to look for illicit discharges when cleaning catch basins and other drain structures, and the town continues to respond to and investigate citizen complaints. Most complaint investigations involve a number of Town Departments including DPW, Board of Health, Conservation Commission, and Sewer Department. Illicit discharges are most likely to be detected during Seawall Maintenance and Monitoring Plan inspections.</p> <p>(See BMP 6.3)</p>	
Revised				(See attachment 14)	
3.5	Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.	DPW, Storm-water Committee, WRWA	Ensure that educational materials developed include illicit discharge awareness. Materials developed and distributed.	<p>In Year 12 the DPW Director presented information on stormwater management and the NPDES program to all Department Heads on several occasions, and issued a press release on stormwater management. Stormwater education material is available on the Town's Web page and Cable Channel, including a Stormwater Management information brochure, Household Hazardous Waste Disposal Information, and Non Toxic Cleaning Alternatives.</p> <p>(See Attachments 1 &amp; 3)</p>	
Revised					

3a. Additions									

#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12 (Reliance on non-municipal partners indicated, if any)
4.1	Review, revise (if necessary), and implement the existing stormwater by-law to require erosion and sediment controls.	Town Planner, DPW, Conservation Commission, Stormwater Committee	Review of model ordinance and existing stormwater by-law. Ensure compliance with existing laws and regulations. Review of stormwater management plans. Conduct informational meeting. Modify existing by-law if necessary.	The Town has both a “Stormwater By-Law” and “Stormwater Regulations” which require sedimentation and erosion controls for construction projects in Town. The Bylaws and Regulations were submitted with prior year’s report.  (Also see 3.3)
Revised				
4.2	Ensure that construction site operators disturbing one acre or more implement erosion and sediment controls	Building Officials, Town Planner, DPW, Conservation Commission	Inspection schedule established. Inspections conducted. Deficiencies noted and corrected.	The Conservation Commission, Building Department and DPW all monitor construction sites over one acre for sedimentation and erosion control. There were no new projects over one acre in the permit year. (Also see 4.3)  (Attachment 10)
Revised				
4.3	Ensure construction site operators disturbing one acre or more control construction wastes, and other wastes that may cause adverse impacts to water quality during construction	Building Officials, Town Planner, DPW, Stormwater Committee, Conservation Commission	Ensure stormwater by-law includes language to control construction wastes. Inspections conducted. Deficiencies noted and corrected.	The Conservation Commission, Building Department, DPW, and Board of Health all monitor construction sites, over one acre for construction waste. There were no new projects over one acre in the permit year. A breakdown of Building Permits issued in Year 12 is attached.  (Attachment 10)
Revised				

4.4	Develop procedures for site plan review which incorporate consideration of potential water quality impacts	Building Officials, Town Planner, DPW, Stormwater Committee, Conservation Commission	Ensure stormwater by-law includes language for site plan review. Consider providing guidance documents or other outreach materials for developers.	The DPW Planning Board and Conservation Commission all review permit applications proper stormwater management. New developments are required to install BMP's as part of the development. Plans are reviewed for stormwater quality. Town works with applicants to develop designs that will help the Town to achieve better stormwater quality, and address soil erosion and sediment control during construction.	
Revised					
4.5	Develop procedures for site inspection and enforcement of control measures	Building Officials, town Planner, DPW, Conservation Commission	Inspection schedule established. Inspections conducted. Deficiencies noted and corrected.	In Year 12 all construction sites in Town were inspected for erosion controls by the Building Inspector and/or the Conservation Administrator. DPW also inspects sites of concern and refers any issues off to Building or Conservations for enforcement.	
Revised					
4.6	Develop procedures for receipt and consideration of information submitted by the public.	Building Officials, Town Planner, DPW, Stormwater Committee, Conservation Commission	Develop a form for the public to provide information. Designate municipal official responsible for receiving, reviewing, and responding to information. Track deficiencies and corrections. Post form on town website.	Complaints to Building Department or Conservation Commission are usually handled by that department. Complaints to DPW or Board of Health are usually referred off to Conservation and/or Building Department. Complaints to DPW are logged and tracked on Work Lists.	
Revised				(Attachment 11)	





5.3	Ensure all new development and redevelopment projects that disturb one acre or more require long term operation and maintenance of post-construction runoff controls.	Town Planner, DPW, Conservation Commission, Stormwater Committee	Ensure proposed by-law or regulations, language and enforceable mechanism for long term operation and maintenance of post-construction runoff controls.	In Year 12 there were no new development or redevelopment projects that disturbed one acre or more of land.	
Revised				(See Attachment 10)	
5.4	Acquire land for conservation and preservation as open space	Town Manager, Conservation Commission.	Acres preserved and to remain undeveloped	The Town continues to pursue acquisition of private property for preservation and open space, and also works with non-municipal partners such as the Hull Land Conservation Trust in support of continued acquisition.	
				(Attachment 12)	

**5a. Additions**

## 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 12 (Reliance on non-municipal partners indicated, if any)	
6.1	Review and expand upon the current public street and parking lot sweeping program. Consider tracking streets and curb miles swept and the quantity of material collected.	DPW, Storm-water Committee	Continue existing program and maintain records on areas swept including, a breakdown of beach sand and road sand.	In Year 12 the Town swept all public roadways and municipal parking areas at least once, and environmentally sensitive areas, beach locations, low lying areas and the business districts more than once. Logs were maintained on dates and amounts including a breakdown of sand types.	
Revised				(Attachment 13) (Also see Attachment 3)	
6.2	Consider including pollution prevention training for equipment operators	DPW, Storm-water Committee	Consider including pollution prevention training for equipment operators. Evaluate the existing level of awareness of equipment operators. Consider incorporating Health and Safety training with stormwater awareness training.	In house training is done to educate DPW staff about proper stormwater management, and spill containment supplies are in DPW vehicles. The Fire Department is trained and available to respond to any hazardous material spills, and has an “emergency response trailer” that is equipped with supplies and materials needed for this.	

Revised	<i>Include pollution prevention, environmental awareness, and spill response training for equipment operators</i>	<i>DPW, Storm - water Committee, Fire Department, and Police Department</i>	<i>Provide pollution prevention, environmental awareness and spill response training for equipment operators and other town staff as appropriate. Evaluate the existing level of awareness of equipment operators.</i>		
6.3	Review and expand upon the current storm system inspection and maintenance program	DPW, Conservation Commission, Stormwater Committee	Continue existing program. Identify the system and all public structures tributary to the system. Conduct a catch basin sediment accumulation pilot program. Establish a routine inspection and maintenance program. Maintain records of inspections conducted, number of basins cleaned, approximate volume of material collected. Note areas that accumulate more sediment and consider more frequent inspection, cleaning or further investigation.	In Year 12 the DPW inspected and cleaned almost all of the 3,000 catch basins and manholes at least once, and those in problem areas more than once. The Town maintains a record of storm drain cleaning and jetting of lines and records the amount of material removed. Inspections and maintenance of the Town's stormwater infrastructure were conducted in accordance with the Town's "Standard Operating Procedures" program. In Year 9 the Town developed a new Outfall Inspection Report Log and began an in-depth inspection and evaluation of all drain outfalls. A copy of a portion of the log is attached, as is a copy of CB/MH Cleaning and Line Jetting Log.	
Revised				(Attachments 14 )	

6.4	Identify, as necessary, structural modifications to the storm sewer system in conjunction with future roadway improvements	DPW, Conservation Commission and Town Manager	Evaluate system improvement needs in conjunction with planned roadway improvements.	The DPW Director, Conservation Administrator, Town Manager, and Town Planner meet on a regular basis to discuss stormwater system improvements that could be incorporated into future roadway reconstruction. In Year 10 GCG Associates prepared a Stormwater Report for Bay Ave. East that identified stormwater management BMP's that will be included in the Bay Ave. East Revitalization project.	
Revised				(Attachment 15)	

6.5	Provide spill response and storm-water/environmental awareness training to mechanics and equipment operators	DPW, Fire Department, Police Department	Develop training program. Identify staff for training. Conduct initial and annual refresher training. Maintain training, roster for each session, and include documentation in personnel files.	(See 6.2 above) In addition, the Coast Guard is available for any spills in Marine/Coastal areas.	
Revised	Combined with 6.2	Combined with 6.2	Combined with 6.2		

6.6	Post spill prevention/emergency action plans prominently in areas where hazardous materials are used and stored.	DPW, Fire Department, Police Department	Develop posters outlining spill prevention/emergency response plans. Post prominently in the garage.	Task Completed; Report as Needed. (Also see Attachments 6.2, 6.4, and 6.5)	
Revised					

6.7	Conduct annual inspection of municipal maintenance facilities.	DPW, Fire Department, Police Department	Develop Checklist. Conduce inspections. Record and correct deficiencies.	The DPW continues to do self inspections and remains in contact with other Town Departments concerning self inspections and good housekeeping practices.	
Revised					
6.8	Develop a program for curb-side pick-up and composting of yard wastes.	Town Manager, DPW, Hull Municipal Landfill	Yard waste collected from citizens and composted at the Hull Landfill.	The Town composts municipally generated yard waste including wood chips generated from brush and trees collected from residents. Chip Days, which allow residents the opportunity to drop off trees and brush were held on 5/3/14 and 11/8/14.	
Revised	<i>Develop a program for composting of yard wastes</i>	DPW Director, Town Manager, DPW, Hull Municipal Landfill	Yard waste composted at the Hull Landfill	(Attachment 16)	
6.9	Investigate floor drain connections at maintenance facilities and post “no dumping” signs in the vicinity of these drains	DPW, Police Department, Fire Department	Number of floor drains connections investigated. Floor drains closed or connected to the sanitary sewers with adequate BMP’s. Signs posted.	All floor drains have been removed, sealed off, or connected to the Town’s sanitary sewer system.	
Revised					
6.10	Establish a program to discourage and investigate illegal dumping. Enforce penalties.	DPW, Police Department, Stormwater Committee, Neighborhood Groups	Educate citizens on the dangers of illegal dumping. Monitor chronic dumping areas. Enforce penalties and fees.	The Board of Health actively issues citations/orders to those who are caught illegally dumping. The Police Department is also available to enforce penalties against illegal dumpers. The town has a litter and dumpster by-law that provides legal enforcement abilities.	
Revised				(Attachment 17)	

6.11	Publicize and support Household Hazardous Waste (HHW) Collection events	DPW, Town Recycling Center, Sewer Commission, Wastewater Treatment Plant.	Continue to coordinate with the Town Recycling Center and the Sewer Commission to publicize and support HHW Collection events. Record the number of attendees, volunteers. Record the types and amounts of material collected.	As a result of budget cuts, the Town of Hull did not have a household hazardous waste collection in Year 12. However, we continue to coordinate with other groups to encourage recycling, and we maintain a Recycling Web site to provide residents with information on recycling and household hazardous waste disposal.	
Revised				(Attachments 18)	
Revised					
Revised					

**6a. Additions**

**Town of Hull**  
**Year 12 Annual NPDES Report**  
**Attachments**

1. Stormwater Flyer/Web Page
2. Environmental Courses at Hull Schools
3. Press Release
4. Weir River Watershed Workshop Notice
5. Appointment Letter
6. Annual Meeting Sign-in Sheet
7. Beach Water Quality Testing Summary
8. Beach Grass Planting
9. Estuary Cleanup Notice
10. Building Department Letter
11. Complaints/Work lists
12. Hull Land Conservation Trust
13. Sweeper Log
14. CB Cleaning/Jetting Log, Outfall Inspection Log
15. Bay Ave. East Stormwater BMP Report
16. Chip Day Releases
17. "Prohibited Materials" Bylaw
18. South Shore Recycling Cooperative Notice re: Household Hazardous Waste and Town of Hull's Recycling Webpage
19. Photo #1 (Catch Basin Grate)
20. Diagram A (Manhole Cover)
21. Straits Pond Stormwater Improvement Brochure

## STORM WATER MANAGEMENT

### **What is Stormwater Runoff**

Water that runs off the ground surface, usually because of the presence of buildings, pavement, and other impervious surfaces, is known as runoff. The volume and speed of runoff depends on a number of factors including the amount and intensity of the storm, the size of the drainage area, and imperviousness of the ground. Water that falls during a storm and flows over impervious surfaces and through pipes and channels is called stormwater runoff.

### **The Problem with Stormwater Runoff**

When it rains, water runoff from streets, driveways, parking lots and even lawn areas can pick up pollutants along the way to storm drains and collection areas. Some of the more common pollutants found in stormwater runoff include lawn chemicals, pet waste, motor oil, and deicing chemicals. These pollutants affect water quality, which adversely impacts aquatic plants and animals, and degrades our coastal resources.

Stormwater Management

The Town of Hull is committed to the proper management and control of stormwater runoff, The Department of Public Works is responsible for controlling and managing stormwater runoff from public roads and other Town property so as to ensure the Town is in compliance with the National Pollution Discharge Elimination System (NPDES) Program under the Clean Waters Act. A copy of the Town's Small Municipal Storm Sewer Annual Report under the NPDES Program is available at the Department of Public Works office and at the Hull Public Library.

### **What You Can Do to Help**

- Properly dispose of hazardous waste and recycle used motor oil.
- Use fertilizers; pesticides and herbicides sparingly and follow the manufacturer's instructions.
- Keep your yard waste, trash, and dirt off the street and out of the gutters.
- Clean up after your pets.
- Wash your car at the carwash facility or park your car on the grass before you wash it.
- Spread the word about protecting our waterways from polluted runoff.
- Never dump motor oil, antifreeze or any other contaminants into a storm drain.

### **More Information**

For more information you can contact the Department of Public Works by telephone at 781-925-0900, by e-mail at [jstigliani@town.hull.ma.us](mailto:jstigliani@town.hull.ma.us) or go to any of the following sites:

<http://www.mass.gov/dep/water/laws/swmpoly2.pdf>

<http://www.mass.gov/dep/water/laws/v1c1.doc>

<http://www.mass.gov/ne/nepds/mass.html>

<http://www.mass.gov/ne/topics/water/stormwater.html>

**Environmental Education**  
**Hull Public Schools 2015**

**Jacobs Elementary School**

Currently the Jacobs School does not have environmental education specifically targeted in a particular grade level. Instead, information is dispersed throughout the various grade levels.

**Memorial Middle School**

The middle school provides environmental education to each of their sixth grade students through their Earth Science course. According the Massachusetts State Frameworks the following units are present in this Earth Science course:

- I. Matter and Energy in the Earth System.
- II. Energy and Resources in the Earth System.
- III. Earth Processes and Cycles

The Memorial School also offers a recycling program to their students. Their particular program is run by the students from the South Shore Educational Collaborative.

**Hull High School**

Hull High School currently offers its "Green Team" as an afterschool activity. Green Team members actively discuss environmental issues at the local and

global level. They maintain a recycling and composting program through the high school cafeteria.

Hull High School offers a number of science courses, which tie directly to environmental education and even more specifically the issue of storm water management. These courses and their descriptions as seen in the Hull High School program of studies are listed below:

**468 MARINE SCIENCE**

**3 credits**

Environmental science explores the role of humans in the biosphere, and the impact of human activity on the environment. This course emphasizes the study of the local environment, investigating the components of marine ecosystems and local flora and fauna. The disciplines of biology, chemistry, and geology are used to gain a better understanding of Earth's terrestrial and aquatic biomes, and the various ecosystems within each biome.

**469 ENVIRONMENTAL SCIENCE**

**3 credits**

Marine science and environmental science are one semester science elective courses. Marine science allows the student to discover, explore, and research the biological and physical aspects of the ocean environment through a comprehensive study of marine biology and oceanography.

**470 ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE**

**9 credits**

The goal of the AP Environmental Science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. The course focus is on the "real science" behind environmental problems and issues. Laboratory and field study are an important element of the course.

*Prerequisite: A grade of "B" or above in Honors Biology and Honors Chemistry or an "A-" or above in Biology and Chemistry.*

**476 HULL: ITS ENVIRONMENT AND HISTORY**

**3 credits**

This course is designed to provide students with an understanding of the environment and history of Hull and the surrounding bioregion. Science topics include a study of Hull's geology and the local ecosystem. Social studies topics include Hull's geography and history (from settlement to the present). The goals of this course are to: increase students' understanding of the environment in which they live and their role in protecting

that environment; provide students with a historical context of the Town of Hull and the Boston Harbor Islands; allow students to examine the causes and effects of Hull's geography; allow students to analyze Hull's demographic information looking for trends throughout the years, and; develop in students a greater understanding of and appreciation for their community's rich history and environmental uniqueness.

**FOR IMMEDIATE RELEASE**

**TOWN OF HULL  
STREET SWEEPING SCHEDULE**

The Town of Hull, Department of Public Works is pleased to announce that it has begun its annual street sweeping program. Because of the larger than normal volume of sand on the roads, the sweeper has been concentrating on main roads and environmentally sensitive areas as well as areas impacted by recent storm related high tide events.

Now that these main areas are complete, the sweeper will be focusing on neighborhood areas beginning in the Village during the week of 4/21/14.

The Department of Public Works reminds residents that street sweeping is done for safety reasons and is also an important component of the "Pollution Prevention and Good Housekeeping in Municipal Operations" portion of the Town's Stormwater Management Plan. For more information on stormwater management in the Town of Hull or to see future announcements regarding sweeping operations, you may go to the Town's Website at [www.town.hull.ma.us](http://www.town.hull.ma.us) and click on the Department of Public Works and then Stormwater Management.

Contact information:

Joseph Stigliani  
Hull DPW Director  
781-925-0900  
[jstigliani@town.hull.ma.us](mailto:jstigliani@town.hull.ma.us)  
4/21/14

**Stigliani, Joseph**

---

**From:** Judeth Van Hamm [one@hullportside.net]  
**Sent:** Tuesday, April 22, 2014 6:07 PM  
**To:** Judeth Van Hamm  
**Subject:** FW: Weir River Environmental Forum Apr 23: Join Local and State Decision Makers

Water: Our most important resource. Learn how to protect the Weir River habitat and our water source from stormwater-carried pollution.

Delicious refreshments. Wed., April 23, 6:30 PM at the South Shore Country Club, 274 South St., Hingham.

Sponsored by Weir River Watershed Association, Straits Pond Watershed Association, Weir River Estuary Park Committee, Hingham Land Conservation Trust, Hull Land Conservation Trust, and Aquarion Water.

---

**From:** Weir River Watershed Matters [<mailto:lane@nextgen-strategies.com>]  
**Sent:** Saturday, April 19, 2014 8:40 AM  
**To:** [one@hullportside.net](mailto:one@hullportside.net)  
**Subject:** Weir River Environmental Forum: Join Local and State Decision Makers



## FUTURE OF STORMWATER

April, 19 2014

### WEIR RIVER ENVIRONMENTAL FORUM

Dear Judeth,

*You're invited* to "Keeping Clean Water in Your Community".

What's the best way to manage stormwater and protect the local watershed? That's the primary focus of the next Weir River Environmental Forum scheduled for April 23, 6:30 PM at the South Shore Country Club.

Those attending the upcoming forum will learn more about innovative by-laws and techniques for meeting stormwater requirements, protecting watershed resources, and managing green spaces.

**Presentations at the forum will include:**

- Solving the Stormwater Management Puzzle
- Protecting Water Resources
- Clean Water Landscaping
- Thinking About Clean Water and Development

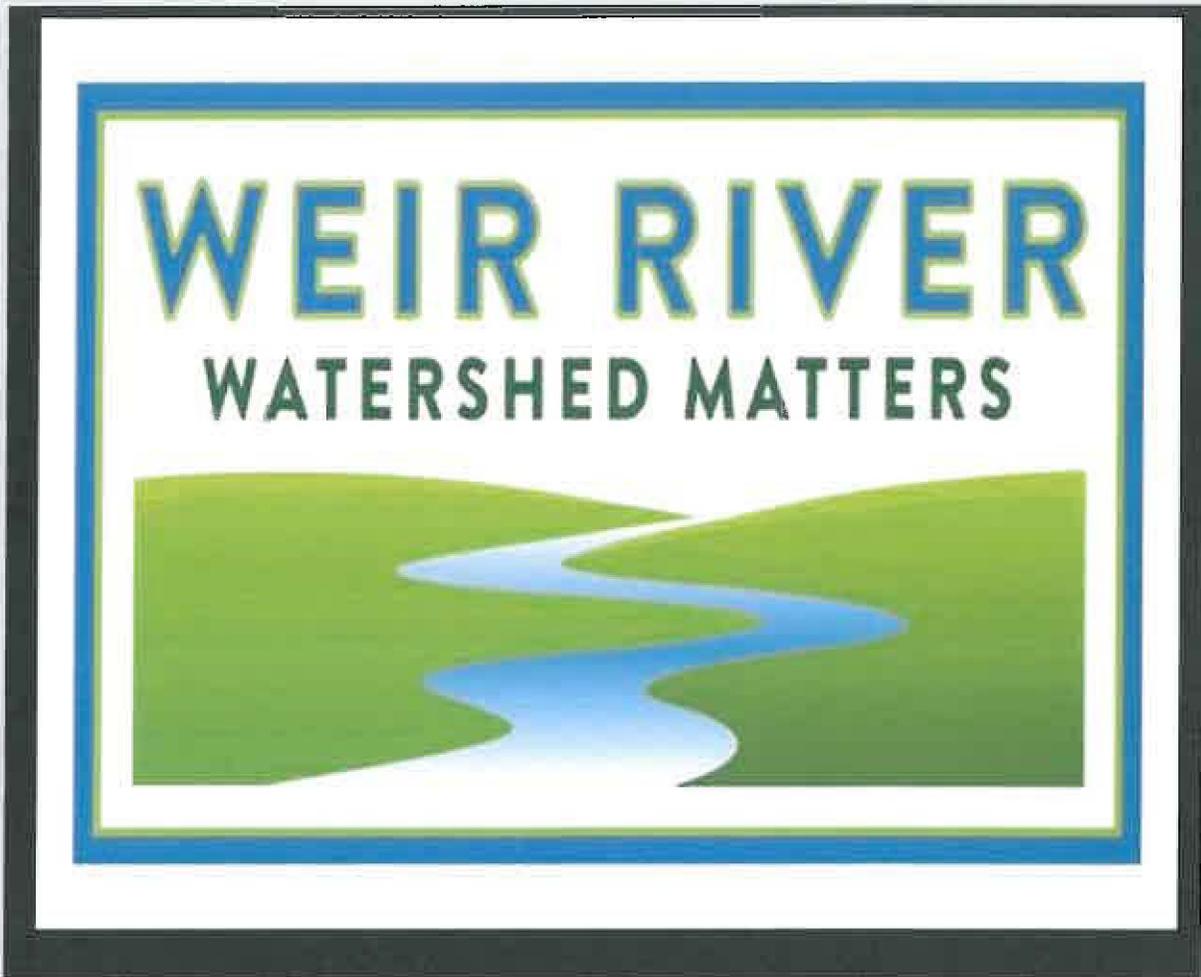
Cities such as Seattle, Milwaukee, and Philadelphia are taking an approach that focuses on sustainability and multiple benefits and have identified millions of dollars in annual benefits that would have been unrealized had they chosen to continue to invest in only traditional storm sewers.

Kurt Gaertner, MA Executive Office of Energy & Environmental Affairs, Katy Konary, Fay, Spofford & Thorndike, David Farrag Cohasset Conservation Commission, Scott McIsaac Hingham Conservation Commission are amongst the speakers.

Join local community leaders to help identify and prioritize ways to restore, enhance, manage and protect our watershed.

The Forum is open to anyone who would like to attend. To learn more please contact Ronit Goldstein at 781-740-6693 or email at [rgoldstein@aquarionwater.com](mailto:rgoldstein@aquarionwater.com).

Weir River Watershed Matters | [Lane@nextgen-strategies.com](mailto:Lane@nextgen-strategies.com) | 60 Station Street  
Hingham, MA 02043



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[Update Profile/Email Address](#) Instant removal with [SafeUnsubscribe™](#) [Privacy Policy](#).  
Concerned Citizens of Armonk | PO Box 715 | Armonk | NY | 10504

Stigliani, Joseph

---

**From:** Tyrell, Kathleen  
**Sent:** Tuesday, March 23, 2010 3:30 PM  
**To:** Erickson, Patricia; Herbst, Anne; Sullivan, Joyce; Petrilak, Ed; Lombardo, Peter; Hollingshead, Robert; Fultz, Robert  
**Cc:** Stigliani, Joseph; Lemnios, Philip; Reilly, John; Blackall, Dennis; Meschino, Joan; Olivieri, Christopher; Sestito, Domenico; Sivo, Scott; Saide, Judi; Devine, Michael; Robishaw, Maureen  
**Subject:** RE: Stormwater Committee

Scott Sivo, assistant principal at Hull High School, will be the school department representative. He will replace Judi Saide.  
Kathleen Tyrell

-----Original Message-----

**From:** Erickson, Patricia  
**Sent:** Tuesday, March 23, 2010 3:22 PM  
**To:** Herbst, Anne; Sullivan, Joyce; Petrilak, Ed; Lombardo, Peter; Hollingshead, Robert; Fultz, Robert; Tyrell, Kathleen  
**Cc:** Stigliani, Joseph; Lemnios, Philip; Reilly, John; Blackall, Dennis; Meschino, Joan; Olivieri, Christopher; Sestito, Domenico  
**Subject:** Stormwater Committee

The following e-mail is from Joseph Stigliani, DPW Director

letterhead Form.doc >>                      << File: Stormwater Committee Memo.doc >>                      << File: DPW



**Town of Hull**  
**Department of Public Works**  
 9 Nantasket Avenue  
 Hull, Ma. 02045  
 781-925-0900

**2014 ANNUAL STORMWATER MEETING**

**September 11, 2014**

2014 update to Pre-Disaster Mitigation Plan  
 Annual Stormwater Update (NIPDES) 9/11/14

<u>Name</u>	<u>Department</u>
CHRIS RUSSO DCHFD	Hull Fire Dept
Stef Lemnios	Town Manager
ALICE BILLINGS	Hull Police
Robert Hollingshead	Fire Chief
Dick Miller	Hull Light
Tanos Tokadjian	Hull Light
Kurt Borenstein	Hull Harbor Master
Joey Sullivan	BOH
Bob Fritz	CDTP
Judi Sainle	IT
Jim Dow	Sewer Dept
Pat Roberts	Building Dept
Joseph Stigizani	DPLW Director

**RUSH**

**RUSH**

**RUSH**

7

**G & L Laboratories**

246 Arlington St., Quincy, MA 02170  
 Tel: (617) 328-3663 Fax: (617) 472-0706

Lab. ID #  
 67978

To: Hull Board of Health  
 Attn: Ms. Joyce Sullivan  
 253 Atlantic Ave.  
 Hull, MA 02045

Received Date/Time: 6/18/14, 11:05a  
 Analyzed Date/Time: 6/18/14 4:25p  
 Reported Date: 6/18/14  
 Collected by: Client  
 Collected Date: 6/18/14

**ANALYTICAL RESULTS**

Sample#	Sampling Location	Sampling Time	Enterococci (MPN/100mL)
1	Hst Ocean	7:55am	<10
2	Hst Bay	8:05am	<10
3	Edge water	8:20am	10
4	Trip Blank B	NA	<1
Maximum Contaminant Level			104
Method of Reference			Enterolert Method

**Laboratory QC Results**

QC	Unit	Enterococci
Duplicate (D1)	100mL	<10
Duplicate (D2)	100mL	<10
Dilution Blank	100mL	<1
Negative Control	100mL	Negative
Positive Control	100mL	Positive

Notes:  
 T.C. 6.5  
 6/18/14, RD  
 1:29 pm (A.A)

Approved by: [Signature] Lab. Director Date: 6/18/14

---

From: Herbst, Anne  
Sent: Thursday, April 03, 2014 3:04 PM  
To: Stigliani, Joseph  
Cc: White, Mary Ellen  
Subject: Saturday beachgrass day assignment

Hi Joe,

Here is the information for the person working on Saturday.

First, a big thank you to that person, whomever it turns out to be.

He should be at A Street at 8:15 AM with the tables, chairs, buckets, metal planters, and beachgrass.

The beachgrass should stay in the sand at the DPW until Saturday morning. The bunches of grass should be placed in the truck lying on their sides (not upright on the roots).

The last time I was at the DPW I saw that there was a small number of metal planters indoors at the back of the DPW next to the buckets.

There was a large number of metal planters outdoors by the storage units. Please make sure we have all of the planters and buckets – we will need them.

Once there, the person working can help with set up. Usually that person helps handing out materials, it will slow down considerably by 10. We hope to have everything back at A St. and ready to pack up and return to the DPW by noon, or close to that.

Anne Herbst  
Conservation Administrator  
Town of Hull  
253 Atlantic Avenue  
Hull, MA 02045  
781-925-8102

## Straits Pond Clean-up Day

Saturday May 17,,,,, 2014  
10:00 A.M. to Noon (Rain or Shine)

Please join other volunteers to help pick up all the winter-storm debris that now mars the shoreline, walks, and green areas along Straits Pond. As in the past, we will have a dumpster available on Atlantic Avenue in Hull and a dump truck at the park across from Rocky Beach in Cohasset. Trash bags will be provided. Work gloves are suggested.

Groups will also be clearing Rocky Beach, ponds in Hingham, the Weir River Estuary Center and surrounding grounds, and Rockland Street from West Corner to George Washington Blvd.

**WANTED ! >>> Volunteers**

**REWARD OFFERED :**

Free Picnic at High Noon at  
Basketball Court / Playground  
on Atlantic Avenue in Hull across from pond

**Stigliani, Joseph**

**From:** Hull Land Conservation Trust [one@hullportside.net]  
**Sent:** Friday, May 16, 2014 3:23 PM  
**To:** Stigliani, Joseph  
**Subject:** Big Weekend for Weir River and Pond cleanup and plant sales—rain or shine

Having trouble viewing this mail? [Click here to view it in your browser.](#)  
Make sure that you always get our messages: Add [one@hullportside.net](mailto:one@hullportside.net) to your contacts.

[Click here to unsubscribe or update your email address.](#)



Join in the annual **Weir River and Straits Pond Cleanup** this **Saturday, May 17**, rain or shine. Some of us will start at the **Weir River Woods at 9 a.m.** You can park at the entrance on Chatham Street or at the Estuary Center and carpool. The main cleanup is from **10 a.m. to noon**. Meet at 1) **Estuary Center**, 333 George Washington Blvd, Hull, 2) the Town parking area along **Straits Pond, 151 Atlantic Avenue**, Hull, or 3) **Triphammer and Foundry Pond** Conservation Areas in Hingham. At **noon**, everyone who helps is invited to a **free cookout** with Nona’s Ice Cream at Gun Rock Playground on Atlantic Ave., Hull or at the Estuary Center in case of rain. Bring trash bags and gloves. Pickup trucks are helpful! Thank You! Weir River Watershed Association, Straits Pond Watershed Association and Hull Land Conservation Trust.



# Town of Hull

## BUILDING DEPARTMENT

TEL: (781) 925-1330

FAX: (781) 925-2228

253 ATLANTIC AVE

HULL, MASSACHUSETTS 02045

### MEMORANDUM

To: Joe  
 From: Janice  
 Date: April 2, 2015  
 Subject: Permits April 14 – March 15

---

<b>April 14</b>	<b>May 14</b>	<b>June 14</b>	<b>July 14</b>
28 Residential 4 Commercial	37 Residential 5 Commercial	41 Residential 2 Commercial	51 Residential 1 Commercial
<b>August 14</b>	<b>September 14</b>	<b>October 14</b>	<b>November 14</b>
39 Residential 3 Commercial	26 Residential 2 Commercial	54 Residential 6 Commercial	17 Residential 2 Commercial
<b>December 14</b>	<b>January 15</b>	<b>February 15</b>	<b>March 15</b>
25 Residential 0 Commercial	20 Residential 1 Commercial	10 Residential 0 Commercial	22 Residential 2 Commercial

Note: No new sites of 1 acre or more

# Catch Basins "2015"

	DATE	TIME	LAST NAME	ADDRESS	ISSUE	RESOLVED
1	3/16			61 Edgewater Rd.	Clogged & frozen	
2	3/18			Island View at Bay	starting to come in	
3						
4						
5						
6						
7						
8						
9						
10						

**White, Mary Ellen**

---

**From:** Stigliani, Joseph  
**Sent:** Monday, April 27, 2015 4:09 PM  
**To:** White, Mary Ellen  
**Subject:** FW: Snowy Woods Walk this Sat., How to Protect Watershed Feb. 13, Annual Meeting Feb. 23

And this?

---

**From:** Judeth Van Hamm [<mailto:one@hullportside.net>]  
**Sent:** Thursday, February 06, 2014 4:03 PM  
**To:** Judeth Van Hamm  
**Subject:** Snowy Woods Walk this Sat., How to Protect Watershed Feb. 13, Annual Meeting Feb. 23



Enjoy a **Snowy Woods Walk** in the Weir River Woods this **Saturday, February 8**. Look for the foot prints of **who lives in and visits the Woods**, such as the small acorn-nibbling creature that took refuge in this hole. Meet at **8 a.m.** at the Estuary Center, 333 George Washington Boulevard, to carpool to the Chatham Street entrance to the Woods. Wear boots. Bring a camera if you have one. **FREE**. Sponsored by the Hull Land Conservation Trust and Weir River Watershed Association.

On **Thursday evening, February 13**, join local community leaders to help identify and **prioritize ways to restore, enhance, manage and protect our Weir River Watershed**. What can we do **now** to change the projection that by the year 2030, water demand will exceed Massachusetts Department of Environmental Protection withdrawal limitations for the Weir River Watershed? You are invited to a panel discussion about the current status of the Weir River Watershed, potential impacts of increased water withdrawals from population growth projections and South Hingham development proposals, and what can be done to address issues facing the watershed. Panelists include Commissioner Mary Griffin, MA Fish & Game, Samantha Woods, Weir River Watershed Matters, John Walsh, Aquarion Water Company, and Matt Zieper, National Trust for Public Lands. **6:30-9 pm** at the South Shore Country Club, 274 South St., Hingham. Refreshments. **Please RSVP** to Ronit Goldstein at [rgoldstein@aquarionwater.com](mailto:rgoldstein@aquarionwater.com) or 781-740-6693. In association with Hull Land Conservation Trust, Weir River Watershed Association, Weir River Estuary Park Committee, Hingham Land Conservation Trust, and Aquarion Water.

You are invited to the **Hull Land Conservation Trust annual meeting, 9 a.m., Sunday, February 23**, at the home of Philip and Karen Delano, 150 North Truro St., Hull, overlooking the Weir River Estuary narrows. We will elect board members and report on progress towards a Lofchie Path to create a Straits Pond Waterfowl Viewing Park. Breakfast refreshments. Please RSVP to Karen Delano, 781-925-8777. We welcome new board members, if you are interested.

**Thank you** for your support of our fall fundraising. People made donations for 145 *Hull along the edges 2014* calendars, two 1795 illustrated maps of Hull, and notecards and decorated shells. After expenses, we **raised over \$1700**. We would appreciate your help taking outstanding photos of the places where Hull's land and water meet for the *Hull along the edges 2015* calendar. Please send copies of **your favorite photos** at any time up until Labor Day. Call 781-925-5665 for more info.

Thank you for envisioning a well-cared for Weir River and Estuary.

Judeth



**Hull Garden Club Plant Sale.** 10 am to 4 pm, George Washington Boulevard parking lot. Hanging plants, patio pots, annuals, perennials, herbs, vegetables and composters. This is the Garden Club's main fundraiser that pays for beautifying corners and public buildings throughout Hull.



**Holly Hill Farm Annual Plant Sale.** 10am – 4pm , Saturday & Sunday, **May 17 & 18** and **May 24 & 25.** 236 Jerusalem Road, Cohasset. Thousands of Certified Organic plants grown from seed in our greenhouse, including herbs, vegetables, annual and perennial flowers. The staples that you can't live without and fun new varieties to try out. Our flower selection includes lots of colors and sizes to fill out your garden in both dimension and hue. The herbs we offer cover all the basics and then some. We also offer bagged soil and compost, lime, fertilizer and pest control aids, all Certified Organic.

**New additions to the May Plant Sale:** This year for the first time we are offering berry plants and asparagus crowns for sale, not organic but from stock grown by Nourse Farms of Whately MA. Nourse Farms has been growing berry plants for more than 80 years and are a well-trusted name in the Pioneer Valley and beyond. Raspberry, blueberry, strawberry, black raspberry and blackberry as well as asparagus crowns and a few horseradish plants too just for fun!

### HULL DPW SWEEPER LOG

Date	Operators	Street Name	From	To	Cubic Yards Material Unloaded	
					Road Sand	Beach Sand
9/26/14	M WHITE	MAIN ST MAN AVE	BARN	HULL CUT	1 YD	
9/29/14	M WHITE	MAIN ST MAN AVE	BARN	HULL CUT	3 YDS	
10/3/14	M WHITE	MAIN ST MAN AV	BARN	HULL CUT	3 YDS	
10/6/14	M WHITE	MAIN ST MAN AVE	BARN	HULL CUT	3.4 YDS	
10/14/14	M WHITE	MAIN ST MAN AV	BARN	HULL CUT	3 YDS	
10/20/14	M WHITE	MAIN ST MAN AV	BARN	HULL CUT	3 YDS	
10/27/14	M WHITE	MAN AVE	BARN	KENBARMA	6 YDS	2 LEAVES
11/3/14	M WHITE	MAN AVE	BARN	KENBARMA	6 YDS	2 LEAVES
11/3/14	M WHITE	ATLANTIC <sup>AV</sup>	MAN AV	COHASSET	6 YDS	2 LEAVES
11/3/14	M WHITE	AMMEX	ALL		6 YDS	2 LEAVES

## HULL DPW SWEEPER LOG

Date	Operators	Street Name	From	To	Cubic Yards Material Unloaded	
					Road Sand	Beach Sand
11/7/14	M WHITE	NAN AVE	BARN	LEHARMA	3 YDS	LEAVES
11/13/14	M WHITE	NEWPORT AV	ALL		3 YDS	LEAVES + GRASS
11/13/14	M WHITE	SHORT GARDEN RD			3 YDS	LEAVES
11/13/14	M WHITE	WORRICK RD			3 YDS	LEAVES
11/14/14	M WHITE	NAN AVE	BARN	LEHARMA	3 YDS	LEAVES
12/19/14	M WHITE	NAN AVE	BARN	FIRE WAY	3 YDS	

**TOWN OF HULL  
NPDES STORMWATER  
OUTFALL INSTPECTION REPORT**

No.	Location	Size	Type	Condition	Flow	Date
	<b>lagoon pump</b>	<b>12"</b>	<b>steel</b>	<b>gd</b>	<b>yes</b>	<b>3/16/2015</b>
	<b>350 Newport rd</b>	<b>10"</b>	<b>plastic</b>	<b>gd</b>	<b>yes</b>	<b>3/16/2015</b>
	<b>bay st at nan ave</b>	<b>20"</b>	<b>cement</b>	<b>gd</b>	<b>yes</b>	<b>3/16/2015</b>
	<b>9 moreland</b>	<b>10"</b>	<b>steel</b>	<b>gd</b>	<b>yes</b>	<b>3/16/2015</b>
	<b>43 Hampton cir</b>	<b>6"</b>	<b>clay</b>	<b>gd</b>	<b>yes</b>	<b>3/16/2015</b>
	<b>12 marginal</b>	<b>10"</b>	<b>steel</b>	<b>gd</b>	<b>yes</b>	<b>3/16/2015</b>
	<b>204 no toro</b>	<b>6"</b>	<b>clay</b>	<b>gd</b>	<b>yes</b>	<b>3/16/2015</b>
	<b>120 no toro</b>	<b>6"</b>	<b>clay</b>	<b>gd</b>	<b>yes</b>	<b>3/16/2015</b>
	<b>Nan rd at 4th</b>	<b>6"</b>	<b>clay</b>	<b>gd</b>	<b>yes</b>	<b>3/16/2015</b>
	<b>Nan rd at5</b>	<b>6"</b>	<b>clay</b>	<b>gd</b>	<b>yes</b>	<b>3/16/2015</b>

# **Stormwater Report on Bay Avenue East Roadway/Sidewalk and Infrastructure Improvement Project**



**Town of Hull, Massachusetts**

**Prepared by:  
GCG Associates, Inc.  
84 Main Street  
Wilmington, MA 01887**

**April 2, 2012**

## Table of Contents

- I. INTRODUCTION
- II. EXISTING CONDITIONS EVALUATION
- III. PROPOSED IMPROVEMENTS
- IV. SCOPE OF PROPOSED WORK – Bay Avenue East
- V. STORMWATER REPORT
- VI. STORMWATER AND DRAINAGE OPERATION AND MAINTENANCE PLAN
- VII. STORMWATER CHECKLIST
- VIII. TSS REMOVAL FORM

## **I. INTRODUCTION**

Bay Ave East has been selected for the revitalization effort according to the following existing conditions and Town goals:

- The existing roadway and infrastructure is deteriorated, outdated, failing and in need of replacement.
- Sidewalks must be constructed to comply with the Federal ADA Accessibility Guidelines and allow persons with disabilities to use them safely.
- The existing roadway drainage system is inadequate and frequent flooding and icing conditions are a public safety concern.

GCG Associates evaluated the existing conditions on Bay Avenue East and prepared an existing conditions plan with the recommended proposed improvements.

## **II. EXISTING CONDITIONS EVALUATION**

This is a mixed-use neighborhood in close proximity to the ocean and a boat ramp. Bay Avenue East is divided between residential and commercial use, and provides pedestrian and vehicular traffic throughout the area. The street encompasses three zoning districts which are Business, Commercial-Rec-C, and Single Family-B Districts. This provides for a mixed-use roadway containing a gas station, businesses, warehouses, a boat yard and residential houses. The section of Bay Avenue East evaluated extends from the intersection with Milford Street to the intersection with Nantasket Avenue and is approximately 1,050 feet long. The existing roadway is paved at a width of approximately 20 feet to 24 feet. Much of the street is paved an additional 8'-10' wider than the average width, often beyond the utility poles, to accommodate on street parking, commercial loading areas and pedestrians. Existing edge of roadway is a transition from edge of pavement to a combination of compacted gravel and grass with no curbing. Utilities present are a sewer system, water system, drainage system, natural gas system and a mixture of overhead and underground utilities. The following is an evaluation of each of these systems:

### **Road Pavement**

Most of the pavement on the road in the target area is in overall poor condition. The paved surface is a mixture of overlays, patching and trench paving which has resulted in an uneven and poorly draining road surface. Settlement areas are apparent. Roadway and private property flooding often occurs at low points along the roadway during and after major rain events due to uneven and slow draining pavement as well as inadequate closed drainage systems. Past utility trenching operations and a poorly draining pavement surface in combination with the freezing and thawing cycles present in New England have resulted in the formation of cracks and a weakening of the underlying subbase and pavement system. The underlying subbase and pavement are in need of reconstruction to restore structural integrity and to direct stormwater runoff to the closed drainage systems efficiently.



**Bay Ave East - Pavement Damaged - Puddling - Slow Drainage**

### **Sidewalks & Curbing**

The existing 8 to 10 strip used for parking and pedestrian walkers is in poor condition and needs to be replaced. There is no defined distinction between the parking and walkways. No curbing is found on Bay Avenue East.



**Bay Ave East - Existing Parking and Pedestrian walkways - No Turning Radii At Intersection**

### **Drainage System**

The existing drainage system along Bay Ave East is in poor condition and is inadequate to convey stormwater away from adjacent properties and the roadway during major rain events. There is approximately 1,150 linear feet of 8" clay, concrete, and PVC pipelines along with 2 drain manholes (one with a grated rim) and 9 catch basins which ultimately convey storm water down Bay Avenue East to the ocean. The drainage system in the area is older and does not appear to be conventionally designed. Most of the catch basins along the streets are connected to each other without manholes and are spaced beyond the required minimum distances of from 200 to 300 feet apart. Many catch basins are not located along the edge of pavement and are not placed in pairs on the edge of pavement. The street may have been widened over the years, but catch basins were not relocated, while other catch basins were added randomly to fix ponding problems on the road or to adjacent properties. Utility work performed adjacent to the drainage system may have resulted in breaks or sags within the drain lines that may be limiting efficiency of the overall drainage system. Manholes should be installed at pipe direction changes to utilize the capacities of catch basins for trapping debris and sediment into the system. Periodic flooding occurs due to the undersized and inefficient drainage system. The drainage system does not comply with current Stormwater Management Regulations and improvements are necessary.

The replacement and expansion of the entire drainage system is critical in terms of importance to the infrastructure improvements. Inefficient management of stormwater run off can adversely affect many of the components of the roadway infrastructure and adjacent properties. A properly functioning drainage system can extend the life span of the infrastructure and provide a safe roadway system for the public.

### **III. PROPOSED IMPROVEMENTS**

After completing the evaluation of the existing roadway infrastructure on Bay Avenue East, GCG Associates recommends the following infrastructure improvements be completed:

#### **Road Pavement and Subbase**

After all utility relocation and upgrades are completed within the existing streets, GCG recommends that the Bay Avenue East pavement and gravel subbase be reclaimed and blended to a uniform gravel subbase. At this time, changes in vertical and horizontal alignments can be made when grading the new roadway subbase to ensure stormwater runoff flows to the closed drainage systems and away from adjacent properties. After grading is complete, a minimum 4" depth of pavement should be installed, consisting of a 2 ½" bituminous binder course and a 1 ½" bituminous surface course. The total length of roadway to be reconstructed is approximately 1,050 linear feet.

#### **Curbs**

After the road grading and paving of the bituminous binder course is complete, a combination of bituminous and granite curbing will be set along Bay Ave East as per the proposed road cross section with granite curbing installed on the north side of the street and bituminous berm on the south side of the street. Additional granite curbing will be provided at all driveways, streets, parking lot entrances, handicapped ramps, etc. to maintain compliance with the ADA requirements. Intersections with adjoining streets will be improved by modifying curb radii when possible. The total length of granite curbing to be added is approximately 700 linear feet. The total length of bituminous berm to be set is approximately 670 linear feet.

#### **Sidewalks**

Currently there is no well defined sidewalks, handicapped ramps, or driveway aprons on Bay Avenue East. Bituminous sidewalks will be constructed on one side of the street adjacent to the granite or bituminous curbing as per the proposed roadway cross section except in areas where a grass filter strip is specified between granite curbing and sidewalk. All driveways will be bituminous, and all handicapped ramps will be cement concrete. All sidewalks and driveway aprons will be installed according to ADA requirements and handicapped ramps will be provided at all intersecting side streets and crosswalks. The total length of bituminous sidewalks, parking areas and driveway aprons to be constructed is approximately 810, 600 and 150 linear feet, respectively. The length of proposed cement concrete handicapped ramps is 50 linear feet. Six street trees will be removed to allow for the installation of the sidewalk system and six new trees will be added to the streetscape.

#### **Drainage System**

The drainage system within the Waveland Area is in poor condition and should be replaced and upgraded as needed. Due to fixed outlet elevations and the shallow depths at which the proposed drain lines must be installed, reinforced concrete pipe and ductile iron pipe will be used to meet required roadway traffic loading requirements. The existing

drainage structures will be replaced with conventional drainage structures with four-foot deep sumps and inlets located in the road. Manholes will be installed when pipes change direction and to effectively utilize the capacities of catch basins for trapping of debris and sediment into the system. The installation of these drain manholes will improve the operation of the drainage system by complying with DEP Stormwater Management guidelines. The locations of drainage structures will be modified to the new roadway cross section and away from intersecting street corners and driveway aprons. This will allow for the construction of handicapped ramps and curb transitions at their required locations, and allow for the addition of granite inlet stones at the back of each catch basin. There is approximately 1,150 linear feet of concrete and clay pipelines, 2 drain manholes (one with a grated rim) and 9 catch basins, which convey the stormwater from the entire area to an outlet in the Bay. The proposed drainage improvements will consist of approximately 1,150 linear feet of reinforced concrete and ductile iron pipes, 7 drain manholes and 12 catch basins/gutter inlets. Sub-drains should be constructed to allow tie-ins from residential sump pumps.

**Summary Improvements**

The existing conditions and the proposed improvements are shown on the attached plans entitled "Bay Avenue East Roadway Improvement Project" and summarized as follows in Table 1:

**Table 1: Summary of Construction Quantities**

Item	Existing Quantity	Existing Material	Repair/Replace or New	New Quantity	New Material
Road	1,050 l.f.	Bituminous Concrete	Replace	1,050 l.f.	Bituminous Concrete
Curb	---	---	New	700 l.f. 670 l.f.	Granite/ Bit. Berm
Sidewalk	550	Bituminous Concrete	New	810 l.f.	Bituminous
Driveways	595 l.f.	Bituminous	Replace/New	595 l.f.	Bituminous
Parking Areas	600 l.f.	Bituminous	Replace	600 l.f.	Bituminous
WCR Ramps	---	Concrete	New	50 l.f.	Concrete
Storm Drain Pipes	1,150 l.f.	Clay/CONC/RCP	Replace/New	1,150 l.f.	RCP/DI
Storm Drain Manholes	2 ea.	Cement Block/Brick	Replace/New	7 ea.	Precast/Block Concrete
Storm Catch Basins	9 ea.	Cement Block/Brick	Replace/New	12 ea.	Precast/Block Concrete
Street Trees	14 ea.	Wood	Replace/New	6 ea.	Wood

#### **IV. SCOPE OF PROPOSED WORK – Bay Avenue East**

The proposed work on Bay Avenue East consists of the necessary infrastructure improvements at this time. The following is a summary of the proposed work for Bay Avenue East:

- Road and Subbase: 1,050 linear feet of reclamation and reconstruction.
- Granite Curbs: 700 linear feet of new granite curbing.
- Bituminous Berm 670 linear feet of new bituminous berm
- Sidewalks: 810 linear feet of new bituminous concrete sidewalks
- Driveways/Ramps: 595 linear feet of new and replaced bituminous driveway aprons, 600 linear feet of replaced parking lot entrances and 50 linear feet of cement concrete handicapped ramps.
- Drainage System: 1,150 linear feet of reinforced concrete and ductile iron pipe, 7 drain manholes, 12 catch basin inlets.
- Landscape: 6 trees removed and 6 new street trees.

#### **V. STORMWATER REPORT**

The intent of this stormwater report is to examine the stormwater runoff from the existing roadway based upon the requirements of the Massachusetts Department of Environmental Protection Stormwater Management Policy. The goal of the design is to improve the collection of stormwater for Bay Avenue East and improve the water quality of stormwater discharged.

##### **1. Compliance with Stormwater Management Standards**

The following paragraphs will define how the proposed project complies with the Stormwater Management Policies. Standards referenced are part of the Stormwater Checklist and Certification. The Bay Avenue East project is a redevelopment project and is subject to meet the standards to the extent practicable.

**Standard 1: No New Untreated Discharges** – The new drainage system on Bay Avenue East has been designed to replace the existing drainage system and connect to the existing pipe. No new discharges are proposed.

**Standard 2: Peak Rate Attenuation** – The Bay Avenue East project is non subject to this standard as the project is located in land subject to coastal storm flowage. The project includes improvements to the existing roadway and drainage infrastructure. The limited right of way width and abundance of utilities underground there are no locations for a detention of the stormwater. The peak discharge rates were not calculated for this project. The overall project does not change the drainage areas or patterns which flow to the existing discharge.

**Standard 3: Recharge** – Recharge cannot be provided due to the limited area located within the existing right of way and the amount of underground utilities which can be clearly seen on the construction drawings. Also, the soils are not ideal for recharge primarily due to the high groundwater.

**Standard 4: Water Quality** – The proposed drainage system improves on the existing stormwater system by adding catch basins and eliminated catch basin to catch basin linked connections. See attached table for the TSS Removal for this project.

Standard 5: Land Uses with Higher Potential Pollutant Loads – This project is not considered a LUHPL.

Standard 6: Critical Areas – There will be no new stormwater discharges to a critical area as an existing discharge is being used and no new discharges are proposed.

Standard 7: Redevelopment and Other Projects Subject to the Standard only to the maximum extent practicable – The Bay Avenue East project has been design to the extent practicable to meet the Stormwater Management Standards.

Standard 8: Construction Period Pollution Prevention Plan and Erosion and Sedimentation Control Plan – Erosion control methods around catch basins during construction have been shown on the contract drawings and contract specifications.

Standard 9: Operation and Maintenance Plan – The Town of Hull Department of Public works currently has an ongoing operation and maintenance plan for the Towns stormwater system. Portions of the plans are included in this report as provided by the Department of Public Works.

Standard 10: Prohibition of Illicit Discharges – There will be no illicit discharges a statement is included as part of this report.

## 2. Best Management Practices (BMP's)

Street sweeping and deep sump catch basins will be used to treat the stormwater runoff.

Structural BMP – Deep Sump Hooded Catch Basins – Deep sump catch basins shall be installed in Bay Avenue East. The deep sumps will have 4 feet from the invert of the pipe to the bottom of the basin with hoods located on the end of the pipes to serve as pretreatment prior to stormwater flowing into the collection system.

## 3. Hydraulics and Pipe Sizing

The closed drainage system was analyzed using the Rational Method for 10 and 25 years storm events using a IDF curves for Boston. A runoff coefficient of 0.9 was used for paved and impervious areas and 0.3 for grass and landscaped areas. The proposed drainage system will eliminate the current ponding and drainage issues on Bay Avenue East.

## 4. Conclusion

In conclusion the Bay Avenue East Roadway Improvement Project will include replacement of the existing drainage systems, reconstruction of roadways, sidewalks which will provided better treatment to the stormwater runoff than the current system. The project is complied with the Best Management Practices to the extent possible under a redevelopment project.

**FOR IMMEDIATE RELEASE**

**TOWN OF HULL  
STREET SWEEPING SCHEDULE**

The Town of Hull, Department of Public Works is pleased to announce that it has begun its annual street sweeping program. Because of the larger than normal volume of sand on the roads, the sweeper has been concentrating on main roads and environmentally sensitive areas as well as areas impacted by recent storm related high tide events.

Now that these main areas are complete, the sweeper will be focusing on neighborhood areas beginning in the Village during the week of 4/21/14.

The Department of Public Works reminds residents that street sweeping is done for safety reasons and is also an important component of the "Pollution Prevention and Good Housekeeping in Municipal Operations" portion of the Town's Stormwater Management Plan. For more information on stormwater management in the Town of Hull or to see future announcements regarding sweeping operations, you may go to the Town's Website at [www.town.hull.ma.us](http://www.town.hull.ma.us) and click on the Department of Public Works and then Stormwater Management.

Contact information:

Joseph Stigliani  
Hull DPW Director  
781-925-0900  
[jstigliani@town.hull.ma.us](mailto:jstigliani@town.hull.ma.us)  
4/21/14

# THE WEEK

Compiled by Susan Ovens

## DPW begins sweeping streets

Hull's Department of Public Works has begun its annual street-sweeping program. All public roads and most sidewalks are swept at least once a year, and some twice or more, depending on how much sand and salt was deposited over the winter and if storm debris such as sand and gravel is present. This winter's excessive snowfall required numerous sanding and salting operations, which resulted in considerable sand left on many roads.

To deal with the excessive amount of sand, the DPW will be sweeping main roads first, as well as roads that have been subjected to coastal overwash. In areas where roads and/or sidewalks still contain a considerable amount of sand and cobble, a backhoe or other equipment may be needed to clear the area before it can be swept.

DPW Director Joseph Stigliani said this means that it may be some time before crews can begin sweeping neighborhood roads. The DPW contracted with a private company to assist. Once all main roads have been swept, a schedule will be provided to advise residents when they can expect the street-sweeper in their neighborhoods.

Street-sweeping is done for safety reasons and is also a component of the town's stormwater management plan.

For more information on stormwater management or to see future announcements regarding street-sweeping, go to [www.town.hull.ma.us](http://www.town.hull.ma.us) and click on the Department of Public Works. Those with questions should call the DPW at 781 925-0900.

to finally make free "black gold" – compost – from your kitchen scraps and yard waste, reducing your household trash by almost 30 percent.

The Greenscapes program ([greenscapes.org](http://greenscapes.org)) at the North and South Rivers Watershed Association is selling rain barrels from the Great American Rain Barrel Company and Earth Machine composters. They are available for pickup on Wednesday, May 13 or thereafter at the NSRWA office, 214 South St., Norwell.

"We are pleased to be offering these simple, inexpensive, and very effective products to our residents. The rain barrel will bring down people's water costs and protect our precious water supplies, and the composter will keep valuable waste out of our landfills, transforming it into highly-productive compost," said Debbie Cook, Greenscapes manager and NSRWA's marketing and communications director.

The rain barrels, which cost \$85, and composters, which cost \$60, must be pre-ordered by May 6.

To order a rain barrel, visit [www.greatamericanrainbarrel.com](http://www.greatamericanrainbarrel.com), look for "shop local programs" in the left side bar, and find North and South Rivers Watershed Association, or email [info@tgarb.com](mailto:info@tgarb.com), or call 800 251-2352.

To order an Earth Machine composter, e-mail [kayakflower@verizon.net](mailto:kayakflower@verizon.net) or call 781 367-0626.

## Help Community Garden grow

Many hands make light work! Stop by the Community Garden at 150 George Washington Boulevard on Saturday, April 18, from 10 a.m. to noon and help ready the garden for its second growing season. The goal is to rake and prune, clean up debris, build new raised beds, and paint a picnic table.

Event coordinators will provide the tools and other supplies; work gloves and boots or sturdy shoes are



**PITCH PERFECT** – Hull High music teacher Ian Barkon listened while student Richard Barone described joy he found in participating in the Southeast Massachusetts School Bandmasters Association Senior Music Festival recently. Barone, who played tenor sax, was the first Hull High student to perform in the juried concert in 20 years, Barkon said. [Robert Jackson photo]

Lynne Shapiro, Frederick Slade III, Michael S. Bodkin, Verena Stampfli, Deborah Stern, Deborah Stewart, Leo Stewart, Brian Sullivan, Cynthia Walcott, Carla Weiner, Kathleen White, Grace Whittemore

## Advisory board

Continued from page 1

"Many are responsible, many are not," said advisory board member Jay Polito, who opposes an amendment to the bylaw.

"This is a unique beach in the area. It is not a qu

# TIMES

Thursday, April 24, 2014

\$1.00

13

Hull Dpw  
9 Nantasket Rd  
Hull MA 02045

HT0377  
\*\*\*\*\*5-DIGIT 02045



**MR. SANDMAN** - The DPW's street sweeper, operated by Jack Kecskemety, on its appointed rounds in Hull Village... [Roger Jackson photo]

as a member of the regional Special Weapons And Tactics (SWAT) team, who is also trained in martial arts and when suddenly he saw several flash-lights turned on and begin moving in the direction of the gathering.

FOR IMMEDIATE RELEASE

TOWN OF HULL

CHIP DAY

The Town of Hull, Department of Public Works is pleased to announce that Spring Chip Day will be held from 8:00 a.m. to 12:00 p.m. Saturday, May 3, 2014, at the Highway Barn, 9 Nantasket Avenue. Residents may bring in tree limbs and brush, 8" in diameter or less, only. Leaves, grass, vines, and other such yard waste will NOT be accepted. Vehicles larger than a standard pick up truck will not be allowed. Landscapers and contractors will be limited to one (1) pick up truckload only. Participants should remain in their vehicles and let the DPW staff remove the limbs and brush from the vehicle. Proof of Hull residency is required. For more information contact:

Joseph Stigliani  
Hull DPW Director  
[jstigliani@town.hull.ma.us](mailto:jstigliani@town.hull.ma.us)  
781-925-0900.

raise funds for production of the sauce in larger containers and new, retail-size bottles. This is an exciting time for the brand. I never imagined we would get this far," Ervin said.

Potential investors can find the 9 Lazy Kidz Kickstarter at [www.Kickstarter.com](http://www.Kickstarter.com). Search Martin Ervin for more information.

### Kids will 'Rake & Take' leaves for drama program

Friends of Hull High School Theatre Arts hold their annual Rake & Take event from Nov. 7-11.

Hull High drama program members and adult volunteers will rake your yard(s) and bag and take away leaves for \$5 per lawn-bag filled.

There are limited slots available, so call early to reserve yours: 781 925-9105.

### DPW schedules extra Chip Day for November 8

Due to popular demand, the Hull Department of Public Works has scheduled a second Chip Day this fall, on Saturday, Nov. 8, from 8 a.m. to noon.

Residents may bring in tree limbs and brush, eight-inches in diameter or less, to the DPW barn at 9 Nantasket Ave. Residents should remain in their vehicle while staff removed the limbs and brush to be chipped. Vehicles larger than a standard pickup truck will not be allowed. Landscapers and contractors are limited to one truckload only. Proof of Hull residency may be required.

Please note that only limbs and brush are suitable for chipping. No leaves, grass, vines, or other plant material can

represent corporate defendants and insurance companies in cases involving product liability, medical malpractice, and employment discrimination.

Clifford grew up in Weymouth, where she still lives. Her husband, Michael, is a Massachusetts State Police trooper and former U.S. Marine who served two tours of duty in Iraq. She earned her bachelor's degree from Boston College and her law degree from Suffolk University Law School.

Colleen Quinn, State House News Service ∞

### HCTV Schedule

#### COMCAST CHANNEL 9/VERIZON CHANNEL 35

The feature show plays every night at 7:30 p.m. and is replayed at midnight and noon the next day.

**Sunday:** Board of Selectmen replay

**Monday:** History: Hull Heritage Day

**Tuesday:** Board of Selectmen replay of 10/28

**Wednesday:** Hull Youth Football Playoff

**Thursday:** New Lecture: Boston Brewing

**Friday:** East Coast Acappella

**Saturday:** Best of Cinzi Lavin

Tune in at 9 and 10 a.m. and 5 and 10 p.m. for more local programming.

And don't miss our Week in Review every Saturday afternoon.

#### COMCAST CHANNEL 22/VERIZON CHANNEL 34

The Show of the Day plays every day at 3, 7 & 11 both a.m. & p.m.

**Sunday:** Weekend Sports

**Monday:** School Committee live

**Tuesday:** Hull High Football

**Wednesday:** School Committee replay

**Friday:** Hull's Home Movies

**Saturday:** Weekend Sports ∞

RT  
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customers

17

## TOWN OF HULL

### Notice of "Prohibited Materials" by Law Adoption

On April 11, 1994, Town Meeting passes a "Prohibited Materials" By Law which restricts exterior storage of abandoned, discarded and unused material.

Since we have observed materials stored in a fashion contrary to this By Law at the above referenced address, you are hereby notified that the enforcement pursuant to Chapter 141 commenced on September 6, 1994.

Therefore, you are ordered to take the necessary steps now to comply with aforementioned requirements. Failure to comply will result in a violation notice(s), and prescribed fines.

You should carefully review the By Law which is as follows:

1. No person, tenant or entity, corporate or otherwise, as owner(s) or one(s) in control of premises, shall keep in the open in any area of the Town of Hull, any prohibited material, as the term is hereinafter defined, for more than (30) consecutive calendar days without being licensed to do so under this chapter.
  - a. "Prohibited material" shall be defined as, including but not limited to, abandoned, discarded, or unused furniture, stoves, toilets, cabinets, scrap metal, lumber, concrete, asphalt, tin cans, rope, rugs, batteries, paper, trash, rubber debris, waste, and other old scrap ferrous or non-ferrous material, which is not being used for its intended purpose.
2. A license to keep any prohibited material shall be requested by filing an application in writing for such a license with the Board of Selectmen no later than fifteen (15) days after a citation has been issued. The Selectmen shall hold a public hearing upon such a request within thirty (30) days of receipt of said application, notice of which shall be published in a newspaper issued in Hull or a paper of general circulation in Hull, at least three (3) days prior to the hearing. The applicant shall pay the cost of the publishing.
3. The Selectmen may grant a license for up to one (1) year upon such condition(s) as the Selectmen deem proper to keep such prohibited material in the open after a hearing has been held and the Selectmen determine that the keeping of the same will not depreciate property value in the area, will not create a hazard to the public safety, or will not become a public nuisance. Renewals of said license shall be granted only after the procedure set forth is followed.
4. The application shall at his own expense, give notice of said hearing by mailing a notice of same prepared by the Board of Selectmen to all parties of interest, meaning abutters, owners of land directly opposite on any public or private street or way and abutters to the abutters within three hundred (300) feet of the property line, all as they may appear on the most recent applicable tax list as certified by the Board of Assessors. The Applicant shall submit an affidavit as to said notice. Renewals of said licenses shall be granted only after the procedure set forth is followed.

5. Notwithstanding the aforesaid sections, no person shall be in violation of this chapter if prior to a determination of guilt by any judicial body, that person or entity acquires a determination by the Hull Planning Board, through the procedures hereinafter prescribed, that those articles or pieces of property which the Town of Hull claim to be prohibited materials are not prohibited, as defined in the chapter.
6. Any person or entity requesting a determination that articles or property are not in violation of this chapter must do so by written application to the Planning Board of the Town of Hull. Said Planning Board shall hold a public hearing upon such a request, the hearing must be held within thirty (30) days after receiving said application. Notice of which shall be published at least three (3) days before the date of the hearing. The applicant shall at his own expense, give notice of said hearing by mailing a notice of same prepared by Planning Board to all parties of interest, meaning abutters, owners of land directly opposite on any public or private street or way and abutters to the abutters within three hundred (300) feet of the property line, all as they may appear on the most recent applicable tax list as certified by the Board of Assessors. The application shall submit an affidavit as to said notice.
7. Notwithstanding the aforesaid sections, no prohibited material shall be deemed to be "in the open" as the phrase is used in Section 1, if it is totally screened from view of any public road or way, or any way which the public has a right of access.
8. Conditions existing on the date of acceptance of this chapter which meet the definition of prohibited material must be brought into compliance within thirty (30) days after said acceptance. Of this chapter, which meets the definition of prohibited material, must be brought into compliance within thirty (30) days after said acceptance.
9. The Building Commissioner and Board of Health shall be charged with the interpretation and enforcement of this chapter, and may also be enforced by the Hull Police Department. Enforcement of this chapter may be by criminal complaint, indictment, non-criminal disposition or appropriate civil enforcement action. Selection of one method shall not preclude the selection of any method or remedy.
10. Any person or entity who is found in violation of this chapter shall be liable for a fine of twenty-five (25.00) dollars a day for the first five days and fifty (50.00) dollars a day every day thereafter. The days shall be counted commencing fifteen (15) days after the notice of violation is given.
11. Any clause, section or part of this chapter determined to be invalid by any judiciary for any reason, shall be severable from any other clause, section, or part, without affecting the validity of that which remains.
12. Construction sites complying with the requirements of 780 CMR and MGL chapter 40, Section 54, are exempt from the aforementioned, provided that all related construction debris is Maintained in a controlled fashion as determined by the Building Official

Should you have any questions concerning this new By Law, please contact the Board of Health Office or the Building Department.



# TOWN OF HULL, MASSACHUSETTS

- RESIDENTS
- VISITORS
- BUSINESSES

- Boards & Commissions
- Town Departments
- Town Calendars
- Board Vacancies
- Available Bids, Quotes & Proposals
- Employment
- Hull Schools
- Geographic Info
- Hull Recreation
- Weather & Tides
- Library
- E-Subscriber
- Contact Us
- Home Page

Hull Town Hall  
253 Atlantic Ave., Hull, MA 02045

Tel: 781-925-2000  
Fax: 781-925-0224

[Virtual Towns & Schools Website](#)

## Recycling

[Printer-Friendly Version](#)

Contact: **Joseph Stigliani**  
Recycle/Landfill Manager

### Additional Links:

[10 Steps To Start Business/School Recycling](#)

[Hull Board of Health](#)

[Freecycle](#)

[Recycle Compact Florescent Lightbulbs \(CFLs\)](#)

[Electronics Recycling Superpulse](#)

[Department of Public Works](#)

[Book Recycling: Videotapes, CDs, DVDs](#)

[MA DEP Recycling & Waste Services](#)

[Abtobl Paper Recycling Benefits Hull Schools](#)

[Recycling and Trash Hauler Companies](#)

[South Shore Recycling Co-op](#)

[Recycle and Repurpose Cell Phone Links](#)

[Television Take Back Program](#)

### Town of Hull Department of Public Works FOR IMMEDIATE RELEASE TOWN OF HULL RECYCLING AREA CLOSURE

Due to reductions in the Department of Public Works and the Recycling/Landfill budgets, the Hull Recycling Area will be closing at the end of June. The facility will be open during regular hours of operation on June 27, 2009.

The town of Hull and South Shore Recycling Cooperative are continuing to negotiate with surrounding communities about the possibility of Hull residents using their recycling facilities. Notices will be placed on the Town's website, cable channel, and released to the local papers if and when arrangements can be made.

Contact: Joseph Stigliani  
DPW Director  
781-925-0900



## Stigliani, Joseph

---

**From:** Claire (Sullivan) Galkowski [ssrecyclingcoop@verizon.net]  
**Sent:** Tuesday, March 31, 2015 4:02 PM  
**To:** Enterprise; duxbury@wickedlocal.com; Enterprise Calendar; jaredtrout@yahoo.com; Kingston@wickedlocal.com; Ledger; Mariner Cohasset Erin Dale; csalters@wickedlocal.com; Mariner Hingham Mary Ford; Old Colony Memorial; Tanna; Townonline Sarah Corbitt; Tracy Seelye; hanover@wickedlocal.com; hanson@wickedlocal.com; scituate@wickedlocal.com; cohasset@wickedlocal.com  
**Subject:** Spring Household Hazardous Waste Collections

**FOR RELEASE weeks of 3/31, 4/6,4/13**

### **Do you have stuff that's too bad for the trash?**

South Shore Recycling Cooperative member towns will host six more household hazardous waste collections this spring. Residents may attend their own or their host town's event at no charge.

Collections are scheduled from 9 am- 1 pm as follows:

**4/18 Plymouth DPW, 169 Camelot Dr.**

**4/25 Hanover Transfer Station, 118 Rockland St. (Rt. 139)**

**5/2 Kingston/Duxbury, Kingston Highway Dept, 32 Evergreen St..**

**5/16 Hingham, Plymouth River School, 200 High St.**

**6/6 Hanson, Plymouth County Hospital, 252 High St.**

**6/13 Scituate/Cohasset, Scituate Highway Dept., 68 Capt. Pierce Rd.**

Residents of those, and of member towns **Abington, Middleboro, Rockland, Weymouth and Whitman** may attend other member towns' collections at their home town's expense. To do so, obtain and bring a signed **Authorization Form** from your town's responsible department (DPW, Environmental Mgmt. or Board of Health). Some towns may limit subsidized quantities to 15 gal. or 30 lb.

Residents from any town without an Authorization Form may attend for a fee of \$45 /15 gal or 30 lbs of waste. Commercial generators, call ahead to 1-617-852-3086 to arrange disposal and payment. Please bring a check.

**Bring:** Oil based paint, stains, solvents, gasoline, automotive fluids, pesticides, photography and pool chemicals, acids, bases, and poisons in secure, labeled containers.

**Do not bring:** industrial, pathological and medical waste, radioactive materials, pressurized gas cylinders or explosives.

**Oil based paint, propane tanks, motor oil, antifreeze, medical sharps, auto & rechargeable batteries, and fluorescent lamps** are collected regularly by some towns and some retailers. Residents should use those services if available. Go to [ssrcoop.info](http://ssrcoop.info), click on "Other Stuff".

Latex paint is **messy, but not hazardous**. If not recyclable as described below, absorb liquid with cat litter and dispose in trash.

**SOUTH SHORE  
RECYCLING  
COOPERATIVE**  
ssrcoop.info



The Evolution of the Waste Can



**You are invited to the SSRC's 16<sup>th</sup> Anniversary**  
**“Trash Bash”**  
**Luncheon, Trade Show, and Trash Talk**

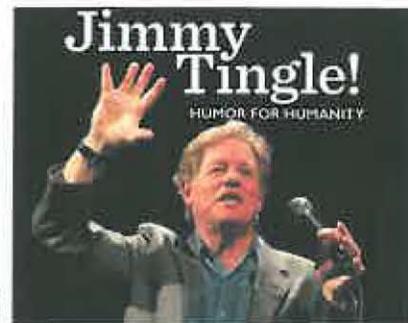
**Featuring comedian/commentator**

**Thursday, March 26, 2015**

**11:30 am -2:30 pm**

**Jones River Trading Co.**

**42 Elm St, Kingston**



Entertainment sponsored by

**COVANTA**  
Powering Today. Preparing Tomorrow.



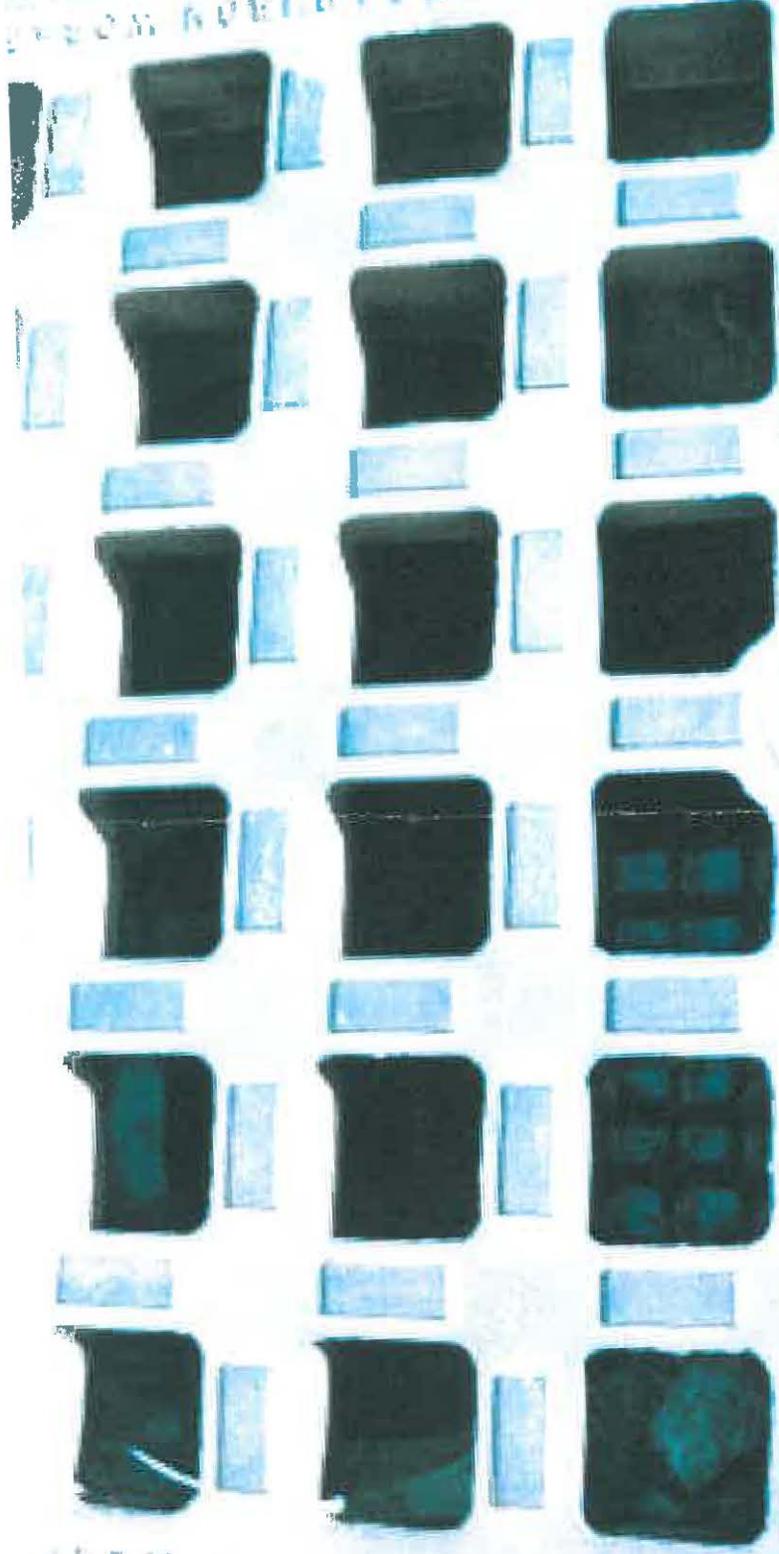
**Seating is limited. To reserve a seat, please reply to this email.**  
**You will be asked to confirm the week before the event.**

**Value is \$45, but there is no charge for invited south shore officials, thanks  
to our sponsors:**



*And more to come...*

PERSON APPLICANT USE



BRING TO WATERPUMP

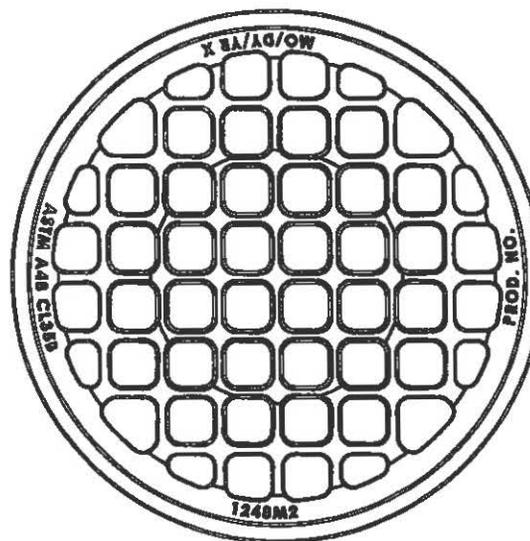
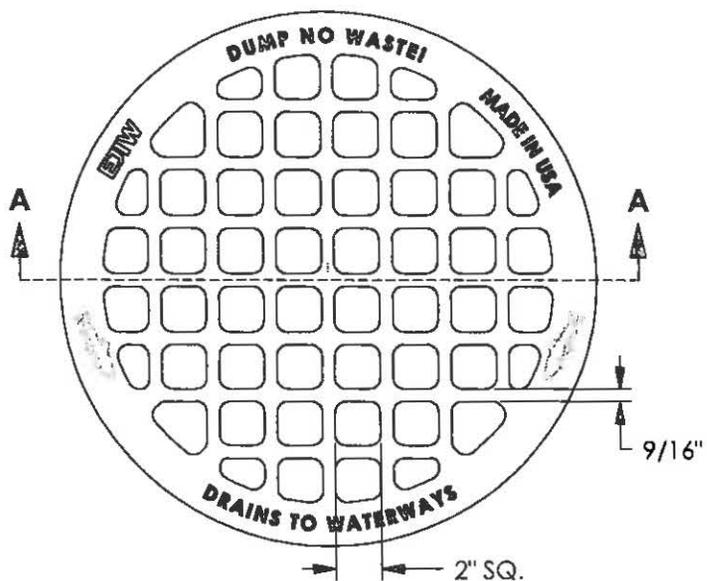
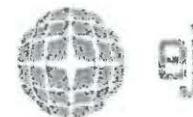
DUMP NO WASTE!

DEBY INC.

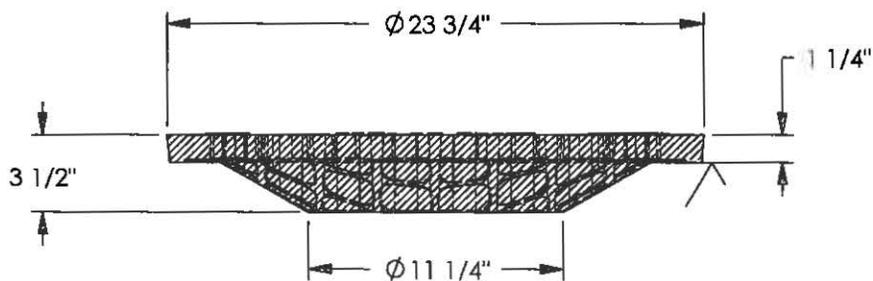
Photo #1 19

# Diagram A

## 1248 Grate



**BOTTOM VIEW**



**SECTION A-A**

**Product Number**

00124833

**Design Features**

- Materials  
Gray Iron (CL35)
- Design Load  
Heavy Duty
- Open Area  
192 sq in
- Coating  
Undipped
- √ Designates Machined Surface

**Certification**

- ASTM A48
- H20
- Country of Origin: USA

**Drawing Revision**

9/25/2009 Designer: DEW  
02/27/2012 Revised By: DJH

**Disclaimer:**

Weights (lbs/kg), dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

CONFIDENTIAL: This drawing is the property of EJ Group, Inc. and embodies confidential information, register marks, patents, trade secret information, and know-how and is the property of EJ Group, Inc. Copyright © 2011 EJ Group, Inc. All rights reserved.

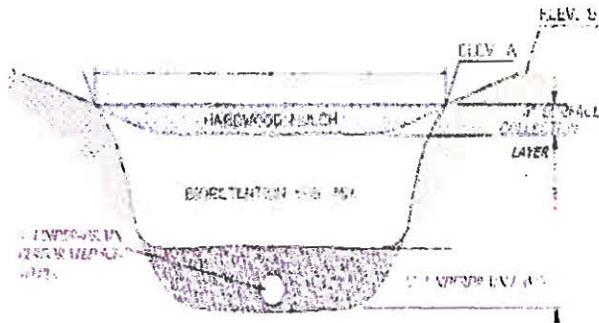
**Contact:**

800 626 4653  
ejco.com

Diagram A 20

## How Rain Gardens Work

Rain gardens (also known as bioretention cells) use vegetation and soils to remove pollutants from stormwater runoff. Stormwater runoff is directed into a rain garden, where it is pre-filtered through a hardwood bark mulch layer prior to filtering through a bioretention soil mix (comprised of shredded hardwood, coarse sand, and topsoil). The bioretention soil mix retains, degrades, or absorbs sediments, bacteria, nitrogen, phosphorus, metals, oil and grease, which are damaging to the pond. After the stormwater has filtered through the bioretention soil mix, it passes through a peastone underdrain layer, and is directed into a perforated drainage pipe connected to the existing stormwater drainage system. The filtered runoff contains fewer contaminants and therefore imparts less stress on the pond.



Three feet of a typical bioretention soil mix can achieve the following pollutant removal from stormwater runoff:

PARAMETER	% REMOVED*
COPPER	93
LEAD	99
PHOSPHORUS	81
TOTAL NITROGEN	43
NITRATE	23

\*Experimentation performed by Dr. Allen Davis, University of Maryland, and reported in "Low-impact development Design Strategies" Prince George's County, Maryland Department of Environmental resources.



**RAIN GARDEN AT COHASSET WATER TREATMENT PLANT**

## Rain Garden Maintenance

- Remove litter, debris and sediment
- Replace mulch (do not use dyed mulches)
- Inspect vegetation and remove damaged limbs and replace diseased plants
- Use native or non-invasive species
- Do not use fertilizers
- Inspect spring and fall

## Stormwater Improvement Project Team

With support from the Town of Hull Board of Selectmen and the Straits Pond Watershed Association, the Hull Conservation and Public Works Departments, working with Norfolk Ram, applied for and received, a "Section 319 Water Quality Grant" from the EPA to design and install this stormwater treatment project for Straits Pond. An earlier grant from the MA Coastal Zone Management, Coastal Pollution Remediation program provided support for the initial investigation and design work. The Hull DPW will participate in the installation and maintenance of the project as part of the Town's contribution to the grant.

# STRAITS POND STORMWATER IMPROVEMENT PROJECT TOWN OF HULL



## Hull Board of Selectmen

John D. Reilly, Jr.  
Christopher Olivieri  
John C. Brannan  
Kevin Richardson  
Domenico L. Sestito

253 Atlantic Avenue  
Hull, MA 02045  
(781) 925-2000

<http://www.town.hull.ma.us>

Prepared by



**NORFOLK-RAM**  
ENGINEERING SOLUTIONS  
FOR THE ENVIRONMENT

One Roberts Road  
Plymouth, MA 02360  
(508) 747-7900

<http://www.norfolkram.com>  
Email: [wperry@norfolkram.com](mailto:wperry@norfolkram.com)  
and the

**Hull Conservation Department**  
781-925-8102



12/1

## Straits Pond Water Quality

Straits Pond covers approximately 92 acres, varies in depth from three to five feet, and is part of the Weir River Area of Critical Environmental Concern. Straits Pond has a history of water quality problems resulting in algae blooms, fish kills, dense swarms of midges, and foul odors.

With the completion of the new tide gates at West Corner, we are seeing improvement in conditions in Straits Pond. This stormwater improvement project aims to continue our progress improving water quality in Straits Pond by removing pollutants that currently reach the pond in stormwater runoff.



## The Impact of Stormwater

- Stormwater picks up debris, chemicals, dirt, animal waste, nutrients and other pollutants and washes it into our waters.
- Sediments cloud water, impair aquatic plant growth and destroy habitats.
- Excess nutrients (often from lawn fertilizers) cause algae blooms. Algae decomposition removes oxygen from the water killing fish and aquatic life.
- Bacteria and other pathogens create health hazards and can make contact with water unhealthy.
- Debris - bags, six-pack rings, bottles, and cigarette butts - choke, suffocate and disable aquatic life including ducks, fish, turtles and birds.
- Household hazardous wastes - insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life.



**DRAINAGE AREA FOR STORMWATER TREATMENT**

## Stormwater Treatment Project

This project will treat a 16-acre drainage area that extends along Richards Road and includes Town Hall and land along Nantasket Avenue.

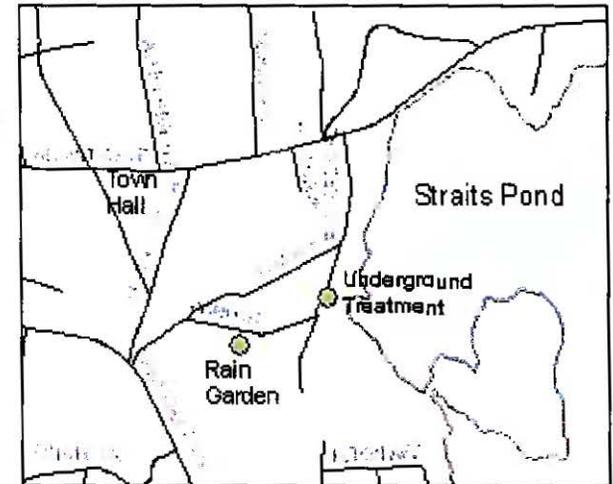
A 5-foot wide and 20-foot long rain garden will be installed along the side of Pond Street. Stormwater will be directed to a sediment forebay (similar to a catch basin), which will settle out sediment. The stormwater will then enter the rain garden where additional sediment, nutrients and other pollutants will be removed. Plantings in the rain garden will include iris, daylily, inkberry, beebalm and montbretia.

Stormwater will leave the rain garden through a pipe that will join the existing stormwater pipe that extends along Pond Street towards Richards Road. As part of this project, this stormwater pipe will be increased in size to relieve flooding in the area.

Finally, a 25-foot wide and 60-foot long underground stormwater retention system will be installed on Town property at the intersection of Richards Road and Pond Street. The underground system will allow stormwater to infiltrate into the ground, removing additional sediments and other pollutants before the remaining stormwater outlets to Straits Pond.

## Stormwater Strategies

This project will reduce pollutants entering Straits Pond by taking advantage of Low Impact Development (LID) strategies. LID helps maintain or restore healthy water bodies and groundwater levels by mimicking natural (pre-development) patterns. LID techniques infiltrate, filter, store, evaporate and/or detain runoff. LID techniques tend to be small-scale and manage stormwater runoff close its source. LID techniques are particularly well-suited to a town like Hull where there isn't a lot of space for large-scale treatment projects.



**STRAITS POND STORMWATER TREATMENT LOCATIONS**

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The Straits Pond Stormwater Improvement Project is financed in part by a Section 319 Water Quality Grant from the Environmental Protection Agency (EPA), administered by the MA Department of Environmental Protection (DEP). Views expressed herein do not necessarily reflect those of EPA, DEP or any of their sub-agencies, nor does mention of any trade names or commercial products constitute endorsement or recommendation for use.