SP 5/1/08

Municipality/Organization: Town of Kingston, MA

EPA NPDES Permit Number: MAR041041

MaDEP Transmittal Number: W-036193

Annual Report Number & Reporting Period: No. 3: March 07-March 08

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Maureen Thomas Title: Conservation Agent

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Maureen D. Thomas

Printed Name: Maureen Thomas

Title: Conservation Agent

Date: April 30, 2008

Part II. Self-Assessment

During the March 2007 to March 2008 permit term, the Town of Kingston continued its relationship with Environmental Partners Group, Inc. with funding provided by a Clean Water State Revolving Fund (CWSRF) loan through the Massachusetts Water Pollution Abatement Trust (MWPAT) in order to continue to meet and address the requirements of our NPDES Phase II permit. With an April 2007 Annual Town Meeting appropriation of $ 7,500.00 and additional funds provided by the Department of Streets, Trees and Parks (DSTP's), a spring 2007 flyover occurred to initiate digital mapping of the storm drain system and other associated goals of permit compliance. With the flyover complete, Environmental Partners Group, Inc. was able to finish up the base maps in April 2008. Environmental Partners Group will be completing the outfall mapping, cataloguing, ground-truthing and screening of all the outfalls in the next permit term. The most significant achievements made during the 2007-2008 reporting term were: commencement of mapping, 2008 Annual Town Meeting (ATM) approval to purchase a catchbasin cleaner after ten years of requests, stormwater improvement projects and commencement of the stormdrain stenciling project. Though it is unclear what the next five year permit term will bring as far as additional requirements from the Environmental Protection Agency (EPA)/Massachusetts Department of Environmental Protection (MA DEP), the Town of Kingston is fully committed to working toward complete implementation of its Stormwater Management Plan along with all of the requirements and goals of the original permit. As such, the Stormwater Working Group has discussed new goals for the 2008-2009 permit year (See below).

Permit Term 2007-2008

Stormwater Working Group

The informal Stormwater Working Group met four times in the 2007-2008 permit term. Meetings were held to discuss the work by Environmental Partners Group, Inc. to conduct mapping of the stormdrain system, the ATM warrant article for purchase of a catchbasin cleaner and overall progress for 2007-2008 as well as goals for 2008-2009.

Catch Basin Cleaner

After approximately ten years of attempting to get Finance Committee, Capital Planning Committee and Town Meeting support and approval to purchase a catch basin cleaner/vactor truck to clean the town-owned stormdrain system, the DSTP's was finally able to get overwhelming support for the purchase at the 2008 Annual Town Meeting held on April 5, 2008 (See attached ATM warrant and supplementary info.). The vote by residents was an overwhelming 143 to 11 to authorize the Board of Selectmen to purchase a catchbasin cleaner for $ 279,000.00. The vactor truck will not be purchased until Fiscal Year 2009, but once it is purchased the Town of Kingston will be able to greatly improve its catchbasin cleaning program to reduce stormwater impacts on wetlands and waterways.

Stormwater Improvement Project – Rocky Nook

The drainage improvement project permitted during the 2006-2007 permit term for Leigh Road in Rocky Nook commenced this April and will be completed in September 2008. This project will improve recharge to groundwater in close proximity to the Jones River, will add treatment of stormwater prior to discharge to bordering vegetated wetlands and Kingston Bay via deep sump catchbasins, infiltration galleys as well as a water quality inlet. The construction costs are being covered with Chapter 90 Highway Administration funds in the amount of $ 322,000.00, while all the permitting costs were paid for by the DSTP's.

Stormwater Improvement Project – Hillcrest Avenue

The DSTP's improved treatment of stormwater and increased recharge to the aquifer by adding a large infiltration galley on Hillcrest Avenue where stormwater previously left the roadway surface as sheet flow and was directed down a steep slope toward the riverfront area of the Jones River.

Change in Town of Kingston De-icing Policy

In 2007 the Town of Kingston changed its winter de-icing policy from a 100% salt use policy to a 50-50 salt-sand mix policy. This change came about as a result of evidence being provided by local cranberry growers that their vines were being killed off by the town salting practices each winter. JRWA has also been a vocal advocate to reduce salt use on town roads in the winter due to its adverse effects on water quality. Though this policy change will result in increased costs to the town, these costs will be offset by the benefit of improving water quality of our wetlands and waterways over the long term. The change in policy also led to the broad scale support of a vactor truck purchase at ATM 2008 to clean the town stormdrain system of accumulated sediments and pollutants.

Stormdrain Stenciling

During the 2007-2008 permit term, the Kingston Conservation Commission commenced the Town of Kingston stormdrain stenciling project along the Gray's Beach and Rocky Nook section of Kingston adjacent to Kingston Bay (See attached newspaper article and photos). The Conservation Commission also collaborated with the Kingston Intermediate School (KIS) Green Team teacher and class for them to do stormdrain stenciling on the school grounds where stormwater drains to Second Brook, a tributary to the Jones River. In addition, the Commission has collaborated with a local Boy Scout who is working on conducting stormdrain stenciling for his Eagle Scout Project. The Kingston DSTP's continues to provide material support to the stormdrain stenciling project.

Low Impact Development Project

During the summer of 2007 the Town of Kingston Department of Streets, Trees and Parks (DSTP's) and the Kingston Conservation Commission built a third raingarden (See attached photo) at the Kingston Intermediate School (KIS) as part of a 319 Low Impact Development (LID) grant to the MassBays Program (through their South Shore partner, the North and South Rivers Watershed Association (NSRWA)), from MassDEP to encourage the use of LID techniques in four South Shore towns. The DSTP's also commenced installation of an infiltration area as part of this project. The DSTP's and the Conservation Commission continue to maintain the raingardens on the property. The MassBays Program and the Kingston Conservation Commission met with the KIS Green Team teacher and class of 5th grade students in October 2007 to discuss stormwater and how it affects water quality (See attached photos of event as printed in the local newspaper). The discussion involved the use of a watershed model to demonstrate the concepts of a watershed, stormwater and pollution to wetlands and waterways. We also took a tour of the raingardens at the school and discussed how they function to clean up stormwater and recharge groundwater. The students were also shown how to stencil stormdrains and were given a stormdrain stenciling kit for the purpose of stenciling the stormdrains located on the school property. They completed much of their school stenciling project in late 2007. To further educate the KIS Green Team students the Jones River Watershed Association (JRWA) has offered to conduct a workshop in 2008 on stream ecology and how stormwater can change the dynamics of a stream. The installation of educational signage at the raingardens and inside the school will further promote education of the general public as well as the students who visit or attend KIS. In addition, educational workshops are planned in 2008 for the groundskeeping staff of KIS and the DSTP's to discuss how certain landscape practices can contribute pollutants to stormwater and adversely affect water quality.

Household Hazardous Waste Day

The DSTP's sponsored a Household Hazardous Waste Day in spring 2007 and in May 2008 another is planned in Duxbury for both Kingston & Duxbury residents. This is a service the DSTP provides to residents on an annual basis in partnership with the Town of Duxbury and the South Shore Recycling Cooperative (SSRC) (See SSRC flyer attached).

Cleaning of Water Quality Structures and Stormdrains

Cleaning of all town-owned water quality structures as well as a portion of town-owned stormdrains occurred in the 5th permit term as it does on an annual basis (See attached DSTP's receipt from John Hoadley & Sons, Inc.).

Greenscapes Program

In 2007 the Town of Kingston Water Department continued to support the Greenscapes Educational Program (See attached list of 2007 Greenscapes Program community leaders) sponsored by the NSRWA (South Shore regional partner of the Massachusetts Bays Estuaries Program) and financed by Massachusetts Department of Environmental Protection, Massachusetts Environmental Trust and the Environmental Protection Agency. The Town of Kingston displays the Greenscapes poster in the front foyer of the Town Hall along with the Greenscapes Guide and brochures. The Guide was mailed to every household in Kingston and was also available for distribution throughout the town in various locations. The Kingston Conservation Commission regularly refers to the Greenscapes publications in public hearings and in the conservation office to educate people about low impact development techniques/stormwater, environmentally friendly landscaping practices and water conservation. It appears that the Greenscapes Program has been successful in educating the masses as local newspapers are reporting more on environmentally sensitive landscaping practices (see attached articles on composting and waterwise gardening as published in the Kingston Reporter) and community groups, such as the Kingston Garden Club, are incorporating environmentally friendly methods into their work (See attached Kingston Garden Club publication from the Kingston Reporter).

Website Announcements

Various town departments such as the DSTP's and the Conservation Commission have been using the award-winning Town of Kingston website to post community announcements such as the availability of free compost at the transfer station and educational

messages regarding stormwater (See attached printout of Town of Kingston homepage and Stormwater Pollution Prevention Tips).

GIS Mapping & Training

In 2007, the Town Planner, with funds from the Open Space Committee who is updating the Kingston Open Space Plan, worked to convert the Assessor's AUTOCAD files into shape files for use in GIS mapping for the Open Space Plan as well as the stormwater system by Environmental Partners Group, Inc. Planning and Conservation will continue to seek out GIS training courses to strengthen our current digital mapping capabilities and to help with integrating the new GIS data generated from digitizing our stormwater system, outfalls, monitoring data and base maps.

Community Clean-Up With JRWA

The DSTP's assisted the JRWA with rubbish disposal from a Community Clean-up project in the Jones River held on April 6, 2008 (See Kingston Reporter, *Spring Cleaning* article attached). The DSTP's will assist the JRWA in a follow-up clean-up project scheduled for May 10, 2008.

JRWA Raingarden

DSTP's rovided materials to JRWA for a raingarden built on JRWA property to capture stormwater overflowing from a town-owned road (See JRWA 2007 Annual Progress Report, p. 6). Heavy flows of stormwater on Maple Street is often not contained within the roadway, overtops a cape cod berm and flows onto the JRWA land which is located within the riverfront area of the Jones River. The raingarden installation will capture, treat and infiltrate the stormwater and also alleviate some flooding issues on the JRWA property.

Water Quality Monitoring

- The JRWA continued to conduct water quality monitoring on the Jones River in 2007 at 19 different stations and at one continuous monitoring station with the help of volunteers (See attached copy of JRWA webpage and a visual of photos, sampling stations and data). The JRWA monitoring program is focused on establishing baseline data and increasing the temporal and spatial resolution of water quality data in the river.

- In the summer of 2007 the JRWA once again led the charge to conduct the fourth year of sampling in the Duxbury-Kingston-Plymouth embayment for establishment of baseline conditions for the DEP/SMAST (School for Marine Science and Technology) Massachusetts Estuaries Project (MEP). Volunteers, including some town employees, assisted the JRWA with the monitoring effort. Every two weeks throughout the summer volunteers caught the outgoing tide and collected water quality samples at six stations from the mouth of the Jones River to Bug Light and to the Plymouth Cordage Channel. The towns of Duxbury, Kingston and Plymouth conduct separate sampling rounds at different locations in an attempt to encompass the embayment system as a whole. Though the results are not yet in for the 2007 sampling season, results from previous years seem to indicate that the estuary contains high levels of nitrogen. The baseline data will aid in the modeling of nitrogen throughout the system in order to better understand the need for restoration of habitat and water quality to designated standards.

- Other groups that do water quality testing in Kingston Bay and the Jones River estuary are the Provincetown Center for Coastal Studies who does Cape Cod Bay monitoring and the Division of Marine Fisheries who conducts sanitary surveys for the shellfish beds in the bay.

River Instream Flow Stewards (RIFLS) Participation

In 2007-2008 the JRWA and volunteers continued to participate in the Massachusetts Riverways RIFLS project to measure streamflow in the Jones River and its tributaries through the reading of stream gauges and measuring of flows for the establishment of flow rating curves. A RIFLS Certification field training day was offered by the Riverways Program in 2007 and the JRWA President as well as the Kingston Conservation Agent attended the training to learn/re-learn how to measure streamflow and develop a flow rating curve (See attached coverpage of RIFLS Roundup ' 07). Another member of the Commission has been reading a stream gauge for many years. Involvement in the RIFLS program not only assists with documenting flow regimes in local rivers, but, in some cases, also helps to evaluate the impacts of stormwater at various times throughout the year when concentrations of pollutants can vary greatly depending on rates of in-stream flow. In extreme low flow conditions such as those that often occur at the Jones River headwater, stormwater can sometimes constitute the vast majority of flow when poor dam management, extensive water withdrawals and drought conditions combine to have massive downstream impacts resulting in nonexistent flow within the natural stream channel. In cases such as the Jones, stormwater can add welcome streamflow, but it

can also contribute greatly to degradation of downstream water quality. The Town of Kingston applied for grant funds to treat and recharge stormwater at the Jones River headwater a few years ago, but was unsuccessful in obtaining funding. The headwater area is one of several locations where the town, in collaboration with JRWA, will seek grant funds for stormwater remediation in the next couple of years.

Anadramous Fish Sampling, Counting and Education

- In 2007-2008 the Division of Marine Fisheries continued to sample the Jones River as a permanent sampling site for the purpose of collecting information on the rainbow smelt populations whose populations have declined dramatically in the Jones River and the entire coast of Massachusetts. The sampling of the rainbow smelt will eventually be conducted by the JRWA and the community. The cause of decline in the migratory fishery is a matter of ongoing research, but according to biologists studying the phenomenon a possible cause is the increase in development and sedimentation of waterbodies. In 2007 Brad Chase, Fisheries Biologist with the Division of Marine Fisheries, provided copies of his technical report, *Rainbow smelt (Osmerus mordax) spawning habitat on the Gulf of Maine coast of Massachusetts* to the Conservation Commission and JRWA. Mr. Chase requested that the Commission do what they can to protect and improve the diminished habitat of the rainbow smelt (See attached DMF letter to ConCom).

- In the spring of 2007 from April 1st to June 1st, JRWA organized their third annual herring count on the Jones River at the Elm Street dam where there is a fish ladder. Many members of the community including Town of Kingston employees and committee members participated in this event to quantify the number of herring successfully migrating upstream. The count sensitized participating individuals to the species and the plight of migratory fish in general. Only 357 fish were seen climbing the fish ladder in 2007. The low counts from 2006 prompted the state to ban the taking of herring from streams across the Commonwealth in an effort to protect those remaining in the dwindling populations. The JRWA is conducting a fish count this spring as well and will continue to organize the fish count on an annual basis for the foreseeable future in order to assess the population while also educating the general public. The main mission of the JRWA is to restore fish passage throughout the watershed and the Conservation Commission supports this mission (See Herring Count info. from JRWA website).

- In 2007 the JRWA participated with other groups in the Watershed Action Alliance (WAA) to develop a "Fish Passage Kiosk" with funding from the Gulf of Maine Council. The kiosk and associated signage became a traveling exhibit in the WAA communities and was an excellent interactive tool to educate people about the plight of the anadramous fisheries that continue to decline from various human-induced impacts, including impacts from stormwater. The WAA is seeking other grant funds to add a stormwater feature to the kiosk and to obtain more kiosks to reach a wider audience.

Wapping Road Fish Passage Feasibility Study

In January 2008 JRWA received funding through NOAA and the Gulf of Maine Council on the Marine Environment to conduct a feasibility study for fish passage options at the Wapping Road Dam. The Kingston Conservation Commission supported the grant application with a letter and donation of $ 1,000.00 from a Town of Kingston grant program for water quality monitoring needed as part of the project. The Wapping Road fish passage feasibility study also became a priority project of the Massachusetts Riverways Program in early 2008. The Wapping Road dam is the first completely impassable structure that anadromous fish encounter after navigating all of the challenges of the ocean, the bay, the estuary and the Elm Street fish ladder. The Commonwealth of Massachusetts South Shore Coastal Watersheds 2001 Water Quality Assessment Report assessed this portion of the river at Wapping Road dam (Station JR103) and upstream to Lake Street at the Jones River headwaters (Station JR104) and found the aquatic life, primary contact, secondary contact and aesthetic uses impaired due to flow alterations and fish passage barriers. There are also stormwater influences in the area of the Wapping Road dam that likely contribute to objectionable turbidity and algae growth in this area portion of the river. Recommendations were made in the report and included a suggestion to restore the natural flow regime in this segment of the Jones River to improve water quality conditions. Depending on the results of the feasibility study, removal of the Wapping Road dam would restore the natural flow regime, restore fish passage and greatly improve water quality in this stretch of the river. This location should also be considered for enhanced stormwater treatment in the coming years to further improve water quality. The technical review team for the Wapping Road Feasibility Study project includes a liaison from the Conservation Commission and will provide much opportunity for public input and involvement throughout the study and any during any follow-up permitting.

Pine Brook Restoration Project

The JRWA also secured funding from the Massachusetts Riverways Program to commence a project to restore habitat, flow and water quality of Pine Brook. JRWA submitted another grant application to another agency to help fund this project from, but have not yet heard whether they will be a recipient of those grant funds. Pine Brook is a large tributary of the Jones River that runs through Kingston Conservation land where a previous cranberry operation left behind many flood control structures that impair the

biological, physical and chemical health of the stream. The Conservation Commission also supported this grant application and intends to volunteer time during the habitat assessment and restoration portions of the project. A new committee made up of various town departments, the Conservation Land Review Committee, has worked on a new management plan for the Cranberry Watershed Preserve conservation land parcel through which Pine Brook flows and this committee was instrumental in providing input to the Pine Brook Restoration Project. The Conservation Land Review Committee also includes an advisory member from the Silver Lake Regional High School Conservation and Horticulture Department who will also be involved in the restoration planting work. The Pine Brook restoration project will help to alleviate existing water quality impacts from upstream stormwater inputs as well, but the Town of Kingston should further evaluate the need for enhanced treatment of stormwater along the Route 27 corridor where the road is being widened and a sidewalk added. During permitting of the Route 27 reconstruction project the Conservation Commission was told that the Chapter 90 monies being used to fund the project could not be used to purchase any water quality inlets to enhance stormwater treatment along the project length. The Commission remains hopeful that the new deep sump catchbasins proposed in the Route 27 reconstruction project will help to enhance uptake of pollutants from the roadway prior to discharge to Pine Brook and other resource areas. Should stormwater impacts increase as a result of the Route 27 project slated to begin in 2008, the Town of Kingston should consider other alternatives for treatments at the Pine Brook crossing and other resource area crossings.

Permit Term 2008-2009

The Town of Kingston will again be relying on our consultant, Environmental Partners Group, Inc. in the 2008-2009 permit term to complete the mapping, field screening/monitoring of outfalls, illicit discharge detection and elimination activities for 2008. We continue to work toward the full implementation of our Stormwater Management Plan and complete compliance with our permit.

Activities scheduled to occur in 2008-2009 inlude:

1. Continue with and ramp up the stormdrain stenciling project as well as reevaluate techniques and materials to find a longer lasting method that will not be as effected by plowing, sanding/salting and winter weather (many stormdrains stencils painted in roadways disappeared over the winter – may purchase metal stormdrain markers in some locations with remaining stormdrain funds);
2. Commence and complete field screening of outfalls and expand other water quality monitoring projects with JRWA and possibly the public;
3. Continue and ramp up drainage improvements along Kingston Bay and the Jones River (including plan for sediment containment to improve spawning grounds of anadramous fishery) with the help of grants funds;
4. Complete the LID implementation site at KIS in summer 2008 including installation of educational signage, a stream ecology workshop for the KIS Green Team & a groundskeeping workshop;
5. Continue and improve annual DSTP activities;
6. Continue to advocate for the purchase of a catchbasin cleaner until it is in possession;
7. Continue Water Department support of the Greenscapes Program and other water conservation efforts (Water Department is applying for a DEP Water Conservation Grant in the 2008-2009 permit term);
8. Create an Erosion Control and Stormwater By-law to develop consistency and streamlining among town regulations and by-laws;
9. Conduct workshops for single family homeowners such as Stormwater Management for the Home, etc. to educate residents about various ways to reduce stormwater pollution emanating from their property;
10. Expand informal Stormwater Working Group to include the Sewer Department, Recreation, schools and other applicable departments/committees;
11. Develop formal snow and ice policy;
12. Continue with GIS training;
13. Establish contact with MassHighway to learn how and when they will be remediating impacts from Route 3 and 3A on wetlands and waterways of Kingston;
14. Continue partnership with KIS as well as other community groups for Town of Kingston stormwater and resource area improvement projects;
15. Continue partnership & participation with JRWA on grant applications for stormwater/resource area improvements, protection of open space, community clean-up days, educational programs, migratory fish sampling/counting, RIFLS, restoration projects, etc.; and
16. JRWA to continue advocacy before town boards and to general public.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
# 1.1	Partnership with local watershed association	Conservation, DSTP's, Planning, BOS, Water Dept., Harbormaster, etc.	Meetings regarding storm water management, water quality (WQ) monitoring, grant proposals, educational programs, clean-ups, etc.	Completed 4th year of MEP baseline monitoring (JRWA, SMAST & public) Supported grant applications that result in much public education and outreach when projects are implemented (fish passage/stream restoration) (JRWA) Herring count at Water Dept. (JRWA & public) River clean-up (JRWA & public) w/ DSTP's assistance Raingarden construction (JRWA & public)	Continue cooperative efforts on monitoring with JRWA for MEP & new TMDL, obtain funds for expanded sampling through coordinated grant & loan applications. Continue JRWA herring count on Jones River in spring 2008 organized by with Water Dept. and community at large. Do collaborative clean – ups, WQ monitoring & educational stormwater workshops Continue to promote LID
Revised					
# 1.2	Storm drain stenciling	DSTP, Conservation, KIS, Stormwater Working Group	Start and finish town-wide stenciling with educational doorhangers & newspaper articles	Commenced stormdrain stenciling/education project in sensitive areas of town – primarily area of Kingston Bay (Boy/Girl Scouts & public) Newspaper article on project	Continue to expand stenciling effort & stormwater education. Re-evaluate technique/methods – explore use of metal markers Write more newspaper articles on project
Revised					

# 1.3	Distribution of educational materials and offer of free workshops for residents through Greenscapes Program	Kingston Water Dept., ConCom	Display and use these materials at Kingston Town Hall to encourage greenscapes in Kingston Install a Greenscape on town property Use town website for educational stormwater messages	Greenscapes Guide distributed to all Kingston households in 2007and free workshops offered (MassBays and other program sponsors) ConCom regularly uses Guide to educate folks & ask them to Greenscape and use LID (MassBays, JRWA) Used town website to post educational stormwater messages ConCom began mailings to new residents living near wetlands and waterways One stormwater article in local newspaper Regular articles on river and watershed (JRWA)	Continue support of Greenscapes Implement Greenscapes demonstration landscape at Town Landing for educational purposes Encourage Greenscapes on other town lands & private lands esp. in high visibility areas Consider a local raingarden tour once more are implemented and educational signage installed Increase use of town website for stormwater education Use newspaper (Kingston Reporter) more to educate – monthly column?
Revised					
# 1.4	Pet waste station installation at local conservation lands	Conservation, E.B. Sampson Fund (town grant program)		Pet Waste Stations were installed on 5 conservation land parcels and included signage (Boy Scouts & DCR (signs)) Requests for more from Harbormaster & other residents living on river and bay	Seek funding to purchase more pet waste stations for remaining conservation lands and other river and bay access points across town Ask volunteers to install them
Revised					
# 1.5	Educational seminars for employees, residents, local engineers, developers, real estate agents on water quality, stormwater, conservation issues	Stormwater Working Group	Plan contents of workshops and set dates Put schedule of seminars in tax bills, in paper, on website	Workshop for KIS Green Team on stormwater & watersheds (MassBays) Continued advocating stormwater pollution prevention with various town departments and public	Hold workshops for adult audiences Scheduling a Green Housekeeping, Landscaping Workshop for town employees Find off-site training for town employees Plan a Stormwater for the Home workshop (JRWA, public & others) Stream ecology & stormwater effects workshop w/KIS Green Team (JRWA)
Revised					

# 1.6	Annual clean-up days on town properties	Conservation, DSTP	Hold annual clean-up days	Various Boy/Girl Scout groups cleaned up conservation land parcels and DSTP's disposed of rubbish (Boy/Girl Scouts & public) Tread Lightly group cleaned up Camp Nekon – town open space property River and roadway clean-up near 2 conservation lands w/disposal help from DSTP's (JRWA & public)	Work on coordinating more large scale clean-up days on town lands with various town groups (Open Space, Recreation, ConCom, etc.) Tread Lightly group cleaning Camp Nekon in May 2008 River clean-up in May 2008

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
# 2.1	Partnership with local schools	Recreation and Selectmen	Gray's Beach	Volunteers cleaned up the planted bio-retention cells installed to reduce stormwater impacts to bay	Need to conduct regular maintenance on bio-retention areas (volunteers)
		ConCom, DSTP's	Coordinating with KIS Green Team teacher & students to plant & maintain raingardens on property	No time in curriculum to plant or clean up raingardens, but students stenciled stormdrains on KIS property instead	Look for opportunities to continue relationship with KIS Green Team
				ConCom and DSTP's has maintained the raingardens in the past few years (MassBays)	Have ConCom formally adopt care of raingardens or find other entities to maintain gardens
		Conservation Land Review Committee, ConCom	Involve SLRHS Cons. & Hort. students in Pine Brook project	SLRHS Cons. & Hort. students will assist with restoration plantings on Pine Brook (JRWA)	Commence Pine Brook restoration planting (JRWA)
Revised					

# 2.2	Partnership with watershed association	Planning, Harbormaster, Conservation	Estuary monitoring with combined town, watershed and volunteer efforts	4th year of estuary monitoring completed (JRWA, DEP/SMAST, Plymouth & Duxbury)	Get data analysis to proceed with TMDL planning (DEP/SMAST, JRWA, Plymouth & Dux.)
		Conservation	Continue collection of water quality data	Increased sampling efforts with citizen volunteers (JRWA)	Continue to involve more of public in sampling and continue education of public & expand QUAP (JRWA)
		Stormwater Working Group	Commence screening of outfalls	Base mapping commenced, outfalls next (Env. Partners Group & JRWA)	Coordinate discussions on manually mapped outfalls to convert to GIS (Env. Partners Group, JRWA, public)
		Water Dept.	Hold annual Herring counts	Succeeded in getting many volunteers to participate (JRWA)	Use data from herring counts in 2007 & 2008 to understand fish passage problems, educate and work toward solutions (JRWA, DMF)
Revised					
# 2.3	Storm drain stenciling	Highway, Conservation, KIS, Stormwater Working Group	Organizing neighborhoods/volunteers to stencil storm drains	Distributed 4 stormdrain stenciling kits to KIS and Boy Scout and trained them in conducting stenciling (public)	Ramp up stenciling project and attempt to complete in 2008
Revised					
# 2.4	Establishing formal Storm Water Management Task Force with citizen involvement	Selectmen and all other applicable boards	Establish Storm Water Management Task Force with regularly scheduled meetings and activities	Still informal Stormwater Working Group meetings with appropriate town officials (JRWA & occasionally other agencies)	Establish formal Stormwater Management Task Force with expanded involvement to include more town boards and citizens at large (Env. Partners Group, JRWA, advice from other towns)
Revised					
# 2.5	Household Hazardous Waste Collection and Recycling Day	DSTP's and Town of Duxbury	Hold annual collection days	Successfully held collection day in spring 2007 that was well attended (SSRC)	Spring 2008 collection day in Duxbury for Kingston as well (SSRC, Duxbury)
			Collect mercury-containing thermometer/thermostats throughout year	DSTP's cont'd collecting mercury thermometers, thermostats and handing out non-mercury thermometers	Town to continue program – post on town website JRWA also doing mercury collection (JRWA & Covanta)

# 2.6	Educational seminars and mailings for residents, local engineers, developers, real estate agents on water quality, stormwater, conservation issues	Stormwater Working Group	Plan contents of workshops and set dates Put schedule of seminars in tax bills, in paper, on website	Workshop for KIS Green Team on stormwater & watersheds (MassBays) Continued advocating stormwater pollution prevention with various town departments and public through ConCom and conservation related mailings to new residents	Continue relationship with Green Team Hold workshops for adult audiences Scheduling a Green Housekeeping, Landscaping Workshop for town employees Find off-site training for town employees Plan a Stormwater for the Home workshop (JRWA, public & others) Stream ecology & stormwater effects workshop w/KIS Green Team (JRWA)
# 2.7	Annual clean-up days on town properties	Conservation, DSTP	Hold annual clean-up day	Various Boy/Girl Scout groups cleaned up conservation land parcels and DSTP's disposed of rubbish (Boy/Girl Scouts & public) Tread Lightly group cleaned up Camp Nekon – town open space property River and roadway clean-up near 2 conservation lands w/disposal help from DSTP's (JRWA & public)	Work on coordinating more large scale clean-up days on town lands with various town groups (Open Space, Recreation, ConCom, etc.) Tread Lightly group cleaning Camp Nekon in May 2008 River clean-up in May 2008
# 2.8	Form "Friends of Conservation Land" group	Conservation and Open Space Committee	Hold regular clean-up days and watch group to reduce vandalism, theft and littering of town conservation land where there are many wetlands and streams	Placed ad in newspaper seeking volunteers – no response Much illegal dumping, vandalism, theft – considering installing spy-cams Some volunteer groups helped clean-up public lands (JRWA, Boy/Girl Scouts, Tread Lightly, public)	Advertise again in newspaper, on website, at cons. land parcels for volunteers Install spy-cams and start watch groups

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
# 3.1	Catch basin/outfall and sewer mapping to receiving waters	Planning, DSTP, Conservation	Mapping hotspots that are suspected to carry high pollutant loads	SRF loan finalized Flyover completed with DSTP's funding	Continue work with Environmental Partners to complete digital mapping, monitoring, illicit discharge detectopm, public education, stormwater bylaw and all portions of the stormwater plan
Revised				DSTP's removed several illicit discharges	Establish hotline to report illicit discharges
				Discussed sending letter to MassHighway asking for information on SWMP to cleanup stormwater outfalls & illicit discharges to Kingston receiving waters	Send letter to MassHighway to cleanup/eliminate Route 3 and 3A untreated discharges/illicit discharges to Jones and Bay
# 3.2	Sewering of densely developed areas and environmentally sensitive areas of town to reduce septic influence on water quality	Sewer Commission	Start Phase II Sewer Project and progress to completion	Phase II sewer completed in 2007 Continued planning for sewer expansion Sewer Dept. considered and working on sump pump by-law to reduce CSO to WWTF from flooded basements	Complete tie-ins to WWTF Continue with sewer plant expansion plans Enact sump-pump by-law
Revised					
# 3.3	Regulatory Review & Permit Enforcement	Selectmen, Planning, Building, Zoning, Conservation, DSTP's, BOH		Selectmen must approve of all connections to stormdrain system – only 1 or 2 approved – none in 2007	Once stormwater by-law is adopted consider review by administrator of by-law as well as BOS (& other applicable boards)
Revised				Considered fine schedule for illicit connections	Implement fine schedule to deter illicit connections to MS4
# 3.4	Storm drain stenciling	DSTP, Conservation, Stormwater Working Group	Adopt a Storm Drain	Discussion of including this in storm drain stenciling efforts, but no progress made	Neighborhood representatives to monitor storm drains for illicit discharges – pursue this with expanded stormdrain stenciling and WQ monitoring Setup hotline for residents to report illicit connections
Revised					
# 3.5	Water Quality Monitoring	Harbormaster, Planning, Conservation, Highway, Water, Stormwater Working Group	Expand WQ monitoring to include surveying for illicit discharge detection	Revised BMP (JRWA, Env. Partners Group, public)	Get more of community involved in sampling program (JRWA, Env. Partners Group, public) Organize & educate public/ volunteers for illicit detection (JRWA, Env. Partners Group, public) Focus on Stony Brook (DMF sanitary survey fecal info.)

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
# 4.1	Regulatory Mechanisms	Selectmen, Planning, Building, Conservation, DSTP, Stormwater Working Group	Establish and implement local stormwater management by-laws and/or stormwater authority to increase construction runoff controls in design criteria	Conservation still working on regs. to fully adopt MA DEP Stormwater Management Policy and Standards	Conservation regulations will be completed in 2008
				Review existing by-laws in-house related to stormwater management for needed revisions (Environmental Partners, JRWA)	Complete review and adopt recommendations
Revised				Plymouth Carver Aquifer Advisory Committee conducted Audit of town regs. to protect aquifer (PCAAC & Horsley Witten Group)	Adopt recommendations
				Planning also revising Subdivision Rules & Regs. to improve regulatory mechanisms, enforcement	Will include provisions to enhance/promote stormwater runoff controls, LID, open space, aquifer protection
				Discussed combining erosion control and stormwater by-law into one document	Continue to review regs. & adopt Erosion Control & Stormwater By-laws and/or Authority (Env. Partners, Town counsel)
				Discussion of enhancing fine schedules	Include fine schedule in new By-laws
# 4.2	Site Plan Review	Planning, Conservation, Building, Zoning, BOH, Stormwater Working Group	Establish Phase II specific stormwater guidelines for review of site plans	Discussion of in house erosion and sediment control training	Conduct in-house stormwater/erosion control workshop – invite public
				Regularly require developers to obtain NPDES CGP for disturbance of 1 acre or more of land (Conservation)	Develop guidelines to be read, understood and signed by all homeowners/developers doing construction on all size projects (could be based on feedback from in-house stormwater workshops)
Revised				Discussed revising Zoning By-law performance standards for site plan review to require CGP for 1 acre or more of disturbance and erosion control standards	Revise all regulations to enhance performance standards for site disturbances of all sizes to improve erosion controls and stormwater runoff

# 4.3	Enforcement	Building, Planning, Zoning, BOH, DSTP, Conservation, Stormwater Working Group	Establish new site inspection forms, new procedures and fee/fine schedules for incorporating requirements of Phase II	Many discussion amongst Stormwater Working Group regarding construction site runoff control Educating developers on as needed basis of new 1 acre or more disturbance regulation and construction general permit requirements ConCom regularly condition permits requiring NPDES Phase II Construction General Permits (CGP) to be in place prior to start of work on disturbance of 1 acre or more ConCom regularly require erosion controls on all sites and started requiring stormwater management reports/bonds during construction to have better oversight on construction sites	Develop/gather educational materials for developers/citizens involved in building projects & include CGP in in-house stormwater workshops Develop guide on priority areas of town where further pollutant loading may threaten water supply or further degrade 303d's Working with other boards/departments to require same
Revised					

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
# 5.1	Regulatory Mechanisms	Selectmen, Town Administrator, Planning, Building, Conservation, DSTP	Establish and implement local stormwater management by-laws	Conservation still working on regs. to fully adopt MA DEP Stormwater Management Policy and Standards	Conservation regulations will be completed in 2008
				Review existing by-laws in-house related to stormwater management for needed revisions (Environmental Partners, JRWA)	Complete review
Revised				Plymouth Carver Aquifer Advisory Committee conducted Audit of town regs. to protect aquifer (PCAAC & Horsley Witten Group)	Adopt recommendations
				Planning also revising Subdivision Rules & Regs. to improve regulatory mechanisms, enforcement	Will include provisions to enhance/promote stormwater runoff controls, LID, open space, aquifer protection
				Discussed combining erosion control and stormwater by-law into one document	Continue to review regs. & adopt Erosion Control & Stormwater By-laws and/or Authority (Env. Partners, Town counsel)
				Discussion of enhancing fine schedules	Include fine schedule in new By-laws
# 5.2	Site Plan Review/As-Built Review	Planning, Conservation, Building, Zoning, BOH, DSTP	Establish Phase II - specific stormwater guidelines and low impact development guidelines for review of site plans	Discussion of in house erosion and sediment control training	Conduct in-house stormwater/erosion control workshop – invite public
				Regularly require developers to obtain NPDES CGP for disturbance of 1 acre or more of land (Conservation)	Develop guidelines to be read, understood and signed by all homeowners/developers doing construction on all size projects (could be based on feedback from in-house stormwater workshops)
Revised				Discussed revising Zoning By-law performance standards for site plan review to require CGP for 1 acre or more of disturbance and erosion control standards	Revise all regulations to enhance performance standards for site disturbances of all sizes to improve erosion controls and stormwater runoff
				GIS mapping will improve electronic reviews	Implement in 2008

# 5.3	Enforcement	Building, Planning, Zoning, BOH, DSTP, Conservation	Establish new site inspection forms, new procedures and fee/fine schedules for incorporating requirements of Phase II	Many discussion amongst Stormwater Working Group regarding construction site runoff control Educating developers on as needed basis of new 1 acre or more disturbance regulation and construction general permit requirements Continue to attach Operations & Maintenance Plans to Conservation Orders of Conditions and refer directly to the O & M Plan with specific conditions into perpetuity (as now required under new DEP stormwater policy) Continue requiring annual reports submitted to ConsCom for stormwater maintenance post-construction	Implement Stormwater and Erosion Control By-Law with fee schedule and revise existing regulations Establish bond surety with developers to create binding obligation to keep stormwater runoff onsite

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
# 6.1	Employee Training	Selectmen, DSTP, Water, Building, Planning, Conservation, Green Energy Committee, Stormwater Working Group	Establish pollution prevention plan and good housekeeping procedures & schedules	Planned Green Housekeeping and Landscaping Workshop for town employees BOS with Green Energy Committee adopted "no-idling policy" for town vehicles ATM08 approved exploring alternative wind energy on town-owned lands	Hold Workshop Summer 2008 Explore possibility of expanding to all residents Continue studies and possibly install new turbines to reduce pollution caused by using traditional energy
Revised					
# 6.2	Improved Maintenance	DSTP, Water, Building	Increase frequency of maintenance and implement better storage practices	Vacuum truck approved for purchase at ATM08 Annual street sweeping Annual cleaning of all town-owned water quality inlets	Purchase vacuum truck in FY09 Increase frequency of street sweeping WQI's, catch basins & infiltration galley cleanings will be greatly improved after vacuum truck purchase
Revised				Water Dept. leak detection – 107 gal/day	Seeking DEP water conservation grant funds
# 6.3	Improved stormwater treatment	DSTP, Water, Conservation, Planning	Upgrade current systems in sensitive areas	Route 27 improvements revised and permitted (Chapter 90 funds, MassHighway) Planned & permitted drainage improvements in Rocky Nook (Leigh Road) and discharge to Kingston Bay – work commenced early 2008 Hillcrest infiltration galley installed to improve stormwater treatment just upgradient of Jones River	Work on Route 27 to start in 2008, ending in 2010 (Chapter 90 funds, MassHighway) Work in Nook (Leigh Rd.) be completed in 2008 (Chapter 90 funds) Continue to seek funding through grant opportunities for improving stormwater treatment in sensitive areas of town (JRWA, Env. Partners Group, others)
Revised					
#6.4	Inter-department education	Conservation, Building, Water, DSTP, Sewer, Zoning	Continue informal education	Succeeded in communicating the importance of stormdrain protection during road work for water, sewer, drainline work performed by the town and the use of enhanced erosion controls	Continue to be vigilant with informal inter-departmental education of stormwater impacts to waterways Seek formal training sessions for all dept's.

#6.5	Improved Recycling	BOS, DSTP's, Recycling Committee	New BMP	DSTP's, BOS, Recycling Committee developing plans to renovate transfer station to improve recycling – recycling rate 21% for 2007	Improve municipal recycling program Work to reduce litter on roads (fining?)
#6.6	Stormdrain Stenciling	Stormwater Working Group, KIS	Start and finish town-wide stenciling with educational doorhangers & newspaper articles	Commenced stormdrain stenciling/education project in sensitive areas of town – primarily area of Kingston Bay (Boy/Girl Scouts & public) Newspaper article on project	Continue to expand stenciling effort & stormwater education. Re-evaluate technique/methods – explore use of metal markers Write more newspaper articles on project

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) *<<if applicable>>*

BMP ID #	**BMP Description**	**Responsible Dept./Person Name**	**Measurable Goal(s)**	**Progress on Goal(s) – Permit Year 5** (Reliance on non-municipal partners indicated, if any)	**Planned Activities – Permit Year 6**
7.1	Target 303d waterbodies for Water Quality Monitoring	Stormwater Working Group	Focus sampling on 303d impaired waterbodies to work toward removing them from 303d list	Collected MEP data for fourth year (JRWA, SMAST/DEP, Plymouth & Duxbury)	Continue to work on MEP project, review of analysis, TMDL and seeking funding for more equipment/sampling to provide data for TMDL allocations (JRWA, Environmental Partners, SMAST, Plymouth & Duxbury) Use website to post results of sampling
Revised					
7.2	GIS Mapping	Stormwater Working Group	Complete mapping of stormdrain system and outfalls	Commenced mapping (Env. Partners)	Complete mapping in 2008 (Env. Partners, JRWA & others)
Revised					

7.3	Stormwater Modeling	Stormwater Working Group	Focus modeling on 303d impaired waterbodies to work toward removing them from 303d list	No modeling done in 2007	Commence modeling in 2008 for Category 5 water bodies
Revised					

Part IV. Summary of Information Collected and Analyzed

The following assessments were conducted in the fifth year of the NPDES Phase II permit year:

1. The Town of Kingston, through their consultant Environmental Partners Group, Inc., conducted a flyover in the spring of 2007 and now that this is complete, digital mapping has begun and should be completed by summer 2008, along with screening of outfalls;
2. In 2007 the Town of Kingston Board of Selectmen and the DSTP's received complaints from cranberry bog owners that the salt used on the roads in the winter were killing the vines on their bogs. Soils analyses showing high salt concentrations were provided to the town. The town created a new policy to change the DSTP's use of 100% salt for de-icing to a 50% salt and 50% sand mix. This also resulted in increased quantity of sediments removed during street sweeping near the end of the fifth permit term;
3. JRWA and volunteers conducted second year of collecting water quality data in Jones River at long-term monitoring station – continuous monitoring for depth, temperature, salinity, DO (mg/L), DO sat (%), and pH in permanent location in Jones River as well as monthly monitoring along 19 transects of the river. A chlorophyll probe has also been added to the suite of YSI 6600 sensors;
4. JRWA and volunteers conducted sampling in Kingston bay during summer 2007 to complete development of baseline water quality data for Massachusetts Estuaries Project (MEP) with help from SMAST/DEP for fourth year in a row (results have yet to be provided to town);
5. JRWA continued in 2007 to participate in the multi-year rainbow smelt fish study with DMF in the Jones River (DMF & JRWA– started in 2004 and ongoing as permanent sampling site)(In 2007 Brad Chase provided JRWA and Commission with his Technical Report TR-30, *Rainbow smelt (Osmerus mordax) spawning habitat on the Gulf of Maine coast of Massachusetts* that includes the Jones River sampling station – See attached letter regarding report as well as actual report at: http://www.mass.gov/dfwele/dmf/publications/tr30_smelt_spawning_habitat.pdf);

Part V. Program Outputs & Accomplishments (OPTIONAL) * (Please see note below this section)

Programmatic

Stormwater management position created/staffed	(y/n)	n
Annual program budget/expenditures	($)	Allocation of $ 10, 000 (flyover) & $ 323, 000. Remaining budget for stormdrain stenciling project $ 2,227

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	All (Greenscapes) 30 (Conservation mailings) All (Mass Recycles) Many more (JRWA Programs)
Stormwater management committee established	(y/n)	Informal
Stream teams established or supported	(# or y/n)	JRWA
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	2 miles
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	13 (in SSRC – 1 for Kingston)
▪ community participation	(#)	2,555 (in SSRC)
▪ material collected	(tons or gal)	Construction debris – 7,118 tons (SSRC) Mattresses – 1,892 (SSRC) Paper – 850 tons (SSRC) Textiles – 280 tons (SSRC) Books – 109 tons (SSRC)
School curricula implemented	(y/n)	Y (Green Team)

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted
Regulatory Mechanism Status (indicate with "**X**")			
▪ Illicit Discharge Detection & Elimination		x	
▪ Erosion & Sediment Control		x	
▪ Post-Development Stormwater Management		x	
Accompanying Regulation Status (indicate with "**X**")			
▪ Illicit Discharge Detection & Elimination		x	
▪ Erosion & Sediment Control		x	
▪ Post-Development Stormwater Management		x	

Mapping and Illicit Discharges

Outfall mapping complete	(%)	Most (manual)
Estimated or actual number of outfalls	(#)	?
System-Wide mapping complete	(%)	Most (manual)
Mapping method(s)		
▪ Paper/Mylar	(%)	Most

▪ CADD	(%)	0
▪ GIS	(%)	Commencing
Outfalls inspected/screened	(# or %)	0
Illicit discharges identified	(#)	Most
Illicit connections removed	(#) (est. gpd)	Few
% of population on sewer	(%)	36.5%
% of population on septic systems	(%)	63.5%

Construction

Number of construction starts (>1-acre)	(#)	0
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	75%
Site inspections completed	(# or %)	100
Tickets/Stop work orders issued	(# or %)	~ 10 - 20
Fines collected	(# and $)	5 ($1500)
Complaints/concerns received from public	(#)	25

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	75%
Site inspections completed	(# or %)	75
Estimated volume of stormwater recharged	(gpy)	75%

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	Once/ 4 years
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	Once/ 4 years
Total number of structures cleaned	(#)	25
Storm drain cleaned	(LF or mi.)	1,000 LF
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	40 tons
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		landfill
Cost of screenings disposal	($)	$30/ton

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1/year
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	1/year
Qty. of sand/debris collected by sweeping	(lbs. or tons)	10 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Town offal pits
Cost of sweepings disposal	($)	0
Vacuum street sweepers purchased/leased	(#)	Leased when needed (2-3 times per year)
Vacuum street sweepers specified in contracts	(y/n)	N, but will be for porous pavements

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	?
▪ Herbicides	(lbs. or %)	?
▪ Pesticides	(lbs. or %)	?

Anti-/De-Icing products and ratios	% NaCl	50%
	% $CaCl_2$	0
	% $MgCl_2$	0
	% CMA	0
	% Kac	0
	% KCl	0
	% Sand	50%
Pre-wetting techniques utilized	(y/n)	Y
Manual control spreaders used	(y/n)	N
Automatic or Zero-velocity spreaders used	(y/n)	Y
Estimated net reduction in typical year salt application	(lbs. or %)	50%
Salt pile(s) covered in storage shed(s)	(y/n)	Y
Storage shed(s) in design or under construction	(y/n)	N