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Municipality/Organization: Town of Abington
EPA NPDES Permit Number: MA041026
MaDEP Transmittal Number: W - 040557
Annual Report Number & Reporting Period: No. 2: March 04-April 05

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Phillip L Warren, Jr. **Title:** Town Manager
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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: _____
Printed Name: Phillip L Warren, Jr. _____
Title: Town Manager _____
Date: _____

Part II. Self-Assessment

The Town of Abington has successfully implemented or begun implementation of several Measurable Goals noted in its Notice of Intent. Prior to the development of Abington's Comprehensive Stormwater Management Program, including Measurable Goals, the Town had an assessment performed of current activities, programs, and regulations that could support the NPDES Phase II Stormwater program. This assessment became the basis for modifying current activities, recommending new programs, and informing town boards and departments of their obligation toward successful implementation of Abington's Comprehensive Stormwater Program.

In accordance with Abington's Comprehensive Stormwater Management Program the Town has begun an Illicit Discharge Detection and Elimination (IDDE) Program in Permit Year 2. Included in this submission is Section 6 from Abington's IDDE Plan that describes proposed IDDE tasks and schedule. The vacancy in the Town Manager position for the Town of Abington has been filled. This appointment of a permanent full-time Town Manager will provide the necessary point of coordination to organize government-wide implementation of a multi-department effort to achieve compliance.

Abington is pleased to present the following summary describing its success at implementing the second year of the town's Comprehensive Stormwater Management Program.

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
1	Create a Stormwater Program	Highway Department Planning Board Conservation Commission Board of Health Board of Selectmen	Abington will present to the public at a public meeting Abington's draft Comprehensive Stormwater Management Program.	The Stormwater Program was reviewed with the new Town Manager, Assistant Town Manager, and Highway Superintendent. The Town of Abington has completed "Stormwater Management Phase II Assessment" report. Copies are available for review by town departments and the public.	Funding and presentation of Abington's IDDE program will be requested at Town Meeting.
2	Create a Stormwater Program	Highway Department Park & Rec Board Board of Health	Abington will identify appropriate sources of funding assistance (SRF, 319 Grant Program, 604(b) Grant Program, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of Abington's Comprehensive Stormwater Management Program, including public education and outreach.	The Town of Abington applied and received funding from the DEP recycling grant program for 2005. The permanent position of Town Manager has been filled. The Town Manager will begin deciding how best to fund the Stormwater Management Project BMPs.	The Town will monitor funding sources for applicability.

1. Public Education and Outreach (cont'd.)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2	Planned Activities – Permit Year 3
3	Address specific groups	Highway Department Conservation Commission	<p>Distribute EPA and other relevant educational brochures to targeted audiences. Distribution points include Town Hall, Library, and Transfer Station.</p>	<p>The Town of Abington is in receipt of EPA educational materials on disk for easy printing and distribution.</p> <p>The South Shore Recycling Cooperative distributes the '2004-2005 Household Hazardous Product Collection Schedule' to Abington residents. This newsletter includes recycling contact information and details of the mandatory recycling program.</p> <p>The Town Hall has several educational brochures/informational resources including:</p> <ul style="list-style-type: none"> o "Are You Troubled by Toxics? Bring Them to a Household Hazardous Product Collection" and o Notices regarding the Abington recycling program, the Compost Site/CRT Center, and an example letter of failed Title V waiver are available at the Board of Health. 	<p>Brochures will continue to be distributed and made available at town buildings.</p>

1. Public Education and Outreach (cont'd.)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2	Planned Activities – Permit Year 3
4	Target groups likely to impact storm water	Highway Department Board of Health Conservation Commission	Brochures targeting specific audiences and activities will be available. These target groups include homeowner and lawn maintenance activities, disposal of household waste, and pet maintenance. Abington will post links to stormwater BMPs and other water quality education resources, including EPA and DEP on its website. http://www.abingtonmass.com/	The Town of Abington is in receipt of EPA educational materials on disk for easy printing and distribution. See BMP #3	Brochures will continue to be distributed and made available to the public.
5	Identify alternative information sources	Highway Department MIS Department	Abington will also post links on its website to the Taunton River Watershed Council http://www.tauntonriver.org/	No progress for this BMP was made in Permit Year 2.	The Town of Abington will arrange to have these links posted on the Town website.
6	Identify alternative information sources	MIS Department	Abington will also post links on its website to the Taunton River Watershed Council http://www.tauntonriver.org/	No progress for this BMP was made in Permit Year 2.	The Town of Abington will arrange to have these links posted on the Town website.
7	Utilize local website	Board of Selectmen	Public meeting notice and the meeting reviewing Abington's Comprehensive Stormwater Management Program will be posted on Abington's local access channel.	The Town of Abington utilized the local access channel for notification of stormwater information. The Town of Abington arranged to post minutes of the Public Meetings on the Town website.	The Town of Abington will continue to utilize the local access channel for notification of stormwater information. The Town of Abington will continue to post minutes of the Public Meetings on the Town website.
8	Develop, conduct and document educational programs	TRW Liaison	The Town of Abington will appoint a liaison to the Taunton River Watershed Council to disseminate information to the Town on TRW programs and activities.	The position of Town Manager in Abington has been filled.	The Town of Abington will consider an applicant for the position of liaison now that the position of Town Manager has been filled.

1. Public Education and Outreach (cont'd.)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2	Planned Activities – Permit Year 3
9	Promote Household Waste Recycling	Board of Health	The Town of Abington will work with the Town's contracted waste hauler and the Board of Health to continue to sponsor Regional Hazardous Waste Collection Days.	The Town of Abington currently works in partnership with the South Shore Recycling Cooperative (SSRC) to sponsor Household Hazardous Product Collection. Events for 2004-2005 were held in October, 2004.	The Town of Abington will continue to work with the SSRC. Flyers will be sent to Town of Abington residents regarding the Household Hazardous Product Collection event.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
10	Storm drain stenciling	Highway Department Town Planner	Abington will work with local Scout groups to develop a stenciling program. Stenciling will target Abington's subwatersheds.	The Town of Abington highway department yearly paints arrows on the pavement locating drainage flow.	The Town of Abington will distribute storm drain stenciling information to interested organizations.
11	Community clean-ups	Highway Department Abington Conservation Commission Plymouth County Mosquito Control	Town of Abington will encourage local stream team cleanups, such as those performed at Island Grove Pond, with local residents and area Scout groups. Town will provide notice of event on local access channel and website.	The Town of Abington through the Parks and Recreation Department supports a program titled, "Take Pride in Abington." In this program, the public is encouraged to adopt an island and provide the required maintenance. The high school football team cleans-up following the yearly 4 th of July celebration in the Town along with the Highway Department.	The Town of Abington will continue to support local cleanup efforts.
12	Community clean-ups	Highway Department Board of Health	Town will provide trucks and other material to support cleanup efforts and disposal of materials.	The Town of Abington Parks Department is responsible for emptying all trash containers at local parks and at the grammar school. Students at the Frolio Jr. High school participated in a "Cleaner, Greener Day" cleaning school grounds and learning about composting in October of 2004.	The Town of Abington will continue to support local cleanup efforts.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) - Permit Year 2	Planned Activities - Permit Year 3
13	Inventory and mapping of storm drain system	Grant Writer Planning Board Board of Health	Abington will identify appropriate sources of funding assistance (SRF, 319 Grant Program, 604(b) Grant Program, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of Abington's Comprehensive Stormwater Management Program, including public education and outreach.	The Town of Abington has completed development of an <i>Illicit Discharge Detection and Elimination (IDDE) Program</i> as part of the Town's Comprehensive Stormwater Management Program. As part of the IDDE Program, the Town reviewed and inventoried all available plan data to support mapping of the storm drain system.	The Town of Abington is requesting funding to continue the Stormwater Mapping as part of the Illicit Discharge Detection and Elimination (IDDE) Program for approval at Town Meeting. The Town will monitor funding sources for applicability for further mapping of the storm drain system.

3. Illicit Discharge Detection and Elimination (Cont'd)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2	Planned Activities – Permit Year 3
14	Mapping and identification of outfalls and receiving waters	Highway Department Board of Assessors Board of Selectmen	Abington will develop and implement a plan to map all outfalls and receiving bodies of water, contingent on Town Meeting approval of funding.	<p>The Town of Abington has completed an <i>Illicit Discharge Detection and Elimination (IDDE) Program</i> as part of the Town's Comprehensive Stormwater Management Program. As part of the IDDE Program, the Town created a GIS base map. Utilizing existing plan data and information gathered in field survey the process of mapping existing outfalls on the GIS base map has begun. Additionally the Town created a database describing the location of all outfalls and the names of all waters that receive discharges from those outfalls. The database of existing outfalls is included in this submission.</p> <p>Highway department staff has located several outfalls within the Community.</p>	<p>The Town of Abington is requesting funding to continue the Stormwater Mapping as part of the Illicit Discharge Detection and Elimination (IDDE) Program for approval at Town Meeting.</p> <p>The Town will continue the process of mapping existing outfalls on the GIS base map. The Town will update the database describing the location of all outfalls and the names of all waters that receive discharges from those outfalls contingent on funding from Town Meeting.</p> <p>The Town of Abington will monitor funding sources for applicability for further mapping of the storm drain system.</p>

3. Illicit Discharge Detection and Elimination (cont'd.)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
15	Identification/description of problem areas	Highway Department Board of Selectmen	Abington will develop and implement an Illicit Discharge Detection and Elimination (IDDE) plan, contingent on Town Meeting approval of funding.	<p>The Town of Abington has completed an <i>Illicit Discharge Detection and Elimination (IDDE) Program</i> as part of the Town's Comprehensive Stormwater Management Program. As part of the IDDE Program, the Town prioritized areas of town for potential sources of Illicit Discharges Based upon the following "hot spots" presented in the NEIWPC's <i>Illicit Discharge Detection and Elimination Manual</i>:</p> <ul style="list-style-type: none"> • Commercial/Industrial areas • Older areas of Town • Areas where there have been repeated complaints • Locations identified from ambient water quality sampling. <p>The Town of Abington has been investigating infiltration/inflow of its sewer system for the last few years. This investigation includes house-to-house survey of sump pumps connected to the sewer, manhole investigation, and television inspection of the sewer system. The town removes any illegal connections observed.</p>	<p>As part of the IDDE Program, the Town of Abington will GPS survey outfalls and identify potential sources of illicit discharges beginning with prioritized areas identified in the IDDE Plan.</p> <p>The Town of Abington has requested funding for Town Meeting approval to support the implementation of the IDDE Plan.</p> <p>The Town of Abington will continue to promote projects that disconnect illegal connections to the storm drain system.</p>

3. Illicit Discharge Detection and Elimination (cont'd.)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
16	Enforcement procedures addressing illicit discharges	Planning Board Town Counsel Board of Health Bylaw Review Committee Zoning Board of Appeals	Abington will review whether local authority is appropriate and able to respond to potential illicit discharges. New by-laws, if necessary, will be proposed to Town Meeting.	The Town of Abington has completed an <i>Illicit Discharge Detection and Elimination (IDDE) Program</i> as part of the Town's Comprehensive Stormwater Management Program. As part of the IDDE Program, the Town has collected a variety of model bylaws that could be included in local by-laws for review.	Abington will review whether local authority is appropriate and able to respond to potential illicit discharges. New by-laws, if necessary, will be proposed at Town Meeting.

3. Illicit Discharge Detection and Elimination (cont'd.)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
17	Public information program regarding hazardous wastes and dumping	Board of Health	Abington will provide educational brochures to residents within the member communities promoting proper disposal of household hazardous wastes and conditions for regional collections.	<p>The South Shore Recycling Cooperative distributes the “2004-2005” Household Hazardous Product Collection Schedule” to Abington residents. This newsletter includes recycling contact information and details of the mandatory recycling program.</p> <p>The Town Hall has several educational brochures/informational resources including:</p> <ul style="list-style-type: none"> o “Are You Troubled by Toxics? Bring Them to a Household Hazardous Product Collection” and o Notices regarding the Abington recycling program, the Compost Site/CRT Center, and an example letter of failed Title V waiver are available at the Board of Health. 	Hazardous waste and dumping brochures will continue to be distributed and made available to the public.
18	Initiation of recycling programs	Board of Health Grant Writer	Abington will apply for funding assistance from DEP’s Recycling Grant Program for assistance in public education and the purchase of recycling materials.	The Town of Abington applied for and received funding assistance from DEP’s Recycling Grant Program for assistance in the purchase of recycling materials for FY 2005.	The Town of Abington will continue to monitor funding sources for applicability for recycling.

3. Illicit Discharge Detection and Elimination (cont'd.)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
19	Watershed assessments and studies	Conservation Commission Board of Health Park & Recreation Grant Writer	Abington will identify opportunities for funding assistance from DEP's 604(b) and 319 grant programs and the Department of environmental Management's Lakes and Ponds Grant Program to support watershed assessment and implementation activities. Tasks can include design and installation of stormwater BMPs and public outreach including storm drain stenciling. Emphasis will be on assessments and remediation of stormwater related problems impacting water quality in Cleveland Pond, Cushing Pond, and Island Grove Pond. These waterbodies have been identified as impaired an on DEP's 303d list.	The Town of Abington has not identified appropriate funding sources for watershed assessment.	The Town will monitor funding sources for applicability for watershed assessment as affected by stormwater related problems.

3. Illicit Discharge Detection and Elimination (cont'd)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
20	Watershed assessments and studies	Board of Selectmen Water Department	The Town of Abington will encourage the Rockland Abington Joint Water Works to apply for funding assistance from DEP's Source Water Protection Program for grant assistance to develop wellhead protection plans and stormwater management plans within Zones II.	Abington / Rockland Joint Water Works has been awarded \$908,000 from the Massachusetts Drinking Water State Revolving Fund (DWSRF). The Abington / Rockland Joint Water Works will use this loan for upgrades of water treatment facilities.	The Town of Abington will ascertain the availability of funds from the Source Water Protection Program in Permit Year 3.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
21	Bylaw: Storm water management regulations for construction sites 1 acre or larger	Planning Board Conservation Commission Town Counsel Board of Health Zoning Board of Appeals	Abington will review model by-law developed by DEP in consultation with the Attorney General's Office.	The Town of Abington has completed an <i>Illicit Discharge Detection and Elimination (IDDE) Program</i> as part of the Town's Comprehensive Stormwater Management Program. As part of the IDDE Program, the Town has collected a variety of model bylaws that could be included in local by-laws for review.	Abington will review whether local authority is appropriate. New by-laws, if necessary, will be proposed to Town Meeting.

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
22	Bylaw: Require post-construction runoff controls	Planning Board Conservation Commission Town Counsel Board of Health Zoning Board of Appeals	Abington will review model by-law developed by DEP in consultation with the Attorney General's Office.	The Town of Abington has completed an <i>Illicit Discharge Detection and Elimination (IDDE) Program</i> as part of the Town's Comprehensive Stormwater Management Program. As part of the IDDE Program, the Town has collected a variety of model bylaws that could be included in local by-laws for review.	Abington will review whether local authority is appropriate. New by-laws, if necessary, will be proposed to Town Meeting.

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
23	Develop a municipal Operations and Maintenance Plan	Highway Department	Using regulations and recommendations from DEP and EPA, Abington will develop and update an operations and maintenance plan to include proper disposal of street sweepings, catchbasin cleanout, snow disposal, roadway de-icing procedures, vehicle washing, and outside storage of materials.	The Town of Abington has completed an <i>Illicit Discharge Detection and Elimination (IDDE) Program</i> as part of the Town's Comprehensive Stormwater Management Program. As part of the IDDE Program, the Town has a summary of recommendations developed as water quality-friendly maintenance practices, EPA and DEP Fact Sheets pertaining to Municipal Operations and Maintenance. The Town of Abington Highway Department cleans catch basins once per year, cleans drainage swales when necessary, and sweeps all streets and sidewalks once per year. Personnel record daily operations and record any problems with the stormwater system.	The Town of Abington Highway Department will continue to review sample maintenance plans and incorporate any relevant practices.

6. Pollution Prevention and Good Housekeeping in Municipal Operations (cont'd.)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
24	Develop a municipal Operations and Maintenance Plan	Highway Department	Abington will implement a formal inspection program, including maintenance logs and scheduling, for catchbasin cleaning, repairs, and new installation.	The Town of Abington has completed an <i>Illicit Discharge Detection and Elimination (IDDE) Program</i> as part of the Town's Comprehensive Stormwater Management Program. As part of the IDDE Program, the Town has a summary of recommendations developed as water quality-friendly maintenance practices, EPA and DEP Fact Sheets pertaining to Municipal Operations and Maintenance. The Town of Abington Highway Department cleans catch basins once per year, cleans drainage swales when necessary, and sweeps all streets and sidewalks once per year. Personnel record daily operations and record any problems with the stormwater system.	The Town of Abington Highway Department will review sample maintenance plans and incorporate any relevant practices.
25	Develop and implement training programs for municipal employees	Highway Department	Abington will send a minimum of 5 public works employees annually to training seminars sponsored by MassHighway, BayState Roads, and other relevant agencies or vendors, as funding allows.	Due to funding constraints within the Town of Abington, the Highway Department did not have funding available to support training.	The Town of Abington is interested in pursuing stormwater educational trainings. When an appropriate course becomes available, the Highway Department will attempt to locate funding.

6. Pollution Prevention and Good Housekeeping in Municipal Operations (cont'd.)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
26	Review storm drainage infrastructure needs	Highway Department	Abington will incorporate storm drain infrastructure review in Abington's Chapter 90 project utilizations.	The Town of Abington Highway Department provided storm drain improvements during road construction projects.	The Town of Abington will continue to provide storm drain system improvements.

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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities - Permit Year 3
				No TMDLs in the Town of Abington	

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Sampling and analysis has not been performed.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)
Annual program budget/expenditures	(\$)

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)
Stormwater management committee established	(y/n)
Stream teams established or supported	(# or y/n)
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)
Household Hazardous Waste Collection Days	
▪ days sponsored	(#)
▪ community participation	(%)
▪ material collected	(tons or gal)
School curricula implemented	(y/n)

Legal/Regulatory

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

Mapping and Illicit Discharges

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

Construction

Number of construction starts (>1-acre)	(#)
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)
Site inspections completed	(# or %)
Tickets/Stop work orders issued	(# or %)
Fines collected	(# and \$)
Complaints/concerns received from public	(#)

Post-Development Stormwater Management

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

Operations and Maintenance

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

Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)
Qty. of sand/debris collected by sweeping	(lbs. or tons)
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)
Cost of sweepings disposal	(\$)
Vacuum street sweepers purchased/leased	(#)
Vacuum street sweepers specified in contracts	(y/n)

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
	% CaCl ₂
	% MgCl ₂
	% CMA
	% Kac
	% KCl
	% Sand
Pre-wetting techniques utilized	(y/n)
Manual control spreaders used	(y/n)
Automatic or Zero-velocity spreaders used	(y/n)
Estimated net reduction in typical year salt application	(lbs. or %)
Salt pile(s) covered in storage shed(s)	(y/n)
Storage shed(s) in design or under construction	(y/n)

6. IDDE Program Implementation

6.1 Coordination with Town Departments

A successful Stormwater Management Program depends on the participation of all Town departments, local businesses, local environmental action groups, and all Town residents. The ongoing implementation of Abington's Illicit Discharge Detection and Elimination (IDDE) Program requires the Town to complete the mapping of all storm sewer outfalls, inspect all outfalls for dry-weather flows, identify and remove the source of illicit and illegal discharges, adopt and enforce by-laws prohibiting illicit discharges to Abington's storm sewer system, and educate local businesses and residents on the dangers of illegal dumping.

Abington's Notice of Intent identified Measurable Goals that require championing by several municipal departments. The Board of Health schedules local hazardous waste collection days, thereby reducing the likelihood of illegal dumping. The Conservation Commission enforces the Massachusetts Department of Environmental Protection's Stormwater Management Policy. Phase II, however, requires Abington to develop, implement, and enforce a program to reduce pollutants in stormwater runoff from construction activities that disturb equal to or greater than one acre of land. Abington is also required to develop, implement, and enforce a program to reduce pollutants in post-construction runoff from construction activities that disturb equal to or greater than one acre of land. Participation by Planning Boards, Conservation Commissions, Building Inspectors, and Boards of Health are integral to the successful adoption and enforcement of these programs.

Education of and participation by Abington's residents are vital in successfully protecting Abington's local bodies of water and drinking water supply. Abington can provide for the distribution of educational materials regarding the impact on water quality of residential activities such as lawn fertilizing, disposal of household wastes, vehicle washing, and pet waste disposal. These materials are available from the Environmental Protection Agency's (EPA) website at www.epa.gov and Massachusetts Department of Environmental Protection Agency's website at www.state.ma.us/dep. Distribution opportunities include Town Meetings, School Activities, Transfer Station, Library, and local businesses.

The education and participation of local boards, committees, and the general public is crucial to the successful appropriation of resources and the successful adoption and enforcement of local water quality protection regulations.

Stormwater workshops for Town employees, public review of Abington's Comprehensive Stormwater Management Program, and the creation of a stormwater committee can contribute to the successful implementation of Abington's stormwater program, including Abington's Illicit Discharge Detection and Elimination (IDDE) Program.

6.2 Annual Requirements and Reporting

The Town of Abington is required to prepare an Annual Report. In Massachusetts, reports must be filed annually with EPA and DEP on May 1st in years 2004 through 2008 (inclusive). Appendix D contains Abington's first Annual Report.

6.3 IDDE Program

6.3.1 Town-Wide Base Mapping

In Phase 1 of Abington's Illicit Discharge Detection and Elimination Program (IDDE) Guertin Elkerton & Associates, Inc. (GE&A) developed a Town-wide map using available information from Massachusetts Geographic Information Systems (MassGIS). These maps prioritize drainage basins within the Town of Abington for investigation of potential illicit discharges. Mapping layers used to generate these maps include the following:

Town boundary (scale 1:12,000)

Hydrological features (scale 1:25,000).

Land use (scale 1:25,000).

Major basins (scale 1:24,000)

Sub-Basins (scale 1:24,000)

Soil Characteristics (scale 1:25,000)

TIGER Census 2000 Roads (1:100,000)

In order to inventory the existing storm sewer system GE&A proposes that a map book be created. This Map Book would divide the Town into approximately 12 tiles at a scale of 1" = 400'. Each tile will be presented as a 24" x 36" sheet. Using available Town data mapping layers and additional MassGIS data, the map book may include the following:



Town parcel map data

Massachusetts Highway Department (MHD) Roads (scale 1:100,000),

Roads and trails (scale 1:5000),

Train lines (scale 1:5000),

Topographic contours (scale 1:5000 or 3 meter intervals)

A description of data layers is available at <http://www.mass.gov/mgis/laylist.htm>.

This will provide GE&A with a base map upon which all subsequent data collected will be mapped.

Deliverable: A Map Book showing a base map for the entire Town of Abington at a scale of 1" = 400', and corresponding electronic files (.pdf).

6.3.2 Develop Stormwater GIS from Existing Data

Guertin Elkerton & Associates, Inc. proposes to complete the review of source documents begun in Phase 1 of the IDDE Program development. This task will identify locations of outfalls, catchbasins, and manholes based on available maps and plans. After relevant plans have been reviewed and stormwater structures have been mapped, GE&A will hold a meeting with relevant Town staff to review map features to that point. Any additional information that Town staff can provide regarding the location of storm sewer infrastructure will be sketched in by hand. This will expedite the field mapping and outfall inspection component of this project.

The estimated number of structures in Abington's storm sewer system is:

Outfalls: 250

Manholes: 250

Catchbasins: 1750

GE&A will update the map book to include stormwater features found in the Town inventory of record drawings as well as the approximate locations of stormwater infrastructure as identified by Town staff.

Deliverable: An updated Map Book showing approximate locations of stormwater structures and corresponding electronic files (.pdf, .shp).



6.3.3 Field Verification

Guertin Elkerton & Associates, Inc. proposes to locate stormwater structures identified in Section 6.3.2 of this report using Global Positioning System (GPS) technology. Based on the supplied estimates of structures a plan for the field verification process will be supplied with an estimate of 3 days of field work. GPS collection will be conducted at better than 1:100 scale accuracy using appropriate hardware and software. We recommend that the Town purchase the equipment as a separate item to achieve the maximum government discount provided by retailers. This GPS and database collection hardware and software will be used by GE&A for the collection of field data and will be delivered back to the Town at the end of the collection program. This will enable the town to continue collecting features and updating the GIS database after the project is completed.

The location, as collected by GPS, of outfalls, catchbasins, and manholes in the storm sewer system will be presented in an updated map book along with a data table with northings, eastings and elevations based on the Massachusetts Mainland State Plan coordinate system, which is recognized and used by the Massachusetts Highway Department. All data collected during this task can be readily incorporated into existing GIS efforts.

Deliverable: An updated Map Book and data table presenting GPS surveyed locations of stormwater structures and corresponding electronic files (.pdf, .shp).

6.3.4 Integration of Stormwater GIS to WebGIS

Guertin Elkerton & Associates, Inc. proposes to coordinate the integration of the newly developed Stormwater GIS layers with the Town WebGIS. GE&A would oversee the delivery and incorporation of Stormwater GIS data layers with the Town's current WebGIS consultant (VueWorks, Inc.). This would require ensuring file format compatibility and appropriate data presentation for a successful and useful merger into the existing Town WebGIS. Fulfillment of this task is contingent on the Town's desire to integrate stormwater infrastructure information and the purchase of any required software by the WebGIS provider.

Deliverable: An updated WebGIS system that represents new Stormwater GIS.

6.3.5 Outfall Inspections

Guertin Elkerton & Associates, Inc. proposes to perform outfall field inspections for the purpose of identifying potential illicit connections to the stormwater system.



The following data will be obtained or verified for each outfall:

Structure Type

Size

Material

Condition

Observable Flow

Signs of Illicit Connections

GE&A will attempt a visit to each location once, on the assumption that outfall location survey and inspection can be conducted simultaneously. If an outfall is inaccessible, this fact will be noted.

As required by the Phase II Stormwater Program, GE&A will provide the Town of Abington a table listing all outfalls with an outfall ID #, location, and receiving water body. In addition, information regarding the outfall will be documented along with photographs of the outfall.

Deliverable: A tabulated inventory of outfalls, with photographs and inspection summaries for each outfall.

6.3.6 Identify Potential Sources of Illicit Discharges

In Phase 1, Guertin Elkerton & Associates, Inc. prepared a map of the Town of Abington showing receiving bodies of water and drainage basins and identified potential "hot spots" using land use activities and local knowledge. In Task 6.3.5 dry weather flows from outfalls will be observed for odor, color, turbidity, floatable matter, stains, vegetation, and damage to outfall structure. Flows may also be sampled for the presence of fecal coliform.

Since the number of flowing outfalls (if any) is unknown, GE&A recommends a budget be set aside for sampling and other procedures in an attempt to identify and remove the source of the illicit discharge. Other procedures may include manhole and up the pipe storm drain inspections, dye testing, video, inspection, and smoke testing. Efforts beyond what is feasible within the budget will be described in section 6.3.7

Deliverable: A report documenting the attempts to identify and eliminate sources of illicit discharge.



6.3.7 Plan to Follow-Up on Dry Weather Flows

Guertin Elkerton & Associates, Inc. proposes to prepare a plan with recommendations and costs for additional follow-up to investigate sources of dry-weather flows. The plan will serve as a resource document for the Town to use when future dry weather flows are identified.

The plan will include a description of the following:

- Inspection and documentation procedures
- Sampling and analysis procedures to verify if dry weather flows are contaminated
- Procedures and estimated costs to pinpoint illicit discharges.
- Procedures include:
 - Notification process
 - Manhole and up the pipe storm drain inspections
 - Dye testing
 - Video inspection
 - Smoke testing
- Summary of identified illicit discharges
- Specific tasks recommended for follow-up, and
- An estimated implementation costs.

Guertin Elkerton & Associates, Inc. proposes to review the plan with appropriate local officials. GE&A will present the plan and the results of mapping and outfall inspection at a public meeting. Five copies of the plan will be provided to the Town.

Deliverable: A plan administering courses of action for the identification of illicit discharges not addressed in 6.3.6 and in the future. Return Hardware and Software used for GPS location and feature attribute collection.



6.3.8 Public Outreach and Education

Guertin Elkerton & Associates, Inc. proposes to facilitate a stormwater work session with relevant Town departments. The NPDES Phase II Comprehensive Stormwater Management Program requires the participation of multiple Town departments in order to be successful. The Board of Selectmen, Department of Public Works, Board of Health, Conservation Commission, Planning Board, Emergency Response, and other Town departments play critical roles in insuring the protection of local water quality.

GE&A will review Abington's Comprehensive Stormwater Management Program with emphasis on the Town's Measurable Goals, schedule of implementation, and responsible departments.

Literature and brochures reviewing stormwater best management practices (BMPs) prepared by environmental agencies or associations will be distributed at the work session. Departments can copy and distribute to the public at large.

Deliverable: Workshops and literature reviewing stormwater best management practices.

6.3.9 Illicit Discharge and BMP By-Laws

Guertin Elkerton & Associates, Inc. proposes to review with the Town, the Town's desire to secure professional assistance in the development of local by-laws and regulations prohibiting illicit discharges into the storm sewer system. If GE&A's assistance is desired, GE&A will submit a proposed budget reflecting the requested level of services.

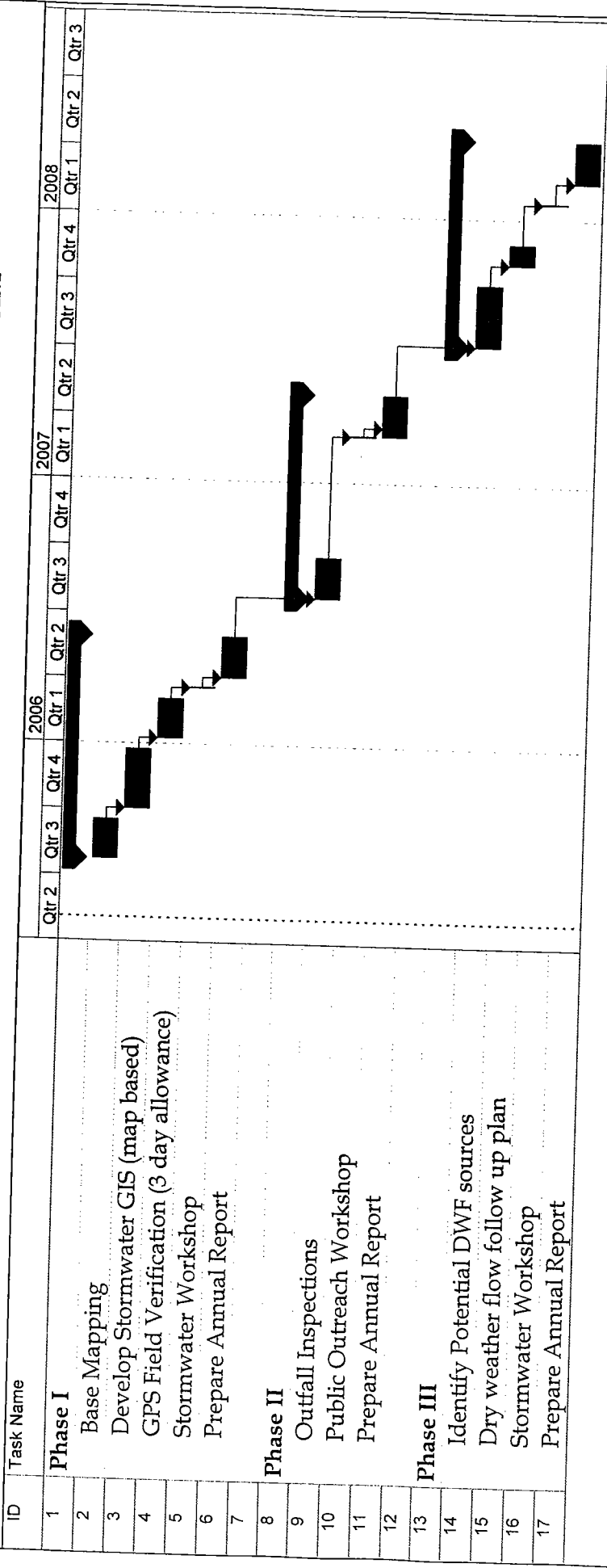
6.3.10 Annual Report

Guertin Elkerton & Associates, Inc. proposes to assist the Town in the preparation and submission of Abington's Stormwater Annual Report to the Environmental Protection Agency and the Massachusetts Department of Environmental Protection due annually on May 1.

Deliverable: A report submitted to both MADEP and EPA describing the Town of Abington's success at implementing the Comprehensive Stormwater Management Program.



**TOWN OF ABINGTON, MASSACHUSETTS
PROPOSED PHASED APPROACH TO STORMWATER COMPLIANCE PROGRAM**



Project: Phased Recommendations ABT.mpp - Date: 05/04/2005

S:/53270.00/Phased Recommendations ABT.mpp

Task Summary

Table 2-3 : Existing Outfalls

Outfall #	Location	Description
1	96 Central Street	Inlet pipe and manhole
2	Abington VFW	Outlet and inlet pipe
3	Bradford Street	Inlet, outlet pipe and retention area
4	1071 Plymouth St.	Outlet pipe
5	1105 Plymouth Street	
6	163 Jean Carol Road	Outlet pipe
7	912 Plymouth Street	Inlet and outlet pipe
8	441 Summer Street	Inlet and outlet pipe
9	347 Summer St. @ "T" pkg lot	outlet pipe
10	Summer & Progress Sts.	Outlet pipe
11	Summer Street	Outlet & Inlet small pipe
12	Summer Street	Main brook inlet and outlet pipe
13	96 Nash Memorial Drive	outlet pipe
14	77 Summer St.	outlet pipe
15	196 Walnut Street	Inlet and outlet pipe
16	Walnut Street	Main brook inlet and outlet pipe
17	89 Richard Road	inlet pipe
18	88 Richard Road	Inlet and outlet pipe
19	51 Myers Ave.	Inlet and outlet pipe
20	178 Bank Street	Inlet pipe
21	135 Bank Street	inlet pipe
22	26 Progress Street	outlet pipe
23	45 Melvern Road	outlet pipe
24	44 Lake Street	outlet pipe
25	639 Washington Street	outlet pipe

Table 2-3 : Existing Outfalls

Outfall #	Location	Description
26	141 Park Avenue	Inlet and outlet pipe
27	11 Park Avenue	outlet pipe
28	Plymouth Street, Little League Field	Inlet and outlet pipe
29	ECC School	outlet pipe
30	ECC Main Brook	Inlet and outlet pipe
31	63 Brookfield Road	outlet pipe
32	22 Bates Street	Inlet and outlet pipe
33	470 Adams Street	outlet pipe
34	223 Bellows Circle	outlet pipe
35	35 Pattison Street	outlet pipe
36	John Street by power plant	Inlet and outlet pipe
37	75 Platt Street	outlet pipe
38	41 Spruce Street	inlet pipe
39	29 Fairview Street	outlet pipe
40	385 North Avenue	outlet pipe
41	50 North Avenue	Outlet and inlet pipe
42	41 East Battery Street	outlet pipe
43	272 Spruce Street	inlet pipe
44	80 North Avenue	
45	82 Wales Street	inlet pipe
46	45 East Street	outlet pipe
47	12 Hemlock Lane	outlet pipe
48	Rte 58 by guardrail by old drive in	Inlet and outlet pipe
49	175 Oak Street	outlet pipe
50	77 Baystate Circle	outlet pipe

Table 2-3 : Existing Outfalls

Outfall #	Location	Description
51	25 Baystate Circle	outlet pipe
52	285 Oak Street	Inlet and outlet pipe
53	248 Oak Street	outlet pipe
54	948 Washington Street	inlet pipe
55	86 Colonel Hunt Drive	Inlet and outlet pipe
56	15 Andrew Ford Way	outlet pipe
57	46 Colonel Hunt Dr.	outlet pipe
58	157 Colonel Hunt Drive	outlet pipe
59	246 Colonel Hunt Drive	outlet pipe
60	104 Colonel Hunt Drive	outlet pipe
61	65 Pine Tree Lane	outlet pipe
62	105 West Chapel Street	Inlet and outlet pipe
63	56 Everett Street	outlet pipe
64	39 Orange Street	outlet pipe
65	62 Belmont Street	outlet pipe
66	56 Bank Street	inlet pipe
67	37 Belmont Street	inlet pipe
68	497 Bedford Street	outlet pipe
69	Washington Street	Main brook inlet and outlet pipe
70	608 Washington Street	inlet pipe
71	860 Washington Street	inlet pipe
72	68 Upper Washington Street	inlet pipe
73	40 Upper Washington Street	inlet pipe
74	284 Walnut Street	Inlet and outlet pipe
75	12 Walnut Street	inlet pipe

Table 2-3 : Existing Outfalls

Outfall #	Location	Description
76	12 Vineyard & 1400 Bedford St	Inlet and outlet pipe
77	15 Carmen Lane	outlet pipe on right of road
78	58 Carmen Lane	outlet pipe
79	15 Carmen Lane	outlet pipe right side
80	30 Harriss Court	inlet pipe
81	79 Harriss Court	inlet pipe
82	26 Highland Road	inlet pipe
83	75 Dale St., in driveway	Inlet and outlet pipe
84	Dale and Indian Brook	outlet pipe and retention area
85	193 Mt. Laurel Lane	outlet pipe
86	4 Edgar D. Bascom Road	manhole with outlet pipe from basin
87	Mt. Laurel Lane	retention area
88	17 Strawberry Lane	outlet pipe
89	201 Russell Lane	Inlet and outlet pipe
90	227 Wyman Road	outlet
91	60 Summit Road	inlet grate
92	290 Summit Road	inlet pipe
93	167 Wyman Road	inlet grate
94	170 Wyman Road	outlet pipe
95	104 Wyman Road	outlet pipe
96	141 Wyman Road	inlet pipe
97	Greenwood Street	inlet & outlet pipe, main brook
98	Greenwood St. Under building	inlet & outlet pipe, main brook
99	78 Barnyard Lane	outlet pipe
100	Old Farm Road	outlet and inlet pipe by rock wall

Table 2-3 : Existing Outfalls

Outfall #	Location	Description
101	161 Old Farm Road	Inlet and outlet pipe
102	37 Wagon Lane	outlet pipe
103	114 Old Farm Road	3 outlet pipes
104	102 Bernard Circle	outlet pipe
105	105 Old Randolph St.	inlet pipe in yard
106	75 Jamieson Street	inlet pipe
107	77 Jamieson Street	outlet pipe
108	70 Ekstrom Circle	outlet pipe
109	56 Ekstrom Circle	inlet pipe
110	738 Old Randolph Street	inlet pipe
111	841 Randolph Street	inlet pipe
112	71 Randolph Street	Inlet and outlet pipe
113	812 Randolph Street	outlet pipe
114	452 Randolph Street	inlet pipe
115	7 Crossley Street	inlet pipe
116	99 Crossley Street	outlet pipe
117	6 Chamberlain Street	outlet pipe
118	104 Shaw Avenue	Inlet and outlet pipe
119	38 Pinecrest Road	outlet pipe
120	7 Colonial Road	outlet pipe
121	71 Colonial Road	inlet pipe
122	125 Colonial Road	outlet pipe
123	30 Grants Place	outlet pipe
124	228 and 242 Shaw Ave.	inlet pipe
125	225 Shaw Avenue	outlet pipe

Table 2-3 : Existing Outfalls

Outfall #	Location	Description
126	220 Shaw Ave.	outlet pipe
127	71 Shaw Ave. - Blanchard Gardens	Inlet and outlet pipe
128	500 Gliniewicz Way, track road	inlet and outlet pipe-retention area outlet pipe
129	250 Gliniewicz Way	inlet pipe
130	250 Gliniewicz Way	outlet pipe
131	Route 18 and Gliniewicz Way	outlet pipe
132	85 Warren Street	inlet and outlet pipe
133	111 Lincoln Street	inlet and outlet pipe
134	338 Lincoln Street	inlet and outlet pipe
135	457 Lincoln Street	two outlet pipes
136	744 Hancock Street	outlet pipe
137	863 Hancock Street	inlet and outlet pipe
138	923 Hancock Street	inlet pipe
139	209 Hancock Street	outlet pipe
140	947 Hancock Street	inlet pipe, main line
141	286 Rockland Street	inlet and outlet pipe
142	238 Rockland Street	outlet pipe
143	61 Rockland Street	inlet pipe
144	56 Rockland Street	outlet pipe
145	477 Old Rockland Street	outlet pipe
146	Old Rockland Street	inlet and outlet pipe
147	13 Caitlin Drive	outlet pipe and retention area
148	43 Orchard Lane	inlet and outlet pipe
149	27 Orchard Lane	retention and outlet pipe
150	138 Broadmeadow Lane	outlet pipe

Table 2-3 : Existing Outfalls

Outfall #	Location	Description
151	30 Broadmeadow Lane	inlet pipe
152	27 Buckboard Lane	outlet pipe
153	9 Bayberry Road	inlet pipe
154	Crabtree Lane	inlet and outlet
155	57 Crabtree Lane	outlet pipe
156	45 Margaret Road	outlet pipe
157	226 Martgaret Road	outlet pipe
158	204 Adley Way and Helen Dr.	inlet and outlet pipe
159	204 Adley Way and Helen Dr.	retention area
160	162 Helen Drive	outlet pipe
161	121 Helen Drive	outlet pipe
162	36 Helen Drive	inlet pipe
163	18 Helen Road	inlet pipe
164	58 Chestnut Street	inlet pipe
165	89 Chestnut Street	outlet pipe
166	58 Chestnut Street	outlet pipe
167	131 Chestnut Street	inlet pipe
168	Chestnut Street, Woodsdale School	inlet pipe
169	Woodsdale Sch, playground @bikerack	inlet pipe and outlet pipe
170	176 Chestnut Street	inlet and outlet pipe
171	Chestnut Street	main brook
172	Chestnut Street	Dam
173	Chestnut Street	Inlet pipe blue pole
174	500 Chestnut Street	inlet and outlet pipe
175	Chestnut Street, near fire road	inlet and outlet pipe

Table 2-3 : Existing Outfalls

Outfall #	Location	Description
176	Chestnut Street	outlet and inlet pipe
177	100-122 Patricia Drive	outlet pipe
178	182 Loganberry Drive	inlet and outlet
179	21 McKinley Drive	inlet and outlet pipe
180	101 McKinley Drive	inlet and outlet pipe
181	254 Presidential Drive	inlet and outlet pipe
182	119 Walker Road	outlet pipe
183	119 Walker Road	small brook
184	37 Leonard Farm Road	outlet pipe
185	20 Leonard Farm Road	outlet pipe
186	571 Linwood Street	small brook
187	100 Lady Slipper Lane	inlet pipe
188	56 Rockland Street	inlet pipe
189	79 Rockland Street	small brook
190	219 Rockland Street	inlet pipe
191	283 Rockland Street	
192	477 Little Rockland Street	
193	Little Rockland Street	main brook
194	Diane Circle	outlet pipe
195	340 Diane Circle	outlet pipe
196	18 Crossman Circle	outlet pipe
197	21 Catherine Drive	outlet pipe
198	84 Karen Drive	inlet pipe
199	89 Karen Drive	outlet pipe
200	59 Daniel Drive	outlet pipe

Table 2-3 : Existing Outfalls

Outfall #	Location	Description
201	5 Hunts Pond Lane	outlet pipe and retention area
202	Hunts Pond and Groveland St.	inlet pipe