Municipality/Organization: Town of Chatham

EPA NPDES Permit Number: MAR041101

MaDEP Transmittal Number: W-035745

2004 APR 28 P 10: 32

Annual Report Number & Reporting Period: No. 1: March 03-March 04

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Robert Duncanson, Ph.D. Title: Dir. of Health & Environment

Telephone #: (508) 945-5165 Email: rduncanson@town.chatham.ma.us

Certification:

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

Signature:

Printed Name: William Hinchey

Title: Town Manager

Date: April 27, 2004

Part II. Self-Assessment

The Town of Chatham has completed the required self-assessment and has determined that our municipality is working toward full compliance within the five year schedule as submitted to EPA and approved as Chatham's NOI to the General Permit issued to Massachusetts under Phase II of the Regulations. This first annual report demonstrates and documents our efforts toward full compliance.

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
1.1	Educational Flyer	Department of Health & Environment (DHE)	Distributed Annually	Door hanger (attached) has been developed in cooperation with other Cape Cod towns and regional land use agency (Cape Cod Commission). To be distributed at May 2004 Town Meeting. To be distributed summer 2004 to reach seasonal population. A section on stormwater was included in the Spring 2004 "Chatham Water News" mailed to all customers of the Chatham Water Department (attached).	New flyer to be developed and distributed.
Revised					
1.2	Web Page	DHE	Develop & Maintain	Stormwater web page developed on Town's web site. Has information from and links to EPA and MaDEP stormwater web sites. Posted notice of Weather Channels program "After the Storm" on town's website. Notice of "After the Storm" has also been running on the towns' cable channel.	Maintain and update web page.
Revised					
1.3	Annual Program Review	DHE, DPW, Board of Selectmen	Meeting held per schedule	Progress/update meeting with Board of Selectmen to be held in May 2004. Will be televised on local cable channel.	Same as year 1.
Revised					
1.4	Pet Waste Control	DHE, Animal Control	Expand/document Mutt Mitt program	Existing Mutt Mitt program has been continued. Additional Mutt Mitt dispensers obtained to respond to requests from public for additional dispenser locations.	Same as Year 1.
Revised					

Revised					
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
2.1	Citizen Water Quality Monitoring	DHE	Program goals met/annual meeting held	Summer 2003 water quality monitoring completed as per program goals. Meeting held in fall 2003 to present preliminary results and "thank" volunteers in cooperation with Friends of Chatham Waterways.	Same as Year 1.
Revised					
2.2	Storm Drain Marking	DHE	Document number marked/year	Year 2 provision. Marker developed and procured in cooperation with other Cape Cod towns and regional planning agency (Cape Cod Commission)	Begin storm drain marking in cooperation with volunteers from Friends of Chatham Waterways.
Revised					
2.3	Annual Program Review	DHE, DPW, Board of Selectmen	Meeting held per schedule	Progress/update meeting with Board of Selectmen to be held in May 2004. Will be televised on local cable channel.	Same as Year 1.
Revised					

2.4	Household Hazardous Waste Collections	DHE	Document participation	Six household hazardous waste collections were held May through October 2003, jointly with 2 adjoining towns, in cooperation with Cape Cod Cooperative Extension. In 2003 231 households participated, compared to 191 in 2002.	Same as Year 1.
Revised					
2.5	Web Page	DHE	Documents hits	Stormwater web page developed on Town's web site. DHE working with information systems department to document hits with counter.	Same as Year 1.
Revised					
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
3.1	Stormwater System Mapping	DHE, DPW, GIS	Complete mapping by year 4 of program	Contact has been initiated with AmeriCorps-Cape Cod to begin field data collection in Fall 2004.	Initiate field data collection in Fall 2004.
Revised					
3.2	Identify and Document Illict Connections	DPW, DHE	Document illict connections	Progress limited to due staff shortages. Past monitoring of discharges during DMF Sanitary Surveys have not documented the presence of illict discharges.	Staff training in the detection of illict discharges. Continued monitoring of discharges during DMF Sanitary Surveys.
Revised					

3.3	Eliminate Illict Connections	DPW, DHE	Quantify illict connections corrected	Progress limited due to staff shortages. Discharges are being corrected as part of overall efforts to mitigate stormwater discharges.	Continue monitoring.
Revised					
3.4	Review Existing Regulatory Mechanisms	DHE	Complete review by December 2004	Review initiated.	Complete review and recommend necessary additions/changes.
Revised					
3.5	Educational Flyer	DHE, DPW	Distributed annually	No progress.	Develop and distribute flyer.
Revised					
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
4.1	Conservation Bylaw/Regulation Review	Conservation Commission/DHE	Necessary regulatory changes implemented	Review initiated.	Complete review and recommend necessary additions/changes.
Revised					
4.2	Subdivision Control review	Planning Board, Community Development Dept.(CDD), DHE	Necessary regulatory changes implemented	No progress. Planning Board and CDD currently committed to a complete re-write of the town's zoning bylaw.	Re-program to years 2 and 3. Initiate review as Planning Board and CDD time allows.

Revised					
4.3	Site Plan Review	Planning Board, CDD, DHE	Necessary regulatory changes implemented	No progress. Planning Board and CDD currently committed to a complete re-write of the town's zoning bylaw.	Re-program to years 2 and 3. Initiate review as Planning Board and CDD time allows.
Revised					
Revised					
Revised					
Revised					

4a. Additions

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
5.1	Conservation Bylaw/Regulation Review	Conservation Commission/DHE	Necessary regulatory changes implemented	Review initiated.	Complete review and recommend necessary additions/changes.
Revised					
5.2	Subdivision Control Review	Planning Board, CDD, DHE	Necessary regulatory changes implemented	No progress. Planning Board and CDD currently committed to a complete re-	Re-program to years 2 and 3. Initiate review as Planning Board and CDD

Revised					
5.3	Site Plan Review	Planning Board, CDD, DHE	Necessary regulatory changes implemented	No progress. Planning Board and CDD currently committed to a complete re-write of the town's zoning bylaw.	Re-program to years 2 and 3. Initiate review as Planning Board and CDD time allows.
Revised					
Revised					
Revised					
Revised					

5a. Additions

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
6.1	Catch Basin Cleaning	DPW	Clean/document 1/3 of town basins per year	Goal met.	Same as Year 1.
Revised					
6.2	Street Sweeping	DPW	Sweep/document roads once per year	Goal met.	Same as Year 1.
Revised					

6.3 Revised	Utilize Appropriate BMP's for All Municipal Projects	DPW, Building Maintenance	Document implementation	Town has designed new DPW building utilizing appropriate BMP's to retain all stormwater on-site and to mitigate pollutant loads from activities. Municipal fish pier (site CHA-16) renovation includes installation of Stormceptor to mitigate parking lot runoff. Town completed re-construction of town landing on Taylors Pond (site CHA-3) eliminating surface runoff, including use of Grasscrete Paving blocks. Town. Town began re-construction of Ryder's Cove Road and Landing (Site CHA-19) with installation of infiltration BMP's. Town continued design of improvements to Stage Harbor Rd., Pond St., and Queen Anne Rd. (Site CHA-11-13) to mitigate runoff to Oyster Pond. Town initiate design of BMP's to Mill Creek Road (site CHA-1).	Continue implementation of BMP's and initiate design for new projects.
6.4 Revised	Pet Waste Control	DHE, Animal Control	Expand/document Mutt Mitt program	Existing Mutt Mitt program has been continued. Additional Mutt Mitt dispensers obtained to respond to requests from public for additional dispenser locations.	Same as Year 1.
6.5 Revised	Annual Training	DPW, DHE	Held annually/participation documented.	No progress.	Program to be developed and implemented in Year 2.
Revised					

6a. Additions

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

The Town of Chatham was the first Massachusetts community to have nitrogen-loading thresholds completed as part of the MaDEP's Massachusetts Estuaries Project. The thresholds developed are in the process of being incorporated into the town-wide Comprehensive Wastewater and Nutrient Management Planning Program.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures	($)	$20,000*

*** In addition to DPW funding for routine drainage improvements.**

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		Yes

▪ days sponsored	(#)	6
▪ 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	(#)	30
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened	(# or %)	
Illicit discharges identified	(#)	

Illicit connections removed	(#) (est. gpd)	
% of population on sewer	(%)	5
% of population on septic systems	(%)	95

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)	Yes
Storage shed(s) in design or under construction	(y/n)	

CHATHAM WATER NEWS

Published by the Chatham Water & Sewer Departments
William G. Redfield, P. E., Director

Spring 2004

Only Rain Down the Drain

This summer you may see the above slogan on a decal placed on or near to roadways' stormdrains. This decal is to inform people of the potential pollution of stormwater runoff. Stormwater is rain that falls on driveways, roads, and lawns. As stormwater travels over the land it can pick up contaminants. As this water is carried away by stormwater drains it eventually ends up in our groundwater, rivers, ponds, estuaries, and the ocean.

Ways to Reduce Stormwater Pollution

- Never dump anything into or near storm drains, street gutters, or on the ground.
- Check your car for oil, antifreeze, and transmission fluid leaks, and make immediate repairs to stop the leak.
- Use absorbent pads or materials to remove grease and oil spills from driveways, sidewalks, and roads. Don't wash these spills down the drain.
- When changing automobile fluids, always recycle the waste fluids at a designated recycling center.
- Use a carwash that recycles the wash water.
- Use fertilizers and pesticides sparingly.
- Compost your yard waste.
- Pick up after your pet defecates.
- Inspect and pump your septic tank regularly. Once every three years is the recommended pumping schedule.

Free Replacement Low Flow Toilets

The Chatham Water Department is accepting applications for a limited number of free low flow "flapperless" toilets. The cost of a plumber to; remove the old toilet; install the new toilet; and disposing of the old toilet are the homeowner's responsibilities. These toilets are available on a first-come, first-served basis so stop at the Chatham Water and Sewer Departments' office for a complete list of requirements and pick up an application.

Open House

The Water and Sewer Departments will be hosting their annual Open Houses on Saturday, May 8, 2004, from 10:00 a.m. through 2:00 p.m., in celebration of "National Drinking Water Week". The two Open Houses will be held at the Training Field Wells Pumping Stations #5 & #8, located at 125 Training Field Road and at the Waste Water Treatment Facility off Sam Ryder Road, behind the landfill and solid waste transfer station. This is your opportunity to stop by and see two of your well pumping stations and the wastewater treatment facility first hand.

Meter Tampering

During this past fall, several meters were removed by homeowners or plumbers while draining homes for the winter or performing renovations to the building. This is not allowed as stated in the following quote from the "Town of Chatham, Rules and Regulations of the Water Department", Article II, General Provisions, Section 11 – Authorization.

" NO PERSON SHALL TAMPER WITH OR TAP ANY WATER MAIN; CONNECT ANY SERVICE PIPE TO ANY WATER MAIN; INSTALL, REMOVE OR REPAIR A METER; TURN ON OR SHUT OFF THE WATER FROM ANY PIPE OR HYDRANT WITHOUT PERMISSION OF THE WATER DIRECTOR OR HIS AUTHORIZED AGENT. PERSONS TAMPERING WITH ANY PART OF THE WATER SYSTEM ARE LIABLE TO CRIMINAL PROSECUTION."

This rule was adopted to ensure the water supply is protected from contaminants that may enter the system by untrained people and to prevent the theft of water.

If you need to remove the water meter or its remote reading device, contact the Water Department.

Spring Flushing & Chlorination Program

The Water Department will once again be conducting a spring water distribution system flushing program. The program is aimed at cleaning the system of any sediment that may have accumulated over the past year and to bring fresh water to those areas with low water usage during the winter months.

The Water Department will also be adding a small amount of chlorine to the water system as a precautionary measure to kill any bacteria that may be stirred up as a result of the flushing program. Flushing will begin on March 22 and will continue through the end of May 2004. Notices will be published in the local newspapers prior to the addition of chlorine and the start of flushing. Signs will also be posted in the area being flushed.

You may experience some discoloration in the water for short periods of time. In most instances, letting your water run for a few minutes should clear the discoloration. Please check the water coming from your faucet before you begin to do a wash, take a shower, or other chores that require clear water. We also suggest that customers keep a gallon or two of water stored in the refrigerator for drinking or food preparation should off-taste or discoloration develop.

System wide flushing of the water distribution system is an important aspect of our ongoing maintenance program. We understand you may experience some inconvenience and thank you for your cooperation and patience during this important task that ensures you receive the highest water quality possible.

Water Main Projects

Phase II of the Town's water main replacement project began in the fall of 2003. Bortolotti Construction of Marstons Mills was awarded the contract. Work began on Seaquanset Road, Geranium Drive, and Monomoit Lane in December but was halted due to the cold weather. Work will resume when the ground thaws on Seastrand Way, Pepper Lane, Dugan Pond Lane, Glover Square, Old Academy Road, Independence Lane, Bonita Drive, Willow Bend, and Wilkey Way.

The New Math

In response to the mathematical conversion formula that is printed on your water bills, Mr. Robert Bartlett has suggested we use an easier way to calculate your water use. Instead of adding two zeros to the consumption, you may move the decimal point two digits to the right (7.48 to 748) in the cubic feet to gallon conversion constant as demonstrated in the following example:
Multiply a consumption of 20, as shown on the water bill, by 748 to arrive at a total of 14,960 gallons.

This alternative formula will be on future Water and Sewer invoice forms.

Can The FOG

Cooking fats, oils, and greases (FOG) aren't just bad for your arteries; they're bad for sewers and septic systems too. Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. A common cause of sewer and septic systems' overflows is sewer pipes blocked by FOG.

Often, FOG is washed into the plumbing system, usually through the kitchen sink. The FOG then cools and sticks to the insides of sewer pipes. Over time, FOG can build up and block the entire pipe, causing a backup. A simple way to reduce the potential of sewer or septic system's backups is simply discard your household cooking fats, oils, and greases FOG in the trash. After allowing it to cool, place FOG into a suitable disposable container (metal can) while it is still in its liquid form. After it solidifies, discard the container with your regular solid waste (trash).

The Chatham Sewer Department continually performs inspections on restaurants and other FOG generating facilities connected to the sewer to ensure that FOG is not discharged to our sewers and pumping stations. Additionally the Department pressure washes the sewers two times a year to remove FOG build up and reduce the possibility of grease blockages and sewage backups.

Chatham Water and Sewer Web Site
www.town.chatham.ma