



TOWN OF EASTHAM

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www.eastham-ma.gov

TRANSMITTAL MEMORANDUM

TO: Ann Herrick - CIP
U.S. Environmental Protection Agency - Region 1
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Massachusetts Department of Environmental Protection
Division of Watershed Management
627 Main Street
Worcester, MA 01608

FROM: Mary Elizabeth Burgess, Town Planner 

RE: Town of Eastham
Phase II Annual Report – Permit Year 3
EPA NPDES#: MAR041110
DEP Transmittal #: W040891

Pursuant to the requirements under the National Pollution Discharge Elimination System (NPDES) Stormwater General Permit to meet the United States Environmental Protection Agency's (EPA) Final Phase II Stormwater Rule, attached please find a certification in accordance with 40 CFR 122.22 and an Annual Report (with attachments) for Permit Year 3 for the Town of Eastham. Please do not hesitate to contact me at 508.240.5906 x202 if you have any questions or require any additional information.

Municipality/Organization: Town of Eastham

EPA NPDES Permit Number: MAR041110

MaDEP Transmittal Number: W-040891

Annual Report Number

& Reporting Period: No. 3: March 2005-March 2006

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Mary Elizabeth Burgess

Title: Town Planner

Telephone #: 508.240.5906 x202

Email: meburgess@eastham-ma.gov

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: Sheila Vanderhoef

Printed Name: Sheila Vanderhoef

Title: Town Administrator

Date: January 22, 2007

Part II. Self-Assessment

The Town of Eastham has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

Part III. Summary of Minimum Control Measures**1. Public Education and Outreach**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
1.1	Educational Brochures	NR, DPW	Development of Brochures	Updated Brochures from Year 2. Continued to coordinate with Local Regional Planning Agency on Informational Campaign	Continue to update educational brochures as new information arises.
Revised					
Revised					
1.3	Storm Water Video	Planning	Airing on Cable TV	Program discontinued due to lack of funding.	Obtain Funding to resurrect this project.
Revised					
1.4	Coastal/Pond Cleanup	ConCom, DPW	Conducting Cleanup	Coastal Cleanup conducted as part of MCZM's "Coastsweep" Program completed bi annually	Cleanup completed twice yearly in the Spring and Fall. Includes local aquaculturalists, cub scouts and Regional School students
Revised					
1.5	Office Brochure	NR, DPW, Planning	Availability of Brochures	Brochures with local contact info corresponding with 1.1 displayed in NR/DPW Building and Building Dept in Town Hall. Posters were added to the informational campaign.	Continue to update brochures and Informational Posters in Permit Year 4.
Revised					
Revised					

1a. Additions

Town of Eastham, MA (MA 0941110)

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
2.1	Storm Water Management Program	NR, DPW, ConCom, Planning, Health, WRAB	Development of Program	This program was discontinued due to lack of support.	Look into resurrecting project.
Revised					
2.2	Pollution Reporting	NR, DPW, Pond Stewards	Visual Monitoring/ Recording	Routine monitoring of marine areas conducted by NR staff five times per week, daily monitoring of drainage system/ road network by DPW, and monitoring of fresh surface waters by Eastham Pond Stewards. Monitoring capabilities augmented for summer months in Rock Harbor (marina) by seasonal employee.	Continue with monitoring as described for Permit year 3.
Revised					
Revised					
Revised					
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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
3.1 Revised	Map Outfalls	NR, DPW, Planning	Comprehensive Map	Due to lack of funding, there is no progress of this project	Continue to look for grant money to fund this project
3.2 Revised	Detection of Non-Stormwater	NR	Correction of Discharges	Continue to identify any non-stormwater discharges and remedy the situation depending on source of discharge.	Continue project indefinitely.
3.3 Revised	Dry Weather Flow Screening	NR	Screening Testing	Incorporate dry weather flow screening into the routine monitoring of marine areas conducted by NR staff five times per week starting every starting in spring and ending in the fall.	Continue project indefinitely.
3.4 Revised	Reporting Line	NR, DPW	Establishment of Line	Line established for NR and DPW to report any inappropriate inputs to the MS4. Reports involving oil or hazardous waste is referred to the Fire Dept and MA DEP	Continue project indefinitely.
3.5 Revised	Hazardous Product Collection	Health, DPW, Recycling	Conducting Collection Day	Hazardous collection days was held on July 15, 2005 and September 16, 2005.	Continue conducting collection days. Tentatively scheduled for July 16, 2005 and September 9, 2006.
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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
4.1	Draft Construction Site Runoff Control Bylaw	ConCom, Planning	Develop Bylaw	Proposed Bylaw to be created and incorporated into Local Wetland Control Bylaw and Local Subdivision Control Bylaw.	Implement Bylaw Changes in Permit Year 4.
Revised					
4.2	Enact Construction Site Runoff Control Bylaw	ConCom, Planning, Town Meeting	Implement Bylaw	Programmed Start Permit Year 4	Programmed Start Permit Year 4.
Revised					
Revised					
Revised					
Revised					
Revised					

4a. Additions

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Town of Eastham, MA (MA 0941110)

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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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
5.1	Draft Construction Site Runoff Control Bylaw	ConCom, Planning	Develop Bylaw	Proposed Bylaw to be created and incorporated into Eastham Wetland Bylaw and Local Subdivision Control Bylaw.	Implement Bylaw Changes in Permit Year 4.
Revised					
5.2	Amend Site Plan Review	ConCom, Planning	Develop Bylaw	Proposed Bylaw to be created and incorporated into Eastham Wetland Bylaw and Local Subdivision Control Bylaw.	Implement Bylaw Changes in Permit Year 4.
Revised					
5.3	Enact Construction Site Runoff Control Bylaw	ConCom, Planning, Town Meeting	Implement Bylaw	Programmed Start Permit year 4	Implement/enforce Construction Site Runoff Control Bylaw.
Revised					
Revised					
Revised					
Revised					

5a. Additions

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Town of Eastham, MA (MA 0941110)

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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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
6.1	Annual Training	NR, DPW, Planning	Training session	Program Postponed.	Program Postponed.
Revised					
6.2	Review of Town Properties	DPW	Audit Report	Programmed Start Permit Year 4	Programmed Start Permit Year 4
Revised					
6.3	Review of Town Operations	DPW, Health	Audit Report	Programmed Start Permit Year 4	Programmed Start Permit Year 4
Revised					
6.4	Catch Basin Cleaning	DPW	Updated Log	Cleaned all Town owned Catch Basins in the Spring and Fall of 2005.	Clean all Town owned Catch Basins in the Spring and Fall of 2006.
Revised					
6.5	Street Sweeping	DPW	Record of Areas Swept	Swept all Town owned Roadways and parking lots in April and September of 2005.	Sweep all Town owned Roadways and Parking lots in April and September of 2006.
Revised					
Revised					

6a. Additions

6.6	Remediation of Existing Outfall	DPW	Elimination of Stormwater discharge	Three discharge sites identified: Steele Road, Cooks Brook Road and Thumpertown Road.	Discharge Eliminated in Permit year 3
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6.7	Drainage Alterations	DPW	Catch Basin Replacement	25 Catch Basins identified for replacement or closure.	Continued through Permit Year 4
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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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

NOT APPLICABLE

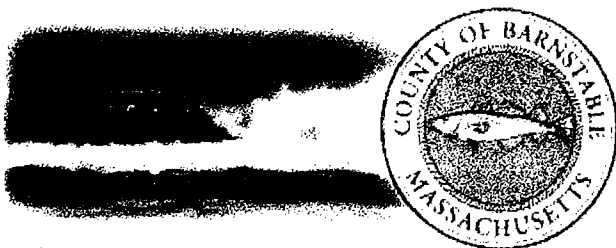
Part IV. Summary of Information Collected and Analyzed

FRESHWATER SAMPLING: The Cape Cod Pond and Lake Stewardship (PALS) are continually sampling the Eastham ponds in an effort to identify possible pollutants and recommend the best management practices for containing and eliminating possible pollutants.

BEACH SAMPLING: Sixteen Eastham Beaches (eleven salt water and five freshwater) were sampled in the summer of 2005 by the Barnstable County's Department of Health and Environment. Four Beaches had samples above the sampling limit (see attached summary data). However, those samples exceeding the limits only resulted in the posting of swimming advisory notices. While a definitive cause was never determined for the need to post the swimming advisory, speculation was that it was related to natural geological conditions (peat deposits) and not related to a direct stormwater discharge (No outfall pipe exists).

GROUND WATER SAMPLING: The Town continued its voluntary sampling project to evaluate levels of nitrate in residential wells. Each year 1/3 of the Town is sampled. The sampling has rotated back to the first 1/3 sample area and continually sample the town allowing for a three year sampling rotation schedule.

SHELLFISH SAMPLING: The Natural Resources Office continued to test for Red Tide and participate in shellfish sampling in coordination with Massachusetts Division of Marine Fisheries on a weekly basis throughout the Spring, Summer and Fall.



Cape Cod Summer 2005

Directory of Beach Location and Water Quality

Directory of Beach Water Quality by Town	Water Quality Laboratory	Barnstable County Department of Health Home Page	Environmental Health	Useful Links
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Eastham Public Bathing Beach Water Quality Report

Beaches are tested weekly during the summer bathing season (June to August). In the event of a failure, the beach in question will be resampled daily thereafter until results permit re-opening. most recent weeks of sample results will be included in this chart. Green indicates good water quality and red indicates bacteria levels above the acceptable standard.

Pass Fail

Marine (salt) Beaches:	6/8/05	6/15/05	6/22/05	6/29/05	
S. Sunken Meadow			6/22	6/23	
Cook's Brook			6/22	6/23	
Campground Beach					
Thumpertown					
Kingsbury		6/15	6/16		
Cole Road Beach					
First Encounter Beach				6/29	
First Encounter Spit					
Boat Meadow					
Dyer Prince					
Town Cove					

Freshwater Beaches:	6/8/05	6/15/05	6/22/05	6/29/05	
Long Pond (Depot Street)					
Herring Pond					
Wiley Park					
Great Pond					
Minister Pond					

Town by Town Beach

Top of

Eastham Public Beaches - 2005

			rain	rain		rain	rain	rain	rain					rain at night						
Date of Last Rain:	5/26	5/26	6/16	6/22	6/22	6/28	6/30	7/6	7/7	7/9	7/9	7/9	7/9	7/22	7/22	7/22	7/22	7/22	7/22	7/22
Amount of Last Rain:	0.17	0.17	0.01	0.02	0.02	0.05	0.01	2	0.01	0.18	0.18	0.18	0.18	0.12	0.12	0.12	0.12	0.12	0.12	0.12
															outgoing	incoming				
															am	pm				

Marine Beaches	6/8	6/15	6/16	6/22	6/23	6/29	6/30	7/6	7/7	7/13	7/20	7/21	7/22	7/25	7/26	7/26	7/27	7/28	7/29
S. Sunken Meadow	2	12		200	4	20		24		4	56						352	64	
Cook's Brook	<2	18		110	32	<2		118	4	<2	156	134	>400	24	4	190	160	148	120
Campground Beach	<2	14		48		2		2		1	102						2		
Thumpertown	<2	66		6		22		<2		<2	80						2		
Kingsbury	4	240	4	30		54		24		<2	14						12		
Cole Road Beach	6	92		30		4		4		<2	4						2		
First Encounter Beach	<2	38		40		136	<2	8		<2	69						6		
First Encounter River	<2	8		8		30		<2		8	2						12		
Boat Meadow	<2	22		6		84		12		<2	74						5		
Dyer Prince	1	4		38		4		>400	20	2	8						<2		
Town Cove	<2	<2		1		4		<2		38	<2						18		

Fresh Water	6/8	6/15	6/22	6/29	7/6	7/7	7/13	7/20	7/27	7/28
Great Pond	32	<4	<4	8		<4	8	8	<4	
Herring Pond	<4	16	12	6	<4		<4	4	4	
Long Pond (Depot St)	4	16	4	32		4	<4	<4	280	24
Minister Pond	10	<4	4	16		72	56	36	12	
Wiley Park	<4	<4	<4	<4	4		4	48	<4	

# Marine Beach Samples	174
# Marine Beach Failures	23
% Marine Failures	13.22%
# Fresh Water Samples	66
# Fresh Water Failures	1
% Fresh Water Failures	1.52%

**Eastham Semi-Public
Beaches - 2005**

			rain	rain	rain										rain							
Date of Last Rain:	5/26	5/26	6/22	6/28	7/7	7/9	7/9	7/9	7/22	7/22	7/22	7/22	7/22	7/22	8/2	8/2	8/2	8/2	8/5	8/5	8/5	8/5
Amount Last Rain:	0.17	0.17	0.02	0.06	0.01	0.18	0.18	0.18	0.12	0.12	0.12	0.12	0.12	0.12	0.03	0.03	0.03	0.03	0.2	0.2	0.2	0.2

Marine Beach																					
Organizations:	6/8	6/15	6/22	6/29	7/7	7/13	7/20	7/22	7/25	7/27	7/28	7/29	8/1	8/2	8/3	8/4	8/5	8/8	8/9	8/10	8/11
Silver Springs Assoc.								>400	20		112	168	24	56	140	34	8	52	26	<2	2
Massasoit Hills																		162	32	2	14
Fresh Water Organizations:																					
	6/8	6/15	6/22	6/29	7/7	7/13	7/20	7/22	7/25	7/27	7/28	7/29	8/1	8/2	8/3	8/4	8/5	8/8	8/9	8/10	8/11
Nauset Haven Lakeside																					
Condo (Ministers Pond)	<4	6	12	<4	24	10	20			80					18					8	
Whispering Pines Condo																					
(Muddy Pond)	<4	12	8	54	32	4	<4			4					24					<4	

Date of Last Rain:	8/5	8/15	8/15	8/17	8/30
Amount Last Rain:	0.2	0.03	0.03	0.01	0.74

Marine Beach							
Organizations:	8/12	8/17	8/18	8/24	8/31	# Samples	# Fail
Silver Springs Assoc.		46		72	78	16	4
Massasoit Hills	6					5	1

Fresh Water Organizations:							
	8/12	8/17	8/18	8/24	8/31	# Samples	# Fail
Nauset Haven Lakeside							
Condo (Ministers Pond)		348	<4	<4		13	1
Whispering Pines Condo							
(Muddy Pond)		<4		<4		12	0

# Marine Beach Samples	21
# Marine Beach Failures	5
% Marine Failures	23.81%
# Fresh Water Samples	25
# Fresh Water Failures	1
% Fresh Water Failures	4.00%

Eastham Public Beaches - 2005

8/1 night .13

		rain												rain		rain
Date of Last Rain:	7/22	8/2	8/2	8/2	8/2	8/5	8/5	8/5	8/5	8/5	8/15	8/15	8/15	8/24	8/31	9/1
Amount of Last Rain:	0.12	0.03	0.03	0.03	0.03	0.2	0.2	0.2	0.2	0.2	0.03	0.03	0.03	0.01	0.74	0.07

Marine Beaches	8/1	8/2	8/3	8/4	8/5	8/8	8/9	8/10	8/11	8/12	8/17	8/18	8/24	8/25	8/31	9/1	# Samp	# Fail
S. Sunken Meadow			360	14	134	240	4	<2	40	6	16		12		20		21	5
Cook's Brook	32	100	148	130	280	62	<2	2	<2	<2	76		14		52		30	12
Campground Beach			28					<2			10		30		<2		13	
Thumpertown			16					<2			28		<2		14		13	
Kingsbury			2					2			190	2	2		8		15	2
Cole Road Beach			<2					<2			2		<2		2		13	
First Encounter Beach			2					<2			30		2		<2		14	1
First Encounter River			<2					<2			7		<2		<2		13	
Boat Meadow			24					<2			26		4		8		13	
Dyer Prince			4					2			8		26		>400	4	15	2
Town Cove			<2					14			2		>400	<2	8		14	1

Fresh Water	8/3	8/10	8/17	8/24	8/31	# Samp	# Fail
Great Pond	<4	<4	8	2	24	13	
Herring Pond	<4	<4	<4	<4	<4	13	
Long Pond (Depot St)	4	<4	4	4	24	14	1
Minister Pond	16	8	8	<4	16	13	
Wiley Park	2	22	<4	4	2	13	

# Marine Beach Samples	174
# Marine Beach Failures	23
% Marine Failures	13.22%
# Fresh Water Samples	66
# Fresh Water Failures	1
% Fresh Water Failures	1.52%