

Appendix 1-2
Plan of Study

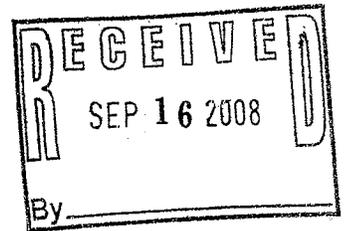


TOWN OF EASTHAM

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REVISED LETTER

September 12, 2008

Please replace this letter for
earlier letter dated
September 8, 2008.

Mr. Brian Dudley
Massachusetts Department of Environmental Protection
973 Iyannough Road, Route 132
Hyannis, MA 02601

Duplicate of Letter and
attachment is enclosed for your
convenience. Thank you.

Re: Town of Eastham
CWMP Plan of Study

Dear Mr. Dudley:

Enclosed for your review is the August 2008 Plan of Study for the Town of Eastham (Town) Comprehensive Wastewater Management Planning (CWMP) Project. It was developed by our engineering consultant, Stearns & Wheler, LLC in accordance with Massachusetts Department of Environmental Protection guidelines.

The Plan of Study is divided into the following main components:

- Phase I – Interim Needs Assessment, and Identification and Screening of Alternative Solutions and Sites
- Phase II – Revised Needs Assessment, and Identification and Screening of Alternative Solutions and Sites
- Phase III – Detailed Evaluation and Development of the Comprehensive Wastewater Management Plan
- Phase IV – Resolution of Remaining Issues and Project Completion
- Phase V – Environmental and Public Review Process

The Town plans to initiate the Massachusetts Environmental Policy Act and Cape Cod Commission Development of Regional Impact joint review process at the completion of Phase II or Phase III depending on the development of marine and pond water-quality limits. At that time, an Environmental Notification Form will be filed describing the work and findings developed to date, and identifying the needed steps to complete draft and final Environmental Impact Reports (EIRs). The draft and final EIRs are envisioned to be completed in Phases III and IV, respectively.

We have proposed this Plan of Study to be fairly general in nature to be flexible for developing regulations, methodologies, and environmental limits. We expect to complete this project with a cost-effective and environmentally sound plan to manage our wastewater into the foreseeable future (20-year time frame with considerations for buildout conditions).

The Town is proceeding with the development of an Interim Needs Assessment, and Identification and Screening of Alternative Solutions and Sites Phase at this time while the marine and pond water-quality limits are being developed by the Massachusetts Estuaries Project (MEP) and the Cape Cod Commission (CCC). Once these limits are received, the interim report will be revised into a final report with the final watershed delineations and limits.

The Town's Wastewater Management Planning Committee has been charged by the Town Selectmen to guide and oversee the project.

The Town looks forward for your support in your dual role of managing the Estuaries Project as it pertains to Eastham's portion of Nauset and Rock Harbor Estuaries as well as coordinating the regulatory review for the Massachusetts Department of Environmental Protection. We also look forward to the Department's timely review of this document and hope to receive Department comments in the near future.

Please feel free to call Ms. Jane Crowley, Eastham Health Agent or Nathan Weeks, P.E., from Stearns & Wheler, if you have any questions or comments.

Sincerely yours,

TOWN OF EASTHAM



Sheila Vanderhoef
Town Administrator

Enclosures

cc: Wastewater Management Planning Committee, (w/enclosures)
Board of Selectmen, (w/enclosures)
Board of Health, (w/enclosures)
Planning Board, (w/enclosures)
Nathan C. Weeks, P.E., Stearns & Wheler, (w/enclosures)

**TOWN OF EASTHAM
COMPREHENSIVE WASTEWATER MANAGEMENT PLANNING PROJECT**

DRAFT PLAN OF STUDY

August 13, 2008

The purpose of the Plan of Study is to provide a listing of the steps needed for the Comprehensive Wastewater Management Planning (CWMP) Project in the Town of Eastham (Town). Listing these tasks allows Town department staff, regional and state agencies, and the public to understand the CWMP process and efficiently provide input to the Project. The Plan of Study is expected to have the following main uses:

- Submittal for Department of Environmental Protection (DEP) review as required
- Budgeting and scheduling tool for Comprehensive Wastewater Management Planning.
- Development of environmental review documents for the Project through the joint Massachusetts Environmental Protection Act (MEPA) and Cape Cod Commission (CCC) Development of Regional Impact (DRI) review process.
- Development of public education and outreach materials throughout the Project.

PHASE I – INTERIM NEEDS ASSESSMENT, AND IDENTIFICATION AND SCREENING OF ALTERNATIVE SOLUTIONS AND SITES

This is the first phase of Comprehensive Wastewater Management Planning and it involves the initial assessment of the wastewater needs for the Town of Eastham as well as the identification and screening of alternative solutions. The interim phase is proceeding while the marine-water nitrogen limits are being developed by the Massachusetts Estuaries Project (MEP) and the pond-water phosphorus limits that are being developed by the Cape Cod Commission (CCC). These limits are expected to be complete in 2008 or 2009.

Eastham's wastewater needs will be defined by identifying the Town goals for wastewater management, evaluating the existing conditions, reviewing regulatory requirements, developing projections of the future conditions, and then comparing these goals and conditions to the wastewater limitations in Eastham.

Once the needs are developed, alternative solutions and facility sites will be identified. These solutions and sites are then summarized and screened to retain only the most feasible ones. Feasible solutions (technical as well as management) and sites are then grouped into alternative scenarios for detailed evaluation in Phase III.

The main tasks of this phase are listed below:

- A. **Review and Summarize Town Issues and Project Background**
- B. **Review and Summarize Regulatory Issues Affecting Wastewater Management Planning**
- C. **Evaluate, Summarize, and Describe Existing and Future Conditions in Town Including Nitrogen Limits**
- D. **Identify the Goals and Objectives of the Town Related to Wastewater Management**
- E. **Summarize the Wastewater Related Needs of the Town**
- F. **Identify, Review and Summarize Alternative Solutions to Meet the Town's Wastewater Management Needs**
- G. **Screen the Alternative Solutions to Identify the Most Feasible ones for Detailed Evaluation.**

- H. **Identify and Screen Potential Sites For Wastewater Management Facilities**
- I. **Group Feasible Solutions and Sites into Alternative Wastewater Management Scenarios**
- J. **Prepare the Interim Needs Assessment and Alternatives Screening Analysis Report by Summarizing the Tasks of this Phase**

PHASE II – REVISED NEEDS ASSESSMENT, AND IDENTIFICATION AND SCREENING OF ALTERNATIVE SOLUTIONS AND SITES

The purpose of this phase is to revise the Phase I – Interim Needs Assessment Report and Alternatives Screening Analysis Report based on water quality limits and additional information as data gaps are resolved.

PHASE III – DETAILED EVALUATION AND DEVELOPMENT OF THE COMPREHENSIVE WASTEWATER MANAGEMENT PLAN

Phase III provides a detailed analysis of costs and non-monetary factors for the alternative wastewater management scenarios. It presents the recommended wastewater management plan to mitigate the wastewater related problems. This plan will include the scheduled implementation steps for new facilities, management structures, local regulations, and funding requirements. The main tasks for this phase are listed below.

The purpose of this phase is to select the most appropriate wastewater management plan for Eastham based on a cost effectiveness analysis, analysis of non-monetary factors.

The main tasks for this phase are listed below:

A. **Perform Subsurface and/or Environmental Investigations for Potential Wastewater Management Sites**

B. **Prepare a Methodology of the Planned Detailed Evaluations for Project and Regulatory Review.**

C. **Perform Present-Worth Evaluations of the Alternative Scenarios.**

D. **Perform Non-Monetary Evaluations of the Alternative Scenarios.**

E. **Perform an Environmental Impact Analysis of the Alternative Scenarios.**

F. **Evaluate The Present-Worth, Non-Monetary Factors, and the Potential Environmental Impacts (and Benefits) of the Alternative Management Scenarios to Select the Most Appropriate One.**

G. **Develop and Present the Recommended Wastewater Management Plan, and Prepare the Draft Comprehensive Wastewater Management (DCWMP) Report.**

H. **Submit The DCWMP Report For Regulatory and Public Reviews.**

PHASE IV – RESOLUTION OF REMAINING ISSUES AND PROJECT COMPLETION

This phase is needed to complete review process and finalize the CWMP. This phase includes the following tasks:

A. **Resolve Remaining Issues.**

B. **Modify the DCWMP to Prepare the Final Comprehensive Wastewater Management Plan (FCWMP) Report, and Submit it for Review.**

PHASE V – ENVIRONMENTAL AND PUBLIC REVIEW PROCESS.

This phase is the coordination of the environmental and public review process that proceeds throughout the whole project.

The environmental review process needs to follow the Cape Cod Commission/Massachusetts Environmental Policy Act (CCC/MEPA) Joint Review Process (CCC/MEPA, 1991).

The public review process is closely related to the environmental review process. It will contain additional items needed to properly disseminate information to the Town's community groups and to the Town Public. Proper public education is needed to ensure that the recommended plan will be approved by Town Meeting and by the voters in any proposition 2½ override referendums.

The purpose of this phase is to create and coordinate an environmental and public review process which will inform project participants and the Town Public, and facilitate the recommended plan's approval by Town Meeting and Town voters.

The approach for the environmental review process is to file an Environmental Notification Form (ENF) document at the end of Phase II or III (depending on the completion of water-quality limits) to initiate the Massachusetts Environmental Policy Act (MEPA) and Cape Cod Commission Development of Regional Impact (DRI) Joint Environmental Review Process. This ENF will summarize the findings of Phase I and II, and focus the review on the Alternative Management Scenarios that were developed at the end of Phase II and their associated human-health and environmental benefits. The ENF will detail how these Alternative Management Scenarios will be evaluated. The subsequent environmental evaluations will be summarized in the Draft Comprehensive Wastewater Management Plan and Draft Environmental Impact Report (DCWMP/DEIR) and in the Final Comprehensive Wastewater Management Plan and Final Environmental Impact Report (FCWMP/FEIR)

The main tasks of this phase are listed below:

A. Utilize the Eastham Wastewater Management Planning Committee for Project Reviews and Public Outreach

This committee was established in 2002 and will meet throughout the project to review project documents and provide project input. This group will also assist with the public participation program and presentations.

A subcommittee of this committee is comprised of Town professional staff and will provide technical guidance for the Project and to the Wastewater Management Planning Committee.

B. Prepare and Conduct a Public Participation Program

C. Submit and Coordinate the Public Review of the Environmental Notification Form.

D. Submit and Coordinate the Public Review of the Draft Comprehensive Wastewater Management Plan and Draft Environmental Impact Report (DCWMP /DEIR)

E. Submit and Coordinate the Public Review of the Final Comprehensive Wastewater Management Plan and Final Environmental Impact Report (FCWMP /FEIR).

F. Coordinate the Needed Public Meetings and Hearings to Comply with State and Regional Regulations as well as Meet the Informational Needs of the Community

