

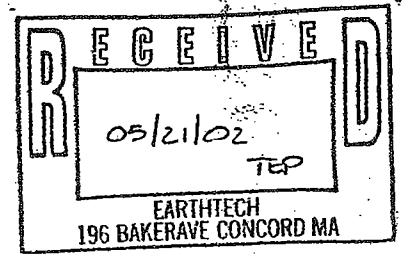
The Commonwealth of Massachusetts
 Executive Office of Environmental Affairs
 251 Causeway Street, Suite 900
 Boston, MA 02114-2119

JANE SWIFT
 GOVERNOR
 BOB DURAND
 SECRETARY

Tel. (617) 626-1000
 Fax (617) 626-1181
<http://www.magnet.state.ma.us/envir>

May 17, 2002

Mr. Thomas E. Parece, P.E.
 EarthTech
 196 Baker Avenue
 Concord, MA 01742



Re: Nantucket CWMP/EIR; EOE# 12617
 Request to proceed with Phase II

Dear Mr. Parece,

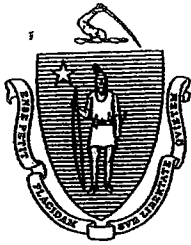
I have received your letter of May 14, 2002, requesting authorization to proceed with Phase II. Upon review of the comments and the November, 2001 Certificate on the ENF, and in light of the prior submission of the Phase I document with the ENF and the Department of Environmental Protection's substantive approval of the proposed Phase II scope, I hereby authorize you to submit a single filing that combines the Phase II document and the requested information updates and responses to the comments received on the ENF and on the Phase I document.

Sincerely,

Jay Wickersham
 Assistant Secretary

cc: Jeff Whitt 8/28/02





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Executive Office of Environmental Affairs

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Boston, MA 02114-2119

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November 16, 2001

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ESTABLISHING A SPECIAL REVIEW PROCEDURE

PROJECT NAME : Comprehensive Wastewater Management Plan

PROJECT MUNICIPALITY : Nantucket

PROJECT WATERSHED : Islands

EOEA NUMBER : 12617

PROJECT PROPONENT : Town of Nantucket

DATE NOTICED IN MONITOR : October 10, 2001

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.03 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of an Environmental Impact Report. Furthermore, pursuant to Section 11.09 of the MEPA Regulations, I hereby establish a special procedure for the review of this project.

PROJECT DESCRIPTION

This project involves the development of a Comprehensive Wastewater Management Plan (CWMP) for the island of Nantucket. This plan is proposed to identify areas on the island where on-site sub-surface wastewater disposal problems occur; to identify the most effective and environmentally sound means of dealing with those problem areas; and to provide a detailed environmental analysis of the proposed plan to ensure that impacts are avoided or minimized and that appropriate mitigation is proposed for those impacts that are considered unavoidable.

The project is expected to exceed Mandatory EIR thresholds established in the MEPA Regulations, certainly the threshold at Section 11.03(5)(a)3 dealing with construction of more than 10 miles of new sewers. The project will require a variety of federal, state and local permits and approvals and the Town is



seeking public financial assistance from the State Revolving Fund. The provision of financial assistance grants broad based jurisdiction that extends to all aspects of the project that might cause adverse environmental impact.

SPECIAL REVIEW PROCEDURE

The Town has requested that I establish a Special Review Procedure (SRP) for the review of this project under MEPA that would consist of the filing of three documents: Phase I, the ENF, the Needs Analysis, and the Screening of Alternatives; Phase II, the Draft CWMP and EIR; and Phase III, the Final CWMP and EIR. The Town has filed the ENF and a Phase I report that provides significant information on both needs and alternatives. However, additional work and information is required for both the needs analysis and the screening of alternatives before that phase can be determined to be complete and adequate under MEPA.

Consequently, I hereby establish, with the consent of the Town, a SRP consisting of three filings:

- Phase I, Needs Analysis and Screening of Alternatives, based on the existing information developed in these earlier studies and including the additional information identified below, and a revised proposed scope for the Phase II document;
- Phase II, the Draft CWMP and EIR; and
- Phase III, the Final CWMP and EIR.

SCOPE FOR PHASE I DOCUMENT

Needs Areas

The Phase I report should provide further documentation on the process used to determine individual needs areas and how the application of the criteria was consistent between areas. The report should provide adequate clarification, and modification if required, to ensure that the rankings and the rationale for them are clear and appropriate.

Disposal Site Alternatives

The Phase I report should contain a screening of disposal site alternatives. The screening is important at this level to ensure that public and agency review is provided early in the process for those sites that receive a high ranking. This early screening and ranking will avoid time consuming and costly analyses of sites that the Town may not be able to develop.

Water Supply

The report should provide a summary of the existing and projected water use in the Town and how the existing and projected water use fits with the Water Management Act approval for the Town.

Planning for Growth (Executive Order # 385)

The proposed scope for the Phase II document should include a section dealing with compliance with the directives of Executive Order #385.

Executive Order #385 requires that state and local agencies engage in proactive and coordinated planning oriented towards both resource protection and sustainable development. For reasons both of environmental protection and fiscal prudence, investments in public infrastructure should be carefully targeted toward those areas for which clear existing need has been established and for areas where denser development is appropriate, thereby relieving pressures on open space, agricultural lands, and other valuable natural resources.

I note that the comments of the Nantucket Planning & Economic Development Commission (NPEDC) are generally supportive of this project. However, NPEDC also notes several areas in which the CWMP does not fully reflect the approved Comprehensive Plan. Their comments should be addressed in future filings, to ensure compliance with EO #385.

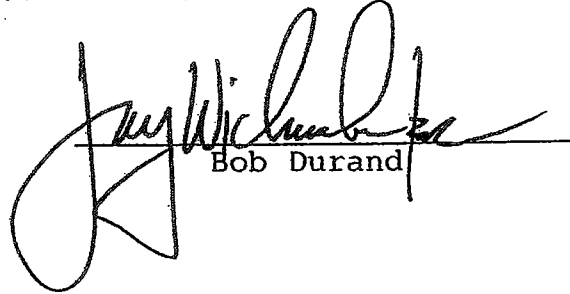
Responses to Comments

The report should include responses to the issues raised in the attached comment letters, insofar as those issues relate to

needs and screening of alternatives. Issues other than those relating to needs and alternatives should be included in the proposed scope for the Phase II document.

November 16, 2001

Date


Bob Durand

Date

for the Town of Nantucket

Comments received :

- Department of Environmental Protection
- Coastal Zone Management
- Division of Marine Fisheries
- Department of Food and Agriculture
- Massachusetts Historical Commission
- Nantucket Planning & Economic Development Commission
- Nantucket Conservation Commission
- Nantucket Land Council, Inc.
- Nantucket Community Association
- Sylvie O'Donnell (2)

BD/rf

MEMORANDUM

TO: Richard Foster, Environmental Reviewer, MEPA Unit

THROUGH: Robert P. Fagan, Regional Engineer, BRP
David Johnston, Deputy Regional Director
David DeLorenzo, Deputy Regional Director
John Viola, Deputy Regional Director
Paul L. Grady Jr., Service Center Manager

CC: Elizabeth Kouloheras, Chief, Wetlands
and Team Leader, Cape Cod Watershed
Jeffrey Gould, Chief, Water Pollution Control
and Team Leader, Buzzards Bay Watershed
Tena Davies, Team Leader, Ten Mile River and Islands Watershed
Deborah Marshall, Acting Chief, Audits/Site Management
Andrea Langhauser, EOE A Team Leader, Ten Mile River Watershed
David Murphy, Commissioner's Office

FROM: Sharon Stone, SERO MEPA Coordinator

DATE: November 9, 2001

RE: ENF EOE A #12617 - NANTUCKET - Nantucket Comprehensive
Wastewater Management Plan
Nantucket, MA

"For Use in Intra-Agency Policy Deliberations"

The Southeast Regional Office of the Department of Environmental Protection has reviewed the Environmental Notification Form (ENF) for the proposed Nantucket Comprehensive Wastewater Management Plan to be located in Nantucket, Massachusetts (EOEA #12617). The project proponent provides the following information for the project:

"This ENF is presented as the first step of the process of the preparation of an Island-wide Comprehensive Wastewater Management Plan (CWMP/EIR) to identify areas within the Island with sub-surface wastewater disposal problems and to develop a plan to mitigate or eliminate the problems. This work has been and is accomplished under the DEP CWMP Program as State Revolving Fund Numbers CWSRF340 and CWSRF625.

In summary, THE CWMP/EIR is to investigate, evaluate, and report on the existing environmental conditions in Nantucket and determine the Town's present and future water pollution needs. The focus of the CWMP/EIR is to evaluate and develop wastewater collection, transmission, treatment, disposal and residuals management programs and

facilities that will best serve Nantucket's existing and future needs, while maintaining and/or improving the environment. The CWMP/EIR utilizes available data from previous studies and reports performed by and/or for the Town to the fullest extent possible."

The ENE submittal includes the Phase 1-Needs Analysis and Screening of Alternatives document as well as the proposed scope for the complete CWMP/EIR. The Department has the following comments on the Phase 1 report and the scope:

Phase 1 Report:

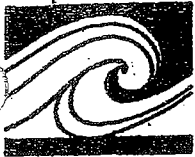
1. The Phase 1 report should include a discussion of the current and projected water supply and demand situation in the town, and discuss the status of the town's Water Management Act limits and whether there are or will be exceedances of the WMA limits.
2. The Phase 1 report should present an analysis of the current and projected flows at the Surfside WWTP, as well as a presentation of the current status of the wastewater treatment plant facilities and an evaluation of the capabilities and deficiencies of the treatment plant units and operations. The report should also describe the existing wastewater collection system and evaluate its condition and deficiencies.
3. In the Needs Analysis section of the report, there needs to be a clearer presentation of the two-step methodology used for the rating of the individual needs areas. It is not clear what the threshold level from the first step means in terms of the actual degree of Title 5 compliance, and how the second step of the process resulted in the conclusions for given areas to be designated for further analysis or not. It is not readily apparent from the discussion in the report that the decisions for inclusion or exclusion for the areas were consistent. The Department has had discussions with Earth Tech regarding these issues on other CWMPs recently, and based on those discussions, the report should be modified and clarified to ensure that the discussion of the rating process and rationale for the decisions on each area are clear. The Department will discuss this issue more specifically with Earth Tech.
4. The report is labeled both a Needs Analysis and Screening of Alternatives, but there is no screening of alternative disposal sites. Since the screening of disposal site alternatives is a very significant issue in Nantucket, which has been difficult and controversial in the past, the Department does not recommend using a Special Procedure that would have the next MEPA filing be the Draft CWMP/EIR. There should be a filing of the revised Phase 1 report that addresses the comments discussed above and that includes the screening of alternative disposal sites so that any public and agency comments can be addressed before proceeding to the full detailed analysis of alternatives in the Draft CWMP/EIR.

CWMP/EIR Scope:

1. The Department, in conjunction with the University of Massachusetts School of Marine Science and Technology (SMAST), has recently committed to the development of a program to evaluate the status of nutrient sensitive embayments in coastal areas of Southeastern Massachusetts and determine appropriate targets for nitrogen loadings to the embayments. As part of that program, Nantucket Harbor will be one of the first priorities due to the amount of available data already collected in the harbor. The scope for the CWMP/EIR should include a task to evaluate alternative wastewater treatment and disposal options that may need to be considered in order to maintain nitrogen levels below the targets established by the DEP/SMAST evaluations. The Department will provide additional guidance to the town and Earth Tech once a more definitive schedule for the Nantucket Harbor work is developed.
2. A scope of work for any hydrogeological evaluations should be prepared and submitted to DEP for review and approval prior to any fieldwork being conducted at the potential disposal sites.
3. An evaluation of the existing and potential erosion at the disposal bed area at Surfside should be conducted in order to determine the useful disposal area that may be available at that site.
4. The CWMP/EIR should include, as part of the recommended plan, a plan for ongoing collection system operation-and-maintenance program, including a program for Infiltration and Inflow (I/I) control. The Department can provide additional guidance regarding the elements of such a program to the town and Earth Tech.
5. The Department has reviewed the separately submitted detailed scope of work for the purposes of the SRF program, and the above comments should be addressed in a revised scope that should then be submitted to DEP for review and approval.

The Town of Nantucket has submitted the ENF for the purpose of initiating a "need analysis and preliminary screening of alternatives" for a comprehensive wastewater management plan/environmental impact report. To assist the Town of Nantucket during this phase of the planning process, the Bureau of Waste Site Cleanup (BWSC) would like to make the Town aware that disposal sites do exist in the Town. A list of the disposal sites identified by the BWSC are available online at the Department's website at <http://www.state.ma.us/dep/bwsc/sites/report.htm>

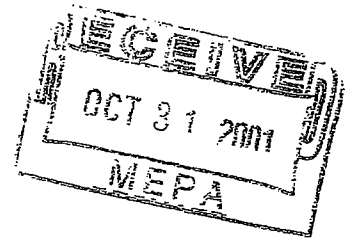
The DEP Southeast Regional Office appreciates the opportunity to comment on this proposed project. If you have any questions regarding these comments, please contact Sharon Stone at (508) 946-2846.



THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
251 CAUSEWAY STREET, SUITE 900, BOSTON, MA 02114-2136
(617) 626-1200 FAX: (617) 626-1240

DF

MEMORANDUM



TO: Bob Durand, Secretary, EOE
ATTN: Dick Foster, MEPA Unit
FROM: Tom Skinner, Director, CZM *TS*
DATE: October 29, 2001
RE: EOE #12617 – Nantucket Island Comprehensive Wastewater Management Plan;
Nantucket

The Massachusetts Office of Coastal Zone Management (CZM) has completed its review of the above-referenced Environmental Notification Form (ENF), noticed in the Environmental Monitor dated October 10, 2001. CZM recommends that the following matters be addressed in the Draft Environmental Impact Report (DEIR).

The Town of Nantucket has prepared a Comprehensive Wastewater Management Plan (CWWMP) to identify areas of the island with wastewater disposal problems and to develop a plan to eliminate or mitigate the problems. This ENF establishes existing and future needs, provides an analysis of the alternatives for addressing wastewater treatment and disposal, and lists recommended priority areas of need.

CZM is supportive of the overall project and the approach to rating the suitability of potential wastewater treatment plant and effluent disposal sites. We are pleased to see that the proponent recognizes that siting wastewater facilities in hazard-prone areas is problematic from a long-term planning perspective and identifies the floodplain as one of the 10 screening criteria.

CZM feels that the evaluation criteria could be modified to make them more comprehensive and inclusive. CZM recommends that the criteria for rating sites adjacent to fisheries resources (p. 4-8) be reevaluated. Other studies have suggested that sites greater than 1000 feet downstream from a source of wastewater discharged to the ground or a surface water body can experience decreased water quality and decreased habitat for shellfish and juvenile finfish. We suggest that the proponent include proximity to shellfish beds in the "fisheries" screening criteria and reconsider labeling these sites as "no constraint" in relation to siting wastewater discharge facilities. As described in the ENF, the fisheries criteria only take into account stocked fish. We suggest that shellfish also be included in this definition.

CZM recommends that shoreline change data be added to the screening criteria for facilities siting. The shoreline change history, especially along the south and east shores of

Nantucket, is complex, with the shoreline fluctuating over time with alternating periods of significant erosion and accretion. Nantucket has some of the highest erosion rates in the Commonwealth. For example, Aubrey Consulting Inc., in a 1990 report, found that the shoreline in the Siasconset area experienced severe erosion in the 40 years prior to 1990, that periods of erosion were intermixed with periods of accretion, and that between 1971 and 1990 there was an erosional trend along the entire area from Tom Nevers Head eastward to Siasconset Cliffs. Due to the ongoing rapid erosion, particular attention should be directed toward the siting of any facilities along the south or east shores. CZM is finalizing updated historic shoreline change maps and encourages the Town to use this resource and other available shoreline change data to ensure that the Town's investment will not be threatened by erosion or flooding. Another example of information that could be very useful to the Town is the beach profile data collected by the Sconset Beach Preservation Association. These data are collected on a quarterly basis at approximately 44 transects on the southeastern shore of Nantucket.

Finally, it is CZM's understanding that a nitrogen loading model for Nantucket Harbor will soon be completed as part of a Department of Environmental Protection regional project. CZM recommends that, when this modeling effort is complete, the data be considered in the CWWMP process and the proponent consider the nitrogen assimilation capabilities of the waterbodies downstream of the proposed effluent disposal sites in its screening process.

The proposed project may be subject to CZM federal consistency review, in which case the project must be found to be consistent with CZM's enforceable program policies. For further information on this process, please contact Jane W. Mead, Project Review Coordinator, at 617-626-1219 or visit the CZM web site at www.state.ma.us/czm/fcr.htm.

TWS/tpc/rh

cc: Abigail Thomas,
Earth Tech, 300 Baker St., Suite 300, Concord, MA 01742
Truman Henson
CZM Cape and Islands Regional Coordinator
Elizabeth Kouloheras, Section Chief
Southeast Regional Office, MA DEP
Sharon Pelosi, Section Chief
Waterways Program, MA DEP
Jack Schwartz, Division of Marine Fisheries
Patti Kellogg, Team Leader
Cape and Islands Watershed
Karen Kirk Adams, Chief
Regulatory Branch, US Army Corps of Engineers



Paul J. Diodati
Director

Commonwealth of Massachusetts

Division of Marine Fisheries

251 Causeway Street • Suite 400

Boston, Massachusetts 02114

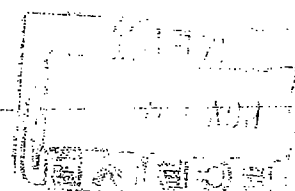
(617) 626-1520

fax (617) 626-1509



November 5, 2001

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Rick Foster, EOEA no. 12617
251 Causeway Street, Suite 900
Boston, MA 02114



Dear Secretary Durand:

The Division of Marine Fisheries (the Division) has reviewed the Environmental Notification Form (ENF) #12617 entitled Nantucket Comprehensive Wastewater Management Plan submitted on behalf of the Town of Nantucket (the proponent). The Proponent is requesting a special review procedure as provided under MEPA regulations 301 CMR 11.00 to complete a review of the plan in phases that will ultimately result in a final plan for the treatment of sewerage and discharge of wastewater. No plan has been proposed at this time. The Division is providing the following comments.

Many coastal areas of Nantucket produce an abundant harvest of shellfish. However, attachment 6, section 2.0 listing specific thresholds for review gives no mention to land containing shellfish. The Division requests that land containing shellfish be added to this list, and that a complete review and assessment of environmental impacts to fishery resources be submitted prior to the issuance of permits or the Secretary's Certificate.

Eliminating the discharge of sewerage to marine waters of Nantucket will improve water quality and protect harvestable fishery resources. The Division supports the intent of the ENF. With the exception of three nearshore embayments of limited area, western Nantucket Harbor, Polpis Harbor, and Madaket Harbor, all other marine waters are classified SA, which is the highest standard for marine water quality. The Division recommends that all future phases of wastewater treatment and discharge plans not result in any degradation below these standards.

Since no plans have been submitted the Division is unable to provide specific comments relative to the proposed wastewater treatment facility and discharge. However, The Division requests that consideration be given to the waters in those areas currently impacted by fecal coliform pollution noted above for remediation to the SA standard of not exceeding a geometric mean MPN (most probable number) of 14 organisms per 100 milliliters (ml) with no more than ten percent of the samples exceeding a MPN of 28 organisms per 100 ml.

The Division appreciates the opportunity to comment and requests the opportunity to review future phases of this project. The Division will provide further assistance as needed. Please contact Dr. Jack P. Schwartz at our Gloucester office (978.282.0308x122) if you need further assistance.

Sincerely,

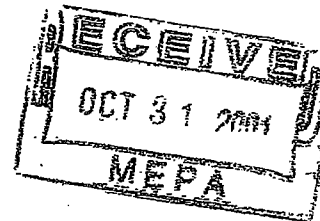
A handwritten signature in black ink that reads "Paul J. Diodati". The signature is written in a cursive style with a large, sweeping initial "P".

Paul J. Diodati
Director

cc: Neil Churchill, MDMF
Mike Hickey, MDMF
Jack Schwartz, MDMF
Paul Hogan, DEP
David Burns, DEP
Todd Callaghan, MCZM



DF



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

October 26, 2001

Secretary Bob Durand
Attn.: MEPA Office
Executive Office of Environmental Affairs
251 Causeway Street, 9th Floor
Boston, MA 02114-2150

RE: Comprehensive Wastewater Management Plan, Nantucket, MHC #RC.22107. EOE # 12617.

Dear Secretary Durand:

Staff of the Massachusetts Historical Commission have reviewed the Environmental Notification Form (ENF) for the proposed project referenced above and have the following comments.

The entire island of Nantucket is listed in the National and State Registers of Historic places as a historic district and is designated a National Historic Landmark. Nantucket has one of the highest densities of Native American archaeological sites in the Commonwealth.

MHC requested in a letter to MEPA dated September 18, 2001 that an archaeological reconnaissance survey (950 CMR 70) be conducted for the project. The purpose of the reconnaissance survey is to analyze the project alternatives in order to identify archaeologically sensitive areas within the project area that will require further testing to locate and identify any important archaeological resources that they may contain. The archaeological sensitivity of these areas is assessed on the basis of an in-depth study of land-use history, current conditions, proposed plans, and proximity to favorable environmental characteristics and known archaeological sites. The results of the reconnaissance survey should be integrated into the further analysis of project alternatives by project proponents. MHC is willing to assist project proponents in developing an appropriate scope for the reconnaissance survey and looks forward to reviewing the report when it is complete.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966 as amended (36 CFR 800), Massachusetts General Laws, Chapter 9, Sections 26-27C as amended by Chapter 254 of the Acts of 1988 (950 CMR 71), and MEPA (301 CMR 11). If you have any questions, please feel free to contact Eric S. Johnson or Margo Muhl Davis at this office.

Sincerely,

Brona Simon
State Archaeologist
Deputy State Historic Preservation Officer
Massachusetts Historical Commission

xc: Ron Lyberger, DWPC, DEP (Boston)
Abigail Thomas, Earth Tech, Inc.
Nantucket Historical Commission

NP&EDC



NANTUCKET PLANNING AND ECONOMIC DEVELOPMENT COMMISSION

11-09-01 P03:14 IN

November 8, 2001

Mr. Robert Durand
Secretary of Environmental Affairs
Executive Office of Environmental Affairs
251 Causeway Street, Suite 900
Boston, MA 02114
Attention: MEPA UNIT, Dick Foster, EOEA File # _____

Re: Comprehensive Wastewater Management Plan and Environmental Impact Report,
Phase I: Needs Analysis and Screening of Alternatives: Nantucket, Massachusetts

Dear Secretary Durand:

The Nantucket Planning and Economic Development Commission (the "Commission"), a regional planning agency encompassing the Town of Nantucket, is pleased to submit these comments concerning the above-referenced EIR.

The Comprehensive Wastewater Management Plan ("CWMP") is an important milestone in Nantucket's long-range planning efforts. If done well and comprehensively, it can be a valuable tool for directing growth, ensuring the health of our community, and for planning our future capital needs. Our comments below are in the spirit of ensuring that that these objectives are accomplished.

Relationship to Nantucket Comprehensive Community Plan

The Commission lauds the efforts of the Town of Nantucket, and its consultant, Earth Tech, to relate the Comprehensive Wastewater Management Plan to the Nantucket Comprehensive Community Plan ("Comprehensive Plan"), approved by the Commission on January 5, 2001, and ratified at a Special Town Meeting on January 8, 2001. It is essential to the Commission that the CWMP be consistent with Plan objectives because of the influence that sanitary sewer service has on the health and welfare of the community. Concerning that relationship, we offer the following comments:

1. On pages 1-3, 1-4, 2-7, and in other references throughout the document, the document needs to consistently refer to the approved Nantucket Comprehensive Community Plan. There are places throughout the document that refer to a draft released in January of 2000 that has since been substantially revised and

superceded by a final Plan. The official title should be: "Charting the Future: the Nantucket Comprehensive Community Plan."

2. The Comprehensive Plan advocates the definition of Town and Country as a means of defining areas where development might be encouraged, within the constraints of infrastructure and growth management measures ("Town"), while discouraging growth and the extension of infrastructure in other areas ("Country"). The boundary between Town and Country was conceived of as a sewer and water service area. However, at the time that the boundaries were being designed, we had hoped that the results of this Phase I report would be available for inclusion in the Comprehensive Plan. This did not occur during the period, and the preparation of the CWMP was held in abeyance while other Town priorities could be attended to. Thus, the boundary was a "best guess" as to what might be logical sewer service and growth boundaries based on what was known at the time. Following the review of the document, we find that there is only one area designated "Country" in the ratified Comprehensive Plan that, in retrospect, should have been included in "Town", based on extent and level of development and, as revealed by the CWMP, is an area in need of the extension of sanitary sewers; that area is Somerset (see p. 3-36). We also note that Monomoy (p. 3-48), located within "Town", is now slated for the extension of sanitary sewers, consistent with the recommendations of the Comprehensive Plan and the Nantucket Harbor Watershed Work Group. Specific mention should be made of that fact. In all other respects, suggested "solutions" appear to be consistent with the Comprehensive Plan.
3. p. 1-3,4. Mention the coordination of this CWMP process with that of the Comprehensive Community Plan.

Nantucket Harbor Watershed District; Madaket Harbor Watershed Definition

A Harbor Watershed District was established by vote of Town Meeting at the 2000 Annual Town Meeting, and is codified in Chapter 99 of the Town Code. Although not a regulatory instrument per se, it is important in that it provides the framework for future regulatory measures (i.e., wetlands regulation and enhanced Board of Health regulations) and capital program funding decisions. The boundary has been defined, based on a Horsley, Witten, Heggeman, Inc. report entitled "Nantucket Water Resources Plan", dated 1990. The watershed boundary identified in the CWMP and related references in the text (p. 3-2) are not consistent with that boundary (see Figure 2A-1), and must be amended accordingly. Attached is a map depicting the boundary, and a copy of Chapter 99 of the Town Code.

The Commission recently identified its priority issues that must be dealt with expeditiously. Water quality, and especially harbor water quality was identified as a top priority issue, together with affordable housing and transportation. Recent water quality analyses conducted by the Marine and Coastal Resources Department, for instance, have revealed 50 PPM of coliform in waters of Madaket Harbor, when the "safe" threshold is only 10 ppm. Due to the urgency associated with dealing with these matters, the Commission believes that the relationship of the Harbor Watershed District to the study

areas should feature prominently throughout the document. Specific mention of the inclusion of the District in the following study areas should be added to the narrative: Town; Town (WPZ); Monomoy; Shimmo; Polpis; Pocomo; and Wauwinet. (pp. 3-14, 3-15, 3-16 through 19, 3-19, 3-20, and 3-21; pp. 3-34 through 3-50). Further, when discussing Madaket and the effects on its harbor, we believe that it is essential that the Horsley, Witten, and Heggeman definition of that watershed be used as a frame of reference for planning purposes, notwithstanding the fact that a formal watershed district has not yet been established. A boundary for regulatory purposes will be commissioned within months, pending the receipt of State EOE funding.

Given the increasingly obvious link between septic discharges and the water quality of our harbors, we strongly recommend that the location of any CWMP study area within the Nantucket Harbor Watershed District, the Madaket Harbor Watershed, and within the Wellhead District should be an important determining factor in the establishment of qualifying criteria for needs areas (p. 3-30). If such consideration is made, Pocomo, Shimmo, and Monomoy (pp. 3-42, 3-43, 3-47), would likely be elevated to areas of need on the basis of their importance to maintaining or improving the water quality of Nantucket Harbor. The Phase I report gives recognition to the Town (WPZ) needs area, and similar consideration should also be given to the Harbor. We also strongly recommend that Chart 4A-1 be amended to include Harbor Watershed as a screening criterion.

Data is not Current

The Commission can appreciate the fact that the preparation of this CWMP is a long-range effort that spans a number of years, and that such a long-range project can create difficulties keeping pace with the dynamics of growth and evolving data on Nantucket. The hiatus between the commencement of the process in 1998 and the issuance of this report has certainly not been conducive to continuity. Information gathered in 1998 and 1999 is in many cases now obsolescent. And since that time, the Town's GIS system has become more sophisticated, such that it can provide more current data than that employed in the report, and it has the analytical ability to fill in some statistical gaps. Further, much data in the Report is based on information provided by the NP&EDC in 1997, and there is now more current data available, including the preliminary 2000 census information. Utilizing the most current information is important, because a great deal of growth has occurred during the last half decade – more than any other County in the Commonwealth – and this fact has a bearing on the validity of future plans for meeting our wastewater needs.

The following represent some of the data deficiencies and inconsistencies we noted, as well as other omissions. We urge you to revise the document and make the following revisions:

1. p. 2-8. Use current Nantucket GIS for land use extrapolation.

2. p. 2-8. The report states that the percent of open space on the island is 42%, while elsewhere in the document it is cited correctly as 44%. The references should be consistent and current, reflecting the latter number.
3. p. 2-9. The report represents the population density as 180. The report should reflect that the actual density per the 2000 census is now 199.
4. Cite District maps approved at the 2000 and 2001 Annual Town meetings.
5. p. 2-10. Update academic years to include the years 2000 and 2001.
6. p. 2-11. Use 2000 Census count for housing units, which is now 9,210.
7. p. 2-11. Update building permit and building cap information through the year 2000. (see attached)
8. p. 2-12. Cite average household size as noted in 2000 census of 2.37, and average family size of 2.90.
9. p. 2-13. Use latest HUD Median Household Income Statistics. For family of 4, the Median Household Income per HUD was \$75,900 for 1999.
10. p. 2-18. Mention Harbor Watershed District.

Solutions Have Growth Inducement Potential

The underlying theme of the Comprehensive Plan is sustainability. Nantucket should be distinguished from most, if not all, mainland Massachusetts communities, because the entire Island is a National Historic Landmark, and it contains vast areas of rare heathland habitat. Although the Comprehensive Plan falls short of defining how much growth the Island can sustain, it proposes, among other strategies, the implementation of the "Town and Country" concept as a principal means to safeguard the Island's attributes that contribute immeasurably to its unique character. This concept would direct growth to areas where infrastructure already exists, and away from areas where disperse patterns of development have begun to take hold.

The CWMP proposes wastewater "solutions" in areas outside of areas defined as "Town" designated areas. To the extent that these solutions are necessitated by the documented or perceived threat to public health, the Commission is supportive of finding an appropriate solution. But we need to be cognizant of the fact that a "solution" to public health issues may have secondary effects with equally, if not more serious, consequences. These effects are in the form of inducements to growth which are the result of sanitary sewer or package plant solutions. As a consequence of these "solutions", existing lots that are now undevelopable under Title V or the Nantucket Health Code may be developable in the future with sanitary sewers or package plants. The growth induced by the sewerage of these lots may increase the buildout potential of these areas, and with that potential, the consequences of growth, including added density and traffic generation. The CWMP should quantify the numbers of dwelling units that could potentially be created as a consequence of these wastewater solutions, so that the Commission can gauge the consequences of this additional growth.

Other Issues

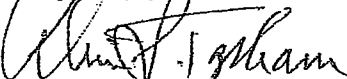
1. p. 2-9. Two Area Plans are now underway, with boundaries that have been defined by both the Commission and the Work Groups. They may be used as a means for calculating the population density for these areas.
2. p. 2-9. The report states that the newly-established Multi-family Overlay District boundaries are designated "to reduce the environment impacts of development" – clearly not the intent of the establishment of this District. The report should also acknowledge the existence of the Neighborhood Employee Housing and Dormitory Overlay Districts, with the common goal of "creating affordable housing opportunities on the Island". These boundaries should be depicted on a map accompanying the report, because they represent the potential for higher density in these areas. See the relevant bylaw amendments and Overlay District maps approved at the 2000 and 2001 Annual Town Meetings.
3. p. 2-20. There is no mention of the fact that there are significant sanitary sewer facilities that are under private control. The report needs to quantify the miles of public sewer versus private. The CWMP should also designate which private sewer systems are priority areas for acceptance by the Town, on the basis of public health needs, or because these private sewers are the gateways to logically providing sanitary sewer service to other areas.
4. p. 3-2. The population information cited here is inconsistent with that cited in the second section of the report. Please maintain consistency and currency of data throughout.
5. p. 3-19. The report describes the Town-WPZ Area as having a relatively low density. Because of the characteristics of this mixed use zone, there are certain areas within the zone that are low density, but others that are quite high, due to the 5,000 s.f. minimum lot size (Naushop is an example). The area also contains several Multi-Family Overlay Districts, that can permit up to double the underlying zone density.
6. p. 3-28,9. The report uses the average rating as a threshold for determining whether a needs area would receive priority consideration. On what basis is the average the determinant of need?
7. p. 3-49. In this and other subsections, the report makes statements concerning the percentage of soils in the needs area that have specific limitations. It is expedient that each needs area be profiled on the basis of how much of the needs area is preserved as open space; how much of the developed portion of each needs area has soils with limitations; and finally how much of the undeveloped land has soils with limitations.
8. p. 3-51. The consultants need to clarify whether the household size for the peak season is applied to both year-round and seasonal residences for the summer months. This higher household size seems appropriate given the pattern of seasonal employee rentals and house guests for much of the year-round population throughout the peak season.
9. p. 5-31. We are puzzled by the outright dismissal of the Innovative / Alternative (I/A) systems as feasible options to serve the wastewater needs of the needs areas removed from sewerred areas. This dismissal seems to conflict with the needs analysis assessment found on pages 3-34 through 3-50, which conclude that I/A systems may be feasible alternatives. This conclusion unfairly dismisses

the fact that there are a diversity of soil conditions and lot sizes throughout each of these needs areas, and that I/A systems may be feasible on some lots, while conventional Title V solutions may be the only option on others. In other words, a combination of solutions may be possible within each needs area that may result in acceptable benefits.

10. p. 5-63. Only passing mention has been given to Solar-Aquatics Technology as a possible solution for neighborhoods with relatively small discharge volumes. These systems have been proven to be cost-effective and reliable in a number of sites in New England and in Eastern Canada. The application of this technology on Nantucket would also be consistent with the community's need to find sustainable solutions to our waste disposal needs, such as the Island's composting facility. It must be given more serious, rather than passing, consideration.
11. p. 5-73. Several of these sections contain what seems like boilerplate language that appears in every EIR. This section should be tailored to acknowledge the existence of Nantucket's trash composting facility, which accepts sludge from the existing Surfside plant.
12. p. 5-80. In a similar vein, this section fails to acknowledge the fact that the Town has designed, and is contemplating construction of, a sanitary sewer extension in the Monomoy needs area. Modify the document to acknowledge this important initiative, which also benefits Harbor Water Quality.
13. Map 7-B1. This map should be modified to reflect added needs in consideration of their inclusion in the Harbor Watershed District.

The NP&EDC appreciates this opportunity to comment, and urges you to seriously consider these essential changes.

Very truly yours,



Alvin S. Topham
Chairman

Cc: Board of Selectmen / Board of Public Works
Jeff Willett, DPW Director



Town of Nantucket
Conservation Commission

37 Washington Street
Nantucket, Massachusetts 02554

Tel (508) 228-7230
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RECEIVED

NOV 15 2001

MEPA

November 8, 2001

RE: EOE No. 12617 - Comprehensive Wastewater Management Plan Phase I, Nantucket, MA

Robert Durand, Secretary
Executive Office of Environmental Affairs
251 Causeway Street, Suite 900
Boston, MA 02202

Dear Secretary Durand:

1) Comments on Phased EIR:

As you and your staff are aware, wastewater management issues on Nantucket are critical at both the watershed facilities planning and operational level, as well as at the individual onsite level. Nantucket has been addressing wastewater management at a community planning and involvement level for many years and has recognized and implemented facilities treatment for more than a decade. However, recent demands on the island due to population growth shifts, economic changes, and changes in development growth patterns have created a heightened urgency, as well as complicated how best to deal with wastewater management. The Town of Nantucket, its agencies, and its citizenry have taken responsibility for dealing with these issues through town meeting initiatives such as the Nantucket Harbor Watershed Working Group and agency commitments as evidenced by the Phase I Comprehensive Wastewater Management Plan prepared for the Nantucket DPW by Earth Tech Inc. as attached to the present ENF.

On behalf of the Town of Nantucket, the DPW has submitted an ENF requesting Special Review Procedure status (310 CMR 11.09) to allow a phased review of this project. The Conservation Commission supports this request by the Town of Nantucket as we believe a phased approach will serve as the best vehicle to incorporate the various ongoing sources of up-to-date information, reports, and/or regulation changes being 1) determined by concurrent town and state environmental reviews, 2) completed by citizen action groups such as the Nantucket Harbor Watershed Working Group, and 3) implemented through local agencies such as the Board of Health and Conservation Commission. Phasing will also allow for assessment and/or evaluation of the need to incorporate new technologies available for individual onsite systems (such as SeptiTech, etc.) that may

address seasonal design and enhanced nutrient removal concerns. Phasing should also encourage decision and planning options based on technical data resulting from scientifically based studies, observation, and inventories made on Island, (as opposed to more generic/broad based assumptions). The Nantucket Conservation Commission's guiding principle for its interaction within the community on environmental issues, and for its regulatory role in protecting wetland resources through state and local authorities, is that decision making and planning should be fact based and supported by science. The Conservation Commission supports the Phased EIR approach as requested by the DPW because it maximizes the opportunity for the Town to incorporate in the most timely manner practicable, the most technically based (and approved) technologies, with applicable planning and regulatory tools to deal with the institutional infrastructure and environmental complexities involved. We hope that you and your staff concur.

2) Comments on ENF:

The ENF submitted by Earth Tech Inc. on behalf of the Town of Nantucket, DPW clearly outlines the complexity of developing an Island-Wide Comprehensive Wastewater Management Plan with respect to:

- 1) the level of funding required for facilities planning to date (state funding alone is in excess of \$7.5million)
- 2) the level of permitting required for facilities planning to date (more than 22 permitting actions identified)
- 3) the diversity of historic/environmental issues identified to date (more than 50 endangered, threatened, and special concern species identified; more than 15 state and national historic places identified; multiple inland and coastal wetland resource interests identified)
- 4) the urgency relative to compliance with a DEP consent order to upgrade the Siasconset facilities plan

The ENF states that "the intent of the Comprehensive Wastewater Management Plan EIR (and the Town of Nantucket) is to identify and provide a comprehensive solution to wastewater and effluent disposal needs around the entire island". To meet this goal the ENF identifies the following steps as necessary:

- 1) determine "need" (referenced as Phase I) by:
 - a) evaluating factors leading to substandard and/or inadequate Island-Wide onsite disposal and available options for improving existing onsite wastewater disposal systems [AND FACILITIES]*

- b) obtaining existing and projected conditions information on land use, demographic conditions, and population
- 2) analyze "Options for Treating Wastewater" and its potential impact (referenced as Phase II) by:
- a) investigating the viability of siting wastewater treatment facilities and disposal of treated wastewater effluent on the Island relative to its impacts to wetlands, soils, drinking water supplies, fisheries, recreational resources, historic interests, park lands and [SENSITIVE RECEPTORS SUCH AS HOSPITALS, SCHOOLS, RETIREMENT HOMES, ETC.]*
 - b) evaluating wastewater treatment options based on four criteria (technical, environmental, institutional, and economic factors) and four wastewater treatment technologies where existing onsite septic systems are shown to be inadequate, and where innovative alternative systems, communal systems and local wastewater collection, treatment and disposal facilities are deemed inappropriate
- 3) evaluation (in accordance with the scope issued by the Secretary of EOEA on Phase II EIR) of Nantucket's (Phase III)
- a) existing wastewater conveyance and treatment systems relative to the existing wastewater system (town and Siasconset), infiltration/inflow rehabilitation, and the existing Surfside Wastewater Treatment Facility, and
 - b) [ADDITIONAL WASTEWATER CONVEYANCE AND TREATMENT SYSTEM FACILITIES]*

The ENF recognizes the ongoing need throughout each Phase as identified above to involve and educate the public. The ENF states that the Island-Wide Comprehensive Wastewater Management Plan Phase II and Phase III documents, public meetings, and public education process will be conducted and coordinated in the same general manner as the Siasconset Facilities Plan EIR. Generally, the outreach efforts to the public were good. However, coordination with other town boards and agencies, particularly with the Nantucket Harbor Watershed Working Group, the Conservation Commission, etc. needs improvement with respect to Phase II efforts so that necessary technical information and community awareness information may be incorporated in a timely manner.

As a document serving to outline a course of action, the ENF as generally circulated, without the Phase I - Need Analysis and Screening of Alternatives Report, is adequate. Taken by itself, much of the supporting references and text for the ENF appear

to be based on information provided and processes established for the Siasconset Wastewater Facilities Plan. Concern might therefore be expressed that the ENF may be limited and should be expanded by direct reference and/or updated to make sure that all relevant information, information sources, and public and agency coordination is done on an Island-Wide basis for the Comprehensive Management Plan. In practice, the updates and Town-Wide emphasis have already been incorporated within the Phase I - Needs Analysis Report that is available upon request, for simultaneous review. Any perceived shortcoming in the ENF relative to Island-Wide application of a complete needs analysis, environmental impact assessment, or public and agency participation agenda, can be dispelled by even a limited review of the Phase I report which identifies study areas of "wastewater disposal need: 1) Madaket, 2) Polpis, 3) Pocomo, 4) Quidnet, 5) Siasconset, 7) Somerset, 8) Shimmo, 9) Town-WPZ, 10) Warrens Landing and 11) Wauwinet," clearly from an Island-Wide perspective.

3) Comments on Comprehensive Wastewater Management Plan and Environmental Impact Report Phase I - Needs Analysis and Screening of Alternatives Nantucket, Massachusetts

The Phase I - Report provides a Town-Wide needs analysis based on a rating matrix assessing the known functional status of onsite sewage disposal systems and on evaluation of the physical characteristics of individual development areas and systems. Based on this approach the Report identifies 12 wastewater disposal analysis areas:

- Madaket
- Monomoy
- Pocomo
- Quidnet
- Siasconset
- Somerset
- Shimmo
- Shimmo
- Polpis
- Town
- Town - WPZ
- Warrens Landing
- Wauwinet

The purpose of the Phase I EIR is to investigate, evaluate, and report on existing environmental conditions and wastewater treatment systems (individual, cluster and community facilities) in order to determine the Town's existing and future wastewater control needs. The Phase I EIR provides:

- a brief history of the Town's efforts to date relative to planning and wastewater practices

- a description of existing environmental conditions, existing land use and demographics, groundwater supply, onsite wastewater disposal systems, and wastewater conveyance and treatment systems
- an analysis of project future environmental constraints, land use, demographics, and wastewater treatment problems, projected flows, and pollutant loadings
- a description of facilities siting criteria and a preliminary identification of potential sites
- a fairly generic discussion of innovative/alternative wastewater disposal treatment options for individual and cluster onsite systems; innovative/alternative options for community wastewater collection, treatment levels (primary, secondary, tertiary, and advanced wastewater treatment) and disposal alternatives; existing wastewater treatment facilities (Siasconset Facility), sewer connections and capacity; and potential reuse of treated effluent
- a brief discussion of a public participation program, and
- a short listing of wastewater treatment facilities and disposal alternatives for follow-up evaluation as part of the Phase II EIR.

The Phase I EIR adequately serves to identify the needs of the Town of Nantucket based on available data, local regulatory authorities and practices, landform carrying capacity, and developing public policy. Traditional methodologies for evaluating need including research of health department records, research on soil and/or groundwater limitation factors, and inventory of system age and lot size have been completed for each of the 12 identified geographic areas. Baseline data for Nantucket consisting of available assessor's records, water consumption data, undeveloped parcel and acreage data, and land use data have been analyzed to forecast wastewater flows and pollutant loading. This information and analysis have been evaluated to determine needs and site locations for potential wastewater treatment facilities. The Phase I report details screening criteria that should be applied to the Phase II EIR analysis of potential wastewater treatment facilities sites including:

- wetland resource area (vegetated wetlands surface water bodies)
- soils
- floodplains
- drinking water supplies – well head protection areas
- fisheries

- sensitive habitats
- park lands
- recreational resources and
- historic interests

and describes a rating process to rank potential sites. A generalized discussion of state regulatory requirements under 310 CMR 15:00 (Title 5) and 314 CMR 5:00 (Groundwater discharges) as they apply to individual and clustered onsite sewage disposal systems, community treatment facilities and innovative, alternative, and biologic technologies is presented with some specific references to the Siasconset Treatment Facilities.

The review of the public participation program, as provided in the Phase I EIR, is basically a summary of protocols, hearings, etc. established during the review of the Siasconset Wastewater Treatment Facilities Plan.

Given that the Phase I EIR has been prepared using the best information available from Town of Nantucket records, and that the general evaluation approach outlined with respect to existing and potential resource impact is consistent with standard wastewater engineering practices, the Phase I - EIR appears to be adequate. Clearly, the more generic information provided in discussions relative to "alternatives for wastewater disposal" needs to be updated to incorporate performance-based innovative/alternative system data now available with respect to onsite sewage disposal design, and evaluated to characteristics specific to Nantucket as the Phase II EIR proceeds. Further, more attention needs to be given to expanding the public participation program so as to outreach effectively to the 12 geographic areas identified, and to all relevant local regulatory agencies.

CONCLUSION:

Based on our review of the information presented in the ENF, Phase I report, and the public and agency work undertaken to date by the Town of Nantucket, the Conservation Commission strongly urges you, as Secretary of the Executive Office of Environmental Affairs to allow the Comprehensive Wastewater Management Plan for Nantucket to be reviewed as a Phased Environmental Impact Report under the provisions of 301 CMR 11.09. Further, we request that you and your staff acknowledge the adequacy of the Phase I - Report as prepared 8/2001 and submitted simultaneously with the ENF (EOEA No. 12617) by providing a scope for the Phase II - Draft Comprehensive Wastewater Plan and Environmental Impact Report.

The Conservation Commission appreciates the opportunity to provide comments on this project. Further, the Commission is available to assist the DPW, environmental

Comprehensive Wastewater
Management Plan Comments
November 8, 2001

agencies, and the public with the technical and educational support to ensure Island-Wide environmental concerns are addressed, and that the Comprehensive Wastewater Management Plan adopted meets the needs of our community.

Sincerely,



Michael Glowacki
Chairman

pf/mjr

cc: Board of Selectmen
DPW
Earth Tech Inc.



Nantucket Land Council, Inc.

Six Ash Lane
Post Office Box 502
Nantucket, Massachusetts 02554

508 228-2818
FAX 508 228-6456
e-mail: nlc@nantucket.net

November 7, 2001

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Robert Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Richard Foster, EOE # 12617
251 Causeway Street, Suite 900
Boston, MA 02114

Re: Comprehensive Wastewater Management Plan (CWMP) and
Environmental Impact Report, Phase I: Needs Analysis and Screening of
Alternatives: Nantucket, Massachusetts. EOE # 12617

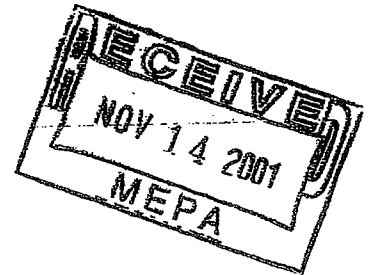
Dear Secretary Durand:

The Nantucket Land Council, Inc. is a non-profit, environmental organization, supported by more than 1500 members. We have reviewed the above referenced EIR and are pleased to submit the following comments.

The Nantucket Land Council commends the Town of Nantucket and its consultant Earth Tech for seeking positive and proactive approaches for improving the wastewater situation on Nantucket.

Effects of Sanitary Solutions on Future Growth

In the past twenty years Nantucket has experienced an astounding rate of growth compared to the rest of Massachusetts. Town agencies have been hard pressed to respond sufficiently to the resulting environmental and economic issues such as water quality, fisheries, traffic, and open space protection that come hand in hand with an expanding population. On January 5, 2001, the Nantucket Comprehensive Community Plan was approved by the Nantucket Planning and Economic Development Commission and subsequently ratified at a Special Town Meeting on January 8, 2001. The Comprehensive Plan's overriding message is for the town to incorporate a message of sustainability in planning matters. With carefully measured growth the town can maintain successful economic conditions while protecting the health and well being of the island's environmental systems.



The Nantucket Land Council supports the improvement of the substandard sanitary infrastructure that is found throughout the island. Elevated nutrient and bacteria levels have been found in various water bodies. Some of these areas are exhibiting behavior consistent with the first stages of eutrophication and many shellfishing beds have been closed. The town's efforts to alleviate these problems are important and are supported by the Nantucket Land Council.

However, by fixing the sanitary problems on the island, there comes certain causal effects that may exacerbate an already excessively high rate of development. Existing lots that are now undevelopable under Title V or the Nantucket Health Code could be developed if a functional sanitary solution is found. It is necessary therefore for the CWMP to quantify the number of lots that would be made developable by the proposed sanitary solutions. What would be the associated costs to the municipal budget for maintaining the infrastructure that supports such development – street and sewer maintenance, schools, fire, police, land fill, municipal offices, etc.? Additionally, how would an increase in buildout affect the already unacceptable nutrient loading numbers when it comes to fertilizer leaching and stormwater runoff? What are the thresholds each area can withstand if additional lawns are created and additional roads are constructed?

Inclusion of Watershed Delineations

When considering wastewater management issues, it is important to think in terms of a watershed framework. The EIR Needs Analysis highlights portions of two significant watershed areas but omits the surrounding areas. The Nantucket Harbor Watershed District was established by a vote at the 2000 Annual Town Meeting. This now enables future planning decisions to incorporate the Harbor Watershed District into various regulatory and management decisions. The delineation of the Harbor Watershed is based on Horsley, Witten, Heggeman, Inc.'s "Nantucket Water Resources Plan" dated 1990. The individual areas of need within the Harbor Watershed District should be expanded to include the entire district. Although the amount of wastewater impact varies from area to area within the Harbor Watershed, all on site wastewater systems do affect Nantucket Harbor to some degree. By looking at the entire Harbor Watershed District as an area of need, every sanitary system could be analyzed and thus all wastewater inputs to the harbor could be evaluated. The same watershed framework could be used when performing a needs analysis in the Madaket harbor area.

According to the CWMP Needs Analysis, several areas have criteria ratings below the threshold number including the areas of Cisco and Miacomet and surrounding portions of the "Other" study area. However, these areas are significant because they make up large sections of two separate watersheds;

the Hummock Pond watershed and the Miacomet Pond watershed. Both ponds have elevated nutrient levels most likely in part due to surrounding septic systems. The CWMP states on p. 3-36, 3-38, 3-50, that the recommended wastewater disposal solutions for these areas are Conventional Title V septic systems. It is important to evaluate the health of these waterbodies as directly correlating to the number and type of septic systems in each watershed. If Conventional Title V systems are the recommended long term option, then the projected affect on the corresponding water bodies under buildout conditions must be estimated and discussed. It may be important to consider alternative solutions for both watersheds.

Alternative Technology

The CWMP mentions that on-site innovative alternative (I/A) systems may be a viable solution for some of the needs areas (p. 3-34 - 3-50) and will be assessed in the Phase II of the CWMP/EIR based on technical, environmental, and financial considerations. However, when all of the needs areas are assessed as a whole (p.3-51), I/A systems are discouraged as treatment options because each need area contains sections of land that are not conducive to the operation of such systems.

Recommended solutions for each need area should, where applicable, combine a variety of options, including on site I/A systems, communal wastewater treatment systems, and Conventional Title V systems. An assemblage of systems may be the best long term goal for some of these areas because hydrological and soil conditions vary widely throughout individual need areas.

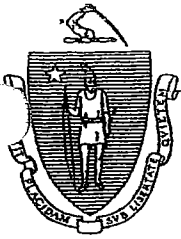
P. 5-61 - 5-64 discusses the potential of aquaculture, constructed treatment wetlands and solar aquatic technology as potential wastewater treatment solutions. However, they were discounted based on a screening for technical, environmental, and institutional factors. Table 7C-1 on p. 7-4 scores all three systems relatively high to the rest the other options, but behind the top three options. It appears that the screening criteria is based on a generalized view of each need area and not on a lot by lot or neighborhood basis. Neighborhoods with smaller discharge volumes might be conducive to such systems. A greater consideration and a more site specific analysis should be employed to determine the feasibility of their use.

Thank you for taking the time to review these comments

Sincerely,



Cormac Collier
Ecologist



COMMONWEALTH OF MASSACHUSETTS
 EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
 DEPARTMENT OF FOOD AND AGRICULTURE

DF

LANCASTER FIELD OFFICE

142 OLD COMMON ROAD, LANCASTER, MA 01523 (508) 792-7711 FAX: (978) 365-2131

JANE SWIFT
 Governor

MEMORANDUM

BOB DURAND
 Secretary

JONATHAN L. HEALY
 Commissioner

RECEIVED

NOV 15 2001

MEPA

FAXED
 11/7/01

To: Bob Durand, Secretary
 Executive Office of Environmental Affairs

Attn: Dick Foster, MEPA Office

From: Marcia Starkey JS

Re: EOE #12617 ENF Comprehensive Wastewater Management Plan Nantucket

Date: 8 November 2001

This Environmental Notification Form provides background, generally describes needs, and requests a special review procedure for a comprehensive wastewater management plan on the island of Nantucket. We request that the Phase II EIR identify agricultural resources on the island and discuss their preservation as related to wastewater infrastructure and related water quality and supply. The DEIR should also examine consistency of the recommendations to current land use, existing infrastructure and Nantucket's Community Plan. The statistics in the ENF appear to be linked to the 1998 onset of the project, and should be updated if possible.

Figure 2A-1 identifies natural resources and environmentally sensitive areas on Nantucket, but fails to include or describe agricultural soils resources which are deemed finite and worthy of protection in the Commonwealth. Prime farmland, as identified and described by USDA "produces the highest yields with minimal inputs of energy and economic resources, and farming it results in the least damage to the environment".

The island includes areas of cropland, pasture and unique soils in several large cranberry bogs. These resources should be considered in the Phase II document. The proponent should also be aware that the provisions of Executive Order 193 and the Agricultural Lands Mitigation Policy apply to state-assisted wastewater projects which traverse or front unprotected agricultural parcels thereby encouraging their conversion, and that land classified under Chapter 61A or under an agricultural preservation restriction may not be assessed betterment fees.

The Department encourages municipalities and project proponents to identify prime, important and unique agricultural soils, as well as active agricultural areas, to ensure that they remain available for food production if needed. Concern for identifiable and secure food sources is prompting greater awareness of the importance of local agricultural capability and resources.

C/Abigail Thomas, Earth Tech
 Nantucket Planning Board
 Nantucket Planning & Economic Development

DE

VIA FAX/US MAIL

NANTUCKET COMMUNITY ASSOCIATION

78 West Chester Street
Nantucket MA 02554

November 12, 2001

RECEIVED

NOV 15 2001

MEPA

FAXED
11/12/01

Bob Durand, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Dick Foster, EOEA No. 12617
22 Causeway Street, Suite 900
Boston MA 02114

Re: EOEA No. 121617—Environmental Notification Form for Nantucket
Island Comprehensive Wastewater Management Plan/Environmental
Impact Report

Dear Secretary Durand:

This letter is submitted in response to a notice soliciting public comment concerning the above filing. The Town of Nantucket, through this filing seeks a Special Review Procedure under 301 CMR 11.09 to effect an evaluation of a proposed Nantucket island-wide Comprehensive Wastewater Management Plan /Environmental Impact Report (CWMP/EIR) in three phases. Phase I provides for the submission of the subject Environmental Notification Form and a Needs Analysis and Screening of Alternatives.

The Nantucket Community Association is submitting comments on the filing as noted below. The Association (NCA) is a non-profit corporation whose members reside on Nantucket on either a year round or seasonal basis. The issue of wastewater management on Nantucket and the implementation of proposed changes to the treatment of wastewater on the Island are matters that substantially affect the interests of members of the Association.

NCA's comments are as follows:

- 1) The CWMP/EIR should be developed through all three Phases in conformity with the guidelines established in the Nantucket Comprehensive Community Plan approved at a Nantucket Town Meeting on January 5, 2001. This should be reemphasized, for example, in the Executive Summary and section 3 (p. 3-2) of the CWMP/EIR as well as elsewhere in the document.

- 2) One or more of the technologies proposed as possible solutions could lead to the inducement of problematic growth on the Island. As noted in the CWMP/EIR (Section 2, p. 2-11) Nantucket has experienced unprecedented growth with the year round population increasing some 43% between 1990 and 1998. It has been projected to be the fastest growing county in Massachusetts since 1990 (p. 2-11). Similarly, significant growth has been experienced in visitors arriving on the Island by sea and air. This combined growth is severely straining the Island's infrastructure (in particular its roads) and creating capital obligations which have yet to be reflected in the Town's property taxes. The use of one or more of the technologies cited (such as small-scale wastewater plants suggested in the CWMP/EIR Section 5, p. 5-2) would permit building on a number of currently unbuildable lots. The CWMP/EIR should estimate the number of lots which could be built upon resulting from the use of such technologies as well as any correlated impacts such as increase in traffic on the Island, increase in school population, etc. We also note that the current building cap, which has dampened some growth in the past, expires on January 1, 2002. The effect of the removal of the cap on future Island wastewater needs should also be explored further.
- 3) The CWMP/EIR should use the most recent data available. Key data and resulting projections are drawn from studies that are now obsolescent particularly in light of the growth experienced on the Island. More recent data in the form of U.S census data and interim data developed by consultants such as Howard/Stein-Hudson Associates, Inc. and RKG Associates ("Optimal Carrying Capacity of Nantucket"—Year 2001 Update) would provide a more updated and accurate picture of current trends and form the basis of more correct predictions of growth. As a footnote, data which support the annual rainfall assumptions on the important issue of groundwater recharge on Nantucket (1941-1970) (p. 2-7) also appear obsolescent and at least anecdotally outdated. The bases for this data should be reviewed to determine if more recent information from that or another source is available.
- 4) In light of the information provided in the CWMP/EIR on the significant failure rate of septic systems on Nantucket, the CWMP/EIR should set forth information on expected failure rates of any proposed alternative wastewater treatment systems. In Phase II the CWMP/EIR should include a cost/benefit analysis for each proposed system as an aid in system evaluations.

