



The Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Deval L. Patrick
GOVERNOR

Timothy P. Murray
LIEUTENANT GOVERNOR

Richard K. Sullivan, Jr.
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181
<http://www.mass.gov/envir>

July 6, 2012

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
SECOND NOTICE OF PROJECT CHANGE

PROJECT NAME :Comprehensive Nitrogen and Wastewater Management
Plan
PROJECT MUNICIPALITY :Mashpee
PROJECT WATERSHED :Cape Cod
EEA NUMBER :12615
PROJECT PROPONENT :Town of Mashpee
DATE NOTICED IN MONITOR :June 6, 2012

Pursuant to the Massachusetts Environmental Policy Act (M. G. L. c. 30, ss. 61-62I) and Section 11.10 of the MEPA regulations (301 CMR 11.00), I have reviewed the Notice of Project Change (NPC) submitted for this project and hereby determine that the Scope for the Draft Environmental Impact Report (DEIR) issued on November 9, 2001 still stands.

Project Description

As originally described in the Environmental Notification Form (ENF) submitted in October of 2001, the project involves the development of a comprehensive nitrogen and wastewater management plan for the Town of Mashpee (Mashpee CWMP). The Mashpee CWMP is intended to achieve reductions of wastewater nitrogen loading and meet Total Maximum Daily Loads (TMDLs) for nitrogen loading to the Town's coastal embayments including Popponesset Bay and Waquoit Bay.

Project History

As stated in the Secretary's Certificate on the ENF dated November 9, 2001, the project is

expected to proceed in phases with the submission of reports dealing with four major work elements: (1) a Needs Assessment Report, defining those areas of Mashpee that need nitrogen and wastewater management, identified as the Project Planning Area (PPA) and establishing project flows from the PPA; (2) an Alternatives Screening Analysis Report, evaluating the various means of meeting the wastewater requirements of the needs areas; (3) the Nitrogen and Wastewater Management Plan and Draft Environmental Impact Report (DEIR), which will identify a proposed management plan and assess the potential environmental impacts of that plan; and, (4) the Nitrogen and Wastewater Management Plan and Final EIR (FEIR), which will provide any additional environmental analysis required and will respond to comments submitted on the DEIR. The Certificate on the ENF directed the Town to prepare and submit for review the first two reports prior to the submission of the DEIR.

Notice of Project Change

The Town submitted a Notice of Project Change, together with a final Needs Assessment Report, to the MEPA Office in October 2007 in accordance with the MEPA regulations for a lapse of time, at 301 CMR 11.10(2). As described in the first NPC document, the project was put on hold following the submission of the ENF as the Town awaited the results of the Massachusetts Estuaries Project (MEP). The MEP's reports relevant to the PPA were released in 2004 and 2005, and were to be used by the Town in the development of the nitrogen management needs and management plan. The Needs Assessment Report provided information on existing wastewater facilities; physical features, land use and regulatory issues affecting wastewater facilities; and existing conditions related to environmental resources, nitrogen loadings and on-site septic systems. The report also identified the impacts of population growth in the PPA on wastewater collection, treatment and disposal facilities. The Town has estimated the total amount of wastewater flow from the PPA to be approximately 2.7 million gallons per day (MGD).

Permits and Jurisdiction

The project is subject to MEPA review and to the Mandatory EIR provisions of the MEPA regulations at 301 CMR 11.03(5)(a)(3) because it is presumed that the project will ultimately result in the construction of more than 10 miles of new sewers. The project will require a Groundwater Discharge Permit, a Chapter 91 License, and a 401 Water Quality Certificate from the Department of Environmental Protection (MassDEP). The project must be reviewed by the Natural Heritage Endangered Species Program (NHESP) and the Massachusetts Historical Commission (MHC) because portions of the project occur within Priority Habitat and within or adjacent to recorded archaeological sites and archaeologically sensitive areas, respectively. It may require Federal Consistency Review by the Massachusetts Coastal Zone Management (MCZM) Office. It may also require a Construction Access Permit from the Massachusetts Highway Department. The project may be required to obtain a Section 404 Permit from the U.S. Army Corps of Engineers. The project will require an Order of Conditions from the Mashpee Conservation Commission (and, on appeal only, a Superseding Order from MassDEP). The project should comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site.

The Town is seeking Financial Assistance from the Commonwealth under the State Revolving Fund (SRF); therefore, MEPA has broad scope jurisdiction over the project. The project is being reviewed under a Joint Environmental Review Process established between the Executive Office of Energy and Environmental Affairs (EEA) and the Cape Cod Commission (CCC).

REVIEW OF THE SECOND NOTICE OF PROJECT CHANGE

The Town has submitted this second Notice of Project Change (2nd NPC) in accordance with the MEPA regulations at 301 CMR 11.10(2)(b)(2) because more than three years have elapsed between the publication of the ENF and commencement of non-construction related project work or activity.

As described in the 2nd NPC document, subsequent to the issuance of the Secretary's Certificate on the 1st NPC (November 26, 2007), the United States Environmental Protection Agency (EPA) established Total Daily Maximum Loads (TMDLs) of nitrogen for the Popponeset Bay and the East Waquoit Bay estuaries (Quashnet River, Hamblin Pond, Little River, Jehu Pond and Great River). According to the Town, the TMDLs for Waquoit Bay (Childs River, Eel River) are currently being reviewed by the US Environmental Protection Agency (EPA). The Town is currently conducting an analysis of alternative scenarios for the targeted collection, treatment and disposal of wastewater flows located in the PPA to address the water quality requirements and TMDLs of the Town's marine and freshwater water resources. These wastewater treatment and disposal alternatives include: 1) the conveyance of wastewater flows to existing and proposed privately-owned wastewater treatment facilities (WWTFs); 2) relocation of existing public water supply wells; and 3) shared regional approaches to wastewater treatment and disposal with the Towns of Barnstable, Sandwich and Falmouth.

Conclusion

I commend the Town of Mashpee for its ongoing efforts to design a comprehensive approach to achieve reductions of wastewater nitrogen loading and meet nutrient TMDLs to the Town's coastal embayments including Popponeset Bay and Waquoit Bay. Comments submitted on the 2nd NPC indicate that a timely implementation program and a prioritized targeted watershed restoration plan are important factors to incorporate into the analysis of the Mashpee CWMP program alternatives. The DEIR should include a response to comments submitted on the 2nd NPC from the CCC, MassDEP and NHESP. I strongly encourage the Town to work closely with the MassDEP and the CCC during the Town's preparation of the alternatives analysis for this project.

Because the Town of Mashpee shares a portion of the Popponeset Bay and Waquoit Bay watersheds with the Towns of Falmouth to the west, the Town of Barnstable to the east, and Sandwich to the North, I ask the Town of Mashpee to work with these neighboring Towns, and with MassDEP and the CCC to continue discussions meant to identify possible opportunities to

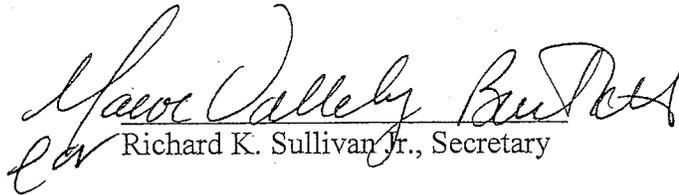
integrate the Town of Mashpee's wastewater treatment planning efforts with the planning efforts that are currently being undertaken by those neighboring towns. In a separate section of the DEIR, the Town should include an update of the Town's efforts to identify regional strategies for reducing the nutrient loading to coastal embayments and freshwater ponds in Barnstable, Mashpee, Sandwich and Falmouth.

Circulation

The DEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to town officials from the Towns of Barnstable, Eastham and Brewster. A copy of the DEIR should be made available for public review at the Barnstable, Sandwich and Falmouth Public Libraries.

July 6, 2012

Date


Richard K. Sullivan Jr., Secretary

Comments Received:

06/26/2012 Department of Environmental Protection (MassDEP), Southeast Regional Office – SERO
06/26/2012 Natural Heritage and Endangered Species Program (NHESP)
06/21/2012 Cape Cod Commission (CCC)

RKS/NCZ/ncz
2nd NPC #12615

MEMORANDUM

TO: Nicholas Zavolas, Environmental Reviewer, MEPA Unit

THROUGH: Jonathan Hobill, Regional Engineer, Bureau of Resource Protection
Martin Suuberg, Regional Director
David Johnston, Deputy Regional Director,
Bureau of Resource Protection
Maria Pinaud, Acting Deputy Regional Director, BWP
Millie Garcia-Serrano, Deputy Regional Director, BWSC
Brenda Chabot, Deputy Regional Director, ADMIN

CC: Elizabeth Kouloheras, Chief, Wetlands and Waterways and
Team Leader, Cape Cod Watershed
Jeffrey Gould, Chief, Water Pollution Control
Brian Dudley, Wastewater Management, Cape Cod Watershed
Richard Rondeau, Chief, Water Supply
Richard Keith, Chief, Municipal Services
Pamela Truesdale, Municipal Services
Leonard Pinaud, Chief, Site Management
Julia Sechen, Site Management

FROM: Sharon Stone, SERO MEPA Coordinator

DATE: June 26, 2012

RE: NPC EOEEA #12615 – MASHPEE – Watershed Nitrogen Management
Plan, 16 Great Neck Road North

"For Use in Intra-Agency Policy Deliberations"

The Southeast Regional Office of the Department of Environmental Protection (MassDEP) has reviewed the Notice of Project Change (NPC) for the proposed Watershed Nitrogen Management Plan developed for the Town of Mashpee, Massachusetts (EOEEA #12615). The project proponent provides the following information for the project:

“As originally outlined in the Environmental Notification Form (ENF) submitted in October of 2001, the project involves the development of a comprehensive nitrogen and wastewater management plan for the Town of Mashpee. The Plan is intended to address the Town’s needs for reducing nitrogen impacts to its coastal embayments and to evaluate all options for restoring those embayments.”

Water Pollution Control Program Comments

Mashpee has been pursuing due diligence in its evaluation of appropriate nitrogen mitigation strategies in order to address impaired coastal water bodies. MassDEP supports the request for an extension in order to provide the Town the opportunity to develop an optimal plan that is both cost effective and adequately protective of the environment and public health.

Bureau of Waste Site Cleanup

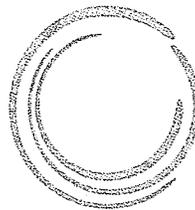
In considering the need for upgrading the infrastructure in town, the assessment should include the potential for encountering contamination associated with waste sites (both known and unidentified) throughout the town if excavation is necessary for the installation of the collection system/or distribution system. The filing of a Utility Release Abatement Plan would be required to excavate in contaminated areas. The location of known sites should be taken into consideration when conducting the assessment to upgrade the infrastructure.

The Project Proponent is advised that, if oil and/or hazardous material is identified during the implementation of this project, notification pursuant to the Massachusetts Contingency Plan (310 CMR 40.0000) must be made to MassDEP, if necessary. A Licensed Site Professional (LSP) may be retained to determine if notification is required and, if need be, to render appropriate opinions. The LSP may evaluate whether risk reduction measures are necessary or prudent if contamination is present. The BWSC may be contacted for guidance if questions regarding cleanup arise.

Proposed s.61 Findings

The "Certificate of the Secretary of Energy and Environmental Affairs on the Notice of Project Change" may indicate that this project requires further MEPA review and the preparation of an Environmental Impact Report. Pursuant to MEPA Regulations 301 CMR 11.12(5)(d), the Proponent will prepare Proposed Section 61 Findings to be included in the EIR in a separate chapter updating and summarizing proposed mitigation measures. In accordance with 301 CMR 11.07(6)(k), this chapter should also include separate updated draft Section 61 Findings for each State agency that will issue permits for the project. The draft Section 61 Findings should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

The MassDEP 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.



142

3225 MAIN STREET • P.O. BOX 226
BARNSTABLE, MASSACHUSETTS 02630

CAPE COD
COMMISSION

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

By Email to Analyst and Regular Mail

RECEIVED

June 21, 2012

JUN 26 2012

Secretary Richard K. Sullivan
Executive Office of Energy and Environmental Affairs
100 Cambridge Street
Suite 900
Boston, MA 02114

MEPA

**RE: MEPA Unit Project Number 12615
Mashpee Watershed Nitrogen Management Plan Notice of Project Change
MEPA Nicholas Zavolas**

Dear Secretary Sullivan:

On June 4, 2012, the Cape Cod Commission (Commission) staff received a copy of a Notice of Project Change (NPC) from F. Thomas Fudala, Chairman of the Mashpee Sewer Committee and Paul Gobell, the Mashpee Sewer Administrator. The NPC is to request an extension of time from the Executive Office of Energy and Environmental Affairs for Mashpee's Watershed Management Plan.

Commission Water Resources staff has reviewed the NPC and supports the Town's continuing efforts on their Comprehensive Wastewater Management Plan. The NPC submittal refers to three options with collection and treatment ranging from 1.76 to 1.91 million gallons a day (MGD) which have been formatted for Massachusetts Estuaries Project (MEP) scenario analysis. These scenarios will provide the Town with additional information in order to identify where flows and loads are collected, treated and discharged. Commission Water Resources staff encourages the Sewer Commission to incorporate the suggestion below as part of their work, seek technical input and keep Commission staff apprised of their efforts.

In regard to the filing, Commission Water Resources staff found little to review other than three graphical descriptions of alternatives under review. The Town provided a February 15, 2012 and October 3 2011 memos from GHD that describes option 1A, 1B and 1C. Commission Water Resources staff has reviewed and summarized the options and provides the following comments.

The presented options are variations on targeted wastewater collection areas and where the treated water would be discharged. The total amount of flow in the Planning Area is 2.7 MGD. These options include:

Option 1A – Send a majority of wastewater flow (1.03 MGD) to the Rock Landing Well Site under the assumption that the public supply wells could be relocated in the future. Continued and expanded use of four existing wastewater treatment facilities (WWTFs), use of three proposed WWTFs; Wastewater from Falmouth, Sandwich and Barnstable would be treated by those towns out-of –watershed.

Rock Landing:	1.03 MGD - new
Johns Pond	0.37 MGD - new
Existing WWTF:	0.34 MGD
Proposed Private WWFT:	<u>0.05 MGD</u>
	1.79 MGD
F + S + B:	0.40 MGD (all out)
Title 5 and IA:	<u>0.52 MGD</u>
	0.92 MGD
Total:	~2.7 MGD

Option 1B – Managing wastewater flow within the watersheds that generate the flow, so that 4 new large WWTF sites would receive 1.67 MGD with the majority in the eastern portion of Town going to Willowbend. This option includes Sandwich and Barnstable flows remaining in the Popponessett watershed, with the latter flows being treated at Willowbend (except for the Barn-39 sector) and Falmouth flows being taken out-of – watershed. Less flow remains to be treated with Title 5 system in this alternative.

Keeter	.34 MGD - new
WillowBend:	.63 MGD - new
Johns Pond	.37 MGD - new
Central Mashpee:	.33 MGD - new
Existing WWFT:	.16 MGD
Proposed Private:	<u>.09 MGD</u>
	1.92 MD
S + F + B:	.42 MGD (Sand in, Fal-out, Barn in-B39)
Title5 + IA:	<u>.37 MGD</u>
	.80 MGD
Total:	~2.7 MGD

Option 1C – This is similar to Option 1A but includes wastewater in the neighboring towns being managed like Option 1B.

There are a number of additional qualifications and caveats to the proposed alternatives that are being forwarded to the MEP for model scenarios such as existing private treatment facilities that will remain and improve treatment to 3 ppm nitrogen and IA systems that will achieve a treatment level of 19 ppm.

The Town has conducted pre-run accounting indicating how the rearrangement and treatment of wastewater can achieve the numerical amount of nitrogen to be removed according to the MEP thresholds and Total Maximum Daily Load (TMDL). This is a reasonable approach that the Commission anticipates illustrating with the WatershedMVP tool.

Commission staff suggests the Town should re-examine the Town's water supply infrastructure including rates of withdrawal, and water quality and evaluate options of potential sources including new wells and/or purchase from the Upper Cape Water Collaborative. Commission Water Resources staff notes that according to the 2008 Annual Statistic Report over 46% of the Town's supply was pumped from the Rock Landing wells. Given that a large percentage of the Town's supply comes from this area raises the question whether this alternative could be implemented within a reasonable period.

Considering wastewater infrastructure construction time frames of 20 or more years, the time of implementation and setting priorities for targeted watershed restoration are important factors to incorporate into the analysis. It is recommended that the Town work with the Commission staff, MEP and DEP to gauge the incremental water quality restoration benefits of a targeted watershed approach with expedited wastewater collection for unattenuated nitrogen loads in priority areas.

In regard to the Popponessett watershed, it appears that Option 1B includes regional treatment options for the Barnstable portion of the watershed which is a good aspect of a targeted approach. Sandwich is presently evaluating both public and private partnership approaches for the Triangle Area and other adjacent properties for treatment outside of the Popponessett watershed. Commission staff suggests the tables accompanying the Memo dated October 2011 showing the amount of flow and load after treatment should also contain a column with the existing attenuated loads so the degree of nitrogen removal can be relative to the contribution. This would likely recast the need for widespread collection in an area of the watershed that gets a high proportion of nitrogen removed from natural attenuation such as the Sandwich area. Adaptive Management should be factored into the alternatives so that less crucial areas can be deferred depending on monitoring.

A high volume of wastewater, of 1 MGD discharged at the Keeter Site 6 could be problematic due to mounding and flow into the Rock Wells and the Waquoit area. Commission Water Resources staff notes that option 1B has a lower amount of 335,000 gpd, which should be evaluated.

The new format for the identification of Sewer planning areas is a good step for comparing phased options for collection and treatment or trading from one area to another.

Commission Water Resources staff is available to answer any questions that you may have about this letter.

Sincerely,



Paul Niedzwiecki, Executive Director

Cc (Regular Mail):

Ernest Virgilio, Mashpee Commission Member
F. Thomas Fudala, Mashpee Sewer Committee Chair
Paul Gobell, Mashpee Sewer Administrator



MassWildlife

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

June 26, 2012

Ian A. Bowles, Secretary
Executive Office of Environmental Affairs
Attention: MEPA Office
Nicholas Zavalas, EEA No. 12615
100 Cambridge St.
Boston, Massachusetts 02114

<i>Project Name:</i>	<i>Watershed Nitrogen Management Plan</i>
<i>Proponent:</i>	<i>Sewer Commission, Town of Mashpee</i>
<i>Location:</i>	<i>Town of Mashpee</i>
<i>Document Reviewed:</i>	<i>Notice of Project Change</i>
<i>EEA No.:</i>	<i>12615</i>
<i>NHESP No.:</i>	<i>12-31134 (formerly 01-9528)</i>

Dear Secretary Bowles:

The Natural Heritage & Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries & Wildlife has reviewed the *Notice of Project Change* (NPC) for the proposed Watershed Nitrogen Management Plan for the Town of Mashpee and would like to offer the following comments with regard to state-listed species and their habitats.

Portions of the Town of Mashpee and associated infrastructure improvements for the nitrogen management plan are mapped as *Priority* and *Estimated Habitat* in accordance with the 13th Edition of the *MA Natural Heritage Atlas*. The NHESP is supportive of the Town's plan to manage nitrogen, as at least ten (10) of the twenty-seven (27) species listed in accordance with the Massachusetts Endangered species Act (MGL c. 131A) rely on aquatic and/or marine habitats for at least one stage of their life cycle and may directly benefit from reduced levels of dissolved nitrogen and improved water quality. These species include the American Brook Lamprey, Eastern Pondmussel, and Pine Barren's Bluet, among others.

The NHESP notes that any portions of the proposed project that occur within *Priority* and *Estimated Habitat*, and that are not exempt pursuant to 321 CMR 10.14, will require review through a direct filing with the NHESP for compliance with the MESA and the rare species provisions of the Wetlands Protection Act. The NHESP encourages the Town to consider design and implementation alternatives which avoid, minimize and mitigate impacts to state-listed species and their habitats, and to consult with the NHESP on the proposed project during the design phase. We appreciate the opportunity to comment on this project, and look forward to working with the Town to proactively address potential concerns related to state-listed rare species.

If you have any questions about this letter, please contact Misty-Anne Marold, Endangered Species Review Biologist, at misty-anne.marold@state.ma.us or 508-389-6356.

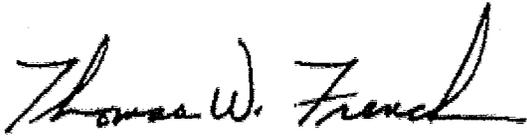
www.masswildlife.org

Division of Fisheries and Wildlife

Field Headquarters, One Rabbit Hill Road, Westborough, MA 01581 (508) 389-6300 Fax (508) 389-7891

An Agency of the Department of Fish & Game

Sincerely,

A handwritten signature in black ink that reads "Thomas W. French". The signature is written in a cursive style with a large, sweeping initial 'T' and 'F'.

Thomas W. French, Ph.D.
Assistant Director

cc: Paul Gobell, Town of Mashpee
Town of Mashpee, Department of Public Works
Town of Mashpee, Conservation Commission
DEP Southeastern Regional Office, Wetlands Program

