

1. Introduction

1.1 Report Background and Purpose

The Town of Falmouth's Comprehensive Wastewater Management Project (CWMP) is being developed to protect its coastal environment from impacts of excessive nitrogen to impaired estuaries. Excessive nitrogen loading to the Town's sensitive coastal watersheds is impacting water quality and marine resources in the area. The Massachusetts Estuaries Project has completed studies in multiple Falmouth estuaries indicating that most of this nitrogen originates from wastewater sources. The Falmouth CWMP Project is being completed to provide an environmentally and economically sound approach for wastewater and nitrogen management for watersheds along their south facing coast (from Little Pond to Waquoit Bay) and West Falmouth Harbor. This area is generally referred to as the CWMPs Planning Area.

The Town has adopted the approach of working west to east (starting at Little Pond) to develop Targeted Watershed Management Plans (TWMPs), as part of the overall CWMP, to address nitrogen mitigation needs along its southern coastline. This approach allows for traditional infrastructure to be extended from existing infrastructure, which is primarily located within the Town's downtown areas and the Little Pond Sewer Service Area (LPSA).

The Great Pond Targeted Watershed Management Plan (GPTWMP) outlines Falmouth's comprehensive strategy for wastewater and nitrogen management in Great Pond to meet the watershed Total Maximum Daily Load (TMDL) requirements for Total Nitrogen (TN).

This report is the eighth report developed by the Town of Falmouth related to this CWMP Project. Previous reports prepared for this CWMP project are summarized below:

1. The Needs Assessment Report (NAR), dated October 2007, documented the wastewater and nitrogen management needs for the Planning Area and related areas of Falmouth.
2. The Alternatives Screening Analysis Report (ASAR), dated November 2007, identified possible solutions to address identified wastewater and nitrogen management needs and screened the alternatives to retain the most feasible options for cost development and detailed evaluation.
3. The Environmental Notification Form (ENF) document, dated December 17, 2007, summarized the findings of the Needs Assessment Report to initiate environmental review of the project (as part of the Massachusetts Environmental Policy Act or MEPA review process).
4. The Draft Comprehensive Wastewater Management Plan and Draft Environmental Impact Report (DEIR) and Draft Notice of Project Change, dated July 30, 2012, presented the draft plan and further advanced MEPA review of the project. A Secretary's Certificate was issued on November 14, 2012, stating that the DEIR was adequate, and provided a scope of work for the Final Environmental Impact Report (FEIR).
5. The Final CWMP/FEIR/TWMP, dated September 16, 2013, summarized the detailed evaluations and changes made to the planning project since the review of the Draft Report, and presented the Recommended Plan to address the wastewater and nitrogen management needs of the Little Pond watershed. It also presented the estimated environmental impact (and benefits) of the Recommended Plan as compared to the consequence of not acting on the wastewater needs (also called the No-Action Alternative).
6. The Amended TWMP, dated October 6, 2014, was issued to address a Massachusetts Department of Environmental Protection (MassDEP) request to clarify the Town's approach for addressing the Nitrogen TMDL for Little Pond using the traditional and non-traditional management approach identified in the 2013 CWMP Report. The associated Adaptive Management Plan identified several pilot projects and other initiatives necessary to determine the feasibility of non-traditional wastewater and nitrogen management strategies being considered as part of the planning effort.

7. The South Coast Embayments and West Falmouth Harbor CWMP/TWMP Notice of Project Change Update, dated December 2019, outlined a Compliance Plan Approach for each impaired watershed in the Planning Area and provided an update on the efforts and studies being conducted to assess the feasibility of non-traditional wastewater and nitrogen management strategies incorporated into the Compliance Plan Approaches.

This report outlines Falmouth’s strategy to meet its nitrogen TMDL goals in Great Pond and provides an outline of next steps the Town will undertake to develop TMDL strategies for the Town’s other impaired coastal estuaries.

1.2 Public Participation and Outreach Program

The Town of Falmouth actively participates in public awareness outreach efforts on water quality issues. The Water Quality Management Committee (WQMC) is the primary means of publicly discussing strategic planning efforts toward restoring the impaired estuaries. Table 1.1 provides a summary of WQMC meetings and publicly available archives relating to the activities of the WQMC since the 2019 Notice of Project Change was developed.

Table 1.1 Summary of Meeting Records for the Falmouth Water Quality Management Committee

Year	Regular Committee Meetings	Number of Meetings Available Through FCTV	Number of Articles in Local Newspaper
2019	20	6	19
2020	12	4	7
2021	14	8	11
2022 (through March 1, 2022)	2	2	1
Total through March 1, 2022	48	20	38

The WQMC holds regular public meetings that typically occur on the first and third Thursday of each month. In accordance with the Massachusetts Open Meeting Law, the agenda for each WQMC meeting is publicly posted on the Town’s website at least 48 hours prior to the meeting in accordance with Massachusetts General Law. Detailed minutes from each meeting are also publicly available on the Town’s website. Current and archived agenda and minutes can be found at:

<https://ma-falmouth.civicplus.com/AgendaCenter/Water-Quality-Management-Committee-39>

The Water Quality Management Committee will continue to work with the Select Board and Town departments to inform the public and to provide a forum for open dialogue on water quality issues. This project has been publicly presented at two Select Board meetings since 2019, and the findings of this report shall be presented a future Select Board meetings anticipated in 2022.

1.2.1. Coordination and Outreach to Neighboring Towns and JBCC

1.2.1.1. Joint Base Cape Cod

The Town of Falmouth is actively participating in discussions and evaluations related to the potential use of the wastewater infrastructure at Joint Base Cape Cod (JBCC). This is a regional multi-year effort that includes JBCC, and the Towns of Falmouth, Barnstable, Bourne, Mashpee, and Sandwich.

1.2.1.2. Nitrogen Loading Allocation for Waquoit Bay Watershed

The Town of Falmouth is actively working with its neighboring communities of Mashpee and Sandwich to establish nitrogen loading allocations and responsibility for Waquoit Bay. It is anticipated that the communities will establish these allocations in the future to aid in each community’s approach to address the nitrogen impacts in this shared watershed.

1.3 MEPA and DRI Review Process

The environmental review process was initiated in December 2007 with the filing of an ENF with the MEPA office of the Executive Office of Energy and Environmental Affairs (EOEEA) as well as the Cape Cod Commission (CCC). Project documents that have undergone MEPA review and received a Certificate of the Secretary of Energy and Environmental Affairs are summarized in Table 1.2.

Table 1.2 Summary of Town of Falmouth CWMP EOEEA Certificates

Document	EOEEA Certificate Approval Date
Environmental Notification Form	January 30, 2008
Draft CWMP/DEIR	November 14, 2012
Final CWMP/FEIR/TWMP	January 10, 2014
Bournes Pond Inlet Widening	February 10, 2016
CWMP/TWMP NPC Update	February 7, 2020

The environmental review process will continue with the MEPA and CCC review of this Great Pond TWMP report. A Secretary's certificate is expected at the end of this review. After a successful MEPA review, the CCC will complete their 208 Consistency Review. Comment responses are included in Appendix 1-1 for the NPC 2020 comments and the Draft TWMP 2022 comments.

1.4 Environmental Impact Review Process

The Final CWMP/FEIR/TWMP, dated September 16, 2013, summarized the detailed evaluations and changes made to the planning project since the review of the Draft Report, and presented the Recommended Plan to address the wastewater and nitrogen management needs of the Little Pond watershed. It also presented the estimated environmental impact (and benefits) of the Recommended Plan as compared to the consequence of not acting on the wastewater needs (also called the No-Action Alternative). The Supplemental EIR for the infrastructure projects in the Great Pond TWMP is outlined in Section 10.