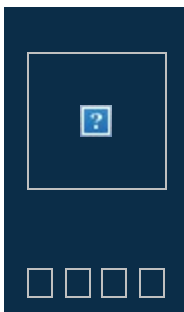


ATTACHMENT 9

EEA EJ Maps Viewer Figure, EJ Screening Form,
EJ Distribution List, and EJ Public Involvement Activities

From: [Kathryn Roosa](#)
To: ["paul@capecodchamber.org"](#); ["info@bcleanwater.org"](#); ["environmentwatchesoutheasternma@gmail.com"](#)
Cc: [MEPA-EJ@mass.gov](#); [Helen Gordon](#); [Marlene McCollem](#)
Subject: FW: Town of Bourne - Advance Notification for MEPA Filing
Date: Friday, November 8, 2024 1:42:14 PM
Attachments: [BourneCWMP_EJPrenotificationwAttach.pdf](#)
[image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)
[image012.png](#)
[image013.png](#)

Good afternoon,
See forwarded message below. The highlighted email addresses were undeliverable.
Thanks,
Kathryn




Kathryn Roosa, P.E.

Project Manager
Apex Companies, LLC
 1900 Crown Colony Dr, Ste 402, Quincy, MA 02169
 617-657-0986
ENR Top 30 All-Environmental Firm
[Water](#) • [Environmental](#) • [Health & Safety](#) •
[Compliance & Assurance](#) • [Infrastructure](#)

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From: Kathryn Roosa <Kathryn.Roosa@apexcos.com>
Sent: Friday, November 8, 2024 1:25 PM
To: [sylvia@communityactionworks.org](#); [hclish@outdoors.org](#); [jepke@clf.org](#); [Bjenkins@clf.org](#); [aboydrabin@environmentalleague.org](#); [zsaifee@environmentalleague.org](#); [ben@environmentmassachusetts.org](#); [robb@massland.org](#); [cluppi@cleanwater.org](#); [dalida@n2nma.org](#); [Miles@N2NMa.org](#); [rob@oceanriver.org](#); [vick.mohanka@sierraclub.org](#); [hricci@massaudubon.org](#); [tribalcouncil@chappaquiddickwampanoag.org](#); [crwritings@aol.com](#); [john.peters@mass.gov](#); [melissa@herringpondtribe.org](#); [rockerpatriciad@verizon.net](#); [rhalsey@naicob.org](#); [Coradot@yahoo.com](#); [Solomon.Elizabeth@gmail.com](#); [thpo@wampanoagtribe-nsn.gov](#); [Brian.Weeden@mwtribe-nsn.gov](#); [David.Weeden@mwtribe-nsn.gov](#); [106Review@mwtribe-nsn.gov](#); [info@capecodclimate.org](#); [info@cacci.cc](#); [kgrey@wildlandstrust.org](#); [david@modestsinger.com](#); [petermeier0606@gmail.com](#); [jon5293@msn.com](#); [info@sagamorehighlands.org](#); [Martha_Hoefler@harvardpilgrim.org](#);



rasmussen@savebuzzardsbay.org; agottlieb@apcc.org; jloughran@bcleanwater.org;
Director@Buzzardsbayaction.org; joe.costa@mass.gov; rdwyerphd@gmail.com;
JKeithBarber@gmail.com; info@nativelandconservancy.org; graygables02532@gmail.com;
moliva@capecodcanalchamber.org; wendy@capecodchamber.org; mark.r.forest@gmail.com;
pampol@aol.com; ametcalfe@maritime.edu; sempba@pinebarrensalliance.org

Cc: MEPA-EJ@mass.gov; Helen Gordon <htg@envpartners.com>; Marlene McCollem <mmccollem@bourne-ma.gov>

Subject: Town of Bourne - Advance Notification for MEPA Filing

Good afternoon,

Community-based organizations and tribal organizations are receiving this notification in accordance with the MEPA Public Involvement Protocol for Environmental Justice Populations, which took effect on January 1, 2022. More information is available on the [MEPA website](#).

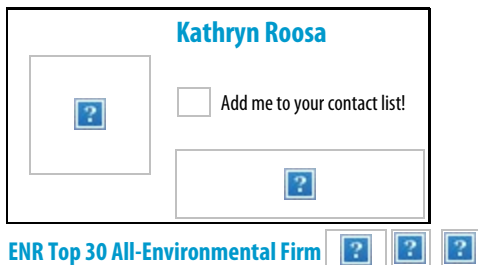
Project Name: Bourne Comprehensive Wastewater Management Plan (CWMP)

Location: Bourne, MA – Various Locations

Description: The purpose of the proposed project is to develop a Recommended Plan for nitrogen mitigation in Bourne MA. The CWMP would be used by the Town of Bourne to create a pathway for State Revolving Fund (SRF) project implementation funding. Bourne’s focus for the first ten years is on nitrogen load reduction in Phinney’s Harbor Watershed and Megansett-Squeteague Watershed, which are both nitrogen-impaired, have Total Nitrogen Total Maximum Daily Limits (TMDLs), and are Nitrogen Sensitive Areas with Natural Resources designations per MassDEP.

Thank you,

Kathryn



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Environmental Justice Screening Form

Project Name	Bourne Comprehensive Wastewater Management Plan
Anticipated Date of MEPA Filing	December 15, 2024
Proponent Name	Town of Bourne, MA
Contact Information (e.g., consultant)	Apex Companies, LLC Kathryn Roosa, PE, Project Manager Kathryn.roosa@apexcos.com Helen Gordon, PE, Principal Helen.Gordon@Apexcos.com
Public website for project or other physical location where project materials can be obtained (if available)	https://www.townofbourne.com/comprehensive-wastewater-management-plan-cwmp or Town of Bourne, Town Hall, 24 Perry Avenue, Buzzards Bay, MA 02532
Municipality and Zip Code for Project (if known)	Bourne, MA - 02532
Project Type* (list all that apply)	Wastewater - CWMP
Is the project site within a mapped 100-year FEMA flood plain? Y/N/unknown	Y/Unknown – Townwide Needs Area encompasses several portions within the FEMA 100-year Floodplain. Final Design of exact wastewater facilities is not yet completed, so exact project locations within the floodplain are not finalized. See attached Figure 10 for map of Flood Zones within the CWMP Study Area.
Estimated GHG emissions of conditioned spaces (click here for GHG Estimation tool)	4.7 lbs CO2 per square foot, per year or 25 tons per year.* *This is approximate value as facility design has not been completed yet. See Item 5. Below for more information about this estimate.

Project Description

1. Provide a brief project description, including overall size of the project site and square footage of proposed buildings and structures if known.

The Town of Bourne Comprehensive Wastewater Management Plan (CWMP) encompasses a twenty-year planning time horizon for all Bourne’s impaired watersheds. There are no design plans included, only conceptual layouts to demonstrate potential nitrogen-removal of various wastewater management alternatives and timelines to address steps that the Town will take towards implementing such alternatives. The first Phase of the CWMP Implementation Plan (Years 1 – 10) focuses on Phinney’s Harbor Watershed and Megansett-Squeteague Watershed. The Phinney’s Harbor Core Sewer Area and Townwide Stormwater Best Management Practices as well as homeowner-targeted education programs in Megansett-Squeteague Harbor will be the primary focus. For the remaining nitrogen-impaired watersheds in Bourne, (Pocasset Harbor, Pocasset River, Buttermilk Bay), investigation and design of any core sewer area needs will be pursued in Phase 2 (Plan Years 11 – 20). Phase 3 includes revisiting the Buzzards Bay and Cape Cod Canal Watersheds between Plan Years 11 – 20, to reassess whether nitrogen reducing measures need to be taken into consideration. This is considered part of the Adaptive Management Planning.

2. List anticipated MEPA review thresholds (301 CMR 11.03) (if known)

CWMP - Wastewater

3. List all anticipated state, local and federal permits needed for the project (if known)

Final list of permits is not completed as the project has not been designed yet, but the projects are expected to require MESA Project Review and MassDEP WPA Form 3 – Wetland Notice of Intent, MassDEP WP-68 – Treatment Works Plan Approval for New/Modified Facility, and MassDEP WP-83 – Hydrogeologic Evaluation Report.

4. Identify EJ populations and characteristics (Minority, Income, English Isolation) within 5 miles of project site (can attach map identifying 5-mile radius from [EJ Maps Viewer](#) in lieu of narrative)

See attached for 5-mile map radius from the Bourne Public School Wastewater Treatment Facility (BPS WWTF). While the CWMP is a Town-wide document, the only alternative with a short-term capital planning implication is the Phinney’s Harbor Core Sewer Area alternative. While the facility nor the sewer extension are not designed, the BPS WWTF is the center of the 5-mile radius. The following table describes the five EJ population groups identified:

Geographic Area Name	Town	EJ Criteria
Block Group 1, Census Tract 139	Bourne	Income
Block Group 1, Census Tract 141	Bourne	Minority and Income
Block Group 1, Census Tract 140.02	Bourne	Income
Block Group 1, Census Tract 5453	Wareham	Income
Block Group 1, Census Tract 141	Sandwich	Minority and Income

4. Identify any municipality or census tract meeting the definition of “vulnerable health EJ criteria” in the [DPH EJ Tool](#) located in whole or in part within a 1 mile radius of the project site.

The Town of Bourne meets the Vulnerable Health EJ criterion for heart attack. The Town of Bourne does not meet the Vulnerable Health EJ Criterion for childhood blood lead, low birth weight, and childhood asthma categories. See attached for the approximate map showing 1-mile radius from the Bourne Public Schools Wastewater Treatment Facility. See below for a screenshot of the only Census Tract within 1-mi. radius of the BPS WWTF site, Block Group 1, Census Tract 141 (Minority and Income EJ Group).

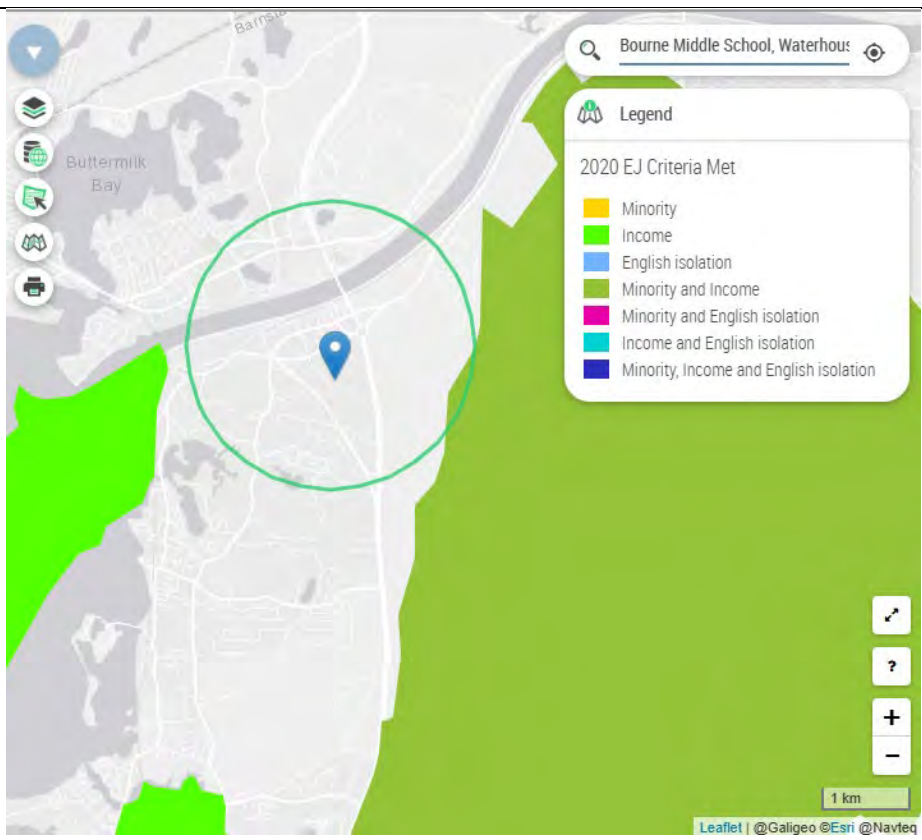


Figure 1: MA DPH Environmental Justice Tool, Vulnerable Health EJ by Census Tract.

5. Identify potential short-term and long-term environmental and public health impacts that may affect EJ Populations and any anticipated mitigation.

The BPS WWTF sits in an approximate 4,250 sf building and uses a 125 KW generator fueled by natural gas. In order to identify potential long-term environmental and public health impacts, we assumed that increasing the wastewater flow to this WWTF will require an increase in facility size. As the flow will approximately increase 2.5 times, the same ratio is used for building expansion (Assumed a new building size of 10,500 sf). Based on the Emissions Footprint Estimation Tool category of “Warehouse (non-refrig)”, the approximate future emissions rate is 25 tons per year for the expanded WWTF. **Please note that this is an estimate, as the facility improvements have not been designed.**

The existing generator will also require an increase in size, but as the existing generator uses natural gas fuel, any new generator will also use natural gas fuel. Both the facility size and fuel/power type impact long term environmental and public health impacts. The goal of any upgrade to this facility is to use best available building envelope energy saving technologies available and the most efficient use of natural gas in fueling the generator. The goal will be to improve any existing building envelope heating/cooling systems to be electrified in accordance with Commonwealth of Massachusetts Energy and Heating Systems regulations, guidelines, and standards during the design process.

The short-term temporary construction impacts will have a much greater public health impact of improvement to water quality. Mitigation measures will be planned for design and construction once the sewer expansion and WWTF facility expansion are designed.

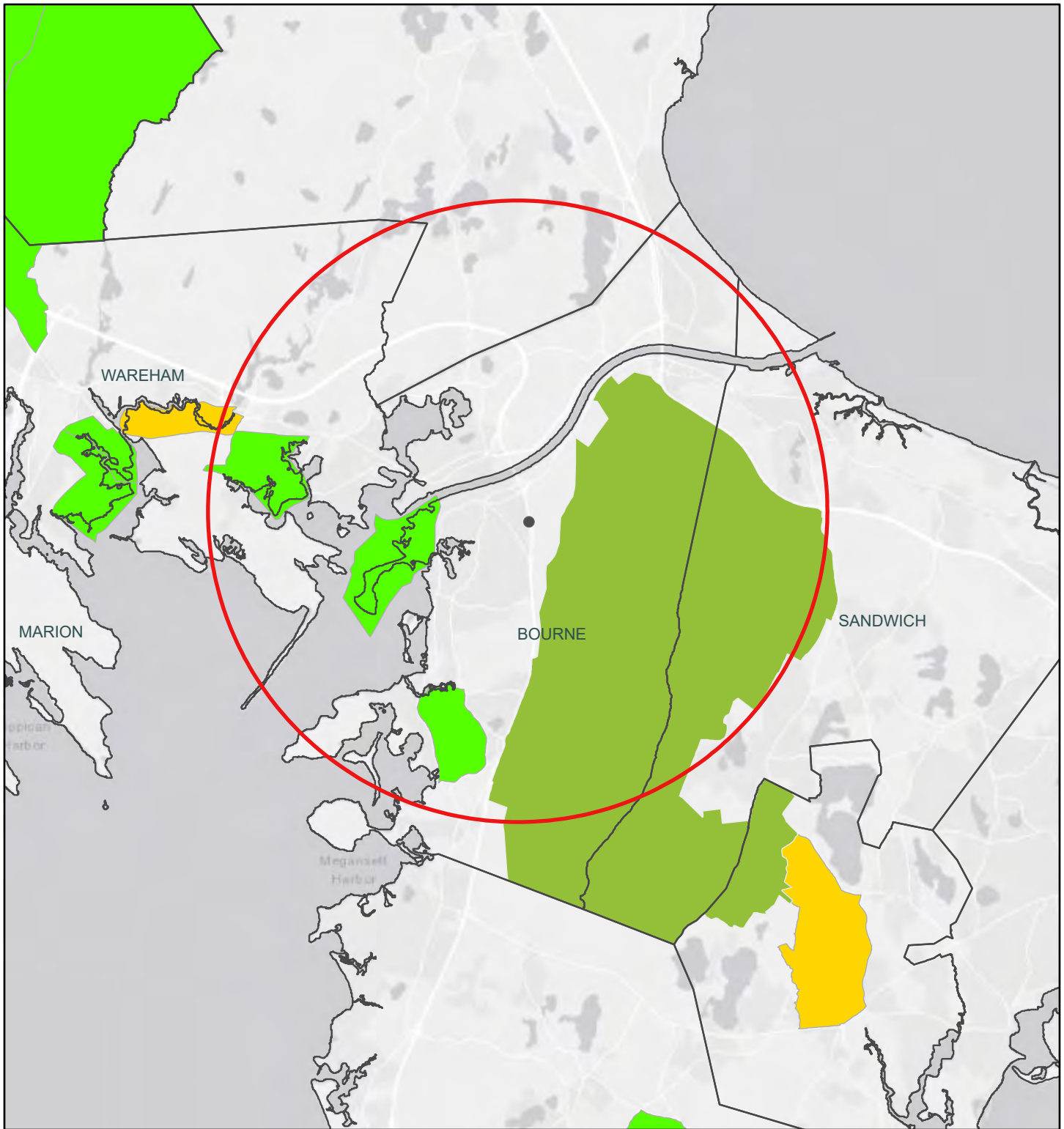
7. Identify project benefits, including “Environmental Benefits” as defined in 301 CMR 11.02, that may improve environmental conditions or public health of the EJ population

By increasing the flows at the BPS WWTF to accommodate sewer expansion in Phinney’s Harbor Embayment, more homes will be removed from septic systems thereby reducing direct nitrogen loading into groundwater in the Back River Area of Critical Environmental Concern (Phinney’s Harbor Embayment). Currently, the BPS WWTF treats to advanced treatment effluent levels (Tertiary Treatment) of Ammonia and Nitrate (1 lb./day). This high-quality treated wastewater effluent, discharged into groundwater, will produce positive environmental benefits such as reduced nutrient pollution, availability of shellfish and return of critical species such as eelgrass.

8. Describe how the community can request a meeting to discuss the project, and how the community can request oral language interpretation services at the meeting . Specify how to request other accommodations, including meetings after business hours and at locations near public transportation.

A meeting request can be made through the Town of Bourne’s Town Administrator’s office or by emailing Apex Companies project representatives directly (contact emails listed on page 1 of this form.). Please include accommodation needed as part of the meeting request.

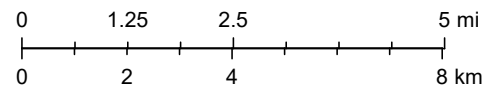
2020 Environmental Justice Neighborhoods



11/4/2024, 10:56:22 AM

1:192,597

- Override 1
- MA Municipalities
- MA 2020 Environmental Justice Block Groups
 - Minority: the block group minority population is $\geq 40\%$, or the block group minority population is $\geq 25\%$ and the median household income of the municipality the block group
 - Income: at least 25% of households have a median household income 65% or less than the state median household income
 - Minority and Income



MassGIS, Esri, HERE, Garmin, USGS, EPA, NPS

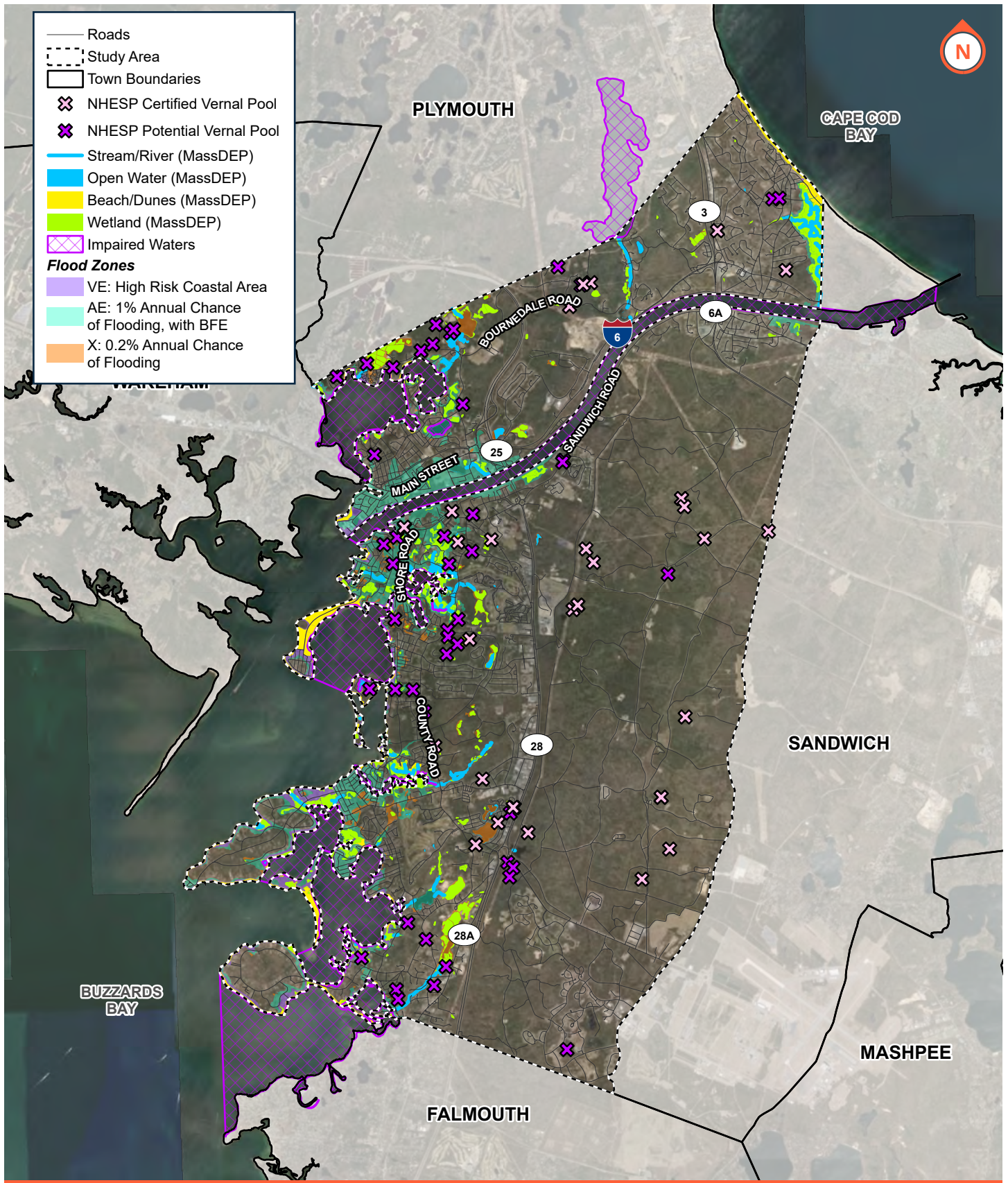


Figure 10
CWMP - Water Resources

Bourne, Massachusetts

3/17/2022

ENVIRONMENTAL PARTNERS

— An Apex Company —

