



Town of Bourne Comprehensive Wastewater Management Plan

Select Board Status Update

ENVIRONMENTAL
 PARTNERS
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Agenda

- Title 5 Regulation Changes
 - Revised Nitrogen Sensitive Areas
- Watershed Permit Option
 - Upcoming Action Dates
- Decisions Required
- Next Steps



Title 5 Regulation Changes

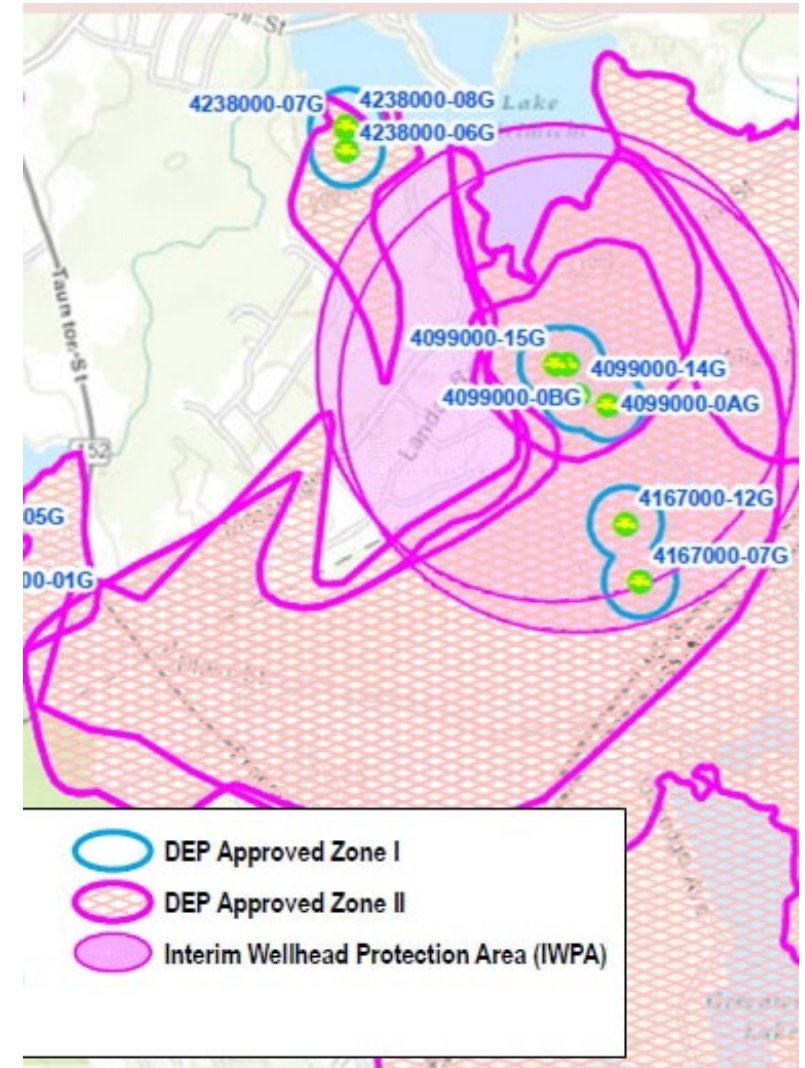
- Expanded definition of Nitrogen Sensitive Areas
 - Areas where traditional Title 5 systems (without nitrogen removal) will be non-compliant
 - Public and Private Water Supply Areas
 - Natural Resource Areas
- Owners or proposed owners determine whether the facility is in a designated Nitrogen Sensitive Area
 - Prior to any transfer of title, transferor must disclose to transferee and Board of Health
- Natural Resource Area Timelines
 - New Construction – **Starting January 7, 2024**
 - Unless Town files a Notice of Intent to File a Watershed Permit
 - Existing Systems – **Five years to comply beginning July 7, 2025**
 - Unless Town applies for a Watershed Permit
 - Existing I/A (nitrogen removing systems) installed within last 10 years (2013 - 2023) are exempt unless Local Approving Authority determines otherwise (e.g. system failure)

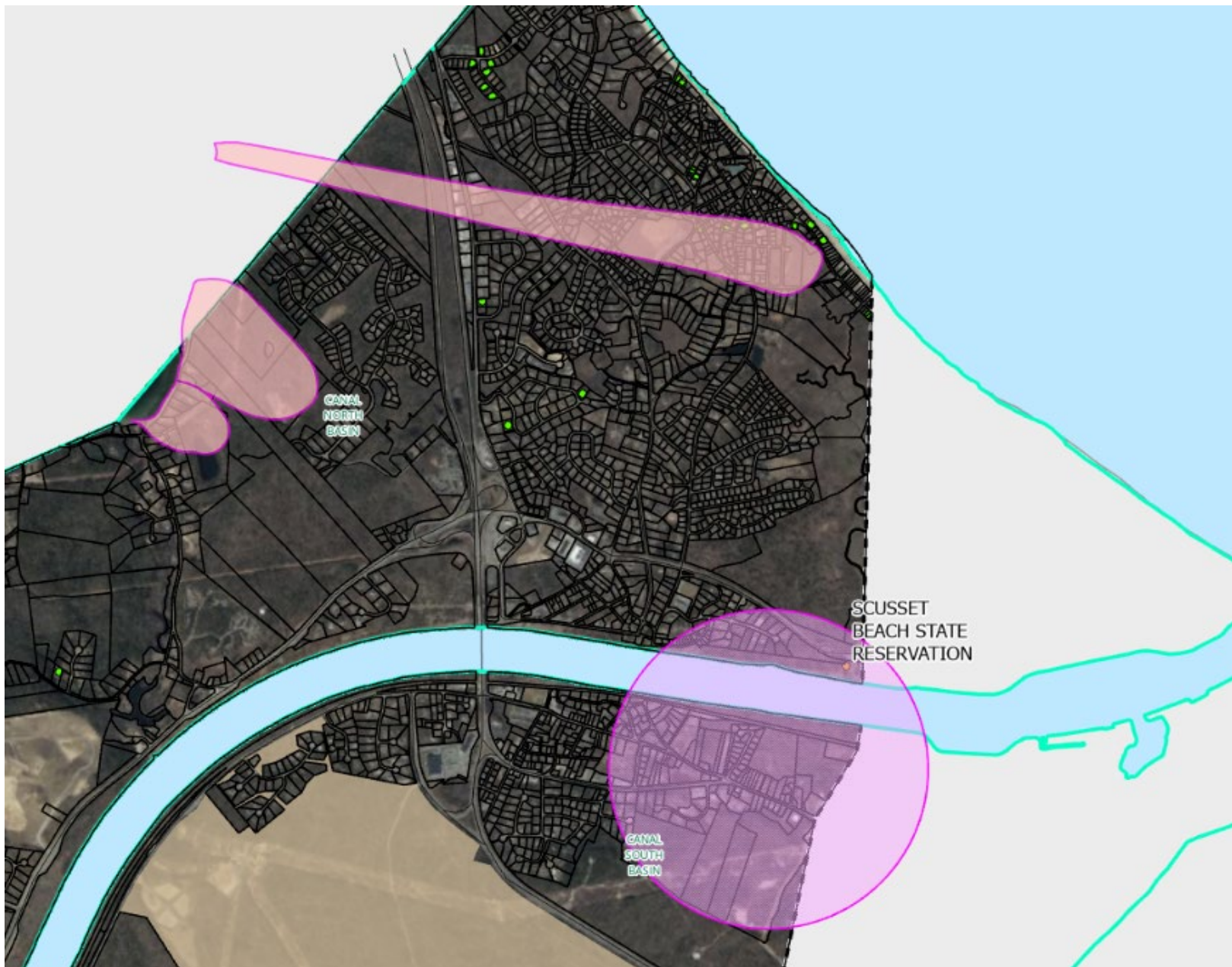


Public and Private Water Supply Protection Areas

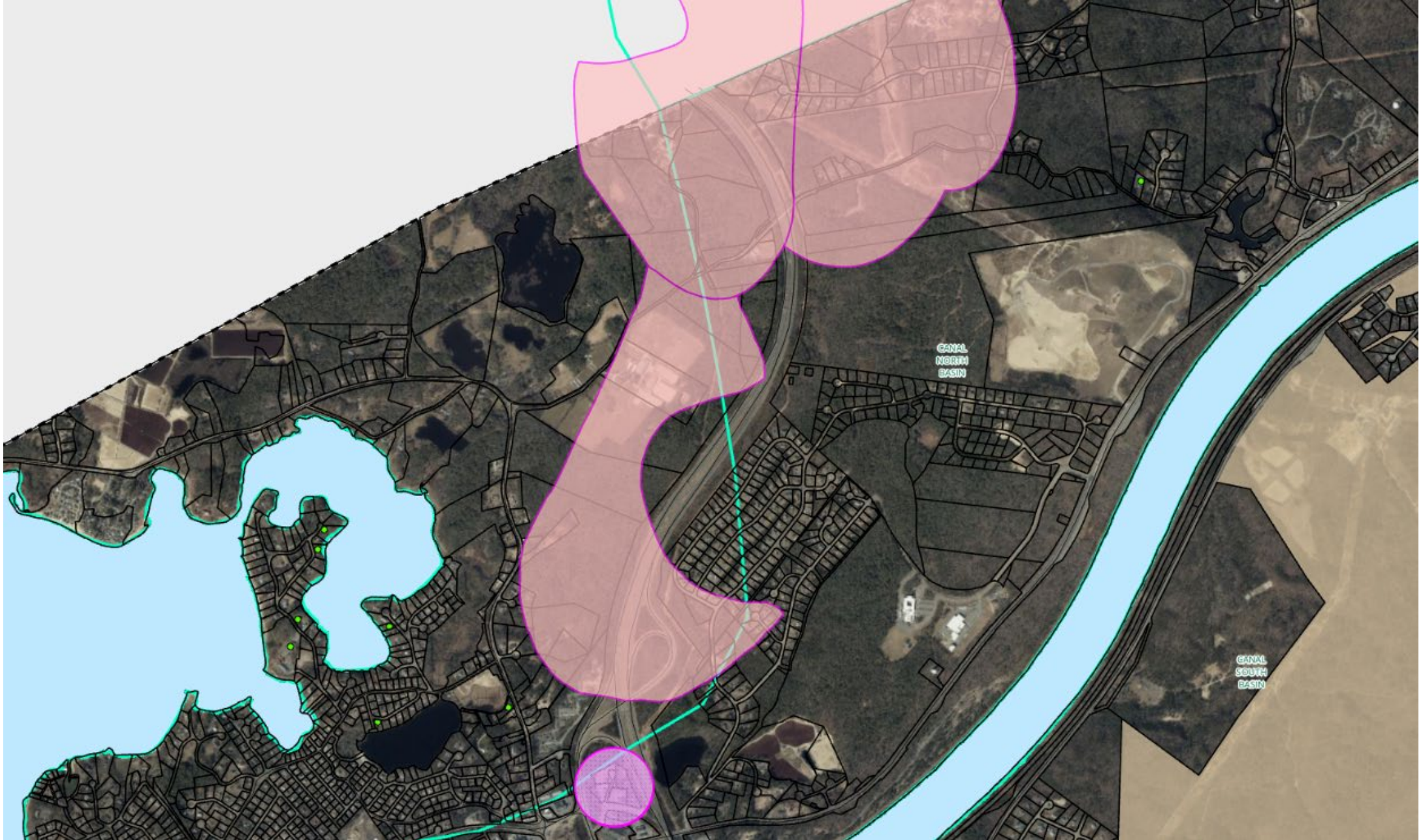
- No onsite wastewater disposal flows greater than 440 gallons per day, per acre (gpd/acre)
 - Exceptions:
 - Recirculating sand filters
 - Approved Facility Aggregation Plan
 - Systems with Enhanced Nitrogen Removal
 - Enhanced Nitrogen Removal
 - 10 ppm nitrate effluent discharge
 - Approved alternative system or treatment plant with groundwater discharge permit
- If within Public and Private Water Supply area AND Natural Resource Area, then must comply with the timelines for Natural Resource Areas

Example Zone II and IWPA



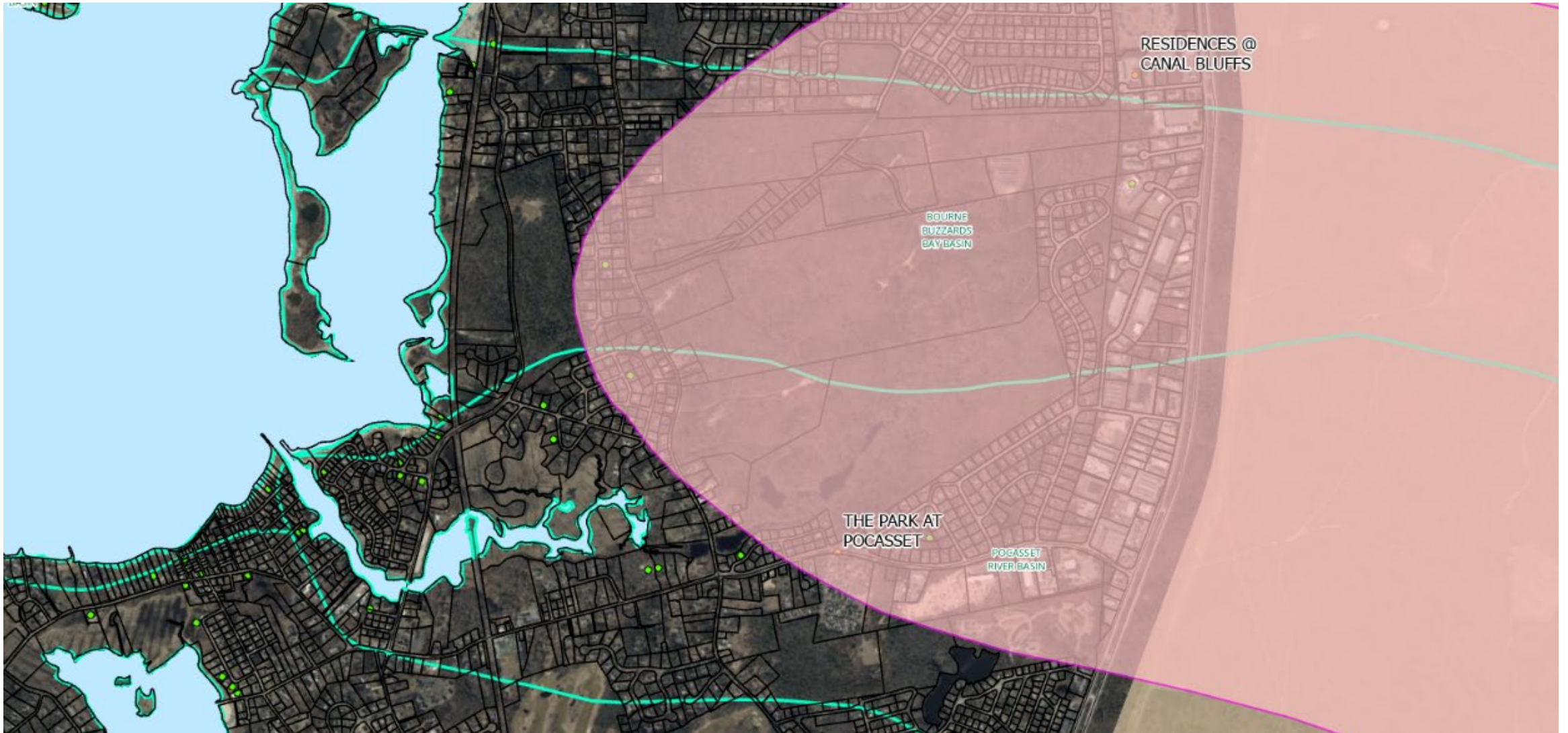


Zone II in Sagamore



Zone II in Buttermilk Bay and Bournedale





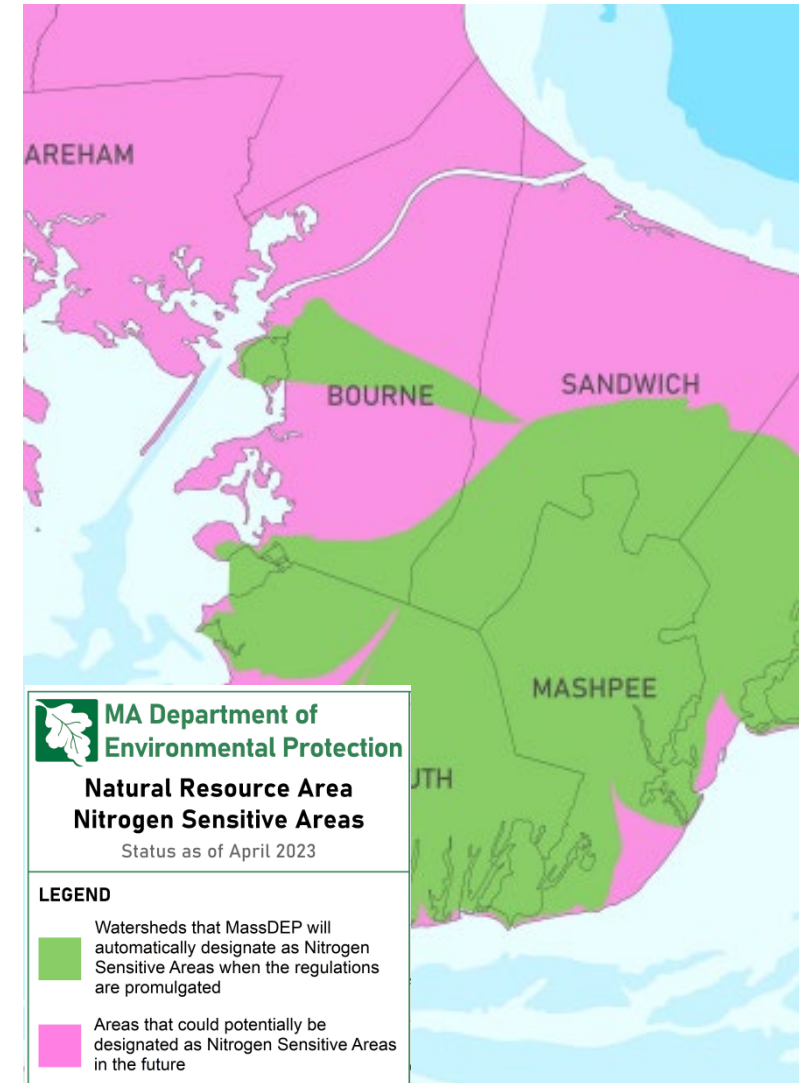
Zone II in Pocasset River and Buzzards Bay



Zone II in Pocasset Harbor

Natural Resource Areas

- Traditional Title 5 septic systems no longer compliant
 - Best Available Nitrogen Reducing Technology (BANRT) must be used instead
- Entire TMDL Watersheds are automatically designated as Nitrogen Sensitive Areas
- Existing Title 5 systems need to be upgraded within five years
 - Megansett-Squeteague, over 250 properties
 - Phinney's Harbor, over 1,000 properties



Alternative: Watershed Permit

- A 20- year permit to meet nitrogen removal goals issued for one or more watersheds
- Town becomes Permittee to the State
 - Requires active water quality monitoring and reporting
 - Requires 5-Year Adaptive Management Report
- Immediate action needed to opt-in
 - Notice of Intent (the Town's intent to apply for a permit for one or more watersheds)
 - Application
 - Includes public comment and hearing period, separate from CWMP hearing
 - MassDEP reserves the right to reject application for permit

314 CMR: DIVISION OF WATER POLLUTION CONTROL

314 CMR 21.00: MASSACHUSETTS WATERSHED PERMIT REGULATIONS

Section

- 21.01: General Provisions
- 21.02: Definitions
- 21.03: Application for a Watershed Permit
- 21.04: Application Review Process
- 21.05: Elements of a Watershed Permit
- 21.06: Modification, Revocation, Termination, and Renewal of a Watershed Permit
- 21.07: Continuation of an Expiring Watershed Permit
- 21.08: Signatories to Permit Applications and Reports
- 21.09: Enforcement, Violations and Right of Entry
- 21.10: General Conditions
- 21.11: Appeals
- 21.12: *De Minimis* Nitrogen Load Exemption

21.01: General Provisions

(1) Purpose. The purpose of these regulations is to establish a watershed permitting strategy and process to restore and protect water quality in nutrient impacted watersheds. The development and implementation of a Watershed Management Plan that will eliminate these water quality impacts are essential to this purpose.

A Watershed Permit establishes performance standards, authorized activities, and the timeframes that will be utilized under an adaptive management framework to achieve nutrient load reductions that are necessary to meet the specific water quality and habitat quality restoration goals that have been identified in a watershed analysis as being necessary to meet the designated uses of the waterbody established by the Department under 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*, for the nutrients identified in the watershed analysis.

(2) Authority. The Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53, charges the Department with the duty and responsibility to protect the public health and enhance the quality and value of the water resources of the Commonwealth. The Massachusetts Watershed Permit Regulations are promulgated pursuant to M.G.L. c. 21, § 27 and St. 2014, c. 259, § 2A. Consistent with this authority, any Watershed Permit that the Department issued prior to the effective date of these regulations shall remain valid and binding on the permittees.

21.02: Definitions

For the purposes of 314 CMR 21.00, the following terms shall have the following meanings, unless the context clearly requires otherwise:

208 Plan – An Areawide Waste Treatment Management Plan certified by the Governor or his or her designee and approved by EPA pursuant to § 208 of the federal Clean Water Act, 33 U.S.C. § 1288.

Alternative Control Approach or Technology – A technology or approach that is not a Conventional Control Approach or Technology but can be effectively used to remove pollutants from a waterbody or prevent or reduce the introduction of pollutants into a waterbody. Examples include but are not limited to permeable reactive barriers, enhanced natural attenuation, restored or constructed wetlands, fertilizer reduction, and pollutant credits or trading.



Watershed Permit Option

- File a Notice of Intent
 - Immediately (to opt out of 2024 New Build requirement for I/A) **or** before July 2025 for Existing Systems
- File a Permit Application
 - Town has seven years post-NOI to file Watershed Permit Application
 - Requires CWMP to be finalized
 - Requires additional plans including Quality Monitoring and Compliance
 - Public Comment Period
- Requirements
 - Duty to monitor and report results
 - 5-Year Report
 - Any proposed schedule changes must be reviewed by MassDEP
 - Any changes to the Watershed Management Plan must be reviewed by MassDEP



Title 5 (Default) vs. Watershed Permit (Opt-in)

| | Title 5 | Watershed Permit |
|-------------------------------------|--|---|
| Who's responsible? | Individuals | Town |
| When are upgrades required? | New Build: January 2024 Existing Systems: 2030 | Per timeline of Watershed Management Plan (e.g. CWMP Implementation Timeline) |
| Is there an Application Process? | No | Yes |
| Are there annual requirements? | No, but Local Approving Authority keeps records/performs inspections | Yes |
| Are there additional costs? | No | Yes* |
| Are there fines for non-compliance? | Yes, if applicable under Title 5 | Yes |

*Town would assume responsibility for any permit non-compliance, which incurs costs outside the CWMP Recommended Plan implementation costs (difficult to predict at this time).



Decisions Needed

- Public Feedback?
- Watershed Permit?
 - If yes, NOI by January?
 - You don't need to file an NOI by January, but if you want to avoid any new build homes requiring a best available nitrogen reducing technology onsite system, then it needs to be filed
 - If maybe, NOI by 2025
 - If no, then Title 5 default kicks in
 - CWMP Recommended Plan will incorporate the 5-year compliance requirement starting in 2025



Next Steps: CWMP

Winter
2024

- Draft Recommended Plan

Spring
2024

- Submit for joint review by MEPA, Cape Cod Commission, and Public Comment
- Incorporate Feedback into Final Plan

Fall
2024

- Town Meeting Action
- Begin CWMP Implementation

THANK YOU

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 PARTNERS
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