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Sr. Project Manager/Project Director

Chatham Select Board Chatham Watershed Permitting Update

July 8, 2025

Welcome

Outline

Background on Town's Comprehensive Wastewater Management Plan (CWMP), Watershed Permitting, and Implementation

- Natural Resource Nitrogen Sensitive Area (NRNSA)
- Comprehensive Planning
- Implementation Summary
 - Initial Focus Areas
 - Changes Since Implementation
 - Phasing
 - Outreach
- Upcoming Efforts

Watershed Permitting Planning Grants

Natural Resource Nitrogen Sensitive Area (NRNSA) Grants



Grant Scope

FY 2024 – Initial (\$60,000) Grant focus:

- Pleasant Bay Alliance (PBA) support
- Filing Notice of Intent for Watershed Permit
- Watershed planning and scoping sessions
- Community outreach workshop planning
- Updated Town water use data for nitrogen analysis

FY 2025 –Current (\$133,500) Grant focus:

- Pleasant Bay Alliance (PBA) support - continued
- Draft watershed planning report preparation
- Public outreach
- Nitrogen loading analysis update
- Implementation phasing and cost update projections

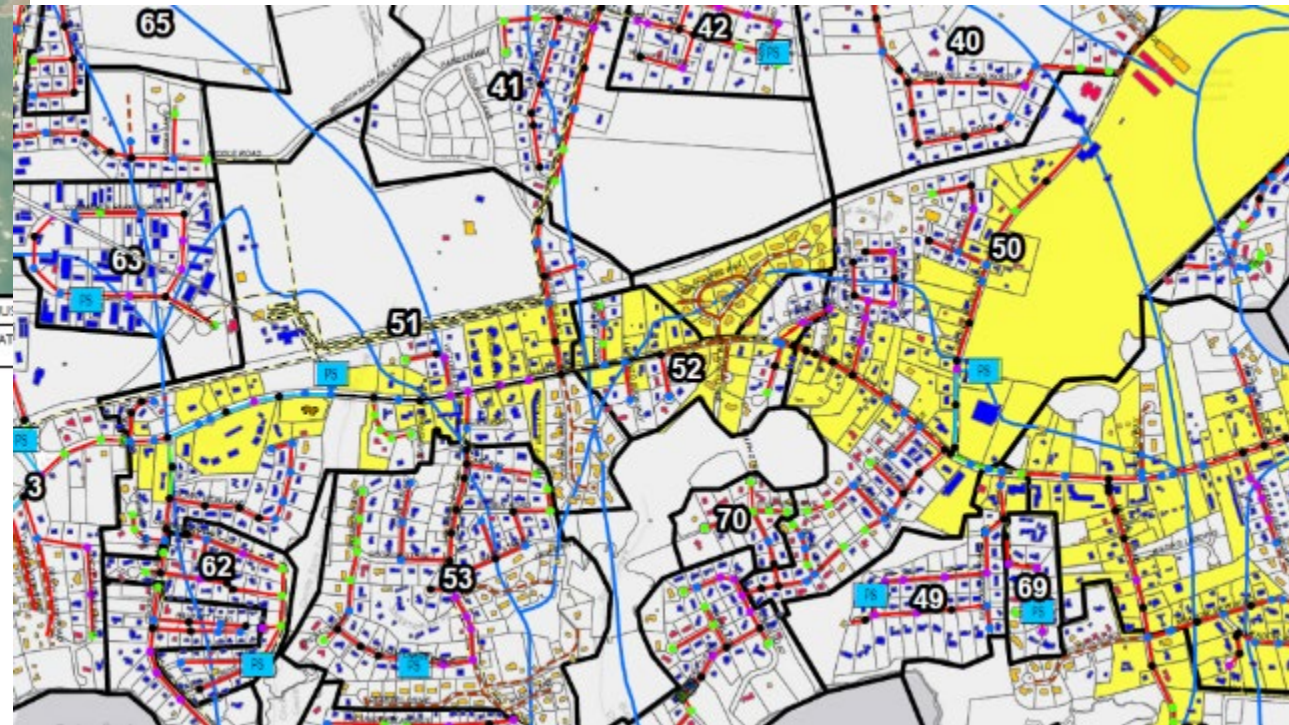
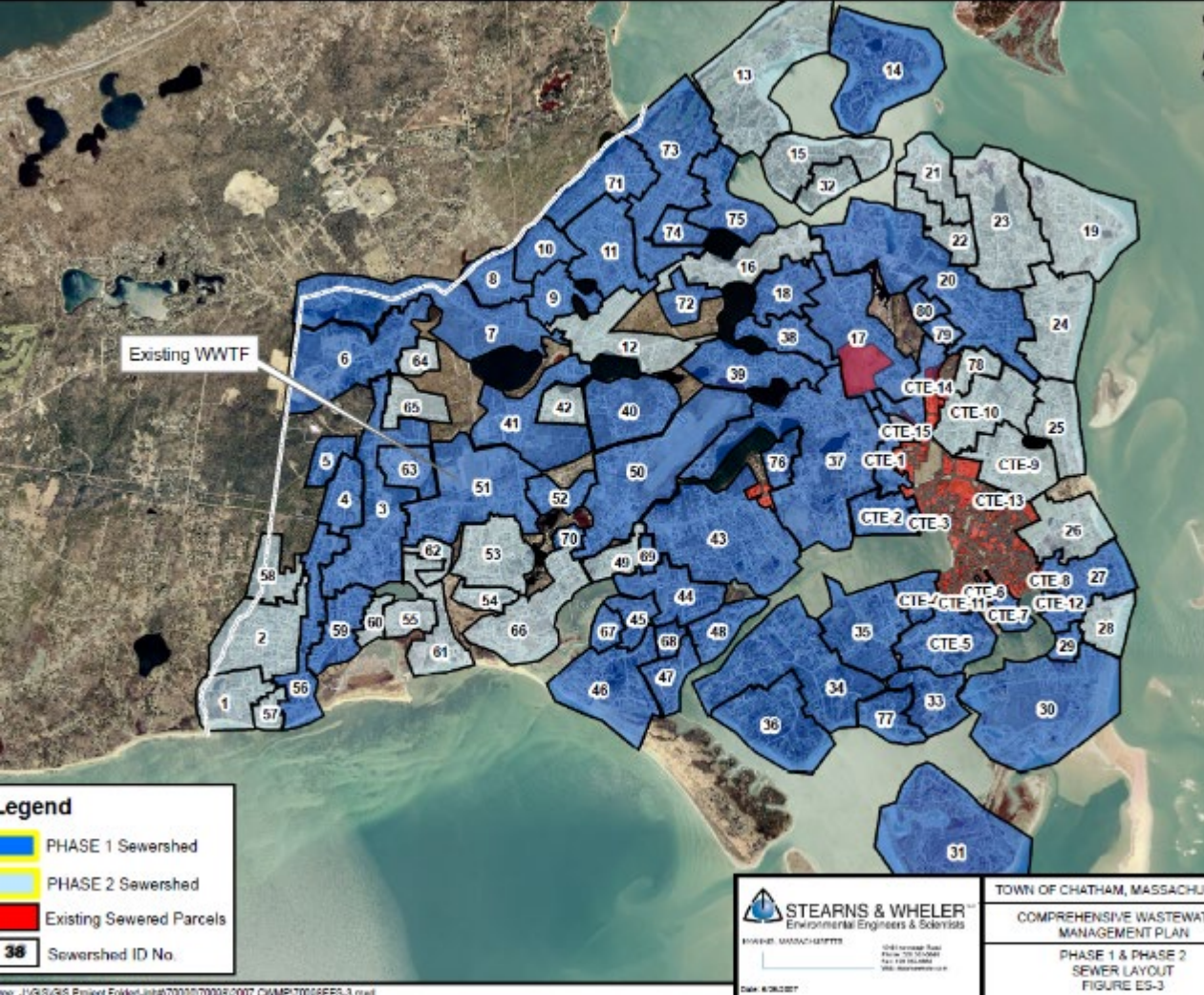
Comprehensive Wastewater Management Plan

- The CWMP was filed and accepted in 2009
- Town plan is to provide sewer to the entire Town in two Phases
 - Phase 1 – to achieve nitrogen Total Maximum Daily Load (TMDL) compliance
 - Phase 2 – to address balance of Town
- In 2018 Chatham, as part of Pleasant Bay Alliance, entered into the State's first watershed permit
- In 2023 State promulgated new Watershed Permit regulations
 - In 2024 Chatham filed their Notice of Intent to file a watershed permit for their remaining watersheds
 - This document will not replace the CWMP but simply provide a Town-wide update of the water use data/nitrogen loading estimates and a 20-year timeline of implementation
 - Watershed permit reports will be issued by the holder every 5 years
 - Watershed permits can be modified throughout the life of the permit with Department of Environmental Protection (DEP) approval
 - Goal is to demonstrate at least 75% compliance within 20 years or demonstrate reasonable progress

Recommended Plan

Two major phases:

- Phase 1 – to address Total Maximum Daily Load (TMDLs) (dark blue) – approx. 4,500 parcels
- Phase 2 – to address fiscal fairness – sewerage entire Town (light blue) – approximately 2,300 parcels
- Existing collection systems and private systems (in red) – approximately 390 parcels



Existing systems include:

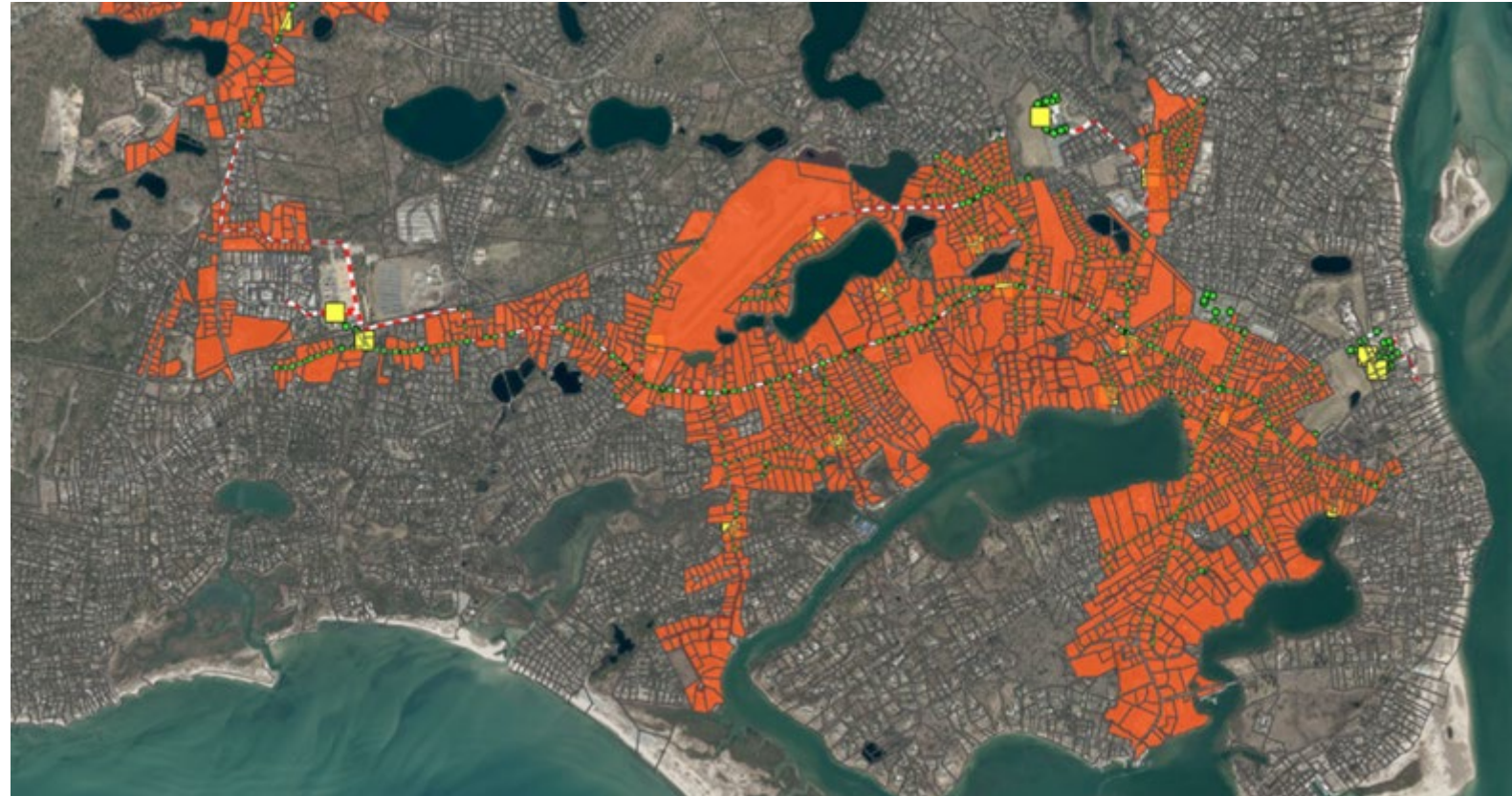
- 1960s sewerage of “downtown” area (and extensions prior to 2009)
- Chatham Bars Inn (not shown in color)
- Bailey’s Path (not shown in color)

Sewer Implementation and Adjustments

Comprehensive Wastewater Management Plan (CWMP) and 2006 Sewer “master plan” evolution:

- Pumping station location changes (impacts to collection system layouts)
- Elimination of pumping stations (lack of available location(s))
- Harwich connection, directed focus west from Stage Harbor
- Pleasant Bay Alliance – watershed permit
- DEP watershed permit requirements
- Time needed to obtain easements
- State Revolving Fund (SRF) and regional funding
- Grinder pump (ownership/operational considerations)

PHASE 1A through 1E: Completed to Date



Implementation Map (Existing – Phase 2)

Chatham Phases:

Phase 1F-1 (Cedar Street, Main Street)

- Includes **BLUE** parcels

Phase 1F-2 (Barn Hill/Katie Ford/1D-2B)

- Includes **PINK** parcels

Phase 1I (Taylors Pond/Mill Creek)

- Includes **PURPLE** parcels

Phase 1J (Muddy Creek/Bucks Creek)

- Includes **TAN** parcels

Phase 1K (Pleasant Bay)

- Includes **BLACK** parcels

Phase 1L (South Coast 1)

- Includes **YELLOW** parcels

Phase 1M (Chatham Harbor)

- Includes **WHITE** parcels

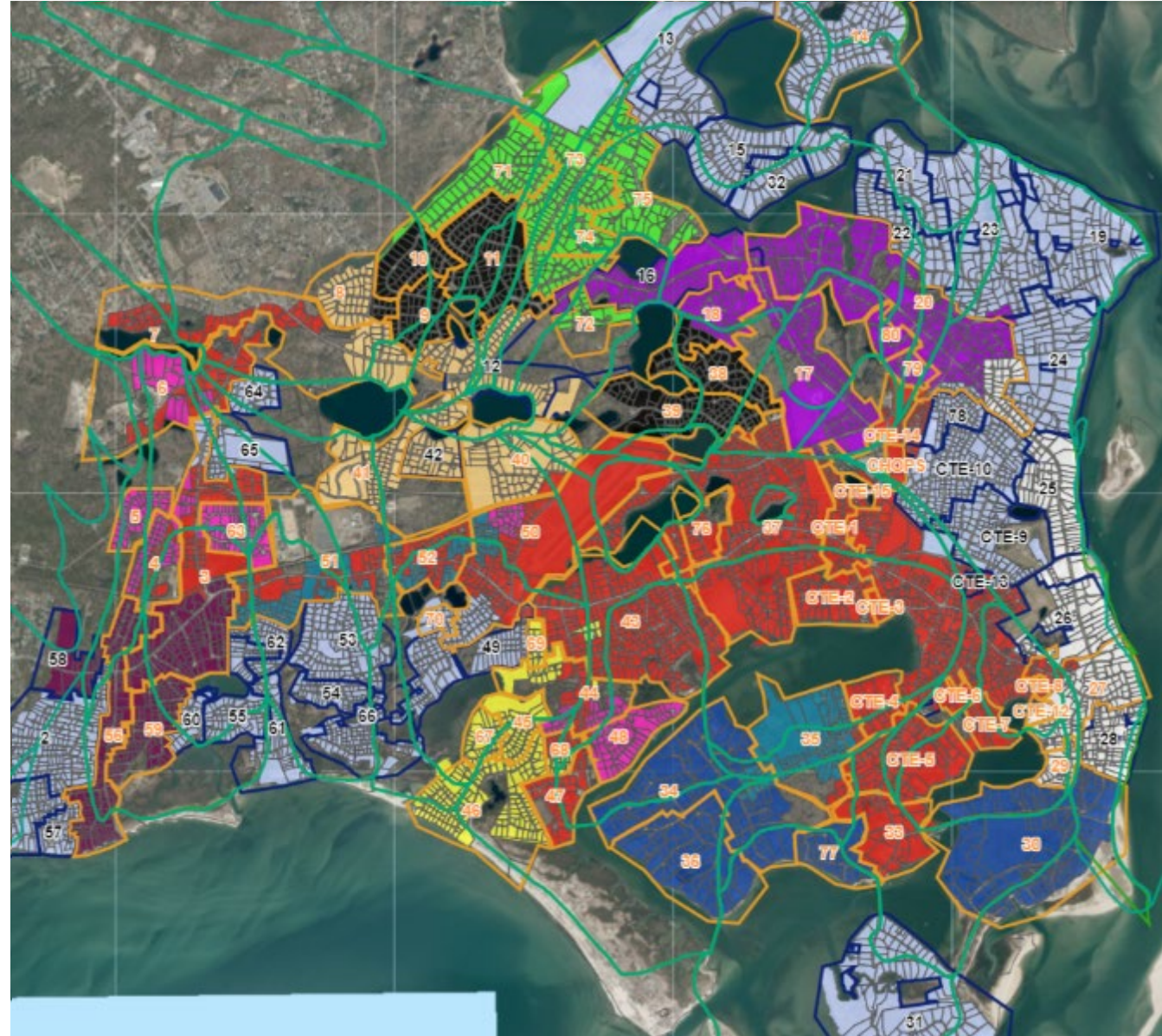
Phase 1N (South Coast 2)

- Includes **BLUE** parcels

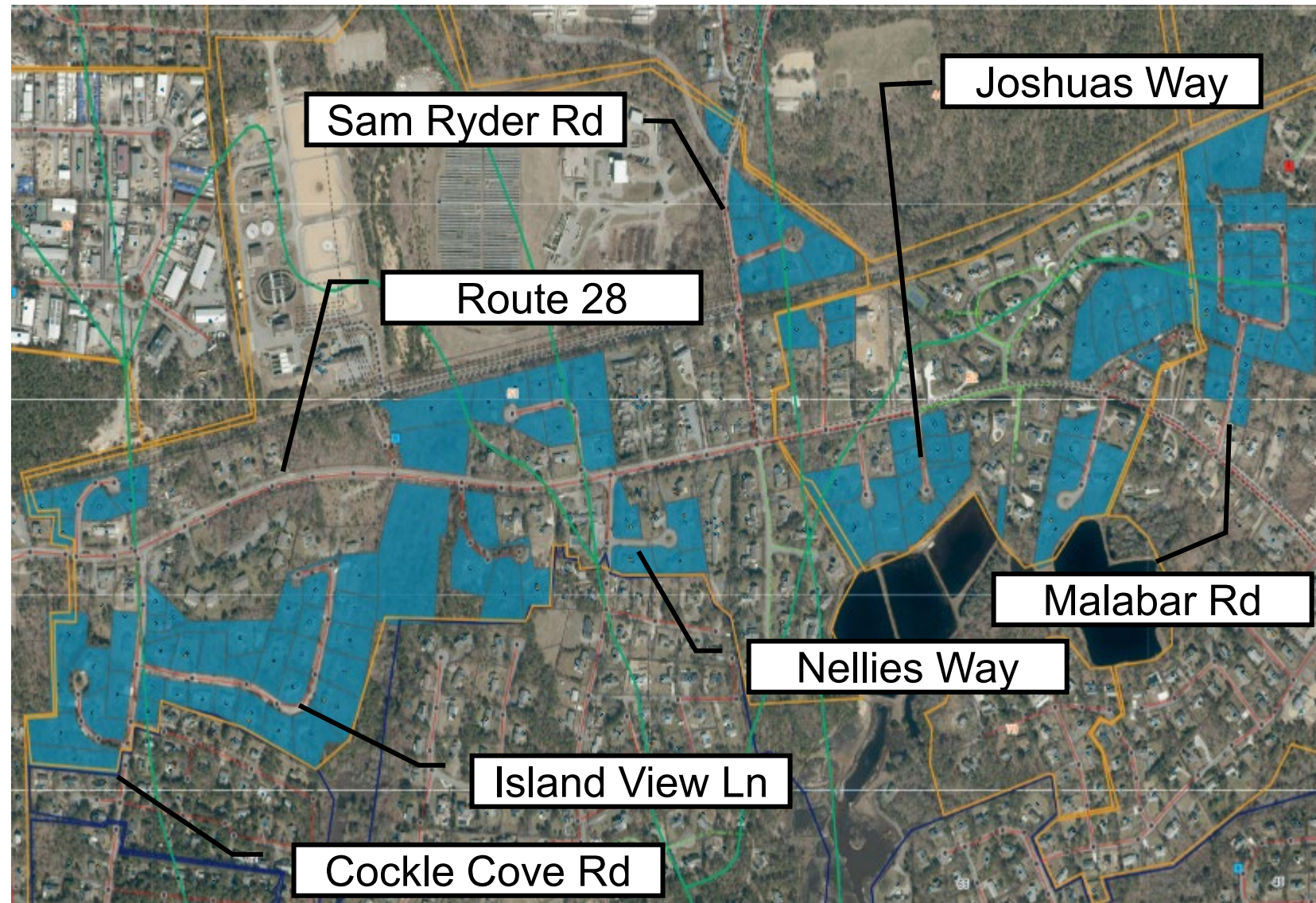
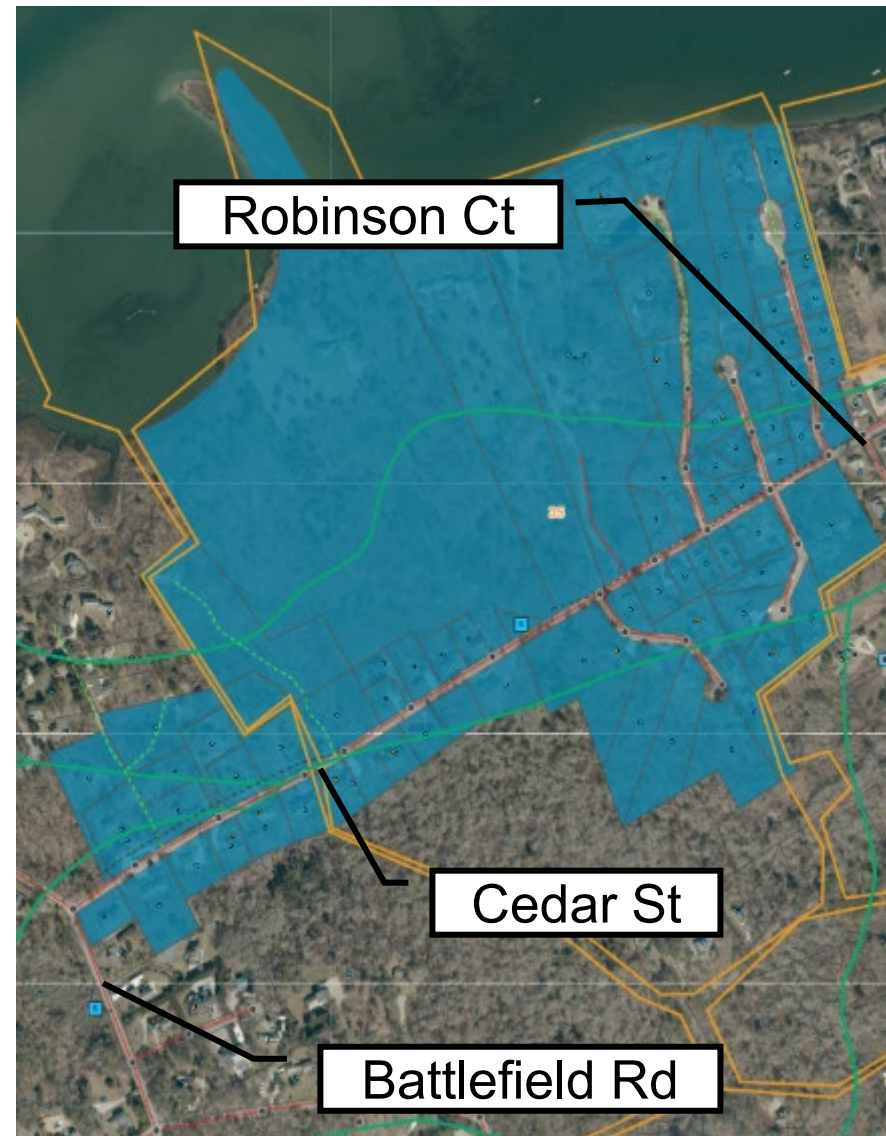
Phase 2

- Includes **LIGHT BLUE** parcels

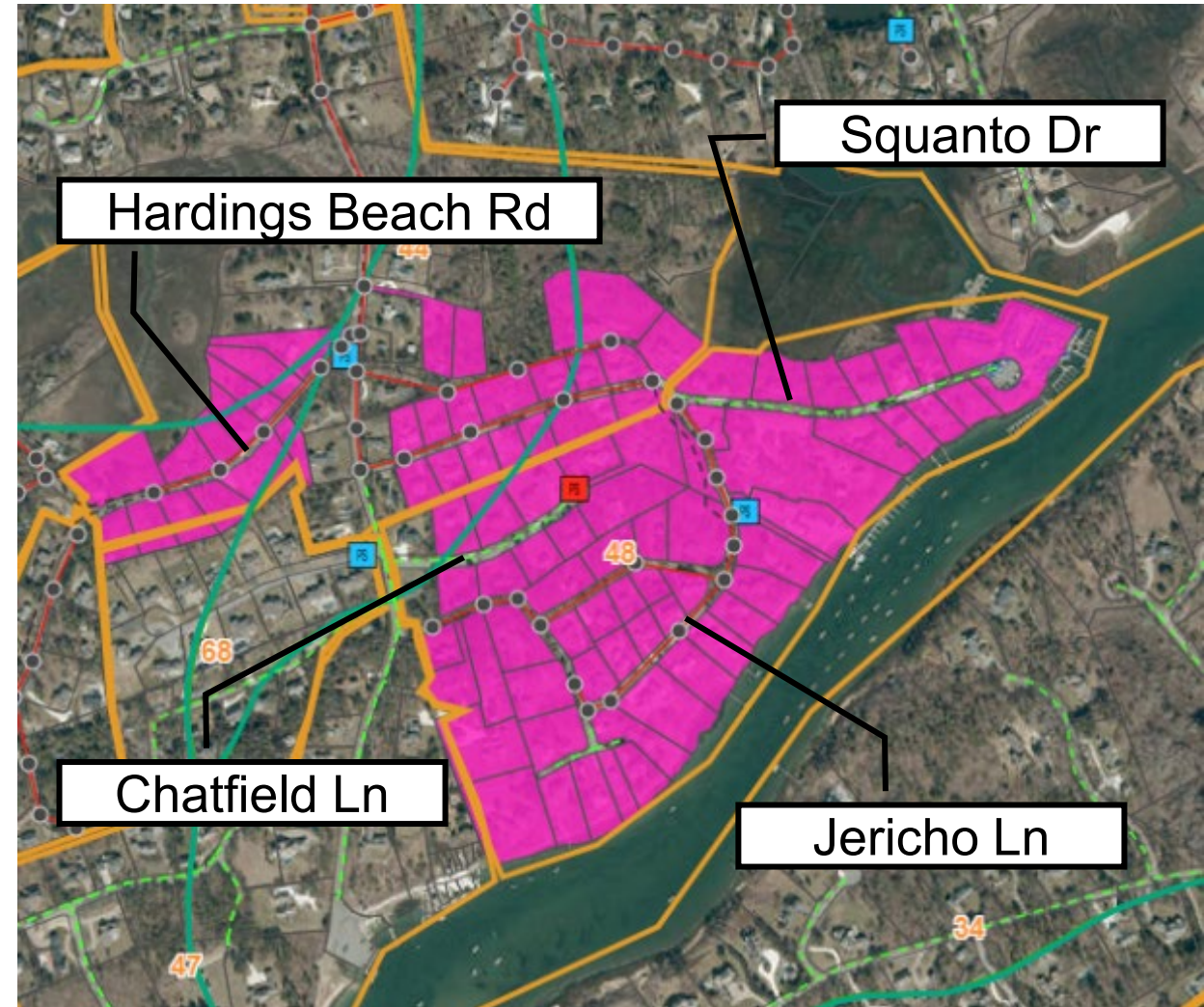
RED parcels represent sewered parcels to date



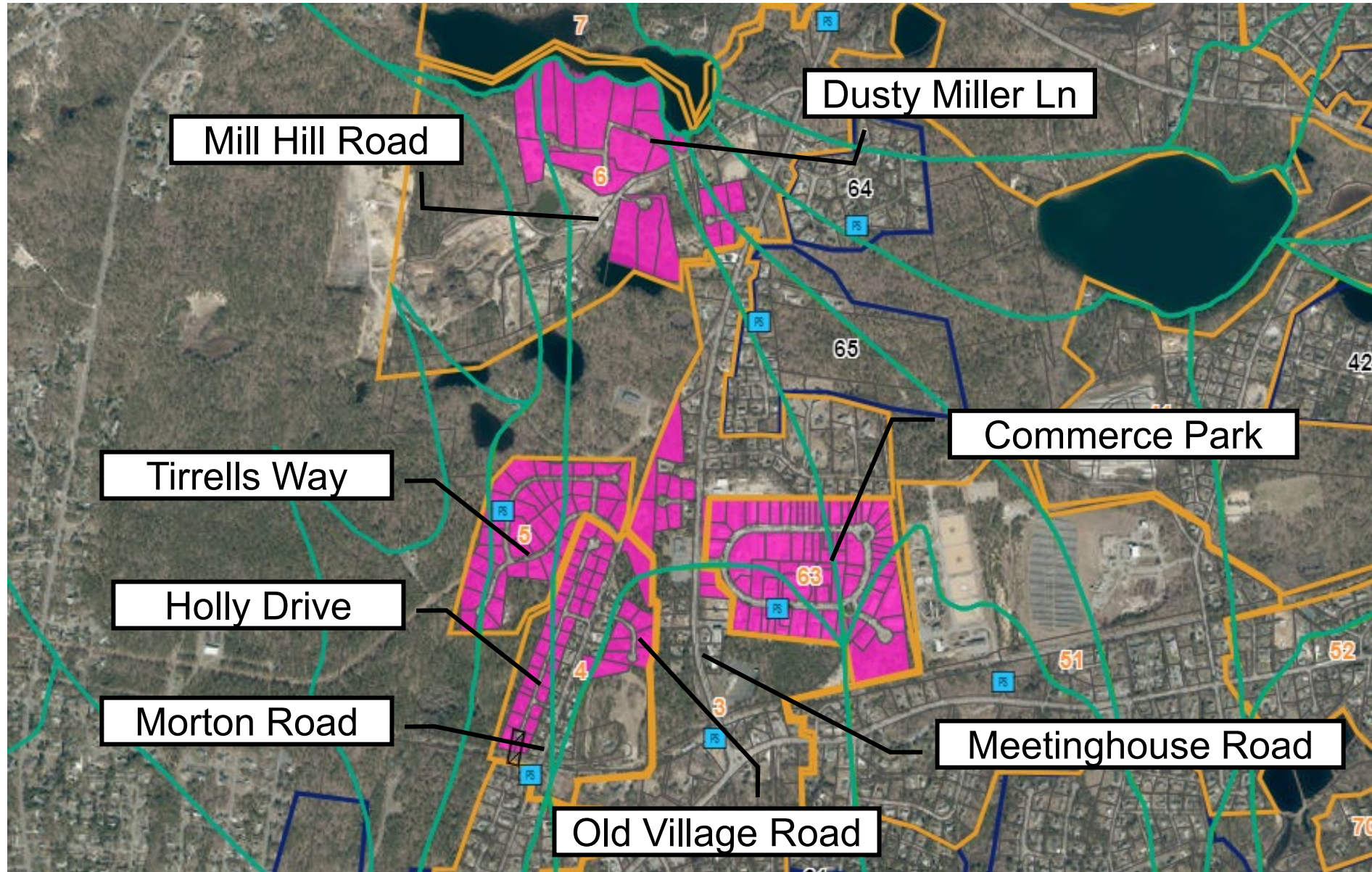
Phase 1F-1 (Cedar/Route 28) 2024-2029



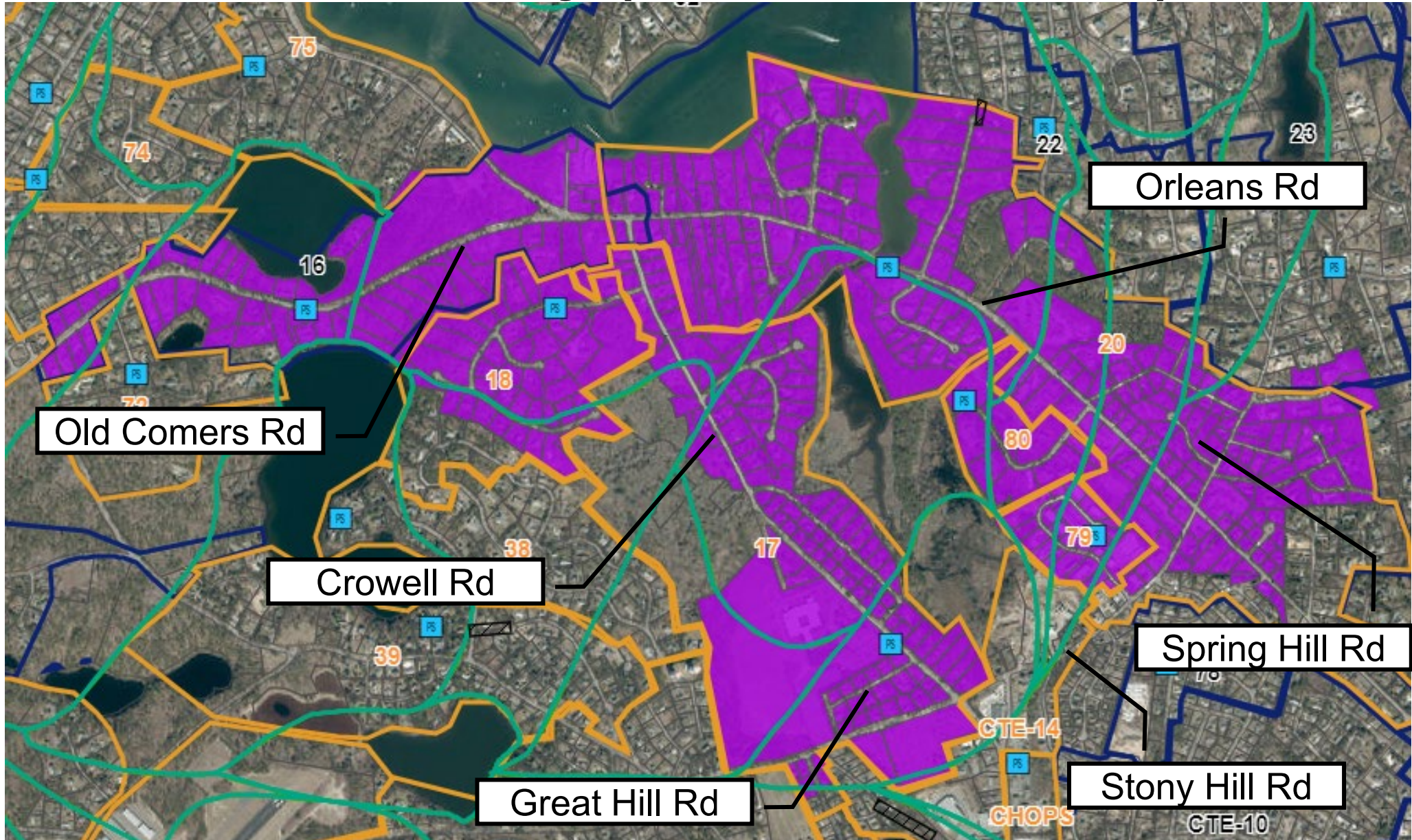
Phase 1F-2 (Barn Hill/Katie Ford) 2026-2031



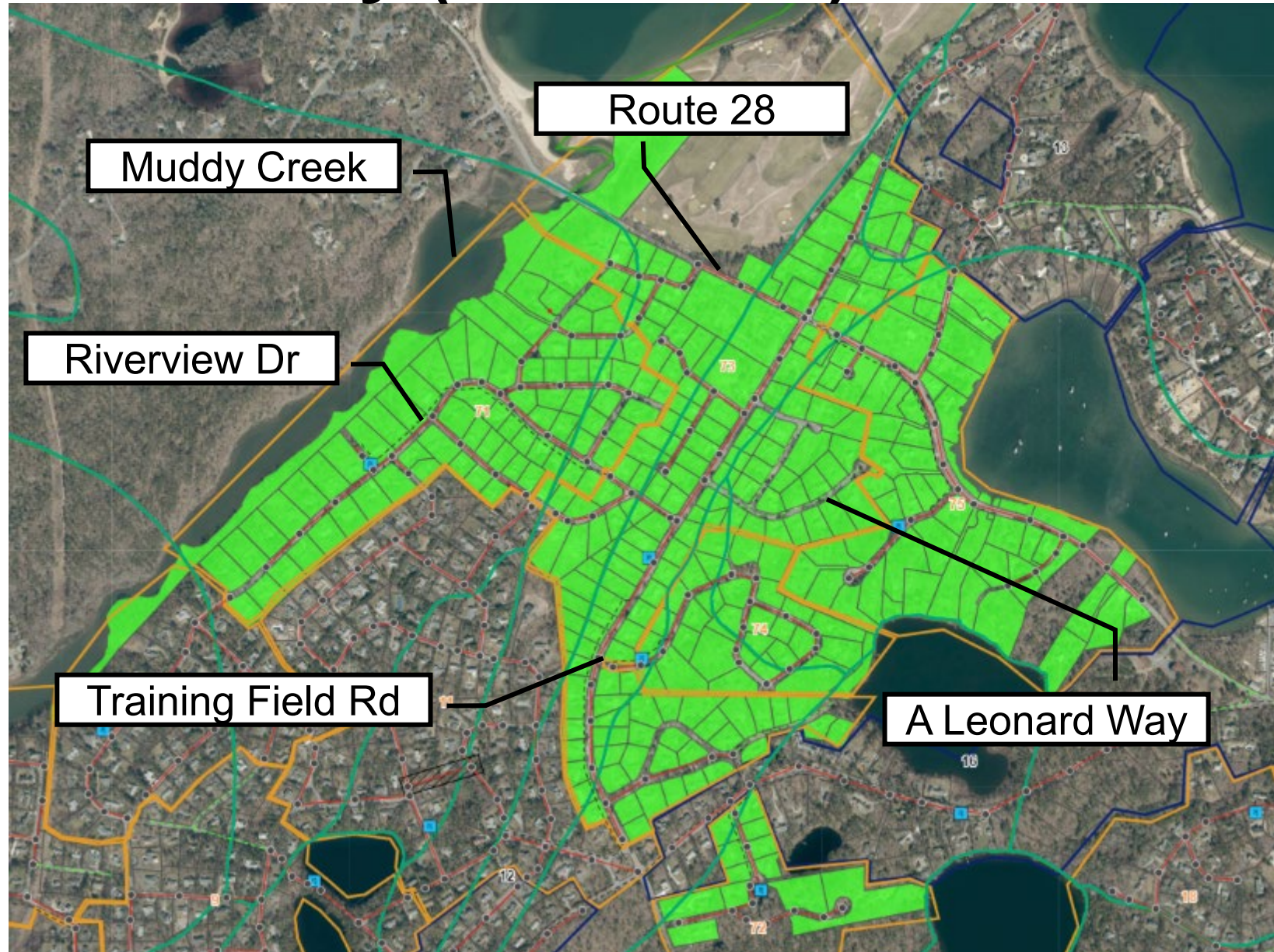
Phase 1F-2 Continued (formerly 1D-2B area) 2026-2031



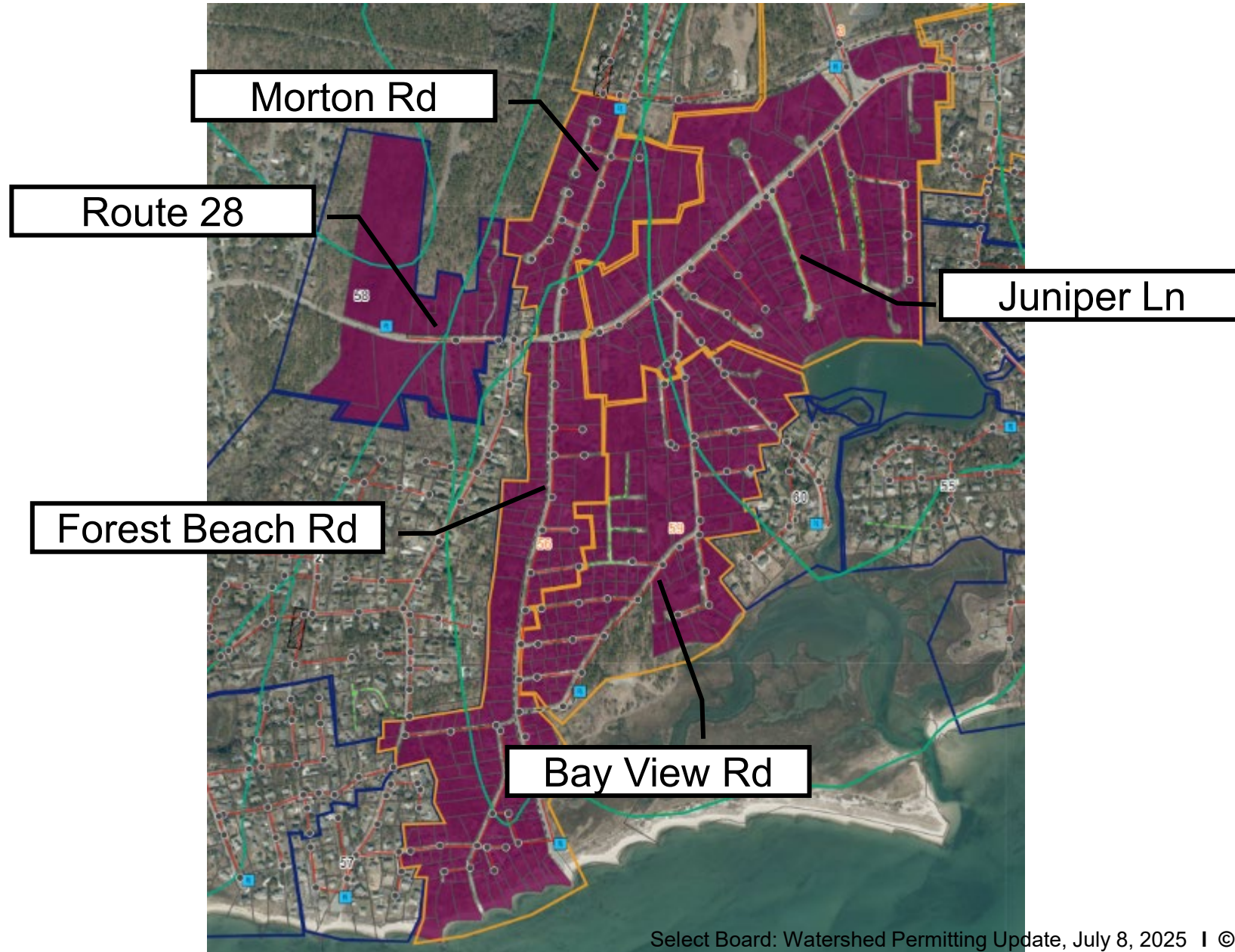
Phase 1G Pleasant Bay (Frost Fish Creek) 2028-2033



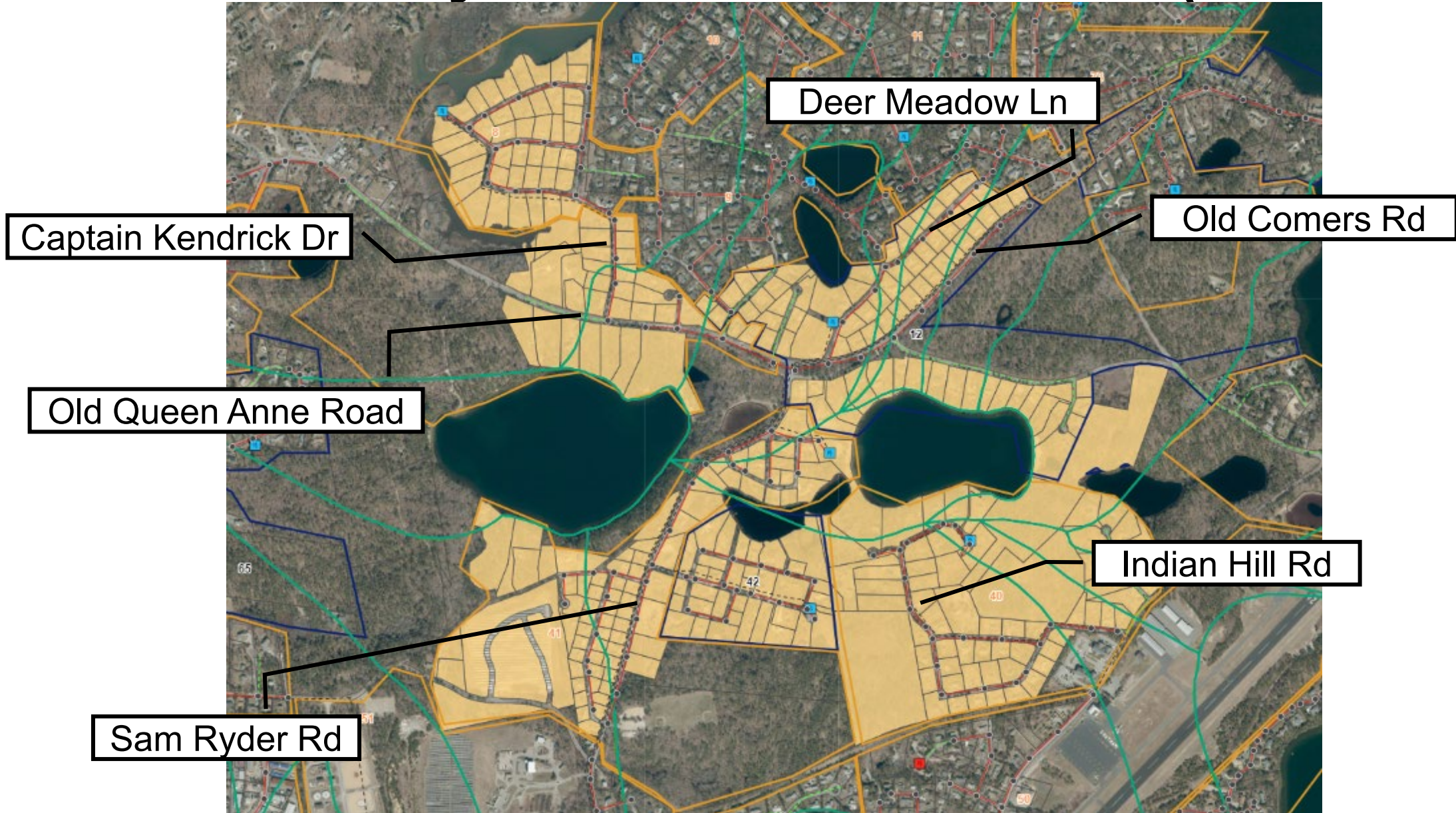
Phase 1H Riverbay (2030-2035)



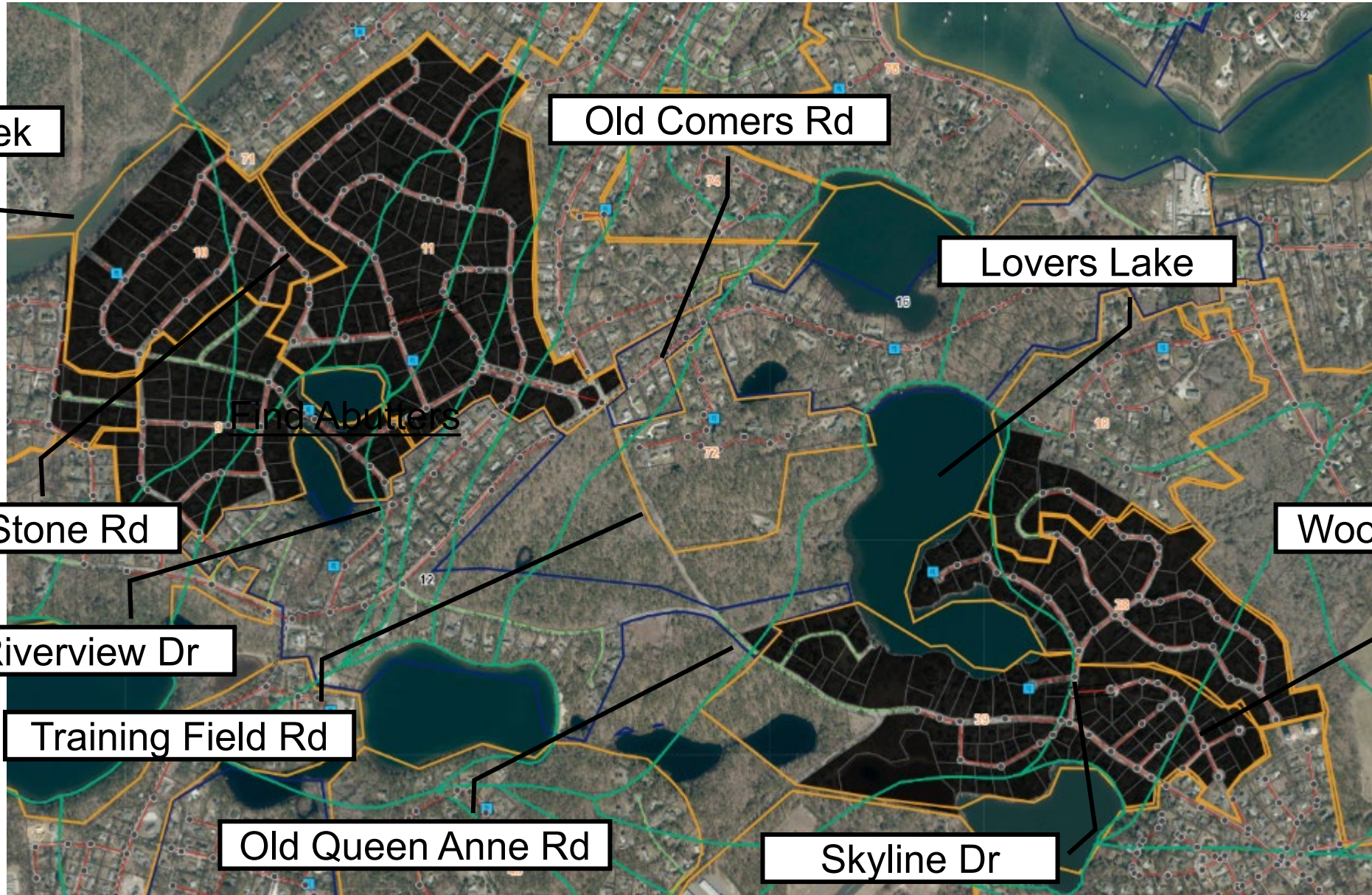
Phase 1I Taylors Pond / Mill Creek (2032-2037)



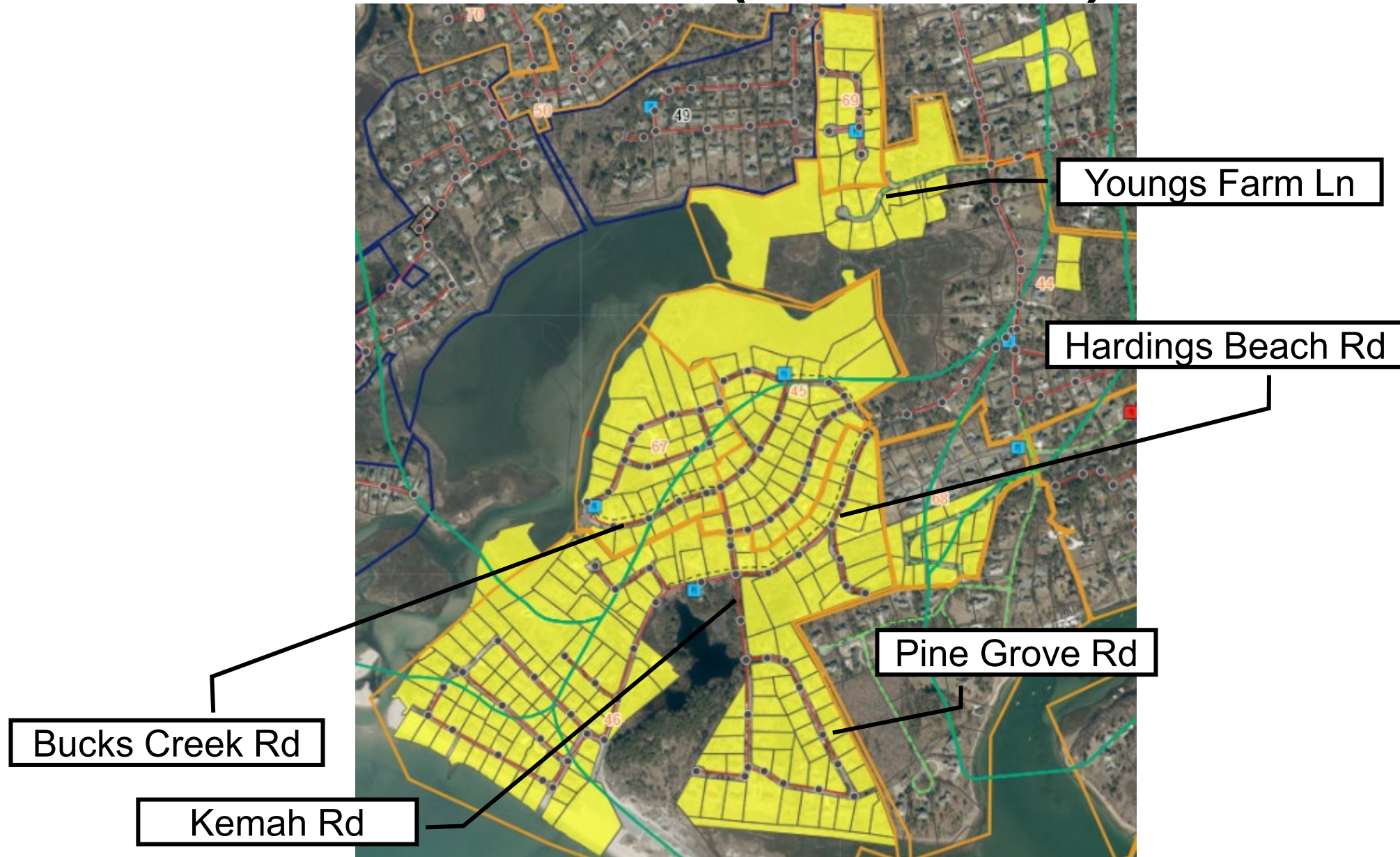
Phase 1J Muddy Creek / Bucks Creek (2034-2039)



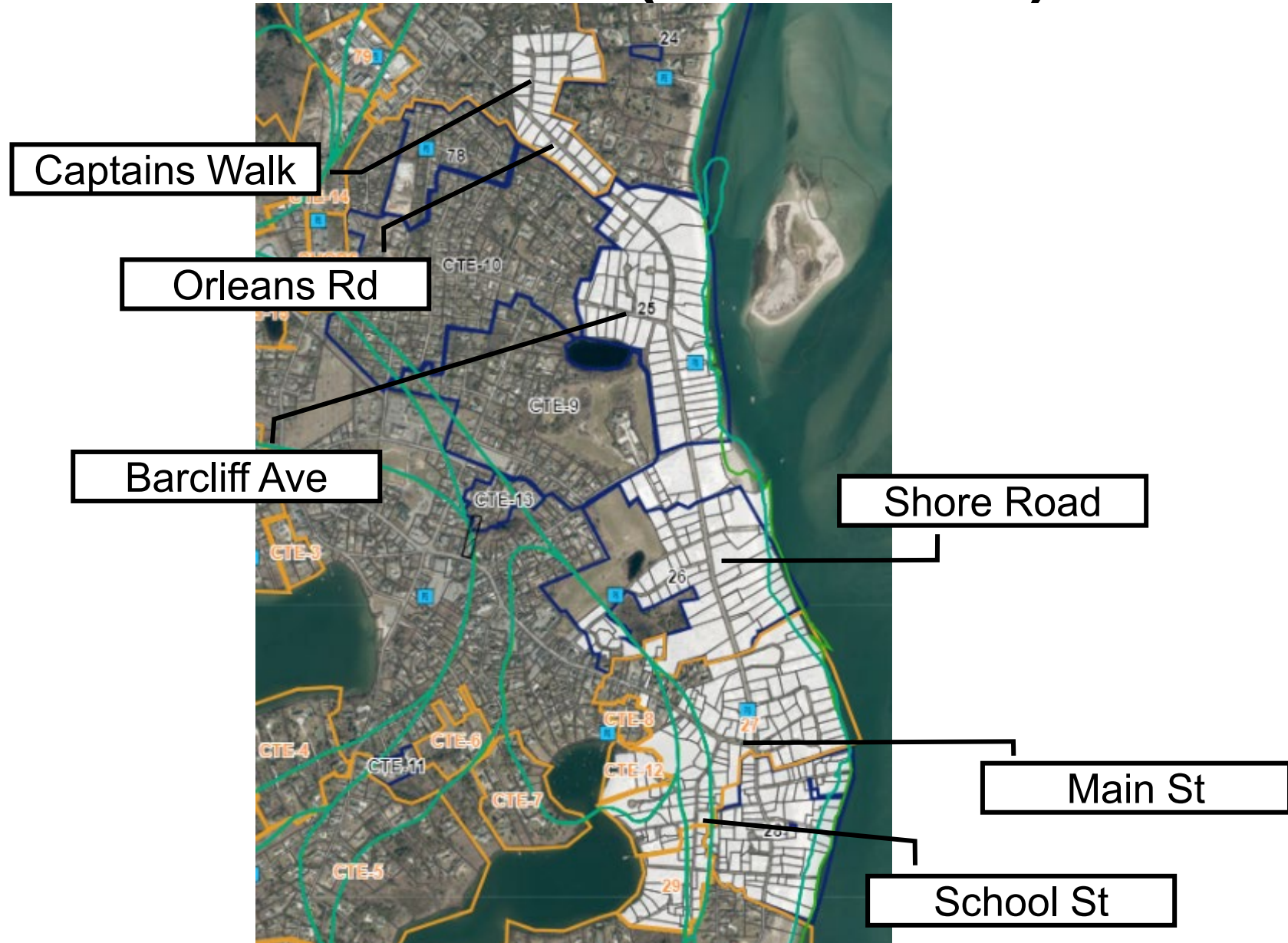
Phase 1K Pleasant Bay (2036-2041)



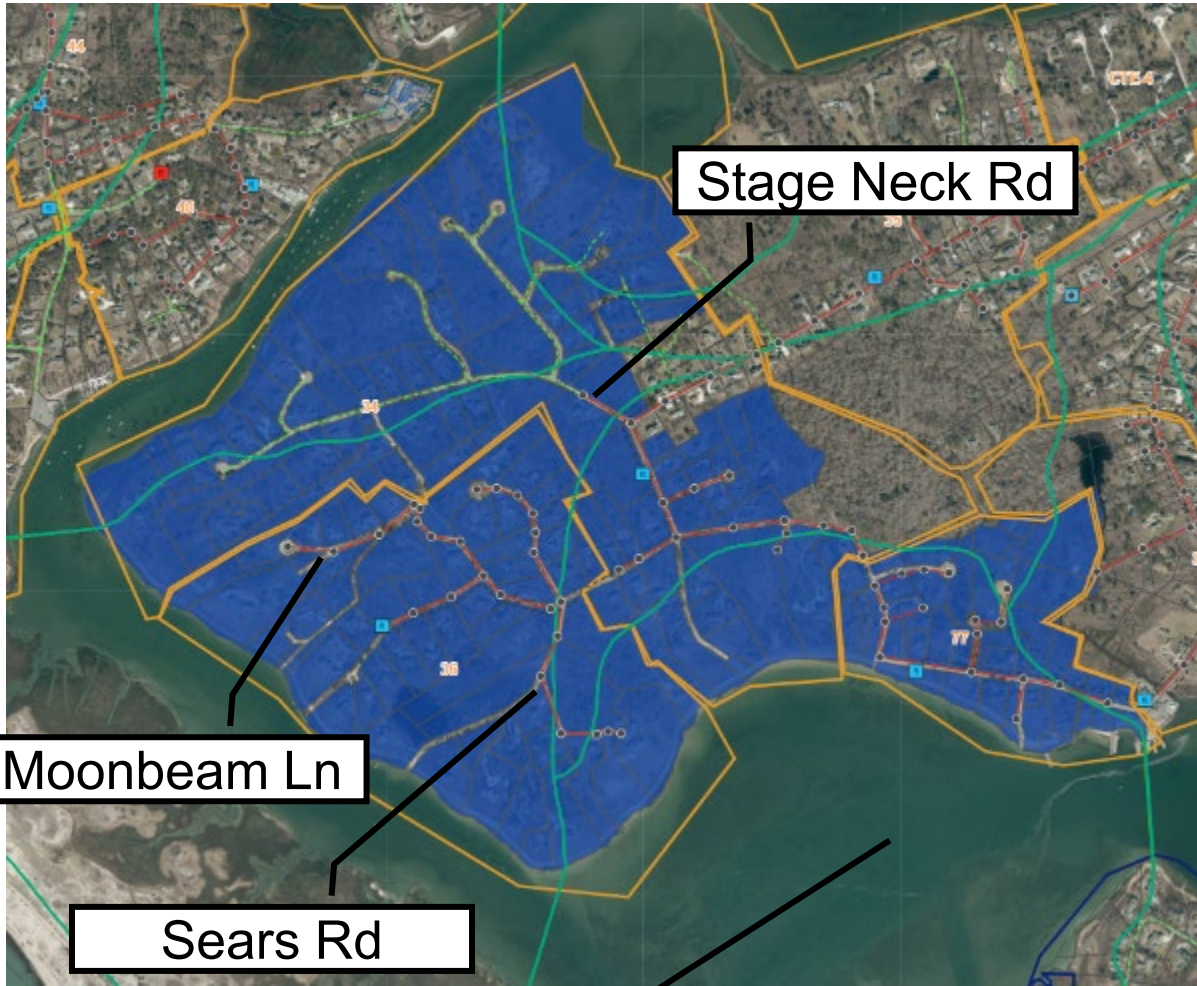
Phase 1L South Coast 1 (2038-2043)



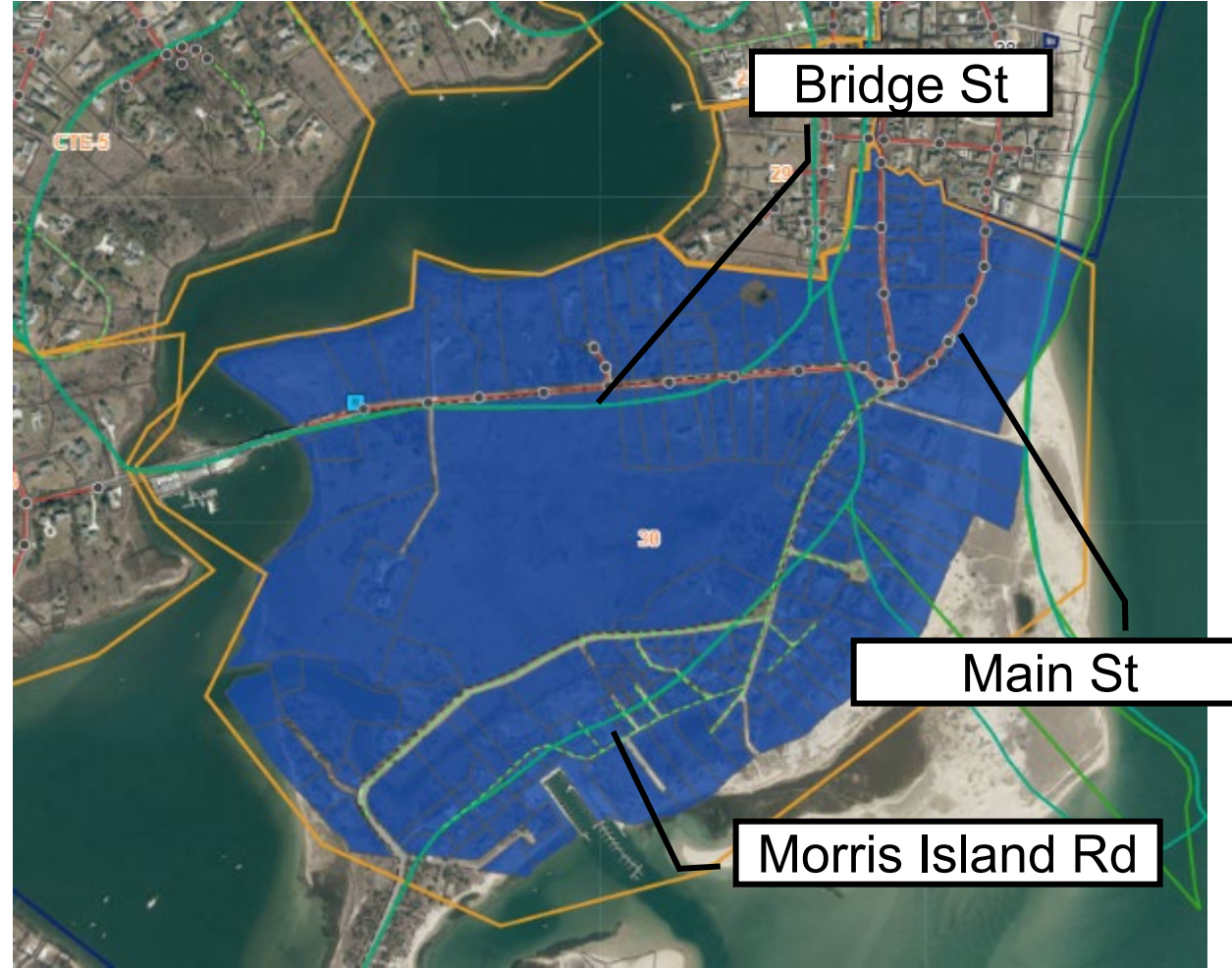
Phase 1M Chatham Harbor (2040-2045)



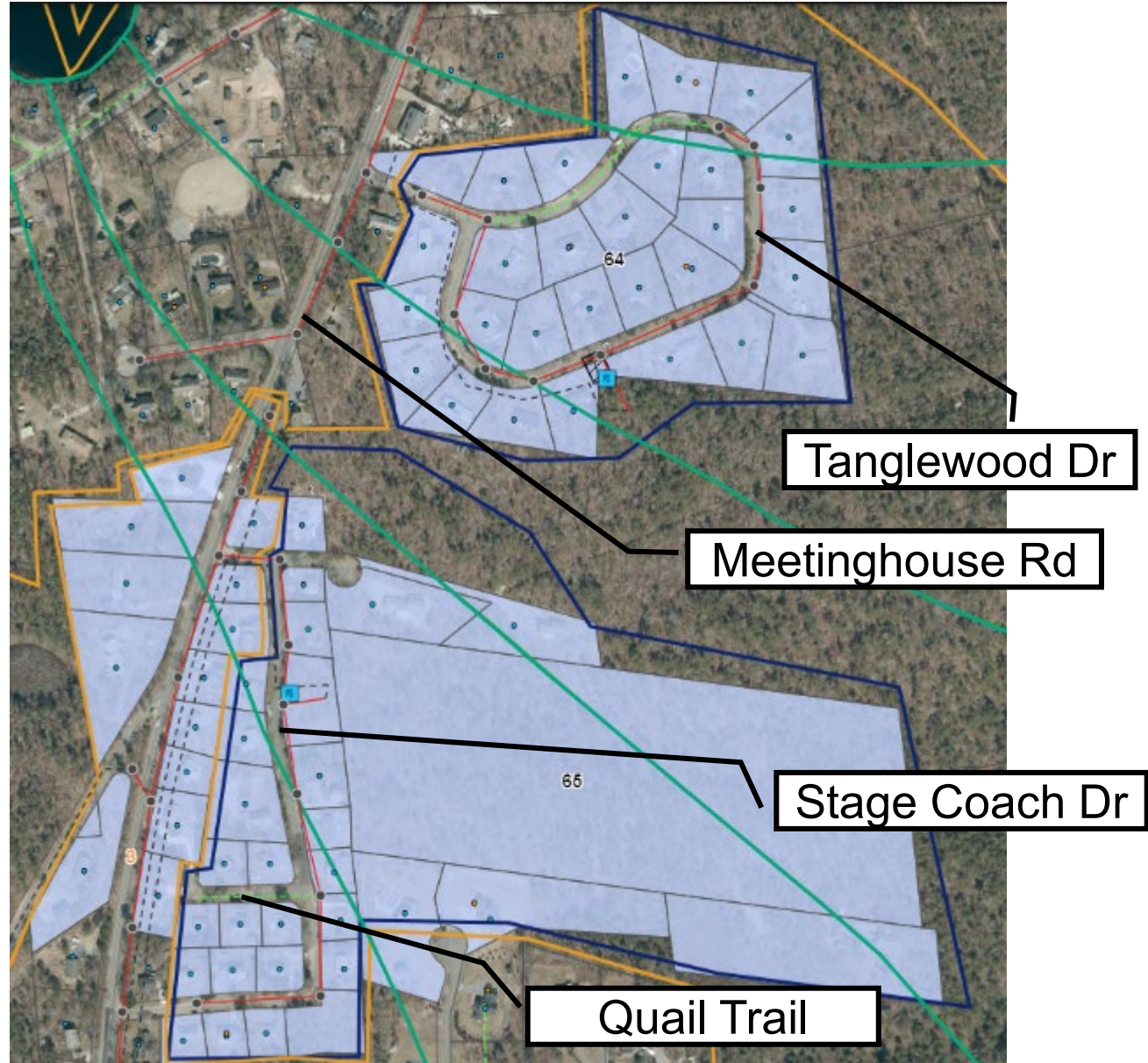
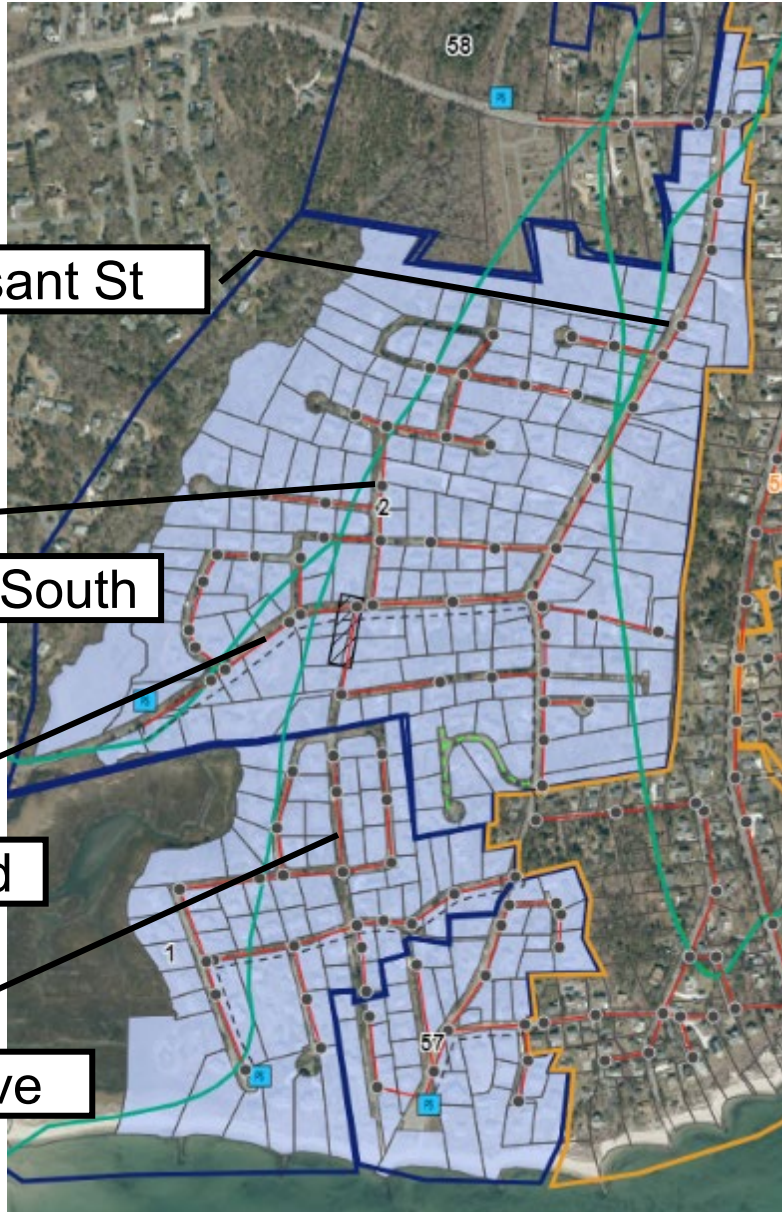
Phase 1N South Coast 2 (2042-2047)



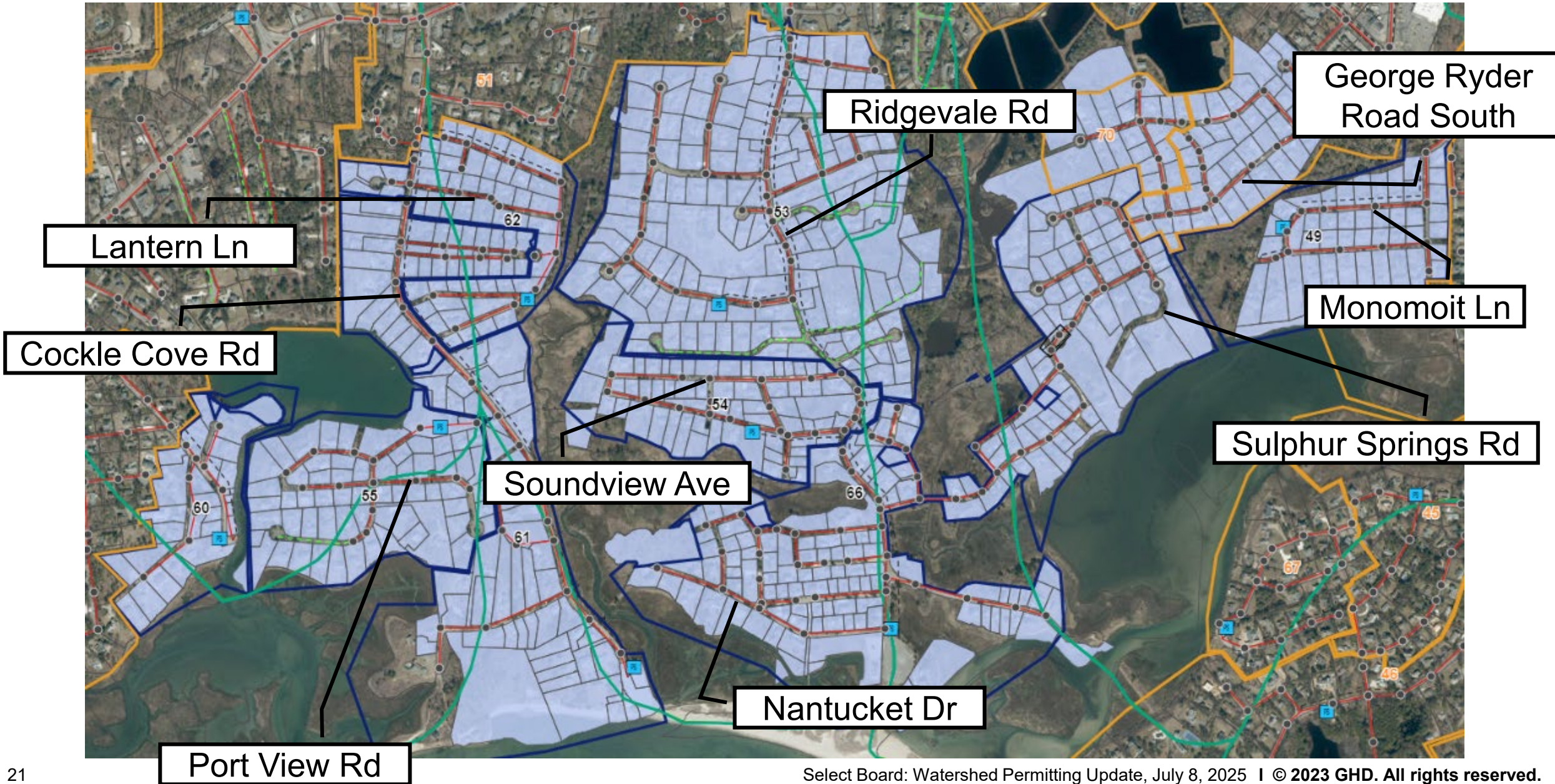
Stage Harbor



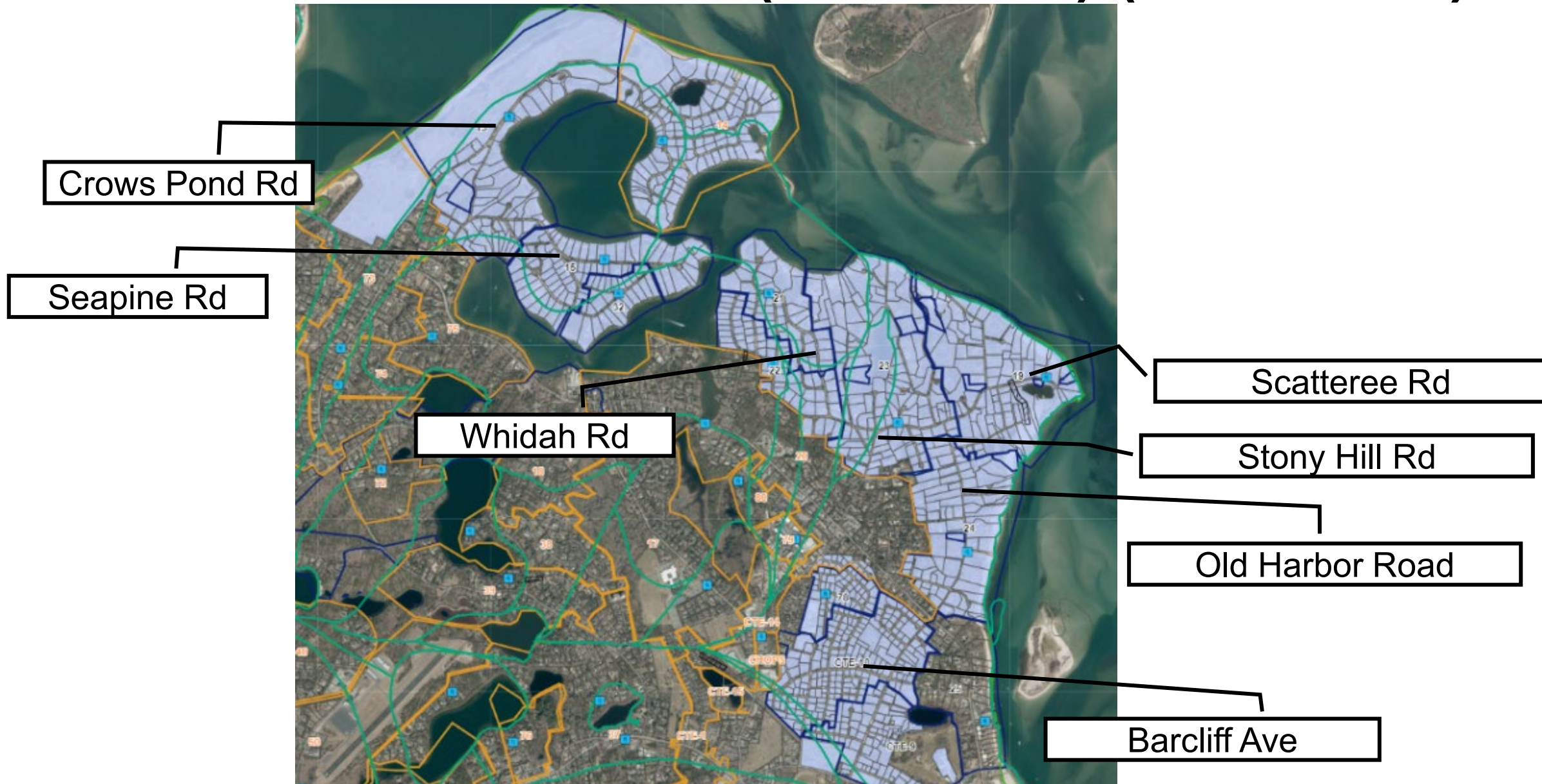
Phase 2: Balance of Town (2044-TBD)



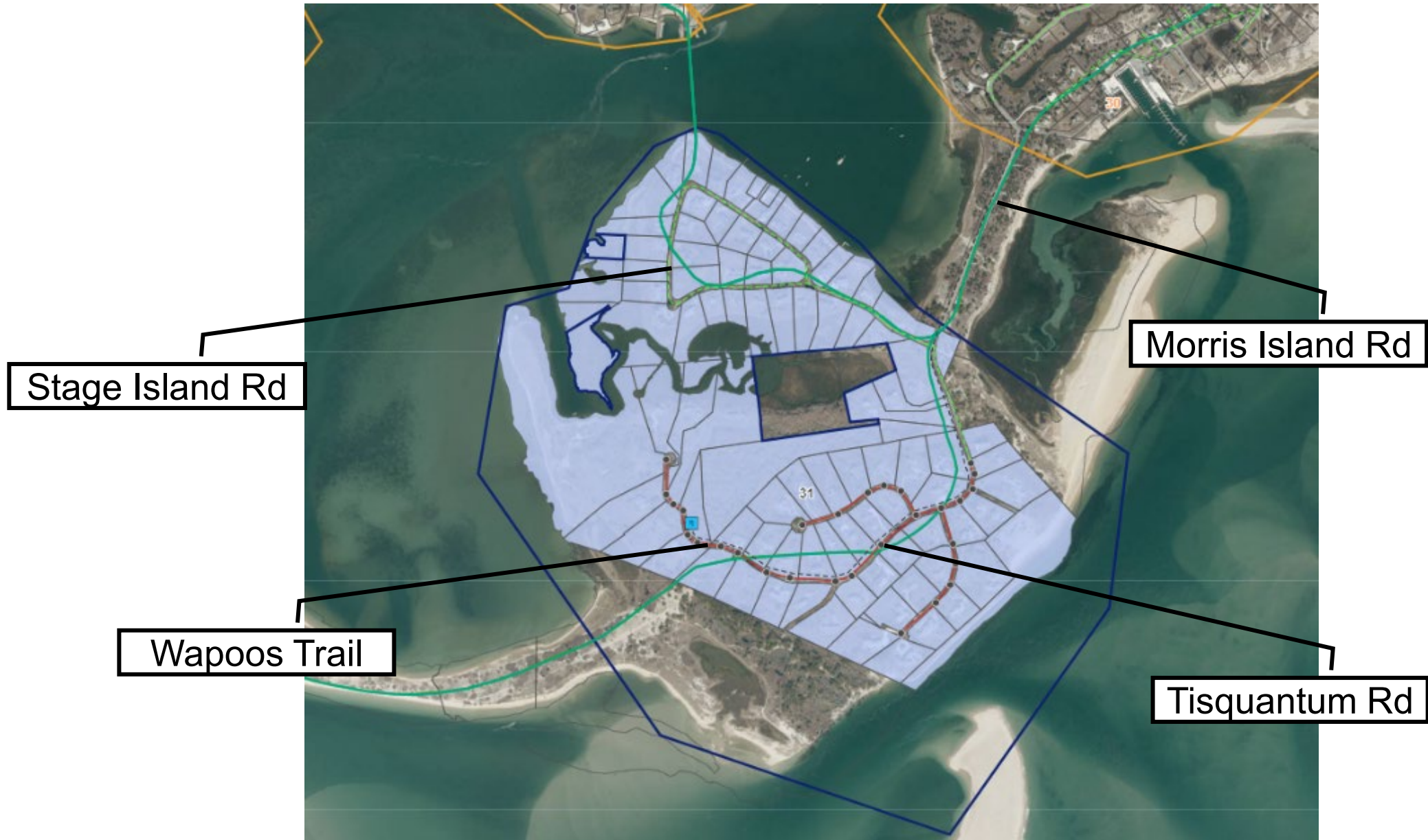
Phase 2: Balance of Town (2044-TBD) (continued)



Phase 2: Balance of Town (2044-TBD) (continued)



Phase 2: Balance of Town (2044-TBD) (continued)



Watershed Permitting Timelines

Original Pleasant Bay Watershed Permit

The original permit managed through the Pleasant Bay Alliance (PBA) started in 2018.

PBA Permit Update (2025/2026)

PBA is considering permit date change with DEP and associated communities.

South Coast Embayments (SCE)

Notice of Intent requires filing by Dec. 2027, therefore anticipated a 2028 date. Originally intended to line up with PBA original permit timeframe.

PBA Permit (Original)	PBA New	SCE Normal	SCE Adj.
2018			
2023			
	2026		
2028		2028	2028
	2031		2031
2033		2033	
	2036		2036
2038		2038	
	2041		2041
		2043	
	2046		2046
		2048	2048

Preliminary Timeline

Implementation Phase	Design / Construction Timeline	Pleasant Bay Alliance Permit Timeline (original 2018 permit)	Pleasant Bay Alliance Permit Timeline (proposed 2025 permit update)	South Coast Embayment Anticipated Permit Timeline
Phase 1F-1 (Cedar/Route 28)	2024-2029	2018 (start) / 2024	2025 / 2026 (Start)	2028 (start)
Phase 1F-2 (Barn Hill/Katie Ford/ 1D-2B area)	2026-2031	2028 / 2029	2030 / 2031	
Phase 1G – Pleasant Bay (Frost Fish Creek)	2028-2033	2033 / 2034		2033
Phase 1H – Riverbay	2030-2035		2035 / 2036	
Phase 1I – Taylors Pond / Mill Creek	2032-2037			
Phase 1J – Muddy Creek / Bucks Creek	2034-2039	2038 / 2039 (original end)		2038
Phase 1K – Pleasant Bay	2036-2041		2040 / 2041	
Phase 1L – South Coast 1 (Hardings Beach)	2038-2043			2043
Phase 1M – Chatham Harbor	2040-2045		2045 / 2046 (end)	
Phase 1N – South Coast 2 (Bridge St. / Stage Neck)	2042-2047			2048 (end)
Phase 2 – Balance of Town	2044-TBD			

Preliminary Anticipated Compliance Timeline

Implementation Phase	Design / Construction Timeline	Pleasant Bay Watersheds (all systems) (%) (2025 – PB Watershed Permit Update**)	South Coast Watersheds (all systems) (%)
Phases A through E	2009-2025		(77% Oyster Pond***); (95% Taylors Pond); (145% Little Mill Pond); (189% Mitchell River)
Phase 1F-1 (Cedar/Route 28)	2024-2029		(102% Taylors Pond)
Phase 1F-2 (Barn Hill/Katie Ford/ 1D-2B)	2026-2031		
Phase 1G – Pleasant Bay (Frost Fish Creek)	2028-2033	(92% Bassing Harbor*); (98% Frost Fish Creek)	
Phase 1H – Riverbay	2030-2035	(86% Crows Pond*)	
Phase 1I – Taylors Pond / Mill Creek	2032-2037		(78% Mill Creek); (167% Taylors Pond)
Phase 1J – Muddy Creek / Bucks Creek	2034-2039	(79% Ryders Cove); (103% Upper Muddy Creek**); (113% Crows Pond*)	(85% Sulfur Springs)
Phase 1K – Pleasant Bay	2036-2041	(50-65% Pleasant Bay**); (107% Frost Fish Creek); (115% Lower Muddy Creek)	
Phase 1L – South Coast 1 (Hardings Beach)	2038-2043		(78% Oyster River); (109% Sulfur Springs)
Phase 1M – Chatham Harbor	2040-2045	(247% Chatham Harbor*)	
Phase 1N – South Coast 2 (Bridge St/ Stage Neck)	2042-2047	(98% Ryders Cove)	(79% Mill Pond***); (86% Stage Harbor); (100% Oyster River)

Note: Cockle Cove Creek, and Bucks Creek have no removal requirements;

* Bassing Harbor, Crows Pond and Chatham Harbor had no original removal requirements, however, following the 2025 Pleasant Bay Watershed Permit identifies some increased removal requirements from original 2018 Permit.

** Majority of PB watersheds reflect updated 2025 proposed permit values. Upper Muddy Creek and Pleasant Bay impacted by model changes: less WW load then needed to remove, therefore 2018 limits shown for these watersheds.

*** Oyster Pond and Mill Pond generate less WW nitrogen than removal limits identify. Compliance does not include growth or non-wastewater loads

Outreach

- South Chatham Community Outreach Meeting – May 22, 2025
- Select Board Meeting – July 8, 2025
- Upcoming:
 - Neighborhood discussions on areas that are projected to need grinder pumps/pressure sewer
 - Holly Drive (North and South)
 - Ebens / Tirrells
 - Commerce Park discussion
- Fall Select Board Meeting – Watershed Permit Preliminary Draft and Cost presentation
- Subsequent Select Board Meeting – Incorporation of Select Board comments on Preliminary Draft

Upcoming Town Efforts

- Neighborhood discussions on areas that are projected to need grinder pumps/pressure sewer
 - Holly Drive (North and South)
 - Ebens / Tirrells
 - Commerce Park
- Applications for future MassDEP Grants for additional planning funds for Watershed Permitting, as available
- Grinder pump procurement
- Town will be looking at next phases of implementation with focus on:
 - nitrogen loading, growth, and watershed permit perspective
 - collection system expansion
- Filing watershed permit for South Coastal Embayments by end of 2027



*** Thank You**