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# Community Workshop

# Chatham Watershed Permitting

# Update

South Chatham  
May 22, 2025

# Welcome

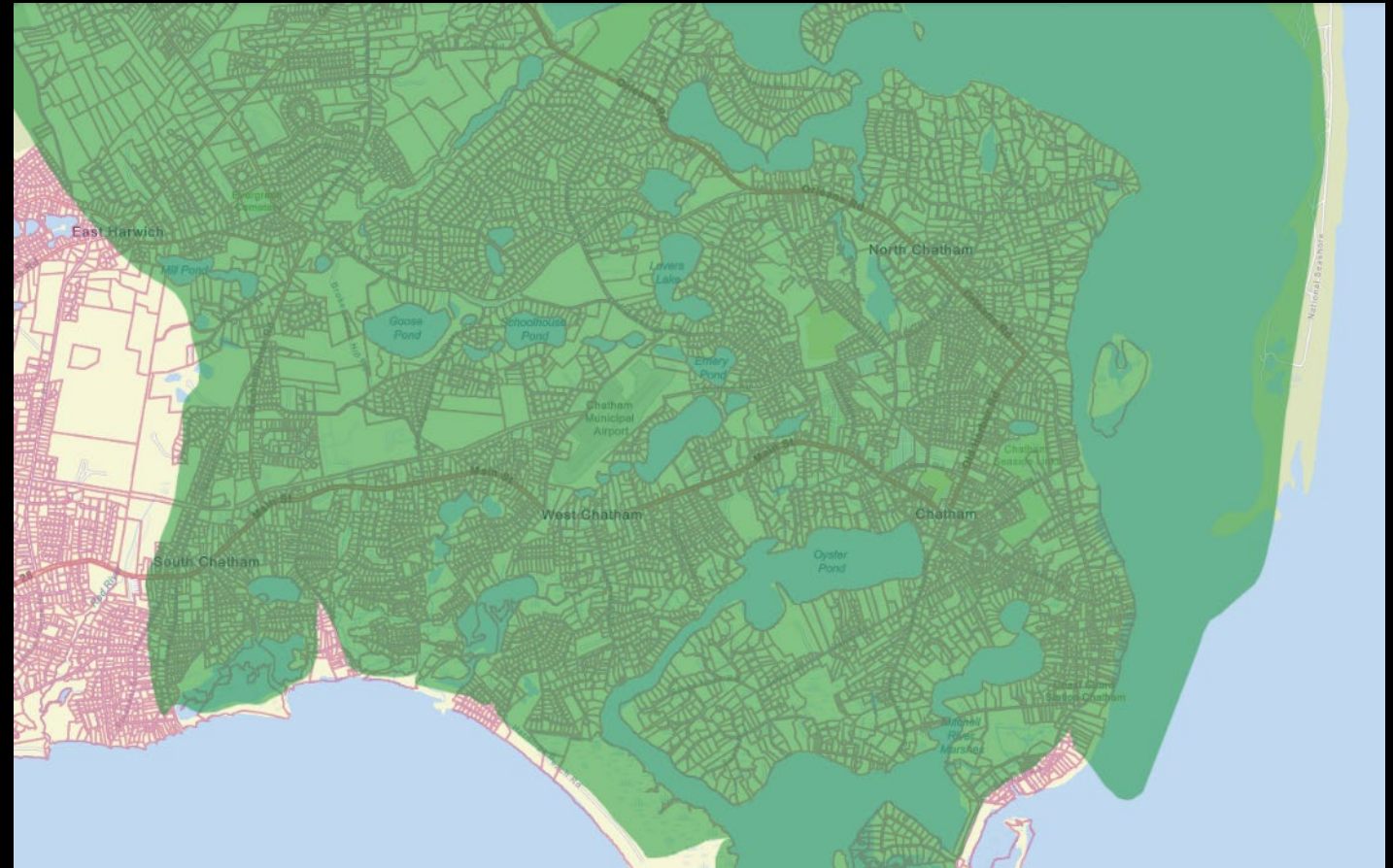
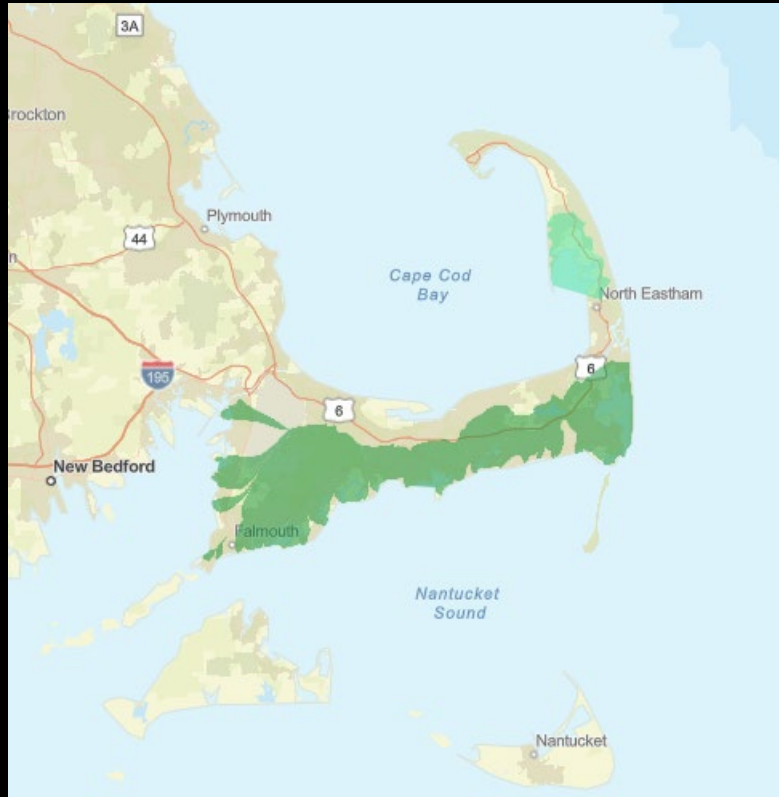
# Outline

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

- Natural Resource Nitrogen Sensitive Area (NRNSA) Grants
- Comprehensive Planning Background
  - Background
  - Findings
  - Comprehensive Planning Timeline
- Implementation Summary
  - Initial Focus Areas
  - Changes Since Implementation
  - Focus on South Chatham
- Upcoming Efforts

# Watershed Permitting Planning Grants

## Natural Resource Nitrogen Sensitive Area (NRNSA) Grants



# Grant Scope

## FY 2024 – Initial 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 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

# CWMP Process Background

- Town entered the MEPA review process at the beginning of the project in late 1990's
  - Town created a Citizens Advisory Committee (CAC)
  - Town created a Technical Advisory Group (TAG)
    - The two groups would meet regularly to discuss the project and the progress and make recommendations to Select Board
- Filed the CWMP in 2009

# CWMP / Planning Current Chronology

## PLANNING

- 1997/1998
  - Chatham hires Stearns & Wheler (now GHD) to complete CWMP
- 1998
  - Chatham enters the Massachusetts Environment Policy Act (MEPA) process in 1998
- 1999
  - Chatham completes the Needs Assessment Report
  - After report, project is put on hold as in 2000 the Massachusetts Estuaries Project kicks off for Chatham
- 2006
  - Townwide SewerCAD Modeling and Sewer Master Planning
- 2009
  - Final CWMP and MEPA Certificate
- 2018
  - PBA Watershed Permit entered
  - Annual reports filed
  - SewerCAD Model updated
- 2023
  - Filed NOI for Watershed Permit
  - Covers Southern Embayments (Stage Harbor, Taylors Pond/Mill Creek, Sulfur Springs/Bucks Creek)
- FY2024
  - \$60,000 Grant to start watershed permit plan outlines
- FY2025
  - \$133,000 Grant to further develop the plan
  - Public outreach
  - Update of phasing and cost development
- 2025
  - PBA Watershed Update
- 2027
  - Watershed Permit Filing – South Coastal Embayments

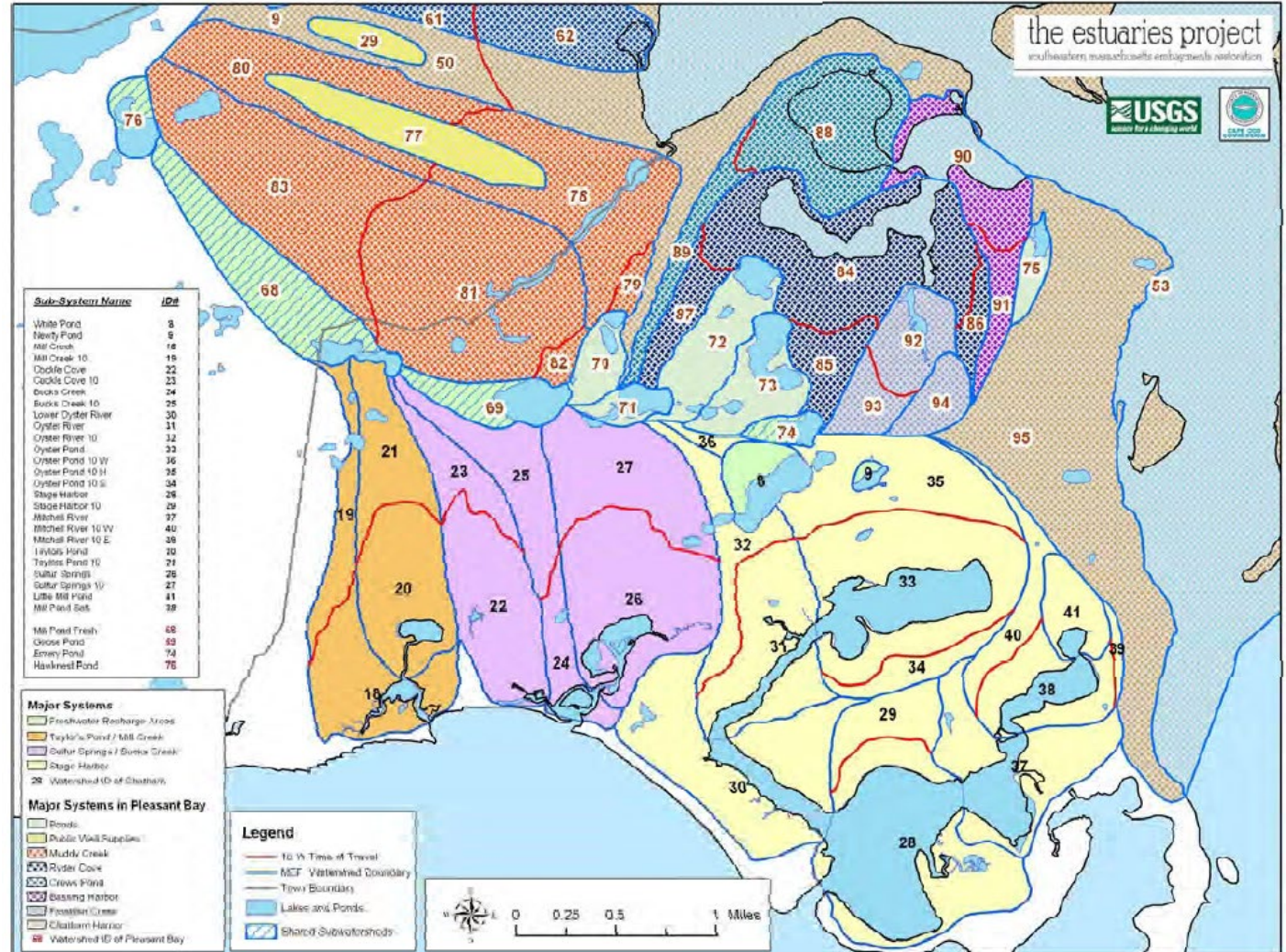
# Needs Assessment Findings

- Six Coastal Embayment Watersheds – TMDL compliance
  - (TMDL compliance identified after Needs Assessment – preliminary work based on Stage Harbor study indicating nitrogen impacts)
- Industrial Zoned Areas
  - Enterprise Drive and Commerce Park
  - Potential for introduction of contaminants into the groundwater
  - Located within Town Water Resource Protection District
  - Located within coastal embayment watersheds
- Town also looked at high groundwater areas, flood zones, low permeability soils areas, buffer areas around freshwater ponds and lakes

# CWMP / Chronology

## SCIENTIFIC STUDY

- 2003
  - Stage Harbor, Sulfur Springs, Taylors Pond, Bassing Harbor, Muddy Creek MEP Report Completed
- 2006
  - Pleasant Bay System, Orleans, Chatham, Brewster & Harwich MEP Report Completed
- 2007
  - Updated Stage Harbor/Oyster Pond, Sulphur Springs/Bucks Creek and Taylors Pond/Mill Creek MEP Report
- 2007
  - Pleasant Bay Final TMDL
- 2008
  - Stage Harbor/Oyster Pond, Sulphur Springs/Bucks Creek, Taylors Pond/Mill Creek Final TMDL



# CWMP Findings

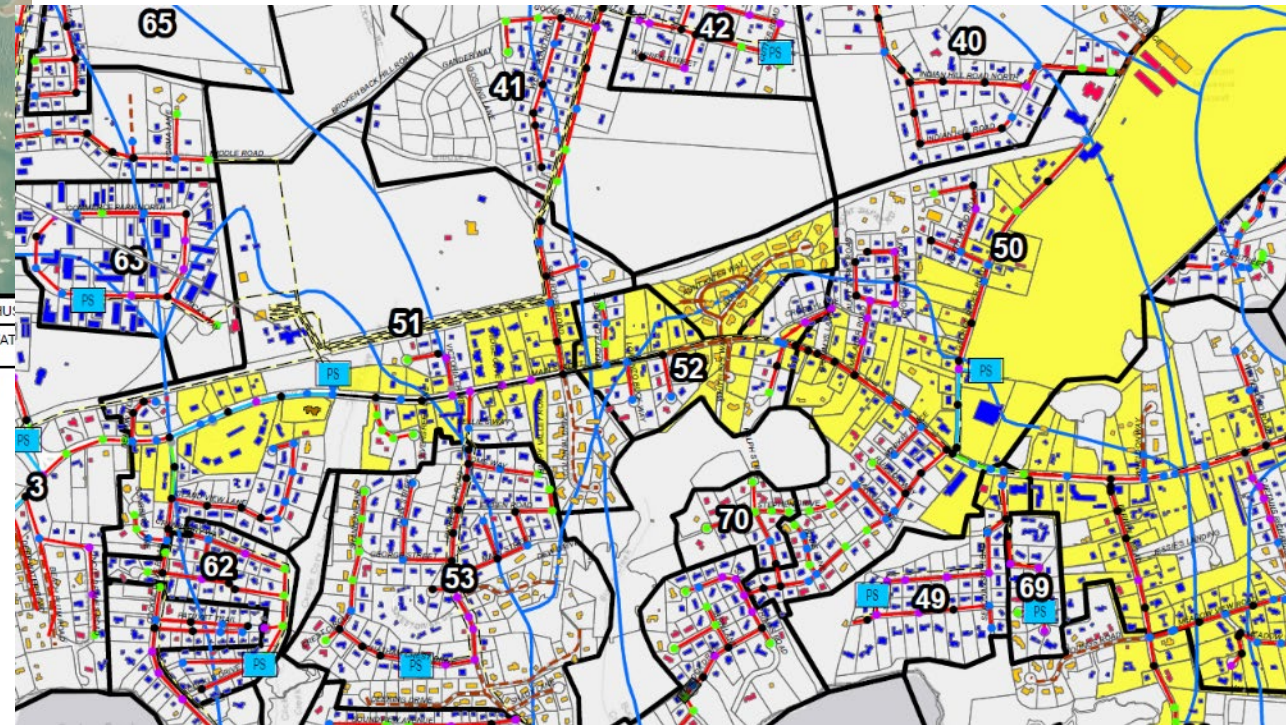
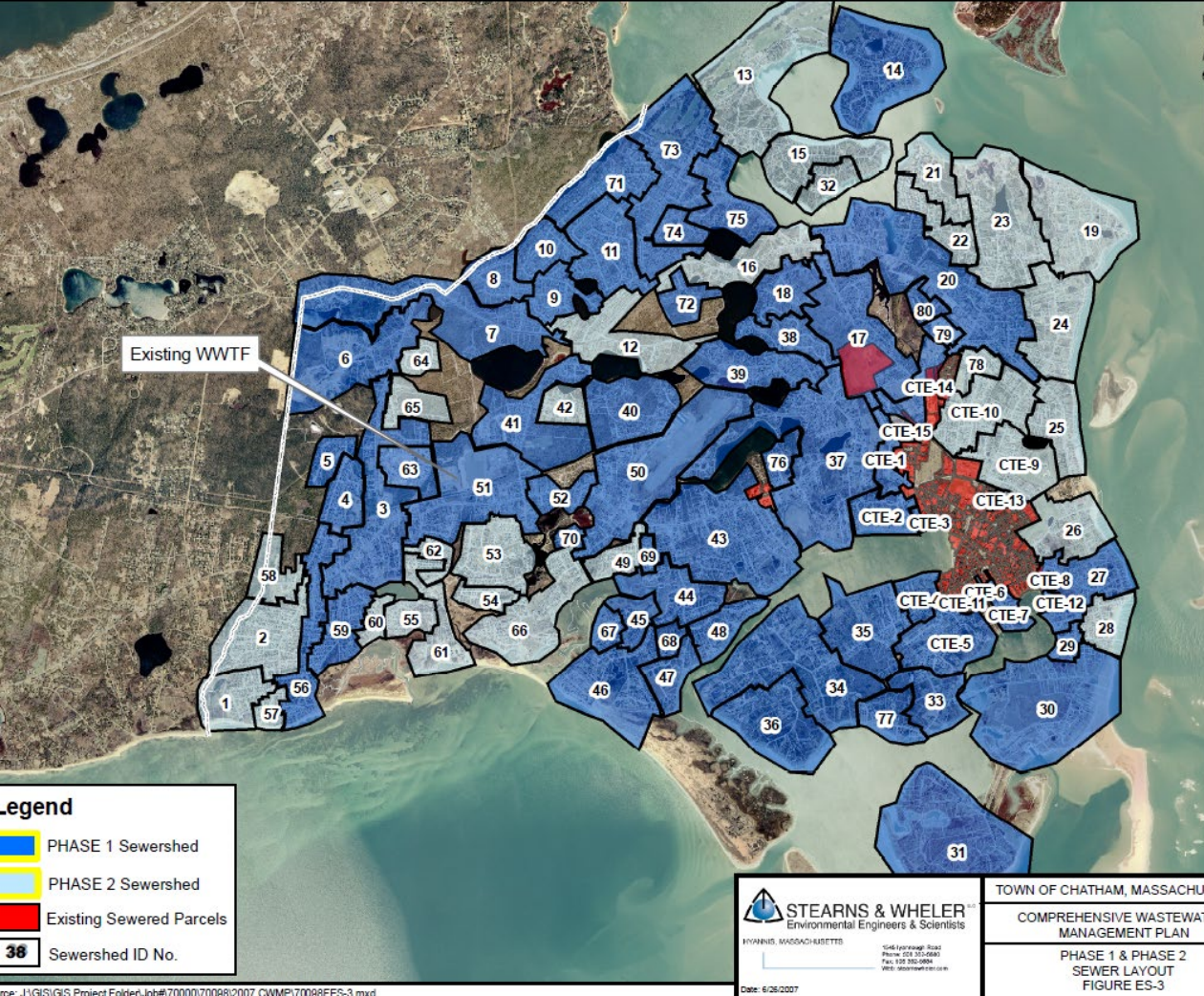
## – General Findings

- Large areas of Chatham need to remove > 50% of the wastewater nitrogen to remediate embayment water quality and the related water resources
  - Primary target to start = Stage Harbor Watershed (100% within Chatham)
- This nitrogen removal performance is best met with collection and treatment at an Upgraded Chatham WPCF
  - (limit of technology: < 3 mg/L total nitrogen)
- Fiscal decision
  - Town voted to sewer the entire town
- Fewer raised systems and protection of drinking water supplies by elimination of septic systems
- Maximize use of gravity collection systems
- Address needs in other Areas of Concern
  - Enterprise Drive and Commerce Park

# Recommended Plan

## TWO MAJOR PHASES

- Phase 1 – to address 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:

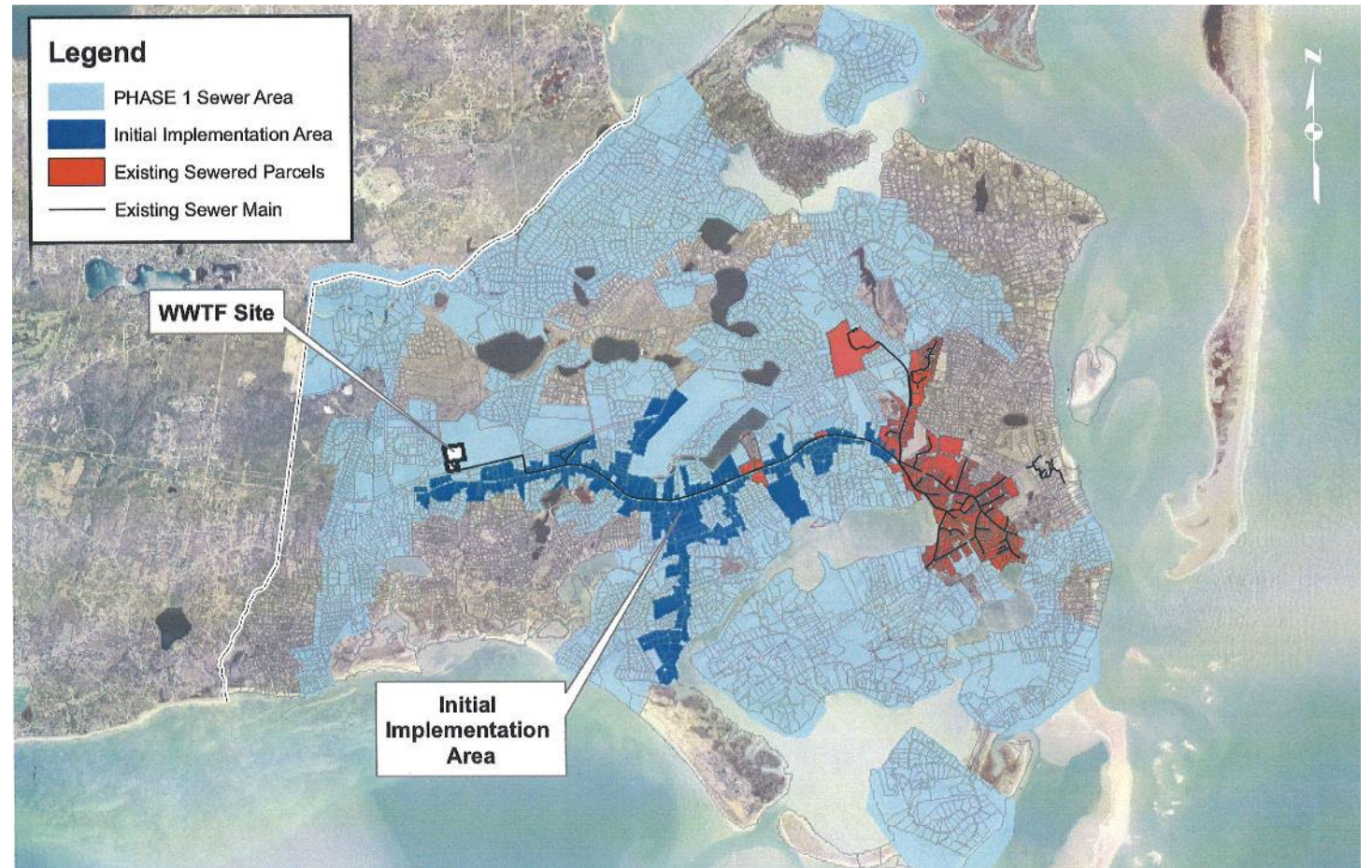
- 1960's sewerage of "downtown" area (and extensions prior to 2009)
- Chatham Bars Inn (not shown in color)
- Bailey's Path (not shown in color)

# CWMP / Implementation Current Chronology

## IMPLEMENTATION

- 2010 – 2013
  - Construction of Phase 1A (Collection System “backbone” and WPCF upgrade)
- 2013 - Present
  - Construction of Phase 1B, 1C, 1D, 1E
- 2025
  - Phase 1F-1 Cedar Street and neighborhoods off of Route 28/Main Street – in design

## PHASE 1A: “BACKBONE”



# Sewer Implementation and Adjustments

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
- SRF and Regional Funding
- Grinder Pump (ownership/operational considerations)

PHASE 1A through 1E: Completed to Date

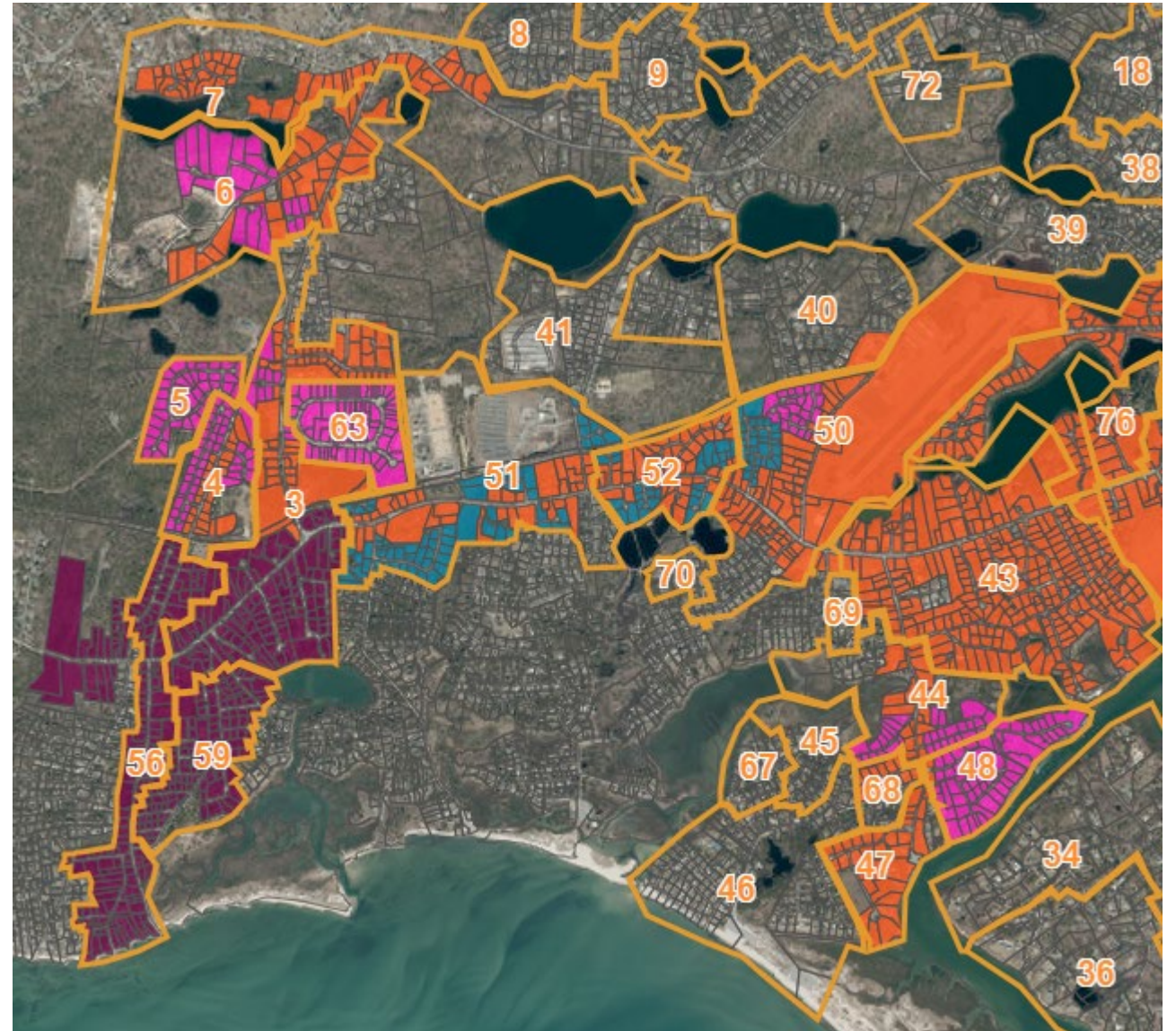


# South Chatham

## SOUTH CHATHAM – PHASE 1 AREAS

### Upcoming South Chatham Phases:

- 2024-2028
  - Phase 1F-1 (Cedar Street, Main Street)
  - Includes **BLUE** parcels
- 2026-2030
  - Phase 1F-2 (Barn Hill/Katie Ford/1D-2B)
  - Includes **PINK** parcels
- 2032-2036
  - Phase 1I (Taylors Pond/Mill Creek)
  - Includes **PURPLE** parcels
- **ORANGE** parcels represent sewerred parcels to date



# 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
- Town will be looking at next phases of implementation with focus on:
  - nitrogen loading, growth, and watershed permit perspective
  - collection system expansion
- Grinder pump procurement
- Filing watershed permit for South Coastal Embayments by end of 2027



**\* Thank You**