Board of Selectmen
Town Administration

WOODARD & CURRAN

PHASE IIB / CWMP UPDATE - QUARTERLY UPDATE

August 7, 2013

Phase IIB – Downtown Sewer Rehab

Proposed Fall 2013 Work Plan

- Ash Lane / Ash Street
  - Sewer
- Academy Lane / Gay Street
  - Sewer and Water
- Finish Fair Street Pavement
- Broad Street / Quince Street
  - Dewatering 24/7
  - Shut Down - Christmas Tree Lighting
  - Shut Down - Christmas Stroll
- Paving and Clean Up
- Remobilize Final Paving

Phase IIB – Downtown Sewer Rehab

Fall Project Contractor Discussions

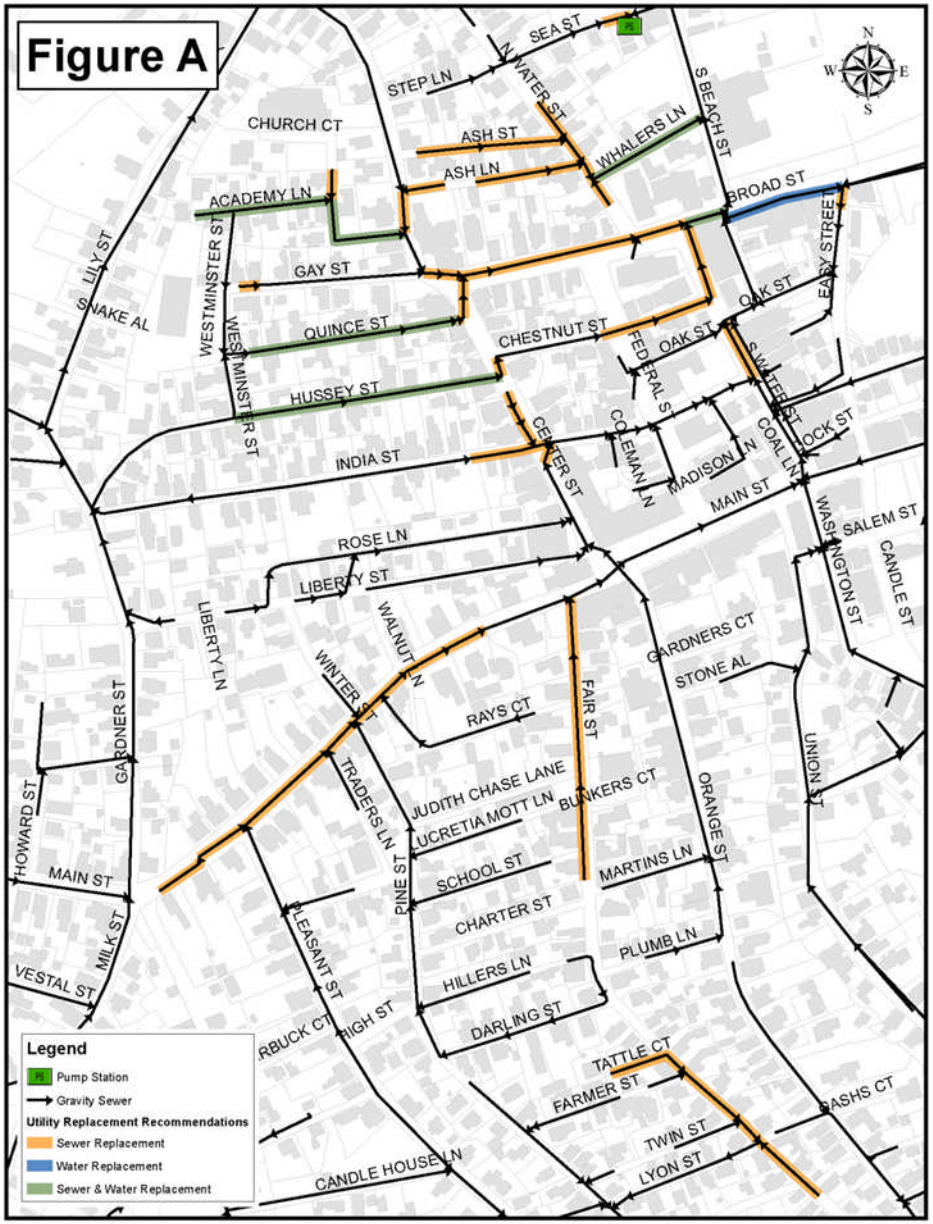
- Improved Clean-Up
- Better Outreach Communication
    - Timelines, Road Closings, Schedules (Police Twitter, Ping Four)
- Coordination With PLUS
- Coordination With Steamship Authority
  - Broad Street
- Coordination With Island Activities
  - Fall Holiday Activities
  - Weddings
  - Christmas Activities
  - Spring Activities
    - Daffodil Days

Phase IIB – Downtown Sewer Rehab

Project Changes

- Jetties Beach – Identified Major I/I Issues
  - Four Manhole/Pipe Replacements
- Madison Alley – Identified Major Pipe Issue
  - Pipe Burst New Pipe
- Broad Street – Alignment of Utilities
  - Sewer Location Different
  - Numerous Conflicts With Original Plans
    - Utilities Not Shown
  - Conducted Test Pit Research
  - Conducted Re-Design
- Full Width Pavement for Many of the Streets

Phase IIB Site Map

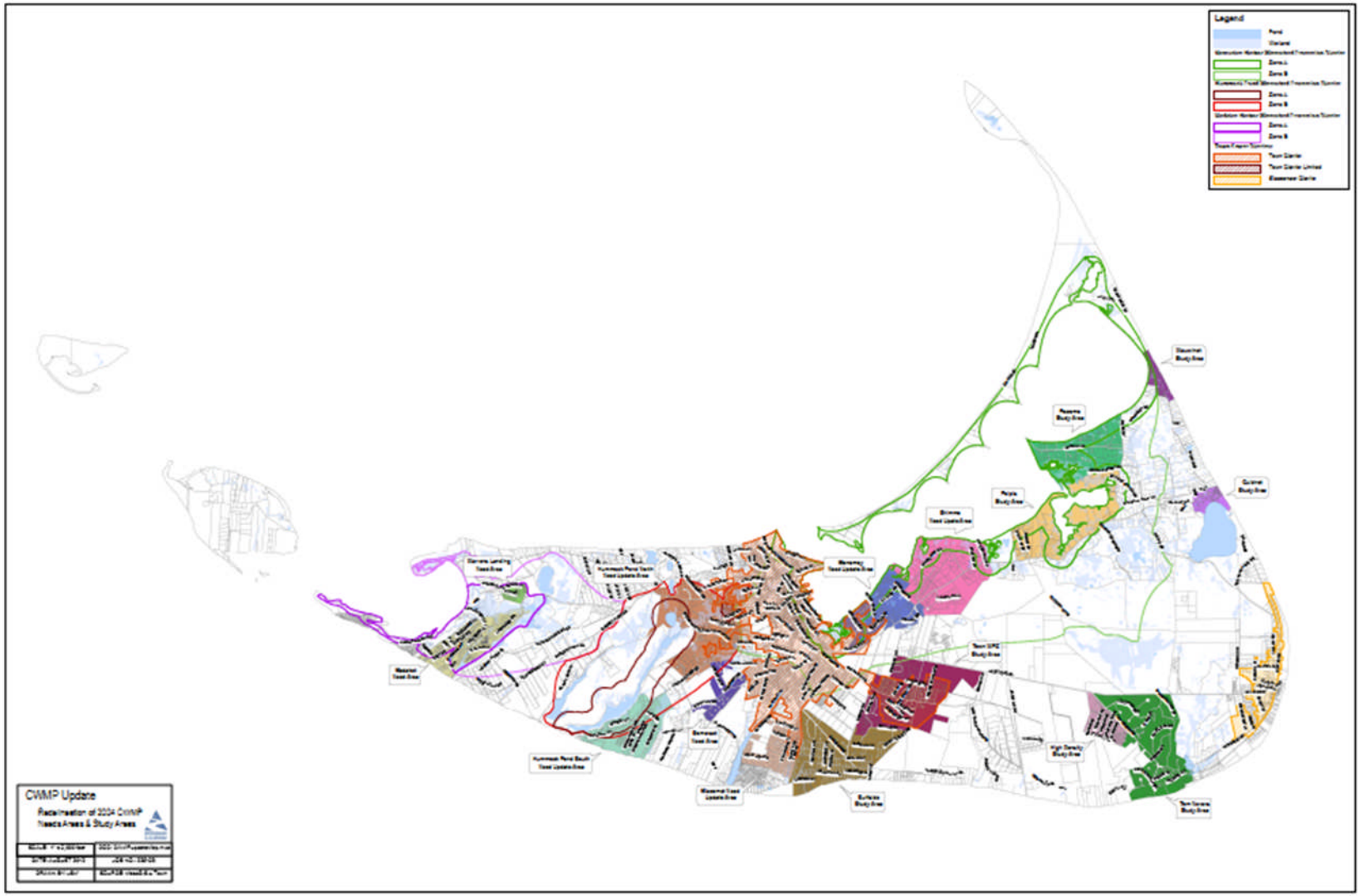


CWMP Update Status

Progress to Date

- Delineated Updated Map of Needs / Study Areas
  - Coordinated Town-wide Efforts
- Board of Health
  - Review of Records 2004 to Present
- Hummock Pond Estuary Study
  - Implementation & Schedule
- Final Summer / Winter Flow Estimates
  - All Study / Needs Areas / Town Sewer District Build Out

Study Area - Needs Area Update Map



Town Sewer District Update

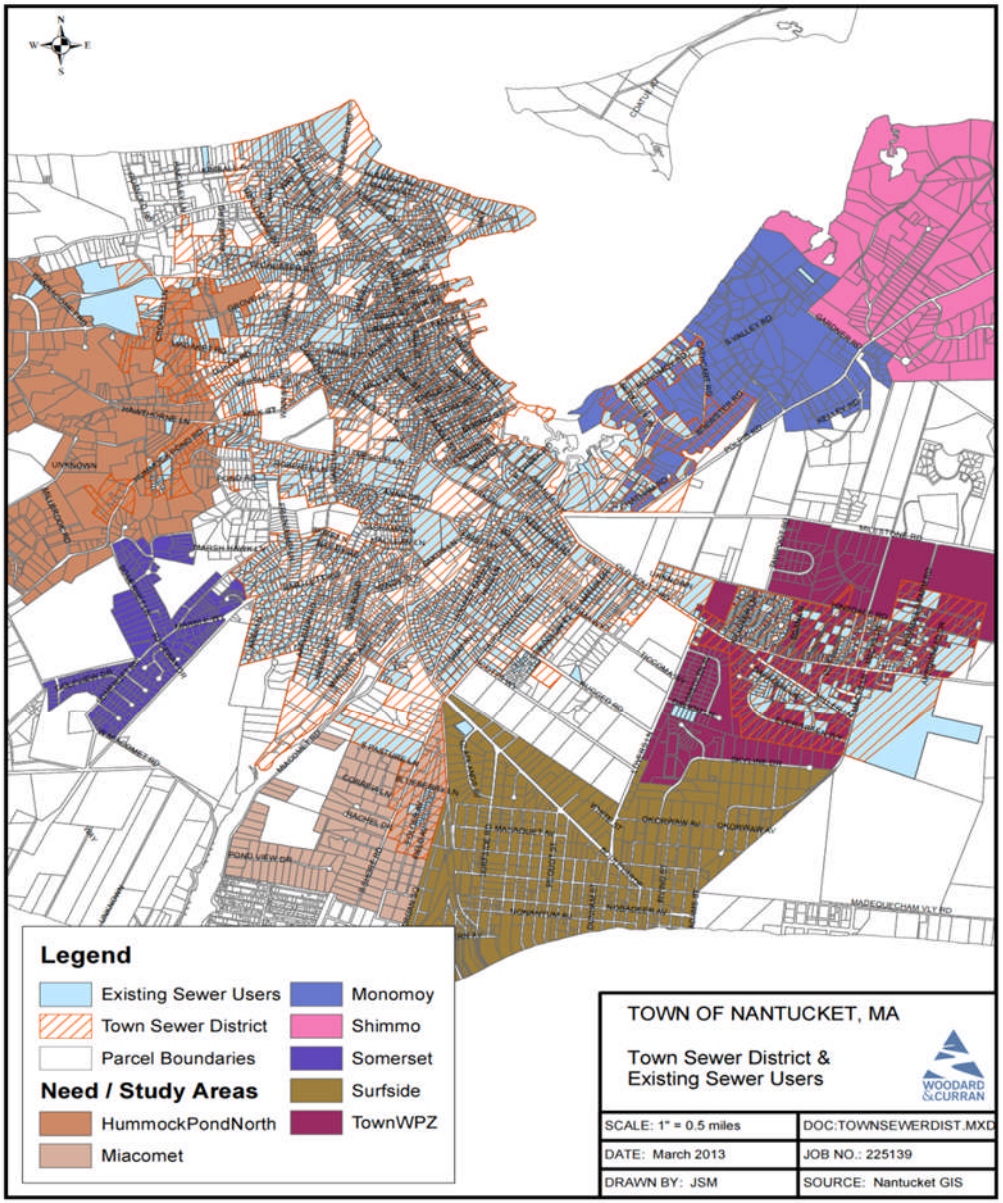
Town Sewer District (TSD)

- Utilized Town's Sewer User Billing Records from GIS

Results

- Users NOT Receiving Bills
  - Lost Revenue
  - Nitrogen Load Issues in Nantucket Harbor
- Town Evaluated and Corrected Billing Data
  - Developing Plan to Address – SPWG Through BOS
  - Revised Build Out Flows
  - Working with SMAST to Rebalance MEP Nitrogen Load
- Unconnected Parcels - ~324
  - Means to Address Through Local Regulation 69.00

Town Sewer District Map



Capacity Analysis Update

Surfside Wastewater Treatment Facility

- Design of WWTF – 5.8 MGD
- Groundwater Discharge Permit - 3.5MGD
- On-Going Due Diligence to Verify
  - Hydraulic Capacity
  - Biological Treatment Capacity
  - Groundwater Disposal Bed Capacity
    - MassDEP Meeting for Surfside Bed Reload
- Existing and Future Flows
  - Incorporated All Study and Needs Areas
  - Included Existing and Full Build-Out in TSD
  - Surfside WWTF Can Accommodate Within Existing Permit
  - Need Additional 400,000 GPD Discharge

CWMP Update - On-Going Work

- Hummock Pond Estuary
- Sesechacha Pond
- Total Maximum Daily Loads (TMDLs)
  - Nantucket Harbor
  - Polpis Harbor
  - Madaket Harbor
  - Long Pond
- Model Run Scenarios
- Board of Health
- ACO
- Stormwater
- Fertilizer
- FAA Site
- Town Sewer District
- Island-Wide Water Quality Testing
- Alternatives Discussion
- Alternatives Analysis
- Ocean Outfall

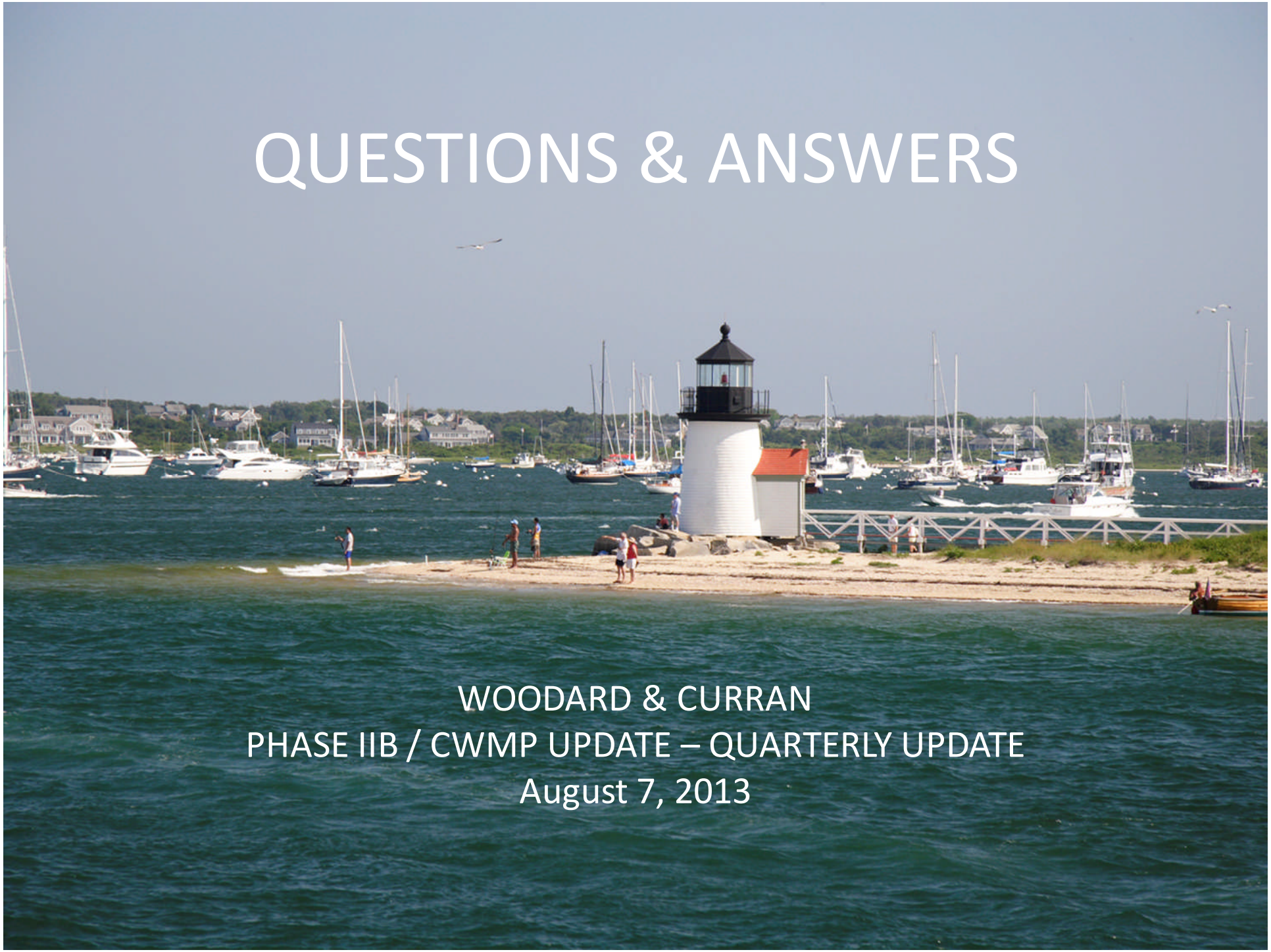
Moving Forward

CWMP Update

- Coordinate Efforts Through DPW
- Continue with MassDEP Approved Scope of Work
- Coordinate Efforts With SMAST
  - 2013 Island-Wide Water Quality Sampling Program
  - Sesechacha Pond Study
  - Hummock Pond Estuary Study
  - Additional Model Run Scenarios
- Alternatives Evaluation
- Stormwater Evaluation
- Fertilizer Evaluation
- Surfside WWTF Evaluation
  - Surfside Discharge Beds Capacity Analysis
- Energy Initiative
- Continue Public Outreach

Required Town Actions

- Town Sewer District Evaluation
  - Sewer Connection Policy
  - Local Regulation 69.00 - Implement and Enforce
- Financing (Future)
  - Appropriate Policies
- Fertilizer Management
  - Education and Implementation
- Septic ACO Program
  - Educational and Implementation
  - Needs Areas Expansion
- Stormwater Management
  - Assess Options and Costs
- Public Outreach
  - Consensus Building



QUESTIONS & ANSWERS

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