

Board of Selectmen Town Administration



WOODARD & CURRAN
PHASE IIB / CWMP UPDATE - QUARTERLY UPDATE
April 24, 2013

Phase IIB – Downtown Sewer Rehab

Project Status

- Bids Received On Wednesday, December 12, 2012
- Total Of 5 Bids Received - C.C. Construction, Inc. from S. Dennis, MA Low Bidder
- C.C. Construction Bid Price - \$3,494,320.87 for the Base Bid and Alternate 1 Work
- Bid Price - Well Within the Town's Available Budget
- Construction Start Mid-January 2013 – End May 2014
- Construction Shut-downs – Contractor Responsible for Issues & Repairs
 - Daffodil Days – April 2012 & 2013
 - May 15 to October 2, 2013
 - Christmas Stroll – December 2012



Phase IIB – Downtown Sewer Rehab

Spring 2013 Update

–Main Street

- Sewer Complete – Cobbles Replaced This Season

–Fair Street / North Water Street

- Pipe Burst Complete – Road Patched For Summer and Resurfaced In Fall

–Hussey Street / Whalers Lane

- Sewer and Water Complete - Road Patched For Summer and Resurfaced in Fall

–Centre Street / India Street

- Sewer Complete

–Quince Street

- Water Complete – Sewer Completed in Fall

–Sea Street / Gay Street

- Manhole to be Replaced



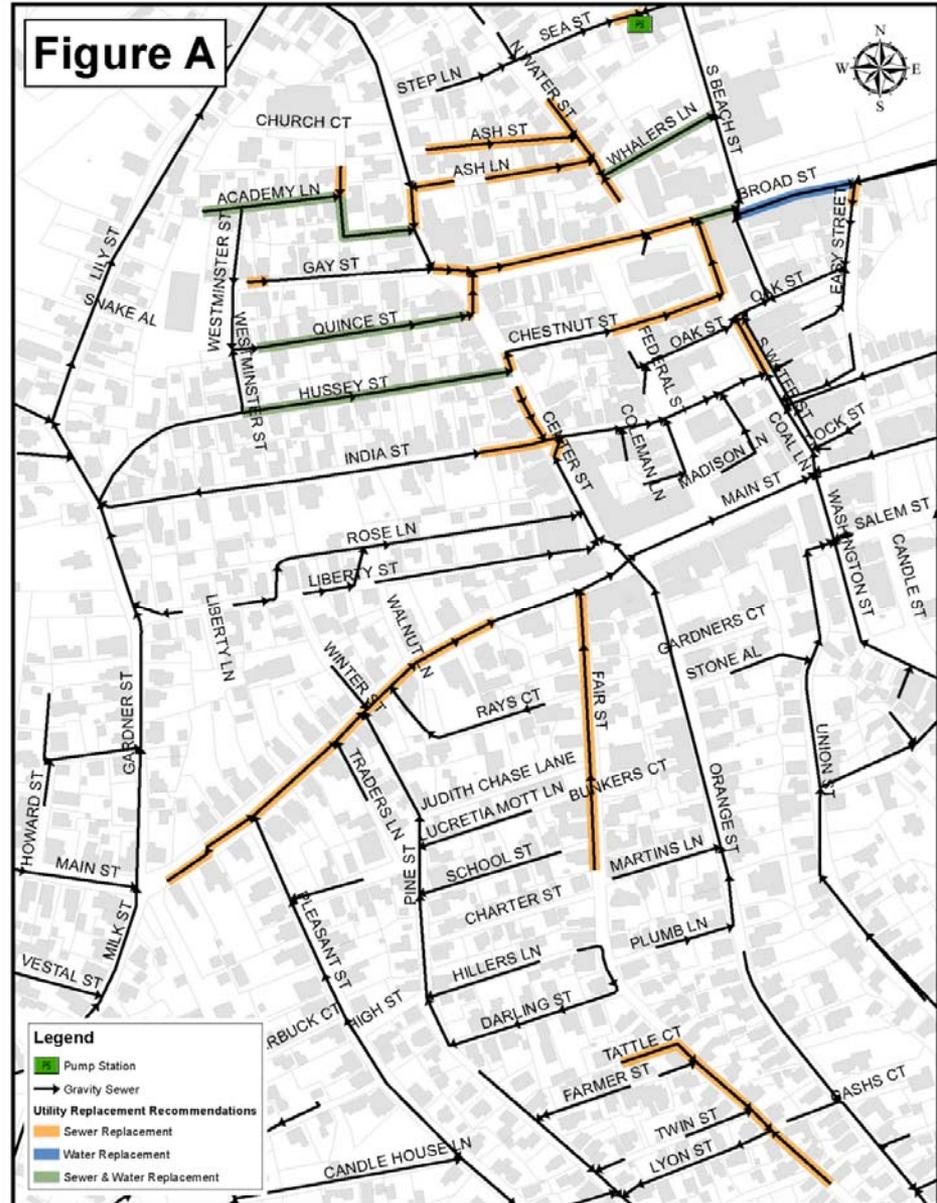
Phase IIB – Downtown Sewer Rehab

Fall 2013 Work Plan

- Broad Street / Easy Street
 - Sewer, Water and Stormwater
- South Street
 - Sewer and Stormwater
- Academy Lane
 - Sewer and Water
- Ash Lane / Ash Street / East Chestnut Street
 - Sewer



Phase IIB Site Map



Phase IIB – Downtown Sewer Rehab

New Items

–The Jetties

- Source of Sea Water at WWTF
- Significant Source of Inflow Identified – Old Brick Manholes
- Clay Pipe Replaced With Plastic Pipe by Pipe Bursting
- Manholes to be Replaced

–Madison Alley

- Damaged, Leaking Pipe Identified
- Pipe Burst Successful – Avoided Major Impacts

–Issues

- Existing Utilities – Unforeseen Challenges
- Field Conditions – Loss of Time and Need for Additional Resources
- Record Information of Service Ties – Limited
- Clay Soils Encountered

–Budget

- Within Expectations



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
- Preliminary Summer / Winter Flow Estimates
 - All Study / Needs Areas / Town Sewer District Build Out



Town Sewer District Update

Town Sewer District (TSD)

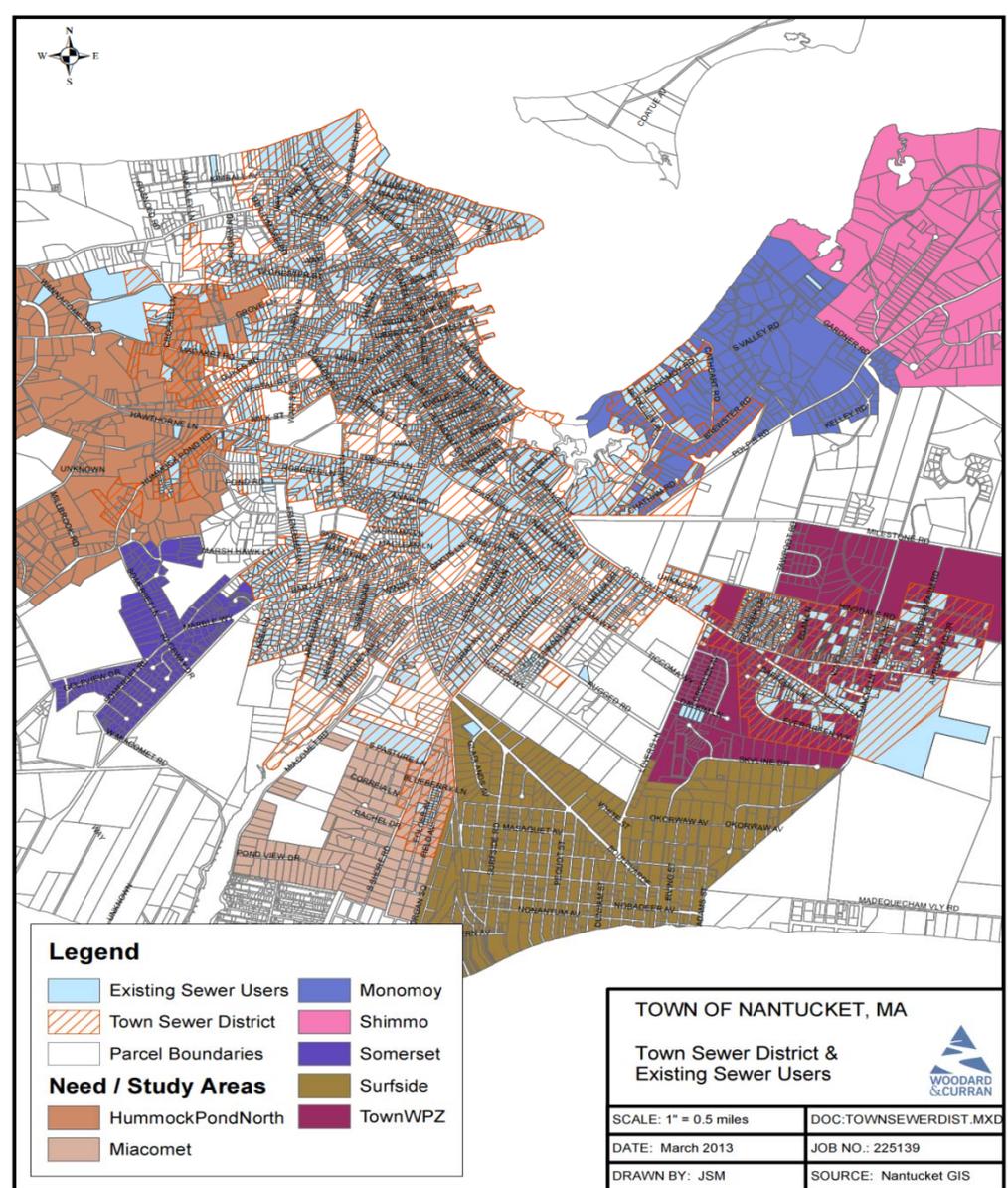
- Utilized Town's Sewer User Billing Records
 - Delineate Parcels Within TSD Connected
 - Delineate Parcels Within TSD NOT Connected
 - Breakdown Future Developable Parcels

Results

- Users NOT Receiving Bills
 - Lost Revenue
 - Nitrogen Load Issues in Nantucket Harbor
- Town Needs to Evaluate and Correct Billing Data
 - Relook at Build Out Flows / Correct MEP Nitrogen Load



Town Sewer District Map



Flows and Loads Update

Need / Study Area	2004 CWMP		CWMP Update	
	Design Flows with 2nd Dwellings		Average Daily Flow	
	Winter	Summer	Winter	Summer
Madaket	169,516	293,007	91,850	158,800
WarrensLanding	27,497	47,562	18,500	32,000
HummockPondSouth			38,200	66,070
HummockPondNorth			56,730	97,980
Somerset	63,139	108,794	51,630	89,030
Monomoy	69,936	120,551	48,890	84,550
Shimmo	57,107	98,675	35,940	62,150
Town Sewer District Build Out			358,569	612,704
Total Flows			700,309	1,203,284



Capacity Analysis Update

Surfside Wastewater Treatment Facility

- Design & Groundwater Discharge Permit - 3.5MGD
- On-Going Due Diligence to Verify
 - Hydraulic Capacity
 - Biological Treatment Capacity
 - Groundwater Disposal Bed Capacity
- Assess Need and Potential for WWTF Expansion
 - CWMP Study / Needs Areas / Existing Flows - Final Flows and Loads
 - Madaket / Warrens Landing Cross Island Alternative

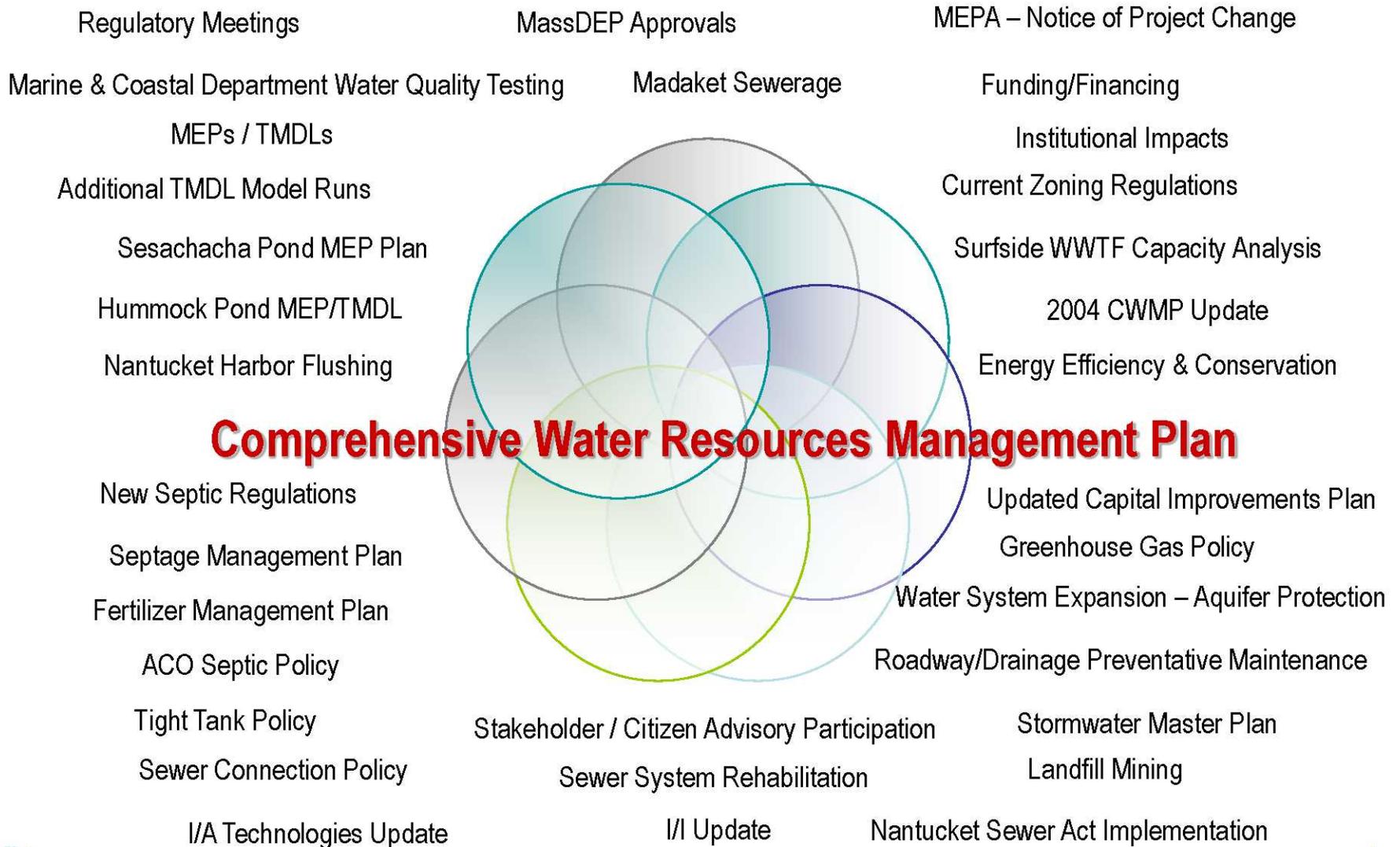


CWMP Update - On-Going Work

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



Components Of Integrated Plan



Moving Forward

CWMP Update

- Coordinate Efforts Through DPW
- Continue with MassDEP Approved Scope of Work
- Coordinate Efforts With SMAST
 - Sesechacha Pond Study
 - Hummock Pond Estuary Study
 - Additional Model Run Scenarios
- Alternatives Evaluation
- Stormwater Evaluation
- Surfside WWTF Evaluation
- Energy Initiative
- Continue Public Outreach

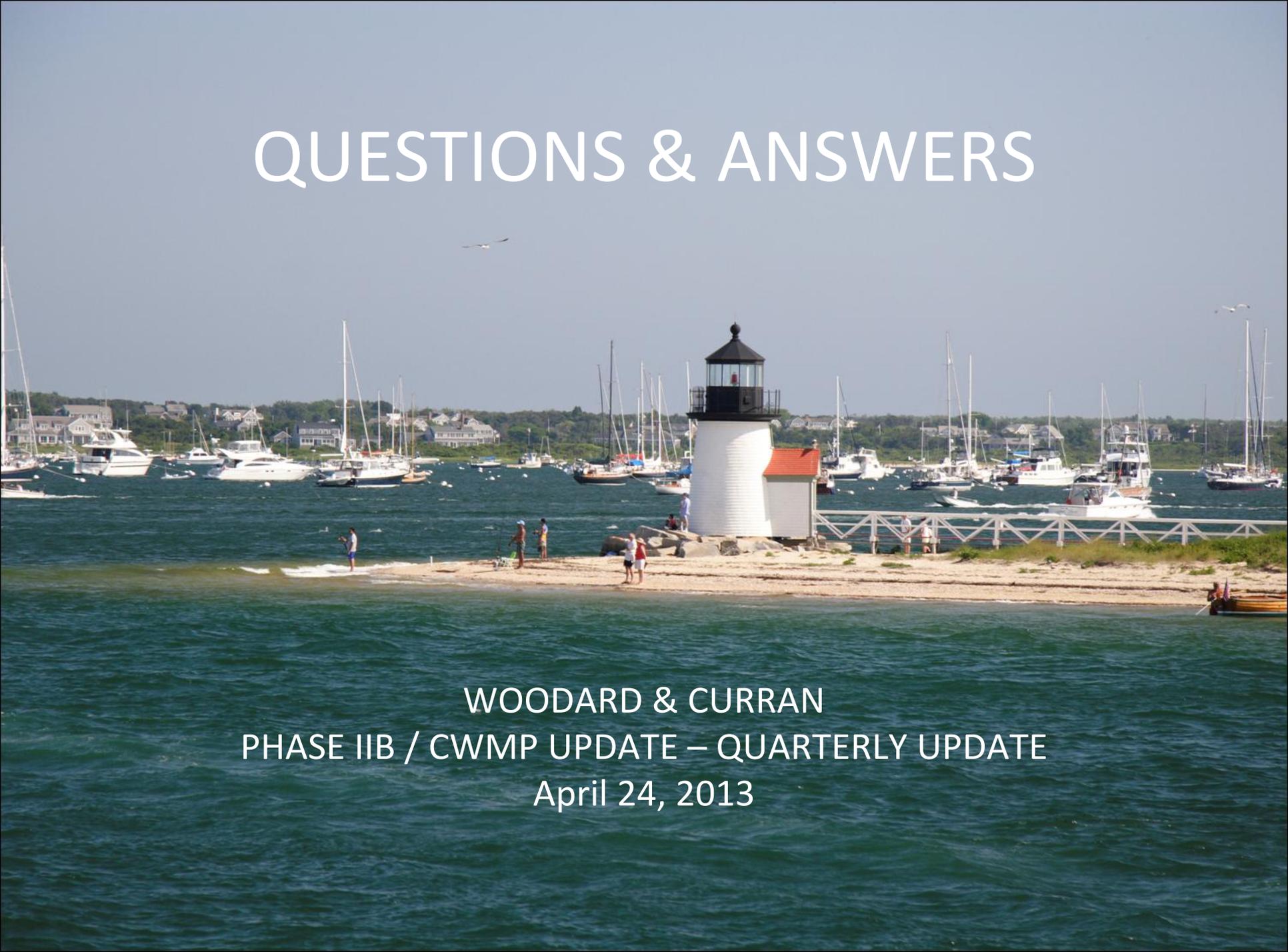


Required Town Actions

- 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
 - Prepare Master Plan
- Public Outreach
 - Consensus Building



QUESTIONS & ANSWERS



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