

Town of Nantucket Sewer Action Plan

Madaket Area Planning Update



Workshop Number 2 Presentation
July 13, 2011

Madaket Planning Project Team

Town of Nantucket

Board of Selectmen

Town Administration

Department of Public Works

Board of Health

Marine and Coastal Resources Department



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COMMITMENT & INTEGRITY DRIVE RESULTS

Madaket Area Planning – Why?

- 2004 Comprehensive Wastewater Management Plan Recommendations
- Wastewater Need Criteria
 - Small Lots
 - Density of Systems
 - High Groundwater
 - Severe Soils
 - Systems Built Before 1978
 - Systems In 100 Year Flood Plain
 - Systems Within Madaket Harbor Watershed District

- 2011 Changes/Updates
- Supplement to 2004 CWMP Criteria
 - Massachusetts Estuaries Program (MEP)
 - Nitrogen Issues in Embayments
 - Madaket Harbor
 - Hither Creek
 - Long Pond
 - 2004 CWMP Recommendations
 - WWTF Design Based on MEP and TMDL
 - Treatment Alternatives
 - Update 2004 Recommendations



Madaket Area Planning Limits From CWMP



Madaket Harbor Estuary System



Madaket Harbor Estuary System Nitrogen Load

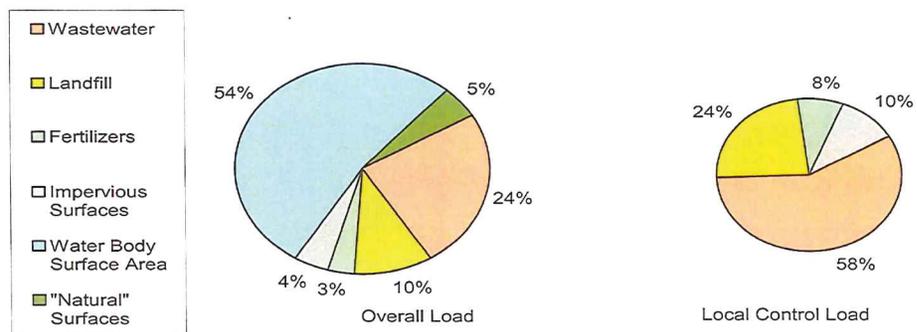


Figure IV-6. Land use-specific unattenuated nitrogen load (by percent) to the overall Madaket Harbor System watershed. "Overall Load" is the total nitrogen input within the watershed including atmospheric deposition to the estuary and nitrogen from natural surfaces (forests, grassland, etc), while the "Local Control Load" represents those nitrogen sources that could potentially be under local regulatory control.



What's Changed Since 2004 CWMP?

- Madaket/Warren's Landing Needs Areas
 - 2004 CWMP Needs Area Changes
 - Town Water
 - Zoning
 - Public Health Regulations
 - MEP
 - TMDL



What's NOT Changed Since 2004 CWMP?

- Madaket/Warren's Landing Needs Areas
 - 2004 CWMP Needs Area Criteria
 - Small Lots
 - Density of Systems
 - High Groundwater
 - Severe Soils
 - Systems Built Before 1978
 - Systems In 100 Year Flood Plain
 - Systems Within Madaket Harbor Watershed District



2004 CWMP Recommendations

- Long-Term Off-Site Wastewater Solution
- Evaluated
 - On-Site Wastewater Disposal Systems
 - Innovative/Alternative Systems
 - Neighborhood/Cluster Solutions
 - No Regional Opportunity
 - Local Solution



Final 2004 CWMP Recommendations

- Long-Term Off-Site Wastewater Solution
- Local Solution
 - Wastewater Collection System
 - Gravity, Low-Pressure and/or Combination
 - WWTF at Former FAA Site
 - Preliminary Evaluations Completed in 2004 CWMP
 - Hydrogeological Study – Groundwater Discharge
 - WWTF Design
 - To Be Based on Final MEP Outcome
 - Total Maximum Daily Limit (TMDL)



Current Madaket Planning Stage

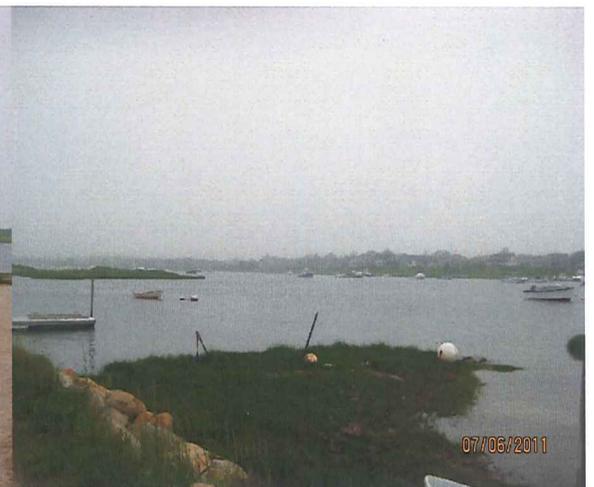
- General Services Administration Process
 - Securing of Former FAA Site
 - Department of Health and Human Services (HHS) Sponsor
- State Planning Process
 - Natural Heritage and Endangered Species Program (NHESP)
 - Massachusetts Historical Commission (MHC)
- Technical Piece
 - Engineering Review Process
- Funding Piece
 - State Revolving Fund (SRF)
 - United States Department of Agriculture Rural Development (USDA /RD)



What's Next?

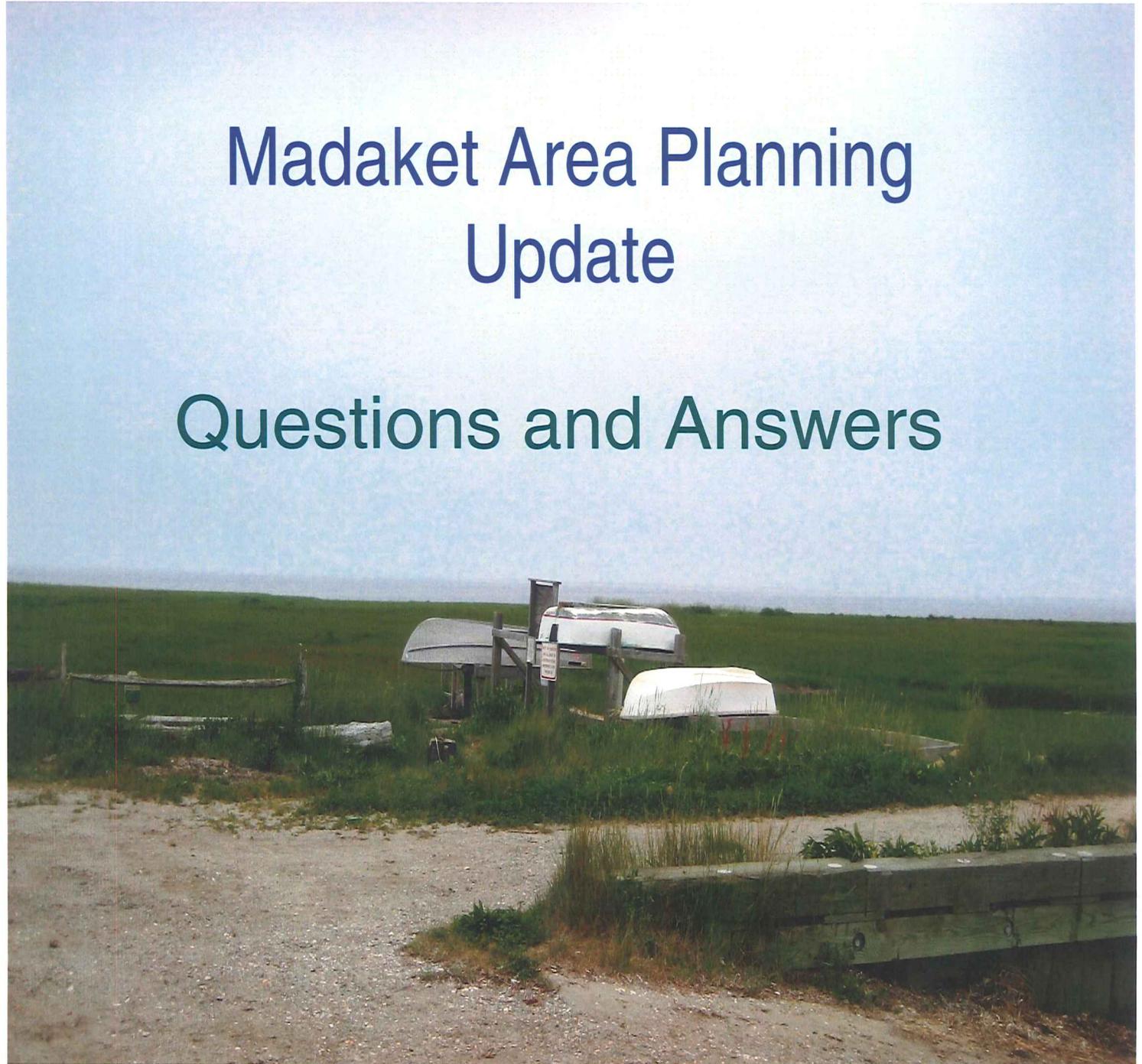
- Incorporate the MEP Supplemental Data to CWMP
- Review Soon to be Released TMDL From MEP
- Review 2004 Final Plan With Above Updates
 - Are Revisions to Final 2004 CWMP Warranted?
 - Work With Town to Finalize Madaket/Warren's Landing Planning





Madaket Area Planning Update

Questions and Answers



Madaket Area Planning Update

Supplemental Slides



TYPICAL ON-SITE COASTAL WASTEWATER DISPOSAL SYSTEM

