

Town of Nantucket
Capital Projects Summary



Town of Nantucket, Massachusetts
Department of Public Works

Board of Selectmen Meeting
June 4, 2008



Town of Nantucket

Capital Projects Summary

Sewer Projects Background

- Projects Started in 1980s
- Comprehensive Wastewater Management Plan (CWMP)
 - Completed in September 2004
 - 2nd Community to Complete Plan
 - 1st Community to Begin Implementation of Plan
- Nantucket is Ahead of the Region
- Nantucket's Project Costs vs. Others



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Capital Projects Summary

CWMP: The Goals and Objectives

● Goals

- Minimize Potential For Pollution
- Maximize Protection of Sole Source Aquifer
- Considerations (Environmental Impacts, Economics, and Quality of Life)

● Objectives

- Identify Study Areas and Determine Areas of Need
- Evaluate Conventional and Alternative Options
- Recommend Environmentally and Economically Sound Solutions



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Capital Projects Summary

CWMP: The Problems and Impacts

- Aging/Failing On-Site Systems
 - Potential Nuisance / Health Hazard / Environmental Contamination
 - Soil and Groundwater Limitations
 - Replacement Constraints - Environmental, Physical and Financial
- Existing Infrastructure
- Inadequate Treatment - Contamination
 - Surface, Groundwater and Harbor Water Quality Problems
 - May Pose Health Threat to Drinking Water Supplies
 - Limits Recreational Use of Surface Waters



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Capital Projects Summary

Key Facts of CWMP Recommendations

- Long-Term Wastewater Disposal Solution
- Updates Out Dated / Neglected Infrastructure
- Environmental Friendly
- Identifies Growth Potential
 - Low Pressure Sewers
 - WWTF Sizing
- Dynamic and Flexible Solution



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Key Facts of CWMP Recommendations (cont.)

- Surfside WWTF Upgrade

- Madaket

- 40,000 I.f. Low Pressure Sewer
- 549 Connections

- Warren's Landing

- 6,600 I.f. Low Pressure Sewer
- 89 Connections

- Somerset

- 13,000 I.f. Gravity Sewer
- 7,200 I.f. Low Pressure Sewer
- 205 Connections

- Shimmo

- 26,500 I.f. Low Pressure Sewer
- 185 Connections

- Monomoy

- 4,800 I.f. Gravity Sewer
- 14,500 I.f. Low Pressure Sewer
- 227 Connections

- Other

- Septage Management Plan
- I/I Reduction
- Stormwater Management



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Estimated Project Cost of Remaining Components of CWMP Recommendations

● Wastewater Treatment Facilities	\$ 46.9 M
● Infrastructure Expansion	\$ 66.8 M
● Wastewater (I/I Rehabilitation)	\$ 64.6 M
● Stormwater	<u>\$ 25.5 M</u>
Total	\$203.8 M

(Current Day Costs – 06/08)



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ATM 2008 Funded Projects

- System Expansion (Design Only)
 - Somerset
 - Shimmo
 - Monomoy
- Rehabilitation (Design and Construction)
 - Minisystem N-2
 - Minisystem N-3A
- Rehabilitation (Construction)
 - Minisystem N-1 (Phase II-B)



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Capital Projects Summary

Implementation Workshop(s)

- System Expansion

- ▣ Somerset
- ▣ Shimmo
- ▣ Monomoy

- Rehabilitation (I/I)

- Low Pressure Sewers

- ▣ Private vs. Public
- ▣ Ownership (Design vs. Operations)
- ▣ Type

- Implementation Schedule

- ▣ Establish Project Priority

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Project	<u>Town Meeting Appropriation</u>		<u>Implementation</u>	
	Design	Construction	Design	Construction
<i>/// Rehabilitation</i>				
Minisystem N-1 (Phase II-A)	2006	2006	Completed	Fall 2008
Minisystem N-1 (Phase II-B)	2006	2008	Completed	Fall 2009
Minisystem N-2	2008	2008	Start 2008	Fall 2010
Minisystem N-3A	2008	2008	Start 2008	Fall 2011
<i>New Infrastructure</i>				
Monomoy	2008	2010	Start 2008	Fall 2012
Somerset	2008	2010	Start 2008	Fall 2013
Shimmo	2008	2010	Start 2008	Fall 2014

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Questions and Answers

