WATER RESOURCE ADVISORY COMMITTEE
UPDATE TO BOARD OF SELECTMEN

JULY 30, 2019
THE NITROGEN PROBLEM IN YARMOUTH
PRIMARY CONCLUSIONS TO DATE

CENTRALIZED WASTEWATER TREATMENT IS:

- MOST COST-EFFECTIVE SOLUTION ACROSS THE COMMUNITY
  - FOR CAPITAL INVESTMENT, AND
  - FOR ONGOING OPERATION AND MAINTENANCE COSTS

- ACHIEVES THE BEST NITROGEN REMOVAL RESULTS

- HAS THE ABILITY TO ADDRESS CONTAMINANTS OF EMERGING CONCERN (CEC)

- PROVIDES SUBSTANTIAL VALUE TO HOMEOWNERS AND BUSINESSES

- POTENTIAL TO PROVIDE SIGNIFICANT ECONOMIC DEVELOPMENT OPPORTUNITIES
YARMOUTH CONCEPTUAL PHASING PLAN

Town of Yarmouth
Sewer Phasing Plan
January 2019

- Phase 1: Force Main
- Phase 2: Gravity Main
- Phase 3: Pressure Main
- Phase 4: Vacuum Main
- Phase 5: Pump Station
- Phase 6: Vacuum Pump
- Phase 7
- Phase 8

CDM Smith
CONCEPTUAL PHASE 1

- Addresses nitrogen in all three watersheds of immediate concern
- Sets the stage for future phases
- Provides for significant economic development opportunities
- Provides flexibility for adaptive management opportunities and cost savings
CENTRAL TREATMENT PLANNING OPTIONS

- Evaluating partnerships for treatment with:
  - Dennis & Harwich
  - Barnstable

- Collection system (70% of total cost) remains with each town

- Estimated total investment of over $400 million and annual operating costs approximating $10 million
  - Total plan at build-out over 40 years
  - We have done this before with our municipal water system
  - Opportunities for cost reduction (MassDOT, regional, etc.)

- Maintaining an “Adaptive Management” approach - focus on early phases!
PHASE 1 COST ESTIMATES

- YARMOUTH ONLY OPTION COST ESTIMATE APPROXIMATES $112 MILLION FOR TREATMENT PLANT, COLLECTION SYSTEM AND RECHARGE FACILITIES
  - OPPORTUNITIES FOR COST REDUCTION THROUGH: REGIONAL OPPORTUNITIES; ROAD WORK COORDINATION; AND DESIGN
- ZERO INTEREST LOAN/30 YEAR AMORTIZATION = $3.73 MILLION ANNUAL DEBT SERVICE
  - 0% VS. 2% INTEREST PROVIDES INTEREST SAVINGS OF UP TO $35M OVER THE LIFE OF THE LOAN
- DEVELOPING A PLAN TO FUND THESE COSTS WITHOUT A GENERAL TAX RATE IMPACT
  - FOR FRAME OF REFERENCE PURPOSES ONLY, IF IT WERE ON TAX RATE:
  - IMPACT WOULD BE 64 CENTS PER THOUSAND, OR $64 PER ONE HUNDRED THOUSAND OF VALUATION.
PHASE 1 COST RECOVERY OPTIONS
WHAT IS YARMOUTH’S PATH TO FUNDING WITHOUT TAX RATE IMPACT?

WE HAVE DONE THIS BEFORE WITH OUR WATER INFRASTRUCTURE!

- GRANT OPPORTUNITIES – INCLUDING POTENTIAL PROJECT SUBSIDY (10%)
- MUNICIPAL WATER INFRASTRUCTURE INVESTMENT FUND
  - UP TO 3% ($1.7 MILLION) PROPERTY TAX SURCHARGE, SIMILAR TO CPA
- CAPE & ISLANDS WATER PROTECTION TRUST
- FLOW-BASED BETTERMENT PROGRAM
- 25% CAPITAL SURCHARGE ON OPERATING RATE
- DEDICATE SHORT-TERM RENTAL BILL REVENUES
- OTHER LOCAL REVENUES – I.E. SOLAR PV RECEIPTS OR SAVINGS
- SEPTAGE PLANT RECEIPTS OR WATER OPERATION COST SHARING
- BOS FINANCIAL MANAGEMENT POLICIES REGARDING NEW GROWTH
- DEBT DROP OFF
Assumptions: Phase 1 costs of $112,000,000, payable over a 30 year, zero interest loan (represents a savings of up to $35,000,000 on interest costs)

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<thead>
<tr>
<th>ELEMENT</th>
<th>AMOUNT</th>
<th>%</th>
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<tbody>
<tr>
<td>Annual debt service cost</td>
<td>$3,733,333</td>
<td>100%</td>
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<tr>
<td>Estimated Funding:</td>
<td></td>
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<td>User Generated Revenues: Septage plant funding; 25% capital surcharge on sewer rates; Betterment program on 20% of collection system costs. High level of certainty.</td>
<td>1,113,400</td>
<td>30%</td>
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<td>Water Infrastructure &amp; Investment Fund: 1.5% property tax surcharge. High level of certainty as to amounts, moderate as to passage of surcharge.</td>
<td>1,063,821</td>
<td>28.5%</td>
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<td>Dedicated Local Receipts: New Short-term rental tax revenues ($570,000) and estimated savings on solar PV projects ($125,000). Moderate level of certainty.</td>
<td>695,000</td>
<td>16.5%</td>
</tr>
<tr>
<td>Cape &amp; Islands Water Protection Trust: Yarmouth’s participation in the Trust, estimate of 25% of project costs covered. Low level of certainty.</td>
<td>933,333</td>
<td>25%</td>
</tr>
<tr>
<td>Total estimated annual funding</td>
<td>$3,805,554</td>
<td>100%</td>
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<td>Estimated annual surplus</td>
<td>$72,221</td>
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SUMMARY OF POTENTIAL WASTEWATER CAPITAL COST FUNDING PLAN

ALL AMOUNTS ARE ESTIMATES AND CARRY VARIABLE LEVELS OF CERTAINTY

Contemplated Phase 1 Funding Plan

- User Generated Revenues: 1,113,400 (29%)
- WPT Funding: 933,333 (25%)
- WIIF Surcharge: 695,000 (28%)
- Local Receipts: 1,063,821 (18%)
BEGIN PRE-FUNDING OF PLAN IN FY 2021 TO ESTABLISH A CAPITAL RESERVE TO SMOOTH OUT ANY SHORTFALLS IN PLAN FUNDING IN ANY ONE YEAR DUE TO ACTUAL COSTS & REVENUES DIFFERING FROM THE ESTIMATES

CONTEMPLATING A COMBINED WATER RESOURCE ENTERPRISE FUND TO ALLOW FOR CARRYING OVER OF SURPLUSES AND MAINTENANCE OF CAPITAL RESERVES.

SURPLUS CAPITAL CONTRIBUTIONS THAT ARE UNUSED WOULD BE SET-ASIDE TO SEED FUNDING OF FUTURE PHASES.

ADDITIONAL COST AVOIDANCE/RECOVERY OPPORTUNITIES:
  ▪ REAL ESTATE TRANSFER TAX; DEBT DROP-OFF; “NEW GROWTH” DUE TO ECONOMIC DEVELOPMENT
  ▪ GRANT AND SUBSIDY OPPORTUNITIES RESULTING FROM HAVING A “SHOVEL READY” PROJECT.
  ▪ HOW DO WE “BACK STOP” THE PLAN IN THE EVENT ACTUAL RESULTS DO NOT MEET ESTIMATES.
QUESTIONS?

To view informational documents and reports related to the Town’s wastewater planning efforts please visit:

https://www.yarmouth.ma.us/1754/Water-Resources

Visit our WRAC webpage for information, meeting minutes/materials, and a link to our YouTube Channel for meeting videos:

https://www.yarmouth.ma.us/1754/Water-Resources

Contact: Rich Bienvenue at 508-398-2231 ext. 1297 or via email at rbienvenue@yarmouth.ma.us