BOARD OF SELECTMEN UPDATE
WATER RESOURCES ADVISORY COMMITTEE
JANUARY 29, 2019
WATER RESOURCES ADVISORY COMMITTEE

**Purpose**
To provide an overview of the last 3 months of activity of the WRAC and an update as to the status of water resource planning efforts. WRAC will utilize feedback received to begin drilling down on these high-level discussions to formulate detailed recommendations and educate & inform our citizens on a workable program.

**Agenda**
- Opening Comments from the Chairman
- Introduction of our Panel
- Update of WRAC efforts to date
- Questions, Feedback & Guidance

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<th>Member</th>
<th>Representing</th>
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<tr>
<td>Curt Sears, Chairman</td>
<td>Member-at-large</td>
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<tr>
<td>Lisa Coedy</td>
<td>Parker’s River Watershed</td>
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<td>John Deliso</td>
<td>Lewis Bay Watershed</td>
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<td>Tom Durkin</td>
<td>Conservation Commission</td>
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<td>Renie Hamman</td>
<td>Member-at-large</td>
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<td>Paul O’Bryan</td>
<td>Board of Health</td>
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<td>Tom Roche</td>
<td>Bass River Watershed</td>
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<td>Lee Rowley</td>
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<td>Vacant</td>
<td>Northside Area</td>
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HOW DID WE GET HERE? NITROGEN

1951 – Pop. 3,297
2010 – Pop. 23,793

Population Densities

722% Increase

85% of our controllable nitrogen pollution comes from septic systems
WATER QUALITY PROTECTION

WHY
- Protect Yarmouth’s water resources
  - Drinking water quality
  - Pollution of ponds and estuaries
- Nitrogen removal
- Contaminants of Emerging Concern (CECs)

HOW
- Leave it to individual property owners
- Address this as a community
- Work with regional partners
THE COST OF DOING NOTHING

- Regulatory ramifications
  - Costs to homeowners in “nitrogen sensitive watersheds”
  - Approximately 10,000 homeowners, excluding commercial properties
  - Estimate of $20,000 capital cost and $2,600 O&M per homeowner
  - $200 million in homeowner investment across the community with $26.5 million in annual operating costs
  - This excludes costs for commercial systems, or requirements for new innovative residential systems
  - Homeowners alone don’t remove enough nitrogen – the town would still have to provide for removing nitrogen
- Litigation and loss of control
- Continued environmental degradation
- Continued stagnation/decline of commercial tax base, tourism & industry
ACTIVITY OF THE WATER RESOURCE ADVISORY COMMITTEE

- Looking at community-wide solutions in order to avoid each homeowner going “on their own”
- First meeting October 9, 2018 and met 6 times to date
- All meetings recorded and are on Town YouTube Channel
- Members have been updated as to
  - Status of various planning efforts
  - Key issues related to planning efforts
  - Options currently under consideration
  - Financing issues related to funding the recommended plan
- Efforts are ongoing
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 CEC’s
- Provides substantial value to homeowners and businesses
- Potential to provide significant economic development opportunities
Pent up demand for development

Businesses do not want to be in the wastewater business – on-site systems are expensive, limit expansion

Businesses constrained from reaching market potential

Continued stagnation/decline of commercial tax base and tourism

Underperformance on rooms/meals tax.

35% decline in non-residential values over 10 years

Anemic “new growth” rate for property tax base of .77%

#1 impediment to significant redevelopment … absence of wastewater treatment

Every $ spent on water resource infrastructure results in $15 of private investment
ECONOMIC DEVELOPMENT BENEFITS

- Stabilize or improve erosion of non-residential tax base
- $100 million in investment approximates $1 million in revenue
- Doubling of new growth rate results in $420 k annual revenue
- Achievable results from hotel/motel tax generates $260k annually
- Homeowners can more easily expand or add bedrooms and avoid costly septic system upgrades
- More attractive/desirable development
- Property investment in homes and businesses drive property values
- All of these factors can be part of a cost-recovery program
RECOMMENDED WATER RESOURCES PLAN

- Similar to 2016 program
- 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, loan subsidy, etc.)
- Maintaining an “Adaptive Management” approach – focus on early phases!
PROPOSED PHASING PLAN – JANUARY, 2019

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
RECOMMENDED PHASE 1

- Addresses nitrogen in all three watersheds of immediate concern
- Sets the stage for all future phases
- Provides for significant Economic Development opportunities
- Provides flexibility for adaptive management opportunities
- Estimated capital cost approximating $115 million
  - Opportunities for cost reduction
  - Zero interest loans/30 year amortization = $3.83 million annual debt service
  - Would result in tax rate going up .64 per thousand, if not offset
  - Would cost $64 per $100 thousand of property valuation.
DRAFT OF RECOMMENDED PHASE 1 MAP
Nearly everyone contributes in some manner to our problem. Everyone in the community benefits from clean water, therefore:

1. Everyone should participate in the solution
2. Dedicated funding source(s) should be identified where possible
3. Funding for the program should not go towards other town programs
4. Those that contribute more to the problem, should contribute more to the solution
5. Minimize placing costs on the general tax rate
6. Benefits from economic development should mitigate cost, when they are realized.
PHASE 1 COST RECOVERY OPTIONS UNDER CONSIDERATION

- Municipal Water Infrastructure Investment Fund (Principles 1,2,3,5)
  - Up to 3% ($1.7 million) property tax surcharge, similar to CPA
- Debt Drop-off from Cape Tech School project (and others, if approved) (Principles 1,3,5)
- Flow-based betterment program (Principles 2,3,4,5,6)
- 25% capital surcharge on operating rate (Principles 1,2,3,4,5)
- Short-term rental bill revenues – developing (Principles 2,3,4,5)
- BOS Financial management policies regarding new growth (Principle 6)
TIMING ISSUES

- Request for planning funds at May 2019 Town Meeting.
- Aligning Phase 1 construction to coincide with Route 28 road work to mitigate costs.
- Town Meeting vote on regional partnership(s).
- Town Meeting vote for Phase 1 design funds.
- Town Meeting vote on Phase 1 construction.
- Planning efforts assuming construction begins in 2021.
TIMING ISSUES – ROUTE 28 ROAD WORK PROJECTS

Route 28 North Main Street Work (Yarmouth)
- Design: Underway (~25%)
- Start of Construction: Spring 2021
- End of Construction: Spring 2023
- End of Construction Moratorium: 2028

Route 28 Work (Hyannis/Barnstable)
- Design: Underway
- Start of Construction: April-September 2018
- End of Construction: April-September 2021
- End of Construction Moratorium: 2026

Parker River Bridge (Yarmouth)
- Design: Underway
- Start of Construction: 2019
- End of Construction: 2021
- End of Construction Moratorium: 2026-Pipe supports must be included in the construction of the bridge as they cannot be added on later

Route 28 Main Street Work (West Dennis)
- Design: Underway (~25%)
- Start of Construction: 2024-2025
- End of Construction: 2026-2027
- End of Construction Moratorium: 5 years following completion of construction

Bass River Bridge (Yarmouth/Dennis)
- Design: Underway (~25%)
- Start of Construction: Fall 2020
- End of Construction: Fall 2022
- End of Construction Moratorium: 2027-Pipe supports must be included in the construction of the bridge as they cannot be added on later
Evaluation of options for partnerships

Updates on build-out flows

Updates on design and cost projections

Updates on a cost-recovery plan

Outreach, Outreach, Outreach
Visit our website
General Information, meeting minutes, meeting materials
https://www.Yarmouth.ma.us/1667/water-resources-advisory-committee

Visit our YouTube Channel
for videos of our meetings, informational videos to come!
https://www.youtube.com/channel/UCgQ1QFZevmoqW5Mz2PnWKpA

Contact Town Staff:
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FOR MORE INFORMATION

Sign up for email updates

- Via website sign-up form – coming soon
- Via “Join My List” option on Town Facebook page
- Contact - call or email town staff to be added
- Text “yarmouthwater” to 22828 and provide your email when prompted