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# BOARD OF SELECTMEN UPDATE

WATER RESOURCES ADVISORY COMMITTEE

JANUARY 29, 2019



# WATER RESOURCES ADVISORY COMMITTEE

## Purpose

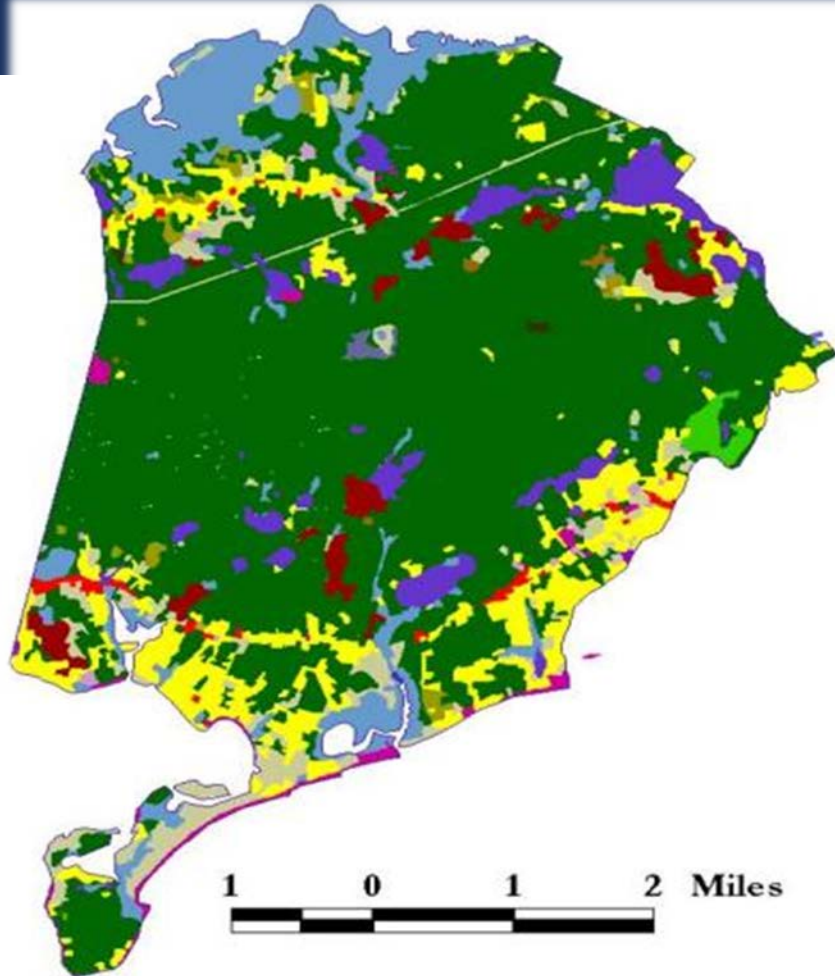
To provide an overview of the last 3 months of activity of the WRAC and an update as to the status of water resource planning efforts. WRAC will utilize feedback received to begin drilling down on these high-level discussions to formulate detailed recommendations and educate & inform our citizens on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

## Agenda

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

Member	Representing
Curt Sears, Chairman	Member-at-large
Lisa Coedy	Parker's River Watershed
John Deliso	Lewis Bay Watershed
Tom Durkin	Conservation Commission
Renie Hamman	Member-at-large
Paul O'Bryan	Board of Health
Tom Roche	Bass River Watershed
Lee Rowley	Planning Board
Vacant	Northside Area

# HOW DID WE GET HERE? NITROGEN



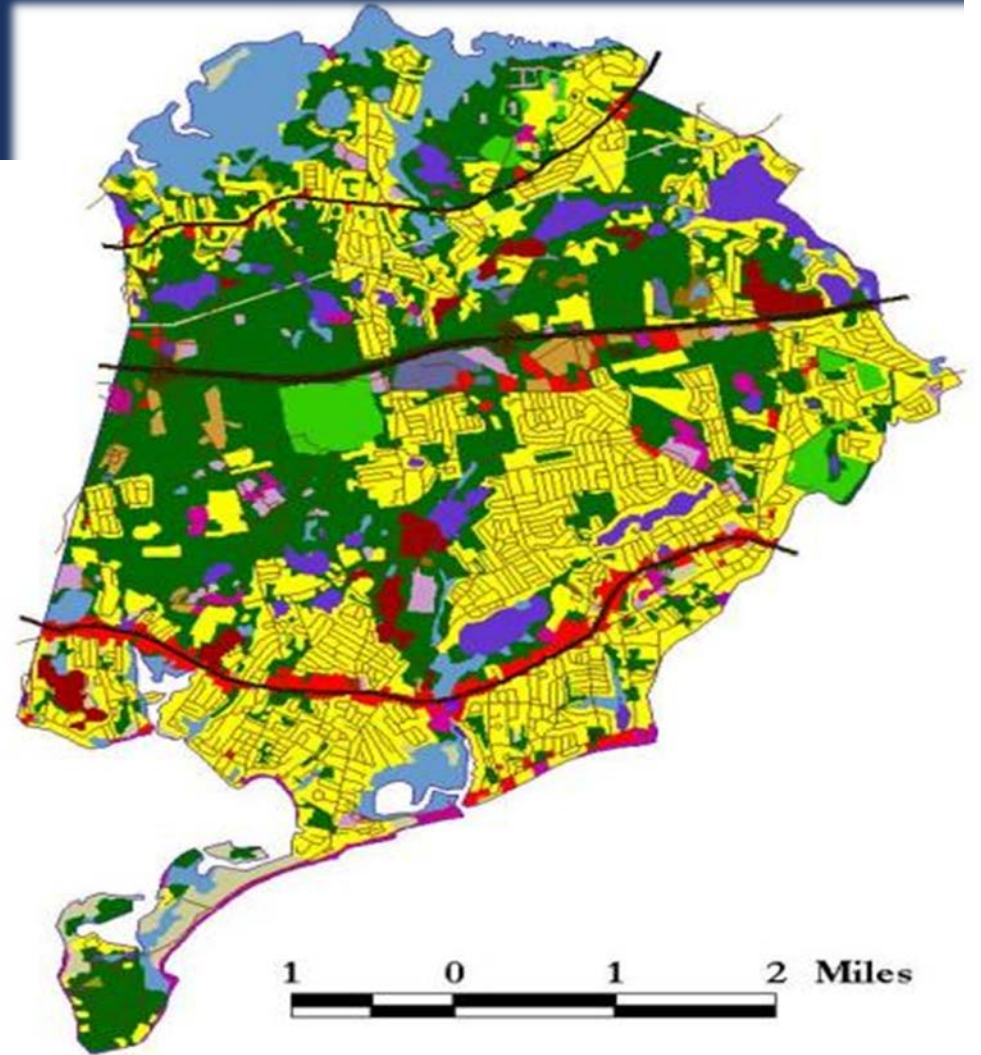
1951 – Pop. 3,297

Population Densities



722% Increase

85% of our controllable  
nitrogen pollution  
comes from septic  
systems



2010 – Pop. 23,793

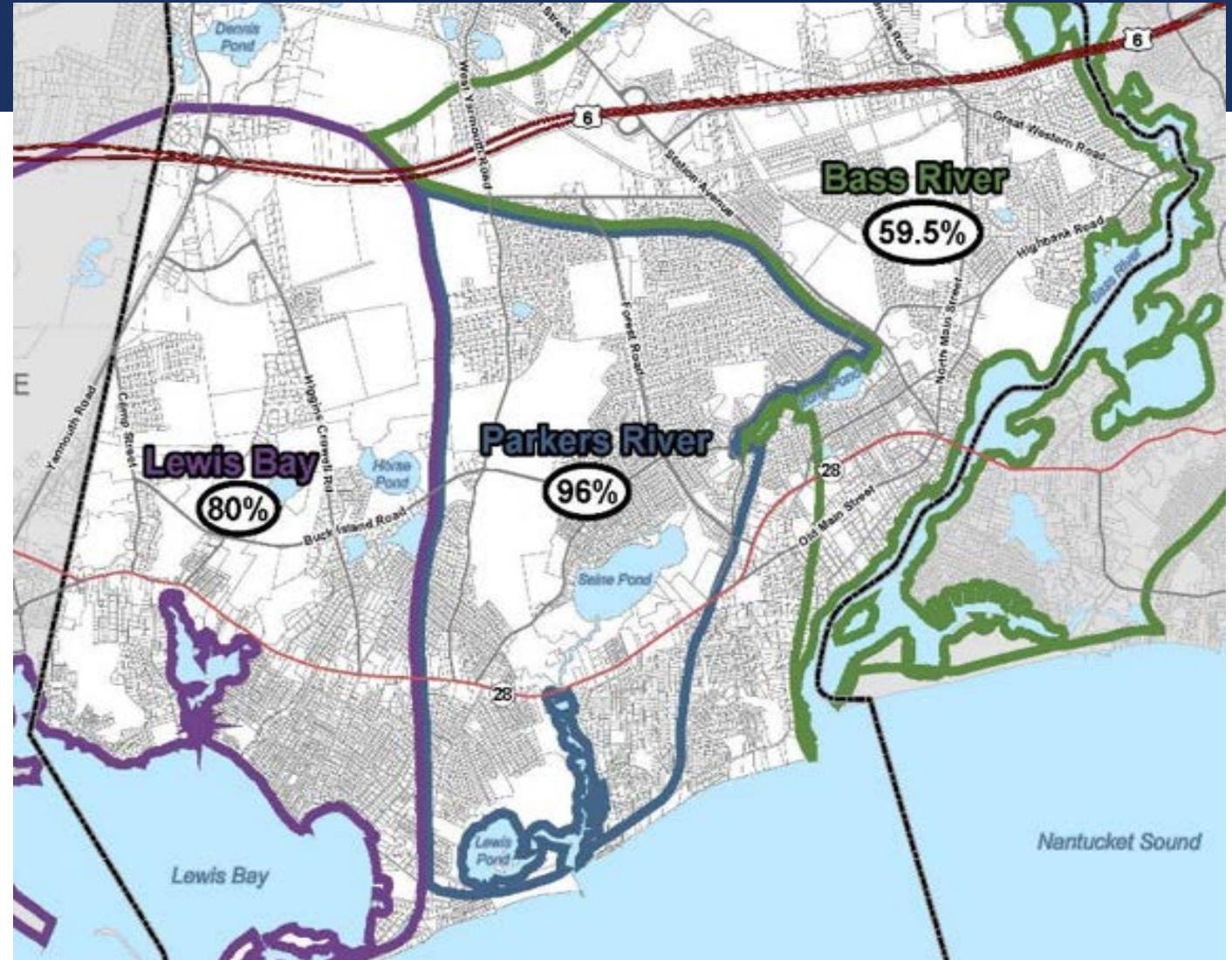
# WATER QUALITY PROTECTION

## 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

# PRIMARY RECOMMENDATION 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 CEC's
- Provides substantial value to homeowners and businesses
- Potential to provide significant economic development opportunities

# ECONOMIC DEVELOPMENT REPORT

- 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



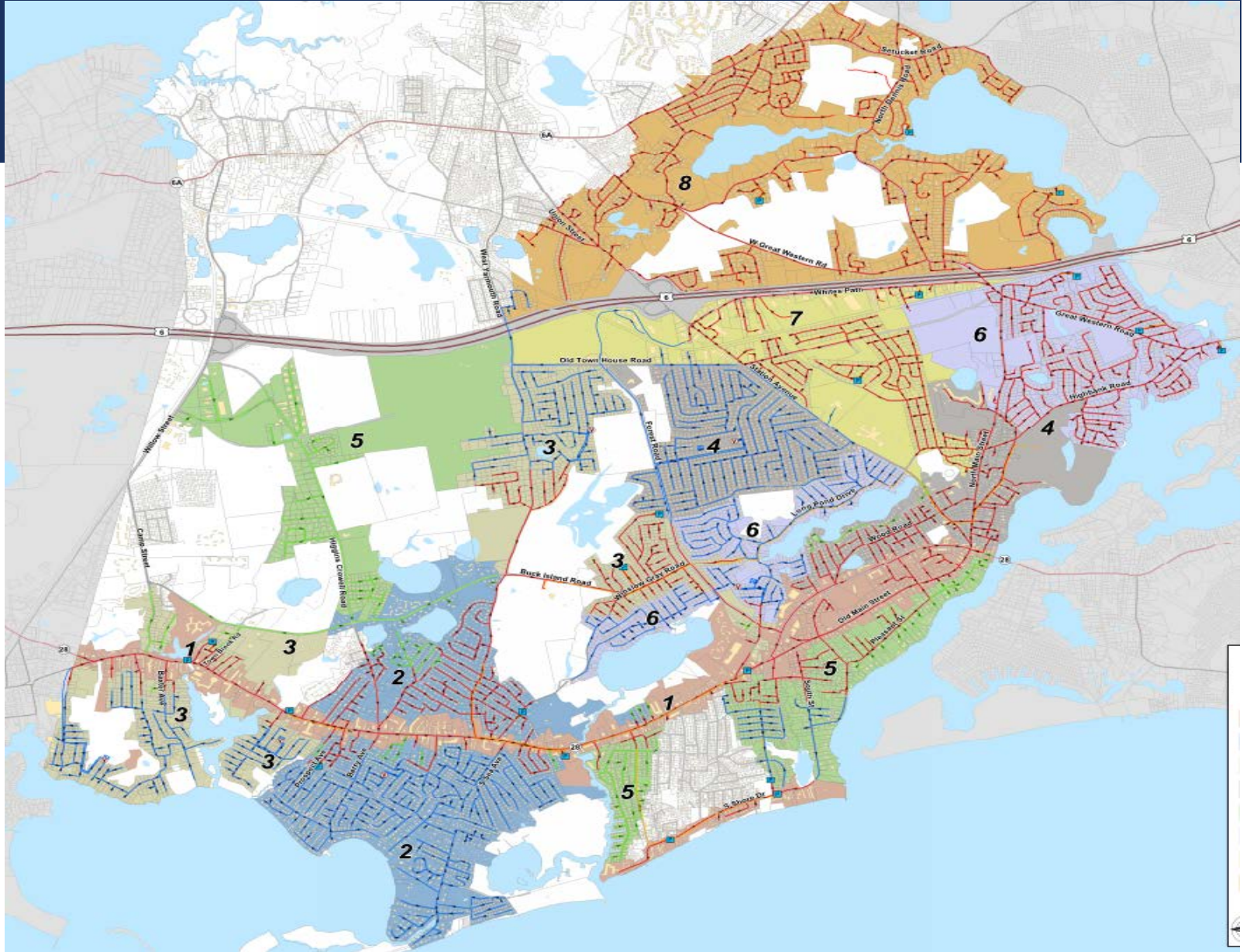
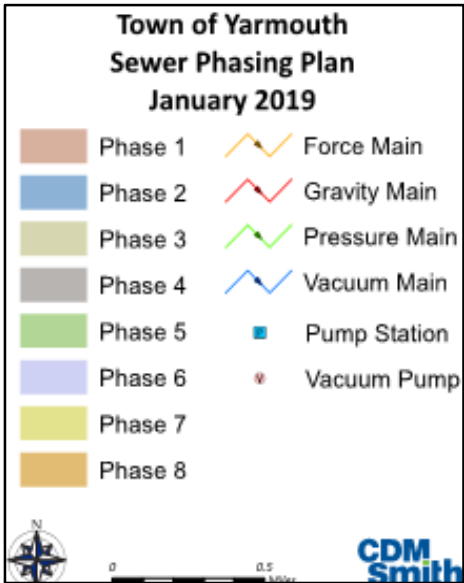
# ECONOMIC DEVELOPMENT BENEFITS

- 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!

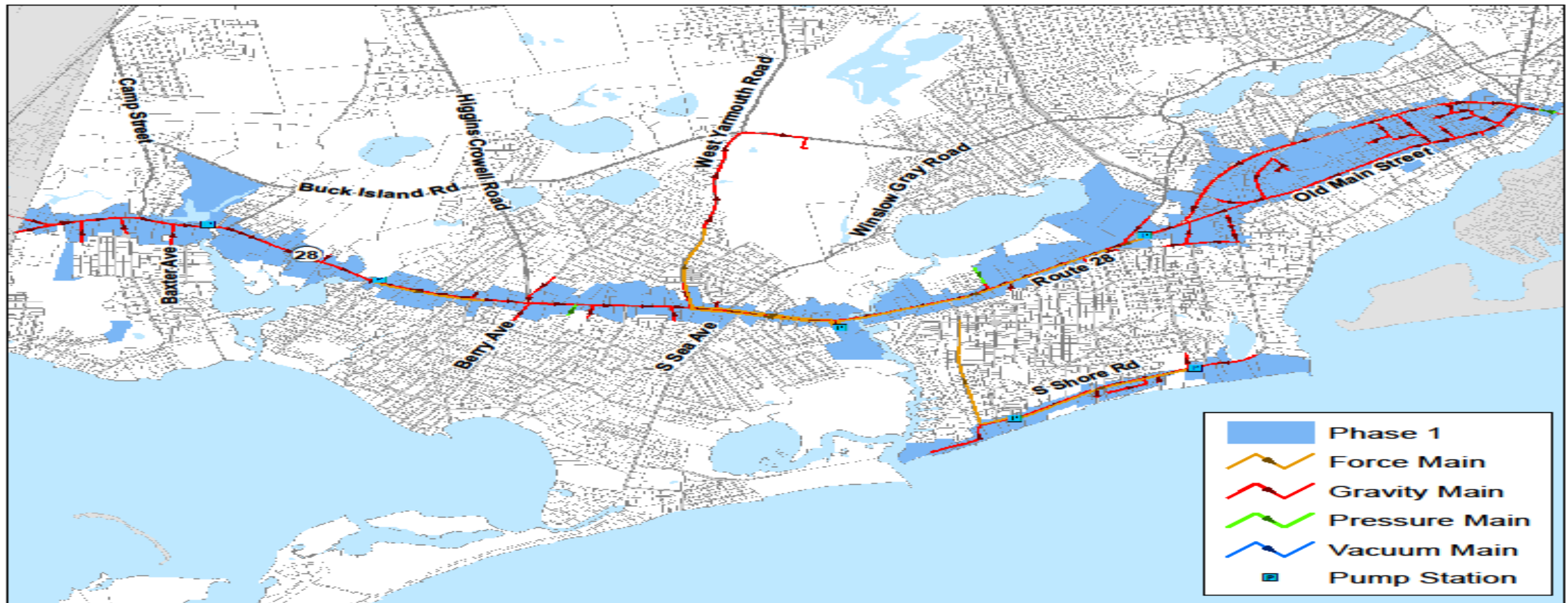
# PROPOSED PHASING PLAN – JANUARY, 2019



# RECOMMENDED PHASE I

- 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 I MAP



# COST RECOVERY PRINCIPLES

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 I COST RECOVERY OPTIONS UNDER CONSIDERATION

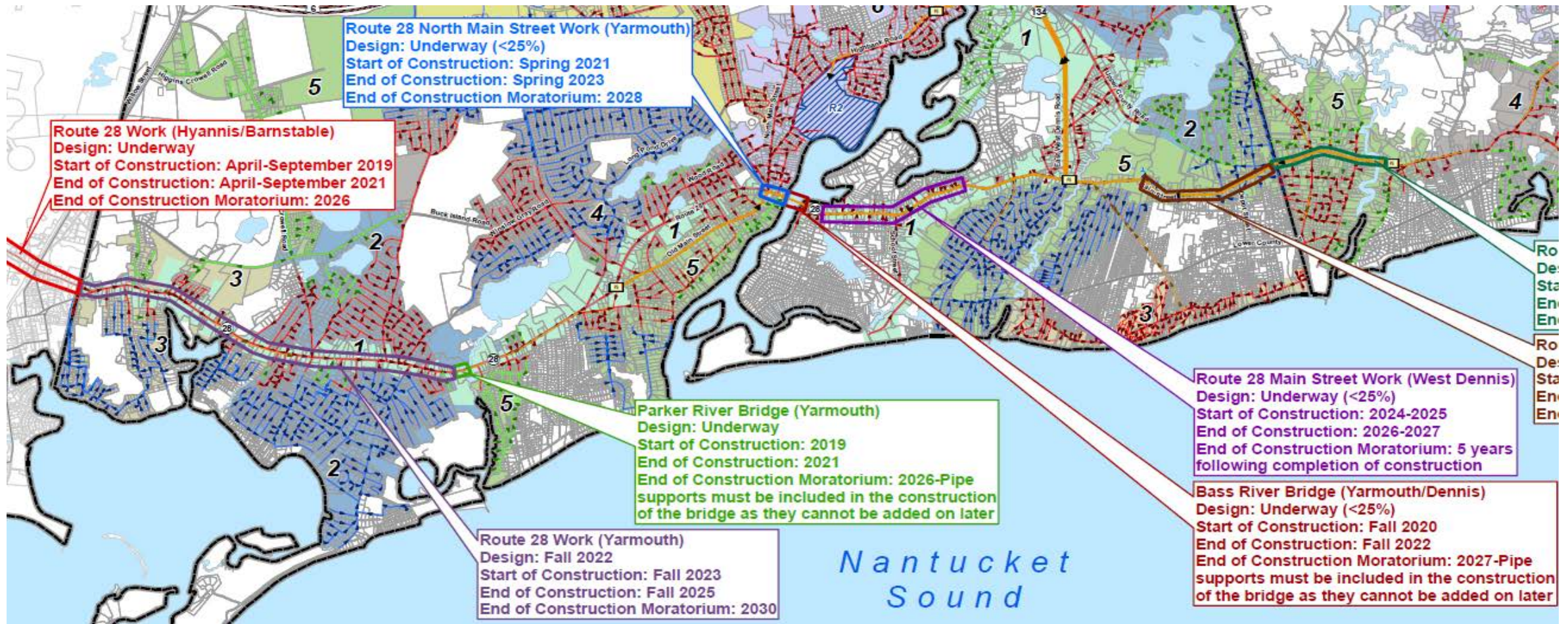
- Municipal Water Infrastructure Investment Fund (Principles 1,2,3,5)
  - Up to 3% (\$1.7 million) property tax surcharge, similar to CPA
- Debt Drop-off from Cape Tech School project (and others, if approved) (Principles 1,3,5)
- Flow-based betterment program (Principles 2,3,4,5,6)
- 25% capital surcharge 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 I construction to coincide with Route 28 road work to mitigate costs.
- Town Meeting vote on regional partnership(s).
- Town Meeting vote for Phase I design funds.
- Town Meeting vote on Phase I construction.
- Planning efforts assuming construction begins in 2021.



# TIMING ISSUES – ROUTE 28 ROAD WORK PROJECTS



## NEXT STEPS

- 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

# FOR MORE INFORMATION

Visit our website

General Information, meeting minutes, meeting materials

<https://www.Yarmouth.ma.us/1667/water-resources-advisory-committee>

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MASSACHUSETTS

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Visit our YouTube Channel

for videos of our meetings, informational videos to come!

<https://www.youtube.com/channel/UCgQIQFZevmoqW5Mz2PnWKpA>



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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

Get updates about water resource initiatives!

Send your email address by text message:

Text  
**YARMOUTHWATER**  
to **22828** to get started.



Message and data rates may apply.