

***Water & Wastewater as a Driver or Limiting
Factor for Development***
A Case Study of 5 South Shore Communities

ACEC Webinar

03/02/2022

Zoom Meeting Protocols

- Participants cannot unmute audio during the presentation
- During the Question or Comment period, this setting will be changed. You will be asked to raise your hand and once recognized, asked to unmute yourself
- Feel free to use the chat function to ask questions or post comments throughout the presentation – these will be monitored and responded to during the question and comment period

South Shore Site Readiness Study

Study Partners



Study Core Team Members

Amanda Gregoire, VP Real Estate Services, MassDevelopment

Peter Forman, President & CEO, South Shore Chamber of Commerce

Betsy Cowan Neptune, Former Chief of Economic Development, MAPC

Martin Pillsbury, Director of Environmental Planning, MAPC

Josh Fiala AICP AIA LEED AP, Principal Planner, MAPC

Tara McManus PE, Team Leader, Weston & Sampson

Laurie Toscano, Team Leader, Weston & Sampson

Gabe Crocker, Crocker Design Group

Thomas Berkley, Senior VP Development and Operations, Union Point Development Company

Town Representatives from Hanover, Hingham, Norwell, Rockland, & Weymouth

Water & Wastewater as a Driver or Limiting Factor for Development **Webinar Agenda**

1. MassDevelopment's Capabilities in Fostering Collaboration

Amanda Gregoire, VP Real Estate Services, MassDevelopment

2. Lessons & Takeaways as a Business Community

Peter Forman, President & CEO, South Shore Chamber of Commerce

3. South Shore Site Readiness Study – Land Use and Development Context

Martin Pillsbury, Director of Environmental Planning, MAPC

4. Water Supply & Wastewater Management Needs & Considerations

Tara McManus, Team Leader, Weston & Sampson

Laurie Toscano, Team Leader, Weston & Sampson

5. Weymouth Plan-in-Action

Ted Langill, Chief of Staff, Office of Mayor Robert L. Hedlund

Robert Luongo, Director of Planning & Community Development

Ryan Allgrove, Principal, Environmental Partners

6. Funding Opportunities for Water & Wastewater Infrastructure

Maria Pinaud, Director MassDEP Division of Municipal Services

7. Questions and Comments

1. Fostering Collaboration

Amanda Gregoire

VP Real Estate Services, MassDevelopment

MassDevelopment



- Massachusetts' finance and development agency, working with businesses, nonprofits, banks, and communities to stimulate economic growth. Also acts as the state's land bank.
- FY2021 Results
 - Financed or managed 416 projects
 - Invested more than \$1.86 billion in the Massachusetts economy
 - Created or supported 6,578 jobs and built or preserved 1,909 housing units

Who We Serve



Businesses

Helping companies expand, modernize, and relocate.



Developers

Making the difference at every stage of development.



Housing

Building expertise, from predevelopment to construction.



Manufacturers

Finding skilled employees, opening global markets.



Municipalities

Eliminating blight, revitalizing downtowns, creating opportunities.



Nonprofits

Working with nonprofits to upgrade, renovate and expand.



Banks

Partnering with banks to provide creative financing.

How We Serve



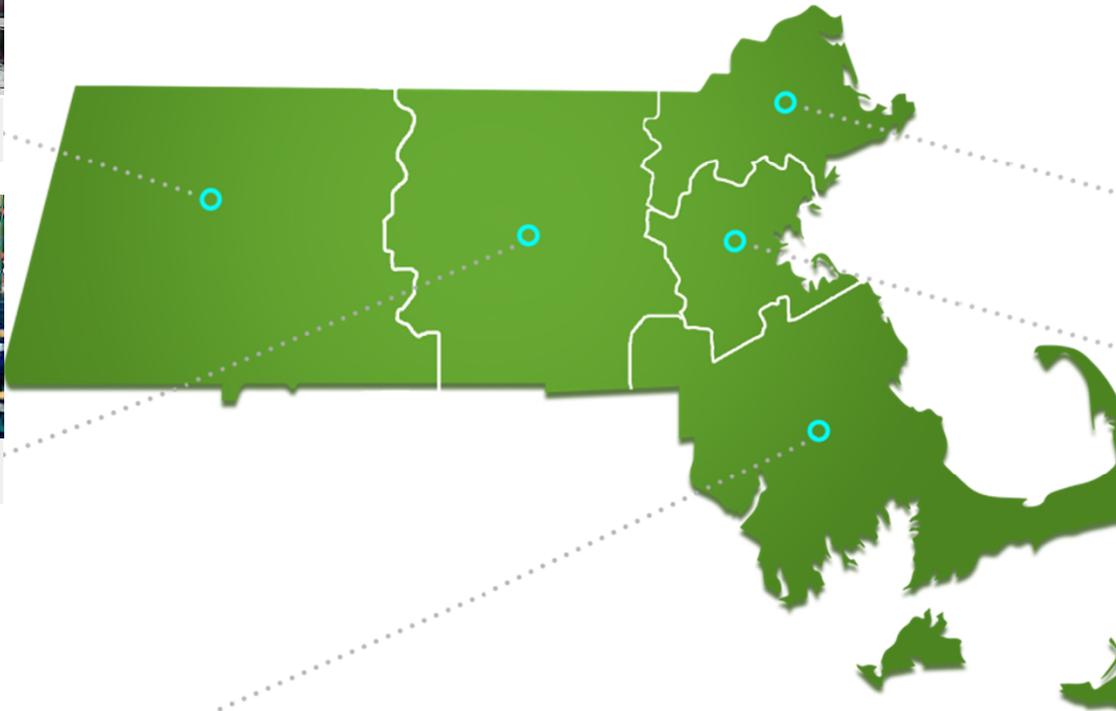
West



Central



South



North



Greater Boston

What We Offer



Finance

- Bond Financing
- Grants
- Loans & Guarantees
- Tax Credits

TDI



Real Estate

- Development Projects
- Technical Assistance
- Site Readiness Program

Real Estate Services: Technical Assistance Program

Objective Address site-specific and/or district-wide economic development challenges

Eligible Applicants

- Municipalities
- Municipal agencies
- Other public entities

Program Highlights

- MassDevelopment Project Management Assistance
- Access to vetted House Doctor expertise
- Awards of up to \$50,000
- Expedited Assistance

Eligible Uses

- Public Surplus Property Reuse
 - Site Concept Plans and Market Feasibility Studies
 - Request for Proposals/Qualifications
- Local District Management Implementation Assistance
 - District Improvement Financing (DIF)
 - Business Improvement District (BID)

Real Estate Services: Site Readiness Program

Objective Increase the Commonwealth's inventory of large project ready sites

Eligible Applicants

- Municipalities
- Municipal agencies or authorities
- Economic development and industrial corporations
- Economic development authorities and non-profit entities

Program Highlights

- MassDevelopment Project Management Assistance
- Access to vetted House Doctor expertise
- Awards between \$50,000 - \$1,000,000
- No maximum project duration

Eligible Uses

- Site Preparation
 - Site Concept Plans
 - Site Market Studies
 - Site Acquisition and Related Tasks
 - Demolition
 - Construction of Site-Related Upgrades
- Predevelopment and Permitting
 - Engineering Documents
 - Permitting and Pre-Permitting
 - Pro-Forma Development
 - Due Diligence Activities

2. Lessons & Takeaways as a Business Community

Peter Forman

President & CEO, South Shore Chamber of Commerce

3. South Shore Site Readiness Study – Land Use and Development Context

Martin Pillsbury

Director of Environmental Planning, MAPC

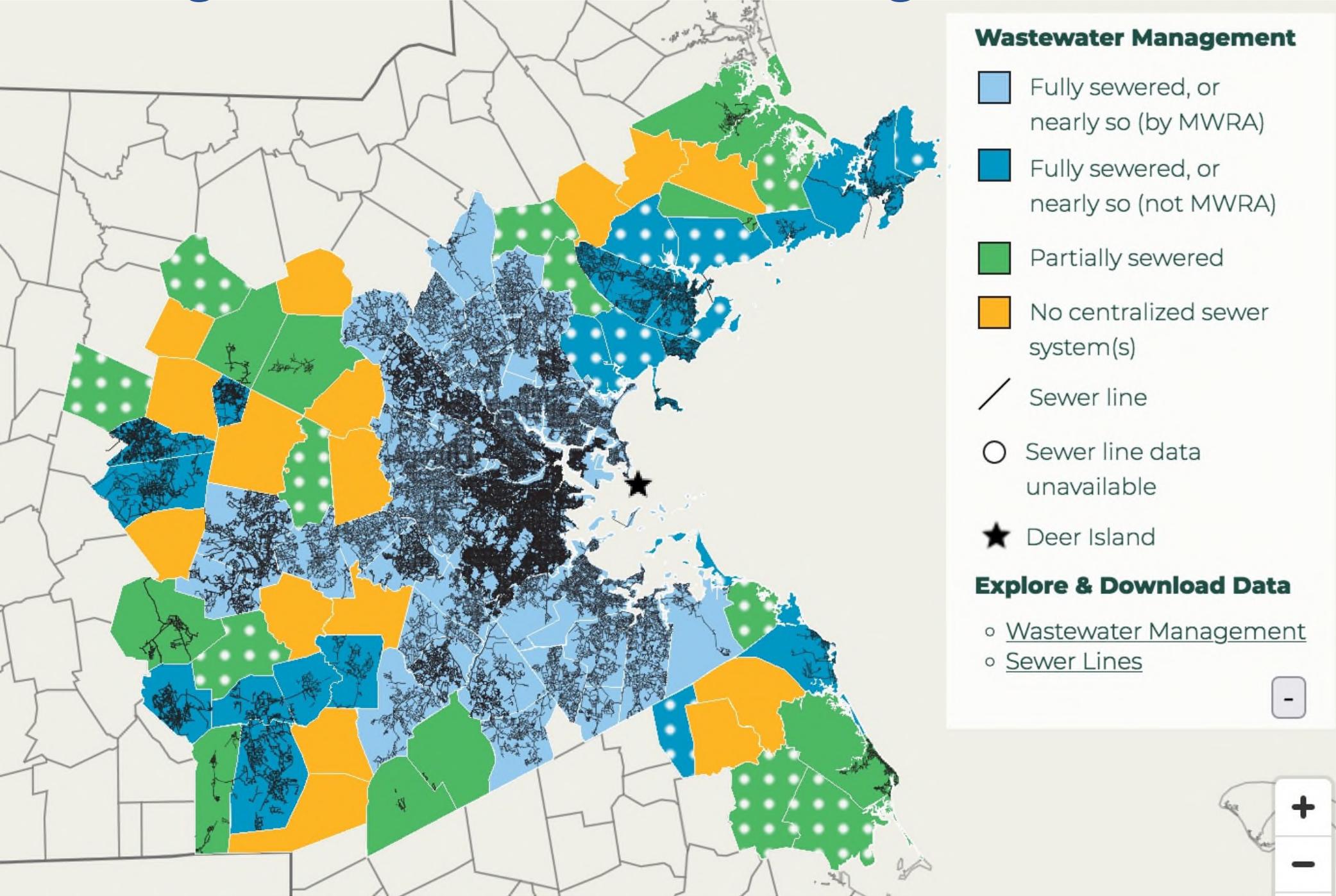
Land Use and Development Goals

- **Smart growth and infrastructure** – improved infrastructure capacity enables the type of development envisioned by sub-regional plans such as South Shore 2030 and MetroCommon 2050
- **Encouraging compact mixed-use development** – higher capacity and collaborative water and wastewater systems enable more sustainable models of development
- **Zoning as growth management** – if infrastructure limitations are reduced, proactive planning aligned with zoning becomes more important
- **Mutual and strategic investments** – leverage development projects to share infrastructure costs and benefits
- **Development review and assessment of infrastructure systems** – encourage analysis of infrastructure solutions, life-cycle costs, and increased collaboration through development review processes

Study Overview and Goals

- **Define appropriate areas** for **smart growth development and redevelopment** along the South Shore Route 3 corridor in the towns of *Hanover, Hingham, Norwell, Rockland and Weymouth*
- **Select six example properties** for analysis with two **build-out scenarios** to estimate water supply demand and wastewater capacity needs
- **Provide an analysis of water and wastewater capacity constraints and opportunities** in the five South Shore municipalities
- **Recommendations focus on the actions and potential partnerships** to encourage investments in water and wastewater infrastructure for a variety of future benefits including future growth

Regional Wastewater Management MAPC



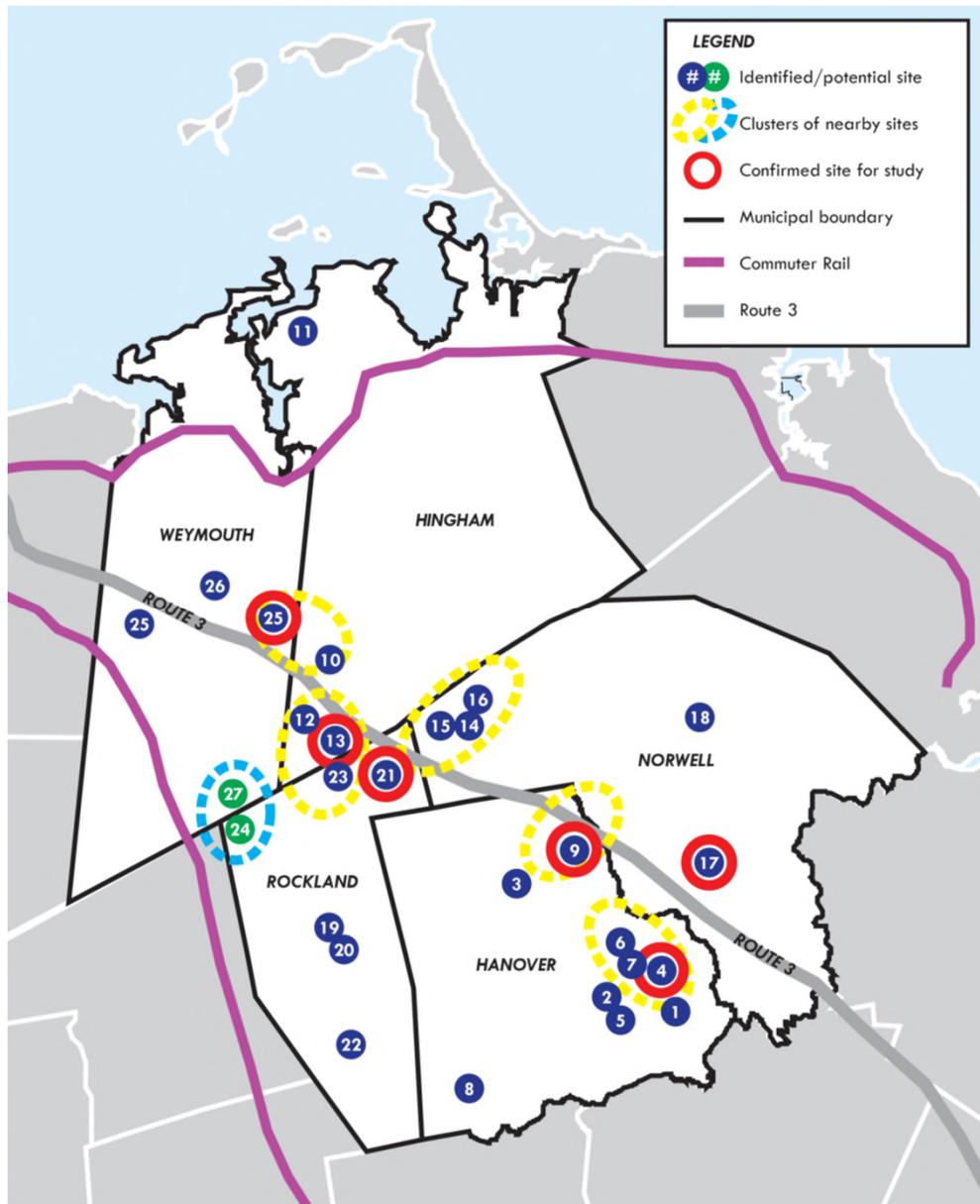
Site Selection Criteria for Buildout Analyses

- Zoning
- Existing uses
- Past site/area uses; site context
- Availability of water supply and wastewater treatment and discharge
- Roadway access/transit
- Site constraints – contamination, wetlands, topography, rare species
- Sites that leverage other opportunities around them

Example (Hanover):

Map #	Name	Address	Acres	Current Owner	Current Use	Current Zoning	Source
Details verified – Potential Opportunity							
1	Salmond School property	188 Broadway	8.4	Town of Hanover	Town office for Public School District (former Salmond School)	Residence A	Open Space Residential Cluster Bylaw, Appraisal Report
2	Sylvester School	495 Hanover Street	21.0 (total) 3.6 (RFP)	Town of Hanover	Vacant	Residence A	Sylvester School RFP 2018
3	Former Curtis School site	848 Main Street	3.0	Town of Hanover	Vacant	Residence A	Master Plan
4	Cardinal Cushing property (rear portion of property)	405 Washington St Rear	139.0	Cardinal Cushing School	Active school at front, vacant at rear	Residence A	Norwell Coordination Call

Six Example Properties & Clusters



- (4) Cardinal Cushing rear property, Hanover
- (9) Unicorn Development property, Hanover
- (13) South Shore Park property, Hingham
- (17) Wildcat Lane property, Norwell
- (21) Land behind Home Depot, Rockland
- (25) Bristol Brothers property, Weymouth

Build-out Analysis Methodology

Two Build-out Scenarios: Current Zoning and Potential Unconstrained by Zoning

Current zoning build-out was based on current characteristics:

- If residential, the property was mathematically subdivided into minimum lot sizes accounting for wetland areas – not based on a conceptual layout
- If commercial/industrial, the property was mathematically subdivided into minimum lot sizes accounting for wetland areas with mix of uses based on existing uses at Hingham's South Shore Park

Potential build-out unconstrained by zoning used conceptual information from property owners and recent comparable development:

- Modera, Marshfield
- Residences at Driftway Place, Scituate

Three geographies are used for the build-out analyses:

- Single parcel
- Assembled adjacent parcels
- Potential cluster of other nearby parcels

Build-out Example – Potential Cluster



South Shore Park Property, Hingham

Location		Build-out Projections		
Study Property	Extent	Current Zoning	Potential	Change between current and potential
Study Property #3 – South Shore Park Property, Hingham				
	Potential Cluster	<i>Residential</i> Single-family: 0 units Multi-family: 0 units	<i>Residential</i> Single-family: 100 to 125 units Multi-family: 520 to 570 units	<i>Residential</i> Single-family: +100 to +125 units Multi-family: +520 to +570 units
		<i>Commercial</i> General/office: 259,000 SF Retail: 0 SF Restaurant: 0 SF	<i>Commercial</i> General/office: 276,000 SF to 390,000 Retail: 170,000 SF Restaurant: 40,000 SF	<i>Commercial</i> General/office: +17,000 SF to +131,000 Retail: +170,000 SF Restaurant: +40,000 SF
		<i>Light Industrial</i> Manufacturing: 427,000 SF Warehouse: 287,000 SF	<i>Light Industrial</i> Manufacturing: 75,000 SF Warehouse: 50,000 SF	<i>Light Industrial</i> Manufacturing: (-352,000) SF Warehouse: (-237,000) SF

4. Water Supply & Wastewater Management Needs & Considerations

Tara McManus PE

Team Leader – Water, Weston & Sampson

Laurie Toscano

Team Leader – Wastewater, Weston & Sampson

Existing Water Supply Conditions

- **Town of Hanover** – three groundwater treatment plants in the South Coastal Watershed with a combined Water Management Act (WMA) authorized daily annual average withdrawal of 1.38 million gallons per day (MGD)
- **Town of Hingham** – Weir River Water System also provides water to Hull, and North Cohasset with a single treatment plant in Hingham and sources located in the Boston Harbor Watershed with a combined WMA authorized daily annual average withdrawal volume of 3.51 MGD.
- **Town of Norwell** – two groundwater treatment plants with one in the South Coastal and one in the Boston Harbor Watersheds. The combined WMA authorized daily annual average withdrawal volume is 1.14 MGD.
- **Town of Rockland** – Abington & Rockland Joint Water Works with two surface water treatment plants in the South Coastal Watershed and a groundwater treatment plant in the Taunton watershed. The combined WMA authorized daily annual average withdrawal volume is 3.11 MGD.
- **Town of Weymouth** – two water treatment plants with groundwater and surface water sources in the Boston Harbor Watershed. The combined WMA authorized daily annual average withdrawal volume is 5.00 MGD.

Water Supply Management Alternatives

Types of Water Management for South Shore Site Readiness Build-out Scenarios

Private Ownership

Private or Public Ownership

Public Ownership

MINIMAL BUILD-OUT

- Need to reserve an appropriate area to site individual wells on each property

INDIVIDUAL WELLS

- Typically, < 10,000 gpd
- Single Family or Multi Family Home
- Local control (BoH)
- Monitored & treated as needed by Owner

- Norwell Scenarios 1 & 4
- Assumed not applicable for others

PARCEL BUILD-OUT

- Need to reserve an appropriate area on parcel to site a well/wellfield
- New Source Approval Process (MA DEP)
- Typically, limited number of properties with limited commercial/industrial usage

PUBLIC WATER SUPPLIER / COMMUNITY OR NON-COMMUNITY

- ≥ 15 service connections or ≥ 25 people
- Typically, > 10,000 and < 100,000 gpd
- Property use-specific
- State Approval & Control (MA DEP)
- Source-specific treatment likely required

- Hanover Cushing Scenarios 1, 2, 3 & 4
- Hanover Unicorn Scenario 2, 3 & 4
- Hingham Scenarios 1, 2 & 3
- Rockland Scenarios 1 & 4
- Weymouth Scenarios 1, 2 & 4

CLUSTER BUILD-OUT

- Connect to existing Public Water Supply is likely option – potentially supplement existing PWS source/treatment/piping
- Identifying a new source in the community > 100,000 gpd is very unlikely

PUBLIC WATER SUPPLIER

- Community-specific
- Existing PWS controlled and monitored by the State
- Local PWS connection fee
- Infrastructure improvements (treatment and/or distribution piping) likely required

- Hanover Cushing Scenario 5
- Hanover Unicorn Scenario 5 & 6
- Hingham Scenarios 4 & 5
- Weymouth Scenarios 3 & 5

ALL BUILD-OUT

- Connect to MWRA – potentially create a localized Regional Water Supply across several communities

REGIONAL PUBLIC WATER SUPPLIER

- MWRA is an Existing Regional PWS
- MWRA connection fee & pipeline cost
- Region-specific (crossing community boundaries)
- State Approval & Control (MA DEP)
- Possibly create a localized Regional Water Supply of compatible water (quality and hydraulically) systems
- MWRA is in compliance with MassDEP's current PFAS regulation

- Hanover Cushing Scenario 6
- Hingham Scenario 6
- Weymouth Scenario 6

Additional Assumptions

- Connection to an existing water system is preferred, if available.
- Assumes scenario's maximum development average daily flow unless N/A.
- Only new well/wellfields water sources are considered viable not surface water source
- Multi-family build-out refers to apartment style living (≥10 units/building therefore ≥25 people/building)
- Additional local town bylaws, planning & zoning ordinances, and/or conservation requirements may apply
- New source approval and land protection zone(s) required for Private PWS options; MEPA may be triggered depending on build-out/water use

Existing Wastewater Management Conditions

- **Town of Hanover** – no centralized wastewater management system, existing development relies predominantly on septic systems or decentralized treatment systems located on each property.
- **Town of Hingham** – two separate centralized wastewater management systems (sewer districts), the North Sewer District transmits flow to the Massachusetts Water Resources Authority (MWRA) and the Weir River Sewer District transmits flow to the Town of Hull wastewater treatment facility.
- **Town of Norwell** – no centralized wastewater management system, existing development relies predominantly on septic systems located on each property.
- **Town of Rockland** – currently has a centralized wastewater management system (sewer). The Rockland municipal sewer system transmits flow to the Rockland WWTF. The current permitted capacity is 2.5 MGD
- **Town of Weymouth** – currently a MWRA municipality and all wastewater is transmitted to the MWRA system through multiple connections throughout the City. Weymouth currently contributes approximately 8.48 MGD to the MWRA.

Wastewater Management Alternatives

Types of Wastewater Management for South Shore Site Readiness Build-out Scenarios

Private Ownership

Private or Public Ownership

Public Ownership

MINIMAL BUILD-OUT

- Need to reserve areas on parcel for septic system
- Typically, one property owner

ONSITE SEPTIC SYSTEM

- $\leq 10,000$ gpd
- Local control (BoH)
- Limited treatment
- Monitored by Owner

➤ Norwell Scenarios 1 & 4

PARCEL BUILD-OUT

- Need to reserve areas on parcel for wastewater treatment plant (WWTP) and groundwater discharge (GWD)
- Typically, limited number of property owners

DE-CENTRALIZED WWTP'S with GWD's

- Typically, $> 10,000$ and $< 100,000$ gpd
- Property-specific
- State Control (MA DEP)
- Increased treatment
- Monitored by State Permit

- Hanover Cushing Scenarios 1, 2, 3 & 4
- Hanover Unicorn Scenario 2, 3 & 4
- Hingham Scenarios 1, 2, & 3
- Rockland Scenarios 1 & 4
- Weymouth Scenarios 1, 2, 3, 4, & 5

Additional Assumptions

- Connection to an existing wastewater system is preferred, if available.
- Assumes scenario's maximum development average daily flow unless N/A.
- Flow basis is regulatory for on-site systems, but typical for other options and based on per capita flows generated for this project.
- Additional local town bylaws, planning & zoning ordinances, and/or conservation requirements will apply.
- MEPA may be triggered depending on thresholds of specific project(s).

CLUSTER BUILD-OUT

- Need to reserve areas in vicinity for wastewater treatment facility (WWTF) and groundwater discharge (GWD)
- Typically, many property owners

CENTRALIZED/ COMMUNITY WWTF

- Typically, $> 100,000$ gpd
- Community-specific (may serve portions of adjacent communities)
- If GWD, State Control (MA DEP)
- If SWD, Federal Control (US EPA)
- Increased treatment
- Monitored by State/Federal Permit

- Hanover Cushing Scenarios 5 & 6
- Hanover Unicorn Scenarios 5 & 6
- Hingham Scenarios 4, 5 & 6
- Weymouth Scenario 6

ALL BUILD-OUT

- Multi-community Centralized WWTF and GWD
- Typically, Intermunicipal (or other entity) Agreements required

REGIONAL/MULTI-COMMUNITY WWTF

- MWRA is an Existing Regional WWTF with limited wastewater capacity remaining
- Similar to Centralized WWTF option but across several communities
- Typically, $> 1,000,000$ gpd
- Region-specific (crossing community boundaries)
- If GWD, State Control (MA DEP)
- If SWD, Federal Control (US EPA)
- Increased treatment
- Monitored by State/Federal Permit

- Weymouth Scenarios may have a more feasible option to connect to the Existing MWRA Regional wastewater system, if system capacity constraints change

Water and Wastewater Considerations

- **Cost benefit** – ascending water and wastewater solutions benefit public health and environmental protection
- **Inter-municipal** – neighboring municipalities have similar infrastructure limitations and may have more potential solutions working together
- **Public/private partnerships** – potential for private upfront capital investments and public operation and maintenance of systems
- **Private/private partnerships** – adjacent or nearby properties can share land resources depending water sources or effluent recharge areas
- **Regional collaboration** – inter-municipal partnerships for regional water collaboration, such as a connection to MWRA's water system and partnerships to convey water through other towns and agreements for connection fees and associated infrastructure improvements

Land Use Considerations

- **Smart growth and infrastructure** – improved infrastructure capacity enables the type of development envisioned by sub-regional documents such as South Shore 2030
- **Encouraging compact mixed-use development** – more high capacity and collaborative water and wastewater systems enable more sustainable models of development
- **Zoning as growth management** – if infrastructure limitations are reduced, proactive planning aligned with zoning becomes more important
- **Mutual and strategic investments** – leverage development projects to share infrastructure costs and benefits
- **Development review and assessment of infrastructure systems** – encourage analysis of infrastructure solutions, life-cycle costs, and increased collaboration through pre-development and development review processes

Next Steps

- **Potential municipal actions**
 - Increased communication and coordination within municipal departments, commissions and leadership
 - Outreach and discussion about infrastructure challenges with members of the community
 - Expand inter-municipal coordination
- **Potential property owner actions**
 - Advocate for infrastructure investments
 - Explore partnerships with municipalities and other property owners
- **Potential Chamber or other stakeholder actions**
 - Convene partners and build collaboration
 - Government advocacy
 - Possible future studies
 - Identifying regional economic opportunities ties to infrastructure
 - Exploring how findings from this study might have broader implications to other communities

5. Weymouth Plan-in-Action: Improve & Preserve Existing Water Supply While Protecting Environmental Resources

Ted Langill

Weymouth Chief of Staff, Office of Mayor Robert L. Hedlund

Robert Luongo

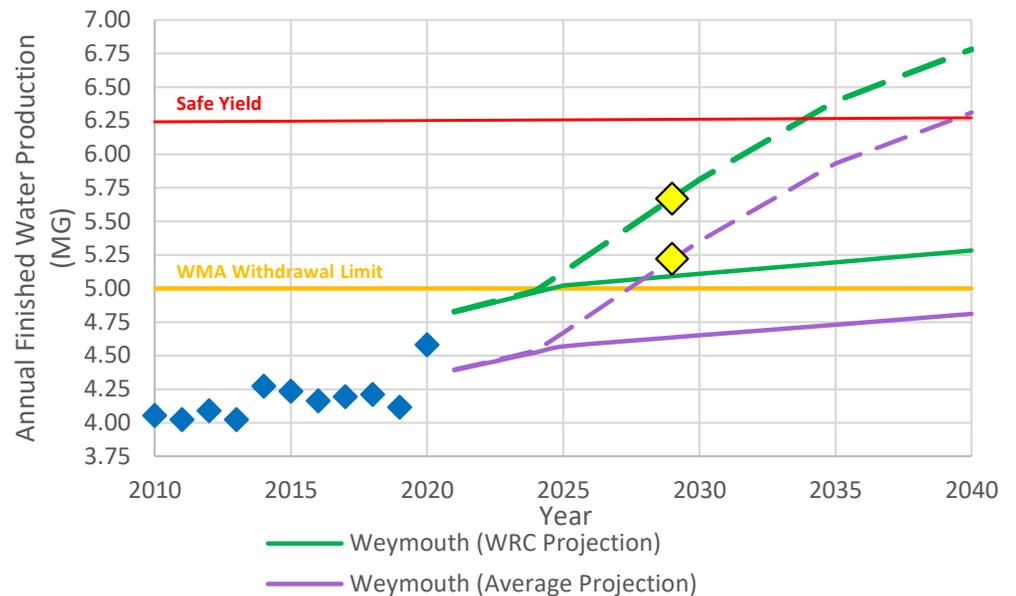
Weymouth Director of Planning & Community Development

Ryan Allgrove PE

Principal, Environmental Partners

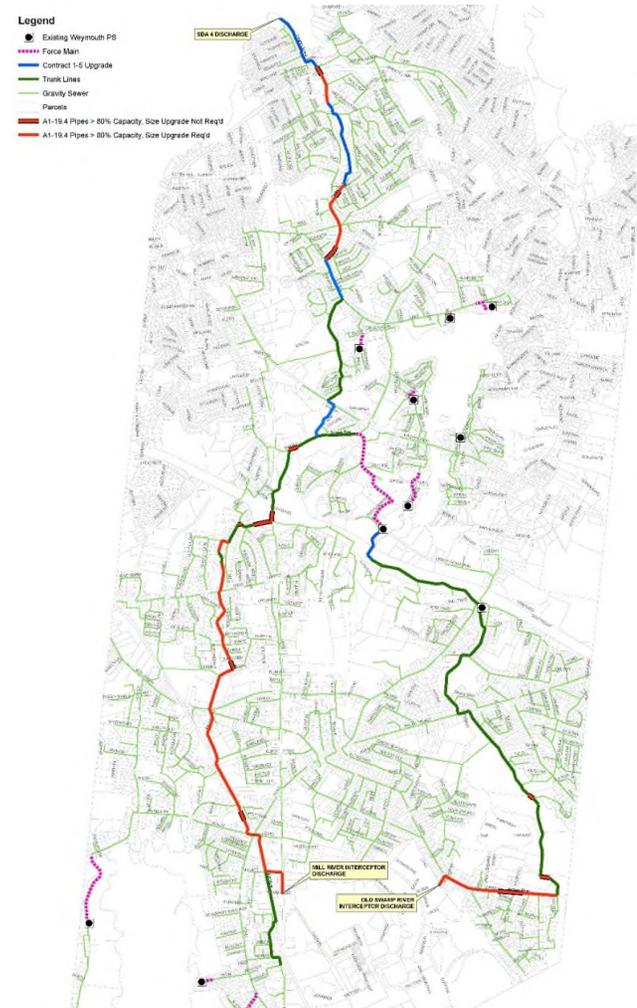
Weymouth's Existing Water Needs

- Using 85% of Withdrawal Limit (5 MGD)
- Potential 2 MGD Town increase over 20 years
- Projected Exceedances
 - WMA withdrawal
 - Supply Safe Yield
- Increased Operational Stress
 - Aging groundwater supply
 - Long Term PFAS Treatment Costs



Weymouth's Existing Wastewater Needs

- Potential 20% increase in ADF over 20 years
 - Concentrated in Single Basin
- 10 miles of Interceptor Sewer Affected
 - 15" – 42" Diameter
 - Projected 4-5 Miles of Interceptor Upgrades Required
- Continued Inflow/Infiltration Challenges

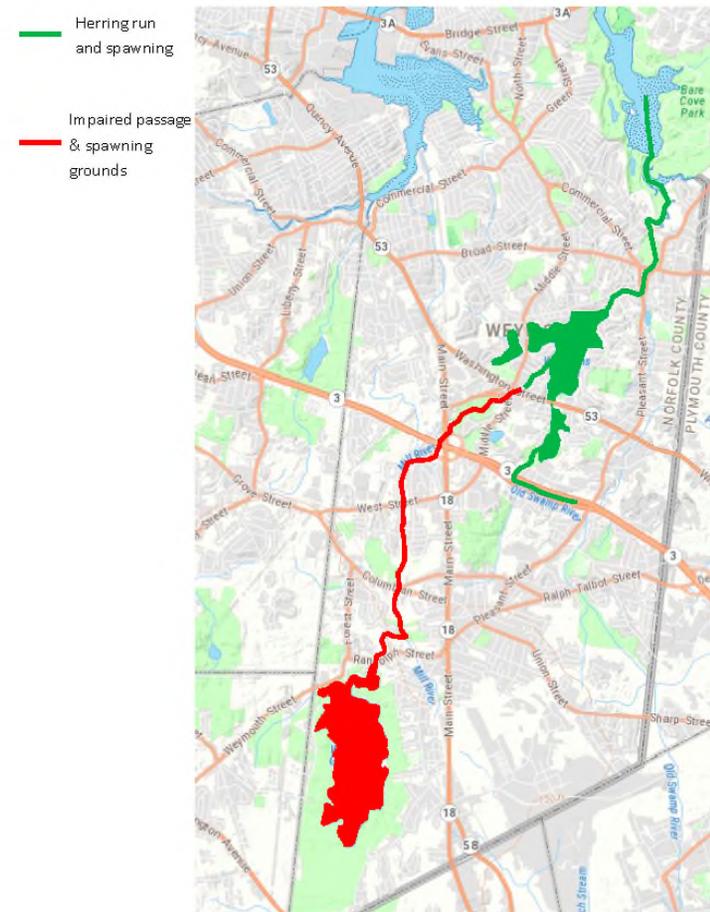


Weymouth's Future Goals

- Environmental Protection/Conservation and Expansion of Natural Resources (**Herring Run**)
- Expand **Passive Recreational Opportunities** at and around Great Pond



Herring Passage Weymouth MA



Weymouth's Future Goals

- Improve Weymouth's **Water Quality**
- Revitalize Weymouth's **Village Centers**
 - Jackson Square, Weymouth Landing, Columbian Square, Bicknell Square
- Revitalize Weymouth's **Commercial Corridors**
 - Bridge Street (Route 3A), Main Street (Route 18), and Washington Street (Route 53)
- Realize Potential of Union Point (Weymouth, Rockland and Abington)
 - Full buildout water need is currently estimated at approximately 2.5 MGD

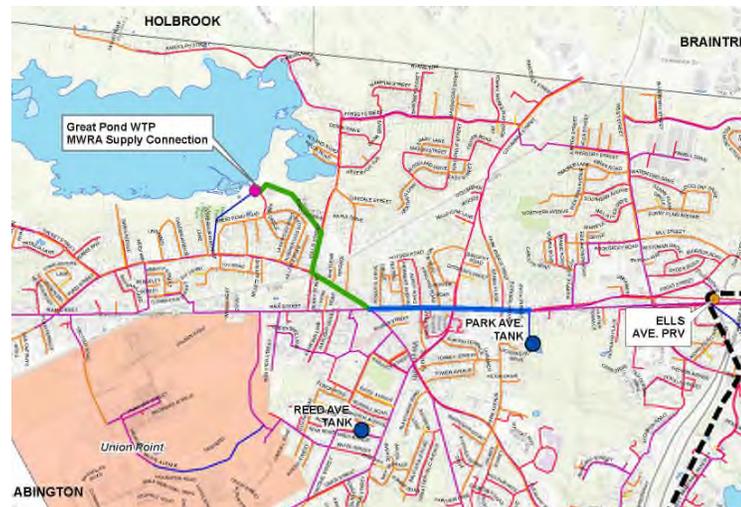
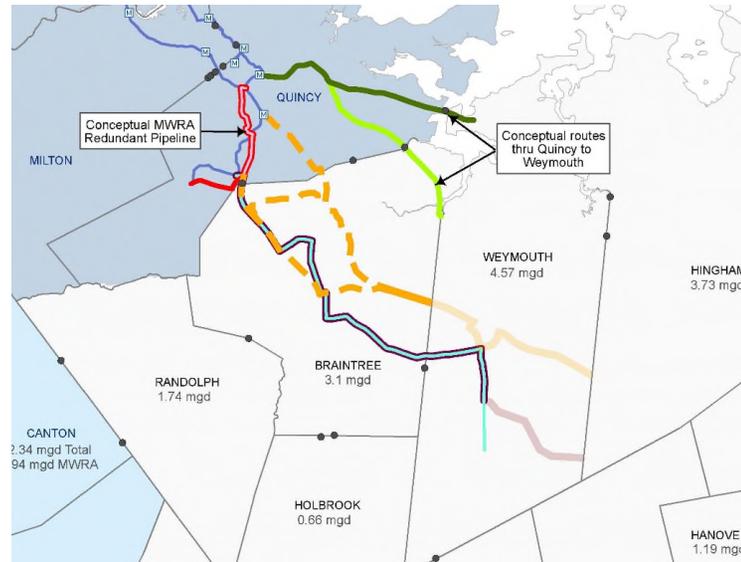
Need/Demand would exceed Weymouth's water supply safe yield and require supply from a regional supplier (MWRA).



MWRA Supply

Water demand with future goals would exceed Weymouth's water supply safe yield and require supply from a regional supplier (MWRA).

- MWRA 100MGD of Water Available
- 8 Concepts under Consideration
- Redundancy
 - Neighboring Communities
 - Existing Supplies
 - Continued MWRA Expansion
- Weymouth System Reliability
 - Maintain Current Level of Service
 - Cast Iron Mains
 - Storage Volume
 - Operational Considerations
- Additional Study for MWRA Expansion Earmarked by State Legislature



6. Funding Opportunities for Water & Wastewater Infrastructure

Maria Pinaud

Director, MassDEP Division of Municipal Services



STATE REVOLVING FUND UPDATES

March 2, 2022

Maria E. Pinaud, Director
Division of Municipal Services

Overview of the Massachusetts SRF Loan Program

- **The Massachusetts Clean Water Trust (Trust) and MassDEP jointly administer the Clean Water (CW) and Drinking Water (DW) State Revolving Funds (SRFs)** to finance water infrastructure projects to assist communities in complying with the Clean Water and Safe Drinking Water Acts.
- Funding is provided by **annual grants** from the U.S. Environmental Protection Agency (EPA), state matching funds and repayment of loans.
- To date, the Trust has financed approximately **\$8.1 billion** in loans for nearly **300** communities, serving **97%** of the Commonwealth's population. Nearly **\$288 million** provided in loan forgiveness to disadvantaged communities.
- **Clean Water SRF (CWSRF) Projects include:**
Wastewater Treatment Improvements, Combined Sewer Overflow Correction, Stormwater Management, Infiltration/Inflow Remediation, Sewer System Rehabilitation, Non-Point Source, Nutrient Enrichment Mitigation and Planning
- **Drinking Water SRF (DWSRF) Projects include:**
Drinking Water Treatment Improvements, Transmission and Distribution, Source Protection, Storage Improvements and Planning

Advantages of Borrowing Through the MA SRFs

Fixed Low-Interest Rates

- Rates are established by law and offer a stable planning tool for communities.
- Loans with a 20-year term will have an interest rate of 2%
- Loans with a term over 20 years will generally have an interest rate of 2.4%
- Certain projects qualify for reduced or 0% interest

Interim Loans (Construction Loans)

- The Trust offers interim loans with no fees or interest. These loans allow for one-stop financing through the Trust.

Flexible Repayment Terms

- Loans can be financed up to 30 years with a useful life certificate.

Disadvantaged Communities Additional Subsidy (Loan Forgiveness)

- The Trust uses a percentage of its annual grant and state funding as **additional subsidy** each year. This subsidy comes in the form of loan forgiveness to disadvantaged communities.
- Eligibility is determined by **an annual affordability calculation** – which ranks communities into affordability tiers. The amount of loan forgiveness is **based** on a community's affordability tier.

Disadvantaged Community Tiers	Tiers by Adjusted Per Capita Income (APCI) Range	CW Loan Forgiveness %	DW Loan Forgiveness %
Tier 1	APCI more than 80% but less than 100% of the State APCI	3.3%	6.6%
Tier 2	APCI more than 60% but less than 80% of the State APCI	6.6%	13.2%
Tier 3	APCI less than 60% of the State APCI.	9.9%	19.8%

Other Subsidy Programs Offered

- **Asset Management Planning Grants:** The grant program provides a **60%** grant to assist communities with completing or updating asset management plans for wastewater, drinking water, stormwater utilities, or any combination of the three to ensure the operational integrity of the water utility.
- **Housing Choice Loan Program:** Communities that have achieved the “Housing Choice” designation under the Housing Choice Initiative will be eligible for an interest rate reduction up to **.50%** from the standard below market rate of **2%** offered by the Trust.
- **0% Nutrient Enrichment Reduction Loans:** This loan program is for CWSRF loans that are primarily intended to **remediate** or prevent nutrient enrichment of a surface water body or water supply which can cause environmental degradation of the surrounding water bodies.
- **0% Interest PFAS Mitigation Loans:** Per- and polyfluoroalkyl substances (PFAS) are a family of chemicals that are classified as emerging contaminants and are known to cause health issues when found in drinking water. Projects that have the purpose of reducing PFAS in water below the established Maximum Contamination Level of 20 parts per trillion, are eligible for **0%** interest loans.

ARPA Supplemental SRF funding

Chapter 102 of the American Rescue Plan Act (ARPA) of 2021 appropriated \$100 million to the Massachusetts Clean Water Trust to support water infrastructure projects through the SRFs.

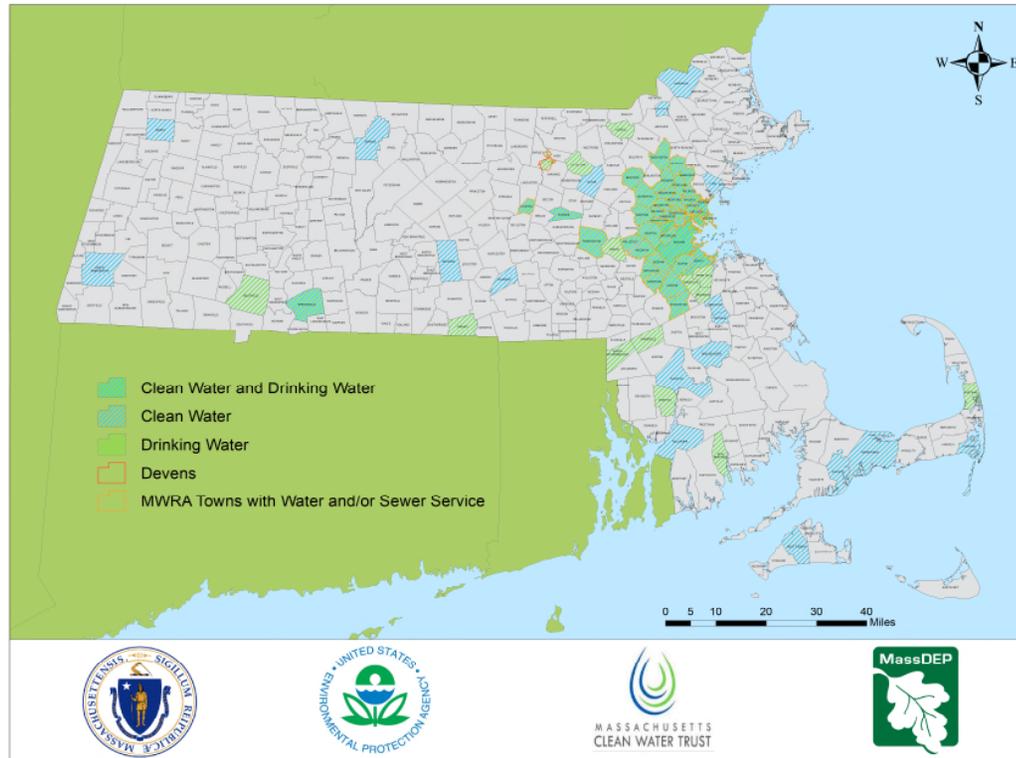
- \$12.88 million earmarked to specific projects.
- \$87.12 to be provided as principal forgiveness (PF)
 - ✓ \$67 million for all construction projects in the 2021 IUPs
 - ✓ The remaining \$20 million for CSO construction projects in the 2022 IUP.

2021 Projects Receiving ARPA Grant Funds

Project Type	# of Projects	Project Costs			Eligible Subsidy	ARPA Funds Committed
		Disadvantaged Communities	All Other Communities	Total		
Drinking Water SRF Projects						
PFAS Projects ⁽¹⁾	10	\$46.9	\$59.4	\$106.3	20.0%	\$21.3
Small Systems	2	16.8	---	16.8	15.0%	2.5
All Other DW Projects	8	25.5	9.5	35.0	10.0%	3.5
Total DWSRF Projects	20	89.2	--	158.1		27.3
Clean Water SRF Projects						
CSO Projects	1	--	23.0	23.0	15.0%	3.5
All Other CW Projects	31	446.2	34.4	480.6	7.5%	36.0
Total CWSRF Projects	32	446.2	57.4	503.6		39.5
Combined Totals	52	\$535.4	\$126.3	\$661.7		\$66.8

⁽¹⁾ Projects to remediate Per- and polyfluoroalkyl substances (PFAS). This ARPA subsidy will be paired with the Trust's 0% interest rate PFAS program.

2021 Intended Use Plan Construction Projects



MassDEP Region	2021 CWSRF			2021 DWSRF		
	# of Projects	Project Costs	ARPA Loan Forgiveness	# of Projects	Project Costs	ARPA Loan Forgiveness
Southeast Region	13	\$252.1	\$18.9	7	\$39.9	\$6.8
Northeast Region	10	\$120.0	\$10.7	8	\$51.7	\$8.2
Central Region	4	\$62.4	\$4.7	3	\$41.6	\$8.3
Western Region	5	\$69.1	\$5.2	2	\$24.9	\$4

BIL Supplemental SRF funding

Highlights for Massachusetts SRFs

- President Biden signed into law the **\$1.2 trillion** Infrastructure Investment and Jobs Act of 2021 (H.R. 3694) *aka* Bipartisan Infrastructure Law (**BIL**).
- Provides funding for the Clean Water and Drinking Water State Revolving Funds (SRFs) over the next five years (2022 – 2026) – This funding is in addition to the annual SRF capitalization grants (for Massachusetts \$55M CWSRF and \$ 25M DWSRF).
- Expands program capacity while adhering to existing SRF project eligibilities.

BIL Supplemental Funding

- Funding will be available to the SRFs to expand capacity while adhering to existing project eligibilities, in the following grant categories:
 - Clean Water SRF:
 - Supplemental Grant- these funds are available for all eligible projects.
 - 49% of the grant must be given away as loan forgiveness.
 - Emerging Contaminants Grant- these funds focus specifically on emerging contaminants such as PFAS.
 - 100% of the grant must be given away as loan forgiveness.
 - Drinking Water SRF:
 - Supplemental Grant- these funds are available for all eligible projects.
 - 49% of the grant must be given away as loan forgiveness.
 - Emerging Contaminants Grant- these funds focus specifically on emerging contaminants such as PFAS.
 - 100% of the grant must be given away as loan forgiveness.
 - Lead Service Line Replacement Grant- These funds will go towards identifying, planning and removing lead service lines.
 - 49% of the grant must be given away as loan forgiveness.

Expected BIL Investment in Massachusetts

Year	CW Supplemental	CW PFAS	CW State Match	DW Supplemental	DW PFAS	DW Lead	DW State Match	Total
2022	\$60,925,000	\$3,198,000	\$6,092,500	\$41,662,000	\$17,495,733	\$65,610,000	\$4,166,200	\$199,149,433
2023	\$70,534,621	\$7,195,500	\$7,053,462	\$48,233,293	\$17,495,733	\$65,610,000	\$4,823,329	\$ 220,945,940
2024	\$76,973,068	\$7,195,500	\$15,394,614	\$52,636,060	\$17,495,733	\$65,610,000	\$10,527,212	\$245,832,187
2025	\$83,379,482	\$7,195,500	\$16,675,896	\$57,016,922	\$17,495,733	\$65,610,000	\$11,403,384	\$258,776,919
2026	\$83,379,482	\$7,195,500	\$16,675,896	\$57,016,922	\$17,495,733	\$65,610,000	\$11,403,384	\$258,776,919
Total	\$375,191,654	\$31,980,000	\$61,892,369	\$256,565,198	\$87,478,667	\$328,050,000	\$42,323,510	\$1,183,481,397

State Revolving Fund Loan Process

The SRF financing process can take up to two years, depending on the community and project, from the initial project proposal to funding being disbursed. MassDEP staff will provide assistance to the community from application submission to project completion.



CONTACTS

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Massachusetts Department of Environmental Protection

<https://www.mass.gov/state-revolving-fund-srf-loan-program>

Massachusetts Clean Water Trust:

<https://www.mass.gov/orgs/the-massachusetts-clean-water-trust>

7. Questions and Comments

Zoom Meeting Protocols

- Questions or comments made throughout the presentation will now be addressed in order of receipt
- If you have an additional question or comment, please raise your hand and you will be recognized and asked to unmute yourself. Or feel free to use the chat function
- If available, please turn your video on

Water & Wastewater as a Driver or Limiting Factor for Development

Webinar Presenters

1. MassDevelopment's Capabilities in Fostering Collaboration

Amanda Gregoire, VP Real Estate Services, MassDevelopment agregoire@massdevelopment.com

2. Lessons & Takeaways as a Business Community

Peter Forman, President & CEO, South Shore Chamber of Commerce pforman@southshorechamber.org

3. South Shore Site Readiness Study – Land Use and Development Context

Martin Pillsbury, Director of Environmental Planning, MAPC mpillsbury@mapc.org

4. Water Supply & Wastewater Management Needs & Considerations

Tara McManus, Team Leader, Weston & Sampson mcmanust@wseinc.com

Laurie Toscano, Team Leader, Weston & Sampson toscanol@wseinc.com

5. Weymouth Plan-in-Action: Improve & Preserve Existing Water Supply While Protecting Environmental Resources

Ted Langill, Chief of Staff, Office of Mayor Robert L. Hedlund tlangill@weymouth.ma.us

Robert Luongo, Director of Planning & Community Development rluongo@weymouth.ma.us

Ryan Allgrove, Principal, Environmental Partners rja@envpartners.com

6. Funding Opportunities for Water & Wastewater Infrastructure

Maria Pinaud, Director MassDEP Division of Municipal Services maria.pinaud@mass.gov