



### **Massachusetts Water Resources Authority**

# Infiltration/Inflow Local Financial Assistance Program Annual Update

March 17, 2021



## MWRA I/I Local Financial Assistance Program Funding Summary

### ATTACHMENT 1 MWRA I/I LOCAL FINANCIAL ASSISTANCE PROGRAM FUNDING SUMMARY AS OF DECEMBER 2020

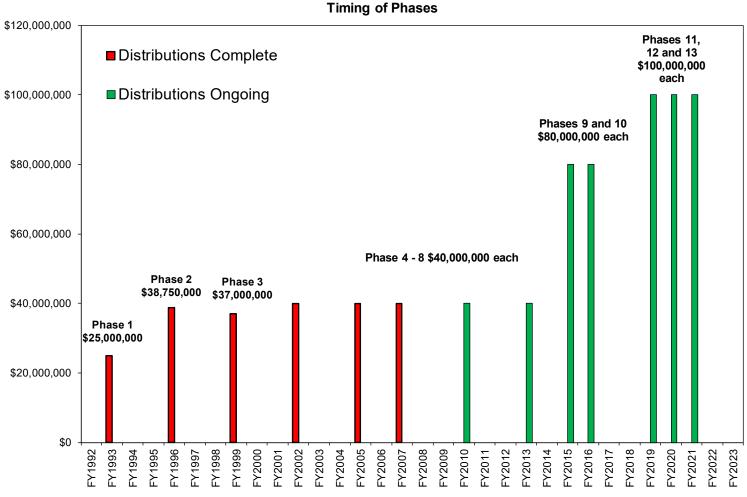
Community	Total Allocations (Phases 1 - 13)	Total Distributions (Phases 1 - 13)	Percent Distributed	Funds Remaining
Arlington	\$13,703,000	\$10,023,000	73%	\$3,680,00
Ashland	\$3,818,500	\$1,742,450	46%	\$2,076,05
Bedford	\$5,654,600	\$2,439,658	43%	\$3,214,94
Belmont	\$8,255,100	\$5,135,100	62%	\$3,120,00
Boston	\$218,001,200	\$97,064,876	45%	\$120,936,32
Braintree	\$14,419,000	\$9,928,840	69%	\$4,490,16
Brookline	\$21,355,200	\$10,666,200	50%	\$10,689,00
Burlington	\$8,432,800	\$7,322,800	87%	\$1,110,00
Cambridge	\$39,250,100	\$28,830,100	73%	\$10,420,00
Canton	\$6,635,900	\$2,675,900	40%	\$3,960,00
Chelsea	\$11,760,100	\$10,130,100	86%	\$1,630,00
Dedham	\$9,220,000	\$6,900,000	75%	\$2,320,00
Everett	\$13,381,500	\$6,650,500	50%	\$6,731,00
Framingham	\$20,375,000	\$13,671,000	67%	\$6,704,00
Hingham	\$2,802,500	\$2,412,500	86%	\$390,00
Holbrook	\$2,779,600	\$896,562	32%	\$1,883,03
Lexington	\$12,125,300	\$10,565,300	87%	\$1,560,00
Malden	\$20,683,900	\$5,641,900	27%	\$15,042,00
Medford	\$19,637,600	\$7,961,600	41%	\$11,676,00
Melrose	\$10,126,300	\$8,657,300	85%	\$1,469,00
Milton	\$9,014,500	\$7,864,500	87%	\$1,150,00
Natick	\$9,332,600	\$5,582,600	60%	\$3,750,00
Needham	\$9,977,600	\$4,018,600	40%	\$5,959,00
Newton	\$34,937,400	\$34,937,400	100%	
Norwood	\$11,589,400	\$6,879,400	59%	\$4,710,00
Quincy	\$32,780,000	\$26,237,239	80%	\$6,542,76
Randolph	\$10,070,800	\$4,971,058	49%	\$5,099,74
Reading	\$7,749,100	\$5,669,100	73%	\$2,080,00
Revere	\$16,940,900	\$5,502,900	32%	\$11,438,00
Somerville	\$25,955,800	\$12,116,900	47%	\$13,838,90
Stoneham	\$7,829,900	\$5,889,900	75%	\$1,940,00
Stoughton	\$7,902,900	\$6,724,150	85%	\$1,178,7
Wakefield	\$9,806,900	\$8,526,900	87%	\$1,280,00
Walpole	\$6,110,000	\$4,490,000	73%	\$1,620,0
Waltham	\$22,282,400	\$15,226,900	68%	\$7,055,50
Watertown	\$10,155,800	\$6,285,800	62%	\$3,870,00
Wellesley	\$9,249,700	\$4,739,700	51%	\$4,510,00
Westwood	\$4,302,300	\$2,091,300	49%	\$2,211,00
Weymouth	\$19,100,900	\$12,225,900	64%	\$6,875,00
Wilmington	\$4,232,000	\$2,462,000	58%	\$1,770,00
Winchester	\$6,793,000	\$5,923,000	87%	\$870,00
Winthrop	\$5,553,400	\$4,561,150	82%	\$992,2
Woburn	\$16,665,500	\$14,675,500	88%	\$1,990,00
Totals	\$760,750,000	\$456,917,583	60%	\$303.832.41

- \$760.75 million approved (13 Phases)
- \$457 million distributed (FY93 December 2020)
- \$181 million in loans repaid to MWRA
- All 43 communities participating
- 616 local projects funded
- 545 projects complete, 71 ongoing
- Community allocation based on % share sewer charge



### MWRA's Long-Term Commitment to Fund I/I Reduction

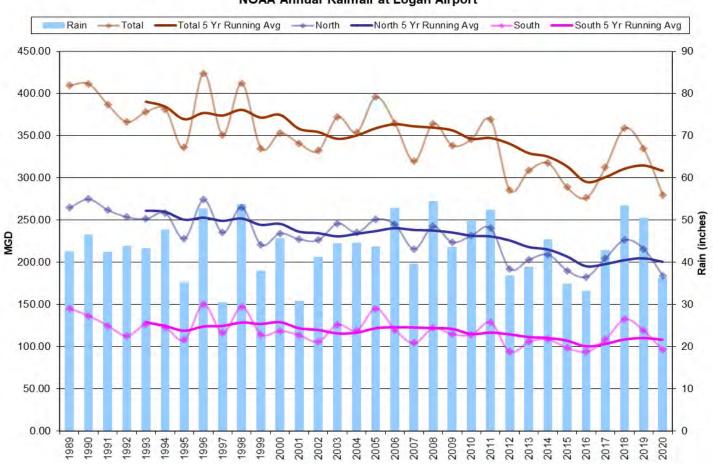
### I/I Local Financial Assistance Program Timing of Phases





## **MWRA Long-Term Regional Flow Data — Gradual Decrease in Flow**

ATTACHMENT 3
MWRA Long-Term Regional Flow Data
NOAA Annual Rainfall at Logan Airport





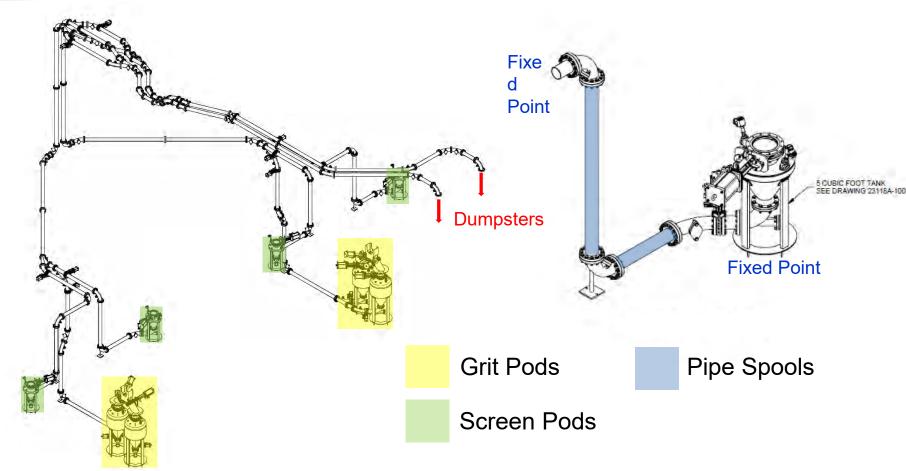
### **Massachusetts Water Resources Authority**

### Chelsea Creek Headworks Upgrade Contract 7161 - Change Order 45

March 17, 2021



### **Chelsea Creek Headworks: Pneumatic Ejection Piping System**



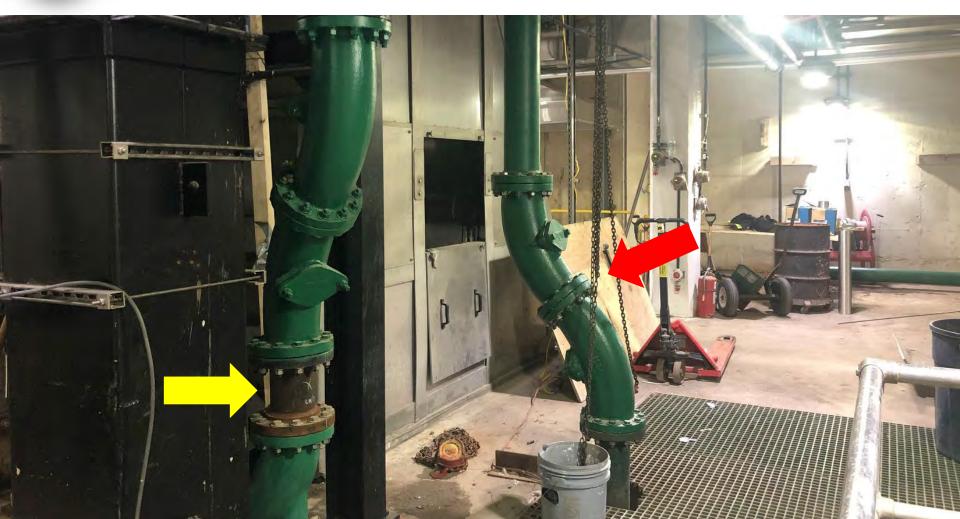


### **Chelsea Creek Headworks: Temporary Pipe Closure Spools**





### **Chelsea Creek Headworks: Temporary Pipe Closure Spools**





### **Chelsea Creek Headworks: Re-route Pipe Around Conflicts**





### **Chelsea Creek Headworks: Ceramic Composite Lining**





### Chelsea Creek Headworks: COVID-19 Safety Stand Down



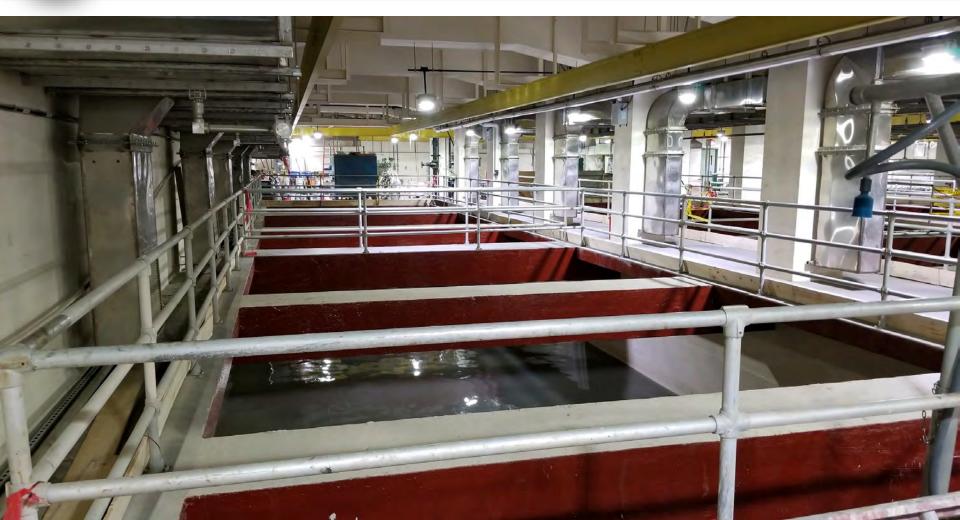


## **Chelsea Creek Headworks: Roof Infills for Abandoned Penetrations**





### **Chelsea Creek Headworks: Reliability Testing**





### **Chelsea Creek Headworks: Odor Control System**





### Chelsea Creek Headworks: Building Exterior & Site Restoration





### **Chelsea Creek Headworks: Building Exterior & Site Restoration**





### Remote Headworks Upgrade: Arcadis US, Inc., Contract 7206

- Contract Amendment 7
  - \$439,000
  - 6-month time extension
- Presenter:
  - John Colbert



### **Massachusetts Water Resources Authority**

### Green Forestry Certification

March 17, 2021



### **Over 140 Square Miles of Watershed Forest Managed by DCR**



FOREST STEWARDSHIP COUNCIL	SUSTAINABLE FORESTRY INITIATIVE
Workers Rights/Conditions	Sustainable Forestry
Indigenous Peoples' Rights	Protection of Water Resources
Community Relations	Protection Of Biological Diversity
Environmental Values & Impacts	Aesthetics and Recreation
Management Planning	Protection of Special Sites
Monitoring & Assessment	Responsible Fiber Sourcing Practices
High Conservation Values	Indigenous Peoples' Rights
Implementation of Mgt Activities	Community Involvement
	Communications & Public Reporting



### **Massachusetts Water Resources Authority**

## Local Water System Assistance Program Annual Update

March 17, 2021



## MWRA Local Water System Assistance Program Funding Summary

#### MWRA LOCAL WATER SYSTEM ASSISTANCE PROGRAM ALLOCATION AND FUND UTILIZATION BY COMMUNITY THROUGH DECEMBER 2020

Community	Community Total Allocation Phases 2 and 3	Total Distributions Phases 2 and 3	Percent Distributed	Funds Remaining
Arlington	\$14,912,000	\$5,700,000	38%	\$9,212,000
Ashland*	\$519,400	\$0	0%	\$519,400
Bedford *	\$6,067,000	\$2,418,000	40%	\$3,649,000
Belmont	\$7,329,000	\$5,477,000	75%	\$1,852,000
Boston	\$91,541,000	\$52,648,230	58%	\$38,892,770
Brookline	\$8,011,000	\$660,000	8%	\$7,351,000
Burlington*	\$827,400	\$0	0%	\$827,400
Canton *	\$6,187,000	\$4,600,000	74%	\$1,587,000
Chelsea	\$8,853,000	\$5,325,700	60%	\$3,527,300
Dedham/Westwood *	\$1,352,000	\$503,000	37%	\$849,000
Everett	\$10,970,000	\$7,191,200	66%	\$3,778,800
Framingham	\$16,360,000	\$10,057,900	61%	\$6,302,100
Lexington	\$6,801,000	\$1,145,015	17%	\$5,655,985
Lynnfield Water Dist.	\$3,074,000	\$1,146,800	37%	\$1,927,200
Malden	\$17,877,000	\$6,734,800	38%	\$11,142,200
Marblehead	\$9,349,000	\$2,200,000	24%	\$7,149,000
Marlborough *	\$5,429,000	\$1,283,800	24%	\$4,145,200
Medford	\$17,759,000	\$2,075,000	12%	\$15,684,000
Melrose	\$10,853,000	\$6,734,000	62%	\$4,119,000
Milton	\$10,090,000	\$4,764,000	47%	\$5,326,000
Nahant	\$3,325,000	\$1,460,100	44%	\$1,864,900
Needham *	\$2,688,000	\$1,131,265	42%	\$1,556,735
Newton	\$34,439,000	\$12,241,800	36%	\$22,197,200
Northborough *	\$2,498,000	\$986,053	39%	\$1,511,947
Norwood	\$10,691,000	\$6,913,400	65%	\$3,777,600
Peabody *	\$3,845,000	\$3,845,000	100%	\$0
Quincy	\$24,757,000	\$19,056,200	77%	\$5,700,800
Reading	\$9,219,000	\$4,146,000	45%	\$5,073,000
Revere	\$10,349,000	\$6,050,000	58%	\$4,299,000
Saugus	\$16,309,000	\$7,109,994	44%	\$9,199,006
Somerville	\$18,210,000	\$5,898,234	32%	\$12,311,766
Southborough	\$3,432,000	\$0	0%	\$3,432,000
Stoneham	\$5,081,000	\$4,139,000	81%	\$942,000
Stoughton*	\$6,053,000	\$2,506,000	41%	\$3,547,000
Swampscott	\$9,031,000	\$5,049,468	56%	\$3,981,532
Wakefield *	\$5,681,000	\$3,325,000	59%	\$2,356,000
Waltham	\$25,197,000	\$5,520,201	22%	\$19,676,799
Watertown	\$6,723,000	\$3,978,000	59%	\$2,745,000
Watertown Welleslev *	\$5,618,000	\$241,569	4%	\$5,376,431
Weston	\$3,920,000	\$2,313,997	59%	\$1,606,003
Wilmington *	\$1,917,000	\$611,000	32%	\$1,306,000
Winchester *	\$2,276,000	\$775,000	34%	\$1,501,000
Winthrop	\$7,431,000	\$7,431,000	100%	\$1,501,000
Woburn *	\$6,496,000	\$2,591,000	40%	\$3,905,000
SUBTOTAL	\$479,346,800	\$227,983,726	48%	\$251,363,074

 Chicopee
 \$16,927,000
 \$5,183,400
 \$31%

 South Hadley F.D. 1
 \$3,564,000
 \$2,038,000
 57%

 Wilbraham
 \$3,569,000
 \$0
 0%

 SUBTOTAL
 \$24,000,000
 \$7,221,400
 30%

\$235,205,126

\$503,346,800

TOTAL

\$11,743,600 \$1,526,000 \$3,509,000 \$16,778,600

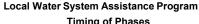
\$268,141,674

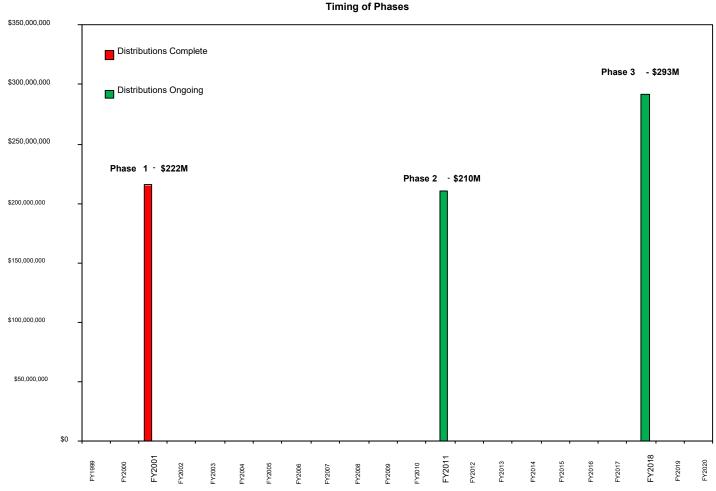
- \$725 million approved (3 Phases)
- \$456 million distributed (FY01 December 2020)
- \$308 million loans repaid to MWRA
- 43 communities participating
- 478 local projects funded
- 416 projects complete, 62 ongoing
- Community allocation based on % share water charge and % share unlined pipe

Partially Served Communities



## MWRA's Long-Term Commitment to Fund Local Water System Rehabilitation







### **MWRA Funding for Local Water Projects**



Water Main Replacement Construction

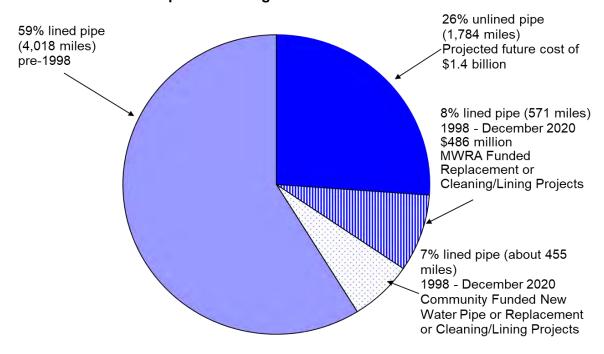


Water Storage Tank Rehabilitation



### Funding for Local Water Projects and Future Needs

## Regional Water System Lined and Unlined Pipe 6,828 Miles of Community Water Mains Updated through December 2020



Remaining Unlined Pipe Represents a \$1.4 Billion Future Cost



### Lead Service Line Replacement Loan Program

- \$100 million in 10-Year Interest-Free Loans
- Fully Replace Lead Service Lines
- Distributed \$17.6 million to 11 Communities:
  - Newton \$4.0 million
  - Marlborough \$3.0 million
  - Everett \$2.5 million
  - Winchester \$2.2 million
  - Winthrop \$1.5 million
  - Quincy \$1.5 million
  - Needham \$1.0 million
  - Somerville \$900,000
  - Chelsea \$700,000
  - Revere \$195,000
  - Weston \$160,000





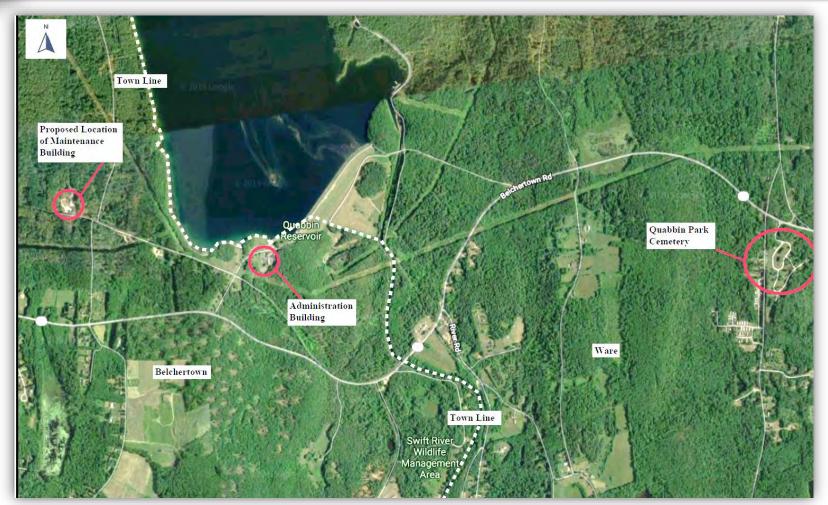
### **Massachusetts Water Resources Authority**

### Quabbin Maintenance Building Design, Construction Administration, and Resident Engineering Services

March 17, 2021



### **Quabbin Maintenance Building**





**Existing Facility** 



**Rendering of Proposed Facility** 



## **Quabbin Maintenance Building - Designer Selection Board Process**

- Qualification Based Procurement
- Overseen by the Massachusetts Designer Selection Board (DSB)
- MWRA Prepared Scope of Services
- Proposers Submit to DSB
  - Seven Proposers
  - DSB Ranks Proposers
  - Robinson Green Beretta Corporation ranked first
- MWRA Negotiated Scope and Cost



### **Massachusetts Water Resources Authority**

### Commonwealth Avenue Pumping Station Contract 7524

March 17, 2021



### Wiring the New Control Cabinet in the West Pump Station





## **Before and After Painting the West Pump Station Discharge Piping**







### **West Pump Station Dehumidification Unit**





Installing WASM1 Spool, Couplings, and Restraints

Preparing Pipe Bedding Near Valve Vault D

## Pumps in East Building





- For approval
- Presenter:
  - Andrea Murphy, Director of Human Resources



### **Appointment of Manager, Operations Administration**

- For approval
- Presenter:
  - Andrea Murphy, Director of Human Resources



### **Appointment of Director, Security**

- For approval
- Presenter:
  - Andrea Murphy, Director of Human Resources



### **Appointment of Deputy Director, MIS**

- For approval
- Presenter:
  - Andrea Murphy, Director of Human Resources



## **Appointment of Associate General Counsel, Labor and Employment**

- For approval
- Presenter:
  - Andrea Murphy, Director of Human Resources



### **Delegated Authority Report - February 2021**

- For information only
- Presenters:
  - Michele Gillen, Director of Administration
  - Douglas Rice, Director of Procurement



### **FY21 Financial Update and Summary - February 2021**

- For information only
- Presenters:
  - Thomas Durkin, Director of Finance
  - Matthew Horan, Deputy Director of Finance/Treasurer
  - Michael Cole, Budget Director



### **Appointment of Proxy for Fore River Railroad**

- For information only
- Presenters:
  - Matthew Horan, Deputy Director, Finance/Treasurer



## Harbor Outfall Monitoring and Loading System Upgrade: Guild Systems, Inc., Contract 7653

- Contract Award
- Presenters:
  - Paula Weadick, Director of MIS