



ACEC

*MWRA Update*

**Frederick A. Laskey**  
Executive Director

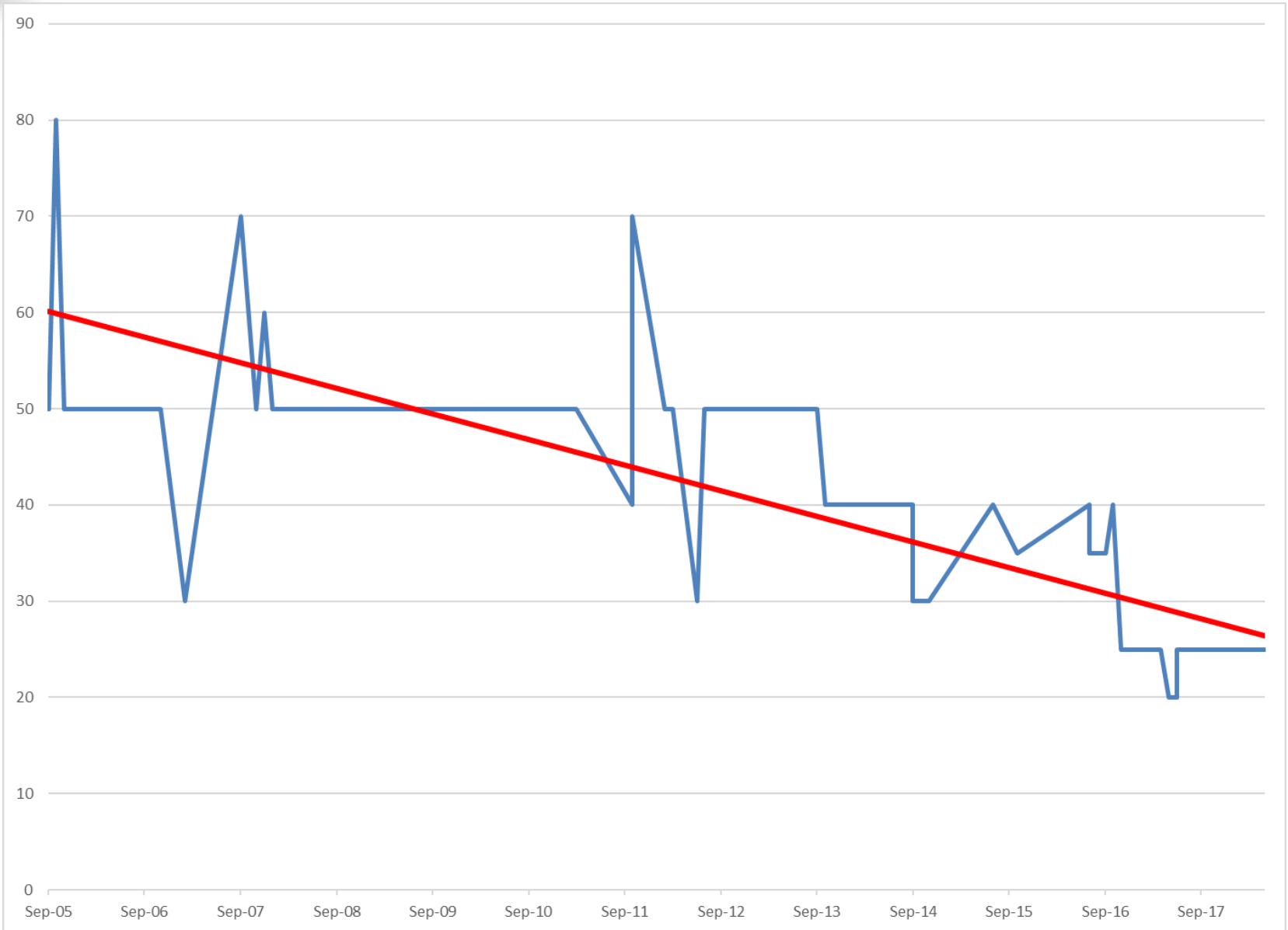
May 31, 2018



## ***A Promise Kept***



# Cost Criteria Weight is on a Downward Trend





## Awarding to Lowest Bidder is on a Downward Trend

- MWRA continues to put less emphasis on cost criteria in design procurements. Over the last few years:
  - In FY16, **50%** were not awarded to the lowest cost proposer
  - In FY17, **60%** were not awarded to the lowest bidder
  - In FY18, **75%** were not awarded to the lowest bidder



# ***Upcoming Capital Projects***



# Deer Island Combined Heat and Power Alternative Study

Estimated cost: \$830,000

RFP Date: May 2018





# Deer Island Eastern Seawall

Estimated cost: \$683,000

RFP Date: January 2019







# Rehabilitation of Wachusett Gatehouse

Estimated cost: \$1.6 million

RFP Date: April 2019







# Ward Street and Columbus Headworks Rehabilitation

Estimated cost: \$11 million

RFP Date: November 2019



Columbus Park



Ward Street



# Quinapoxet Dam Removal

Estimated cost: \$200,000

RFP Date: April 2020





# Quabbin Administration Building Rehabilitation

Estimated cost: \$2.8 million

RFP Date: December 2020







# Next Major Initiative - Long-Term Water System Redundancy

To provide redundancy for Metropolitan Tunnels which deliver water to 60% of the system

- \$1.54 billion
- Project duration 2018 – 2039





## Upcoming Tunnel-Related Projects

Chestnut Hill Emergency Pump Station	July 2018	\$6.7 million
Tunnel Conceptual Design/EIR	October 2018	\$9 million
Shafts 5 and 9 Building Improvements	January 2019	\$683,000
Section 101, Waltham Section Design	April 2019	\$3 million



# ***Preparing for Climate Change***





## It's Here!

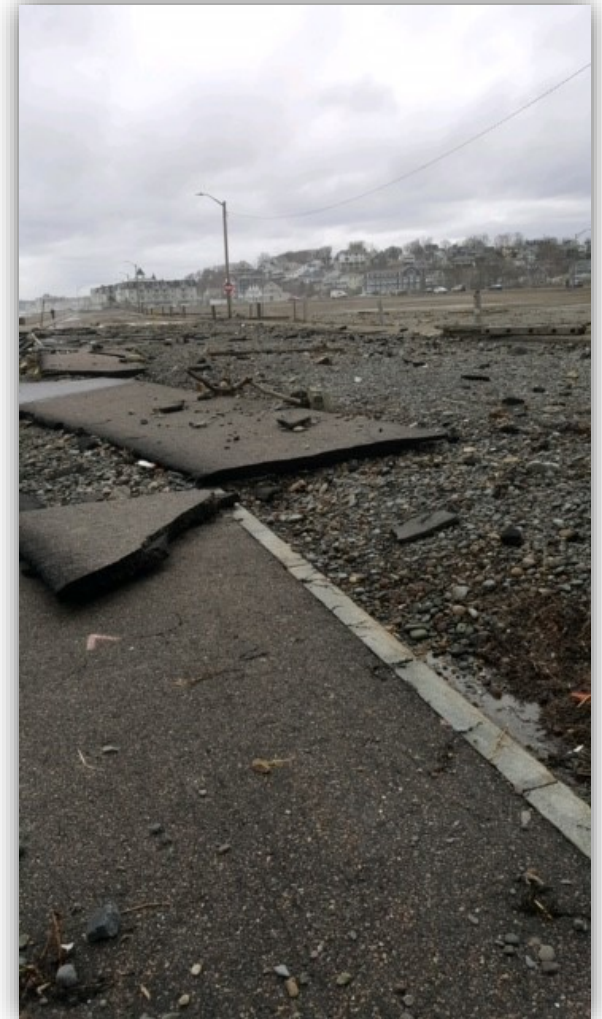
- Three Nor'easters this winter
- Flooding and storm surge caused damage all along the harbor and the islands



# DCR: Nantasket Beach



Nantasket Avenue in front of DCR complex; damage to Hull Shore Drive





# DCR: Spectacle Island



Damage to yurt





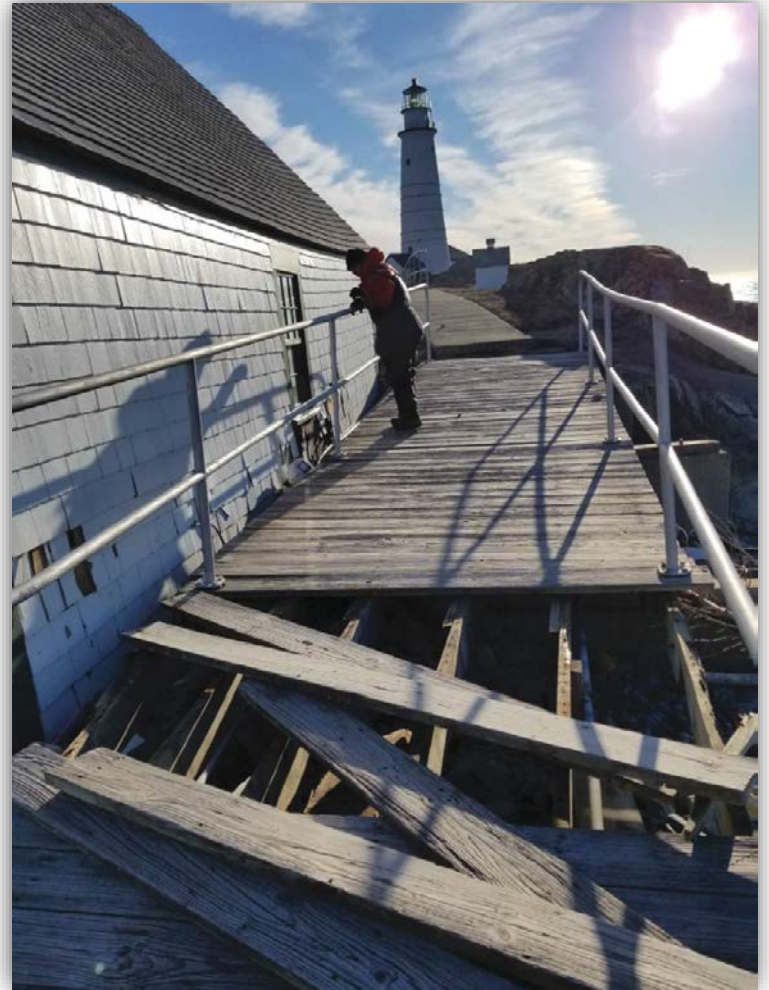
# DCR: Hingham Commuter Boat Pier



Undermined revetment and walkway



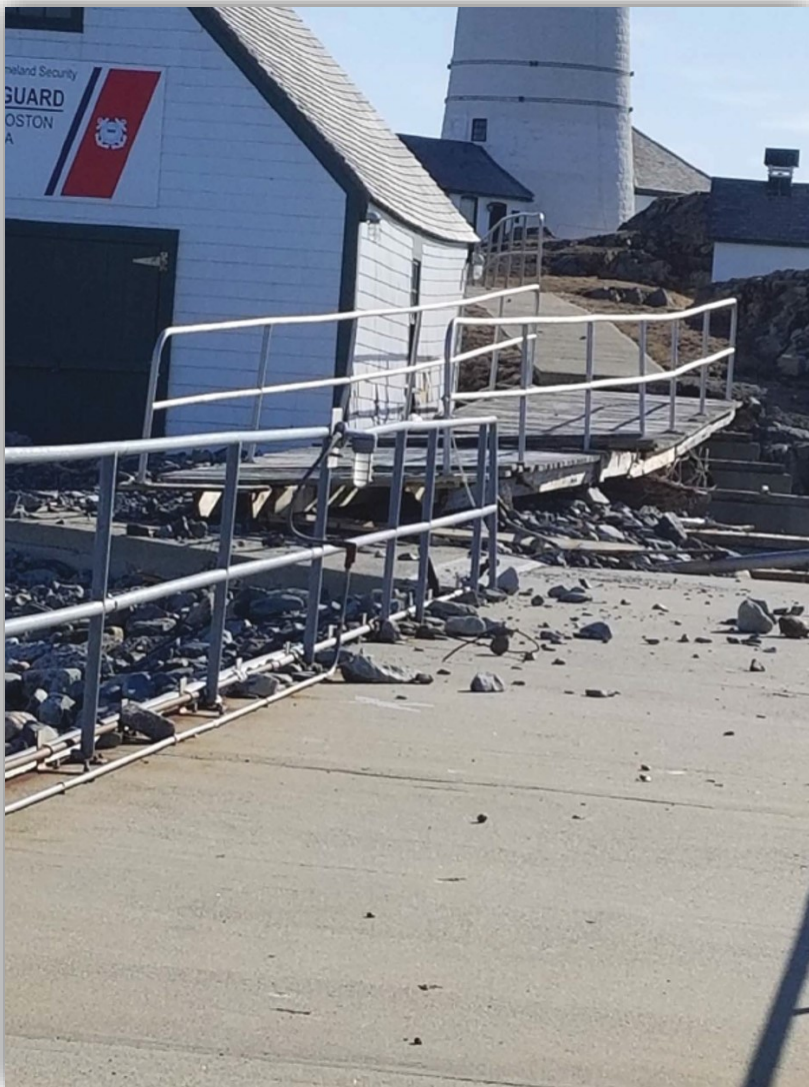
# US Coast Guard: Little Brewster and Boston Light







# US Coast Guard: Little Brewster and Boston Light







# Thompson Island



Once again, the climate-resilient design of the Waterfront Landing paid off. With the main decking placed above the 100 year storm sea level, the storm surge went under, not through, the building. This time without the ice of the Jan. 4 storm.





# Thompson Island



This area was all cleaned up after the Jan. 4 storm. Time to clean it up all over again.





# Thompson Island



The greatest damage we sustained was to the wave wall. This breach appears to have been created by the sheer force of wind and waves out of the east and northeast.



# Calf Island



Looking east, showing massive overwash fan of cobble pushed by storm energy over the top of the salt marsh





# Gallops Island



Looking southwest, showing continued damage to historic seawall and erosion of bluff that protects cemetery



# Grape Island



Looking east (left image) and looking west (right image), showing overwash fan of shells, cobble, and vegetative debris pushed by storm energy over the coastal trail next to the pier





# Georges Island and Lovells Island



Looking south, showing continued damage to historic seawall and outer earthworks of Fort Warren



Looking east, showing perched doorway and tunnel entrance associated with Fort Standish coastal defense installation



# World's End



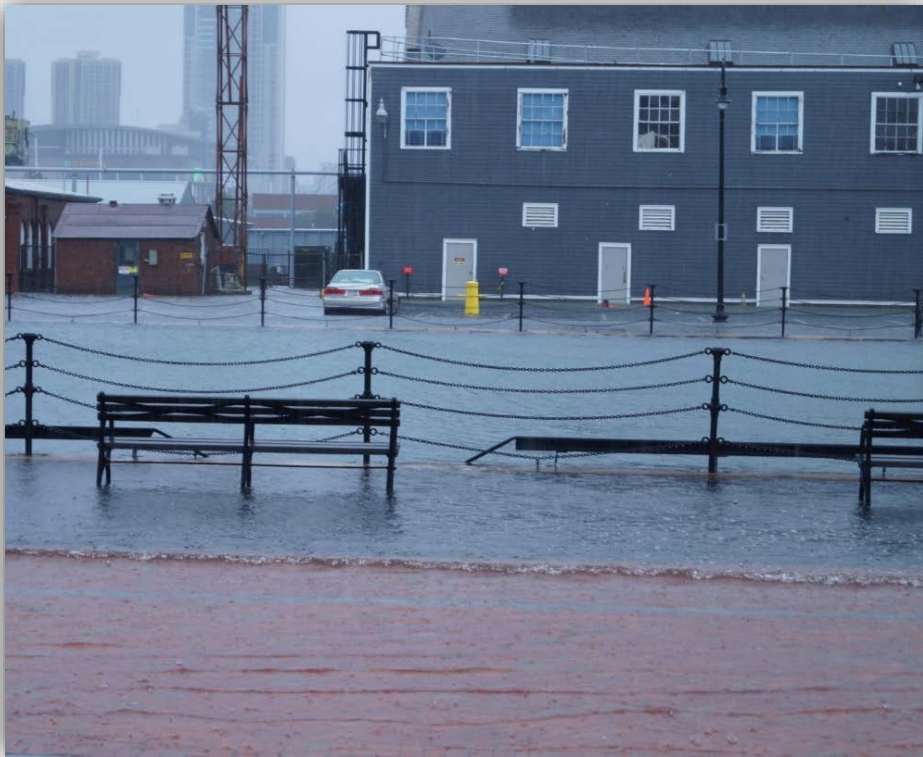
March 2<sup>nd</sup> high tide







# Charlestown Navy Yard





# Charlestown Navy Yard



Dry Dock received 15 feet of water from overflow of caisson, overtopping and pump drains



# Charlestown Navy Yard



Pier One was flooded from overtopping of seawall





# East Boston







# State Street, Boston





# MWRA: Deer Island



The seawall protects the island from storm surges





# MWRA: Deer Island



Fallen tree in front of historic pump station; granite blocks along public access were moved by waves





# Short Beach, Revere







# Shirley Street, Winthrop







# MWRA: Nut Island



Access to Nut Island was cut off by roadway flooding



# Eastern Avenue, Chelsea







# Summing It All Up...



*Secretary Matt Beaton*