

# GROUNDWATER and Fort Point Channel



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Why are low groundwater levels a problem?

# Construction Techniques of Properties Built Before 1925, With Some Exceptions

- Many foundations were supported by wood pilings designed to be submerged/preserved in groundwater.
- Wood pilings were cut off at elevations of 5' – 7' above Boston City Base.
- When groundwater levels are low, pilings can become exposed to air and can deteriorate over time.

# Implementation Steps

## 1. Boston Groundwater Trust

- City Council created in 1986
- Mayor expanded to all neighborhoods in 2005
- Installs wells, collects data, and provides public information

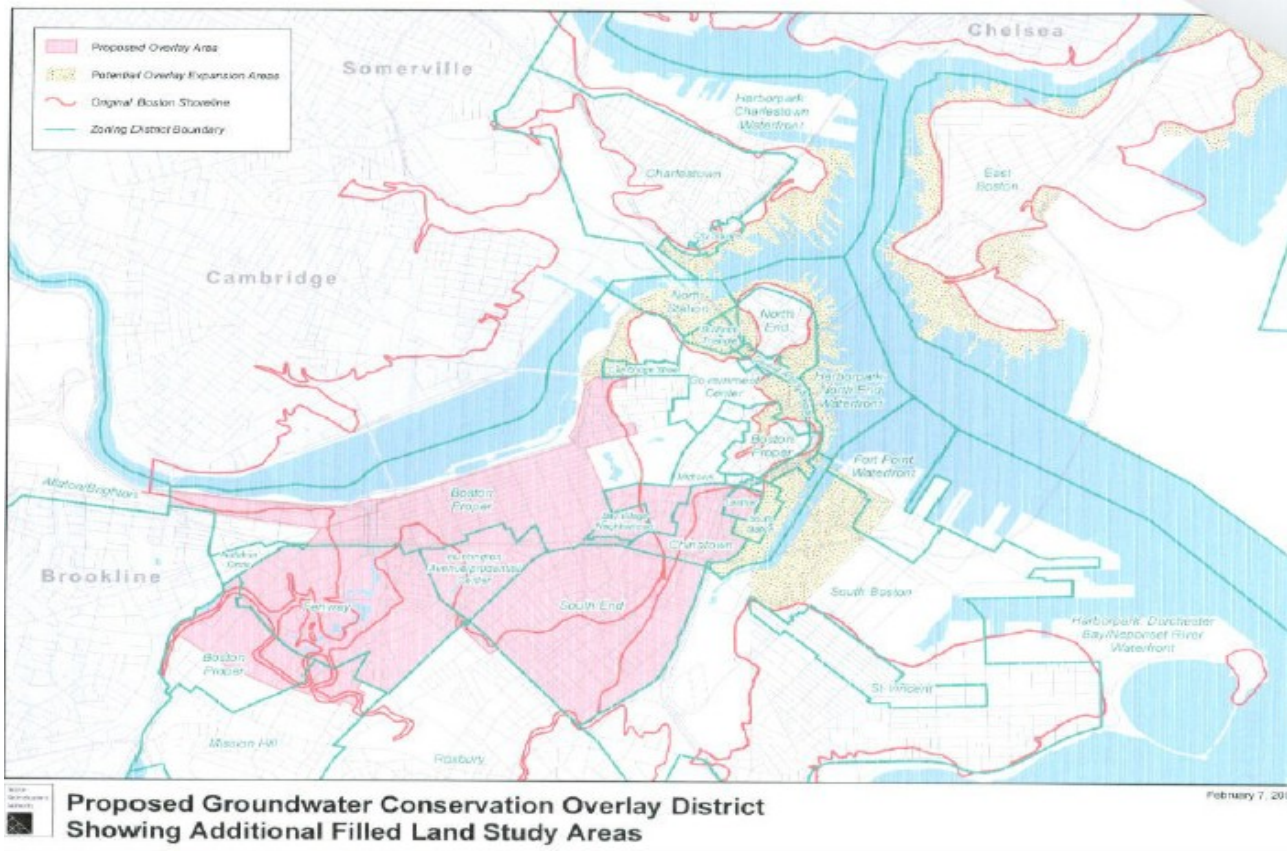
## 2. City/State MOU signed 2005

- Share information
- Identify problems
- Develop solutions

## 3. Groundwater Conservation Overlay District

- Adopted into the Zoning Code in February 2006

# GCOD Map



# Groundwater Monitoring Well Network

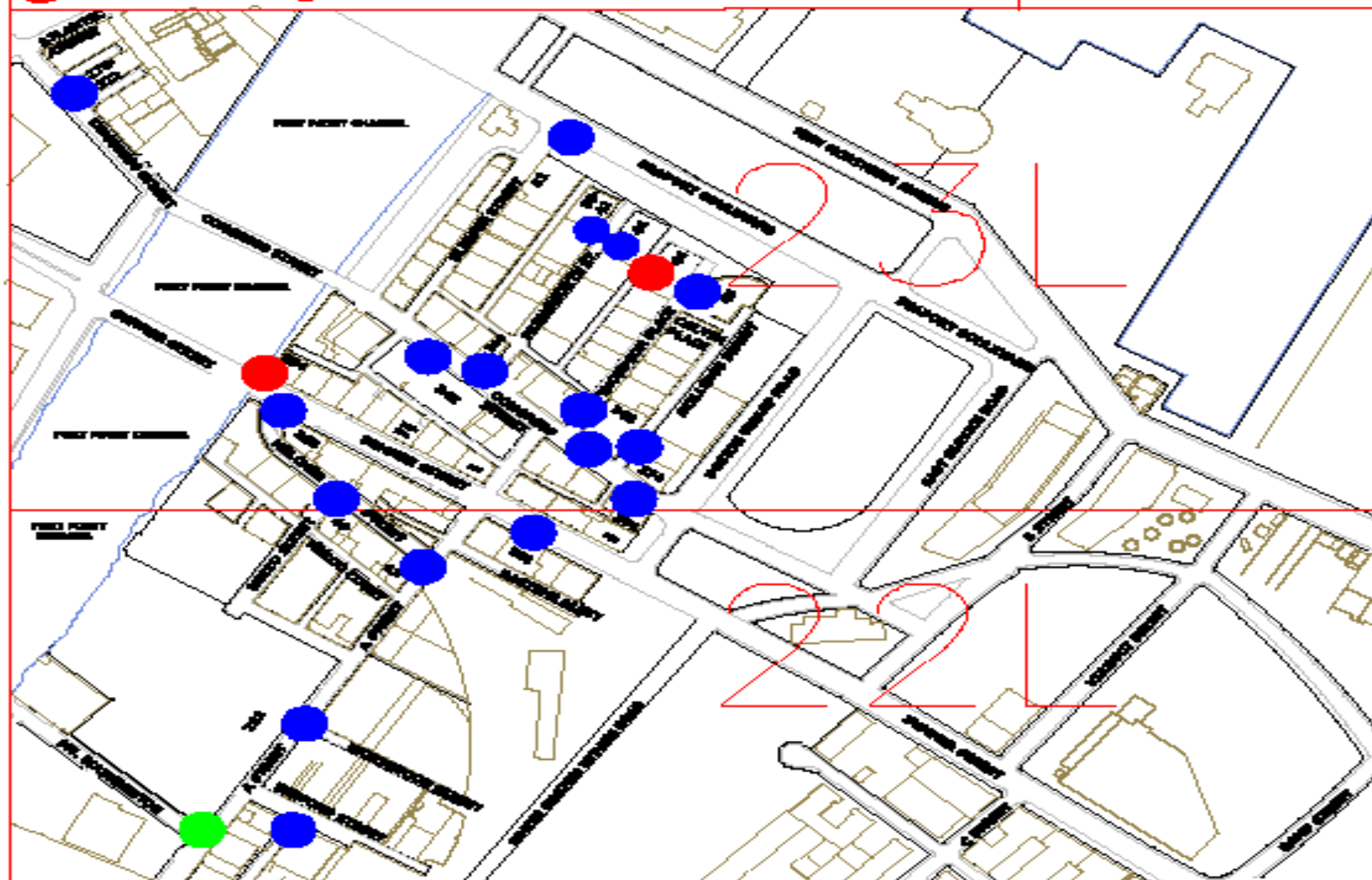
- The City secured \$2 million to install a network of monitoring wells by the Boston Groundwater Trust.
- 800 well network completed June 2006.
- 19 wells are being monitored in the Fort in the Fort Point Channel area.

# Boston Groundwater Trust (BGWT): Fort Point Channel January 2007 Elevations



Preserving  
Boston's  
Historic  
Foundations

- 17 Wells @ Elevation > 7'
- 1 Well @ Elevation 5' - 7'
- 2 Wells @ Elevation 3' - 5'



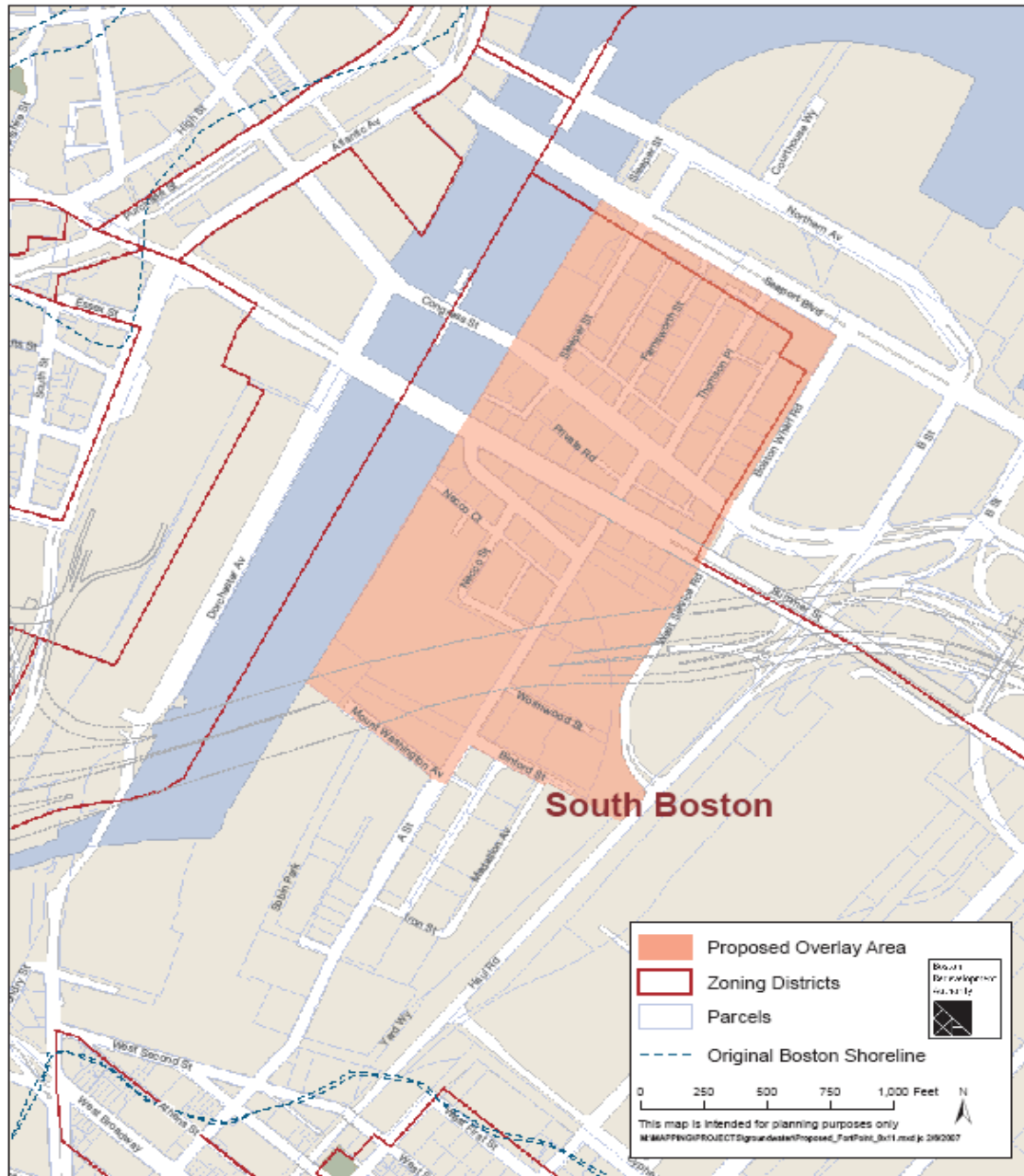
# Proposed Fort Point Channel GCOD Thresholds

- Any project that involves:
  - 1) Construction below Elevation 7 Boston City Base;
  - 2) New surface coverage of an additional 50 square feet or more.

Projects will a require conditional use permit from the Board of Appeals that demonstrates the proposed project will have no adverse impact on groundwater levels.



# Proposed Groundwater Overlay District Expansion



# Next Steps for Fort Point Channel

1. February 12: Receive community input;
2. March 8: Present Draft Proposal for approval of the BRA Board. If approved;
3. March 28: Present to the Zoning Commission for final approval and enactment.