Evaluating the Vulnerability of Boston’s Inner Harbor Designated Port Areas to Sea Level Rise and Coastal Storms

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The Problem
Boston’s Designated Port Area’s vulnerability to sea level rise (SLR) and coastal storms has not been evaluated.

Finding-Based Problems and Recommendations

- Lack of Transparency: Centralized regulations and review of emergency plans for flooding within DPAs as well as the formation of a committee to oversee this.
- Gap of Knowledge of Vulnerability of DPAs: More in depth evaluation should be completed. This is a very relevant problem within Boston and more time should be dedicated to this issue.

“… [DPA facility] has not had a problem with flooding at this facility in the past, nor do we foresee any problems for the future... [Our] contingency plans are not public information.”

–DPA Business Representative

What Makes a Site Vulnerable

<table>
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<tr>
<th>Exposure</th>
<th>Sensitivity</th>
<th>Ability to Cope</th>
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<tbody>
<tr>
<td>• Area</td>
<td>• SLR Infrastructure</td>
<td>• Predicted Property Damage</td>
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<tr>
<td>• Elevation From Sea Level at High Tide</td>
<td>• Chemicals on Site</td>
<td>• Net Worth of Business</td>
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<td>• Shore Length</td>
<td>• Chemical Storage</td>
<td>• Emergency Plans</td>
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<tr>
<td>• Location in Predicted Flood Zone</td>
<td>• Building Condition</td>
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References

- www.bostonharbornow.org
- www.mass.gov
- scc.climatecentral.org
- www.boston.gov
- www.state.ma.us

Map of Boston Inner Harbor DPAs and Selected Parcels

DPA’s are areas within Massachusetts, set aside for water dependent industrial use.

- Proerized New England Co. Everett Wharf
- Distrigas of Massachusetts Everett Marine LNG Terminal Wharf
- Constellation Mystic Power, LLC Mystic Station Wharf
- Everett Fish Pier
- Preferred Freezer
- Fitzgerald Fish Pier Winnissimetted Landing Pier No. 1-5
- Perini Corp. Quarter Deck Marina
- KHB Bulkhead Vacant Abandoned Bulkhead
- Eastern Salt Salt & Fuel 170,000 tons of salt and coal
- Boston Forging and Welding Boat Repair
- Boston Towing and Transport Boat Repair
- Channel Fish Co. Inc. Pier Fish Processing Salt and formaldehyde is kept on site
- MA Port Authority, South Boston Ship Dock and Barge Dock Old Industrial 2,292,000 barrels of petroleum 4,437,000 gallons of molasses
- Irving Oil Terminals Inc. Revere Terminal Pier Fuel 1,400,000 barrels of petroleum storage
- Gulf Oil Chelsea, Terminal No. 1 Fuel 1,677,600 barrels of petroleum storage
- Irving Oil Terminals Inc. Revere Terminal Fuel Pier
- 245 & 257 Marginal St. LLC Bulkhead Vacant
- Irving Oil Terminals Inc. Revere Terminal Pier
- East Boston DPA
- Boston Marine Industrial Park Berth No. 6 Cargo
- Boston Towing and Transport
- Perini Corp. Quarter Deck Marina
- KHB Bulkhead
- Eastern Salt
- Boston Forging and Welding
- Boston Towing and Transport
- Channel Fish Co. Inc.
- MA Port Authority, South Boston Ship Dock and Barge Dock
- Irving Oil Terminals Inc.
- Gulf Oil Chelsea, Terminal No. 1