Abstract: Boston Harbor is located in eastern Massachusetts on the western shore of Massachusetts Bay and is the New England region’s largest port. The main deep water harbor is comprised of the waterways of the Main Ship Channel, Reserved Channel, Mystic River and Chelsea River. These channels provide access at a depth of 40 feet at mean lower low water (MLLW) to the Port’s principal terminals, except for the Chelsea River which has an authorized depth of 38 feet MLLW. Deep water access to the harbor is provided by three entrance channels; the Broad Sound North Channel at 40 feet, the Broad Sound South Channel at 30 feet, and the Narrows Channel at 27 feet.

This study focused on improving safe navigation access to Boston Harbor’s deep draft cargo terminals. Growth in waterborne shipping of containers and bulk commodities is constrained by lack of adequate channel dimensions, particularly depth, to meet the needs of the Port Authority, its customers, and other terminal operators.

The recommended plan consists of improvements accessing four segments of the port:

- **Main Ship Channels**: Deepen the Main Ship Channel to 50 feet in the present 40-foot lane of the Broad Sound North Entrance Channel from the Bay to the Outer Confluence. Provide a depth of 48 feet in the Main Ship Channel between the Outer Confluence and the Reserved Channel, the President Roads Anchorage, the lower Reserved Channel, and the Reserved Channel Turning Area. The bends in the channel would be widened as needed. Massport would deepen the two deep berths at the Conley Terminal to a depth of at least three feet greater than that provided in the improved channel.

- **Main Ship Channel Deepening Extension to Massport Marine Terminal**: Deepen the Main Ship Channel above the Reserved Channel Turning Area to the Massport Marine Terminal, at a depth of 45 feet and width of 600 feet. Massport would provide a depth of at least 45 feet in the berth at the Marine Terminal.

- **Mystic River Channel at Medford Street Terminal**: Deepen a portion of the existing 35-foot lane of the Mystic River Channel to 40 feet to improve access to Massport’s Medford Street Terminal in Charlestown. Massport has already deepened the berth at this terminal to 40 feet.

- **Chelsea River Channel**: Deepen and widen the existing 38-foot Chelsea River Channel to 40 feet.

**BCR’s are:** Main Channel Improvement (1.64 to 1), Main Ship Channel Extension to Marine Terminal (2.13 to 1), Mystic River Channel Deepening (1.59 to 1), Chelsea River Channel Deepening (2.96 to 1), Combined Total BCR for All Recommended Improvements (1.74 to 1). The total combined project cost is $307,700,000.
Report Documentation: Pertinent documentation on the project, the results of the CWRB, and subsequent Washington Level Review Actions are linked below.

- CWRB Agenda – 21 Aug 2008
- CWRB Agenda – 18 Sept 2008 Follow-up
- Project Summary
- CWRB Briefing Slides – 21 Aug 2008
- CWRB Briefing Slides – 18 Sept 2008 Follow-up
- CWRB Lessons Learned and AAR
- State & Agency Review Comment Letters
- Documentation of Review Findings
- Signed Chief of Engineers Report
- Advance Copy to Congressional Committees
- ASA (CW) Memo to OMB
- OMB Clearance
- ASA (CW) Transmittal to Congress
- Signed Record Decision
- Authorization

Additional Information:

North Atlantic Division

New England District

Boston Harbor Navigation Improvements