

The Scope of the Boston Harbor Project

Few projects of its type have the scale of this massive undertaking, nor have past ventures had to contend with as many complicating circumstances.

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The Boston Harbor Project is the result of a long process that originated with the passage of the federal Water Pollution Control Act in 1965. The project represents the efforts of the Commonwealth of Massachusetts and its agencies and authorities, and the communities of the greater Boston metropolitan area, as well as many individuals and private companies, to comply with that (and subsequent) legislation and to increase the capacity of the wastewater treatment system of the greater Boston metropolitan area to meet future needs. Key features of the project are:

- Upgrading the Deer Island treatment plant;
- A secondary treatment plant on Deer Island;
- A headworks facility on Nut Island;
- An inter-island conveyance system;
- An effluent outfall in Massachusetts Bay; and,
- A sludge processing plant at Fore River in Quincy.

Figure 1 shows the location of each of these components of the project.

This series of papers on the Boston Harbor Project included in this issue was developed at the suggestion of the John R. Freeman Committee of the Boston Society of Civil Engineers Section/ASCE. This association is indeed a fitting one, since John R. Freeman was involved in some of the most important water projects in New England. He was a driving force in the developing the water supply network for New York City and also participated in one of Boston's earlier water projects of momentous importance — the Quabbin Reservoir. That project, which was completed in 1939, resulted in the submersion of 39 square miles of land and the obliteration of four towns. The cost of the project was about \$50 million (equivalent to about \$440 million in 1993 dollars). The population of the area serviced by the Boston water supply then was about 1.5 million so the cost of Quabbin project was about \$330 per person (roughly \$2,930 in 1993 dollars). That figure clearly demonstrates the magnitude of the Boston Harbor Project, which is expected to cost about \$2,500 per person. Freeman was also a principal figure in the creation of the Charles River Basin in 1910, which profoundly changed the character of Boston and affected many acres of wetlands.

In some ways, bringing a large-scale project to fruition in Freeman's days was a somewhat simpler task than it has become today. There

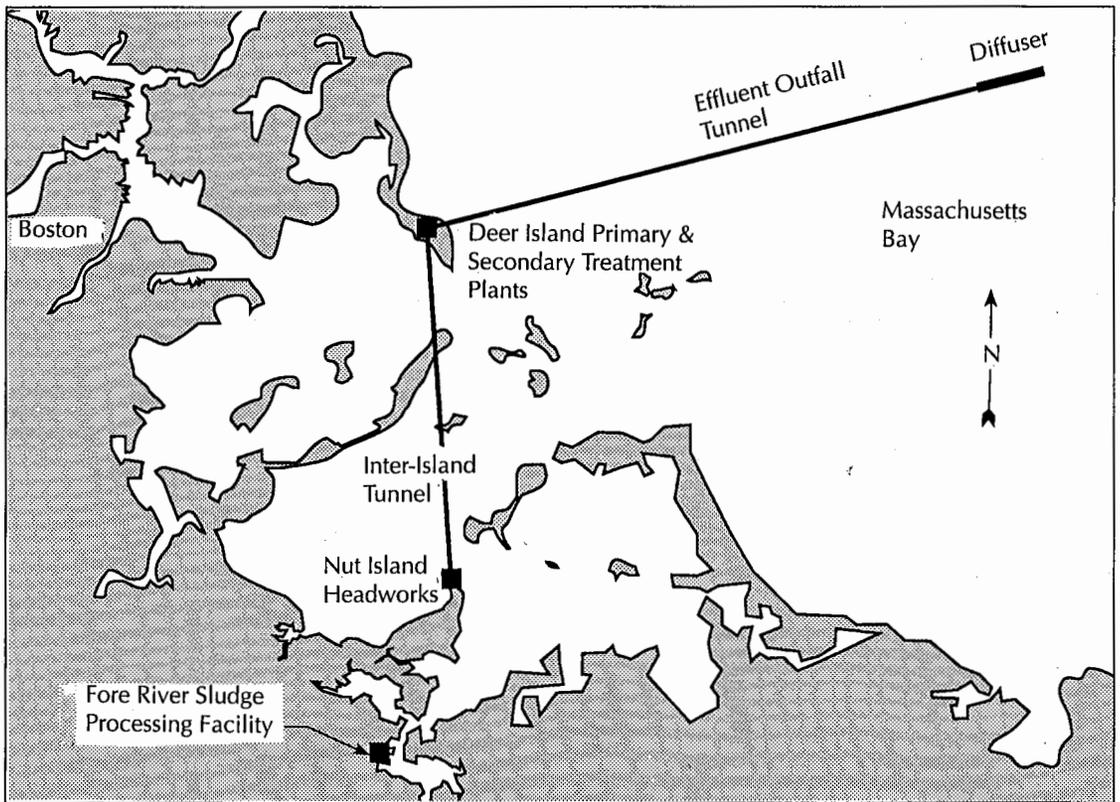


FIGURE 1. Principal elements of the Boston Harbor Project.

was far less emphasis on evaluating the effects of a construction project of any sort on the environment. For example, wetlands were not protected by law. The terms "environmental impact statement," "citizen's advisory committee" or "value engineering" had yet to be coined. Even so, the Quabbin Reservoir and the Charles River Basin, like the Boston Harbor Project, had their elements of controversy. Decisions regarding their design and construction had to be carefully weighed. In the previous two projects, as well as what happened in 1985 for Boston Harbor, communal decisions were made that necessitated taking bold steps — steps that, despite their cost, would be worthy legacies to the future.

Much has been said on the Boston Harbor Project — in court rooms, public meetings, political rallies and living rooms. Much has been written also — from mountainous reports, plans and specifications to newspaper articles. The objective of this collection of papers is to present in one setting a concise description of

the main elements of the current Boston Harbor Project.

At this time, construction is at a high pitch, and much of the project's design has been completed. Many individuals and companies have taken part in this project, and many long hours have been spent to ensure that the project remains on schedule. Acknowledging individual contributions or even corporate participation is not possible in this forum, but it is hoped that this collection will serve as a record of the importance of their accomplishments.



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