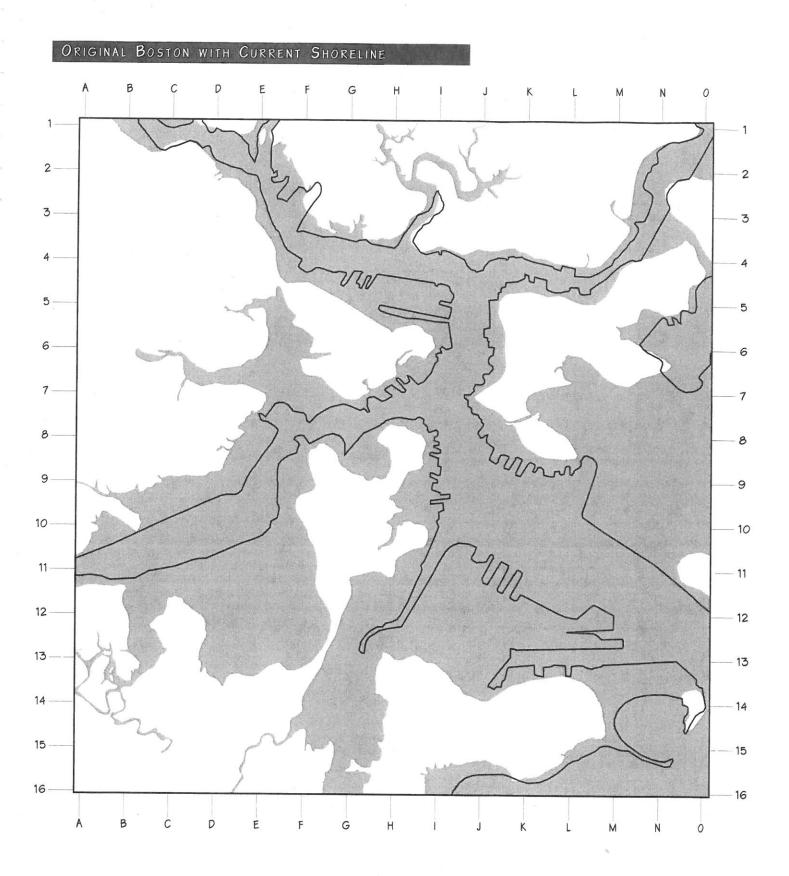
ACTIVITY 4-1 WET HISTORY OF BOSTON



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INTRODUCTION: THE STORY OF EARLY BOSTON

Boston, in Ben Franklin's boyhood, was a very different community from the city we know today. It was a peninsula of hills, fields, and marshy shores, very much a port and sea-faring place, inhabited by merchants, shopkeepers and shipbuilders. Yet as simple as it sounds, by 1743, when Franklin was 37 years old, Boston was the largest town in British North America, larger than Philadelphia or New York, with a population of 16,382.

The center of town was the present intersection of State and Washington Streets. To the east, State Street ran down to Long Wharf, the sea, and the rest of the world. The high ground to the north, which we call Beacon Hill, was mostly fields and a few poorer neighborhoods. To the south and west, a main road we now call Washington Street was Boston's only link to the mainland, running along a narrow neck of exposed land that connected to Roxbury. A fortified gate there protected the town by land; gun emplacements on the hilltops and in shoreline batteries controlled access by sea.

Residents of Dorchester and Cambridge did not visit Boston often, for travel by foot or horseback was time consuming at best and wet and muddy in stormy weather.

Jamaica Pond was far out in the country. The first bridge that linked Boston and the mainland was built to Charlestown in 1786. Boston was no longer quite so isolated.

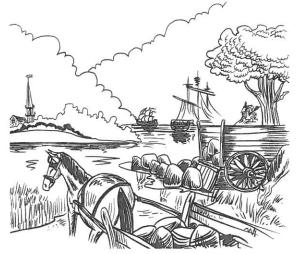
The greatest geographical differences between Boston in 1776 and today are its shoreline and its lowered hills. Large areas we know as the central waterfront, South Cove, the South End, South Boston, East Boston and Back Bay



were simply tidal flats -- that is, shallow water at high tide and marshy ground at low tide. Early ships unloaded by anchoring in the harbor and transferring cargo to lighter boats. Only when docks and wharves were extended to deeper water could ships unload directly onto land.

WET HISTORY OF BOSTON

How did tidal flats become neighborhoods? Beginning around 1800, several of Boston's tall hills were cut down, and their gravel and soil were hauled to the shore and dumped there. This raised the ground high enough that new buildings would not flood at high tide. Beacon Hill was 60 feet taller than it



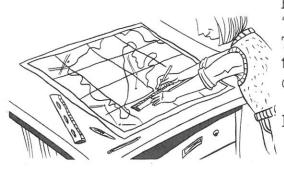
is today, and two other hills on either side of it (the three together were called Trimountain) were cut down completely. Much of this work was done by hand, with only horses to help. Later, beginning in the 1850s, when most of the hills had been moved, gravel was dug by steam shovels in Needham and brought by railroad to fill the Back Bay and South End. The land for the neighborhoods from Washington Street to the Charles River on the northwest, and from Washington to the Fort Point Channel on the east, was all "created" by filling tidal flats.

Map One in this exercise will show you just how much Boston has changed. The white area is land; the gray is water.

PROCEDURE

- A. Using small, neat lettering, label the following features of the 1775 Boston area. Example:
 - 1. Castle Island

0 - 14



First line up one straight edge along the two "Os" at the top and bottom of the page. Then line up the other straight edge along the "14s" on the sides. The two lines cross on Castle Island.

Note: If a point is between two letters, say C and D, we will give its location as CD. If it is between 8 and 9, we will call that 8.5.

2. Charlestown	G- 6	7. Dorchester Heights	K - 15
3. Noddle's Island	L - 6	8. Charles River	A - 11
4. Shawmut Peninsula	G- 10	9. Muddy River	A - 13.5
5. Shawmut Neck	FG - 12 to FG - 13	10. Stony Brook	C - 15

ACTIVITY 4-1

STUDENT PAGE

6. Cambridge

WET HISTORY OF BOSTON

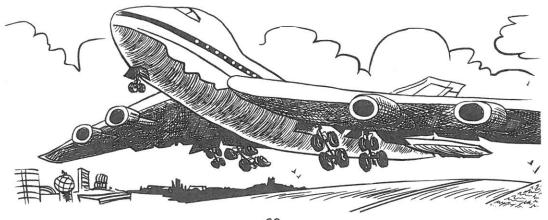
0 - 11

B. To understand Boston's growth, locate the following modern landmarks on your map. If there is too little room to write, simply put down an abbreviation or the number.

B - 8

11. Governor's Island

12. Fenway Park	B - 12	22. State House	G - 9.5
13. MIT	C - 9.5	23. New Federal Court House	IJ - 10.5
14. Museum of Science	E - 8	24. Old North Church	HI - 8
15. Central Sq., Camb.	A - 8	25. Boston City Hospital	E - 14.5
16. Symphony Hall	CD- 13	26. Museum of Fine Arts	B - 14
17. N. E. Aquarium	I - 9.5	27. Hatch Shell	EF - 10
18. Lechmere Station	E - 7	28. L Street Bath House	K - 15.5
19. Mass General Hospital	H - 7.5	29. Kendall Square	CD - 8.5
20. Commonwealth Pier	JK - 11	30. Bunker Hill Monument	GH - 6
21. Boston Public Library at Copley Square	E - 11.5	31. Southwest boundary of Logan Airport	L-9.5 to O-12



As the city grew, it needed more water. The few wells and springs soon proved inadequate, and the concentration of horses and outhouses gradually polluted the groundwater. People channeled roof drains into underground storage tanks called cisterns, but in a city of soot and sea gulls, roof water wasn't always the best quality, either.



In 1795, a group of investors formed the Jamaica Pond Aqueduct Company and constructed a wooden pipeline to bring the relatively untouched waters of Jamaica Pond to the growing town. (Jamaica Pond is just off the southwest corner of our map.) Residents could now fill their cisterns with much cleaner water, and those who began to pipe it into their houses no longer needed to go outside to fetch water.

A large fire in 1825 demonstrated the need for a larger water supply, and in 1848 water was brought all the way from Lake Cochituate in Natick. More and more people could now have indoor plumbing. In 1865, the Upper Mystic Lake, northwest of the city, was developed for water supply.

Another fire, the most significant in Boston's history, took place in November, 1872. A series of additional reservoirs were built soon after, concluding with the Sudbury Reservoir in the 1890s. Through these decades, Boston annexed the neighboring towns of Roxbury, Dorchester, Brighton and Charlestown, and the demand for water continued to grow.

In 1895, a new Metropolitan Water District was formed, open to any community within ten miles of the State House, or roughly the area within Route 128 today. Rivers in Central Massachusetts, the Nashua River at the turn of the century and the Swift River in the 1930s, were dammed to form Wachusett and Quabbin Reservoirs, the water sources we depend upon today. Wachusett and Quabbin are the only sources currently in use. All the sources that served Boston earlier in its history, from Jamaica Pond to Sudbury Reservoir, have been retired.

ACTIVITY 4-1

C. **Map Two** covers a portion of Massachusetts, but not Cape Cod or the Berkshire Mountains. It shows some of the major rivers in our area and the water sources that have served Metropolitan Boston over the years. Label those features as listed below. For each body that has served as water supply, include the date when it was developed.

Charles River Basin (inset) KL - 2.5

Merrimack River N - 3 to T - 1

Jamaica Pond (inset) K - 4

Neponset River P - 10.5 to RS - 9

Mystic Lakes (inset) J - 1

Sudbury Reservoir M - 8

Lake Cochituate O - 8

Wachusett Reservoir K - 7.5

Connecticut River C - 3 to B - 12

Quabbin Reservoir E - 7