

Water-table woes

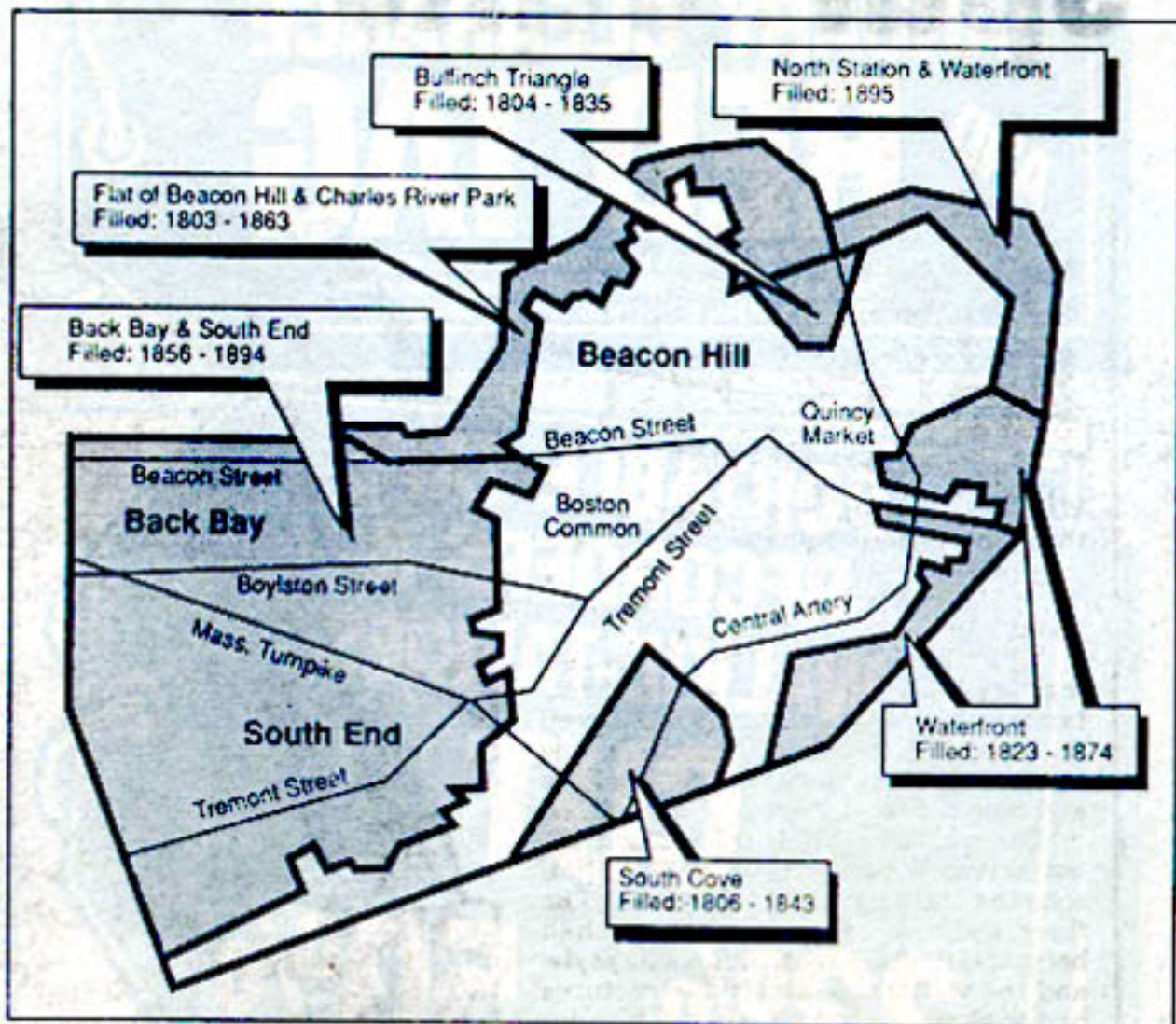
Beacon Hill, Chinatown on shaky foundation

By JACK MEYERS

MANY Bostonians are getting a sinking feeling as a declining water table allows foundation pilings to rot away and their buildings to collapse.

Not only do they see damage costing millions of dollars to put right but no one seems to want to accept responsibility for putting them back on solid ground.

In five years the underground phenomenon has expanded across the city from exclusive Beacon Hill, where the facades of some of the Hub's most elegant mansions have cracked and crumbled, to Chinatown, home to thousands of Boston's newest immigrants.



CITY MAP shows the portions of the Back Bay, South End and Waterfront that were filled in from swamps and lowlands during major excavation work in 19th century.

The problem has also blossomed from an engineering puzzle to a political and legal dogfight, pitting the City Council against the mayor and affected property owners against city and state government.

"The city can ill afford to close its eyes to buildings that are collapsing," said City Councilor James Kelly, who represents Chinatown, South Boston and the South End. "No one wants to see the city held liable (for damages) but I think it is quite appropriate for the city to be looking into this."

With a lawsuit pending against the city and state over water table-related damages, Mayor Ray Flynn late last month vetoed a City Council ordinance mandating that the Hub's building department monitor changes in underground water levels. Flynn said he vetoed the bill because it opened the city to further lawsuits.

City councilors are predicting a speedy override of the veto, possibly as early as this Wednesday. While the law may make the city more vulnerable to lawsuits, the ordinance's sponsors — Councilors David Scodras and Kelly — say the administration should not stick its head in the sand concerning the expanding groundwater crisis.

Scodras said, "I think we're open to more serious litigation if we don't do something (to address the problem) than if we do something." Passage of the ordinance will have little effect on the outcome of the lawsuits but could delay efforts to study and solve the problem, he said.

"The mayor, at every

‘As many as 200-400 units of low- and moderate-income housing could be at risk.’

stage of the game, has taken a leadership role in this problem," but lately has been sidetracked by Law Department concerns, Scodras added. "It is a part of leadership that you take risks."

Crisis at a glance

HERE'S Boston's groundwater crisis at a glance:

- Falling underground-water levels have been blamed by city officials for millions of dollars in damages to 17 buildings and 70 homes on Beacon Hill.
- In 1987, 53 Beacon Hill property owners filed suit against the two state agencies, the city and its water and sewer commission, and a private company, charging "carelessness and negligence" regarding the falling water table.
- The phenomenon has destroyed four Hudson Street buildings in Chinatown, severely damaged several others and threatens dozens more — housing 200 to 400 low- and moderate-income residents.
- An Inspectional Services Department survey of 160 buildings on three Chinatown streets revealed 90 percent have in the past had damage characteristic of falling water tables.
- Isolated buildings in Back Bay and the South End have been damaged by sinking water levels.
- Other Hub neighborhoods — built on filled land in the 19th century and susceptible to water-table problems — are the Fenway, Bay Village and parts of South Boston.
- Typical residential homes in affected neighborhoods are supported by 100-200 wooden piles. Repairs cost \$1,000 to \$1,500 for each rotted piling. — JACK MEYERS

Administration officials have been keeping silent on the issue in recent weeks and did not return calls from the Herald last week.

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IN THE 19th century, swamps and shallow bays were filled in, forming what are now the Back Bay, the South End, the Fenway and Chinatown. Buildings erected in those districts were constructed on dozens of wooden piles sunk into the ground to support the foundations.

Falling water levels expose the wooden pilings under many of Boston's older buildings to the air. Fungi and bacteria attack

the exposed portions of piles, rotting the wood over several years and eroding support for the foundations. Without adequate support, the buildings crack, causing costly and sometimes irreparable damage.

While Flynn and the City Council have been wrestling over the ordinance, the Boston Ground Water Trust — the panel Flynn appointed in 1986 to develop a roadmap for solving the problem — has been pushing ahead with plans for a water table "early warning system" of several hundred observation wells.

The trust is studying bids from four engineering firms to design a monitoring system, using new or existing wells. The system will take several months to design and months more — and over \$1 million — to build, said trust chairman William Rizzo.

The trust's latest push was sparked in part by the discovery last summer that several buildings on Hudson Street in Chinatown were condemned due to rotted piles caused by falling groundwater levels.

In an Aug. 26, 1988, letter to Flynn, Rizzo wrote that "as many as 200-400 units of low- and moderate-income housing" could be threatened by groundwater problems and rotting piles. Rizzo asked for "swift action" by the mayor, help which he says has yet to materialize.

"I'm getting very tired of the failure of the city to act in this matter," said Rizzo last week. As of Jan. 1, the trust had not received any money from the city, although \$25,000 has been