

Tunnel plan targets rain runoff

By Stephanie Ebbert
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[A PUBLISHED CORRECTION HAS BEEN ADDED TO THIS STORY.]

Aiming to make South Boston's beaches clean enough for swimming almost every day, water officials yesterday approved a massive new tunnel designed to hold polluted water during storms and keep it from flowing into north Dorchester Bay.

The long-delayed plan approved yesterday by the Massachusetts Water Resources Authority board is designed to close a nagging gap in the \$4.5 billion Boston Harbor cleanup: Rain can overwhelm the city's combined system of storm drains and sewers, pushing untreated waste straight into the harbor. The nearly \$300 million project includes a 2.1-mile tunnel near the shoreline in Dorchester and South Boston to collect the mix of storm water and sewage and hold it for processing. It also includes an odor control station at Carson Beach and a 10-million-gallon-per-day pumping station to be built at Conley Terminal in South Boston.

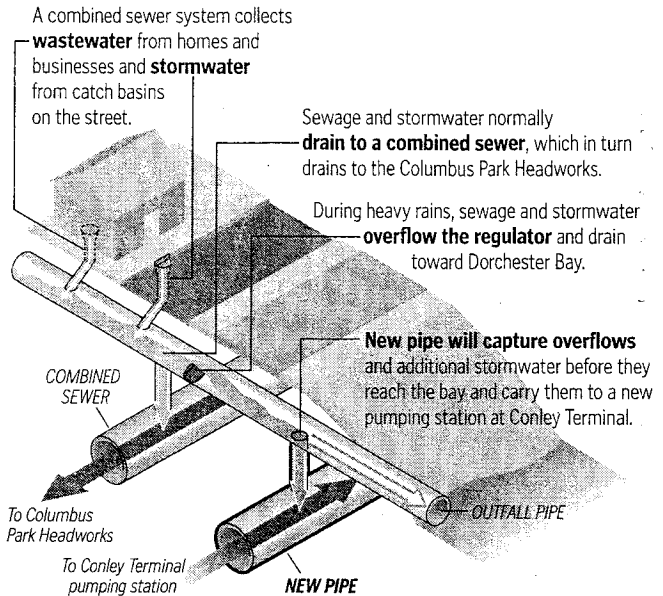
The system, designed to handle all but the most extreme storm conditions, is expected to prevent pollution from closing the beaches to swimmers.

"When there's a big rain, it's still going to be bad on the beach, but those rains are very infrequent," said Bruce Beriman, spokesman for Save the Harbor / Save the Bay, an advocacy organization that has been fighting for better use of the beaches. "Compared to once a week, you're looking at a home run here."

Cleaning up the beach

A new conduit to be built beneath William Day Boulevard is expected to stop the discharge of sewage onto South Boston beaches.

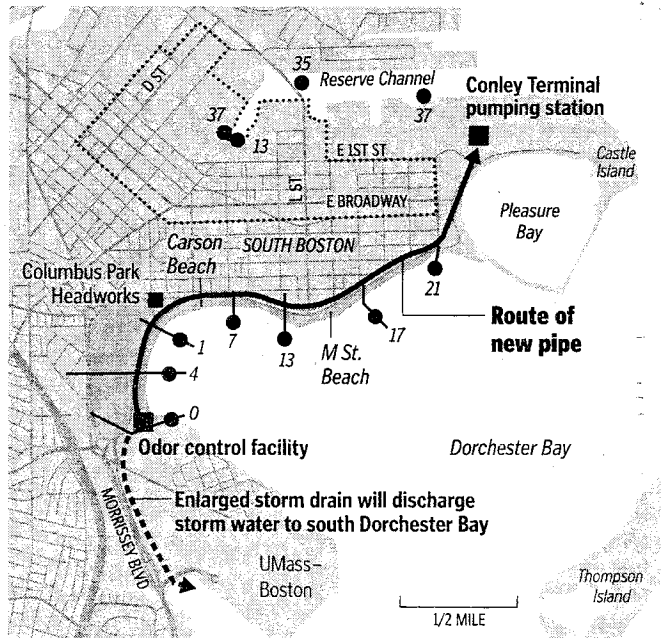
INTERCEPTING SEWER OVERFLOWS



THE NEW SYSTEM

Construction of the new pipe is expected to eliminate combined sewer discharges at South Boston beaches. Additionally, a new sewer system should drastically reduce the number of discharges into the Reserve Channel, while an enlarged storm drain will handle storm water at the southern end of the system.

- Outfall locations (Current number of discharges in typical year)
- Area to be converted to separated sewer system



SOURCE: MWRA

GLOBE STAFF GRAPHIC / ED WIEDERER

The project will raise combined water and sewer rates for larger MWRA customers from \$835 this year to \$1,407 in a decade, according to the authority. [CORRECTION - DATE: Friday, April 16, 2004: Correction: Because of a reporting error, a story about a Massachusetts Water Resources Authority sewage treatment project in yesterday's City & Region section overstated the project's impact on customer rates. Water and sewer rates for a large household are projected to increase from \$835 to \$1,407 within 10 years, and about one-quarter of that increase would be attributable to the project, MWRA officials say.]

An earlier version of the plan was blocked four years ago by opposition from South Boston residents worried about the enormous new pumping station slated for their neighborhood. The new plan reduced the size of the station to win neighbors' approval.

If approved by state environmental officials, the project would launch an around-the-clock "Little Dig" under Day Boulevard and Columbia Road, with a purpose-built tunnel-boring machine burrowing through 2.1 miles of soft ground to create a conduit 17 feet wide. The tunnel is expected to start processing water when the station is completed in 2011.

The compromise proposal emerged after MWRA officials, pressured by a federal judge to satisfy their commitment to treat both sewage and storm water, changed the expectations and the designs of their original plan. The first plan would have eliminated any discharge of the combined rainwater-sewage mixture that now overflows the system. The new plan would allow discharge in hurricane and flood conditions, expected on average every 25 years. During certain large storms, of a severity occurring about once in five years, storm water will bypass the tunnel and discharge on the beaches so the system's capacity will be saved for the more concentrated sewage.

A recent analysis by Save the Harbor/Save the Bay found that storm water, though less potent than raw sewage, is more often responsible for delivering bacteria to the beaches.

Some advocates and lawmakers are still concerned about the time frame and the diversion of dirty water. Under the plan, some untreated storm water would be diverted to Patten's Cove in Dorchester, which is used for boating but not swimming. That concerns Senator Jack Hart, who represents both communities, and the Conservation Law Foundation, a plaintiff in the original Boston Harbor suit. Those critics worry that the proposal simply shifts pollution from one area to another.

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