

**PREPARED TESTIMONY FOR ELLIOTT LAFFER TO
BOSTON CITY COUNCIL
MAY 8, 2007**

I am pleased to be able to report that City and State agencies and the private sector continue to work together in the effort to overcome the causes of lowered groundwater. The City-State Groundwater Working Group has received the enthusiastic support of the Patrick Administration and continues to be a forum in which all of the relevant agencies share the latest information on their efforts to raise groundwater levels. None have held back, and all have committed time and money to helping to solve the problem.

In our well readings, we have identified six areas where we consistently find relatively low groundwater levels. We call these "hot spots". They include: the area near the Storrow Drive underpass; the area along Stuart Street and near Back Bay Station; along the Turnpike at Herald Street; around Tremont Street in the South End; in the Fenway generally along Hemenway Street; and in East Boston in the area near Porter Street. In each of these areas, the agencies involved have helped to understand what is causing the low readings and have put in place plans to address those problems.

I want to thank the Mayor and the Council for your support in this effort. Particular thanks should go to Jim Hunt and his intrepid Chief of Staff, Nancy Grilk, who have been incredibly effective at getting all of these sometimes contentious players to work together. Particular thanks as well should go to the Boston Water and Sewer Commission and its Chief Engineer, John Sullivan, who have worked very hard to reduce the inflow of groundwater into their pipes, both raising groundwater levels and reducing wastewater treatment costs.

In a new initiative undertaken after a recommendation from the Trust, the BWSC and the Inspectional Services Department have developed a protocol to discover locations that are discharging groundwater to BWSC's drains without a permit, often causing nearby groundwater levels to drop.

I am also pleased to tell you that the Trust has been fully funded for its operations, and that the Mayor has kept his promise in the FY2008 budget to increase our City funding to allow for inflation. We completed our basic well network last fall and are now monitoring our approximately 800 wells on a continuous roughly six week cycle. New readings are posted as soon as they have been received and verified on our website, www.bostongroundwater.org. The website continues to grow in traffic; last month it averaged over 300 visits per day.

Adoption of the Groundwater Conservation Overlay District has led to commitments for installation of recharge systems, with no requests for a variance from the requirements. We are now working with BWSC to develop a system for tracking the installation of these systems so that we can study their impact on nearby groundwater levels. The recently adopted expansion of the GCOD to the North End and Fort Point Channel neighborhoods has been tailored to meet conditions in those areas. I look forward to

working with government officials and residents to help to develop the best response to low groundwater levels in East Boston. I also want to particularly commend the BRA for making all projects that come under Article 80 address potential groundwater impacts; they have been particularly responsive to suggestions the Trust has made in response to those filings and have followed through strongly with project proponents.

The Trust is funding two research projects. Working with professors at Northeastern and BU through the Gordon Center for Subsurface Imaging Systems, we are attempting to develop a less invasive and expensive way than digging test pits to determine the elevation of the tops of pilings for individual buildings. It can often cost over \$5000 to have a test pit dug and the results analyzed.

We are also working with a professor at Wentworth to study less costly methods of repairing the damage caused by failed pilings. The current method of repair is the same that was used on the Boston Public Library in 1929. As you know, underpinning a row house costs \$300,000 or more. We will be exploring the feasibility of repairs to lighter buildings, such as those in East Boston and Bay Village, that might reduce those costs by at least half. We will be looking, as well, at the advantages and disadvantages of other alternate methods that might apply to heavier buildings.

Much of what we have done has been geared toward making continuing efforts at solving the groundwater problem part of the institutional way in which the City goes about its business. We will always have to monitor these levels and repair infrastructure when leaks occur, and we will always want to be sure that we are capturing the benefits of the precipitation that falls on Boston. If the effort on monitoring that began in the 1930's when the WPA wells were installed had been continued, it's likely that many subsequent problems could have been avoided.