BOSTON GROUNDWATER TRUST (BGwT) BOARD MEETING May 14, 2007

The Lenox Hotel - Patriot Room

The meeting of the Board of Trustees of the Boston Groundwater Trust was called order at 4:12 pm in the Copley meeting room. The meeting notice was posted at City Hall in accordance with provision of the Commonwealth's Open Meeting Law.

Trustees in attendance, comprising a quorum, were:

- Mr. Tim Mitchell, Neighborhood Association of the Back Bay
- Mr. Gary Saunders, Boston Back Bay Association
- Mr. Galen Gilbert, Fenway Community Development Corporation (CDC)
- Mr. Michael Nairne, Ellis Neighborhood Association
- Mr. Jim Hunt, Mayor's office
- Ms. Nancy Grilk, Mayor's office

Also present were:

Elliott Laffer, BGwT Executive Director; Christian Simonelli, BGwT Technical Coordinator; John Kastrinos, Haley & Aldrich; Anne M. Pistorio, North End Water Front Residents Association (NEWRA) Groundwater Working Group; James Lambrechts, Wentworth Institute of Technology

1. Adoption of the minutes of the April 24, 2007 Meeting

Minutes were distributed to board members for review.

Trustee Grilk moved to adopt the amendment. Trustee Nairne seconded the motion.

Voted: To accept the minutes of the April 24, 2007 meeting.

2. Finance Report

In the absence of Trustee Sherin, Mr. Laffer reviewed the BGwT *Financial Report and Reconciliation Detail*. Mr. Laffer noted the payment made to Wentworth Institute of Technology for the research project on alternatives to underpinning. He also noted that the Columbus Center contribution has been removed since it is unlikely that the BGwT will receive the contribution by the end of FY07. Discussion followed.

3. Back Bay Station Area Update

Mr. Laffer updated the BGwT on status of the proposed solution(s). He noted that the MBTA has requested that the BGwT install 2 wells, (one at the end of each Cazenove and St. Charles St., adjacent to MBTA wall). The purpose of these wells is to investigate the flow of water and whether or not it flows along the MBTA wall. Mr. Laffer noted that once the BGwT receives a purchase order we will proceed with the installations. Discussion followed.

4. <u>Storrow Drive Update</u>

Mr. Laffer updated the BGwT on Storrow Drive project. He noted that the MWRA does not want to use river water for recharge. The MWRA does not want to be liable for sewage that may enter the river and be recharged after large storms. Discussion followed.

5. Research Projects

Mr. Laffer noted that 2 contracts have been signed. The first, with Wentworth Institute of Technology for alternatives to underpinning and the second with CenSSIS for subsurface imaging for identifying the bottom of granite blocks. Mr. Laffer noted that CenSSIS will start lab testing this Wednesday 5/16/07. Discussion followed.

6. Frequency of Trustee Meetings

Trustee Saunders commented on the frequency of the BGwT board meetings. He noted that in discussion with Trustee Sherin, both of them feel that fewer meetings are better and that if issues arise which require the board's attention, the board can always meet with more frequency. Discussion followed.

Trustee Saunders also noted that the Executive Director's report should be sent out on a monthly basis for review. Trustee Gilbert agreed. Trustee Gilbert also expressed interest in inviting more guests to speak at the meetings. These guests could be from various entities and municipalities throughout the city. Discussion followed.

Trustee Hunt feels that most of the information that is shared at the meetings can be sent electronically through e-mail and that less meetings are ok. He also noted that it's important for the decision making process to remain the same. Trustee Gilbert agreed. Trustee Hunt suggested that a schedule be set up to compliment other meetings that Trustees attend like the City/State Groundwater Working Group. Discussion followed.

Trustee Gilbert suggested moving the meeting to City Hall to boost attendance. Trustee Saunders noted that it has been some board members from neighborhood groups that have been absent in the past, not city officials. Discussion followed.

Mr. Laffer noted that importance of meetings is what attendance should be based on. He agreed that sending monthly Executive Director's and Finance Reports to the Trustees was a good idea. He will coordinate setting board meeting dates in conjunction with the City/State Groundwater Working Group and set up special meeting dates as needed. Discussion followed.

Trustee Gilbert suggested looking into the possibility of encourage attendance with phone calls and more interesting meetings. Trustee Hunt agreed. Trustee Mitchell feels like it's a good time to move the board meetings to every other month. Trustee Nairne suggested that Mr. Laffer work on inviting a guest for 3 out of the 6 meetings per year. Discussion followed.

Trustee Hunt made a motion to move monthly meetings to bi-monthly meetings and that meetings be scheduled in conjunction to compliment other meetings that Trustees attend like the City/State Groundwater Working Group. Trustee Gilbert seconded the motion.

Voted: To move monthly meetings to bi-monthly meetings and that meetings be scheduled in conjunction to compliment other meetings that Trustees attend like the City/State Groundwater Working Group.

7. Geothermal Heat Pumps and Groundwater

Mr. Kastrinos distributed a handout of three different types of Geothermal Heat Pumps. He noted that of the three the Standing column (closed loop system) is the most common in urban areas. He noted that there is a potential for some water loss in most systems. Common problems exhibited by these systems are shallow wells that may discharge to storm drains and poor well sealing at the top of the well. He noted that some drillers are not equipped to go to the required depths and that shallower wells are more common and prone to drawdown the water table. Discussion followed.

Trustee Hunt noted that ISD permits the installation of these wells but permits for the wells are not that common. He suggested that the Technical Advisory Committee consider what regulations, if any, need to be put in place to protect upper aquifer groundwater levels.

8. Executive Director's Report

BGwT Executive Director Mr. Elliott Laffer distributed his report. Discussion followed. Refer to the attached *Executive Director's Report: May 14, 2007*, for a complete list of all activities.

9. <u>Technical Coordinator's Report</u>

BGwT Technical Coordinator Mr. Christian Simonelli presented his activities of the past month. Discussion followed. Refer to the attached *Technical Coordinator's Well Monitoring Update BGwT Meeting: May 14, 2007* for a complete list of all activities.

The meeting adjourned at 5:41 p.m.

NEXT MEETING: Mr. Laffer will e-mail the Trustees for next meeting date.

Notes submitted by Christian Simonelli, BGwT Technical Coordinator, on 5/15/07.

Respectfully submitted,

Secretary

EXECUTIVE DIRECTOR'S REPORT May 14, 2007

- 1. City-State Groundwater Working Group The Working Group met again on April 26. Attendance remains excellent, with all groups showing continued cooperation.
- 2. City Council The City Council held an oversight hearing on the groundwater issue on May 8. My prepared testimony is on our website. Also testifying were Jim Hunt, John Sullivan, Scott Darling of the MBTA, Gordon Richardson of Citywide GET, and several individuals from the South End. The tenor of the meeting was generally positive, although with a request that I once again provide a map with my newsletter. There was also some request for an overall plan to comprehensively attack the issue. I also met with Councilor Arroyo on May 3 to update him on the groundwater issue.
- 3. BRA I was invited to an update on the BRA's new computer system for tracking projects. We will have access to the system to enter comments and to follow various aspects of the progress of the projects we're concerned with.
- **4. Zoning** The Zoning Commission voted to extend the modified Groundwater Conservation Overlay District to the Bulfinch Triangle, North End Waterfront, and Fort Point Channel neighborhoods. It is now in effect in those areas.
- **5. BWSC** The work on Back Street will be completed except for paving by the end of August. The video survey of low sewer pipes is about 2/3 complete.
- **6. DCR** DCR is scheduled to return to the Technical Advisory Committee of the City-State Groundwater Working Group on May 21 with an updated plan for recharge as part of the Storrow Drive tunnel reconstruction project.
- 7. MBTA The MBTA will be contracting with the Trust to install two additional observation wells very close to the Southwest Corridor structure on Cazenove and St. Charles Street. They want to use these to understand whether a significant groundwater flow extends along the structure or if the flow is primarily toward the area between Arlington and Berkeley Streets. This will help in deciding the best long term solution to install.
- **8. MTA** The MTA has inspected its structure near Prudential, but has yet to find any leaks there.
- **9. Budget Request** The Mayor has included funding for the Trust at last year's level plus an allowance for inflation in his budget request, as promised.
- 10. East Boston Jim Hunt, Nancy Grilk, and I met with Councilor LaMattina and a group of East Boston residents on May 11 to discuss the groundwater problem in that neighborhood and potential next steps. We will probably meet again soon with the Councilor to discuss the potential extension of the modified GCOD to affected areas of East Boston.
- **11. The Clarendon** The promised report on groundwater levels in the area and why they are low has been completed by Haley & Aldrich and is in review by the Beal Companies. I expect to receive it shortly.
- **12. Website** Traffic on the website in April was at near record levels. May has seen a slight drop, but continues at high levels.
- 13. Research Projects Work in the Northeastern University testbed for our project on remote sensing is to be done this week. Assuming that the results are positive, we will be proceeding to a field test. I signed the agreement with Wentworth for our project on alternate methods of foundation repair. Jim Lambrechts and Christian hope to jointly select the student who will be assisting on the project this week. Work is to take place over the next two semesters, with completion in January.
- **14. Press** There are new articles from the Boston Courant and the Back Bay Sun to be added to the site.
- **15. Comment Letters** I filed on the GrandMarc at St. Botolph project. The letter is posted on our website.

TECHNICAL COORDINATOR'S WELL MONITORING UPDATE BGwT Meeting: May 14, 2007

WELL MONITORING

The BGwT's latest set of readings are indicated below.

There are currently 702 wells in the West network. Wells were read between April 14 – May 11,, 2007. Of the 702 wells read:

- 252 wells @ elevation >7'
- 274 wells @ elevation 5′- 7′
- 131 wells @ elevation 3'-5'
- 32 wells @ elevation <3'
- 13 wells @ no reading

We have read 89 wells in the East network (East Boston Area). Wells were read in East Boston on April 10 & 13, 2007. Of the 89 wells read:

- 48 wells @ elevation >7'
- 14 wells @ elevation 5′- 7′
- 8 wells @ elevation 3′-5′
- 14 wells @ elevation <3'
- 5 wells @ no reading

NOTE: We are continuously reading the well network.

LEVELOGGERS

- Group 6 dataloggers have been installed. Data is scheduled to be uploaded in June.
- As per agreement with GEI Consultants Inc., loggers (there are a total of 4) installed in and around Cazenove St. continue to be uploaded once a week and sent to GEI Consultants Inc. The purpose is to observe the water levels in the area where the recharge systems have been installed.

ISD REASEARCH

• We continue to look for any underpinned buildings. Data continues to be scarce up to this point.

PURGING

- Approximately 230 wells in our network will be purged over the next 4-5 months to verify their operability
- Wells not meeting a certain criteria will tabbed for replacement or flushing depending on the results
- These wells are the original wells that formed that foundation of our network. All were installed by various developers at different times. Some are also from the WPA study.
- Our last major purging effort was in 1999 and 2000