BOSTON GROUNDWATER TRUST (BGwT) BOARD MEETING March 18, 2010

The Board of Trustees of the Boston Groundwater Trust held its meeting in the Patriot meeting room, which is located in the Lenox Hotel. The Executive Director posted a meeting notice at City Hall in accordance with provision of the Commonwealth's Open Meeting Law. Mr. Mitchell called the meeting to order at 4:09 pm. The following trustees were present, and the Chairman declared that there was a quorum:

Mr. Tim Mitchell, Neighborhood Association of the Back Bay

Mr. Gary Saunders, Boston Back Bay Association

Ms. Molly Sherden, Beacon Hill Civic Association

Mr. Peter Shilland, Ellis Neighborhood Association

Mr. William Moy, Chinatown Neighborhood Council

Ms. Nikko Mendoza, Mayor's office

Also present:

Elliott Laffer, BGwT Executive Director; Christian Simonelli, BGwT Technical Coordinator; Anne M. Pistorio, North End Water Front Residents Association (NEWRA) Groundwater Working Group

1. Adoption of the minutes of the January 21, 2010 Meeting

Minutes were distributed to board members for review. Discussion followed.

Ms. Sherden, Trustee, moved to adopt the minutes. Mr. Moy, Trustee, seconded the motion.

Voted: To accept the minutes of the January 21, 2010 meeting.

2. Financial Report

Ms. Sherden reviewed the BGwT Financial Report and Reconciliation Detail. Discussion followed.

Ms. Sherden noted that the BGwT has money divided into 3 CD's at 24 months, 18 months, and 6 months as indicted under Note 1 of the report. Also, that the interest for each isposted to the financial report only when received at maturity Discussion followed.

3. FY 2010 Well Installation

Mr. Laffer reviewed Mr. Simonelli's analysis of bids submitted for the Spring FY2010 17 Well Installation. Mr. Laffer noted that the major difference in the bid line items were the mobilization/demobilization of drill rigs and police detail hourly rates. Discussion followed. Mr. Laffer also noted that New Hampshire Boring, Inc. has a decided advantage in their owning of a vacuum truck, while Geo-Logic Earth-Exploration, Inc. would have incur the cost of renting one on a daily basis. Discussion followed.

Mr. Moy, Trustee moved to approve entering into a contract with New Hampshire Boring. Ms. Sherden seconded the motion. Discussion followed.

Voted: To award the 17 Well Installation contract to New Hampshire Boring, Inc.

4. FY 2011 Preliminary Budget

Mr. Laffer reviewed the proposed FY 2011 budget. Discussion followed. Mr. Laffer noted that the website line item for FY2010 is a little higher because it reflects 4 yrs. of invoicing.

Mr. Mitchell, Trustee, noted the one time expenses line items regarding research project and well installation. Discussion followed. Mr. Saunders suggested the format be changed so that it is clear that the Trust's expenditures including the one time items exceed its income, and that Mr. Laffer should consult BGwT accountant Raphael & Raphael on an appropriate format. Discussion followed.

Mr. Laffer will send out a revised budget to the board members via email for review before the next board meeting.

5. Research Project

Mr. Laffer updated the board on the status of the research project with Tufts Professor Richard Vogel. Mr. Laffer noted that yesterday's meeting at Tufts went very well and that the researches are very excited with the results so far. Discussion followed. Mr. Shilland also felt that the project was headed in the right direction and that he feels good about where it's headed. Discussion followed.

6. Executive Director's Report

BGwT Executive Director Mr. Elliott Laffer distributed his report. Discussion followed. Refer to the attached *Executive Director's Report: March 18, 2010* for a complete list of all activities.

7. Technical Coordinator's Report

BGwT Technical Coordinator Mr. Christian Simonelli presented his activities since last meeting. Discussion followed. Refer to the attached *Technical Coordinator's Well Monitoring Update BGwT Meeting: March 18, 2010* for a complete list of all activities.

The meeting adjourned at 5:09 p.m.

NEXT MEETING: May 20, 2010 @ 4:00 pm at the Lenox Hotel.

Notes submitted by Christian Simonelli, BGwT Technical Coordinator, on 3/19/10.

EXECUTIVE DIRECTOR'S REPORT March 18, 2010

- 1. City-State Groundwater Working Group The Working Group will meet again on April 15.
- 2. MBTA The most recent readings on Cazenove Street indicate a recovery to the highest levels seen in some months, although still somewhat below what is required to assure the protection of wood pilings along that street. The low groundwater levels along Boylston Street in front of the Boston Public Library, associated with the construction project at Copley Station, continue. The work still requires dewatering which appears to be the cause of the drawdown.
- 3. BWSC BWSC will be doing a television inspection of the combined sewer overflows on Berkeley and Fairfield Streets this week to see if they have similar damage to the one on Dartmouth Street. They expect to contract for repairs shortly. BWSC has been working on a number of major sewer rehab/rebuild projects that are in areas where we have had continuing concerns about low groundwater levels affecting the wood pilings. We have seen increased levels, often to their highest levels ever, in some of these areas. The following projects are at least 90% complete: Beacon St, Brimmer St to Charles St; Berkeley St, Stuart to Stanhope St; Charles St, Pinckney to Branch St; Chestnut St, Brimmer St to River St; Dartmouth St. Alley 418 to Alley 425: Mt Vernon St at Charles St; Mt Vernon St, Otis PI to Brimmer St; Trinity PI, St James Ave to Stuart St; Canal St, Causeway St to Market St; Church St, Winchester St to Melrose St; Lancaster St, Causeway St to Merrimac St; Park Plaza, Arlington St to Hadassah Way; Stuart St, Columbus Ave to Church St; Border St, Maverick St to Condor St; Central Square from Border St; Norway St at Hemenway St; Summer St, Melcher St to A St; Aquadilla St, Tremont to San Juan St; Appleton St, W Canton St to Dartmouth St: Bond St. Hanson to Milford St: Chandler St at Clarendon St: Chandler St. Columbus Ave to Clarendon St; Clarendon St, Warren Ave to Chandler St; Columbus Ave, Braddock Park to Clarendon St; Drapers Lane, Ivanhoe St to Upton St; Hanson St, Tremont St to Shawmut Ave; Milford St, Tremont to Taylor St; San Juan St at W Brookline St; Tremont St at E Berkeley Se; Tremont St, Milford St to Alley 705; Tremont St, W Newton St to Aquadilla St; Upton St, Drapers Lane to Shawmut Ave; Warren Ave, Clarendon St to Berkeley St; Warren Ave, W Brookline St to W Canton St; W Canton St, Tremont St to Alley
- **4. MWRA** MWRA is nearing completion of its major sewer replacement project in East Boston. The sewer pipe under Porter Street that is in the area where extremely low groundwater readings occur consistently will be discontinued and filled in by the end of the summer
- 5. MassDOT They are continuing with design work for modifications to the drainage system from the Central Artery. The decision on whether and where to introduce recharge awaits completion of some of BWSC's repair projects and a determination of whether the recharge would be a benefit in the areas into which it can be introduced. Decisions should be made in the summer.
- 6. GCOD GCOD compliance continues to be excellent. The Board of Appeals has ruled on over 160 applications, with only two not being able to completely comply with recharge requirements. Over 80 recharge systems are installed and operating.
- 7. Research Project We have received the interim report from Professor Vogel, and the Technical Advisory Committee was briefed on the findings yesterday. The research has found a small, but statistically significant positive impact on groundwater levels associated with individual recharge systems. They have developed a model and are refining it to allow the prediction of this impact. At this point, they feel that the model accurately represents the impact of any individual recharge on any well in Back Bay. They are refining the model to better represent the impact of multiple recharges at any single point. They plan to present an interim paper at a conference in Rhode Island in May. Professor Vogel is confident that they will have an accurate and refined multipoint model and a paper explaining it in terms understandable to the general public by the end of the summer.
- **8. Website** Traffic to the website continues high. We have experienced some lack of reliability in the availability of the interactive map, apparently caused by inadequacies of the

- shared server arrangement. We are working with our consultant to remedy this, probably by moving the map to a different server.
- 9. **Meetings** I had a productive meeting with the membership of the Union Park Neighborhood Association to explain the groundwater issue and efforts undertaken to alleviate it to them. Christian and I met with the Goethe Institute to discuss apparent piling problems in their building on Beacon Street.

TECHNICAL & RECHARGE COORDINATOR'S UPDATE BGwT Meeting: March 18, 2010

WELL MONITORING

The BGwT's latest set of readings are indicated below. Wells were read from Feb. 19 – Mar. 11, 2010

There are currently 705 wells in the West network. Of the 705 wells read:

- 67 wells @ elevation >9'
- 140 wells @ elevation 7′–9′
- 267 wells @ elevation 5'-7'
- 174 wells @ elevation 3′-5′
- 33 wells @ elevation <3'
- 0 wells @ Dry
- 24 wells @ no reading
- 85 Recharge Locations

We have read 85 wells in the East network (East Boston Area). Wells were read in East Boston on Feb. 17 & 18, 2010. Of the 85 wells read:

- 24 wells @ elevation >9'
- 12 wells @ elevation 7′-9′
- 9 wells @ elevation 5'-7'
- 5 wells @ elevation 3′-5′
- 4 wells @ elevation <3'
- 11 wells @ Dry
- 20 wells @ no reading

NOTE: We are continuously reading the well network and started a new set of readings on Wednesday March 17, 2010 with our new co-op Robert Tully from Wentworth Institute of Technology. Robert will also be reading for us this summer on a part-time basis.

LEVELOGGERS

- We continue to upload dataloggers at the following locations on a weekly basis:
 - o 1 on Saint Charles St. and 2 on Cazenove St.
 - 5 along the Storrow Drive Underpass from Embankment Rd. Clarendon St.
- 4 loggers have been placed in wells in Back Bay closest to the alleys that BWSC are replacing lines and installing recharge systems
- Additional loggers have been placed in the Fenway, South End, and Back Bay.

CONTOURS

- We continue to generate contours for all areas of our well network. Elliott and I have reviewed them with our technical committee.
- We will continue to receive the contours from BWSC and will be sending them our contours for comparison.

ISD RESEARCH

- We continue to look for building permits and any underpinned buildings.
- I continue working on the South End.

RECHARGE

■ I'm wrapping up introduction for our new Recharge tab on the site. I've reviewed and revised it with Elliott.