# BOSTON GROUNDWATER TRUST (BGwT) BOARD MEETING July 29, 2010

The Board of Trustees of the Boston Groundwater Trust held its meeting 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 4:10 pm. The following trustees were present, and the Chairman declared that there was a guorum:

Mr. Tim Mitchell, Neighborhood Association of the Back Bay

Mr. Galen Gilbert, Fenway Community Development Corporation (CDC)

Mr. Peter Sherin, Greater Boston Chamber of Commerce

Ms. Nancy Grilk, 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; Peter Porgorski, Resident of Ellis Neighborhood

#### 1. Adoption of the minutes of the May 20, 2010 Meeting

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

Mr. Sherin, Trustee, moved to adopt the minutes. Ms. Grilk, Trustee, seconded the motion.

**Voted:** To accept the minutes of the May 20, 2010 meeting.

#### 2. Financial Report

In lieu of Ms. Sherden, the Treasurer, Mr. Laffer reviewed the BGwT *Financial Report and Reconciliation Detail*. Discussion followed.

Mr. Laffer noted the absence of the 14 OW invoice from New Hampshire Boring, Inc., under the line items. Mr. Laffer noted that the BGwT has just received the invoice and is in the process of analyzing the number. Discussion followed.

Mr. Mitchell, Trustee, questioned the \$14,450 line item for the Tufts research project. Mr. Laffer noted that the \$14,450 represents the second half of funding for the project and will be released when Tufts submits a report and presents their finding to the BGwT. Discussion followed.

#### 3. Office Move

Mr. Laffer noted the BGwT moved their office to 229 Berkeley St. 4<sup>th</sup> Floor. The move has saved the BGwT \$200/month in rent. The total cost of the move was around \$1,100. Discussion followed.

#### 4. Report on City-State Groundwater Working Group Meeting

Mr. Laffer noted that the MBTA is in the process selecting an Engineer to perform tunnel rehabilitations that includes groundwater related work. Discussion followed. Refer to item #3 in the attached *Executive Director's Report: July 29, 2010.* 

Mr. Laffer noted that the BWSC is continuing their various repairs on their infrastructure throughout the city. Discussion followed. Refer to item #4 in the attached *Executive Director's Report: July 29, 2010.* 

Mr. Gilbert, Trustee, asked Mr. Laffer if he has obtained any pumping data from the various agencies at the City/State meetings. Discussion followed.

#### 5. Meeting with the Newmarket Business Association

Mr. Laffer reviewed the meeting he attended with the Newmarket Business Association at BWSC headquarters. The focus of the meeting centered around a major problem in the Albany Street Corridor having to do with possible tidal flow and the increased water levels affecting buildings in that area. Mr. Laffer noted that the BGwT will install two (2) dataloggers in existing wells in the area to see any possible effects of tidal influence. Discussion followed.

#### 6. Neighborhood Focus: North End with Updated Underpinning Data

Mr. Simonelli reviewed the current dynamics of the North End. Topics reviewed were pile cut-off elevations, buildings found to be underpinned, composition of the fill, existing infrastructure, observation well levels and coverage, and Recharge. Discussion followed.

#### 7. Executive Director's Report

BGwT Executive Director Mr. Elliott Laffer distributed his report. Discussion followed. Refer to the attached *Executive Director's Report: July 29, 2010* for a complete list of all activities.

#### 8. 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: July 29, 2010* for a complete list of all activities.

#### 9. Other Business

Mr. Gilbert inquired about the progress of the Recharge Coordinator mapping the green space throughout the city. Mr. Simonelli noted he has made some progress and is working towards compiling a map showing that data. Discussion followed.

Mr. Gilbert also inquired about the possible mapping project of infrastructure along Hemenway St. in the Fenway that Jim Lambrechts had discussed. Mr. Simonelli noted that Professor Lambrechts is having difficulty finding students to assist him. Discussion followed.

Mr. Gilbert suggested the BGwT issue more press releases about meetings, topics, etc. He wondered if the BGwT should form a PR committee. Discussion followed.

The meeting adjourned at 5:55 p.m.

NEXT MEETING: September 16, 2010 @ 4:00 pm at the Lenox Hotel.

Notes submitted by Christian Simonelli, BGwT Technical Coordinator, on 7/30/10.

# EXECUTIVE DIRECTOR'S REPORT July 29, 2010

- 1. City-State Groundwater Working Group The Working Group met on July 22. As always, attendance and participation were excellent. Details of particular agency reports are listed under the agency heading below.
- 2. Well Installation We have completed the installation of our wells for this year. We installed 14 wells. Because of the subsurface conditions encountered, three of the planned sites proved to be unworkable. Results of initial readings from each of the new wells are posted on our website.
- 3. MBTA The MBTA continues to go forward with plans for the long term solution for low groundwater issues in the South End in the vicinity of Back Bay Station. They received letters of interest from six engineering firms for the tunnel rehabilitation project that includes the groundwater related work on July 14. They expect to complete the selection process and award a contract by September. Because the groundwater related work is one of the first items to be completed under the contract, they expect construction could start by Spring 2011. On another project, the T has completed all dewatering associated with the elevator installations for Copley Station; groundwater levels appear to be returning to normal.
- 4. BWSC BWSC is currently working on repairs to the sewer on Richmond Street between Commercial Street and Atlantic Avenue in the North End, with completion likely very soon. They have also discovered some leaking privately owned pipes in the area and are working with the owners to get them repaired. In the Back Bay, all of the sewer and recharge work in the alleys is complete for this year; they expect to line the combined sewer overflow on Dartmouth Street between Beacon and Back Streets in late August. BWSC is still working to find the cause of low groundwater at two sites in the South End, Albany Street and Union Park as well as Shawmut Avenue and Upton Street.
- 5. MWRA MWRA has substantially completed their major sewer project in East Boston, including the siphon that goes under the Blue Line near Porter Street. We have seen some improvements in groundwater levels in the area and will be watching this closely over the next few months.
- 6. DCR After informing us, DCR had to turn off the recharge pumps from the Storrow Drive Tunnel from June 15 to July 15 to complete testing of some modifications to their stormwater pumping system. We monitored that area closely, with dataloggers in multiple wells. We did see a gradual drop in levels during the month. We'll be watching to see that they rebound as anticipated. Because the system is designed to switch to the stormwater pumps and discharge to the Charles River in the event of a major storm, the recharge system would not have received the water from the July 10 storm. DCR reported that those pumps were able to keep up even with that extraordinarily rapid rainfall.
- 7. GCOD In what is hopefully a sign of an improving economy, we are beginning to see an increase in cases coming before the Board of Appeals under GCOD. Compliance remains virtually 100%, thanks to the efforts of the Board, BWSC, and ISD.
- **8. Website** We are having a problem with the traffic statistics function of our website. The information that I have been able to gather indicates a steady traffic flow at reasonably high levels. We continue to get comments praising the information available on the site.
- 9. Meetings I attended an additional presentation on the Liberty Mutual project.
- **10. Comment Letters** I have filed comment letters on the planned projects at 100 Arlington Street and 319 A Street Rear. As always, the letters are posted on our website.

# TECHNICAL & RECHARGE COORDINATOR'S UPDATE BGwT Meeting: July 29<sup>th</sup>, 2010

### **WELL MONITORING**

The BGwT's latest set of readings are indicated below. Wells were read from Jun. 11<sup>th</sup> – 30<sup>th</sup>, 2010

There are currently 720 wells in the West network. Of the 720 wells read:

- 46 wells @ elevation >9'
- 122 wells @ elevation 7′–9′
- 310 wells @ elevation 5′-7′
- 186 wells @ elevation 3′-5′
- 29 wells @ elevation <3'
- 0 wells @ Dry
- 27 wells @ no reading
- 94 Recharge Locations

We have read 85 wells in the East network (East Boston Area). Wells were read in East Boston on Jun.  $7^{th}$  &  $9^{th}$ , 2010. Of the 85 wells read:

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

**NOTE:** We are continuously reading the well network and started a new set of readings on Monday July 5<sup>th</sup>, 2010 with our returning part-timer Robert Tully from Wentworth Institute of Technology.

Robert has continued to work out extremely well for us so we have decided to re-hire him again on co-op for the fall semester.

### **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.

## **WELL INSTALLATION**

- We installed 14 OW's from June 7<sup>th</sup> June 25<sup>th</sup> in the Back Bay, South End, Fenway, and the Leather District. Our contract initially called for the installation of 17 OW's. However, due to some utility interference and soil conditions 14 of the 17 were installed.
- Overall the operation ran relatively well. There were some minor hiccups here and there. The weather was great and

once again New Hampshire Boring, Inc. executed fine work.

	14 BGwT OW's Installed from June 7 <sup>th</sup> – 25 <sup>th</sup>		
install_date	location		
07-Jun-10	On Newbury St., in front of 20-24 Newbury St.		
09-Jun-10	On Berkeley St., in the sidewalk, adjacent to 200 Berkeley St.		
09-Jun-10	Corner of Saint James Ave. and Berkeley St., adjacent to 175 Berkeley St.		
14-Jun-10	On Blagden St., in the sidewalk, at the rear of 700 Boylston St.		
14-Jun-10	Corner of Arlington St. and Columbus Ave., adjacent to 130 Arlington St.		
15-Jun-10	On Union Park, in front of 89 Union Park		
18-Jun-10	On Huntington Ave., in front of 258 Huntington Ave.		
18-Jun-10	On Clearway St., adjacent to 182 Massachusetts Ave.		
21-Jun-10	On Lincoln St., in front of 108 Lincoln St.		
21-Jun-10	Corner of South and Tufts St., adjacent to 89 South St.		
22-Jun-10	On Clearway St., adjacent to 55 Clearway St.		
25-Jun-10	On Arlington St., in front of 122 Arlington St.		
25-Jun-10	On Berkeley St., in front of 229 Berkeley St.		
25-Jun-10	On Kneeland St., in front of 150 Kneeland St.		
	07-Jun-10 09-Jun-10 09-Jun-10 14-Jun-10 14-Jun-10 15-Jun-10 18-Jun-10 21-Jun-10 21-Jun-10 22-Jun-10 25-Jun-10		

#### **NOTES:**

OW's: 23J-1894B, 23J-2563B, 22J-0218, 1164B, 1879B, 1955B, 2041B, & 22I-2615AB are replacements for OW's that were either destroyed or were not operating properly

# **3 Proposed OW's Not Installed**

well_id	reason OW not installed
21K-2273	Organic layer too high. Most of OW would have been screened in organics.
21J-1584	No Organics; right to clay layer. Hole moved & yielded same result.
23K-2693	2 failed attempts with vac truck. Utility interference in both attempts.