

BOSTON GROUNDWATER TRUST (BGwT)  
BOARD MEETING  
November 17, 2011

The Board of Trustees of the Boston Groundwater Trust held its meeting in the Copley 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, co-chair, called the meeting to order at 4:05 pm. The following trustees were present:

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. Molly Sherden, Beacon Hill Civic Association  
Mr. Peter Shilland, Ellis Neighborhood Association  
Ms. Nancy Grilk, City of Boston

Also present:

Elliott Laffer, BGwT Executive Director; Christian Simonelli, BGwT Technical & Recharge Coordinator

**1. Adoption of the minutes of the September 22, 2011 Meeting**

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

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

**Voted:** To accept the minutes of the September 22, 2011 meeting.

**2. Financial Report**

Ms. Sherden reviewed the new Balance Sheet Detail format. Ms. Sherden noted that this new format will replace the previous Reconciliation detail. Ms. Sherden noted the Executive Director's line item for expenses and that a detail of those expenses was attached at the end of the new detail. Discussion followed.

**3. Transfer of Certificate of Deposit**

Ms. Sherden noted that she is currently looking into the next banking institution for the best rate on a CD. She has found a 9-month CD earning 1.3% interest at a new branch of Hingham Savings Bank located at 80 Charles St. in Beacon Hill. Ms. Sherden also noted that this rate is only available at this branch because it's a new branch opening. She noted that most average rates at other institutions run around 0.25%. Discussion followed.

Ms. Grilk, Trustee, moved to authorize Ms. Sherden to undertake the opening of a CD at Hingham Savings Bank. Mr. Sherin seconded the motion.

**Voted:** To authorize Ms. Sherden to undertake the opening of a CD at Hingham Savings Bank.

Mr. Sherin and Mr. Gilbert, Trustee, suggested the Trust look into alternate avenues of investment for the Trust's funds. Discussion followed.

**4. Conflict of Interest Policy/Special Municipal Employee Status**

Mr. Laffer reviewed the distributed memo from Catherine Lizotte (the city's assistant corporation counsel) regarding the state conflict of interest law, M.G.L. c. 268A. Mr. Laffer noted that Ms. Lizotte was scheduled to attend the meeting to brief the board. However, due to a death in the family she will be invited to attend the January 19, 2012 meeting instead. Discussion followed.

Mr. Gilbert would like a copy of the city's ordinance designating the trustees as "special municipal employees". Mr. Laffer noted that Ms. Lizotte should be able to provide that and he will check with her. Discussion followed.

Mr. Gilbert suggested that he update the Trust's conflict of interest policy to include members of the Technical Advisory Committee and Trust employees. Discussion followed. Mr. Gilbert will draft a revised policy and present it to the board.

**5. Dartmouth Street Update**

Mr. Laffer reviewed the ongoing efforts of BWSC to address the low levels on Dartmouth Street. Mr. Laffer highlighted the following;

- BWSC grouted and lined a leaking manhole in Dartmouth Street between Beacon & Marlborough St. at the end of Alley No. 418
- There are still leaks in the 36" line located on the West Side of Dartmouth St. which needs to and will be lined in the Spring of 2012
- BWSC restarted recharging on Tuesday November 15<sup>th</sup> and dye testing will also be performed to try and discover additional sources of potential infiltration into their system.
- Recharging will continue until the temperature dips below freezing
- The Trust has 8 data loggers in the area that are uploaded every week to monitor the levels

Discussion followed.

Mr. Shilland, Trustee, suggested that Mr. Laffer inquire with BWSC about heat lining the hose that is used for Recharge. Mr. Laffer noted that he will speak with BWSC. Discussion followed.

**6. Well Readings, Latest, and 2011 Review**

Mr. Simonelli reviewed the latest readings and the progress that has been made in specific areas of the well network. Discussion followed. Refer to the attached *BGwT 2011 Well Network Review* for a complete list of area's covered.

**7. Executive Director's Report**

BGwT Executive Director Mr. Elliott Laffer distributed his report. Discussion followed. Refer to the attached *Executive Director's Report: November 17, 2011* for a complete list of all activities. Discussion followed.

**8. Technical & Recharge Coordinator's Report**

BGWT Technical & Recharge Coordinator Mr. Christian Simonelli reviewed his activities since last meeting. Discussion followed. Refer to the attached *Technical & Recharge Coordinator's Update BGWT Meeting: November 17, 2011* for a complete list of all activities. Discussion followed.

**The meeting adjourned at 5:55 p.m.**

**NEXT MEETING: January 19, 2012 @ 4:00 pm at the Lenox Hotel.**

Notes submitted by Christian Simonelli, BGWT Technical & Recharge Coordinator, on 11/18/11.

Respectfully submitted,

A handwritten signature in cursive script that reads "Galen Gilbert".

Galen Gilbert, Secretary

## BGWT 2011 WELL NETWORK REVIEW

### 1.) East Boston

- a. Levels along Visconti and Chelsea Streets
- b. MWRA's filling of 18" abandoned line in the area
- c. Levels have come up as much as 6' in some wells
- d. Only two wells now under elev. 3' as of Nov. 4<sup>th</sup>
- e. Overall pretty consistent numbers

### 2.) Lower Beacon Hill/Back Bay

- a. No wells under elev. 3' for the first time ever as of most recent dataset

### 3.) Storrow Drive

- a. Levels along the Embankment have come up steadily since the Recharge from the underpass from DCR
- b. No Recharge in west catch basin (west recharge galley) because of a blockage. Unblocked on April, 29, 2011 see immediate rise on 0216B (closest well in Back St. to the galleys.)
- c. Has been a dip in past weeks (levels were all above 4' for a bit). Notified DCR and they are looking into it.
- d. The majority of the wells are now over elev. 3.5' for the first time ever

### 4.) Back Bay East/Dartmouth Street

- a. Injected water (approx. 18 GPM) into two (2) injection wells in the area and performed dye tests to try and identify leaks.
- b. A sewer line that leads to the West Side Interceptor under Beacon Street was found to have several leaks, in particular in a manhole near the alley between Beacon and Marlborough Streets.
- c. An estimated flow of 8-12 GPM was discovered
- d. The manhole was grouted (approx. 40-50 gallons of grout) and lined
- e. Levels along Dartmouth Street have held since BWSC has made repairs to a leaking manhole and has ceased injecting water into the ground to see if levels can recover on their own
- f. Injecting water started again on 11/15 @ approx.. 7.5 GPM. Dye tests to follow.

- g. Additionally
- 5.) Newbury St. (Arlington-Berkeley block)
- a. Come up significantly since June where now a bunch of wells now sit over elev. 8'
  - b. Actually appears to be moving over towards Boylston St.
- 6.) Back Bay West Hereford St.-Charlesgate West
- a. Levels the highest they've ever been
  - b. Consistently above elev. 7'
  - c. Really no explanation
- 7.) East Fens: Hemenway St. /Burbank St.
- a. Have seen a nice steady bump with now no wells under elev. 3'.
  - b. Took a bit of time
  - c. Benefits from Recharge system installed in Alley by BWSC
- 8.) Tremont St.
- a. Area from Pembroke St. to East Berkeley St. really still a mystery
  - b. Levels have been in 3'-5' range since wells were installed in 2004 and 2005; closer to elev. 4'
  - c. However, properties show no obvious sign of distress and no improvement period
  - d. Some low infrastructure in the area. BWSC has checked but found nothing major and id line some of the cross streets
- 9.) Clarendon St., South of Columbus Ave.
- a. Will be looking into this area as levels are in the 3'-5' range.
  - b. Not sure why
  - c. There is some low infrastructure we will ask BWSC to look into
- 10.) Ellis Neighborhood
- a. Approx. 32GPM of water being injected into the area via four (4) recharge wells
    - i. 6 GPM on Cazenove, 12 GPM on Saint Charles, & 14 GPM on Berkeley St.

- ii. Area being maintained artificially
- b. Are working with the MBTA and their representatives (GZA) on a long term solution

11.) Blagden Street

- a. BWSC will be rebuilding the sewer line via cut and cover construction
- b. Complicated area with a lot of infrastructure including steam which sits on top of their line making it impossible to line
- c. Turnpike drain line cleaned out for the first time in over 60 yrs. by MassDOT. They're awaiting video of the line and will walk it the MBTA this month.

12.) Stuart Street

- a. Now only three (3) wells in this area are under elev. 3'.
- b. Not much really on piles
- c. What is on piles (like the old Hancock) is cut low around elev. 1' or so
- d. Not much to protect except old carriage houses along Stanhope St., Pope building, & Columbus/Stuart Triangle

13.) Bay Village

- a. Is up quite a bit from over the past year
- b. Usually we see a more gradual bump if this was the case

1. **City-State Groundwater Working Group** – The Working Group will meet again in January.
2. **MBTA** – The MBTA has adjusted the flow at the recharge wells on Cazenove Street because the well was overflowing into the street. This had happened previously when there was only one recharge well on that street, and the second well was added to even out the flow and reduce mounding. The T's consultant will be trying to determine the cause of the overflow (at a substantially lower flow rate than is used on St. Charles Street) as part of their design work on a long term solution.
3. **BWSC** – BWSC has made further repairs, including installation of a liner, to the manhole on Dartmouth Street that appears to have been a major cause of the reduction in groundwater levels along the street. As of Tuesday, BWSC is injecting water into the injection well that they installed on Dartmouth Street near the Beacon/Marlborough alley. Because this is using a hose, they will have to turn off the water when temperatures drop below freezing, but we will hopefully see some significant benefit. We continue to monitor the levels along the street closely with data loggers in all wells and will coordinate with BWSC as we see if the levels start to come up.
4. **MassDOT** – MassDOT has completed the cleaning of the Turnpike drain line from the Prudential Tunnel. They are awaiting results of a video inspection. They plan to walk the drain line with the MBTA's consultants, probably in November.
5. **GCOD** – In what is, hopefully, a sign of gradual economic recovery, we have been seeing increasing numbers of applications for GCOD approvals at the Board of Appeals. There continues to be excellent compliance, with the very small number of variances all for good technical reasons. The Board, ISD, BWSC, and the BRA have all been critical players in assuring compliance with GCOD requirements.
6. **Website** – Our consultant has completed an initial pass at upgrading the interactive map on our website so that it is more user friendly and so that it can be used on a tablet computer. We hope that she will complete her work and allow us to get the new map up in the near future.
7. **Meetings** – Christian and I met with the consultant for Emmanuel College on their plans for GCOD compliance that will be included in the new Institutional Master Plan that the college is developing.
8. **Vacation** – Both Christian and I will be on vacation the week of Thanksgiving. I will be checking voicemail and email periodically during that time.

## TECHNICAL & RECHARGE

## **COORDINATOR'S UPDATE**

### **BGwT Meeting: November 17<sup>th</sup>, 2011**

#### **WELL MONITORING**

Our well network was last read from September 28<sup>th</sup> - November 2<sup>nd</sup>. We started new set of readings on Friday November 4<sup>th</sup>.

#### **WELL READER**

I will be taking over reading the well network beginning in January 2012. In discussions with Elliott I felt that I will be able to incorporate this into my weekly tasks. Elliott and I will see how it goes and make any adjustments to this new protocol going forward.

#### **DATA LOGGERS**

16 of our 23 of our data loggers are deployed throughout the west zone. I upload the following loggers on a weekly basis:

##### **Storrow Drive**

- 5 from Embankment Rd. - Clarendon St.
- Levels in these well are the highest they been since 2001 when we started monitoring them
- All 5 wells are now sitting above elev. 4' for the first time ever

##### **Dartmouth Street**

- 8 from Beacon St. – Commonwealth Ave.
- BWSC has made repairs to the leaky manhole and ceased injecting water.
- We will keep these loggers in place and see if the levels come up. So far they're holding and have not dropped back.

##### **Ellis Neighborhood**

- 1 on Saint Charles St. and 2 on Cazenove St.
- The flow in the Cazenove Street Recharge Wells was cut back from just over 8GPM to around 6 GPM by GZA. One of the two (2) recharge wells in Cazenove St. was overflowing.
- GZA is the MBTA's selected contractor for the long-term solution in Ellis Neighborhood

#### **MISCELLANEOUS**



- Elliott & I met with Anthony Urbano of GZA and field members of the MBTA to access the Recharge Wells on Cazenove St. Mr. Urbano had the MBTA open the manhole to access the controls for the two (2) Recharge Wells. Mr. Urbano cut back the flow (as previously mentioned in the data logger section). The Recharge Well is no longer overflowing since the rate of flow was reduced.
- Elliott & I met with the members of the Technical Advisory Committee. We reviewed a number of items and had them provide some feedback for the upcoming release of the City's Groundwater Brochure.
- Elliott & I met with John Kastrinos of Haley & Aldrich. John had asked us to join him in a presentation he is giving at Haley & Aldrich and update the company on the Trust's efforts. Elliott and I will be presenting on Tuesday November, 29<sup>th</sup>.
- Elliott & I met with the consultant from Emmanuel College. We reviewed and commented on the proposed groundwater recharge system.
- Reviewed additional locations of proposed tree infiltration pits Westland Ave., Burbank St., Berkeley St., Charles St., Huntington Ave., Havre St., Paris, St., and Chelsea St.
- Started working on a Recharge presentation that can be made to the public which illustrates different types of recharge and the benefits to the homeowner
- Met with Elliott to discuss potential research projects