

BOSTON GROUNDWATER TRUST (BGwT)
BOARD MEETING
April 24, 2007
The Lenox Hotel – Copley Room

The meeting of the Board of Trustees of the Boston Groundwater Trust was called order at 4:17 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. Gary Saunders, Boston Back Bay Association
Mr. Peter Sherin, Greater Boston Chamber of Commerce
Mr. Galen Gilbert, Fenway Community Development Corporation (CDC)
Mr. Michael Ross, Boston City Councilor for District 8
Ms. Nancy Grillk, Mayor's office

Also present were:

John Sullivan, Boston Water & Sewer; 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; Paul Nelson, North End Water Front Residents Association (NEWRA) Groundwater Working Group

1. Adoption of the minutes of the March 22, 2007 Meeting

Minutes were distributed to board members for review.

Trustee Sherin moved to adopt the minutes. Trustee Ross seconded the motion.

Voted: To accept the minutes of the March 22, 2007 meeting.

2. Finance Report

Trustee Sherin reviewed the BGwT *Financial Report and Reconciliation Detail*. Discussion followed.

3. Expansion of GCOD

Mr. Laffer reviewed the proposed expanded Groundwater Conservation Overlay District (GCOD) in the North End and Fort Point Channel. He noted the expansion has been endorsed by the Boston Redevelopment Authority (BRA) and assuming a quorum is present at the Zoning Commission, the Commission will vote on it on April 25, 2007. Discussion followed.

Trustee Ross questioned whether North End residents would have to go before the board of appeals if doing substantial rehab. Mr. Laffer nothed that in this expanded area of the GCOD substantial renovation will not trigger the requirement for a conditional use permit. Discussion followed.

4. BWSC Update with John Sullivan

Mr. Sullivan updated the BGwT on the following:

- The Back Street project is nearly two-thirds complete and is expected to be completed by the Fall of 2007
- Most downspouts along Back Street are too low and are not connected to the recharge galleries. However, the storm drains are connected to the recharge galleries and should capture most of the runoff from the downspouts.
- The galleries are 4'x4' concrete structures that have an enormous capacity to handle all of Back Street precipitation and DCR precipitation which will be connected to the system. They also are easily accessible through manholes and are easy to maintain.
- The recharge system in Public Alley No. 807 in the Fenway is being tested and the BGwT will receive results on that when tests are complete
- The BWSC is working in conjunction with ISD on entering buildings to inspect whether or not building owners may be pumping groundwater.
- There is approximately 60,000-LF of pipe that is below invert elevation 5 which was scheduled to be inspected using TV/video technology. The BWSC is about two-thirds of the way done having inspected 37,000-LF so far. 12,000-LF needs repair. Mr. Sullivan noted that so far no water appears to be gushing in but there are some cracks. Repairs are slated for next year.
- The areas for possible repair are along Columbus Ave., Tremont St., Clarendon St., and Private Road north of Appleton St. and south of Chandler St. It is likely that these pipes will all be relined.

Trustee Gilbert suggested that an entity be established to take over ownership of all laterals in the city that are below the water table. Mr. Sullivan suggested this might not work because finding funding for such an entity would be difficult. Mr. Sullivan would like see to homeowners purchase insurance for their laterals. Discussion followed.

5. Back Bay Station Area Update

Mr. Laffer updated the BGwT on the City/State Technical Advisory Committee meeting that took place on April 6, 2007 to review Dr. Poulos and Professor Lambrechts proposals. He noted that the best solution seems to be a combination of both proposals. Discussion followed. Mr. Laffer noted that Dr. Poulos and Professor Lambrechts have met following the meeting and that a consensus on a solution in close. Discussion followed.

6. Research Projects

Mr. Laffer reviewed the draft research agreement between the BGwT and Professor Lambrechts of Wentworth Institute of Technology. Discussion followed. Trustee Saunders questioned why East Boston is the focus of the research study. Mr. Laffer noted that lighter buildings and higher cutoff elevation of the piles are the main reasons. He also noted that while the study is in East Boston, the solution could also be applicable to other parts of the city such as Bay Village where buildings are lighter as well. Discussion followed.

Trustee Saunders felt that a meeting was needed with Professor Lambrechts to determine exactly what will be learned from this study. Trustees Sherin and Ross concurred with Trustee Saunders. Trustee Gilbert felt that there was no need for a meeting and that he was ready to vote for approving the funding now. Discussion

followed. Mr. Laffer noted that he would be in touch Professor Lambrechts to set up a meeting by the end of the week.

Trustee Sherin moved to approve funding of the research project between the BGWT and Professor Lambrechts provided that the committee comprised of Trustees Saunders and Mitchell and Mr. Laffer (who reviewed and approved the CenSSIS proposal) review and approve Professor Lambrechts proposal after meeting with him. Trustee Ross seconded.

Voted: To approve the motion. Trustee Gilbert dissented.

7. Executive Director's Report

BGWT Executive Director Mr. Elliott Laffer distributed his report and reviewed his activities since the last meeting. Discussion followed. Refer to the attached *Executive Director's Report: April 24, 2007*, for a complete list of all activities.

8. Technical Coordinator's Report

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: April 23, 2007* for a complete list of all activities.

The meeting adjourned at 5:52 p.m.

NEXT MEETING: Scheduled for May 14, 2007 @ 4:00 pm at the Lenox Hotel.

Notes submitted by Christian Simonelli, BGWT Technical Coordinator, on 4/25/07.

Respectfully submitted



Galen Gilbert, Secretary

EXECUTIVE DIRECTOR'S REPORT
April 24, 2007

1. **City-State Groundwater Working Group** – The Working Group will be meeting again on Thursday. The Technical Advisory Committee of the Working Group has been meeting to advise on the St. Charles Street and Storrow Drive projects.
2. **City Council** – The City Council will hold an oversight hearing on groundwater on May 8 at 3:00. I have been invited to testify.
3. **Zoning** – The petition for extension of the GCOD was heard by the Zoning Commission on March 28. They are scheduled to vote on adoption at their business meeting tomorrow.
4. **BWSC** – The work on Back Street is proceeding on schedule. Unfortunately, two of our wells were damaged and will have to be replaced. Work should be complete by August except for final paving in the fall. BWSC continues with its video survey of their system.
5. **DCR** – DCR met with the Technical Advisory Committee of the Working Group yesterday to discuss the recharge system for Storrow Drive. It looks like it will not be practical to use Charles River water to supplement that drained from the system. They are now studying a different plan that might allow interim recharge before the new road is installed.
6. **MBTA** – The Technical Advisory of the Working Group met with the MBTA, their consultants, and Jim Lambrechts to discuss the potential solutions to the low groundwater levels in the St. Charles/Cazenove/Chandler Street area. Concepts are being refined and re-priced. We hope to reconvene soon to see what they have developed.
7. **MTA** – The MTA hopes to inspect its drains in the area of Exeter Street and Huntington Avenue this week. There has been a drop in levels at that corner in recent months.
8. **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.
9. **East Boston** – There will be a meeting in May to discuss potential actions that could be taken to address low groundwater levels in the Paris Flats area of East Boston.
10. **Columbus Center** – The Columbus Center project continues to be held up by financing issues. It is unclear when it will proceed.
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 continues to increase. We regularly get compliments on the quality of the information and presentation. We will be working on developing information on the installation of drywells to add to the site.
13. **Research Projects** – The testbed for our project on remote sensing of piling cutoff locations has been prepared and the start of test work is imminent. This will be followed by field tests on both radar and acoustic technologies. I have received the proposal from Jim Lambrechts for the project on developing a lower cost method of foundation repairs. He and Christian are working toward the selection of a coop student who will both read wells and work on the project. Work will take place during the summer and fall semesters. We will fund Jim's work through a grant for sponsored research that he will get me the paperwork for.
14. **Press** – There is a new article from the Boston Globe posted to the site and several from the Boston Courant to be added.
15. **Comment Letters** – I filed comment letters on projects at Waterside Place, 120 Kingston Street, 311 Summer Street, and Wheelock College, all of which are posted on the website.

**TECHNICAL COORDINATOR'S
WELL MONITORING UPDATE
BGwT Meeting: April 23, 2007**

WELL MONITORING

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

There are currently 708 wells in the West network. Wells were read between Mar. 11 – Apr. 7, 2007. Of the 708 wells read:

- 217 wells @ elevation >7'
- 299 wells @ elevation 5'- 7'
- 131 wells @ elevation 3'-5'
- 37 wells @ elevation <3'
- 24 wells @ no reading

We have read 89 wells in the East network (East Boston Area). Wells were read in East Boston on March 9 & 10, 2007. Of the 89 wells read:

- 46 wells @ elevation >7'
- 11 wells @ elevation 5'- 7'
- 10 wells @ elevation 3'-5'
- 19 wells @ elevation <3'
- 3 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 RESEARCH

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

Gordon-CenSSIS

I attended the National Science Foundation (NSF) Site Visit of the Gordon CenSSIS center at BU's Photonics & Engineering Building on April 19, 2007. Below are some highlights of the meeting.

- CenSSIS is comprised of 4 academic partners. Those being Northeastern, BU, Rensselaer Polytechnic Institute, and University of Puerto Rico at Mayagüez.
- Their main goal is sustainability
- The core of CenSSIS are their Bio-Medical applications and Environmental/Civil applications
- The life-blood of CenSSIS are the over 200 students who participate in the program
- NSF funding ends in 2010. CenSSIS is expected to be self-supporting by 2010.
- They have developed collaborations with domain experts such as Mass General Hospital and the Memorial Sloan-Kettering Cancer Center
- Some applications they are working on are:
 - Development of handheld skin cancer detection unit
 - Development of Intelligent Video for finding suicide bombers
 - Development of intelligent diagnostics for aging Civil Infrastructure
 - Development of Medical Tomography algorithms for underground assessment

I also attended the Industrial Advisory Board session. The session was a meeting of the Industrial Partners of CenSSIS. Below are some highlights of that meeting and suggestions by the partners.

- The Board reviewed the strengths and weaknesses of CenSSIS

- Some board members felt that a definition of what each partner expects is needed
- The partners also felt that goals should be outlined and measured by tabbing them either successful or unsuccessful
- The Partners felt that a consensus must be reached between CenSSIS and the partners
- The partners felt that there is a large gap between CenSSIS goals and their goals
- A closed loop communication is needed between the partners and Michael Silevitch
- The partners will look into additional funding from NSF