

BOSTON GROUNDWATER TRUST (BGwT)
BOARD MEETING
January 18, 2007
The Lenox Hotel – Copley Room

The meeting of the Board of Trustees of the Boston Groundwater Trust was called order at 4:10 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. Peter Sherin, Greater Boston Chamber of Commerce
Mr. Galen Gilbert, Fenway Community Development Corporation (CDC)
Mr. Paul Chan, Greater Boston Real Estate Board
Mr. Michael Nairne, Ellis Neighborhood Association
Mr. Jim Hunt, City of Boston
Ms. Nancy Grilk, Mayor's office
Ms. Nikko Mendoza, Mayor's office

Also present were:

Elliott Laffer, BGwT Executive Director; Christian Simonelli, BGwT Technical Coordinator; Mr. Dennis Royer, Chief of Public Works & Transportation; Dorothy Kevil, North End Water Front Residents Association (NEWRA) Groundwater Working Group

1. Adoption of the minutes of the November 30, 2006 Meeting

Minutes were distributed to board members for review.

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

Voted: To accept the minutes of the November 30, 2006.

2. Introduction of Dennis Royer, Chief of Public Works & Transportation

Trustee Hunt introduced Mr. Royer to the BGwT board. Trustee Hunt noted that Mr. Royer is up to date on the groundwater issue. Mr. Royer expressed his pleasure with taking the job in Boston and is excited about solving the groundwater problem. Discussion followed.

Mr. Laffer outlined the history of the BGwT and noted its growth since its inception in 1986. Discussion followed.

Trustee Gilbert noted that the BGwT used the WPA project from 1936 as a guide to establish its present day network of observation wells. . Discussion followed.

Trustee Gilbert asked about the role of DPW in the project to raise groundwater levels in the St. Charles Street area. Mr. Royer noted that the DPW will play a major role in the project, if it goes forward, but, that currently the DPW is not equipped to be the primary designer or constructor. Discussion followed.

Trustee Hunt noted that the MBTA should ultimately be responsible for fixing the problem and finding a solution, with the DPW overseeing their efforts. Discussion followed.

Mr. Royer expressed his willingness to work on pilot studies for both underground solutions (retaining walls) and sidewalk recharge for storm water. Discussion followed.

3. Finance Report

Trustee Sherin reviewed the BGWT *Financial Report and reconciliation detail*. Discussion followed.

4. FY08 Draft Budget

Mr. Laffer reviewed the FY08 draft budget. *Please refer to the attached document*. Discussion followed. Trustee Hunt questioned if the BGWT was obligated to install the replacement wells included in the budget. Mr. Laffer noted that the BGWT is not obligated to do so and can install these wells at its discretion.

Trustee Gilbert moved to adopt the FY08 draft budget. Trustee Chan seconded the motion.

Voted: To adopt the FY08 budget as presented.

5. Policy on Pumping or Draining Groundwater

Mr. Laffer reviewed the draft Policy on Pumping or Draining Groundwater. *Please see the attached document*. Discussion followed.

Trustee Gilbert moved to adopt the draft Policy on Pumping or Draining Groundwater. Trustee Chan seconded the motion.

Trustee Hunt suggested that the BGWT meet with the BWSC to assure their agreement before adopting the policy.

Trustee Gilbert withdrew his motion. The board agreed to table the policy until a meeting with the BWSC took place.

6. Update on Strategic Plan Action Steps

Mr. Laffer updated the BGWT on goals set forth in the strategic plan. While he said that the BGWT had made progress on almost all of the action items in the plan, Mr. Laffer noted that the trustees need to improve on communicating with the groups that nominate them. Discussion followed.

Trustee Gilbert noted that BGwT needs to get a handle on preserving housing. He also felt that a board should be established to assist the homeowners in foundation repair. Trustee Mitchell indicated that he sees no real need now for such a board to be established. Discussion followed.

Trustee Saunders requested that Mr. Laffer obtain an update on research projects that are being looked at by Northeastern University and Wentworth Institute of Technology and to stress the necessity of a timeline. Discussion followed. Mr. Laffer noted that he will request updates.

Trustee Sherin cautioned at spending reserve money too quickly and to look at the best investments in research carefully. Discussion followed.

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: January 18, 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: January 18*, for a complete list of all activities.

The meeting adjourned at 5:59 p.m.

NEXT MEETING: February 15, 2007 @ 4:00 pm at the Lenox Hotel.

Notes submitted by Christian Simonelli, BGwT Technical Coordinator, on 1/18/07.

Respectfully submitted,



Galen Gilbert, Secretary

**BOSTON GROUNDWATER TRUST
FY2008 OPERATING BUDGET**

Income

City Appropriation	\$165,000
BWSC Grant	\$25,000
Project Management Fees	\$25,000*

*To supervise projects funded by City including from federal grant

Total Operating Income \$215,000

Expense

Salaries	\$141,000
Retirement	\$4,000
FICA + Unemployment	\$14,000
Health + Dental Insurance	\$5,000
Workers Compensation Insurance	\$1,000
Well Replacement	\$25,000
Well Maintenance	\$4,000
Rent	\$10,000
Electric	\$2,000
Telephone	\$1,000
Miscellaneous Office + Field Expense	\$3,000
Website	\$8,000
Continuing Education	\$2,000
Accounting	\$8,000

Total Operating Expense \$228,000

Operating Deficit (\$13,000)

Reserve Account Appropriation \$13,000

Balance \$00,000

DRAFT RECOMMENDATIONS TO THE BOSTON GROUNDWATER TRUST ON PUMPING/DRAINING GROUNDWATER

Whenever groundwater is pumped or drained from an enclosed space and drawn away from the site, the surrounding groundwater levels are lowered to an elevation approaching that of the pump or drain. This removal of groundwater is the most prominent cause of the exposure of wood piling tops that can cause foundation damage. The Trust believes that every effort should be made to reduce and ultimately eliminate this pumping in areas of concern for low groundwater levels. While the zoning restrictions imposed in the Groundwater Conservation Overlay District and under the Boston Redevelopment Authority's Article 80 Project Review procedures address this issue for new construction and substantial renovation projects, the issue is important for below ground spaces not covered by them.

It is, therefore, the recommendation of the Boston Groundwater Trust that the following steps be taken:

1. A major effort should be undertaken to educate property owners about the need to avoid pumping by waterproofing their underground spaces. This should include the groundwater pamphlet being developed by the Mayor's Office of Energy and Environmental Services, in cooperation with the BGWT and the Boston Water and Sewer Commission, and outreach to the media.
2. The BWSC should develop a method to ensure that the Commission's policy that no groundwater be pumped to any sanitary or combined sewers without a permit is followed. Economic penalties for pumping should be large enough to encourage those who might otherwise remove groundwater to waterproof their structures instead. Critical to this method will be a way to identify potential sources of the pumping or drainage. Groundwater pumping or drainage to storm drains without a permit should also be prohibited.
3. As part of the City-State Groundwater Working Group participating agencies should take all feasible efforts to reduce and ultimately eliminate groundwater pumping or drainage in areas of concern. Where no feasible alternative to pumping or drainage of existing structures exist, agencies should develop recharge mitigation plans that utilize the pumped or drained groundwater/stormwater.

EXECUTIVE DIRECTOR'S REPORT
January 18, 2007

1. **Zoning** – There will be a public meeting in the North End on Jan. 25 to discuss the possibility of extending the GCOD into portions of that neighborhood. There will probably be meetings soon after in other study areas that were designated when the GCOD was adopted. The GCOD continues to be handled well by the Zoning Board of Appeals. No variances from the requirements have been sought. The Board looks to us and to BWSC for input on all cases.
2. **City Council** – The City Council held an oversight hearing on the groundwater issue in December. I served as part of the panel to both brief councilors and to answer questions. The hearing, chaired by Councilor Feeney, went very well.
3. **Public Improvement Commission** – I reviewed a draft of the PIC's regulations for recharge systems under public ways. They looked very reasonable. I would expect them to be adopted shortly.
4. **State Building Code** – The comment period on the proposal submitted by Citywide GET has ended. It is unclear when a final decision on whether to accept the modifications will be made.
5. **BWSC** – Work continues on the BWSC project to rebuild/reline the Back Street sewer. We have been monitoring for changes in groundwater levels along the route as well as to make sure there is no damage to our wells. To date all has gone well. BWSC has also identified a potential problem in the North End that may have had an impact on groundwater levels. They are still considering how best to proceed.
6. **DCR** – I have been invited to attend the subcommittee meetings for the Storrow Drive tunnel project to make sure that groundwater impacts remain in the forefront. The Charles River Watershed Association has been very helpful in raising the issue at the Landscape Subcommittee.
7. **MBTA** – We are monitoring the impact of the recharge wells that the T has installed at Cazenove and Berkeley Streets. As of our most recent readings, our data loggers show a significant increase in groundwater level only at the corner of Berkeley and Chandler Streets; however, John Sullivan told me that it took some time for levels to begin to rise after they installed the wells on St. Charles Street, so this may not be unusual. On another project, the T will install the required groundwater observation wells at agreed locations near the Arlington and Copley Station projects this spring.
8. **MTA** – The repairs at Harrison Avenue appear to have had a positive impact on nearby groundwater levels. We should be able to better confirm this in our current set of readings.
9. **MWRA** – The repairs to the East Boston sewers were completed on Dec. 19. Hopefully we'll see an improvement in the readings currently under way.
10. **303 Columbus Avenue** – The wells that the project is monitoring don't show any negative impacts on groundwater levels. They expect to install the monitoring well in front of 321 Columbus Avenue this week.
11. **Columbus Center** – Columbus Center will be starting some preliminary work along the Turnpike shortly. It will probably be March or April before they get to the point where they will install the wells along the Turnpike.
12. **The Clarendon** – The project has begun demolition work on the post office. Construction should start fairly soon after that is completed. We have received our \$75,000 community benefits funding from the project.
13. **Website** – Traffic on our website was higher than I expected in December, with all of the metrics increasing. January has been a little slower, but still busy.
14. **Potential Research Projects** – Jim Lambrechts is developing a revised proposal for his proposed research project on an alternative method of repairing foundations in lighter buildings. Jim and I met with researchers from Northeastern and BU to discuss the use of acoustic technology to potentially determine cut off elevations and possibly even pile condition without the need for a test pit. I expect a proposal shortly.

15. **Press** – There are new articles from the Boston Courant and the Back Bay Sun posted on our website.
16. **Comment Letters** – I filed comments on Wilbur Place, Northeastern Residence Halls I & K, and 179 Lincoln Street. All are on our website.

**TECHNICAL COORDINATOR'S
WELL MONITORING UPDATE
BGwT Meeting: January 18, 2007**

WELL MONITORING

- We are in the process of reading the well network.
- Two (2) new water level indicators have been purchased.

EMPLOYEES

- Stephen Guarente ended his tenure as an employee of the BGwT. Stephen had been with the trust since 2005 and the work he performed during that time was outstanding. Stephen has been hired by Haley & Aldrich as a Field Engineer.
- Anthony Bernardi of Wentworth Institute of Technology was hired and started work on Saturday January 13, 2007. Anthony is a part-time employee of the trust (15-20 hrs./week). His duties will include reading the BGwT observation well network and assisting the Technical Coordinator.

LEVELOGGERS

- Our Rugged Reader was sent out for maintenance. The Comm Cable on the unit was replaced and the firmware and software were updated. There was no charge since the unit is under warranty.
- Group 5 dataloggers have been installed in 18 wells. Data is scheduled to be uploaded in March.
- 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.