

**BOSTON GROUNDWATER TRUST (BGwT)**  
**BOARD MEETING**  
**March 16<sup>th</sup>, 2023**

The Board of Trustees of the Boston Groundwater Trust met in the Heritage meeting room at the Lenox Hotel located at 710 Boylston Street, Boston, MA. The Executive Director electronically distributed the meeting notice and agenda to the City Clerk at Boston City Hall in accordance with the provisions of the Commonwealth of Massachusetts' Open Meeting Law.

Mr. Gary Saunders , co-chair, read the following statement:

"I, Gary Saunders, co-chair of the Boston Groundwater Trust, am calling this meeting to order at 4:18 pm. In accordance with the Commonwealth of Massachusetts Executive Order Suspending Certain Provisions of the Open Meeting Law, we are conducting this meeting on-line. To ensure public access to the deliberations of the BOSTON GROUNDWATER TRUST, the public may access this meeting through telephone and video conferencing. Members of the public will have an opportunity to ask questions and provide public comment. To do so please, "raise your hand" in the application via the Zoom meeting platform. If you are calling in and cannot use the platform, you can send your questions to staff via email at [csimonelli@bgwt.org](mailto:csimonelli@bgwt.org) or via Twitter by tagging the Twitter handle [@BOSTONGWT](https://twitter.com/BOSTONGWT) and using the hashtag #MAR23MTG."

The following trustees were present at the Lenox Hotel:

Mr. Gary Saunders, Back Bay Association

The following trustees were present virtually:

Mr. Robert Whitney, Beacon Hill Civic Association

Ms. Janine Commerford, Greater Boston Real Estate Board

Ms. Leah Camhi, Fenway Community Development Corporation (Left meeting at 5:30pm)

Mr. Peter Shilland, Ellis Neighborhood Association

Also present at the Lenox Hotel were:

Mr. Christian Simonelli, Executive Director

Also present virtually were:

Ms. Katherine Eshel, Chief of Staff, Environment, Energy and Open Space City of Boston

Mr. Jagrat Jariwala, PE, Principal Civil Engineer, SkyGeo

Ms. Jacqueline Salzer, PhD, Director of Technical Services, SkyGeo

**1. Review of SkyGeo Proposal for Pilot Project using InSAR**

Mr. Jagrat Jariwala and Ms. Jacqueline Salzer, both of SkyGeo, reviewed their proposal to perform a pilot project using standard-resolution and high-resolution InSAR (Interferometric Synthetic Aperture Radar) satellite imagery over select locations within Back Bay and East Boston areas in Boston. InSAR images can be used to provide millimeter-accurate displacement data for ground and building movement. Mr. Jariwala and Ms. Jacqueline Salzer described how this technology could be used to determine potential settlement of Boston buildings. Discussion followed.

Mr. Jariwala and Ms. Salzer took questions during and following the review of their proposal. Discussion followed.

Mr. Jariwala and Ms. Salzer exited the meeting. Discussion followed. The Board instructed Mr. Simonelli to follow-up with Mr. Jariwala and Ms. Salzer and report back to them at the May Trustee's meeting.

**2. Adoption of January 19<sup>th</sup>, 2023, Board Meeting Minutes**

Meeting minutes were previously emailed to Board members for review. Discussion followed.

Mr. Saunders, Co-chair, moved to adopt the minutes. Mr. Shilland, Trustee, seconded the motion.

**Voted:** To accept the Board meeting minutes.

**3. Financial Report & Preliminary Budget Discussion for FY24**

Mr. Whitney, co-chair, and Mr. Simonelli reviewed the Trust's financials. Discussion followed. Mr. Simonelli reviewed the proposed FY24 budget. Discussion followed. Mr. Simonelli will revise the draft budget and bring it back to the Trustees for a vote at the next Board meeting.

**4. BluCloud Inc. Remote Well Reading Device Update**

Mr. Simonelli updated the Board on the status of the seven remote readings units currently deployed. Discussion followed. Mr. Simonelli noted that five of the seven units have been deployed for over a year and have provided consistent, accurate data. Discussion followed.

Mr. Simonelli proposed the following to the Trustees:

Purchase of 25 remote reading units @ \$2K/unit = \$50K

Accompanying data plan for 25 units @ \$20/month/unit = \$500/month

50 Aluminum replacement covers to obtain a consistent signal @ \$125/cover = \$6,250

Discussion followed. Mr. Saunders moved to authorize Mr. Simonelli to proceed with the purchase of the remote reading units, accompanying data plan, and aluminum replacement covers. Mr. Shilland seconded the motion. Discussion followed.

**Voted:** To authorize Mr. Simonelli to proceed with the purchase of the remote reading units, accompanying data plan, and aluminum replacement covers.

**5. Executive Director's Report**

BGwT Executive Director Mr. Christian Simonelli distributed his report. Discussion followed. Refer to the attached *Executive Director's Report March 16<sup>th</sup>, 2023*, for a complete list of activities. Discussion followed.

**6. Other Business**

Mr. Whitney requested that Mr. Simonelli invite Katherine England, Director of Green Infrastructure, City of Boston, to a future Trustee meeting. The purpose would be to discuss the City's infrastructure plans and how the Trust can be helpful to them. Discussion followed. Mr. Simonelli will reach out to Katherine England.

**Mr. Whitney, moved to adjourn the meeting. Mr. Saunders seconded the motion.**

**The meeting adjourned at 5:43p.m.**

**NEXT MEETING: May 18<sup>th</sup>, 2023 @ 4:00 pm, at the Lenox Hotel with a virtual attendance option.**

Notes submitted by Christian Simonelli, BGwT Executive Director, 3/22/2023.

Approved 24 March 2023



J Commerford, Secretary

**EXECUTIVE DIRECTOR'S REPORT**  
**March 16<sup>th</sup>, 2023**

1. **Readings** - Completed seven set of readings in 2022. Started 1<sup>st</sup> set of readings for 2023 on January 11<sup>th</sup>.
2. **Meetings and Calls** -
  - a. Google met with the City's Green Infrastructure (GI) Working Groups on the following dates:
    - i. GI Coordination/Maintenance: 2/24, 3/10
    - ii. GI Policy: 1/20, 2/3, 3/3,
    - iii. GI Working Group: 1/27, 2/17,
  - b. Microsoft Teams met with project team for Patrick J Kennedy School located at 343 Saratoga Street in East Boston to review GCOD requirements. (1/20)
  - c. Attended (and presented on 1/23) the New England Water Environment Association (NEWEA) 2023 annual conference and exhibit at Boston Marriott in the Back Bay. (1/23-1/25)
  - d. Zoomed with all members of the City-State Groundwater Working Group. (1/26) Agency updates are below.
  - e. Zoomed with the project team for Northampton Street Residences located at 597-599 Columbus Avenue in the South End to review GCOD requirements. (1/27)
  - f. Zoomed with Jagrat Jariwala and Jacqueline Salzer of SkyGeo to discuss their presentation at the January Trustees meeting and review the outline for a proposal. (1/30)
  - g. Zoomed with Michael Bushey, Superintendent, Suffolk Construction to review destroyed observation well (23H-2374) at the Boston University Data Science Center located at 665 Commonwealth Avenue. (2/2)
  - h. I was interviewed by David Williams, on-Air Meteorologist, WCVB Channel 5 Boston, about groundwater levels and the potential impact climate change may have on them. (2/16)
  - i. Zoomed with Jagrat Jariwala and Jacqueline Salzer of SkyGeo to discuss their proposal. (2/21)
  - j. Attended Zoom webinar for a walkthrough of the migration path from Social Law Library hosted email to Microsoft 365. The library is being forced to discontinue its email hosting services because the mail server platform that the library has been using has been "sunset" by its vendor. (3/8)
  - k. Attended public meeting, via Zoom for the 1033-1055 Washington Street project located in the Ink Block section of the South End. (3/8)
  - l. Google met with Daniel McCormack and Justin Comeau of BluCloud to review the performance of the 7 units deployed and the next steps on purchasing additional remote reading units. (3/10)
  - m. Google met with the project team for the 9 McKay Place project located in East Boston to review GCOD requirements. (3/13)
  - n. Testified, via Zoom, at the Zoning Board of Appeals hearings in January, February, and March.
  - o. Communicated with residents, engineers, attorneys, & developers throughout the GCOD to discuss ZBA procedures and advised them on what they need to submit to meet the GCOD zoning.
3. **BWSC** - An update on the following:
  - In the process of designing repairs to address the spots where groundwater infiltration has been observed in the Fenway, North End, Back Bay, and the South End.
  - Lower Beacon Hill
    - Investigations continue at Brimmer and Beacon Streets. Catch basins were cleaned and no signs of infiltration were observed. Low sewer line (at approx. El. 1'-3') upstream of a regulator indicated some infiltration. Will look to get it lined.
  - Back Bay

- Repair to a deep CSO on Fairfield Street, in the Beacon-Back Street has been completed. Our February readings have showed a good increase in area wells which we hope will continue.
- Low area along Beacon St., Fairfield-Hereford St. blocks, contractor is currently in the area televising. BWSC engineers reviewing videos and will report any findings.
- Repairs for the Blagden Street sewer and laterals are currently in design phase. Infiltration entering around a lateral of BPL, may be able to grout this location. Will add to grouting list and also televise the lines around the BPL. Also working with Vicinity Energy to check their manholes for infiltration since there are two 1.5" discharge lines tapped into BWSC sewer line. If Steam manholes are experiencing infiltration at Elev. 3' or below, this could be contributing to loss.
- At Exeter and Boylston Street, 48 bottles of green dye were injected in BGwT OW at that corner over a 3-hour period on 9/22/22. No green appeared in their systems or in the Lenox Hotel. Contractor currently in the area televising, will report any findings.
- South End
  - Investigations at a low spot along Harrison Avenue, in the East Concord Street – Worcester Square blocks, revealed groundwater infiltration in an adjacent manhole. Manhole was grouted in August 2022 but no change in GW elevation. Will continue to investigate.
- North End
  - No infiltration in 66" line or 84" lines under Columbus Park. Found leaky laterals and joints along 30" sewer on Commercial St, will add to grouting list.
- 4. **MBTA** - Approximately 38 gpm is being injected into recharge wells in the South End Ellis Neighborhood area along Appleton, Berkeley, Saint Charles, Cazenove, and Clarendon Streets.
  - a. In addition to our manual monitoring, we have 4 wells in the area with dataloggers recording a water level every 60 min.
  - b. The impact of the drought was felt on Cazenove Street where levels dropped slightly below El. 5' BCB. The Cazenove St. recharge systems are at their maximum flow rate of 7.1 gpm. We worked with the MBTA, and their consultant to increase the flow in the Saint Charles St. recharge system from 9.0 gpm to 12.8 gpm. This increase, coupled with the rainfall we had in December and January has brought the levels back up above El. 5' BCB.
- 5. **DCR** – Two recharge pumps for the Storrow Drive Tunnel pump station were replaced on 11/22/22. In addition, some piping work was performed as well. The system is operating as designed.
- 6. **MWRA** – Continue to work with BWSC on support and funding for sewer separation and CSO improvements in East Boston.
- 7. **DOT** – Ryan McNeil, DOT, has replaced Rick McCullough. He has met with operations & maintenance and a contractor to review the work required to line the turnpike pipe drain line. Will coordinate with BWSC to review their inspections of lines in the area of Exeter, Blagden, & Boylston Streets, also the intersection of Exeter Street and Huntington Avenue.