

The Boston Sun

Boston Massachusetts Newspaper



NEWS

Boston Groundwater Trust Forum Comes to Copley BPL

by [Dan Murphy](#) • September 22, 2022 • [0 Comments](#)

The 2022 Boston Groundwater Trust (BGWT) Forum took place on Tuesday, Sept. 20, in Rabb Hall at the Copley Branch of the Boston Public Library.

Wilko Koning, senior project leader for Waternet, the water company that serves Amsterdam, Netherlands, appeared virtually as the forum's keynote speaker.

Koning detailed how the advent of Amsterdam's sewage system in 1913 pointed to the need to monitor its groundwater table, which led to the city starting to monitor its groundwater levels beginning in 1935. Today, Amsterdam has 4,296 observation wells, which are monitored about six times each year, he added.

Amsterdam has adopted a method called "Drainage Infiltration Transport," which uses a valve system to transport groundwater to where it's most needed, said Koning.

The forum also included a discussion with the Climate Change Panel moderated by Rob Whitney, BGWT co-chair and the Beacon Hill Civic Association's representative to the organization. The panel included Kate England, the City of Boston's inaugural Director of Green Infrastructure; Dr. Jayne Knott, principal of JFK Environmental Services LLC (d/b/a HydroPredictions); Matt O'Malley, the first-ever Chief Sustainability Officer for Vicinity Energy, as well the past District 6 City Councilor and City Council President; Dr. Vandana Rao, Director of Water Policy and Executive Director of the Water Resources Commission for the Executive Office of Energy and Environmental Affairs; and John Sullivan, Chief Engineer for the Boston Water & Sewer Commission.

Christian Simonelli, BGWT executive director, presented two videos – one that detailed the organization's work to date, the other explaining the process of underpinning a building (i.e. reinforcing an original foundation using wood pilings).

The BGwT was established by the city in 1986, said Simonelli, and then reactivated in 1997 following a long hiatus. Today, the BGwT monitors 813 active observation-wells found throughout the city about seven or eight times each year, he said.

Moreover, the BGwT is currently deploying remote groundwater-monitoring devices called “Level Devils” in five wells, said Simonelli, who added that the city would collect data from these devices before considering buying more of them.

The city also created the Groundwater Conservation Overlay District (GCOD) in 2006 to further protect its groundwater levels, said Simonelli. The GCOD was modified the following year and then modified again and expanded last year, he added.

In 2005, the Groundwater Working Group was established, bringing together city, state, and private stakeholders on a quarterly basis to share data, said Simonelli.

Garrett Dash Nelson, president and head curator of the Leventhal Map and Education Center at the Copley Branch of the BPL, was also on hand to offer his presentation called “Making Water into Gold.”

Using maps of the city and other documents dating back to the Colonial period (circa 1630), Nelson concluded that \$36 billion of tax-assessed property in Boston is located entirely on filled land, while \$54 billion of tax-assessed property in Boston is located partially or entirely on filled land.

In 2020, this land accounted for \$650 million of the city’s annual property tax revenue, or more than one-quarter of the total sum, said Nelson.

Mayor Michelle Wu also offered opening remarks at the forum.

According to Mayor Wu, about one-third of the city of Boston is built on filled land, but with drought and increasingly frequent heat spells, “Mother Nature is looking to take back what was originally hers” via groundwater depletion and rising sea-levels.

But Mayor Wu also offered some encouraging news: while this summer was on par with the summer of 2016, which was then the city’s driest summer to date, the groundwater levels are higher now than six years ago. And this is a testament to the work of the BGwT, which has significantly increased the number of monitoring wells citywide in that time, she said.

Besides Mayor Wu, other elected officials offered brief remarks at the forum, including Sen. Lydia Edwards; Reps. Jay Livingstone and Aaron Michlewitz; and City Councilors Kenzie Bok and Ed Flynn. (City Councilor Michael Flaherty was also slated to appear but couldn’t attend the forum due to a last-minute scheduling conflict, said Whitney.) As Councilor Bok noted during her remarks, the basement-level Rabb Hall was a fitting setting for the forum, since the Copley Branch of the BPL was built on filled land, with the room itself surrounded by wood pilings.
