Groundwater Levels Returning to Normal

By Zach Carmosino

After a rainy spring, Boston’s groundwater has returned to a safe level, mitigating damage to city infrastructure.

Many of Boston’s neighborhoods are built on marshland filled in with sand and gravel, including parts of Back Bay, South End, Fenway, Beacon Hill and Downtown. Many of their buildings are supported by wood pilings designed to be submerged below groundwater levels.

Groundwater levels vary by year, largely dependent on how much rain and snow falls. When levels drop, the pilings are exposed to air and are attacked by microbes that rot the wood, risking damage to the buildings they support.

When pilings rot, the buildings above them settle and cracks often appear. In several cases, buildings became unsafe to occupy. For homeowners, the cost of underpinning a home or restoring its wooden pilings, can cost more than $250,000, according to Boston Groundwater Trust.

According to Christian Simonelli, executive director of Boston Groundwater Trust, high groundwater levels return to normal when there is excessive rain.

State Cried Wolf About River Algae

By Joe Walsh

A state health warning about dangerous algae in the Charles River may have been overblown.

The warning, issued two weeks ago by the state Department of Public Health (DPH), advised residents to avoid the Charles due to elevated levels of cyanobacteria. But the harmful toxins that some algae species produce were not found in the river and algae counts quickly normalized after a week. The advisory also did not stop hundreds of residents and tourists from plying the Charles.

BSO Is Evaluating Its Underutilized Land

By Joe Walsh

The Boston Symphony Orchestra (BSO) is eyeing a large scale redevelopment project that could transform the face of Huntington Avenue.

The BSO is looking into building a large complex with Symphony Hall as an anchor, according to members of the orchestra’s Board of Advisors. The redevelopment project, still in preliminary stages, could replace a stretch of old low-rise retail buildings that line Huntington Ave near Symphony Hall.

BSO leaders have not formalized or officially unveiled plans for the neighborhood, but the organization’s Board of Advisors discussed preliminary ideas with BSO staff and with acclaimed architect Elizabeth Diller, two board members said. The BSO declined to comment, and Diller, whose role with the

Parcel 12 Won’t Use Fossil Fuels

By Dan Rabb

Boston may soon have its first high rise heated without the use of fossil fuels.

The developers of Parcel 12, a massive proposed complex spanning the Mass Pike along Massachusetts Avenue, say they are committed to installing an all electric heating system in one of the two towers planned for the site. Rather than natural gas, the building will use a system known as an “air source heat pump.”

The BSO declined to comment, and Diller, whose role with the
in kayaks and sailboats every day. Cyanobacteria toxins can lead to liver and kidney issues if swallowed and can irritate skin. But for a place like the Charles where drinking the water is never advisable, the largest risk is with recreational users who might accidentally swallow algae-tinted water, according to a report by the Environmental Protection Agency (EPA).

Swimmers under the age of 10 hold the highest risk of swallowing toxins, but the risk for older swimmers is far smaller, the EPA found. On the Charles River basin, where boating is more common than swimming and the river is wide, deep and constantly changing, the likelihood of swallowing toxins accidentally is even thinner.

“The risk factor, of course, would decrease,” says microbiologist Gary du Moulin, who volunteers with Community Boating. “I don’t think users should be concerned, but the advisories that are in place are logical.”

DPH discourages boating in any water with an advisory, but boaters fill the river nonetheless. The Charles River Watershed Association (CRWA), which studies the river, acknowledges that these advisories do not stop people from using the Charles.

Continued from Page 1

Groundwater

Continued from Page 1

precipitation in Boston over recent months has eased concerns over low groundwater levels brought on by a dry winter. “We had an above-average spring,” he said. “Overall, the wet spring and the slightly above-average year have helped.”

Construction of roadways and subway tracks beneath parts of the city created with landfill have caused groundwater levels to lower since these neighborhoods were built. This challenge is especially felt in Back Bay, which is almost entirely built on reclaimed mud flats along the banks of the Charles River.

The city created the Groundwater Conservation Overlay District that regulates this issue, which works to recharge rainwater into the ground and ensures new construction and renovation projects do not further reduce groundwater.

This summer’s return to higher groundwater levels has eased concerns created by low levels in the recent past. Boston experienced an atypically dry year in 2016, when the city saw an unusually low average of only 30.48 inches of precipitation across the city, according to the Boston Water and Sewer Commission.

Although groundwater levels are up since winter, the city is on pace this year for less rainfall than in 2018. Boston saw an average of 51.78 inches of rainfall across the city last year, according to the Boston Water and Sewer Commission. The city has received only 22.26 inches of rain so far, at pace to reach 37.97 inches over the course of a year.

Simonelli says Boston’s current healthy groundwater levels are a product of unusually high levels of rainfall last year compensating for relatively low precipitation in this one. That level of rainfall was beneficial in the recovery process for Boston’s groundwater, but he expects a return to normalcy in 2019.

“No 2018 was so high, I think this year will push it back to normal levels,” Simonelli said.