

# The Boston Globe

## Waterworks Museum offers glimpse into 19th century

[Its 3 engines served several municipalities](#)



Demee Gambulos (right) and Elena Goldstein, 14, both of Brookline, admired the heavy chains on display at the Waterworks Museum in Chestnut Hill. (Dina Rudick/ Globe Staff)

By [Stewart Bishop](#)

Globe Correspondent / March 28, 2011

Along an idyllic stretch of Beacon Street across from the Chestnut Hill reservoir, Boston's newest museum opened yesterday as a testament to what was once considered a marvel of late-19th-century engineering.

Inside the Waterworks Museum, a giant mass of twisting pipes, gears, and levers make up the archaic engines that were used to pump drinking water for all of Boston, Brookline, Quincy, and Milton as well as communities far south as Norwood and Canton.

During the height of its service, the Boston Water Works pumped 90 million gallons of water through its three engines, the largest standing five stories tall at its highest point.

“This is a prime example of technology from the turn of the century,” said Marcis Kempe, a 34-year veteran of the water supply industry and member of the board of directors for the Waterworks Museum. “It’s very well preserved, the engines are whole. A lot of these are lost forever; there’s only a few meaningful remaining examples of triple-expansion condensing engines. We’re in great shape on that.”

The waterworks was built in 1887, when Boston’s population and water demand had skyrocketed. The building itself is more evocative of a 19th-century castle than a municipal building, with its broad arches and rough-faced stones. It was designed by Boston architect Arthur Vinal in the Richardsonian Romanesque style, named after architect Henry Hobson Richardson, best known for his design of the Trinity Church in Copley Square.

In its heyday, the waterworks was the largest facility of its kind in New England and was also home to the first water supply testing lab in the nation. George Whipple, a waterworks biologist, founded the lab in 1889.

His study of the causes of waterborne illness is regarded as a scientific spark behind subsequent improvements in civic sanitation.

“The people here were very closely aligned with public health and they made their decisions accordingly,” Kempe said. “They did what was best for the people. They literally saved thousands of lives by doing it. The death rate at the time from waterborne disease, that’s what you were looking at.”

Beryl Rosenthal, director of the museum, said the waterworks allows visitors to examine several aspects of history all in one place.

“This was a time, you’ve got the Industrial Revolution, you’ve got Boston’s golden age, you’ve got the beginning of understanding about germ theory — all of it takes place at this one time, and you can see here how they interrelate and connect,” Rosenthal said. “Sites like this have the ability to bring together many different strands, for example the history, the story of expansion into a community and region, the ability to think about what’s going on scientifically and technologically in a community.”

The museum is the culmination of a decades-long process to preserve the building, which had sat mostly dormant since 1976, when the city completed the switch from its steam-pumped water system to the current system.

Today, water reaches the city using the power of gravity: The reservoirs are located at a higher elevation than the city, so the water flows.

Roger Blood of Brookline, who sits on the board of directors, said he became involved with the Friends of the Waterworks, an activist group that advocated for the preservation of the site, after a neighbor told him the building was abandoned and might be torn down.

“It’s unique to North America, and has a wonderful story to tell about something that we all live and rely on and rarely think about: the water coming out of our tap,” Blood said.

The museum is open to the public on Wednesdays from 11 a.m. to 9 p.m., and Thursday through Sunday from 11 a.m. to 4 p.m.

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