

PASSAIC VALLEY WATER COMMISSION

WATER STORAGE IMPROVEMENT PROJECT

FREQUENTLY ASKED QUESTIONS

- ***Why do you have to do this project?***

The short answer is that we are required to do so by federal regulations promulgated by the United States Environmental Protection Agency (USEPA). In a larger sense, the Commission agrees that it is the right thing to do. We believe that a safe, secure, and reliable public water supply is our utmost priority. These uncovered (open) reservoirs are used to store “finished water”, meaning drinking water that has already been treated at our high-technology water treatment plant in Totowa. The uncovered drinking water reservoirs are extremely vulnerable to contamination from birds and mammals and airborne pathogens as well as deliberate contamination from vandalism and other security threats.

- ***Levine Reservoir is the smallest of the three reservoirs so why is it being completed first?***

Levine Reservoir is being upgraded in the first phase of the three phase project along with the new emergency power generators at our Little Falls Water Treatment Plant. During the analyses performed in the Feasibility Study, it became apparent that the New Street and Great Notch Reservoirs could not be taken out of service until the new emergency generators were in operation. In addition, due to its present configuration and location in its pressure zone, the water in Levine Reservoir is more susceptible to stagnation and other water quality concerns. It therefore was the most logical choice to be included in Phase 1 of the overall project.

- ***How much is all this work going to cost, and how will it impact the ratepayers?***

The conceptual design report presented an overall project cost of \$135 million for all three phases. The breakdown per phase is as follows: Phase 1 = \$34 million, Phase 2 = \$51 million, and Phase 3 = \$50 million. The Commission is planning to finance all three phases using low interest, 20-year bonds. Since the three phases will be implemented over a 10 year period, the Commission will be able to spread out the payments over 30 years. This long payback time, coupled with the retirement of significant bonding debt from the Little Falls Water Treatment Plant upgrade project in 2023, will have a mitigating effect on rate increases.

- ***Did you evaluate alternative sites for the Levine Reservoir Tanks so it wouldn't impact the Levine Reservoir which is located in a National Historic District?***

The Commission understands the importance of the National Historic District and did attempt to identify other alternatives as well as alternate locations for the Levine

Reservoir tanks. We soon discovered, however, that alternative sites with the necessary land area, and more importantly, the necessary elevation, were in short supply. A potential site in the area was an empty lot located on New Street in the old quarry below the Garrett Heights condominium complex. This site was too high in elevation, would have to be purchased from a private owner, and is a significant distance away from where it would need to connect to the piping network. Another consideration was the ultimate fate of the Levine Reservoir site. Presently, the reservoir is filled with potable water from our Little Falls Water Treatment Plant. It has a very small drainage area and would end up being a dry hole in the ground if the Commission was to abandon it in favor of another site. The Commission also believes that by constructing the new tanks within the footprint of the existing reservoir, we are at least maintaining the original historical function and purpose of the reservoir, i.e., it will still serve as the location for storage of drinking water. The smaller size of the tanks compared to the reservoir will allow us to minimize the visual impact of the tanks by setting them far back from Grand Street, keeping a low roof profile, and screening them with trees and other landscaping.

- ***Is the USEPA considering changing the LT2 rule that requires this project, and if so why don't you delay the project until then, which I believe is in 2016?***

No, the USEPA is not specifically reviewing the Long Term 2 Enhanced Surface Water Treatment Rule (LT2) drinking water regulation which is driving this project's timetable; as part of a regular periodic review of their regulations they are reviewing a multitude of regulations of which LT2 is just one of many. All indications are that LT2 will remain in full force and effect. This position has been confirmed with the New Jersey Department of Environmental Protection (NJDEP) and the Commission has entered into an Administrative Consent Order with the NJDEP which provides a strict timetable for completion of the project. In addition, the Commission can not envision a scenario wherein the USEPA would overturn LT2, especially in light of its importance in protecting public health and safety and as also recognized by the hundreds of other water utilities across the nation who have already spent billions of dollars in order to comply.

- ***Why doesn't New York City need to get rid of their uncovered finished water reservoirs?***

New York City does need to comply with LT2. They have been negotiating with the USEPA to extend their compliance deadline by making several upgrades to their uncovered, drinking water reservoirs. These upgrades, however, are just temporary fixes and all indications are that they ultimately will have to eliminate their uncovered, drinking water reservoirs.

- ***Couldn't you just leave Levine Reservoir as it is and rely on the Commission's other two reservoirs?***

Levine Reservoir provides critical storage for one of the three main pressure zones. Eliminating that pressure zone and converting it to the New Street Reservoir's pressure zone would cause significant increases in power costs but, more importantly, would severely reduce the reliability of the water supply. The Levine Reservoir pressure zone presently provides water supply storage for parts of

Paterson, Prospect Park and Passaic, as well as wholesale customers in Fair Lawn, Elmwood Park, Garfield, Wallington, and Lodi. It also provides emergency storage and transfer capability for and to the other pressure zones.

- ***Why wasn't the public made aware of the project and allowed to give input?***

This project has been in planning for several years but it wasn't until the Feasibility Study was completed that the details of the proposed solution emerged. The Commission was in violation of the April 1, 2009 LT2 deadline and under pressure from the NJDEP and the USEPA to commit to an accelerated schedule under the Administrative Consent Order. The design of the proposed facilities continues to be developed, however, and there is still time for the public and the affected reviewing/permitting agencies to provide input that may address or mitigate the impact of the proposed project and the Commission is willing to work with and consider all reasonable requests.

- ***These reservoirs have been around for a hundred years; is there really a big enough health concern to justify such an expensive project?***

Yes, there is that much of a public health concern. The uncovered, drinking water reservoirs are very vulnerable to contamination and do not provide the necessary safeguards to a public drinking water supply. It is not necessary to point to anyone's sickness or death to conclude that there is a threat to public health. The USEPA has concurred and mandated their closure and hundreds of water utilities around the country have already done so. Quite frankly, uncovered, drinking water reservoirs are a 19th century technology that has no place in the 21st century.

- ***PVWC has a problem with lead in the water supply; isn't that a more pressing concern that should be addressed first?***

Although not immediately evident, closing the finished water reservoirs will address the lead issue. Lead is not present in the water supplied to our customers; instead the lead in the water comes from materials and components associated with customers' plumbing and service lines. The most effective way to address this problem is to add a corrosion inhibitor to our water supply. This corrosion inhibitor coats the interior of the lead fixtures and service lines, and prevents the lead from leaching into the water supply. However, we cannot minimize lead levels until we do away with our uncovered, drinking water reservoirs. This is because we must treat the water with phosphates to address the lead, but when phosphates stagnate in a reservoir open to sunlight, they will foster blooms of algae in the water. This would lead to objectionable color, odor and taste in our customers' tap water, and make possible the presence of algae-based toxic contaminants. Therefore, the fastest way to minimize lead in our customers' tap water is to replace our open reservoirs with closed, controlled water tanks. Algae will not grow in a closed, disinfected water tank, so PVWC will be able to treat the water effectively with phosphates and reduce the level of lead in our customers' tap water.

- ***Won't the Levine Tanks have an adverse impact on the Paterson Historic District and the new Great Falls National Park?***

The Commission is very sensitive to the concerns associated with the impact of the Levine Tanks and will be making every effort to minimize the effect on the historic district and the national park. Towards that end, the Commission has set the tanks far back from Grand Street and, with a screening from newly planted trees and other landscaping, should be essentially invisible from the public's view.