

BOROUGH OF WESTWOOD

Mayor Ray Arroyo



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March 30, 2022

Commissioner Shawn LaTourette
NJDEP
401 East State Street
PO Box 402, Mail Code 401-07
Trenton, NJ 08625-0402

RE: Pascack Valley Flooding and S-790

Dear Commissioner LaTourette:

I am writing about your 12/17/21 correspondence to Senator Schepisi addressing S-790, which the Senator introduced on January 18, 2022.

After Hurricane Henri I read through the Borough's archived documents on historical flooding in the Pascack Valley. Prior studies have concluded, system wide, that:

1. The reservoirs' water levels play no role in flood events, which are the result of system-wide transmission routes (tributaries to the Hackensack River) that are of insufficient capacity for the volume that falls upon and flows through the drainage basin;
2. The dam gates are neither designed nor designated as flood control devices; and
3. The mission of the water company is, per enabling statute and DEP regulations, to preserve the water asset and the structural integrity of the dam.

The DEP's position has been as clear and consistent as your restatement of it in December: "... based upon our review at this time, DEP cannot recommend reservoir lowering as a means of potential flood mitigation." The agency believes, for the reasons cited above (and in your letter) that it would be an ineffective measure, and therefore not worth the risk of failing to replenish what is released, prior to a predicted rain event, should the actual precipitation fall far short of the forecasted amounts.

Nevertheless, the seasonal water level at the Woodcliff Lake Reservoir and the operation of the dam, both before and during rain events, remains a principal concern of my flood zone residents. Many have been in place for decades, have lived through the various flooding events over the years, and are highly attuned to the weather forecasts for precipitation volume and duration, and the attendant level of risk they represent. Some monitor the events in real time,



including the GSA charts/graphs indicating the elevation at the reservoir and tracking its fluctuations.

They continue to note that during the Woodcliff Lake Dam reconstruction, the reservoir vessel was essentially empty for 18 months. During that period there was no flooding in Westwood, despite rain events that might have normally resulted in flooding. They further observe that during this time there were no drought restrictions imposed on consumers. They have further advised me that the volume capacity of the Woodcliff Lake reservoir represents 3% of the aggregate volume of potable water available across the entire delivery system.

During the 18 months of dam reconstruction that percentage of product was either unavailable or stored elsewhere in the system. And yet no customers were without water and, again, no drought restrictions were imposed. The Woodcliff Lake reservoir was simply by-passed, and consumers were serviced by other parts of the holding and delivery system.

Given that history, it would seem that the reservoir might successfully operate at a lower standing level than the seasonal levels, currently established, without disrupting service to consumers. A lower baseline level, providing more headroom in the reservoir, would presumably reduce the aggregate volume system-wide by a tiny fraction of the 3 percent stored there.

Residents additionally consider a pre-event, slow release of water as another mitigation tool that has unfortunately been eschewed by the utility due to the unreliable nature of weather forecasts. Release too much, too soon, and the asset (along with SUEZ profit) is needlessly flushed down the Pascack Brook. Release too little, too late, and there is still flooding. However, the vast improvements to real time satellite telemetry, and the increased accuracy of these predictions, should better inform the actual risk of needless product loss and the timing needed to abate the flood risk.

I would like to propose that the DEP perform a review of weather data during the 18 months in 2014 and 2015 that the Reservoir was empty, to test the residents' view that reservoir levels and dam operations might in fact contribute to flooding events. Such an historical analysis of predictions versus results is an inexpensive study DEP could conduct in conjunction with the NJ State Climatologist at Rutgers. It could be taken up as an experiment to either affirm or debunk whether the reservoir levels might indeed be modulated to mitigate some level of flooding.

If a lower reservoir level is proven to be effective in reducing some amount of flood damage, it is something that could be in place before the upcoming hurricane season, offering the opportunity to reduce the physical and psychological hardship of our flood victims.

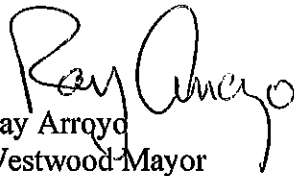
Furthermore, a simple cost benefit analysis component might be added to the study. Utilizing flow data from the US Geological Survey gage station and a dollar value for its water product provided by Suez, this study aspect might reveal that it is less expensive to release some percentage of water, at a loss, than for FEMA and the State of NJ to pay out on damages that might otherwise be incurred.

Ultimately, it may prove less costly to indemnify the water company for those losses incurred through flood mitigation releases, rather than underwriting ever more repetitive loss damages, which is hiking flood insurance premiums to a level that is forcing people out of their homes.

Finally, this study, performed in-house and inexpensively, will either support or contradict the premise informing Senator Schepisi's bill - a bill that is ultimately only one piece of a multi-faceted puzzle that includes Blue Acre buyouts, Home Elevations, the creation of Local Storm Water Utilities, Strategic Placement of Retention Basins, coordinated basin wide De-snagging and De-silting, etc.

But to date, government has not offered residents any immediate, or pre-emptive protections. Their only expectation is more of the same outcomes with the next major storm. This may be an opportune time to try and outperform our history on this issue.

Thank you for your attention and consideration of this proposal.


Ray Arroyo
Westwood Mayor