



CITY OF NEWBURGH

Office of the City Manager

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www.cityofnewburgh-ny.gov

Michael G. Ciaravino, City Manager

August 17, 2016

Martin Brand, Acting Deputy Commissioner
Remediation and Materials Management
Department of Environmental Conservation
625 Broadway
Albany, New York 12233-0001

Re: Emergency Release of Contaminated Water from Washington Lake

Dear Mr. Brand:

I last wrote you on June 16, 2016, to advise you of the impending need to lower the water level in Washington Lake now that the City of Newburgh is no longer withdrawing water from the Lake. A copy of that letter is enclosed as **Exhibit A** for your reference. The last two and a half months have raised the water levels higher, compelling me to write again to request that you give this matter, a consequence of the discharge from the Stewart Airport Superfund Site, your immediate attention.

The dilemma we face is that we cannot allow the water to overtop the dam—a Class “C” High Hazard dam--and possibly undermine the integrity of the dam itself and the City of Newburgh water treatment plant. On the other hand, we are reluctant to release water possibly contaminated with PFOS to the Moodna Creek or Quassaick Creek and put downstream surface water and groundwater users at risk. I am also concerned about potential legal liability resulting from the untreated contaminated water discharge from Washington Lake.

Water levels in Washington Lake are continuing to rise, despite the City previously taking action to close the diversion gates, due to contributory runoff from the Route 300 drainage area and possible natural spring activity below the lake’s water surface. I have attached as **Exhibit B** a copy of our telemetry documenting the continuing rise of water level in Washington Lake. The City’s Fire Chief has advised me that it is imperative we lower the level of the water in the Lake before the hurricane season arrives.

To repeat what I advised in my earlier letter to you, the City has several options for lowering the water level. The first option consists of pumping water from the point where Silver Stream discharges into Washington Lake. A suction hose would be installed in the southwest corner of the Lake and pumped via two diesel bypass pumps within hard piping (8”-12”), along the diversion channel corridor

and through the closed Silver Stream diversion gates. The Lake water would be directed to the existing City owned dam located on Silver Stream, and the discharged water would continue on the existing course of the stream. I am advised it would take about 12 days of steady pumping with one 3,000 gallon per minute diesel pump to reduce the water level by one foot in the Lake. The City is contemplating the use of two diesel pumps to lower the Lake more quickly, and to have redundancy in case of pump failure during a storm event.

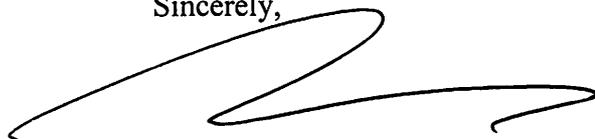
A second option is to siphon water over the dam into Masterson's Pond, allowing the pumped water to continue its natural path through Miller's Pond to Crystal Lake, and then into the Quassaick Creek to the Hudson River. Either way, our concern remains that the release may allow additional PFOS contamination collected in Washington Lake to flow ultimately into Moodna Creek or Quassaick Creek and the Hudson River.

A third option is to have your Department arrange for the temporary installation of a mobile granulated activated carbon water treatment unit, using the same technology used in the permanent facility that the State is designing for the City's water supply system. If such a mobile facility could be installed in the near future, we could begin releasing treated water before the fall storms arrive. A fourth, very short term option, would be to pump Washington Lake water into tankers for transportation or transfer to an appropriate treatment facility. Our Engineering Department and Water Department are ready to work with your engineers and consultants on these options. In my June 2nd letter, I reported that water level in the Lake had risen from 41 feet to 46 feet within the first 30 days after I declared the State of Emergency on May 2, 2016. Since we closed the Silver Stream diversion gates, the rate of rise in water level has slowed but continues to rise. The three to four feet of freeboard I wrote about in my June 16 letter has been reduced to less than 2 feet of freeboard before flow begins to discharge through the emergency spillway.

Once again, we ask that you take into consideration the fact that we are dealing with the consequences of a discharge from a State Superfund Site. We expect that the City will not be required to follow the permitting procedures for the release of Lake water as if the City were the source of the problem. However, we are requesting your direction and approval of the proper method for handling the release. We are also looking for the State's indemnification of the City of Newburgh in the event the approved method of release causes any injury to downstream users, particularly residents and their groundwater wells downstream of the dam.

I thank you for your attention and as always we stand ready to cooperate in any way possible to assure that this and other threats to the Lake Washington watershed are eliminated.

Sincerely,



Michael G. Ciaravino
City Manager
Newburgh, New York

cc: Fire Chief Terry Ahlers, City of Newburgh
Captain Paul Pullar, City of Newburgh
Captain William Horton, City of Newburgh
Police Chief Daniel Cameron, City of Newburgh
Thomas Scaglione, Governor's Office
Judith Enck, Regional Administrator, USEPA
Basil Seggos, Commissioner, NYSDEC
Kenneth Lynch, Executive Deputy, NYSDEC
Kelly Turturro, Acting Director, Region 3
Dr. Nathan Graber, Director of the Center of Environmental Health, NYSDOH
Catherine McCabe, Regional Administrator, USEPA
Pat Evangelista, Region 2, USEPA
Mark Maddaloni, Region 2, USEPA
Paul Simon, Region 2, USEPA
Angela Carpenter, Region 2, USEPA
John Martin, Region 2, USEPA
Cecilia Echols, Region 2, USEPA
Robert Schick, Division Director of Environmental Remediation, NYSDEC
George Heitzman, Director, Environmental Remediation Region 3& 6, NYSDEC
James Tierney, Division of Water, NYSDEC
Jeffrey R. Conway, Region 3, NYSDEC
Dr. Howard Zucker, Commissioner, NYS Department of Health, (NYSDOH)
William Gilday, Bureau of Water Supply Protection, NYSDOH
Dr. Eli N. Avila, Commissioner, Orange County Department of Health, OCDOH
Keith Miller, Orange County Department of Health, OCDOH
Daniel Shapley, Water Quality Program Manager, Riverkeeper
Judy Kennedy, Mayor, City of Newburgh
City Council, City of Newburgh

Exhibit A



CITY OF NEWBURGH

City Hall - 83 Broadway
Newburgh, New York 12550
Phone: 845-569-7301
Facsimile: 845-569-7370

Michael G. Ciaravino, City Manager

June 16, 2016

Martin Brand
Regional Director
Department of Environmental Conservation
21 South Putt Corners Road
New Paltz, NY 10561

Re: Proposed Release from Washington Lake to Silver Stream

Dear Mr. Brand:

Thank you for your letter of June 14, 2016, in which you confirmed that the proposed closing of the Silver Stream diversion gates to minimize the risk of Washington Lake overtopping its earthen dam does not require a NYSDEC permit. You also confirmed that the Department had no objection to closing the gates and that such action is a realistic option to manage the water levels in the short term.

I am writing now to request your advice concerning a further step that must be taken to avoid overtopping the dam. Even with the closing of the diversion gates, we are seeing the water level in Washington Lake rise due to runoff and possible natural spring activity. In order to prevent overtopping the dam, prior to precipitation events we must periodically release water from the Lake via one or both identified options, depending on the time available until the precipitation event. The first option is to pump water from the point in the Lake where the Silver Stream diversion meets the Lake. From this location, a hose would be temporarily installed over the existing dam, along the diversion channel and through the closed diversion gates. Ultimately, this release will be directed into Silver Stream and continue onto the existing course of the stream.

Our concern, as with our previous correspondence, is that this release may allow additional PFOS contamination collected in Washington Lake to flow into Silver Stream and ultimately to the Moodna Creek and the Hudson River. The second option is to pump water from a point in the Lake near the dam, over the dam into Masterson's Pond and the swallow hole near NYS Route 207. This would allow the pumped water to continue its

natural path in the event Washington Lake overtopped through Miller's Pond to Crystal Lake, and then into the Quassaick Creek to the Hudson River.

We are unaware of any testing or test results for locations downstream from Washington Lake. Therefore, our obvious concern is the introduction of PFOS contamination into a new additional waterway which has not been subject to the contaminating impacts identified in Silver Stream and Washington Lake.

Although we currently have three to four feet of freeboard in the Lake, we consider the timing to be urgent. In our experience, a very heavy rain or series of heavy storms could add enough water to the Lake to overtop the dam. As you will recall from my previous correspondence dated June 2, 2016, our lake had risen from 41 feet to 46 feet within the first 30 days after I declared the State of Emergency on May 2, 2016. Since I closed the Silver Stream diversion gates, the rate of rise in water level has tapered off appreciably, but continues to rise still, perhaps from underground springs. We believe we must act soon to provide a buffer of safety against such future spillover events and subsequent possible catastrophic dam failure. The dam itself is classified as Class "C" High Hazard. We have therefore started to make the preliminary emergency preparations necessary in order to siphon water from Washington Lake ahead of the hurricane season to reduce the water level in our lake as a preemptive measure.

In considering this request, please keep in mind that the PFOS contamination the City must release has entered Lake Washington from an off-site source or sources that continue to discharge to our drinking water supply stream in violation of sections 17-0501 and 17-0803 of the Environmental Conservation Law as well as 6 NYCRR 597.4 prohibiting release of hazardous substances.

We trust that the City will not be required to follow the time-consuming permitting procedures of 6 NYCRR Subpart 750-1 for the release of Lake water as if the City were the source of the problem. The release we are proposing is in the nature of an interim remedial measure to mitigate potential long-term damage to the City's reservoir, the surrounding towns and the property owners, residents, and their related drinking wells downstream of the dam.

Although a carefully managed release from the Lake will be returning water and contamination to the stream from which it came, I am unclear whether the release from our reservoir is appropriate given the nature of the PFOS contaminant. Can you please provide guidance on whether we should be pretreating this contaminant prior to release? Should we pump it directly into receiving tankers for transportation or transfer to an appropriate treatment facility? Can we collaborate on the optimal mitigation measures in accordance with the NYSDEC's pre-established protocols and mandates which inform our best practices for this water crisis?

I do not wish our predicament on our neighbors. Ideally, I would like to prevent the further transfer of the PFOS contaminant to other locations in our surrounding watersheds, the Hudson River, and ultimately the Atlantic Ocean if we have a means and

technology to do otherwise. I thank you for your attention and as always stand willing to cooperate in any way possible to assure that this and other threats to the Washington Lake watershed are eliminated.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Ciaravino', with a large, sweeping flourish at the end.

Michael G. Ciaravino

cc: Fire Chief Terry Ahlers
Fire Captain William Horton
Police Chief Dan Cameron
Thomas Scaglione, Governor's Office
Robert Schick, Division of Environmental Remediation
Nathan Graber, M.D., Director, Center for Environmental Health, NYSDOH
Kenneth Lynch, Executive Deputy Commissioner, NYSDEC
Judith Enck, Regional Administrator, EPA

Exhibit B

Washington Lake

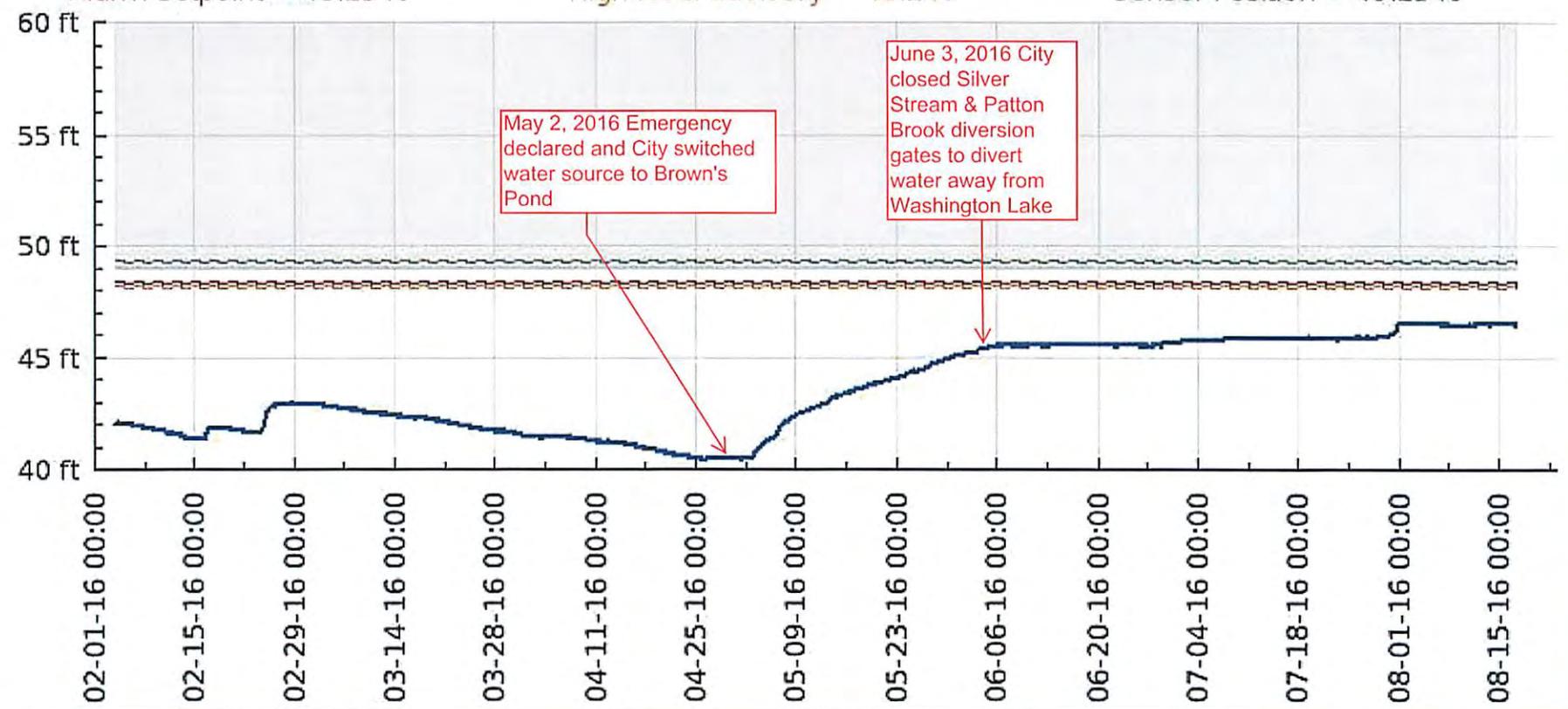


2015-08-17 14:44 - 2016-08-17 14:44 Distance above Sea Level

Alarm Setpoint = 48.25 ft

High level advisory = 48.1 ft

Sensor Position = 49.25 ft



Distance

Time Period: Last Year

Adjust Scale

Download Data

From: 2015-08-17 14:44

Max Y: 50.00