

Testimony at Joint Legislative Hearing, February 12, 2019 Eric Siy, Executive Director, The Fund for Lake George

Thank you for this opportunity to speak on the urgent need for State funding to replace the Wastewater Treatment Plant at Lake George Village—currently the top environmental and economic priority in protecting the "Queen of American Lakes"—world-class destination for tourism and drinking water supply for thousands of residents and visitors alike.

I am Eric Siy, Executive Director of The FUND for Lake George, a science-based, non-profit organization founded in 1980 dedicated to the enduring protection of the lake and watershed. I am joined by Ed Bartholomew, President of the Warren County Economic Development Corporation, and a founding member of The FUND's Council of Business Advisors. We are here today to underscore the fact that as goes the health of Lake George so too goes the health of our regional economy.

Through latest scientific research, The FUND for Lake George informs and empowers diverse constituencies including the business community and local governments on what is necessary to secure the signature water quality and clarity of Lake George. The three pillars of protection employed by The FUND are partnership, innovation, and direct investment. Indeed, our science-to-solutions approach to protecting Lake George is increasingly viewed as an adaptable and scalable model for long-term success.

Whether in catalyzing establishment of the strongest aquatic invasive species prevention program east of the Mississippi; creating the nation's leading initiative for reducing the use of destructive road salt; or making Lake George "the world's smartest lake" through our unparalleled partnership with IBM and RPI, The FUND is setting the fast pace necessary to curb mounting threats to water quality and show others the way. We invest in long-term success and practice leadership by partnership.

We are here today urging the State of New York to invest in the future health of Lake George as lead partner in protecting one of our State's most treasured natural assets by appropriating the State funds required to replace the long failing wastewater treatment plant at Lake George Village. Attached here is "the Timeline of Decline" that illustrates how long this facility has been polluting Lake George, for over a half century! The problem has only grown worse as the popularity of Lake George has grown. The time is long overdue to bring protection of the Lake in line with its growing popularity. Indeed, without the necessary infrastructure improvements to support intensifying use, Lake George is at high risk of being "loved to death".

It was the definitive scientific report issued by the Lake George Waterkeeper, a core program of The FUND, that documented the accumulating magnitude of the problem caused by the failing treatment plant at Lake George Village.

In collaboration with the Village of Lake George, the Waterkeeper performed a 17-month study completed in 2015 detailing significant water quality impacts to surface waters within the Lake George watershed originating from the outdated wastewater treatment plant. (This report is available as a pdf on The FUND's website—fundforlakegeorge.org)

As reported by the Waterkeeper (and as exhibited in the attached Timeline of Decline), the treatment plant, constructed in 1936, has serviced permanent and seasonal residents within the Village and Town of Lake George continuously with minimal improvements. Several years ago, plant operations staff started noting elevated nitrate-nitrogen levels in monitoring wells that were not in compliance with the plant's State Pollutant Discharge Elimination System permit limits. This prompted an internal investigation that revealed major discrepancies between laboratory and written results ultimately leading to an Order of Consent issued by the New York State Department of Environmental Conservation to Lake George Village in 2014. As a provision of the Order, an Engineering Feasibility Study recommended a complete and timely replacement of the pre-World War II facility with a new tertiary treatment plant.

Primary Findings of the Waterkeeper Monitoring Report

- Established a clear connection between the Village wastewater treatment Plant effluent (discharge) and the surface water of West Brook, the fourth largest stream flowing into Lake George;
- Measured high quantities and concentrations of contaminants (nitrates and chloride) indicating the potential for negative human and Lake health impacts requiring immediate action;
- Documented definitively the urgent need to replace the wastewater treatment plant in the Village of Lake George without further delays.

While impacts of the Village treatment plant have been studied for years, findings of the detailed monitoring program, coupled with the State-ordered Engineering Feasibility Study, provide quantified, irrefutable proof connecting treatment plant effluent to seepage streams ultimately reaching the Lake through West Brook and causing negative, long-term water quality impacts to Lake George.

According to the Waterkeeper study, since the early 1970s an estimated 154 tons of treatment plant nitrates entered West Brook. Chloride entering the local groundwater from the plant has increased over the past 45 years (partially related to the Town of Lake George highway garage that maintained an uncovered road salt storage pile for many decades). It is estimated that 3,164 tons of chloride have entered West Brook during that time.

WHY A NEW WASTEWATER TREATMENT PLANT MATTERS

 The Village of Lake George draws their drinking water supply from Lake George near the mouth of West Brook – nitrates can cause human health issues, including blue baby syndrome (lack of oxygen);

- The water quality impact with the increase of nutrients resulting in excessive algae
 growth with increased presence of cyanobacteria, which at certain levels can be toxic to
 humans, dogs, etc. as evidenced by the growing incidence of Harmful Algal Blooms
 (HABs) in water bodies across the State and beyond and dominant forms of algae
 indicating severe nutrient pollution;
- Ecological impacts to fisheries due to the shifting of the algal community and food web through alteration to stream pH, decreasing dissolved oxygen levels and reducing spawning habitat.

There is no doubt that increasing amounts of nutrients and contaminants from the treatment plant into Lake George over decades without the remedial actions required, increases the risk of Lake George experiencing a Harmful Algal Bloom. Lake George is one of 12 lakes across New York included in the State's Harmful Algal Bloom Initiative launched by Governor Cuomo in late 2018. Notably, it is the only one of the 12 yet to experience a toxic bloom and, because of this, is being treated as a "control lake" by state officials.

In the Harmful Algal Bloom (HABs) Action Plan for Lake George issued in 2018 by NYSDEC, NYS Department of Health, and NYS Department of Agriculture and Markets, a principal goal for maintaining water quality is to "implement proactive management to minimize the potential for HABS occurring in Lake George in the future." To meet this goal, specified priority projects of the HABs Action Plan include upgrading the Wastewater Treatment Plant for the Village of Lake George. This coincides with the Order of Consent issued by the NYSDEC that stipulates the new treatment plant must be completed by the fall of 2021.

As the 11 other lakes in the State HABs Initiative are learning the hard way, the impacts of toxic algal blooms are devastating. Until now, Lake George has remained on the pre-HABs side of the ledger. Without the strongest possible measures, however—foremost among them being fast-track replacement of the Village wastewater treatment plant—the risk of HAB occurrence continues to grow with no means of prediction. The best approach to reducing this risk is reducing the nutrient and contaminant levels triggering a HAB event. A strong commitment to keeping HABs out of Lake George is evidenced by the many interests speaking with one voice and acting in concert to keep Lake George—New York's crown jewel—a shining example of what can be accomplished through leadership by partnership.

At this pivotal moment, we call on New York State to continue being the lead partner for protecting the Queen of American Lakes. Providing the funding now needed to replace the Lake George Village Wastewater Treatment Plant in the earliest possible timeframe represents the single-most important action the State can take. New York's investment now will deliver accruing environmental and economic returns for every generation to come. Thank you.



The Village of Lake George Wastewater Treatment Plant

TIMELINE OF DECLINE

1936 - The Village of Lake George Wastewater Treatment Plant was originally built

1965 - An initial upgrade to the Wastewater Treatment Plant occurred

Early 1970s - Outside public and private agencies started to monitor and study the Plant on a monthly basis

1985-2014 - Numerous upgrades to the Wastewater Treatment Plant occurred

2014 - After consistent noncompliant results of nitrate samples from monitoring wells exceeding discharge standards and inconsistencies between certified laboratory results and written submitted reports to the New York State Department of Environmental Conservation (NYSDEC), NYSDEC issues an Order of Consent.

2015 - The FUND released the findings of their detailed monitoring program documenting the magnitude of wastewater impacts originating from the treatment plant and submits Monitoring Report to NYSDEC in January 2016.

2016 - Village of Lake George submitted their original request for funding from the State for a new wastewater treatment plant, accompanied by a conceptual Engineering Report.

March 2017 - The Preliminary Engineering Feasibility Study was completed by AES Consultants and submitted to NYSDEC.

October 2017 – The Village hires Chazen to design the replacement plant. The scope of the project does not change, but new estimate indicated the total project cost increased from ~\$16M to \$22M.

October 2017 - To date, NYSDEC has not provided any feedback on the Feasibility Study submitted to them in March 2017, and the Village of Lake George continues to advocate for funding from the State for a new wastewater treatment plant.

March 2018 - The Village submits 60% Project Plans and Specifications to NYSDEC/EFC for review along with addendum to Engineer's Report due to the estimated increase in project cost.

July 2018 - The Village submits \$4M NYS Empire State Development Infrastructure Grant Application. The Village also submits final Engineering Report for the project.

August 2018 – Village receives final engineer's report approval from NYSDEC/EFC.

September 2018 – Village submits ~\$6M NYSEFC Intermunicipal Water Infrastructure Grant (IMG) Application for Project.

October 2018 – WWTP listed as an CDREDC 2018 Priority Project. However, the Village does not receive any additional funding for the project in 2018.

November 2018 - The Village submits final project plans and specifications to NYSDEC/EFC for review and approval.

December 2018 – The Village learns that neither the NYSDEC Infrastructure Grant or the NYSEFC IMG grant will be awarded to them.

January 2019 - The Village receive NYSDEC/EFC review comments on plans and specifications

February 2019 (pending) – The Village will resubmit final plans and specifications to NYSDEC/EFC for approval and the project will be placed out to bid.