

Lake John Dam Project Summary

Lake John Dam is an earthen dam that was constructed in the early 1900's and facilitates the holding of 5.2 million gallons of water in Lake John. Lake John serves as a secondary water source for the Royalton Fire District #1. Over the years, Lake John Dam has never been upgraded, and has received only minimal repairs. In 2011, due to Tropical Storm Irene, Lake John Dam sustained significant damage. Emergency temporary repairs were conducted at the time however, permanent repairs are required to maintain the dam, and Lake John. The deficiencies with the dam are as follows:

- Primary outflow is plugged
- Emergency outflow area is significantly damaged
- Existing 6" line that feeds the water plant is deteriorating and it does not have an intake screen
- There is no drain for the reservoir
- The downstream slope of the dam is slumping, and there are seepage issues

To repair these issues and maintain the Lake John as a secondary water source the following repairs and improvements are required:

- Remove the primary (non-functioning) outflow structure
- Remove the damaged portion of the existing 18" outflow pipe and fill with grout
- Construct a new water intake transmission main (to deliver water to the plant)
- Replace the existing 24" emergency overflow pipe with a concrete lined spillway designed for both primary and emergency flow conditions
- Repurpose existing portion of the water main (that currently feeds the plant) as a drain
- Reconstruct the access road and install erosion control measures

Project costs:

The estimated total project cost is \$270,000. Through the USDA the Royalton Fire district #1 is eligible to receive 45% of this cost as a grant. The estimated debt service on the loan balance (\$148,500) is \$7095 annually. Currently, the RFD #1 is paying \$6,900 annually on debt service with will be paid in full in September of 2019. If approved, the customers of the RFD #1 would not see a rate increase to cover the debt service for Lake John Dam repairs.