



## **Cuba Lake Dam Low Level Outlet Replacement**

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Cuba Lake Dam is a High Hazard structure located in Cuba, NY. The dam was originally constructed in 1852 - 1858 to impound the largest and most important feeder reservoir to the Genesee Valley Canal. It currently serves to retain Cuba Lake, a popular recreation destination in Western New York. The New York State Office of General Services (NYSOGS) retained Ramboll Americas Engineering Solutions, Inc. in 2014 (Ramboll) to prepare an Engineering Assessment Report for Cuba Lake Dam. The dam was found to be in generally good condition and capable of passing its Spillway Design Flood (SDF). The existing twin 18-inch ductile iron pipe low-level outlet, however, was found to be in a deteriorated condition with inoperable control valves. Additionally, the outlet controls were located on the downstream end of the pipes, leaving the system fully charged under approximately 55 feet of head. The NYSOGS tasked Ramboll with developing alternatives for a replacement of the non-functioning low-level outlet system. Following review of the presented alternatives, a value-engineered option of installing three siphons installed across the dam in lieu of outlet pipes through the dam was chosen as the preferred design approach. Design and permitting of the proposed replacement involved coordination between multiple agencies and stakeholders, including the NYSOGS, NYSDEC, US Army Corps of Engineers and the Cuba Lake District, the caretakers of the dam and representative of the many homeowners along the perimeter of Cuba Lake. Construction of the new low-level outlet commenced in November 2024 and reached Substantial Completion in September 2025. This presentation will provide a brief history of the evaluation, design and permitting of the siphon system and look at the dam during the construction phase, culminating with successful operation of the system.