



SANFORD DAM STABILIZATION  
PROJECT SUMMARY  
2/1/2022

Following the flood of 2020, Four Lakes Task Force, as a sponsor to the NRCS EWP program entered into an agreement to stabilize the Sanford Dam. This stabilization project aims at restoring the Sanford Dam, consisting of the spillway and embankment, to a stable condition and rerouting the river back to its original pre-flood course. In addition, this project will reduce further erosion of the banks near the spillway and prevent continued deterioration of the site. The work done as part of this stabilization project will be utilized during the restoration project which is forthcoming in the following years. Like the Edenville Dam Phase I Sister Wall and Phase II Tittabawassee stabilization projects, GEI Consultants is the engineer of Record, Spicer Group is acting as the Owner's Engineer and Fisher Contracting Company will be performing the construction work.

The scope of the project includes three phases: site preparation/access, modifications to the spillway, and installation of a sheet pile I-wall. A summary of each phase is as follows:

**Phase I - Site Preparation and Access** – The first and current stage of the project began on January 3<sup>rd</sup>, 2022. This phase includes constructing access roads throughout the site, installation of a temporary bridge over the breachway, securing the site for construction activities and preparing the site for the other phases of the project. This phase is intended to be completed in March of 2022

**Phase II - Spillway Modifications** – This phase involves partial demolition of the spillway and is projected to begin in March 2022. The scope of the phase includes removal of the existing radial Tainter gates, partial demolition of the spillway and construction of a new mass concrete weir. At the conclusion of this phase the river will be re-routed back to its pre-flood location and will allow for stabilization work to take place within the breachway. The concrete which is poured will be set to an elevation which is like what the river currently exists at, and it is not anticipated that the river level will be affected during normal conditions. The river level will still fluctuate during runoff events. This work is very similar to what was performed as an emergency action to the Tobacco spillway of the Edenville Dam by EGLE during the winter of 2020. This phase is estimated to be completed during the Fall of 2022.

**Phase III – I-Wall and Downstream Restoration** – The final phase of the project includes driving steel sheet pile through the breachway at the approximate centerline of the existing embankment. The steel sheet pile will form the I-Wall and be protected on either side with riprap. The I-wall will close the breachway and direct higher flows (up to the 200-yr event) through the modified spillway. In addition, stabilization work immediately downstream of the dam will take place and will include placement of riprap along various areas of the riverbank and sediment removal from the river. Phase III and Phase II will be constructed concurrently with an estimated completion date in the late Fall of 2022.

Important project milestones to look forward to include placement of the temporary bridge (completed January 27<sup>th</sup>, 2022), demolition of the spillway, construction of concrete weir and river re-route, and construction of I-wall and restoration of the site to a stable condition until the restoration project starts.

This schedule is subject to change depending on a variety of factors including but not limited to weather conditions, material availability, permit modification approvals, construction setbacks, contingencies, and other delays.