

Dam Concrete Repair 2025

During a routine inspection of the spillway on June 8th, 2025, one member noticed water coming out of the sidewall in the shoot of the spillway. There was a leak in the spillway that needed to be addressed. The leak in the spillway shoot was on the South side of the spillway shoot as shown in figure 1.



Figure 1 – Water leaking out of the spillway

Frog Pond WCID held a board meeting on August 16, 2025 and discussed the next course of action. The board made a decision to hire a concrete contractor to come out and drill exploratory holes to find where the leak in the side of the spillway was coming from.

On September 6th, the board members pulled 3 of the stop logs in the weir gate of the dam to start lowering the water level so that the concrete contractor could assess and

drill holes in the spillway. The board awarded the contract to Double A concrete out of Beaumont. This is the contractor that worked on the spillway for the Wildwood lake community. On September 8th, the contractor came out and started to cut out some holes in the spillway to find the leak. They started at the front of the spillway on the lake side of the spillway close to where the spillway slope meets the top of the spillway. The cut out was a 12 inch by 12 inch square hole. Figure 2 shows the location of the first hole.



Figure 2 – Location of the first hole that was cut out

The contractor chose this location because there is a gap in the concrete. Figure 3 shows the gap in the slope and the top of the spillway.



Figure 3 – Gap in the dam

There was signs of water leaking into the spillway where the crack is between the slope of the spillway meets the top of the spillway. The first hole that was cut out was good. There was no sign of leaking in this area. The next hole to be cut out was on the downward slope of the spillway away from the lake near the spillway. Figure 4 shows the location of the 2nd cut out.



Figure 4 – cut out location number 2

The next cut out was on the North side of the spillway. The cut out on the North side of the spillway is where we started finding erosion. Figure 5 shows the location of the cut out in the spillway. There was a channel that had been eroding out of the spillway. The red box out in the picture outlines the channel in the spillway. Most of the erosion was toward the lake side of the spillway. The water had been seeping in at the crack and eroding the concrete and dirt toward the lake side of the spillway. The erosion was about a 12 inch channel that ran from the cut out hole location all the way to the side wall on the right of the picture and roughly 10 feet to the left of the cut out in figure 5.



Figure 5 – cut out on North side of the spillway.



Figure 6 – Zoom in picture of the erosion on the North side of the spillway.

There was also a similar gap on the south side of the spillway. Figure 7 shows the location of the cut out and the water erosion. The South side of the spillway did not have as much erosion as the North side of the spillway but the North side of the spillway is a little lower and has water flowing over the top of the spillway most of the year.



Figure 7 – Cut out on the South side of the spillway.

The concrete contractor filled the holes with high strength concrete. Figure shows the product that was used to fill the gaps in the spillway.



Figure 8 – Concrete product

The contractor filled all of the holes in the spillway that were found. Then the next part of the work was to clean out and seal the gaps in the spillway to prevent water ingress. The contractor used the concrete saw to clean out the gaps. Figure 9 shows the workers cleaning out the gaps to prep for the caulk.



Figure 9 – Prepping the gaps in the spillway

The contractor then sealed the gaps in the slopes of the spillway on both the lake side and the back side of the spillway using a concrete caulk. Figure 10 shows the product that was used and figure 11 shows the final result of the work that was done.



Figure 10 – Caulk used to seal the gaps in the slopes of the spillway



Figure 11 – Gaps in the spillway sealed