

## **POST LAKE HIGH-WATER EVENT REPORT APRIL 2023**

### **POST LAKE DAM MANAGEMENT COMMITTEE MEETING**

The Post Lake, Dam Management Committee met at 5:00 p.m. on Wednesday, April 19, 2023, at the PLIA Community Building. The meeting was called to discuss the management of the high-water event that the lake was experiencing. Present were Jeff McKinny, John Steber and Ralph Eberle the districts Dam Tender. **Note:** Dam Committee member Andy Joswiak was to participate in this meeting via phone, but we had no phone service at the PLIA Bldg. Andy was in Florida during much of this event, but he was in regular communication with committee members & Ralph.

### **April 2023, High Water Event**

In April of 2023, the Post Lake area had a rather significant snowpack and during the week of April 9<sup>th</sup>, the area experienced unseasonably warm weather with temperatures reaching as high as 80 degrees. The heavy snowpack coupled with the warm weather caused lake levels to quickly rise so members of the Dam Management Committee (Jeff McKinney, John Steber) & Dam Tender, Ralph Eberle, met at the PLIA Building to discuss rising lake levels and the operation of the dam. Topics discussed below:

**IMPORTANT NOTE:** Post Lake's state approved dam operating range is 95.0 feet to 96.0 feet. PLP&RD's Target operating level for Summer is 95.8 and Winter is 95.5.

### **REVIEW OF ACTIONS AND STATUS OF DAM OPERATION**

In review, this high-water event was a good experience for the Dam Tender and committee members. This event was an excellent opportunity to review procedures/training and allow for the opportunity to appreciate the suddenness of a significant weather event, the need to anticipate the potential for rapidly rising water levels and the need to respond in a timely manner.

Overall, we believe the dam was managed in a proper manner and the release of water was appropriate for the capabilities of the dam. Beginning April 7, 2023, all three gates were in an open position, with no water being restricted. However, it should be noted that rapidly rising water levels, from April 13 to the 14<sup>th</sup> did catch us by surprise. On the April 13<sup>th</sup>, the gates were set at what is ordinarily a wide-open position for normal winter runoff, however, they were not set to their highest possible position. The water level rose as much as 6 inches overnight, which was much faster than anticipated. Andy, who was in Florida, was contacted by a lake resident with concerns about rising water levels. He was unable to immediately reach Ralph and out of concern about the rapidly rising water levels, he reached out to two lake resident friends to check out the dam situation and they were able to raise the gates for maximum flow. We don't believe this tardiness had much of a detrimental effect on the overall high-water situation as water levels rose approximately an additional 18 inches from April 14 to April 20<sup>th</sup>.

**GATES:** It was noted, that because of corrosion and overall wear and tear, the gates may need major repairs in the future. At present, the gates cannot be raised to their designed maximum height. During this high-water event, there was a problem only with Gate #1 (northern most gate). This gate collects more water than the other two gates and at its maximum attainable height, it was at times, restricting 12 to 14 inches of water. The other two gates opened high enough so that there was no water being restricted.

## **DAM INSPECTIONS**

There was discussion about the need for the Dam Tender to visit the dam daily during a high-water event and when there is the potential for a high-water event. It was stressed, that during extreme conditions, multiple visits per day may be necessary. John Steber stated, that even during the stable water level months of winter, the Dam Tender should visit the dam no less than twice per week. The Dam Tender Job Description has no specific dam visit/inspections required. It is expected that the Dam Tender will learn to understand the management of the dam and its flow and plan their visits based on weather conditions and need. **NOTE:** It is understood by all parties that in is not necessary for the Dam Tender to visit the dam daily, especially during stable weather conditions. This has been the normal operating procedure for as long as anyone can remember. However, it may be necessary to update the Dam Tenders Job Description, to better detail how often inspections are to be made.

## **WATER LEVEL REPORTS**

There was discussion about the way the Water Level Reports were being filled out. It was noted that elevations were being recorded for every day of the month and it is understood that the Dam Tender does not visit the dam every day. Ralph was recording the water level on his visit days and then estimating the readings between visits. Committee members agreed that the Dam Tenders elevation records are our official record and elevations should only be recorded on days of actual observation by the Dam Tender.

There was also discussion about how we record the position of the gates. At present, the gates are only marked as Open or Closed. In review of this situation, Ralph had the gates marked as open but as the water level rose, the gates were no longer in an open position. We should develop a more accurate description of the gate positions.

## **EMERGENCY ACTION PLAN**

Jeff, John, and Ralph reviewed the districts EAP and discussed our Action Plan notification responsibilities. It was stressed that thorough inspection of equipment and embankments were especially important during these high-water events. It was noted that following this high-water event, it was important that Ralph complete a Flood/High-water Event Inspection Report.

## **WATER LEVEL REVIEW**

According to the Dam Water Level Inspection Reports, the lake levels began to rise slowly beginning on approximately Thursday, March 23, 2023, with a reading of 95.6. By Thursday March 30, 2023, we had a reading of 96.0 which placed the water level at the top of our approved operating range and by Tuesday, April 13, 2023, we were at the top of our gauge at 97.0. Thereafter all readings are estimates and based on landmarks.

Thursday, March 23 <sup>rd</sup> .	95.6	
Thursday, March 30 <sup>th</sup>	96.0	Up 4 tens of inch
Wednesday, April 5	96.5	Up 5 tens of inch
Thursday, April 6	96.75	UP 2.5 tens of inch
Tuesday, April 13	97.0	Up 3.25 tens of inch

Thursday April 14	Water was still rising and property owner express concern. It's believed that the water rose 6 inches overnight, from the 13 <sup>th</sup> to the 14th. Gates are opened to the maximum possible height.
Friday, April 15	Water is over top of gauge, estimates and landmarks from here, while going up.
Monday, April 17	Water even with top of the concrete supports
Tuesday, April 18	Water rising very slowly 1" over concrete supports.
Wednesday, April 19	Water Level holding steady.
Thursday, April 20	Water Level at its peak, up 1+ inch, to bottom of catwalk grate, and remained at this level until April 23 <sup>rd</sup> when it began to recede.
Sunday, April 23	Water levels begin to recede.
Monday, April 22	Andy reported that lake levels were down 7 to 8 inches, but still 1.5 feet over our target level of 95.8.
Tuesday, April 23	Andy reported that lake levels had dropped additional 3 to 4 tens of and inch. About 10 inches above the target level of 95.8.