Key Messages July 5, 2023

Status of Walker River Flood Stage

The BIA is closely monitoring the Walker River stream flows and conducting daily visible inspections of Weber Dam.

- The reservoir dropped about 500 acre feet from June 28 and is now approximately 58% full at 6,150 acre feet.
- The current release rate from Weber Dam of approximately 2,280 cubic feet per second, which is down approximately 120 cubic feet per second from last week.
- Walker River is now *below, but close to,* Flood Stage. Hydrologists predict the reservoir elevation to remain *below* the emergency spillway crest with maximum reservoir level of 4,203.2' through August 2.
 - o This is approximately 3 feet lower than (June 28) previous estimate. Hydrologists anticipate this number to continue to drop as water level recedes.
 - Estimated releases from Weber Dam is not expected exceed 2,500 cubic feet per second. This includes ~400 cubic feet per second released from the outlet works (tunnel that feeds irrigation canals).
- Given current conditions, hydrologist modeling the peak period of high flood stage forecast the peak period for high flood stage to be from July 1-11.

Operating Status of the Weber Dam Spillway

An inspection of the Dam in May 2023 revealed open and offset joints between the Dam's service spillway slabs and sediment in the service spillway drains, early indications the soil under the service spillway chute may be experiencing erosion.

- The spillway is functioning normally.
- Out of an abundance of caution, engineers and scientists from <u>BIA's Safety of Dam's Program</u> are taking proactive measures to provide for public safety and to protect the structural integrity of the Weber Dam facility.
- <u>DOWL</u>, an engineering, planning, surveying, and Professional Services Firm with an office in Reno, Nevada is providing 24/7 monitoring services of the facility. Still photos taken every 10 minutes are available for viewing at: https://www.bia.gov/WeberDamResponse

Status of Walker River Indian Irrigation District

Erosion of the Walker River riverbanks is occurring downriver from Weber Dam. Western Nevada Agency Irrigation System Operators are working around the clock to ensure the two canal channels of the Walker River Indian Irrigation Project and the 49 miles of lateral irrigation lines are functioning properly.

Western Nevada Agency purchased eight loads of 24inch rock to reinforce the entrance structure at Little Dam where Canal 1 and Canal 2 receive water from the Walker River.

The safety of the downstream communities is BIA's priority. BIA remains focused on safely managing the response activities at the Weber Dam spillway. It is too early to determine whether it will be necessary to fully, or partially, drain the reservoir to address safety concerns at Weber Dam. After this flood event, BIA will evaluate the spillway conditions and determine what measures, if any, may need to be implemented to best assure safety of the downstream community.

• It is a high priority to ensure irrigation use and agricultural needs are met to the best of BIA's ability. As the response activities continue, BIA will remain vigilant in minimizing impacts to the irrigation water supply.

Level 1 Response at Weber Dam

On May 17th, the BIA Superintendent, Western Nevada Agency in Carson City, Nevada declared a Level 1 Response at Weber Dam.

• A Level 1 Response indicates an unusual situation at the Dam that triggers increased levels of monitoring.

Response Level	Activity at Dam to Trigger Response Level Activation	BIA Response Activities	Community Action
Level 1 (Ready) Indicates an unusual situation that triggers increased levels of monitoring.	An inspection of the Dam in May 2023 revealed open and offset joints between the Dam's service spillway slabs and sediment in the service spillway drains, early indications the soil under the service spillway chute may be experiencing erosion.	 Conduct 24/7 monitoring services of the facility. Mobilize rock riprap, gravel, and construction equipment to the Dam. Proactively remove Weber Dam's fuse plug. 	 Know your flood risk. Take a household inventory of valuables. Store important documents. Pay attention to authorities and safety officials and where to find official information.

Due to the open and offset joints between the Dam's service spillway slabs and sediment in the service spillway drains that was also detected in the May inspection, BIA is taking additional precautionary measures.

Actions taken to date:

- May 17th, the BIA Superintendent, Western Nevada Agency in Carson City, Nevada declared a Level 1 Response at Weber Dam.
- June 15, BIA awarded a contract to Chiricahua Procurement LLC, a company based in Albuquerque, NM to provide heavy equipment, rock, and gravel to Weber Dam.
- June 21, BIA proactively started moving rock riprap, gravel, and construction equipment to the site in the event action needs to be taken to slow erosion of the service spillway chute foundation.
- June 26 Completed the removal of the Weber Dam Fuse Plug, which was overseen by a BIA Civil Engineer (Construction Specialist).
 - The fuse plug is a rock embankment feature of the emergency spillway intended to wash out in a predictable manner to lower the water elevation of the reservoir should it exceed its holding capacity.
 - o Removing the fuse plug reduces the worst case downstream flood potential scenario by 50%.
- June 28 Constructed two erosion cutoff trenches downstream from the fuse plug from salvaged riprap from the fuse plug. Cutoff trenches are an engineering featured installed to help slow erosion.
- Installed and improved a two foot berm to assist in keeping flow out of the fishway channel.

Actions In Progress:

• Delivery of 2,000 tons (80-90 truckloads) of riprap to construct an additional 8'x8' erosion cut off trench estimated to be complete by July 5.

Future Actions Planned:

• Construction of a fourth, smaller, erosion cutoff trench downstream from green line using existing riprap currently onsite.