RECLAMATION

Managing Water in the West

Status Report, no. 14, Final
July 1, 2009 through November 23, 2009

Savage Rapids Dam Removal and Replacement Pumping Facilities
Grants Pass Project, Oregon
Pacific Northwest Region

Aerial view of the job site. 10/9/09

U.S. Department of the Interior
Bureau of Reclamation
Pacific Northwest Regional Office
Boise Idaho

BUREAU OF RECLAMATION
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July 2009

The contractor, Slayden Construction, installed the concrete plugs for pipe and access holes in the south wall of the old pumping plant.

At the new pumping plant the roof access ladder and platform were installed. The pumping plant continued to operate satisfactorily.

August 2009

Slayden moved the sedimentation bar impacting the intake structure downstream. One day of in-water work was needed to complete this work.

At the pipe bridge the pipe supports were grouted. GPID adjusted the air burst differential in the operating system to correct the problem with pump shut downs at lower river flows.

Slayden dismantled their material storage shed used for the pumping plant construction. The new Qwest pull box was installed allowing the installation of the phone lines.

September 2009

Slayden began work on the old pumping plant intake plugs by removing the bulkheads and mucking out the invert.

October 2009

Slayden continued work on the old pumping plant intake plug and removed the right coffer dam down to water level.

The radial gates were opened to lower the reservoir on October 2, 2009 at which time the right side upstream cofferdam was removed and bays 7, 8 and 9 were demolished.

Slayden began excavating the pilot channel when the reservoir was lowered. The pilot channel was completed and the right side coffer dam was breached on October 9, 2009.

On the south side Slayden removed the remaining piers on the south side and removed the south fish ladder. They placed the concrete plugs in the outlet works and all other concrete plugs in the remaining structure were completed.

November 2009

Slayden placed the last two lifts for the old pumping plant intake plugs. The old crib dam found in the channel was removed. All fencing and seeding was completed. All cleanup was completed.

Schedule and Concerns

The contract work was found to be substantially completed on November 20, 2009, one month ahead of the December 19, 2009 contract completion date.

The interagency group met on September 22, and November 5, 2009 to discuss the progress of the work.

The weather this period was seasonable.

Work Cessation – None; modifications to the south fish ladder provided fish passage during July through the final drawdown on October 2, 2009. The fish ladder was demolished following the breaching of the coffer dam; this work was added to the contract by modification.

Fish Screen – The screen covers were installed by the Grants Pass Irrigation District at the end of the irrigation season prior to the coffer dam breaching.

Isolation and Fish Recovery – On October 2, 2009 at the south fish ladder during the final drawdown of the reservoir. On October 9, 2009 at the south upstream river bank immediately following the coffer dam breaching.

Photos

View of sediment bar at the intake structure. 7/22/09

View of sediment bar at the intake structure. 7/22/09

View of the outlet works channel. 7/22/09

Photo to the West after the crew installed the silt barrier below the intake structure and gravel bar.

Photo to the NW. The sediment bar is being moved downstream.

Photo to the East of the slide gate plug concrete after stripping the forms.

Photo to the South as the two man crew push the dolly loaded with grout out to the middle of the bridge.

Touch-up painting scrapes and dings on the air tank.

To the SE of the upper portion of the South fish ladder and the upper cooling pond.

Photo to the West as the forklift lowers the bulkhead onto the G4 intake.

The contractor's storage tent is dismantled except for the frame work.

Photo looking to the East of the upper section of the South fish ladder. The lake gauge is reading 2.2 ft. and the river flow is at 1720 CFS.

Photo to the SW to the South side of the access road as the mini backhoe excavates the hole for the new Qwest vault.

Photo to the West as the crew places gravel and backfill around the Qwest vault.

Photo to the west of the staging area, the crew is using the fork lift to load scrap metal from the project on to a semi to be hauled off site.

Photo to the East in the staging area as the crew completes loading the storage tent.

Photo to the East at the existing pumping plant as the crew pulls the top U/S stop logs and set dewatering pumps into the bays.

View of Temporary fish ladder entrance. 9/22/09

Removing the right side cofferdam. 9/30/09

Removing the right side cofferdam. 9/30/09

Remains of bay 6. 9/30/09

To the South as the backhoe completes excavating the inside of the sheet pile coffer dam.

ODFW salvaging fish from the South fish ladder after the lake was drained.

Radial gates 100% open after draining the lake.

View of river sediment that the contractor has pushed in front of the D/S outlets of the old pumping plant.

Photo to the South as the backhoe unearths the I-beam whalers along the U/S sheet pile wall.

Photo looking to the NW from across the river during the removal of the right coffer dam.

To the South at the end of the shift as the Axis crew pulls the last piling from the corner on the D/S side of the sheet pile coffer dam.

Photo to the NW as the 460 Link-belt backhoe continues the pilot channel.

Photo to the NW as the Axis Crane crew pulls the last sheet pile from the sheet pile coffer dam on the right side of the river.

Photo to the SE as the 600 Komatsu backhoe with hoe ram begins breaking out the D/S side of bays 7 and 8.

Photo to the South as the 600 Komatsu backhoe with hoe ram continues breaking concrete in the D/S half of bays 7 and 8.

Link-belt backhoe continuing to excavate the pilot channel U/S of the dam.

Photo to the SW as the 600 Komatsu hoe ram continues breaking concrete in bay 8.

Photo looking to the East where the two backhoes to the right are completing demolition of the dam over to pier 10.

Photo to the West of the old pumping plant intake structure and the first lift of the plug walls.

Photo to the East as the contractor continues excavating the pilot channel.

Photo looking to the SE of the completed foundation clean up of bays 8 and 9.

The right side cofferdam is breached and extending the breach to the pilot channel. 10/9/09

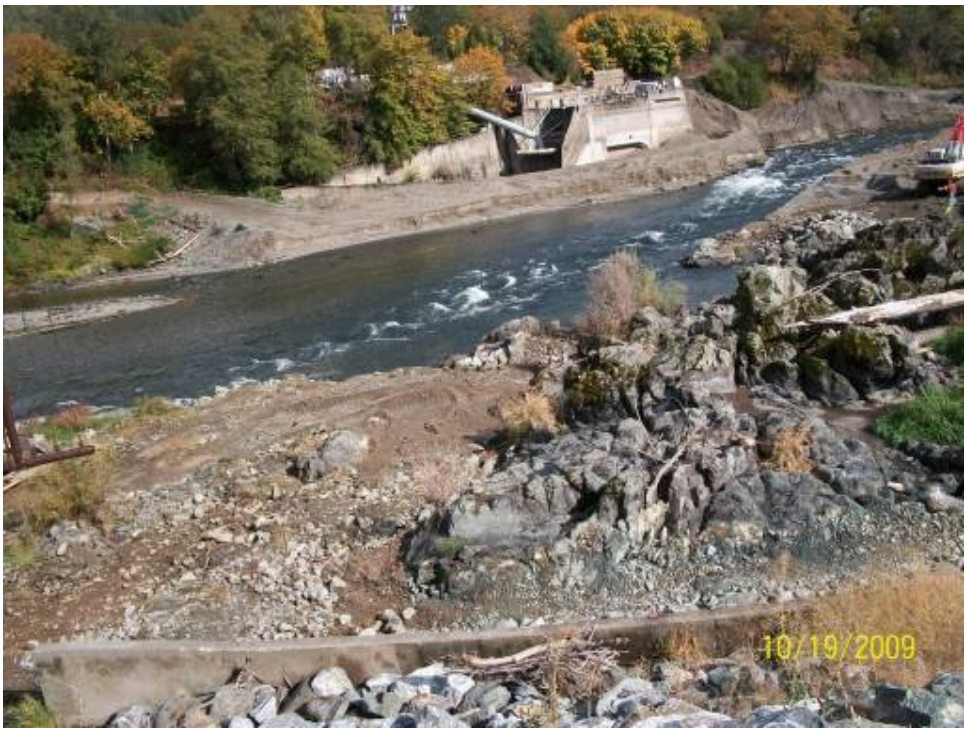
Downstream view of the pilot channel following the breaching. 10/9/09

Photo looking to the NW as the 200 Komatsu with hoe ram begins breaking out the South fish ladder.

Photo looking to the West as the contractor places more ¾" gravel in the PP yard.

View of the rock filled timber crib cofferdam found under approximately ten feet of sediment. This structure dates to the original construction of Savage Rapids Dam.

Photo to the NE inside of the North radial gate bay as the crew pressure washes the old concrete and gate.



View to the NE of the lower end of the fish ladder. Note the temporary wooden and metal section of the ladder are gone as well as all the sand bags.

View to the SE as the crew install rebar and form the pipe and man way plugs in the North end of the remaining dam section.

View to the NW of the crew pumping concrete in the North radial gate bay.

To the North as the backhoe begins to cast riprap into the D/S area of the radial gate bays.

To the SE as the 460 Link-belt backhoe completes placing the rip rap over the D/S side of the radial gate bays.

Photo looking upstream as the crew places the concrete in the lower North fish ladder gate opening.

View to the East of the new river channel.

View to the SW of the contractor's crew adding bird's mouths to the wall forms for the 3rd lift of the old pumping plant intake structure plugs.

View to the SW of the crew continuing with the 3rd lift of concrete in the old plant intake structures.

View to the West along the old pumping plant of the new chain link fence alignment.

View to the West of the upper fish ladder plug at the old pumping plant after form removal.

View to the NE below the remaining portion of the existing dam. The backhoe has uncovered the end of the highway drain pipe that extends through the dam.

View to the West of the removal of the 3rd lift forms.

View to the North as the backhoe removes logs from the old timber crib coffer dam.

View to the East of the new river channel after removal of the timber crib coffer dam. Note that the white water at the crib dam site is gone.

View to the SW of the seeded area around the intake structure and West wall.

View to the SE of the edge of the intake structure area and the areas of the South fish ladder that where seeded and mulched.

View to the North of seeding and mulching on the North side of the river.

View to the West of the completed fence on the North side of the old pumping plant and the area all cleaned and dressed.

At the end of the shift the gate posts have been set in concrete and the fencing crew is setting all the chain link post in concrete.

View to the NE of the new pole gate and new chain link fencing. The fence on the left goes up past the WEASKUINN gate.

View to the East of the new river channel from the bridge. The water keeps working its way to the corner of the old pumping plant and the channel is getting wider all the way up.