Change Request Number: 11LGS012: LGS SW operations
Date: February 9, 2011
Proposed by: NWW
Location of Change- LGS Section 2.3.1.2
Proposed Change:
Section 2.3.1.2. Fish Passage Period (April 1 through December 15)

g. Spillbay Weir (SW)

1. Spring fish passage season will start with the spillbay weir deployed in the SW-HI position [elevation 622 msl]. It will be operated in this position the entire spill season unless the conditions described in paragraph #2 below are met.
2. Change to SW-LO position three normal working days prior to the date on which the most recent stream flow forecast (STP) projects daily average flows above 85 kcfs for at least seven consecutive days or if actual flows indicate that 85 kcfs will be exceeded before the next STP forecast is issued, as determined by NWW Water Management staff. The position change will take place within three normal working days after RCC has issued the operating project a teletype. ~~and within three normal working days after the above trigger conditions have been satisfied.~~ During the period when the change is occurring, the uniform spill pattern will be used, with the exception that spillbay 2 will not be used for safety reasons. The trigger to change to the SW-LO position is further based on the following:
    a. review of the juvenile fish passage at Lower Granite and Little Goose dams to prevent changes during a peak in outmigration;
    b. coordination with regional fish managers.
3. After the spring freshet has passed, change to the SW-HI position after river discharge falls below 85 kcfs and streamflow forecasts indicate river discharges to remain below 85 kcfs for at least seven consecutive days. The spillbay weir will not be operated in the SW-LO position for the rest of the season, even if river discharges subsequently increase above 85 kcfs. The position change will take place within three normal working days after RCC has issued the operating project a teletype. ~~The position change will take place after RCC has issued the operating project a teletype and within three normal working days after the above trigger conditions have been satisfied.~~ During the period when the change is occurring, the uniform spill pattern will be used, with the exception that spillbay 2 will not be used for safety reasons. The trigger to change to the SW-HI position is further based on the following:
    a. a review of the juvenile fish passage at Lower Granite and Little Goose dams to prevent changes during a peak in outmigration;
    b. coordination with regional fish managers.

4. When daily average discharge drops below 35 kcfs in the summer while the SW-HI is installed and forecasts predict flows to remain below 35 kcfs for at least three days, the SW will be closed for the remainder of the spill season. The SW will be closed within three normal working days and coordinated through CENWW-OD-T.
5. Special turbine unit 1 operations will change from the upper 25% of the 1% of best efficiency range to the full 1% of best efficiency range when project discharge is below 38 kcfs and above 31 kcfs.
6. The uniform spill pattern, with no spillbay weir operating, will be used as an alternate pattern when the spillbay weir must be closed for any reason, such as when switching from one SW crest elevation to the other, or when the SW is removed from service due to low river flows.

Reason for Change: This change form prepared after the 2011 Jan 31-Feb 4 regional coordination trip to ERDC. The ERDC trip occurred to identify spill operations that will successfully pass juvenile fish and not delay adult fish passage.

Comments from others:

IDFG- Kiefer said it appears in Table 1 that at 78 kcfs river flow, Unit 1 is operated at the higher range and the other units are evened out. He suggested loading turbines to the south shore as much as possible within the 1% efficiency range. For 78 kcfs river flow that would mean operating Unit 1 at the higher end, Unit 2 in the middle and Unit 3 & 4 at the lower end of the efficiency range. He would like to move the loading to the south shore. Section #2- prefers 70, will agree to 80, not so happy with 90. Section #3- prefers 85.

CRITFC- #2 should be 80 instead of 90. If NWW can guarantee 1 working day, CRITFC will agree to 85. Dykstra respond that the Corps could not guarantee that the weir would be reconfigured within 1 working day of satisfying the trigger conditions because several variables may not allow this to occur (weather, wind, other previously scheduled critical workload, etc). However, in 2010 the Corps was able to reconfigure the weir within one working day of the request and we will do our best to continue this in 2011.

NOAA- Hevlin agreed with Lorz.

BPA- section #2- 80 is too low. Sweet would rather focus on the adult survival and doesn't feel there is much risk to juveniles.

WDFW- ok with 90 in #3.

Hevlin, Kiefer, Dykstra, Sweet, Lorz further discussed the change form. Sweet felt adult passage ~~was~~ could be degraded with the ~~high~~ low crest weir.

Record of Final Action: Approved at February 2011 FPOM, with changes.