## OFFICIAL COORDINATION REQUEST FOR NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE- 17 LGS 12 Change in TSW crest height COORDINATION DATE- June 26, 2017 PROJECT- Little Goose Dam RESPONSE DATE- by 3 PM on June 27, 2017

- **1. Description of problem:** Little Goose Dam is currently operating the temporary spillway weir (TSW) in the low crest (SW-Lo) position in accordance to FPP (LGS 2.3.2.7.b), as flows have been above 85 kcfs. Recent flow forecasts indicate that Little Goose inflow will drop below 85 kcfs on June 29 and remain below 85 kcfs, requiring the TSW elevation to be adjusted as prescribed in the FPP (LGS 2.3.2.7.b.3.). Little Goose would like to adjust crest height on the TSW to the high position (SW-Hi) on June 28, one day prior to the anticipated 85 kcfs inflow due to staff availability and maintenance work load.
- **2. Type of outage required:** Spillbay 1 will be OOS to adjust crest height of spillway weir and spillbay 2 will be OOS to ensure the safety of workers at spillbay 1.
- 3. Dates of impacts/repairs: June 28, 2017
- 4. Length of time for repairs: The TSW will be OOS from 07:00 until 17:00 on June 28, 2017.
- **5. Impact on fish facility operation:** Juvenile fish facility will continue to collect and transport juvenile salmon and steelhead.
- **6. Impact on project operations:** Spillbay 1 and 2 will be closed during the majority of the day on June 28, 2017. Juvenile fish passage will continue through the juvenile fish bypass system and adjacent spillbays.
- **7. Analysis of potential impacts to fish:** Attraction flow for adult passage from turbine units, particularly units 1 and 2 will continue. Attraction to NPE adult entrances could be impacted during the spillbay outage as these entrances are directly adjacent to spillbay 1 and 2. The 10-year average adult fish passage for June 28 consists of 756 chinook, 31 steelhead and 12 sockeye salmon. The current run for chinook is very low with only 94 chinook passing Little Goose on June 26 (Graph 1). Additionally, steelhead passage has ceased and the sockeye have not yet reached Little Goose, with only 1 across Lower Monumental Dam. Juvenile fish passage has also slowed down, with collection counts under 10,000 juvenile salmon and steelhead a day and the total smolt index indicating a similar decreasing trend (Graph 2).
- **8. Final judgement on scale of expected impacts:** Adult passage is currently very low as we are past peak spring chinook passage and sockeye salmon have not yet begun to cross Little Goose. Juvenile migrants will not be able to move downstream through the TSW during this operation. Collection counts and smolt index numbers indicate that we are currently past the peak of the outmigration so juvenile fish numbers should continue to decrease.
- 9. Comments from agencies.

From: Tom Lorz To: Setter, Ann L CIV USARMY CENWW (US) Subject: [Non-DoD Source] Re: LGS TSW crest adjustment Date: Tuesday, June 27, 2017 9:48:18 AM I think this would be ok.

From: Kiefer,Russell To: Setter, Ann L CIV USARMY CENWW (US) Subject: [Non-DoD Source] RE: LGS TSW crest adjustment Date: Tuesday, June 27, 2017 11:47:41 AM Ann, We have no objections. Russ

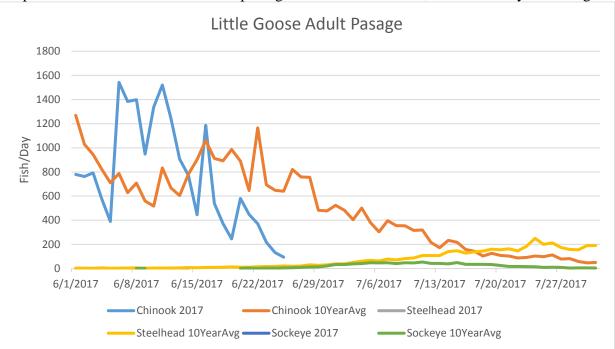
From: Bill Hevlin - NOAA Federal To: Setter, Ann L CIV USARMY CENWW (US) Cc: Bill Hevlin; Trevor Conder; Gary Fredricks Subject: [Non-DoD Source] Re: LGS TSW crest adjustment Date: Tuesday, June 27, 2017 2:39:07 PM Ann, we support the corps proposal to raise the spillway weir at Little Goose Dam. This action should improve tailrace conditions for adult sockeye passage. Bill Hevlin NOAA Fisheries

From: Jay Hesse To: Setter, Ann L CIV USARMY CENWW (US) Subject: [Non-DoD Source] RE: LGS TSW crest adjustment Date: Tuesday, June 27, 2017 5:01:20 PM Ann - I am ok with this adjustment. jay "Knowledge is a tool, and like all tools, its impact is in the hands of the user(s)" -- Dan Brown, The Lost Symbol Jay Hesse Research Division

## **10. Final coordination results:**

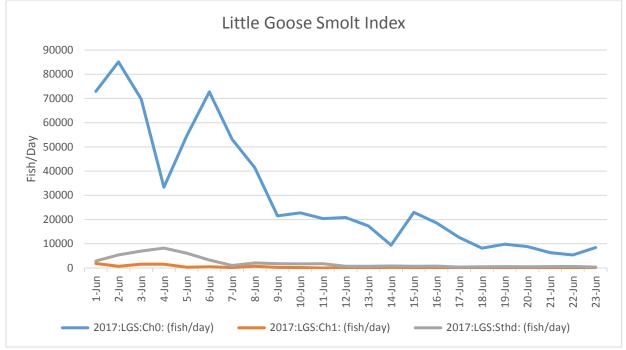
Approved.

11. After Action update: Maintenance crews were unable to adjust crest height on the temporary spillway weir on June 28 due to safety concerns associated with high winds. Crews completed the height adjustment on June 29. Spillbay 1 and 2 were out of service from 09:00 until approximately 15:00. During that time, alternate uniform spill pattern outlined in the FPP (Table LGS-11) was followed. The temporary spillway weir is currently set at the high crest elevation and spill is distributed in accordance to the FPP (LGS 2.3.2.7.a. and Table LGS-9).



Graph 1: Adult salmon and steelhead passage at Little Goose Dam, 2017 and 10-year average.

Graph 2: Smolt index Little Goose Dam, 2017.



Please email or call with questions or concerns. Thank you,

Scott St. John Little Goose Dam Project Biologist Scott.St.John@usace.army.mil