

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

**COORDINATION TITLE-** 18 LMN 07 MOC Unit 1 Digital Governor  
Installation/Commissioning/Model Validation

**COORDINATION DATE-** 6/27/18

**PROJECT-** Lower Monumental Dam

**RESPONSE DATE-** 7/12/18

**1. Description of the problem**

Due to other capital project conflicts, digital governor installation on Lower Monumental unit 1 is anticipated to begin May 28, 2019. This work had originally been scheduled to occur prior to March 1st 2018 after completion of the return to Kaplan effort. But due to contractual delays, the installation of the digital governor was postponed until after work was completed at Lower Granite by the contractor. Commissioning and testing of the new equipment is anticipated to begin during the week of June 30th and is expected to take a total of four days. This work was previously coordinated and approved but now needs to be re-scheduled for 2019.

Commissioning is required to validate proper operation. This will require running unit 1 outside of the 1% peak efficiency range. The commissioning may also decrease spill when necessary to run the unit at the higher end as part of the process. The process is expected to take three (3) days to complete. An additional day will be required to complete NERC required Model validation which will also necessitate operation outside the 1% peak efficiency range.

**2. Type of outage required** – Beyond a routine unit outage, no specific outage is required.

**3. Impact on facility operation** – Test operations will occur outside peak 1% operating efficiency for unit 1.

**4. Impact on unit priority** – During this outage, Unit 2 will become the priority unit while construction is occurring. Otherwise, this outage should have minimal impact on unit priority as Unit 1 is the priority unit.

**5. Impact on spill** – During normal fish passage season summer operations, Lower Monumental is expected to spill a constant 17kcfs per Appendix E of the Fish Passage Plan. The amount of spill may be decreased at times during commissioning dependent on incoming river flows.

**6. Dates of impacts/repairs** – Unit 1 commissioning is scheduled to begin approximately 3 August, 2019 or as soon as Doble testing is completed and is expected to last 4 days.

## 7. Analysis of potential impacts to fish

Upstream adult passage and juvenile outmigration numbers are historically low during this time period. On 1 July, the 10 year average of adult fish passing Lower Monumental Dam daily is 477 Chinook salmon and 77 steelhead (Figure 1). Juvenile outmigration at this time will consist mainly of subyearling Chinook salmon. The 10 year average for 1 July is 6,435 smolts per day passing Lower Monumental. Figure 2 shows the daily subyearling chinook smolt index for Lower Monumental over the last 10 years.

Adult passage should not be affected by running unit 1 outside of 1% peak efficiency. When unit 1 returns to service, it will be the first priority unit to support adult passage.

Juvenile salmonids outmigrating during this time may be exposed to passage through a turbine that is being operated outside of 1% peak efficiency. However, the subyearling Chinook salmon numbers are historically low during this period.

## 8. Expected Impact Analysis

Expected impacts on juvenile and adult passage are low during this period of commissioning. Both adult and juvenile passage numbers are historically low during this time period.

## 9. Comments from agencies

**From:** [Kiefer, Russell](#)

**To:** [Setter, Ann L CIV USARMY CENWW \(US\)](#);

**Subject:** [Non-DoD Source] RE: 18 LMN 07 MOC Unit 1 Digital Governor Installation/Commissioning/Model Validation

**Date:** Wednesday, June 27, 2018 1:33:28 PM

Ann,

Request the adult passage section include SR Sockeye.

Recommend a period of increased spill (TBD at FPOM) before each day of testing to maintain juvenile protection

levels anticipated with the FOP.

Thanks,

Russ

**From:** [Morrill, Charles \(DFW\)](#)

**Subject:** [Non-DoD Source] RE: 18 LMN 07 MOC Unit 1 Digital Governor Installation/Commissioning/Model Validation

**Date:** Wednesday, June 27, 2018 1:37:02 PM

Ann,

I concur with Russ's recommendation

Charlie

**From:** [Tom Lorz](#)

**To:** [Setter, Ann L CIV USARMY CENWW \(US\)](#)

**Subject:** [Non-DoD Source] RE: 18 LMN 07 MOC Unit 1 Digital Governor Installation/Commissioning/Model Validation

**Date:** Wednesday, July 11, 2018 3:23:03 PM

Is there any way to push this back some ie the beginning of August at a minimum, when juv passage is low and adult passage is also low? Current weekly average of collected count numbers is in the 1000's for unclipped and near 5000 for clipped so delaying this some would not be a bad idea since at these flows only a couple of units will be running increasing the chance of putting fish through the unit.

Can this work not be done after spill is shut off, what is the impact?

**From:** [Erick VanDyke](#)

**Subject:** [Non-DoD Source] RE: 18 LMN 07 MOC Unit 1 Digital Governor Installation/Commissioning/Model Validation

**Date:** Wednesday, July 11, 2018 3:07:52 PM

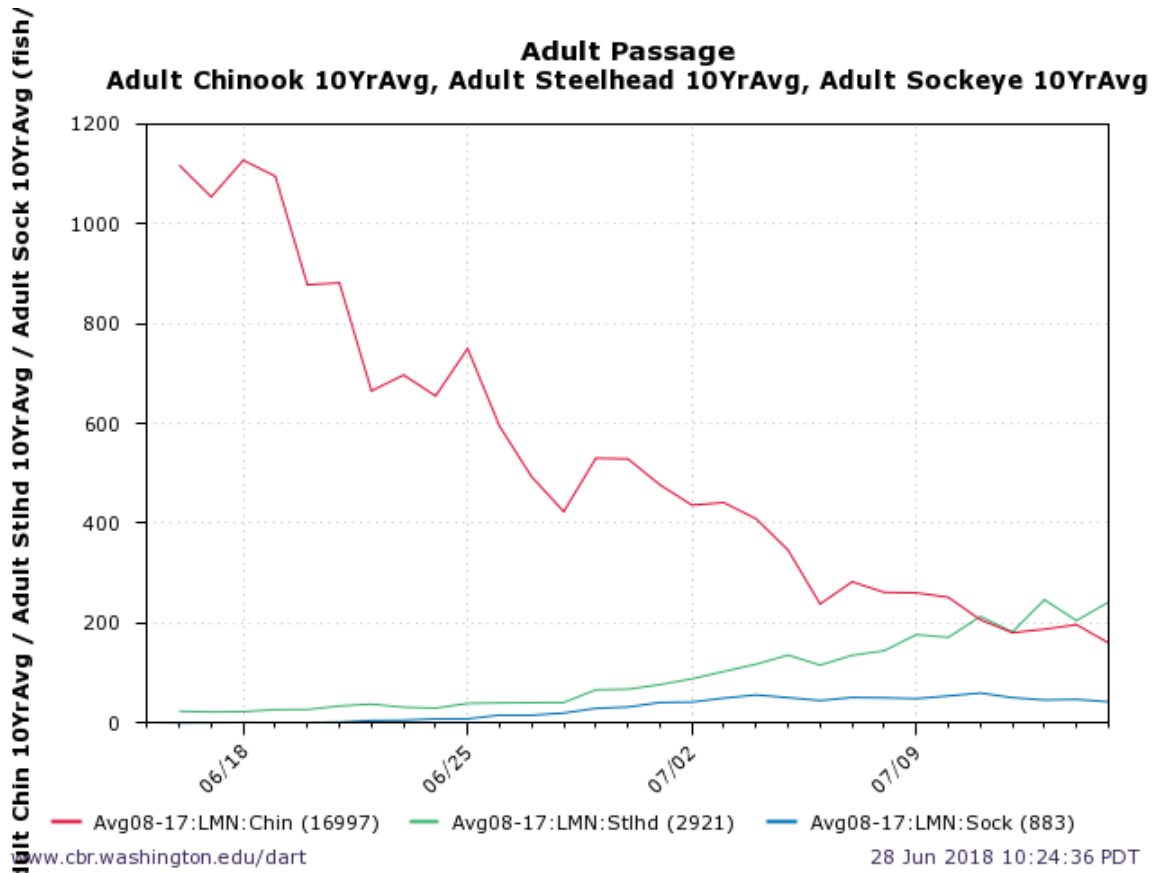
Ann, How does this contracting slip impact the completion of the other two unit outages scheduled for July and October 2018 at Lower Monumental?

**10. Final coordination results**

**FPOM requested (7-12-18 mtg) that this be scheduled immediately following when Doble testing is completed**

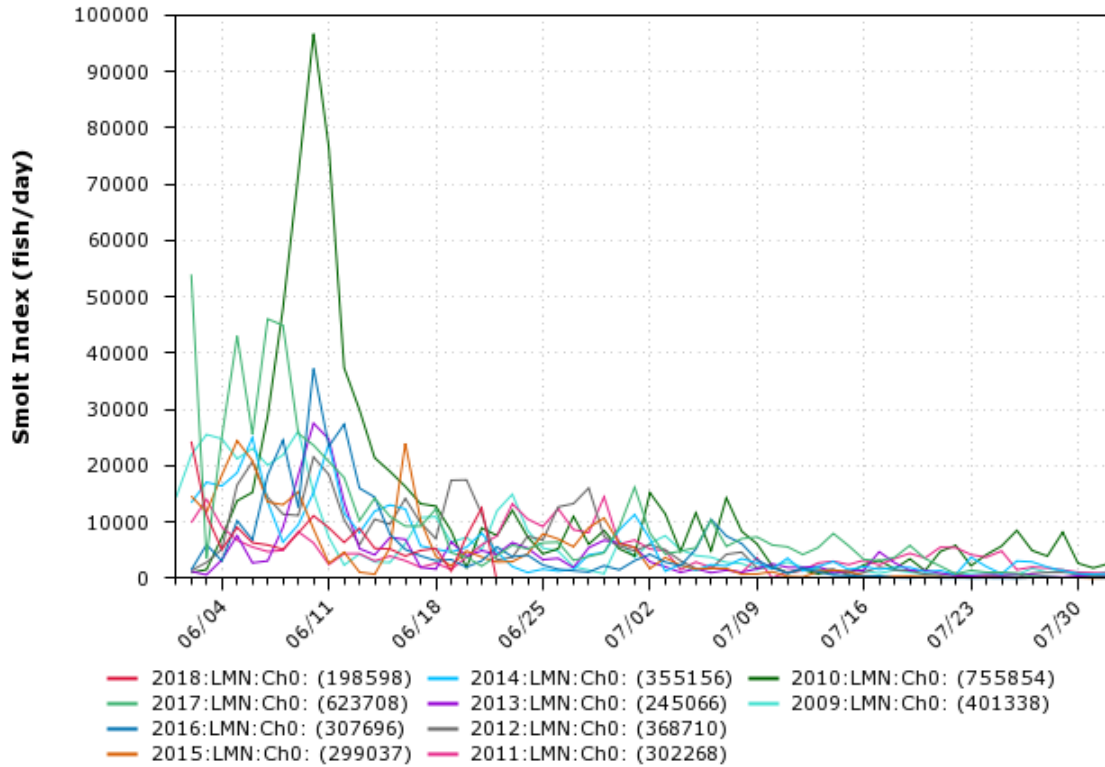
**11. After Action update**

**Figure 1. 10 year average of adult Chinook, sockeye and steelhead passage.**



**Figure 2. Smolt index for affected time period over last 10 years.**

## Smolt Index



[www.cbr.washington.edu/dart](http://www.cbr.washington.edu/dart)

25 Jun 2018 07:23:33 PDT

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

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Lower Monumental Dam  
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