

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

**COORDINATION TITLE** – 22 LWG 03 Navlock Guide wall

**COORDINATION DATE** – 9 March 2022

**PROJECT** - Lower Granite Dam

**RESPONSE DATE** – 23 March 2022

**Description of the problem-** Replacement of one of the upstream guide wall primary cables is required as soon as possible. LWG upstream navlock guidewall was inspected the end of February 2022. The dive inspection revealed one of the primary cables was severed and the floating guide wall was being held in place by the safety line. A failure would result in an extended spillway outage to retrieve and repair the wall and possibly damage the spillway should it break loose. To prevent this, LWG is working with Walla Walla District to obtain funds and expedite contracting to install a temporary line to prevent safety failure.

This work will require dive operations in the forebay in front of the spillway to attach the temporary line to the existing anchor point. It is expected the work will take about three days to complete. Spillway outages will need to be scheduled for two consecutive days during this work window to support safe dive activities. LWG is optimistically hoping for funding and contracting to be in place prior to April 15 with the earliest date possibly being March 28.

Spillway outages will be between 0700 and 1630 hours with the two dates to be determined when the contract process is complete. It is expected that dive operations requiring spillway outages will be less than 10 hours. The two-day outage is being scheduled and coordinated to account for any unforeseen events such as high turbidity, high wind or excessive debris. In the event debris load creates unsafe dive condition an emergency debris spillway will occur prior to the dive.

**Type of outage required-** Two consecutive days of scheduled spillway outages from 0700-1630 hours.

**Impact on facility operation (FPP deviations)-** Spring spill operations will be impacted.

**Impact on unit priority-** N/A

**Impact on forebay/tailwater operation-** Different tailrace conditions will occur with no spill.

**Impact on spill-** Spill will not occur during dive operations.

**Dates of impacts/repairs-** Two days for repair completion TBD.

**Length of time for repairs-** Two days.

**Analysis of potential impacts to fish**

1. 10-year average passage by run during the period of impact for adults and juvenile listed species, as appropriate for the proposed action and time of year;  
The ten-year average daily juvenile passage by species is in Table 1.
2. Statement about the current year's run (e.g., higher or lower than 10-year average);  
No data available on the current year's run.
3. Estimated exposure to impact by species and age class (i.e., number or percentage of run exposed to an impact by the action);  
Percent of the run by species is listed in Table 1. The number of smolts passing LWG and percent of the run impacted will be less than half of what is listed in Table 1. Based on juvenile hourly counts at LWG smolts primarily pass the dam during the nighttime hours.
4. Type of impact by species and age class (increased delay, exposure to predation, exposure to a route of higher injury/mortality rate, exposure to higher TDG, etc.);  
Some delay may occur as juvenile fish are routed from the spillway to the bypass system. The spillway will be returned to service daily when dive work is complete minimizing impact to smolt passage.

**Summary statement - expected impacts:** N/A

**Downstream migrants:** Juvenile fish will be routed to the bypass system during the spillway outage.

**Upstream migrants (including Bull Trout):** The adult fish ladder and collection channel will not be impacted. River flow will be channeled through the powerhouse during dive operations.

**Lamprey:** N/A

**Comments from agencies:**

**From:** Jay Hesse <jayh@nezperce.org>  
**Sent:** Wednesday, March 09, 2022 9:04 AM  
**To:** Peery, Christopher A CIV USARMY CENWW (USA)  
<Christopher.A.Peery@usace.army.mil>  
**Subject:** [Non-DoD Source] RE: 22 LWG 03 MOC Navlock guidewall cable replacement

Will the Corps be proposing some form of mitigation to make up for the lost surface passage? e.g early spill start, forgone performance standard spill periods.....

Jay

**From:** Peery, Christopher A CIV USARMY CENWW (USA)  
**Sent:** Wednesday, March 09, 2022 12:24 PM  
**To:** Jay Hesse <jayh@nezperce.org>  
**Subject:** RE: 22 LWG 03 MOC Navlock guidewall cable replacement

Jay,

If the work can be completed before 3 April it would be possible to add RSW surface spill to make up for a spill outage. After 3 April, I think the only option would be to add spill days in September.

Chris

**From:** Jay Hesse <jayh@nezperce.org>  
**Sent:** Wednesday, March 09, 2022 3:32 PM  
**To:** Peery, Christopher A CIV USARMY CENWW (USA) <Christopher.A.Peery@usace.army.mil>  
**Subject:** [Non-DoD Source] RE: 22 LWG 03 MOC Navlock guidewall cable replacement

If it is after April 3<sup>rd</sup>, I think there needs to be further discussion about in-season adjustment options.

**From:** Peery, Christopher A CIV USARMY CENWW (USA)  
**Sent:** Friday, March 11, 2022 8:42 AM  
**To:** Jay Hesse <jayh@nezperce.org>  
**Cc:** Jonathan Ebel <jonathan.ebel@idfg.idaho.gov>  
**Subject:** RE: 22 LWG 03 MOC Navlock guidewall cable replacement

Jay,

The Corps dive master says the RSW can operate during the dive work. We will need to work out with the dive contractor (TBD) if their safety requirements will allow the work to occur with the RSW in operation. So best case scenario is that the work will proceed before 3 April and can be completed in one day, so no outage required. Worse case is that the work occurs after 3 April with RSW flow or a full powerhouse outage up to 2 days, depending on the contractor. In the latter we can discuss options for making up spill but current flow projections may limit those options. And the FOP also includes contingencies for modifications to spill for navigation safety concerns, which this would fall under. We can discuss further once a contractor is lined up.

Chris

**From:** VANDYKE Erick S \* ODFW <Erick.S.VANDYKE@odfw.oregon.gov>  
**Sent:** Wednesday, March 09, 2022 9:55 AM  
**To:** Peery, Christopher A CIV USARMY CENWW (USA) <Christopher.A.Peery@usace.army.mil>  
**Subject:** [Non-DoD Source] RE: 22 LWG 03 MOC Navlock guidewall cable replacement

Thanks for the update Chris. Some questions that come to mind for me include:

- What was the day in late February 2022 when the safety cables were inspected?
- On what date prior to late February 2022 (time before last inspected) were the safety cables inspected?
- Is the temporary fix being proposed because of funding issues or some other reason?
- Is a permanent fix requiring more than a cable replacement?
- Is the cable severed near the surface, middle or at anchor connection?
- What size cable is used to anchor the guidewall?

Hope these help frame the topic discussion tomorrow.

Erick Van Dyke  
Oregon Department of Fish and Wildlife  
Ocean Salmon and Columbia River Program  
Fish Passage/Mitigation Technical Analyst  
Office: 971-673-6068

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[erick.s.vandyke@odfw.oregon.gov](mailto:erick.s.vandyke@odfw.oregon.gov)

**From:** Peery, Christopher A CIV USARMY CENWW (USA)  
**Sent:** Wednesday, March 09, 2022 1:34 PM  
**To:** VANDYKE Erick S \* ODFW <Erick.S.VANDYKE@odfw.oregon.gov>  
**Subject:** RE: 22 LWG 03 MOC Navlock guidewall cable replacement

Erick,

Safety cables were inspected February 22-23.  
Previous inspection was made by ROV in 2020.  
Divers stated the break was 15 feet below the surface.  
We believe the anchor cable is 2 1/8 inch diameter.

As stated in a previous email, the temporary fix is using material that is available on short notice (2 week estimated delivery) and the permanent fix will be to replace all four anchor cables.

Chris

**From:** VANDYKE Erick S \* ODFW <Erick.S.VANDYKE@odfw.oregon.gov>  
**Sent:** Wednesday, March 09, 2022 1:37 PM  
**To:** Peery, Christopher A CIV USARMY CENWW (USA)  
<Christopher.A.Peery@usace.army.mil>  
**Subject:** [Non-DoD Source] RE: 22 LWG 03 MOC Navlock guidewall cable replacement

Thanks Chris.

**From:** Morrill, Charles (DFW) <Charles.Morrill@dfw.wa.gov>  
**Sent:** Wednesday, March 09, 2022 10:00 AM  
**To:** Peery, Christopher A CIV USARMY CENWW (USA)  
**Subject:** [Non-DoD Source] RE: 22 LWG 03 MOC Navlock guidewall cable replacement

Hi Chris, Elizabeth,

Thanks for MOC explaining the situation. Obviously the sooner the new safety cable can be installed, the better.

I understand safety is paramount and I presume that is why all the spillbays need to be closed. I am curious though as to where the anchoring point is located in front of the spillways as I wondered first if the TSW could be operated and not pose a risk to the divers.

Thank you

Charlie

**From:** Peery, Christopher A CIV USARMY CENWW (USA)  
**Sent:** Wednesday, March 09, 2022 10:54 AM  
**To:** Morrill, Charles (DFW) <Charles.Morrill@dfw.wa.gov>; Baus, Douglas M CIV USARMY  
**Subject:** RE: 22 LWG 03 MOC Navlock guidewall cable replacement

Charlie and Co.,

As noted in the MOC, if at all possible we will try to get the dive contractor lined up to complete the cable replacement before start of spill. Funding has been identified and the project manager is

working to get it in place so the contract solicitation can be advertised. There is a chance that the RSW can remain in operation during the dive work, but until we have the contractor identified we cannot discuss this option.

We will be making a temporary rope replacement because of the urgency of the situation and time required to obtain supplies. The safety rope being used has a two week delivery time. The replacement cables require 6 to 9 month delivery time and all four cables will be replaced for the permanent fix when that occurs later.

Chris

**From:** Morrill, Charles (DFW) <Charles.Morrill@dfw.wa.gov>  
**Sent:** Wednesday, March 09, 2022 11:23 AM  
**To:** Peery, Christopher A CIV USARMY CENWW (USA)  
**Cc:** Morrill, Charles (DFW) <Charles.Morrill@dfw.wa.gov>  
**Subject:** [Non-DoD Source] RE: 22 LWG 03 MOC Navlock guidewall cable replacement

Thank you Chris for the additional information !

Charlie

**From:** Holdren, Elizabeth A CIV USARMY CENWW (USA)  
<Elizabeth.A.Holdren@usace.army.mil>  
**Sent:** Wednesday, March 09, 2022 11:09 AM  
**To:** Peery, Christopher A CIV USARMY CENWW (USA)  
**Subject:** RE: 22 LWG 03 MOC Navlock guidewall cable replacement

Folks,

Replacement of all four cables will be completed during the 2022-2023 winter maintenance outage.

The anchor point is on the north side of the spillway and, as Chris said, operation the RSW may be an option however LWG would still like to coordinate with the RSW out of service in the event the contractor/dive master deems RSW operation unsafe under river conditions that particular day.

Smile,

E

**From:** Morrill, Charles (DFW) <Charles.Morrill@dfw.wa.gov>  
**Sent:** Wednesday, March 09, 2022 11:22 AM  
**To:** Holdren, Elizabeth A CIV USARMY CENWW (USA) <Eric.Grosvenor@usace.army.mil>;  
**Cc:** Morrill, Charles (DFW) <Charles.Morrill@dfw.wa.gov>  
**Subject:** [Non-DoD Source] RE: 22 LWG 03 MOC Navlock guidewall cable replacement

Thank you for that update Elizabeth !!!

;-)

Charlie

**From:** Tom Lorz <lorz@critfc.org>  
**Sent:** Wednesday, March 09, 2022 10:14 AM  
**To:** Peery, Christopher A CIV USARMY CENWW (USA)  
<Christopher.A.Peery@usace.army.mil>

**Subject:** [Non-DoD Source] Re: 22 LWG 03 MOC Navlock guidewall cable replacement

I would strongly encourage we get this work done prior to the start of spill. We can work around the overshoot spill but shutting of day spill much past early April will not be looked upon favorable.

If this overlaps with the start of spill is there no way to at least keep the RSW going since it is the farthest spillbay away? Looks like Thursdays FPOM is going to be more fun than normal.

thanks

Tom Lorz  
CRITFC

**From:** Peery, Christopher A CIV USARMY CENWW (USA)  
**Sent:** Thursday, March 24, 2022 11:29 AM  
**To:** [FPOM]  
**Subject:** RE: 22 LWG 03 MOC Navlock guidewall cable replacement

FPOM,

This an update to the 22LWG03 MOC. A contractor has been arranged to conduct the dive work to replace the severed navlock cable. The contractor will be onsite Monday, 28 March to work out the dive plan with the project. For safety reasons there will be a full spillway lock-out during the dive work. It is anticipated the dive work will occur during 28-30 March but is contingent on flows, turbidity, and when the replacement rope is delivered. The last overshoot spill period is scheduled for Tuesday, 29 March. Every effort will be made to make up these 4 hours of spill if it needs to be postponed for the dive work. Let me know if there are any questions.

Chris

**Final coordination results:** Consensus reached

**After Action update:** LWG rescheduled overshoot spill from Tuesday to Monday to accommodate dive work March 28 and March 29. The spillway was OOS from 1000-1400 hours March 28 and from 0700-1420 hours March 29. Temporary repairs were completed at 1420 hours March 29. Permanent replacement of all four navlock guide wall cables is scheduled to be completed during the 2022-2023 winter outage.

Please email or call with questions or concerns.

Thank you,  
Elizabeth Holdren  
Lead Supervisory Fisheries Biologist  
Walla Walla District  
Lower Granite Project  
Dworshak Dam  
Ph. (509)843-2263

**Table 1. Average 10-year Smolt passage 28 March thru 15 April (2012-2021), average annual smolt passage, and proportion of run.**

	Yearling Chinook	Sub- yearling Chinook	Steelhead	Sockeye	Coho
10-year average	388,274	9,944	363,096	4,138	4,148
Average 10- year total	3,269,868	897,367	2,874,744	79,344	112,094
% 10-year annual average	11.9%	1.1%	12.6%	5.2%	3.7%