OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE – 21 LWG 06 AWS Pump 1 Return to Service
COORDINATION DATE - 20 April 2021
PROJECT - Lower Granite Dam
RESPONSE DATE – 28 April 2021

Description of the problem- Lower Granite normally operates the fish ladder with two auxiliary water supply (AWS) pumps in service and one in standby mode. Currently pumps 2 and 3 are in operation and AWS pump 1 is out of service due to a thrust bearing failure described in MFR 21LWG05. Repairs to the thrust bearing were anticipated to take up to 3 weeks and have now been completed. Pump 1 needs to be brought online for operational reliability testing and to allow the mechanical crew to move forward with lower guide bearing work on AWS pump 3. LWG is prioritizing completion of this work as soon as it is approved to minimize impacts to spring Chinook passage.

Type of outage required- AWS pumps will be taken out of service to swap discharge bulkheads from pump 3 to pump 1 during which the fishway will be out of criteria. If the test of pump 1 is successful, AWS pumps 1and 2 will remain in operation.

Impact on facility operation (FPP deviations)- The two-hour AWS pump outage will impact adult fish ladder channel/tailwater head differentials and depth over the entrance weirs. In the event AWS pump 1 has a problem, an addition 2 hours outage will be needed to swap discharge bulkheads back for pump 3 operation.

Impact on unit priority- N/A

Impact on forebay/tailwater operation- N/A

Impact on spill- N/A

Dates of impacts/repairs- 3 May 2021 from 1300-1500 hrs. If testing AWS pump 1 is unsuccessful, the crew will have enough remaining time in the work day to exchange bulkheads back to 2 and 3 pump operation.

Length of time for repairs- The bulkhead swap and test are estimated to be completed in two hours or less.

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 10 year average adult passage for May 3 is 508 adult Chinook, 7 Jack Chinook, and 26 steelhead. Work is expected to take less than 2 hours and the estimated proportion of fish is based on the total day counts. Based on the 16 hour count day about 32 adult Chinook, 1 jack Chinook, and 2 steelhead may be impacted during the stoplog swap.

2. Statement about the current year's run (e.g., higher or lower than 10-year average);

   2021 adult salmon and steelhead runs are projected to be below the 10-year averages.

3. Estimated exposure to impact by species and age class (i.e., number or percentage of run exposed to an impact by the action);

   Based on the 16 hour fish count day and the 10 year average fish passage about 0.51% adult Chinook, 0.03% jack Chinook, and 0.03% steelhead. The work is scheduled outside of the adult fish passage daily peak hours to minimize the impacts.

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.);

   Repairs are scheduled after 1300 hours to reduce the potential for increased adult delays during the adult morning peak migration hours. No impacts to juvenile passage are expected.

Summary statement - expected impacts on:

Downstream migrants: N/A

Upstream migrants (including Bull Trout): Potential minor delay in adult fish passage due to reduction in attraction flow.

Lamprey: N/A

Comments from agencies:

Final coordination results:

After Action update:

Please email or call with questions or concerns.

Thank you,
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Lower Granite Project
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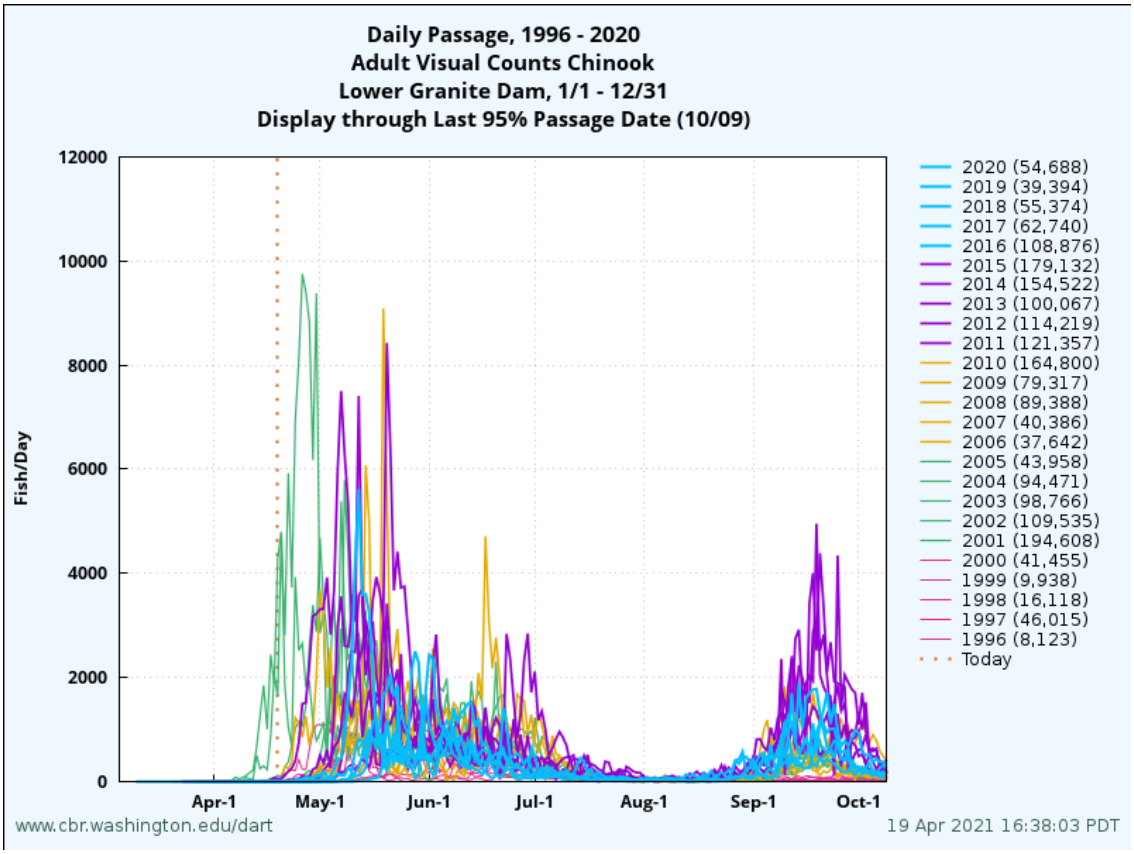
Daily Passage, 1996 - 2020
Adult Visual Counts Chinook
Lower Granite Dam, 1/1 - 12/31
Display through Last 95% Passage Date (10/09)
Fish/Day
12000
10000
8000
6000
4000
2000
0
Apr-1
May-1
Jun-1
Jul-1
Aug-1
Sep-1
Oct-1
2020 (54,688)
2019 (39,394)
2018 (55,374)
2017 (62,740)
2016 (108,876)
2015 (179,132)
2014 (154,522)
2013 (100,067)
2012 (114,219)
2011 (121,357)
2010 (164,800)
2009 (79,317)
2008 (89,388)
2007 (40,386)
2006 (37,642)
2005 (43,958)
2004 (94,471)
2003 (98,766)
2002 (109,535)
2001 (194,608)
2000 (41,455)
1999 (9,938)
1998 (16,118)
1997 (46,015)
1996 (8,123)
Today
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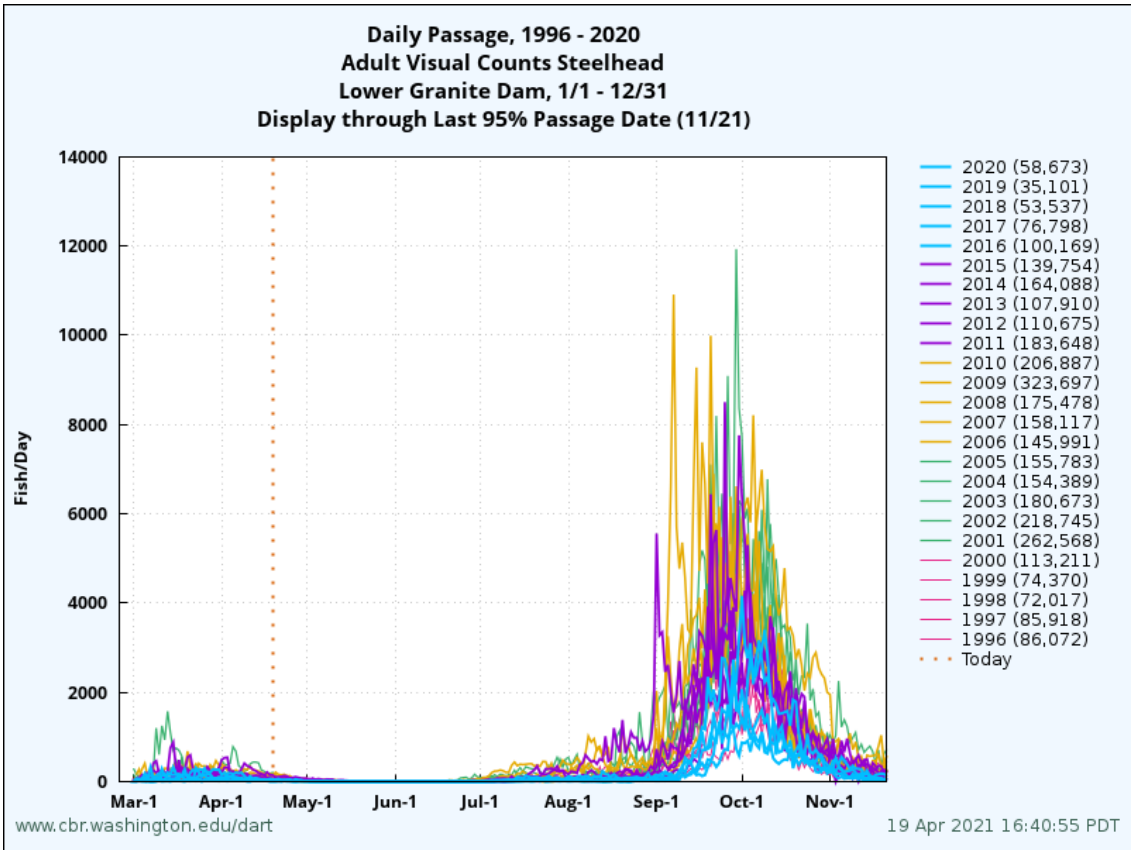
Daily Passage, 1996 - 2020
Adult Visual Counts Steelhead
Lower Granite Dam, 1/1 - 12/31
Display through Last 95% Passage Date (11/21)
Fish/Day
14000
12000
10000
8000
6000
4000
2000
0
Mar-1
Apr-1
May-1
Jun-1
Jul-1
Aug-1
Sep-1
Oct-1
Nov-1
2020 (58,673)
2019 (35,101)
2018 (53,537)
2017 (76,798)
2016 (100,169)
2015 (139,754)
2014 (164,088)
2013 (107,910)
2012 (110,675)
2011 (183,648)
2010 (206,887)
2009 (323,697)
2008 (175,478)
2007 (158,117)
2006 (145,991)
2005 (155,783)
2004 (154,389)
2003 (180,673)
2002 (218,745)
2001 (262,568)
2000 (113,211)
1999 (74,370)
1998 (72,017)
1997 (85,918)
1996 (86,072)
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