

MEMORANDUM FOR THE RECORD 17 LMN 05 Separator Exit Debris Blockage**SUBJECT: Juvenile Salmonid Mortalities due to Debris Blockage in the Separator Exit**

Small woody debris caused a blockage in the B-side (larger fish) of the juvenile fish separator exit at Lower Monumental Dam on 24 May, 2017. The blockage resulted in the mortality of 283 juvenile salmonids. The debris blockage most likely began in the early morning hours but due to the location and nature of the debris was not detected until around 0700 hours when flow decreased in flume downstream of the separator. This area is checked frequently by the technicians, however this debris blockage was not discovered immediately due to the way it formed, location, and overall low numbers of fish passing through the system at the time. The technicians will increase inspections and the flow exiting the separator hourly for any sign of future obstructions.

Clipped Yearling Chinook	Unclipped Yearling Chinook	Clipped Steelhead	Unclipped Steelhead	Clipped Coho	Unclipped Coho	Clipped Sockeye	Unclipped Sockeye	Total
98	51	26	23	13	25	38	9	283

- A. Species – Chinook salmon *Oncorhynchus tshawytscha*, Steelhead *Oncorhynchus mykiss*, Coho salmon *Oncorhynchus kisutch* and Sockeye salmon *Oncorhynchus nerka*.
- B. Origin – Hatchery and Wild
- C. Length – N/A
- D. Marks and tags – All fish were examined for PIT tags. Of the 283 mortalities 11 were PIT-tagged. PIT-tag codes will be uploaded to PTAGIS.
- E. Marks and Injuries found on carcasses – Descaling and injuries associated with debris impingement.
- F. Cause and Time of Death – Debris blockage between the separator exit and flume downstream of the separator exit on the morning of 24 May 2017.
- G. Future and Preventative Measures – Project staff will increase monitoring to hourly inspections of the separator exit and the flow levels in the flume downstream of the separator exit.
- H. Pictures – None taken.
- I. Regional Comments Received and Response –

-----Original Message-----

From: Kiefer, Russell [mailto:russ.kiefer@idfg.idaho.gov]
 Sent: Thursday, May 25, 2017 10:54 AM
 To: Hockersmith, Eric E CIV USARMY CENWW (US)
 <Eric.E.Hockersmith@usace.army.mil>

Cc: Hebdon, Lance <lance.hebdon@idfg.idaho.gov>; Fryer, Derek S CIV CENWW CENWD (US) <Derek.S.Fryer@usace.army.mil>; Setter, Ann L CIV USARMY CENWW (US) <Ann.L.Setter@usace.army.mil>; Pinney, Chris A CIV USARMY CENWW (US) <Chris.A.Pinney@usace.army.mil>; Laughery, Ryan O CIV USARMY CENWW (US) <Ryan.O.Laughery@usace.army.mil>; Bill.Hevlin@noaa.gov; Trevor, Conder - NOAA Federal <trevor.conder@noaa.gov>
Subject: [Non-DoD Source] RE: Official Coordination 17 LMN 05 MFR

Eric,

As you likely know, IDFG does not support size separation of smolts in JBS systems. This type of event is just one of the reasons.

Why are we size separating smolts at LMO?

Thanks,
Russ

-----Original Message-----

From: Hockersmith, Eric E CIV USARMY CENWW (US)
Sent: Tuesday, May 30, 2017 10:13 AM
To: 'Kiefer, Russell' <russ.kiefer@idfg.idaho.gov>
Cc: Hebdon, Lance <lance.hebdon@idfg.idaho.gov>; Fryer, Derek S CIV CENWW CENWD (US) <Derek.S.Fryer@usace.army.mil>; Setter, Ann L CIV USARMY CENWW (US) <Ann.L.Setter@usace.army.mil>; Pinney, Chris A CIV USARMY CENWW (US) <Chris.A.Pinney@usace.army.mil>; Laughery, Ryan O CIV USARMY CENWW (US) <Ryan.O.Laughery@usace.army.mil>; Bill.Hevlin@noaa.gov; Trevor, Conder - NOAA Federal <trevor.conder@noaa.gov>
Subject: RE: Official Coordination 17 LMN 05 MFR

Russ,

We follow the guidance in the Fish Passage Plan under section 5.2.3. "Barge Loading: Whenever possible, small and large fish will be loaded in separate compartments in barges." Since Little Goose and Lower Monumental have the capability to separate small fish from large fish we collect and transport small fish in barge holds separate from the large fish which are collected in different raceways and loaded into different barge holds than the small fish. Since Lower Granite does not have the ability

to separate small fish from large fish they are loaded into their own barge holds which are not used for fish from either Little Goose or Lower Monumental.

The debris plug occurred in the separator exit pipe and was not related to the separation of small fish and large fish but rather the plumbing between the separator exit and downstream flumes that transport fish to the raceways.

Eric Hockersmith
Fishery Biologist
U.S. Army Corps of Engineers
Walla Walla District
201 N 3rd Ave.
Walla Walla, WA 99362
Phone: 509-527-7122
Cell: 509-520-4350

Sincerely,
Chuck Barnes
Project Fisheries Biologist
Lower Monumental Dam
(509) 282-7211
Charles.A.Barnes@USACE.army.mil