

MEMORANDUM FOR THE RECORD

SUBJECT: 18JDA04 MFR – Line 1 Emergency Outage 7/16-7/19/18.

PROBLEM:

Line 1 (main units 1-4) was forced out of service on 7/16 at 1440 and returned to operation on 7/19 in the late afternoon. Main units 5-7 were already out of service. For the four day period, main units 1-7 were out of service.

The following is a copy of email send by JD OPM to Portland District describing the problem which forced JDA Line 1 out of service:

“Boss - this is very early notification and not much info developed - here is what we have:

- we took Line 1 down at 1440 to investigate a Leak and Arcing in one of the Bushings on Line 1.
- BPA has been notified and Crews here are working the issue.
- Immediate impact is the temporary loss of MUs 1-4 - again, coordinated with BPA.
- MUs 1-2 are important part of JD Unit priority and are operating at Speed/No Load providing some of the required flows.

More relevant info will be submitted when available.

R/Kevin”

A significant backflow/ eddy was visually observed in the JD Tailrace BRZ, along the Oregon shore while Line 1 was OOS due to the lack of discharge from the south half of PH (MUs 1-7 were all OOS.) It is likely that smolts from the JBS/ SMF outfall were pulled upstream by the backflow instead of moving downstream causing increased predation and migration delay.

Per the adult fish counts and fish distribution between the two JD Fishways (South and North) there was no indication of any impact to the adult fish passage (the numbers of upstream migrants and their distribution between South and North Fishways didn’t change significantly before, during and after the Line 1 outage.)

The repairs of the faulty Bushing on Line 1 by JD Maintenance were successful and Line 1 returned back to service on 7/19 late PM as originally planned for, in the message above. It was a challenging job which required cooperation among numerous JD engineers and maintenance workers, and only because of their collective skills and knowledge that the repair was accomplished in the shortest amount of time possible. It is hoped that the repaired Line 1 will remain in service through the end of 2018 fish passage season and the repaired bushing will be replaced with new parts during the 2018/2019 winter maintenance season.

- A. Species – Sub-yearlings are currently migrating through JD.
- B. Origin – unknown
- C. Length – juvenile sizes
- D. Marks and tags – N/A
- E. Marks and Injuries found on carcass – N/A
- F. Cause and Time of Death – N/A
- G. Future and Preventative Measures – New Bushing along with other critical parts will be installed during the upcoming winter maintenance season to assure a trouble free performance of Line 1 during the 2109 Fish Passage Season.

Sincerely,
JD Fisheries