

MEMORANDUM FOR THE RECORD

SUBJECT: 15JDA10 MFR – Approximately 20 White Sturgeon (*Acipenser transmontanus*) found / appear to be trapped in the downstream / roller gate slots of 16-B and 16-C.

Updated: 18 September 2015

PROBLEM:

On Friday, 09/11/15 an approximately 20 white sturgeon (*A. transmontanus*) were found milling around inside of the downstream gatewells of MU16 after that unit returned to service, after its digital governor installation. All fish are alive, in good condition and in no immediate danger.

We believe that the sturgeon entered the draft tube from tailrace and then swam up through the open wicket gates into the scroll case, while MU 16 was OOS for digital governor installation (17 August though 21 September 2015.) Only the head gates were installed for this work (no tail logs were installed) and MU 16 was full of water at all times. Also, the MU 16 intake trashrack spacing of 6 inches prevents a larger size fish exiting into the forebay.

JDA Project will dewater MU 16 to perform the fish salvage this week. Update - JDA Project unwatered MU 16 scroll case to salvage the trapped sturgeon on 16 September. The salvage operation lasted approximately 30 minutes, once personnel accessed the scroll case. Besides the 6 mortalities (all small, less than 1 foot), there were 45 live sturgeon (2 to 4 feet) found and salvaged. All sturgeon were lifted from the scroll case to the intake deck through the downstream Gatewell slot and released into the forebay. 45 live sturgeon were released in excellent condition.

MU 1 is slated next for its digital governor installation, but we think there is a strong chance that the sturgeon's entry/ entrapment is limited to the north Powerhouse units, MU 15 & 16 only (11 JD units have been already completed and only two mentioned above had sturgeon found inside.) However, if sturgeon are also found in MU1, JDA Project will modify the digital governor install process by installing the Tail Logs, before the digital governor work commences for the remaining 4 turbines.

- A. Species – Estimated total for both slots is over 20 White Sturgeon (*A. transmontanus*). Update - 6 small size White Sturgeon (*A. transmontanus*) mortalities
- B. Origin – The Dalles pool / JD tailrace
- C. Length – Ranging from approximately 45-145cm. Update - Less than 1 foot in length/ small size.
- D. Marks and tags – None observed
- E. Marks and Injuries found on carcass – N/A Update - mortalities had signs of violent abrasions/ impacts from the flow occurring in the area of the drain's grating.
- F. Cause and Time of Death – All fish are alive in good condition and in no immediate danger. Update - 6 mortalities were found on the drain's grating. The time is unknown.
- G. Future and Preventative Measures – Modify the digital governor installation for the future JDA MUs as to keep strict limit of up to 15 minutes when the wicked gates might be open for any electrical/ mechanical testing purposes. And two hours waiting period will be required before another 15 minute opening is allowed.

Sincerely,
JDA Fisheries

Comments:

CRITFC (Lorz voicemail): This seems similar to U15. We have concerns about sturgeon getting trapped during Digital Governor testing. We may need to re-evaluate the protocols in an effort to find ways to keep sturgeon from becoming trapped in the units.

ODFW: -----Original Message-----

From: Erick VanDyke [mailto:erick.s.vandyke@state.or.us]

Sent: Tuesday, September 15, 2015 2:59 PM

Subject: [EXTERNAL] RE: FPOM: Official Coordination - MFR 15JDA10 (UNCLASSIFIED)

Seems a similar MFR occurred in the not so recent past, perhaps more discussion following August 14 FPOM meeting was in order after all. It should go without reiteration that continuing the same protocol between MU15 and MU16 was not an adequate response for keeping sturgeon out of the roller gate slots at John Day Dam during digital governor installation. It has become a harder pill to swallow that recommended preventative actions were deemed impractical while the process was repeated without any corrections or any semblance of a change. As with the last occurrence, "It would be helpful to get a photo prospective of the a MU1516 gate well area. In addition, I suspect there will be bio-information collected from fish successfully removed and returned to the tailrace upon salvage efforts, and estimates of size and number of white sturgeon not salvaged. It probably goes without saying that the "Last Step Option" is not preferred. Overall, the faster sturgeon are removed and released back into the tailrace the better."

Additionally, tail log installation may have been helpful addition for MU16, so it is nice to see you are adding that to the next four MU OOS. It may be another measure to relook at the 15 minute wicket gate opening criteria, which I recall we were informed was followed strictly for MU15, and identify the efficacy of strictly implementing an even shorter duration (i.e., only time necessary to test electrical/mechanical—less than 15 minutes).

Erick Van Dyke

NWP-----Original Message-----

From: Zyndol, Miroslaw A NWP

Sent: Tuesday, September 15, 2015 4:16 PM

Subject: RE: FPOM: Official Coordination - MFR 15JDA10 (UNCLASSIFIED)

JD is planning to salvage the sturgeon by dewatering MU16 tomorrow.

Is it OK to release the fish into forebay, which is easier for us or should we try to release them back into tailrace?

-Releasing into tailrace will involve an additional transfer and transport in our portable fish tank.

-Releasing into forebay will be accomplished by a portable crane, which will only need to swing its boom from the roller gates slot over to the adjacent forebay.

Thanks for the help!

Miro Zyndol

ODFW-----Original Message-----

From: Erick VanDyke [mailto:erick.s.vandyke@state.or.us]

Sent: Tuesday, September 15, 2015 5:20 PM

Subject: [EXTERNAL] RE: FPOM: Official Coordination - MFR 15JDA10 (UNCLASSIFIED)

Oregon can tolerate releasing entrained sturgeon into the forebay as long as it reduces handling and out of water transfer times. An accurate accounting of the events and subsequent fish condition would be expected

as was requested last time. Scanning fish for PIT tags and other biological collection would be appreciated too.

Erick Van Dyke

ODFW-----Original Message-----

From: Erick VanDyke [mailto:erick.s.vandyke@state.or.us]

Sent: Friday, September 18, 2015 8:44 AM

Subject: [EXTERNAL] RE: FPOM: Official Coordination - MFR 15JDA10 (UNCLASSIFIED)

I would like to request an courtesy update on the events and progress of dewatering MU16 and the changes made to the approach starting with the next MU1 (i.e., installation of stop logs or like apparatus to block yet another repeat of sturgeon entrapment in the gate wells). Did things go as planned for MU16 dewatering and salvage? Are efforts being made to modify the inadequate measures you implement for MU15 and MU16 that address blocking access to the draft tube route? Waiting for a third event to occur before taking action is not an acceptable path forward.

Specifically I would like to see, at a minimum, that the MFR replace the statement in paragraph 5, last sentence "If sturgeon are found in MU1, JDA Project will modify the digital governors install process by installing the Tail Logs, before the digital governor work commences for the remaining 4 turbines" and replace it with "The JDA project will modify the digital governor install process by installing tail logs before any further digital governor work commences." It seems more and more difficult to accept the corps recognition that this is expected to occur again but are not implementing measures to address the know and expected problem until it occurs again (see paragraph 5 sentence 1).

Thanks for your continued efforts to keep the regional groups up to date on this important issue.

Erick Van Dyke

NWP-----Original Message-----

From: Zyndol, Mirosław A NWP

Sent: Monday, September 21, 2015 9:51 AM

Subject: FW: FPOM: Official Coordination - MFR 15JDA10 (UNCLASSIFIED)

Importance: High

Tammy and Kevin,

I had preliminarily agreed with Mr. Decker plan NOT to install the tail logs for MU1 digital governor installation starting today, 9/21. This is based on the fact that out of 11 units already completed only two, MU 15 & 16 contained sturgeon. We believe that there is a strong chance that MU1 won't have sturgeon as it was the case with other 9 already completed units.

Kevin and Norm,

Now the Oregon's FPOM rep who is demanding that the tail logs are installed in MU 1. In my view this is politics, but wouldn't it be prudent to yield and install tail logs in MU1 to avoid any future criticism of the COE on this issue (?)

Thank you for your prompt response !

MZ

NWP-----Original Message-----

From: Moynahan, Kevin NWP

Sent: Monday, September 21, 2015 11:17 AM

Subject: RE: FPOM: Official Coordination - MFR 15JDA10 (UNCLASSIFIED)

I back the current plan not to install TLs upfront on MU 1.

Tail logs and head gates are in scarce supply at the project - and we are engaged in numerous activities at the moment that direct the use of this equipment. New tail logs and head gates are on the way, but not expected to be here for the next several years.

The risk assessment on this issue mitigates against putting the tail log in MU 1. At the same time, this should not pose unreasonable risks to sturgeon.

- our biologists do not anticipate sturgeon entering the draft tube - as they did MUs 15 and 16. It is believed the conditions that existed at MUs 15 and 16 do not exist at MU 1 - therefore we do not anticipate sturgeon to enter the unit.

- if sturgeon do enter MU 1, we will spin the unit and remove them similar to actions undertaken at MUs 15 and 16.

- having a spare tail log - the one not installed in MU 1 - makes it easier to respond in the case of an oil spill to entrap any oil that may discharge from a unit.

- we continue to look at other operational options for removing any sturgeon from MU 1 - if necessary - to prevent a repeat of the situation at MUs 15 and 16.

Kevin