

**MEMORANDUM FOR THE RECORD**

**SUBJECT: 18JDA01 MFR – MU8 B Gatewell Juvenile Salmonids Mortalities Due to Plugged JBS Orifice.**

**PROBLEM:**

On April 23, 2018 AM during the daily/ routine inspection, a JD Fisheries technician found 35 juveniles salmonids mortalities floating on the surface of Gatewell 8B. JD Operations and Structural crews were notified and an STS underwater camera inspection of the gatewell was performed. An additional 25 juvenile salmonids mortalities were found in the gatewell just before this inspection.

The inspection found the orifice completely plugged up by debris, which was immediately removed by JD Structural crew using a grapple hook with an attached rope. An additional 12 juvenile salmonids mortalities were found in the gatewell after the debris removal process.

**UPDATE 09 MAY 2018:** A subsequent investigation, on 24 April determined that the SMF SCADA Auto Cycling of the 48 orifices had failed. No one was aware of the failure for possibly a week or longer. This was likely a result of the recent SCADA computer update. The manual cycling of all 48 orifices commenced immediately, 3 X per day, on 25 April AM and continued until the SCADA Auto Cycling was restored by JD Electrical on 30 April. This lack of orifice cycling was most likely the reason for the plug. JDA has now implemented a daily visual check of the automatic orifice cycling to prevent this from happening again.

Information collected is provided below:

- A. Species – Chinook1 unclipped – 10      Steelhead unclipped – 5  
                          Chinook1 clipped   - 41      Steelhead clipped - 16  
                          Total Chinook1   - 51      Total Steelhead   - 21
- B. Origin – mix of clipped and unclipped
- C. Length – juvenile sizes
- D. Marks and tags – None
- E. Marks and Injuries found on carcass – Severe descaling but no other signs of any traumatic, physical injuries.
- F. Cause and Time of Death – Stress due to the overcrowded conditions and inability to exit the gatewell. Some very fresh mortalities from today, 23 April and a few between one and three days old.
- G. Future and Preventative Measures – A daily visual check of the automatic orifice cycling has been added to the inspection.

Sincerely,  
JD Fisheries

Agency Comments:

**Comments on the update:**

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

From: Morrill, Charles (DFW) [mailto:Charles.Morrill@dfw.wa.gov]

Sent: Friday, May 11, 2018 2:14 PM

To: Kovalchuk, Erin H CIV USARMY CENWP (US) <Erin.H.Kovalchuk@usace.army.mil>;

Subject: [Non-DoD Source] RE: FPOM: Official Coordination 18JDA01 MFR updated

All,

After the prior MOC and concerns expressed over the inspection of orificies .. another event ... thankfully the impact was small compared to the prior event ... however I find it very disappointing that this event occurred ... Why were there no manual inspections to follow up on the SMP SCADA update and ensure it was working properly ... ?

Charlie

**Comments on the original MFR**

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

From: Morrill, Charles (DFW) [mailto:Charles.Morrill@dfw.wa.gov]

Sent: Wednesday, April 25, 2018 1:20 PM

To: Blane Bellerud - NOAA Federal <blane.bellerud@noaa.gov>; Kovalchuk, Erin H CIV USARMY CENWP (US) <Erin.H.Kovalchuk@usace.army.mil>

Subject: [Non-DoD Source] RE: FPOM: Official Coordination 18JDA01 MFR MU 8B gatwell juv mortalities

Hi folks,

I'm not comfortable with 2 as a minimum especially during peak abundance periods for any species, run, rear type.

Pending debris loads and juvenile abundance more frequent inspections should be performed. I would suggest at intervals of not more than 3 hours apart and perhaps pending upon project observations, as frequently as every 2 hours.

I would like to see a discussion on this topic at the next FPOM meeting.

Charlie

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

From: Tom Lorz [mailto:lort@critfc.org]

Sent: Wednesday, April 25, 2018 10:55 AM

To: Kovalchuk, Erin H CIV USARMY CENWP (US) <Erin.H.Kovalchuk@usace.army.mil>

Subject: [Non-DoD Source] RE: FPOM: Official Coordination 18JDA01 MFR MU 8B gatwell juv mortalities

Thanks for the heads up, it seems we need to revisit the inspection requirements, since it says they should be inspected 2x a day and the orifices should be flushed 3 times a day and more during high debris loads???? Need to add to FPOM agenda and get some back ground how long had it been since the orifice had been inspected/flushed. Need to insure that we have coverage going forward as the migration and flows start to increase.

Thanks

Tom Lorz

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

From: Ed Meyer - NOAA Federal [mailto:ed.meyer@noaa.gov]

Sent: Wednesday, April 25, 2018 8:00 AM

To: Cordie, Robert P CIV CENWP CENWD (US) <Robert.P.Cordie@usace.army.mil>

Cc: Zyndol, Miroslaw A CIV CENWP CENWD (US) <Miroslaw.A.Zyndol@usace.army.mil>; Blane Bellerud - NOAA Federal <blane.bellerud@noaa.gov>; Kovalchuk, Erin H CIV USARMY CENWP (US) <Erin.H.Kovalchuk@usace.army.mil>;

Subject: Re: [Non-DoD Source] Re: FPOM: Official Coordination 18JDA01 MFR MU 8B Gatewell juv mortalities

Understood. Thanks for the clarification. I hear you on the aching joints part.

On Wednesday, April 25, 2018, Cordie, Robert P CIV CENWP CENWD (US)

<Robert.P.Cordie@usace.army.mil <mailto:Robert.P.Cordie@usace.army.mil> > wrote:

For the record :) my complaints were to improve the quality of inspections rather than doing 'drive bys' and just reading numbers. And it pertained only to adult fishways. Gatewells were on a separate inspection schedule.

I've since moved on and now complain about other things. Mainly control measures for birds and non-native fish predators. (And sometimes aching joints)

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

From: Ed Meyer - NOAA Federal [mailto:ed.meyer@noaa.gov <mailto:ed.meyer@noaa.gov> ]

Sent: Wednesday, April 25, 2018 6:23 AM

To: Zyndol, Miroslaw A CIV CENWP CENWD (US) <Miroslaw.A.Zyndol@usace.army.mil <mailto:Miroslaw.A.Zyndol@usace.army.mil> >

Cc: Kovalchuk, Erin H CIV USARMY CENWP (US) <Erin.H.Kovalchuk@usace.army.mil

Subject: Re: [Non-DoD Source] Re: FPOM: Official Coordination 18JDA01 MFR MU 8B Gatewell juv mortalities

I guess that I'm confused. At one time the FPP called for project inspections of the fishways three times a day (I think). I remember because Cordie use to complain about having to make inspections so often. I wasn't aware that this has changed. Has the FPP been changed? Maybe the project needs to go back to inspecting 3 times per day (once per shift).

Ed

On Tuesday, April 24, 2018, Zyndol, Miroslaw A CIV CENWP CENWD (US)

<Miroslaw.A.Zyndol@usace.army.mil <mailto:Miroslaw.A.Zyndol@usace.army.mil>

<mailto:Miroslaw.A.Zyndol@usace.army.mil <mailto:Miroslaw.A.Zyndol@usace.army.mil> > > wrote:

Blane et al.

I concur and will implement twice per day gatewell inspections during the peak smolt migration season, 1 April thru 15 September ( coincides with JD sampling season duration) starting tomorrow 4/25/18.

Thanks for the help !

MZ

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

From: Blane Bellerud - NOAA Federal [mailto:blane.bellerud@noaa.gov]

Sent: Tuesday, April 24, 2018 3:47 PM

To: Kovalchuk, Erin H CIV USARMY CENWP (US) <Erin.H.Kovalchuk@usace.army.mi>  
Subject: [Non-DoD Source] Re: FPOM: Official Coordination 18JDA01 MFR MU 8B  
gatewell juv mortalities

What precisely does diligently mean? I need a proposed interval between inspections. I would suggest at least twice per 24 hour period.

Blane