OFFICIAL COORDINATION REQUEST FOR
NON-ROUTINE OPERATIONS AND MAINTENANCE

COORDINATION TITLE - 14 MCN 14 Oregon Ladder Orifice Flow Operations

COORDINATION DATE- 17 June 2014

PROJECT - McNary Lock and Dam

RESPONSE DATE - 18 June 2014, 12:00 pm.

Description of the problem: We just learned that there is a sunken log directly above the picketed leads of the Oregon fish ladder. It threatens to move into the picketed leads when we raise them to clean them. We desire to place the ladder into orifice flow in order to access the log and remove it. This will reduce the ladder exit flow from 230 CFS to less than 100 CFS, enabling crews to remove the log with grappling hooks on a crane.

If possible, we would like to do this at the same time we are reducing the flows from the fish pumps to allow an inspection of the lamprey structure downstream (already approved coordination - 14 MCN 13 Camera Inspection of Lamprey Passage Structure), currently scheduled for Wednesday (tomorrow), June 18, at 1300 hours. This will also make it easier to conduct the camera inspection.

Right now it is unsafe to raise the picketed leads for cleaning, as the log could travel downstream and jam the leads. See picture immediately below.

Type of outage required: Enter into orifice flow for up to 1 hour.

Impact on facility operation: Minimal. This operation will reduce orifice flow by about 130 CFS for up to 1 hour. Work will be conducted in the early afternoon during a low fish passage time, per the diel charts. Also, adult returns are about ¼ of what they were last month.

Dates of impacts/repairs: Planned for June 18; we will do it later if we can't get the approval in time.

Length of time for repairs: Less than 1 hour.

Expected impacts on fish passage: Minimal. Total ladder flow is normally over 4180 CFS. Work will be conducted during a time of minimal adult passage.

Comments from agencies:

-----Original Message-----
From: Bailey, John C NWW
Sent: Wednesday, June 18, 2014 7:33 AM
To: 'Tom Lorz'
Subject: RE: [EXTERNAL] Re: MOC: 14 MCN 14 Oregon Ladder Orifice Flow Operations

Tom:

I am told that fish is an adult shad. McNary biologists aren't sure why it died, but they speculate debris may had something to do with it.

John B.

-----Original Message-----
From: Tom Lorz [mailto:lort@critfc.org]
Sent: Tuesday, June 17, 2014 4:52 PM
To: Bailey, John C NWW
Subject: [EXTERNAL] Re: MOC: 14 MCN 14 Oregon Ladder Orifice Flow Operations

Yes this needs to get done asap, is that fish sleeping or what.

tom

-----Original Message-----
From: Bailey, John C NWW
Sent: Tuesday, June 17, 2014 3:13 PM
To: Bailey, John C NWW; 'Gary Fredricks - NOAA Federal'

Subject: RE: [EXTERNAL] Re: MOC: 14 MCN 14 Oregon Ladder Orifice Flow Operations

Gary:

Bobby Johnson believes this fish mortality is an adult shad.

John B.

-----Original Message-----
From: Bailey, John C NWW
Sent: Tuesday, June 17, 2014 3:01 PM
To: 'Gary Fredricks - NOAA Federal'
Subject: RE: [EXTERNAL] Re: MOC: 14 MCN 14 Oregon Ladder Orifice Flow Operations

Gary:

I didn't know about the dead fish near the ladder picketed leads until I saw the photo today. It definitely caught my attention, and highlighted the need for action on the log problem. It is hard to say without a closeup look to determine species identification, origin, cause etc. I have doubts whether that fish is recoverable or even there anymore. I will check with Carl and Bobby regarding additional information on this fish.

John B.

-----Original Message-----
From: Gary Fredricks - NOAA Federal [mailto:gary.fredricks@noaa.gov]
Sent: Tuesday, June 17, 2014 2:40 PM
To: Bailey, John C NWW
Cc: Lorz, Tom; Dugger, Carl R NWW
Subject: [EXTERNAL] Re: MOC: 14 MCN 14 Oregon Ladder Orifice Flow Operations

John, By all means, get the log out of there tomorrow as planned. Seems odd that no one mentioned the apparent dead fish in the photo? What's with that?? Gary

-----Original Message-----
From: Dugger, Carl R NWW
Sent: Tuesday, June 17, 2014 8:51 AM
To: Moody, Gregory P NWW
Cc: Gersbach, William J NWW; Johnson, Bobby NWW
Subject: FW: [EXTERNAL] Fwd: log at mcn s (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Greg,

We have had a problem come up that we would like to deal with the same time we reduce the blade angles on the fish pumps tomorrow: We have a "log" stuck upstream of the Oregon picketed leads, and we need to place the ladder on orifice flow just long enough to remove it. The log is a threat to the leads, and if we try to raise them to clean them, it could get stuck under them and raise havoc.

Exit flow is normally 230 CFS; exit flows would be reduced to less than 100 CFS when in orifice flow. Can we tie this into the existing approval we have for the fish pumps, or do I need a whole new MOC?

This doesn't quite rise to the level of an "emergency," but we do need to act on it fairly soon, because we don't dare clean the leads with that log in place.

- Carl

-----Original Message-----
From: Johnson, Bobby NWW
Sent: Monday, June 16, 2014 4:16 PM
To: Harris, James A NWW; Stewart, Peter E NWW; Dugger, Carl R NWW
Cc: Gersbach, William J NWW; Roberts, Timothy J NWW; Coleman, Dave R NWW
Subject: RE: [EXTERNAL] Fwd: log at mcn s (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

On the 18th, from 1300 to 1400, they are reducing the blade angle on the fish pumps to do a camera inspection of the lamprey structure at SFEW2. Seems like a good time to do orifice flow and get the debris but I will need to check with district.

-----Original Message-----
From: Harris, James A NWW
Sent: Monday, June 16, 2014 3:59 PM
To: Johnson, Bobby NWW; Stewart, Peter E NWW; Dugger, Carl R NWW
Cc: Gersbach, William J NWW; Roberts, Timothy J NWW; Coleman, Dave R NWW
Subject: RE: [EXTERNAL] Fwd: log at mcn s (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Can we put the ladder on orifice flow so we can remove the log. We can get it out as soon as you get something set up. JIM

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

From: Johnson, Bobby NWW
Sent: Monday, June 16, 2014 2:58 PM
To: Harris, James A NWW; Stewart, Peter E NWW
Cc: Gersbach, William J NWW; Roberts, Timothy J NWW
Subject: FW: [EXTERNAL] Fwd: log at mcn s (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Jim and Pete,

It appears we have some debris by the OR exit leads to keep an eye on or remove. Cannot have it interfere with lead placement.

Thanks,

Bobby

-----Original Message-----
From: Juhnke, Steve D NWW
Sent: Monday, June 16, 2014 2:53 PM
To: Dugger, Carl R NWW; Johnson, Bobby NWW
Subject: FW: [EXTERNAL] Fwd: log at mcn s

Heads up on the current MCN South picket lead view.

Steve

-----Original Message-----
From: donthomps@gmail.com [mailto:donthomps@gmail.com] On Behalf Of Don Thompson
Sent: Monday, June 16, 2014 2:42 PM
To: Juhnke, Steve D NWW
Subject: [EXTERNAL] Fwd: log at mcn s

Steve, for your information: a large log has been jammed in the south picket of McNary since we put the cameras in on June 11 (see screenshot from today). One end (north) is located a few feet from the count window slot and extends south across the picket gap probably at least 8 feet. They pull the pickets most days for cleaning but this log is not moving.

I'm sure the operators will be happy about this.

Don

Final results:

On June 18, project personnel successfully removed the log that was above the picketed leads on the Oregon ladder, and also conducted the camera inspection of the faulty lamprey gate. Photos of the log are shown below.

The fish pumps went to flat blades at 13:04 and were returned to the normal 30% at 13:33.

The ladder went into orifice flow at 13:15 and returned to normal flow at 13:33.

The camera revealed that the jackscrew on the left (west) side of the lamprey gate had become unscrewed and disconnected - no debris jam. There was no locknut on the screw, so it just came unscrewed after a few turns the wrong direction. Unfortunately, it will take a dive to fix it (this paragraph applies to 14 MCN 13 Camera Inspection of Lamprey Passage Structure – work that was being performed concurrently).

Log Being Removed

Removed Log

Please email or call with questions or concerns.
Thank you,

Carl R. Dugger
Supervisory Fisheries Biologist
McNary Lock and Dam
(541) 922-2263
carl.r.dugger@usace.army.mil