**CENWP-OD-D 1/18/2023**

**MEMORANDUM FOR THE RECORD 23TDA02 TDA-N coho morts**

**SUBJECT: North Fishladder Dewatering Mortalities**

On 1/17/23 the north fishladder was dewatered for annual winter maintenance. Halfway down the ladder an unusually high number of adult salmonids, mostly coho, were encountered. Salvage operations were attempted until 20 coho, 9 chinook and 16 lamprey were removed and transported to river release. Three coho looked dead on release. When it was realized that at least 60 adult salmonids remained in the lower pools, it was decided to abort the dewatering and return ladder flow. During the transition and setting up to pull bulkheads, 4 adult coho appeared to have died in grating.

1. Species –7 adult Coho
2. Origin –NA
3. Length –NA
4. Marks and tags –NA
5. Marks and Injuries found on carcass –Not visible from distance
6. Cause and Time of Death –stranding
7. Future and Preventative Measures –Much of the north ladder is difficult to access making it unsafe for effective fish removal. Most years find very few fish, making it easier. We are evaluating the process now to determine better ways to conduct high fish number salvage. First step will be to assess fish numbers before committing to follow through with the salvage.

Sincerely,

Project Fisheries

**Comments –**

**Nez Perce -** -----Original Message-----

From: Jay Hesse <jayh@nezperce.org>

Sent: Monday, January 23, 2023 3:02 PM

To: Mackey, Tammy M CIV USARMY CENWP (USA) <Tammy.M.Mackey@usace.army.mil>

Subject: [Non-DoD Source] RE: FPOM: Official Coordination - 23TDA02 coho morts

Tammy – This issue warrants further discussion at the next FPOM meeting. I have questions about salvaged fish release location (above or below dam), sampling that was conducted, assessment for passage barrier within the ladder, and how ‘take’ will be recorded for live fish that were delayed well beyond typical spawning periods. The pending discussion should also consider if North Ladder conditions that resulted in this observed fish passage delay could have also contributed to the observed delay in coho passing TDA earlier in the migration period.

jay

**CRITFC –**

-----Original Message-----
From: Cordie, Robert P CIV (USA) <Robert.P.Cordie@usace.army.mil>
Sent: Monday, January 23, 2023 1:11 PM
To: Tom Lorz <lort@critfc.org>; Mackey, Tammy M CIV USARMY CENWP (USA) <Tammy.M.Mackey@usace.army.mil>
Subject: RE: FPOM: Official Coordination - 23TDA02 coho morts

No ladder blockages noticed. WDFW did scan the 30 we bagged and pulled out. Things were frantic at the end to keep from killing anymore.

Portland weirdness is spreading to The Dalles.

From: Tom Lorz <lort@critfc.org>

Sent: Monday, January 23, 2023 12:59 PM

To: Mackey, Tammy M CIV USARMY CENWP (USA) <Tammy.M.Mackey@usace.army.mil>; Cordie, Robert P CIV (USA) <Robert.P.Cordie@usace.army.mil>

Subject: [Non-DoD Source] Re: FPOM: Official Coordination - 23TDA02 coho morts

Was there anything up at the exit section that could have slowed or made it more difficult for the salmon to exit. Strange for this number of fish still in the ladder at this time of year. We did have a bigger return of coho and they can be weird. Did you scan or note any marks on the fish alive or dead? You guys were likely hands full with that many fish.

Any updates at the next the FPOM would be great. 2023 starting out kinda of weird lets hope it settles out......

**NOAA Fisheries –**

-----Original Message-----
From: Cordie, Robert P CIV (USA) <Robert.P.Cordie@usace.army.mil>
Sent: Monday, January 23, 2023 4:42 PM
To: Blane Bellerud - NOAA Federal <blane.bellerud@noaa.gov>
Subject: RE: [Non-DoD Source] mystery coho in North ladder

Meaning turbidity? Usually >6’.

From: Blane Bellerud - NOAA Federal <blane.bellerud@noaa.gov>

Sent: Monday, January 23, 2023 4:32 PM

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

Subject: Re: [Non-DoD Source] mystery coho in North ladder

What's the visibility like in the ladder this time of year?

 -----Original Message-----
From: Morrill, Charles (DFW) <Charles.Morrill@dfw.wa.gov>
Sent: Monday, January 23, 2023 4:42 PM
To: Cordie, Robert P CIV (USA) <Robert.P.Cordie@usace.army.mil>; Blane Bellerud - NOAA Federal <blane.bellerud@noaa.gov>; Jay Hesse <jayh@nezperce.org>
Subject: RE: [Non-DoD Source] mystery coho in North ladder

Thanks Bob !

Charlie

From: Cordie, Robert P CIV (USA) <Robert.P.Cordie@usace.army.mil>

Sent: Monday, January 23, 2023 4:16 PM

To: Blane Bellerud - NOAA Federal <blane.bellerud@noaa.gov>

Subject: RE: [Non-DoD Source] mystery coho in North ladder

External Email

Since 2008, we’ve only seen a total of 16 adult coho from all our ladder and channel dewaterings combined. This is definitely an anomaly.

Looking at north fishladder passage since Dec6 (after the east fishladder was dewatered), at total of 74 coho passed the north. Seems all of those liked the fishladder and decided to stay.

Ccing the rest of you since you all seem just as puzzled as we were.

From: Blane Bellerud - NOAA Federal <blane.bellerud@noaa.gov <mailto:blane.bellerud@noaa.gov> >

Sent: Monday, January 23, 2023 4:03 PM

To: Cordie, Robert P CIV (USA) <Robert.P.Cordie@usace.army.mil <mailto:Robert.P.Cordie@usace.army.mil> >

Subject: [Non-DoD Source] mystery coho in North ladder

So how often have you recovered coho from the fish ladders at this time of year. Did some basic perusing of PIT tag records and it does look like there are a few observations of adults in the mid columbia this time of year

--

Blane L. Bellerud Ph.D.

Fisheries Biologist

NOAA Fisheries

Portland, OR

(503)231-2238

**TDA Fish –**

**From:** Day, James Edward CIV USARMY CENWP (USA) <James.E.Day@usace.army.mil>
**Sent:** Monday, January 23, 2023 11:31 AM
**To:** Mackey, Tammy M CIV USARMY CENWP (USA) <Tammy.M.Mackey@usace.army.mil>
**Subject:** RE: FPOM: Official Coordination - 23TDA02 coho morts

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| --- |
|  |
| **DATE** | **CH - A** | **CH - J** | **SP-CH - A** | **SP-CH - J** | **SU-CH - A** | **SU-CH - J** | **FA-CH - A** | **FA-CH - J** | **CO - A** | **CO - J** | **STHD** | **UN- STHD** | **SO** | **LAM** | **CHUM** |
| 01/16/23 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 2 | 0 | 0 | 0 |
| 01/17/23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 |
| 01/18/23 | -2 | 0 | -2 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 1 | 1 | 0 | 0 | 0 |
| 01/19/23 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | -1 | 1 | 1 | 0 | 0 | 0 |
| 01/20/23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 |
| 01/21/23 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 01/22/23 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **YTD** | **2** | **0** | **2** | **0** | **0** | **0** | **0** | **0** | **74** | **6** | **31** | **10** | **0** | **0** | **0** |

We did note that stranded coho in a MFR several weeks prior in the lower channel at the north.  We discussed using the window counts to help determine how many fish may be in the ladder in the future.  From the FPC data above it doesn’t look like the window counts would have been much help as these coho/chinook weren’t passing prior to the dewatering.  May want to note that the fish were heavily marked with spawning colors and teeth which likely led to their early mortality.  Looks like many of the coho did pass the count window the following days.  Most of the fish and lamprey handled on the 17th were scanned by USACE and ODFW/WDFW staff for PIT tags and none were detected, but perhaps the fixed array in the north exit will have PIT detections that may show where these fish were from?

Jim