

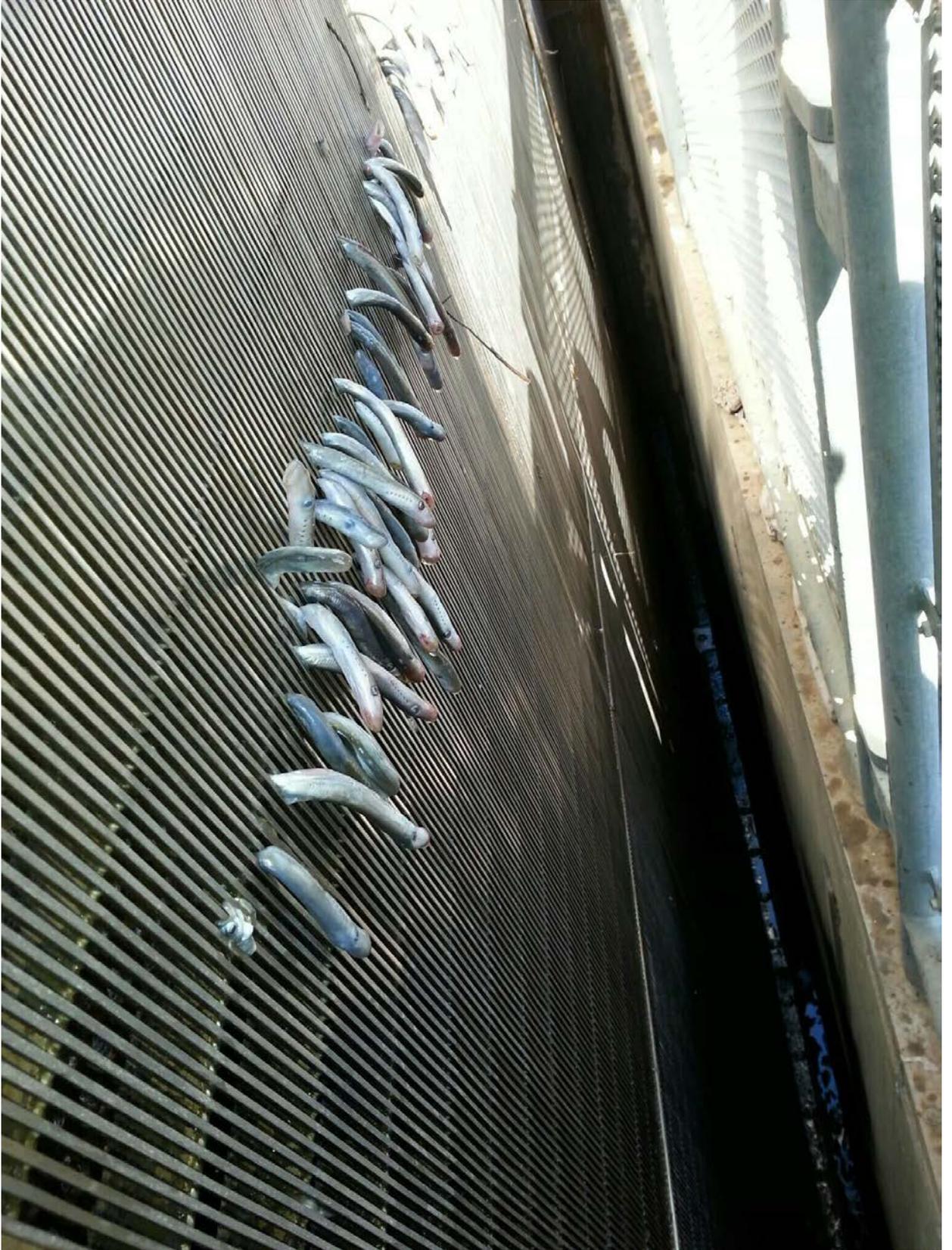
MEMORANDUM FOR THE RECORD: 16 LGS 10 MFR Juvenile Lamprey Mortalities

SUBJECT: Ammocoete Lamprey: Gatewell 3A.

On April 16 and again on the 18th a trouble light for fish screen 3A was found on and screen was returned to service after the limits were reset. On April 19, Project Biologist found no power to fish screen 3A. Electricians found the breaker had tripped and it would not reset. Unit 3 was removed from service and the ESBS in slot 3A was pulled on April 20. Found attached to the screen near the brush were 187 dead juvenile Lamprey (see attached pictures). There were a few that were still alive and these were removed and returned to the water. When the brush failed it created an area near the brush that was preferred by the Ammocoetes for tailing into the screen.

- A. Species – **lamprey (Ammocoete)**
- B. Origin – NA
- C. Length – NA
- D. Marks and tags – NA
- E. Marks and Injuries found on carcass – NA
- F. Cause and Time of Death 4-19-20-2016
- G. Future and Preventative Measures – Wiring for the brush motors had arced and grounded itself. More care is needed when wiring the motors.







Sincerely,

Richard Weis
Project Fisheries Biologist
Little Goose Dam
1-509-399-2233 ext. 264

Comments from Agencies:

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

From: Brandon Chockley [mailto:bchockley@fpc.org]
Sent: Thursday, April 21, 2016 3:57 PM
To: Bailey, John C NWW <John.C.Bailey@usace.army.mil>
Subject: [EXTERNAL] RE: MFR 16 LGS 10 Juvenile Lamprey Mortalities - Gatewell Slot 3A

John-

Thanks for the MFR regarding lamprey mortalities at LGS. It is worth noting that the lamprey in the picture were not ammocoetes, they are macrophthalmia. Same species (Pacific lamprey), different life stage.

----- Forwarded message -----

From: Bill Hevlin <bill.hevlin@noaa.gov <mailto:bill.hevlin@noaa.gov> >
Date: Fri, Apr 22, 2016 at 10:42 AM
Subject: Re: [EXTERNAL] Re: MFR 16 LGS 10 Juvenile Lamprey Mortalities - Gatewell Slot 3A
To: "Laughery, Ryan O NWW" <Ryan.O.Laughery@usace.army.mil <mailto:Ryan.O.Laughery@usace.army.mil> >
Cc: Bill Hevlin <bill.hevlin@noaa.gov <mailto:bill.hevlin@noaa.gov> >

I spoke with John Bailey on the phone just now. He is going to ask the goose samplers for the number in the bypass system during the days mentioned, I just am wondering what happens to these fish if the brush doesn't shut down, would these have ended up in to bypass system?

Bill

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

From: Bill Hevlin - NOAA Federal [mailto:bill.hevlin@noaa.gov]
Sent: Monday, April 25, 2016 8:58 AM
To: Laughery, Ryan O NWW <Ryan.O.Laughery@usace.army.mil>; Bailey, John C NWW <John.C.Bailey@usace.army.mil>
Cc: Bill Hevlin - NOAA Federal <bill.hevlin@noaa.gov>
Subject: Fwd: [EXTERNAL] Re: MFR 16 LGS 10 Juvenile Lamprey Mortalities - Gatewell Slot 3A

Ryan,

Thanks for calling me on Friday, I was in a quandry about how those juvenile lamprey all lined up and go impinged across the screen. I had forgotten about the gap at the top of the escreen, to reduce flow/velocity up the gatewell. Usually, if the brush was not stuck, these lamprey would have been swept through that gap, and then through the turbine. If this was not the case, then many juvenile lamprey would have been seen in the bypass system sample at the time of the brush breakdown, because they would have ended up in the gatewells rather than passing through the gap. Do they pass through the gap or up into the gatewell, similar to salmon juveniles? This is why I asked John to see if he can access the incidental sample data from the crew at Goose during this time period.

bill

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

From: Bailey, John C NWW

Sent: Monday, April 25, 2016 9:30 AM

To: 'Bill Hevlin' <bill.hevlin@noaa.gov>

Cc: Laughery, Ryan O NWW <Ryan.O.Laughery@usace.army.mil>

Subject: Little Goose Lamprey Sample Counts and Expanded Numbers

Bill:

As promised in Friday's phone call on April 22, I am providing you with Little Goose juvenile lamprey sample counts and expanded numbers (to April 22). As you already know, Little Goose started sampling later than usual this year due to a leak that was discovered in the secondary dewaterer piping. Every--other-day collection for sampling began April 9 with the first fish sample being "worked up" on April 10. All Pacific lamprey collected to date have been Macrothalmia or "silver lamprey". No adults have been seen.

Lamprey Sample Numbers at Little Goose Dam, April 10 - 22, 2016.

Date	No. in Sample	Expanded Counts	% Sample Rate
10-Apr	0	0	2.00
12-Apr	1	100	1.00
14-Apr	0	0	0.25
16-Apr	2	800	0.50
18-Apr	4	800	0.25
20-Apr	2	800	0.25
22-Apr	2	800	0.25
Total	11	3300	---

John B.