

From: [Hays, Steve](#)
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Cc: [Osborn, Jeff](#); [Smith, Michelle](#); [Sokolowski, Rosana](#); [Clement, Marcie](#); [Bitterman, Deborah](#); [Buehn, Scott](#); [Campbell, Rob](#); [Willard, Catherine](#); [Underwood, Alene](#); [Hopkins, Scott](#)
Subject: Chelan River Steelhead Trout Egg to Emergence Survival Study
Date: Friday, March 24, 2017 1:22:46 PM
Attachments: [image1.jpg](#)
[IMG_1162.jpg](#)

PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY

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To: Chelan River Fishery Forum

Washington Department of Ecology

Washington Department of Fish and Wildlife

United States Forest Service

National Park Service

United States Fish and Wildlife Service

National Marine Fisheries Service

CCT (Colville)

YN (Yakama)

CTUIR (Umatilla tribe)

City of Chelan

Lake Chelan Sportsman Association

United States Geological Survey

Washington State Parks and Recreation Commission

Washington State Recreation and Conservation Office
Lake Chelan Recreation Association
American Whitewater

From: Steven Hays, Fish & Wildlife Senior Advisor
Public Utility District No. 1 of Chelan County (Chelan PUD)
steve.hays@chelanpud.org
(509)661-4181

Re: Lake Chelan Hydroelectric Project No. 637 (Project)
Schedule - Reduced Flow in Chelan River Habitat Channel
To Implement Chelan River Steelhead Egg to Emergence
Survival Study

Dear Chelan River Fishery Forum and Other Parties:

The steelhead egg box placement went smoothly yesterday. There were no adult steelhead observed in the Habitat Channel during the day and thorough inspection of potential stranding areas in dewatered willow area or shallow cobble/sand areas did not find any stranded Chinook fry or other fish. Flow reduction began at 9 AM and full flow was returned by 5:20 PM. The graph below shows the flows determined from averages over the previous 5 minutes from the point plotted. Also, see the attached email from Scott Hopkins regarding the gamete procurement at the hatchery and egg box placement in the field.

I have also attached two photographs, one of the egg box seeded with fertilized eggs and ready for placement in the artificial redd and the other of an artificial redd after placement of the egg box and refilling with gravel, but before removal of the bottomless 5 gallon bucket.

Scott and Catherine have more photographs if you are interested. If you have any questions feel free to contact us.

Thank you for the support provided for reducing flows so that this study could be conducted.

Steve

Steven Hays

Fish and Wildlife Senior Advisor

steve.hays@chelanpud.org

(509) 661-4181

From: Hopkins, Scott

Sent: Friday, March 24, 2017 8:48 AM

To: Hays, Steve

Cc: Willard, Catherine; West, Todd; Underwood, Alene; Jackson, Todd; Campbell, Rob; Lyon, Brian D (DFW) (Brian.Lyon@dfw.wa.gov)

Subject: Results from Thursdays Steelhead Egg Box Install

Dear All

The installation phase of the District's Steelhead egg to fry emergence study in the Chelan River Habitat Channel was conducted yesterday March 23rd. The spawning at Eastbank Hatchery went very smooth and Eastbank staff were extremely helpful in the process. In total 3 females and 2 males were ready and were used for the study. All hatchery protocols and biosecurity measures were followed throughout the process.

As per the schedule laid out by Steve Hays, the Chelan River habitat channel was at a reduced flow of 89 cfs upon arrival thanks to the Chelan Operators. Crews started around 12:40 p.m. in the most upstream section (7) and worked their way down the channel. Crews searched along banks and recently dewatered areas for any stranded summer Chinook fry. There were no Chinook fry present in any of the sections. This includes dewatered areas and shallow areas within the riparian zone.

All work was completed by 5:00 and full flow was returned to the habitat channel by 5:20. In total 23 egg boxes were installed into

artificial redds. Only one pre-constructed redd needed to be moved due to poor flows.

I want to give a thanks to all those involved with this undertaking. Having to work on the fish's time schedule presented us a shortened window and all things went exceptionally well.

Brian - If you could pass on this message to your crews that would be appreciated.

Steve - If you would like to relay this information to anyone I may not have include that would be great.

Thanks again,

Scott

Scott Hopkins

Fisheries Biologist

Chelan County PUD

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