

PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY
P.O. Box 1231, Wenatchee, WA 98807-1231 • 327 N. Wenatchee Ave., Wenatchee, WA 98801
(509) 663-8121 • Toll free 1-888-663-8121 • www.chelanpud.org

May 11, 2017

VIA ELECTRONIC MAILING

Kimberly D. Bose, Secretary
FEDERAL ENERGY REGULATORY COMMISSION
888 First Street, NE
Washington, DC 20426

Re: **Lake Chelan Hydroelectric Project No. 637**
Notification of Temporary Change in Flow Operations to Implement Chelan River
Steelhead Trout Egg to Emergence Survival Study

Dear Secretary Bose:

Public Utility District No. 1 of Chelan County (“Chelan PUD”) provides notification to the Federal Energy Regulatory Commission (the “Commission”) of operations in the Chelan River Reaches 1 through 3 and Habitat Channel in order to facilitate removal of egg boxes at emergence date for the Steelhead Trout Egg to Emergence Survival Study. During the May 15 through July 15 period in 2017, a minimum flow of 200 cfs is required by the license to mimic the natural hydrograph¹. In order to remove egg boxes and protect redds in the overflow channel and pool, flow will need to be reduced below 200 cfs via a combination of pumped flow and releases from the low level outlet (LLO) at the Lake Chelan Dam for a period of two days (See Attachment A: Steve Hays April 20, 2017 confirmation email). The precise date of egg box removal will depend upon accumulated temperature units (ATU) by Steelhead Trout eggs and alevins between now and the time of emergence. Temperature unit accumulation is being calculated and tracked by Chelan PUD staff. Flow will be returned to greater than license minimum later on the same day after egg boxes are removed.

Background and Reason for Notification

By letter dated March 23, 2017, Chelan PUD notified the Commission of temporary change in pumped flow in order to implement the Steelhead Trout Egg-to-Emergence Survival Study, as directed by the Chelan River Fishery Forum (CRFF)². As stated in that letter, conducting the Steelhead Trout Egg to Emergence Survival Study will provide information regarding the achievability of one Biological Objective contained in the license, 401 Water Quality Certification for the Project (the “Certification”), and

¹ *Public Utility District No. 1 of Chelan County*, 121 FERC ¶ 62,152 (2007) (Order Modifying and Approving Operations Compliance and Monitoring Plan, Article 405).

² The CRFF is comprised of the federal and state fishery agencies, Tribes, and local governments that are signatories to the Lake Chelan Comprehensive Settlement Agreement (SA) and assist Chelan PUD with implementing terms and conditions of the Lake Chelan Hydroelectric Project license associated with the Chelan River. The CRFF consists of the following entities: Washington Department of Fish and Wildlife, USDA Forest Service, National Park Service, NOAA Fisheries, U.S. Fish and Wildlife Service, Colville Confederated Tribes, Yakama Nation, Washington Department of Ecology, Chelan PUD, and city of Chelan.

Settlement Agreement, Attachment B, Chapter 7, Section 5 Implementation Plan. In accordance with that notification, artificial redds were constructed in the Habitat Channel and egg boxes placed in the artificial redds on March 23, 2017. This letter notification is for implementing reduced flows necessary to retrieve the egg boxes as directed by the CRFF.

On March 15, the flow in the Habitat Channel was increased to approximately 285 cfs for Steelhead Trout spawning. This spawning flow will be in effect until May 15. Per license requirement, the Chelan River Reaches 1 through 3 minimum flow requirement changes to 200 cfs in 2017 on May 16 to mimic the spring freshet.

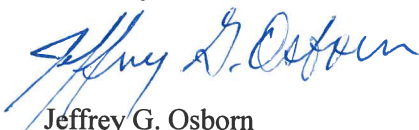
A two-day reduction in flow below the 200 cfs minimum requirement in Reaches 1 through 3 is necessary to remove egg boxes safely in the Habitat Channel at the conclusion of the Steelhead Trout Egg to Emergence Survival Study (See Attachment A). Flows in the Chelan River and Habitat Channel will be provided via a combination of releases from the LLO and pump station over a two-day period. The complicated modified operations are designed, carefully, to retrieve egg boxes while protecting existing Steelhead Trout redds in the overflow channel and pool from dewatering over the two-day period of egg box retrieval.

Settlement Agreement license article 7(c)(3) and Certification sections IV. C., D., and F. describe adaptive management approaches to implementing new or modified measures to meet Biological Objectives. Chelan PUD acknowledges these sections of the license as support for implementing temporary modified Chelan River Reaches 1 through 3 and Habitat Channel flows for implementing the study. As identified in the March 23, 2017 letter to the Commission, Chelan PUD sent an email to the CRFF on March 21 and April 20, 2017 requesting their concurrence to support the flow modifications in order to implement the study (Attachment A).

No adverse effects from the two-day modification in flow in the Chelan River Reaches 1 through 3 are expected to the fish inhabiting these reaches since no small fish were observed during snorkel surveys on April 19 and April 20, 2017. Flows in the Habitat Channel will only be reduced below the necessary incubation flow during the hours needed to remove the egg boxes. No adverse effects to either resident fish, adult Steelhead Trout spawning activity, or to rearing Chinook Salmon fry are expected. Steelhead Trout spawning should have ended by the time of egg box removal. However, if any Steelhead Trout are observed constructing redds then a follow-up survey will be conducted to determine if the Steelhead Trout resume redd construction after the flow is returned to the proposed level, with subsequent surveys to determine if the redd was completed. Monitoring and rescue operations to determine if any Chinook Salmon fry were stranded will also proceed during temporary flow changes.

Please contact me (509) 661-4176 regarding any questions or comments.

Sincerely,



Jeffrey G. Osborn
License Compliance Supervisor
jeff.osborn@chelanpud.org

cc: Erich Gaedeke, FERC Portland Regional Office
Breean Zimmerman, Washington Department of Ecology
Chelan River Fishery Forum

ATTACHMENT A CONSULTATION DOCUMENTATION

The table below identifies CRFF members and participants.

FORUM PARTICIPANTS	AGENCY
Mark Peterschmidt	Washington State Department of Ecology
Jim Pacheco	Washington State Department of Ecology
Brean Zimmerman	Washington State Department of Ecology
Jeffrey Korth	Washington State Department of Fish and Wildlife
Graham Simon	Washington State Department of Fish and Wildlife
Travis Maitland	Washington State Department of Fish and Wildlife
Kari Grover Wier	United States Department of Agriculture Forest Service
Paul Willard	United States Department of Agriculture Forest Service
Emily Johnson	United States Department of Agriculture Forest Service
Ashley Rawhouser	National Park Service
Hugh Anthony	National Park Service
Steve Lewis	United States Fish and Wildlife Service
Justin Yeager	National Marine Fisheries Services
Bill Towey	Confederated Tribes of the Colville Reservation
Bob Rose	Yakama Indian Nation
Carl Merkle	Confederated Tribes of the Umatilla Indian Reservation
Robert Cooney	City of Chelan
Phil Archibald	Senior Scientist/citizen
Keith Truscott	Public Utility District No. 1 of Chelan County
Michelle Smith	Public Utility District No. 1 of Chelan County
Steve Hays	Public Utility District No. 1 of Chelan County
Debby Bitterman	Public Utility District No. 1 of Chelan County
Marcie Steinmetz	Public Utility District No. 1 of Chelan County
Jeff Osborn	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)
Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study
To Implement Chelan River Steelhead Egg to Emergence Survival Study

Dear Chelan River Fishery Forum and Other Parties:

I am requesting that CRFF members who represent agencies with management authority provide a response to this email indicating that they either agree with the flow operations described below or, if they object, to provide suggestions if you prefer a different set of operations to meet our objectives.

This email is to request your approval of some revised flow operations in the Chelan River Reaches 1-3 and in Reach 4. These operations are needed in order to facilitate removal of egg boxes at emergence date for the steelhead egg to emergence survival study and also to protect steelhead redds that have been recently constructed in the spill overflow channel and in the pool along the margin of the hydraulic control structure. This has been a banner year for steelhead spawning in Reach 4 of the Chelan River. At present, the steelhead redd

count is 5 redds in the spill overflow channel, 3 redds in the pool along the edge of the hydraulic control structure and 13 redds in the Habitat Channel. Protection of the redds in the pool and spill overflow channel will require that we provide additional flow after May 15 to keep water flowing over these redds.

This year is an average water year, thus under normal operations the flow in Reaches 1-3 would be increased to 200 cfs on May 15, while pumped flow in the Habitat Channel would be ended on that date. This would result in flows in Reach 4 dropping from around 270 - 300 cfs to 200 cfs. At the 270 - 300 cfs flow, water passing over the hydraulic control structure has resulted in water flowing through the spill overflow channel and steelhead have been spawning in a "fish-rescue" trench that was added to this section during the removal of sediments from the Reach 4 pool. Water should not be flowing over the hydraulic control structure at 300 cfs, but apparently an accumulation of river bed material below the large log jam structure at the entrance to the Habitat Channel has raised the water level in the pool. This issue will be addressed in the summer to remove gravel deposits below the log structure and thus prevent flow in the spill overflow channel during the 2018 steelhead spawning operations. However, for 2017 it will be necessary to revise operations beginning May 15 in order to prevent dewatering the steelhead redds in the spill overflow channel.

We propose the following operations for the remainder of the steelhead incubation period until spill releases begin, expected in June, which will assure that no steelhead redds are dewatered prior to emergence timing.

1. Maintain 4 pump operations (about 205 cfs) along with the 80 cfs minimum flow in Reaches 1-3 until May 15.
2. On May 15, initiate 200 cfs in Reaches 1-3 and reduce pump flow to 2 pumps (about 100 cfs). Maintain this operation, with the exception of the day before and during egg box removal, until Reaches 1-3 spill releases of 300 cfs or greater are initiated.
3. When spill releases into Reaches 1-3 exceed 300 cfs, stop pumped flow. Maintain spill of no less than 300 cfs into Reaches 1-3 and Reach 4 until accumulated temperature units (ATUs) indicate that steelhead emergence should be completed.

We also propose the following operations for the removal of the egg boxes at the conclusion of the steelhead egg - emergence survival study. Currently, ATUs up to this week indicate that emergence timing for the egg boxes will be around the fourth week in May, so egg box removal will be after May 15. Thus, some modification to flows in Reaches 1-3 will be required for two days, as described in the following operations plan, because water levels in the Habitat Channel are delayed by over an hour following flow adjustments at the LLO. That delay does not allow for rapid response and corrections to the water levels in Reach 4, thus this proposal is to use the pumps for flow adjustments since flow effects happen within 15 minutes of changes to pump operations.

1. The day before egg box removal, reduce flow in Reaches 1-3 from 200 cfs to 90 cfs. When the reduced flow reaches the Habitat Channel and pool (when water level begins to drop) go from 2 pump operation to 4 pump operation. Maintain that operation (about 300 cfs) until the next day when egg box removal occurs.

2. At the beginning of egg box removal staging, reduce flow to 3 pumps, then one hour later to 2 pumps, resulting in a flow of about 190 - 200 cfs, while removal of the egg boxes in shallow locations proceeds. Monitor the flow over the hydraulic control structure and in the pool to make sure redds in the pool and spill overflow channel are not dewatered. If necessary, remove some dam boards from the hydraulic control structure slots to assure flow over the redds in the spill overflow channel.
3. When all the egg boxes that can be accessed at 200 cfs have been processed, reduced pumped flow to one pump, about 140 - 150 cfs and attempt to access and process the remaining egg boxes. Continue to monitor water levels in the pool and spill overflow channel and adjust dam boards, as necessary, to prevent draining of gravel with redds.
4. If some egg boxes could still not be accessed, reduce flows by shutting off the final pump and as quickly as possible remove the remaining egg boxes into buckets for later processing on shore. Immediately readjust dam boards, if necessary, and restore 4 pump operation when the last egg box has been moved to shore. Maintain 4 pump operation until flow into Reaches 1-3 is increased and has arrived in the Reach 4 pool and Habitat Channel.
5. Restore the release of 200 cfs to Reaches 1-3 and, as that flow begins to arrive at the Reach 4 pool and Habitat Channel, reduce pumped flow back to 2 pumps. Maintain that operation, as described above. An alternative operation could be to release 300 cfs into Reaches 1-3 and discontinue operation of pumped flow. In either case, maintain flows of at least 300 cfs into Reach 4 until the completion of steelhead emergence.

The two-day reduction in flow in Reaches 1-3 will not have any adverse effect on meeting the objectives for that section of the Chelan River. The purpose of the 200 cfs flow from May 15 - July 15 is to simulate a natural runoff hydrograph in years when we would not have much spill or a truncated spill season. This year, we expect to be spilling from 4,000 - 6,000 cfs through most of June and into July. Also, snorkel surveys in Reach 1 this week found cutthroat and a few rainbow over six inches long, but no small fish that could be stranded by the proposed flow reduction.

Thank you in advance for your response.

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

From: [Osborn, Jeff](#)
To: [Bitterman, Deborah](#)
Subject: FW: Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study
Date: Thursday, May 11, 2017 8:36:35 AM

#2.

From: Hays, Steve
Sent: Wednesday, May 10, 2017 4:18 PM
To: Osborn, Jeff <Jeff.Osborn@chelanpud.org>
Subject: FW: Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study

From: Zimmerman, Breean (ECY) [<mailto:bzim461@ECY.WA.GOV>]
Sent: Monday, May 01, 2017 11:31 AM
To: Hays, Steve <steve.hays@chelanpud.org>
Subject: RE: Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study

Chelan County PUD IT Warning:
Please use caution! This is an external email with links or attachments.
Steve,

Ecology is in agreement with the proposed operations as described below.

Thank you,
Breean Zimmerman | **Hydropower Projects Manager**
Water Quality Program | Central Regional Office
(509) 575-2808 (w) | (509) 406-5130 (c) | bzim461@ecy.wa.gov

From: Hays, Steve [<mailto:steve.hays@chelanpud.org>]
Sent: Thursday, April 20, 2017 4:29 PM
To: Zimmerman, Breean (ECY) <bzim461@ECY.WA.GOV>; Peterschmidt, Mark F. (ECY) <MAPE461@ECY.WA.GOV>; Bowen, David (ECY) <dabo461@ECY.WA.GOV>; Pacheco, James (ECY) <JPAC461@ECY.WA.GOV>; Korth, Jeff W (DFW) <Jeff.Korth@dfw.wa.gov>; Simon, Graham A (DFW) <Graham.Simon@dfw.wa.gov>; Maitland, Travis W (DFW) <Travis.Maitland@dfw.wa.gov>; 'Kari Grover Wier' <kgroverwier@fs.fed.us>; 'pwillard@fs.fed.us' <pwillard@fs.fed.us>; 'Emily Johnson' <ekjohnson@fs.fed.us> <ekjohnson@fs.fed.us>; 'Alex Martinez' <ramartinez@fs.fed.us> <ramartinez@fs.fed.us>; 'Ashley_Rawhouser@nps.gov' <Ashley_Rawhouser@nps.gov>; 'Hugh_Anthony@nps.gov' <Hugh_Anthony@nps.gov>; 'Steve Lewis' <Stephen_Lewis@fws.gov> <Stephen_Lewis@fws.gov>; 'Rich Domingue' <richard.domingue@noaa.gov> <richard.domingue@noaa.gov>'

<richard.domingue@noaa.gov>; 'Bonnie.Hossack@noaa.gov' <Bonnie.Hossack@noaa.gov>; 'Justin Yeager (Justin.Yeager@noaa.gov)' <Justin.Yeager@noaa.gov>; 'Bill Towey' <bill.towey@colvilletribes.com>; 'Bob Rose (rosb@yakamafish-nsn.gov)' <rosb@yakamafish-nsn.gov>; 'Carl Merkle (carlmerkle@ctuir.com)' <carlmerkle@ctuir.com>; 'mcooney@cityofchelan.us' <mcooney@cityofchelan.us>; 'Phil Archibald (ndmarkey@gmail.com)' <ndmarkey@gmail.com>; 'Nick Elwell' <nelwell@usgs.gov>; 'tom.ernsberger@parks.wa.gov' <tom.ernsberger@parks.wa.gov>; Snell, Nona (RCO) <nona.snell@rco.wa.gov>; 'Richard Uhlhorn (richard@richarduhlhorn.com)' <richard@richarduhlhorn.com>; 'Thomas O'Keefe (okeefe@amwhitewater.org)' <okeefe@amwhitewater.org>

Cc: Osborn, Jeff <Jeff.Osborn@chelanpud.org>; Smith, Michelle <michelle.smith@chelanpud.org>; Sokolowski, Rosana <Rosana.Sokolowski@chelanpud.org>; Clement, Marcie <Marcie.Clement@chelanpud.org>; Bitterman, Deborah <Deborah.Bitterman@chelanpud.org>; Buehn, Scott <scott.buehn@chelanpud.org>; Campbell, Rob <rob.campbell@chelanpud.org>; Willard, Catherine <Catherine.Willard@chelanpud.org>; Underwood, Alene <Alene.Underwood@chelanpud.org>; Hopkins, Scott <Scott.Hopkins@chelanpud.org>; Von Reis, Charles <Charles.VonReis@chelanpud.org>

Subject: Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study

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To: Chelan River Fishery Forum
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National Park Service
United States Fish and Wildlife Service
National Marine Fisheries Service
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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
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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)

**Request for Statement of Concurrence - Flow Operations To Protect Steelhead
Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival
Study**

To Implement Chelan River Steelhead Egg to Emergence Survival Study

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pumped flow. In either case, maintain flows of at least 300 cfs into Reach 4 until the completion of steelhead emergence.

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steve.hays@chelanpud.org
(509)661-4181

From: [Osborn, Jeff](#)
To: [Bitterman, Deborah](#)
Subject: FW: Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study
Date: Thursday, May 11, 2017 8:36:48 AM

#3.

From: Hays, Steve
Sent: Wednesday, May 10, 2017 4:18 PM
To: Osborn, Jeff <Jeff.Osborn@chelanpud.org>
Subject: FW: Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study

From: Simon, Graham A (DFW) [<mailto:Graham.Simon@dfw.wa.gov>]
Sent: Wednesday, April 26, 2017 10:51 AM
To: Hays, Steve <steve.hays@chelanpud.org>; Osborn, Jeff <Jeff.Osborn@chelanpud.org>
Cc: Maitland, Travis W (DFW) <Travis.Maitland@dfw.wa.gov>
Subject: Re: Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study

Chelan County PUD IT Warning:
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Steve,

I spoke internally with WDFW's Fish Program. Travis and I discussed the PUD's proposals listed below related to operations for the Steelhead incubation period as well as the need to reduce flow to remove the eggs boxes from the emergence survival study.

WDFW supports the proposal below as long as the PUD monitor redds in the shallow areas to make sure they are not dewatered as part of the egg box removal.

If you need anything else please reach out. I could be available to help with the egg box removal and monitoring if needed.

Regards,

Graham Simon
Fish & Wildlife Biologist
WDFW Habit Program

On Apr 20, 2017, at 4:33 PM, Hays, Steve <steve.hays@chelanpud.org> wrote:

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United States Geological Survey
Washington State Parks and Recreation

Commission

Office Washington State Recreation and Conservation

Lake Chelan Recreation Association
American Whitewater

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Thank you in advance for your response.

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

From: [Osborn, Jeff](#)
To: [Bitterman, Deborah](#)
Subject: FW: Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study
Date: Thursday, May 11, 2017 8:37:10 AM

And final, #4.

From: Hays, Steve
Sent: Wednesday, May 10, 2017 4:18 PM
To: Osborn, Jeff <Jeff.Osborn@chelanpud.org>
Subject: FW: Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study

From: Lewis, Stephen [mailto:stephen_lewis@fws.gov]
Sent: Thursday, April 20, 2017 5:42 PM
To: Hays, Steve <steve.hays@chelanpud.org>
Subject: Re: Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study

Chelan County PUD IT Warning:
Please use caution! This is an external email with links or attachments.
Seems reasonable...USFWS concurs with this action.

S-

On Thu, Apr 20, 2017 at 4:29 PM, Hays, Steve <steve.hays@chelanpud.org> wrote:

PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY
P.O. Box 1231, Wenatchee, WA 98807-1231 • 327 N. Wenatchee Ave., Wenatchee, WA 98801
(509) 663-8121 • Toll free 1-888-663-8121 • www.chelanpud.org

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)
**Request for Statement of Concurrence - Flow Operations To Protect Steelhead
Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival
Study**

To Implement Chelan River Steelhead Egg to Emergence Survival Study

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Public Utility District No. 1 of Chelan County (Chelan PUD)
steve.hays@chelanpud.org
(509)661-4181

--

Stephen T. Lewis
Hydropower and Energy Coordinator
US FISH AND WILDLIFE SERVICE
CENTRAL WASHINGTON FIELD OFFICE
215 MELODY LANE STE 103
WENATCHEE, WA 98801-8122
phone: (509) 665-3508 Ext. 2002
e-mail: Stephen.Lewis@fws.gov

"If a road has no obstacles, it probably doesn't lead to anywhere." S. Lewis

From: [Osborn, Jeff](#)
To: [Bitterman, Deborah](#)
Subject: FW: Reminder - Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study
Date: Thursday, May 11, 2017 8:36:13 AM

#1.

From: Hays, Steve
Sent: Wednesday, May 10, 2017 4:19 PM
To: Osborn, Jeff <Jeff.Osborn@chelanpud.org>
Subject: FW: Reminder - Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study

From: Justin Yeager - NOAA Federal [<mailto:justin.yeager@noaa.gov>]
Sent: Monday, May 01, 2017 8:53 AM
To: Hays, Steve <steve.hays@chelanpud.org>
Cc: Osborn, Jeff <Jeff.Osborn@chelanpud.org>
Subject: Re: Reminder - Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study

Chelan County PUD IT Warning:
Please use caution! This is an external email with links or attachments.

Steve and Jeff,

We approve the flow operations in the Chelan habitat channel for the steelhead egg emergence study and egg incubation. Please keep us apprised of any changes or complications with the flow reduction or during flow restoration.

If you have any questions feel free to contact me.

Thanks,

Justin Yeager
National Marine Fisheries Service
Columbia Basin Branch
304 S Water Street, Suite 201
Ellensburg, WA 98926
(509) 962-8911 x805
(509) 962-8544 fax
www.nmfs.noaa.gov

On Fri, Apr 28, 2017 at 11:25 AM, Hays, Steve <steve.hays@chelanpud.org> wrote:

Hi Justin,

I also left you a phone message on this topic. If you could please get back to us on the proposed

operation that would be very helpful. We have received responses with concurrence from Steve Lewis and Graham Simon. Jeff needs to send a letter to FERC as soon as possible regarding these flow operations since it would involve a short term reduction in minimum flows in Reach 1.

Please let us know if NMFS is in agreement with the proposed operations, including any additional actions or suggestions if you have any.

Thanks

Steve

From: Hays, Steve

Sent: Thursday, April 20, 2017 4:29 PM

To: 'Breean Zimmerman (bzim461@ecy.wa.gov)' <bzim461@ecy.wa.gov>; 'Peterschmidt, Mark F. (ECY) (mape461@ecy.wa.gov)' <MAPE461@ECY.WA.GOV>; 'david.bowen@ecy.wa.gov' <david.bowen@ecy.wa.gov>; 'Jim Pacheco' <jpac461@ecy.wa.gov>; 'Korth, Jeffrey' <Jeffrey.Korth@dfw.wa.gov>; 'Graham Simon' <Graham.Simon@dfw.wa.gov>; 'travis.maitland@dfw.wa.gov' <travis.maitland@dfw.wa.gov>; 'Kari Grover Wier' <kgroverwier@fs.fed.us>; 'pwillard@fs.fed.us' <pwillard@fs.fed.us>; 'Emily Johnson (ekjohnson@fs.fed.us)' <ekjohnson@fs.fed.us>; 'Alex Martinez (ramartinez@fs.fed.us)' <ramartinez@fs.fed.us>; 'Ashley_Rawhouser@nps.gov' <Ashley_Rawhouser@nps.gov>; 'Hugh_Anthony@nps.gov' <Hugh_Anthony@nps.gov>; 'Steve Lewis (Stephen_Lewis@fws.gov)' <Stephen_Lewis@fws.gov>; 'Rich Domingue (richard.domingue@noaa.gov)' <richard.domingue@noaa.gov>; 'Bonnie.Hossack@noaa.gov' <Bonnie.Hossack@noaa.gov>; 'Justin Yeager (Justin.Yeager@noaa.gov)' <Justin.Yeager@noaa.gov>; 'Bill Towey' <bill.towey@colvilletribes.com>; 'Bob Rose (rosb@yakamafish-nsn.gov)' <rosb@yakamafish-nsn.gov>; 'Carl Merkle (carlmerkle@ctuir.com)' <carlmerkle@ctuir.com>; 'mcooney@cityofchelan.us' <mcooney@cityofchelan.us>; 'Phil Archibald (ndmarkey@gmail.com)' <ndmarkey@gmail.com>; 'Nick Elwell' <nelwell@usgs.gov>; 'tom.ernsberger@parks.wa.gov' <tom.ernsberger@parks.wa.gov>; 'nona.snell@rco.wa.gov' <nona.snell@rco.wa.gov>; 'Richard Uhlhorn (richard@richarduhlhorn.com)' <richard@richarduhlhorn.com>; 'Thomas O'Keefe (okeefe@amwhitewater.org)' <okeefe@amwhitewater.org>

Cc: Osborn, Jeff <Jeff.Osborn@chelanpud.org>; Smith, Michelle <michelle.smith@chelanpud.org>; Sokolowski, Rosana <Rosana.Sokolowski@chelanpud.org>; Clement, Marcie <Marcie.Clement@chelanpud.org>; Bitterman, Deborah <Deborah.Bitterman@chelanpud.org>; Buehn, Scott <scott.buehn@chelanpud.org>; Campbell, Rob <rob.campbell@chelanpud.org>; Willard, Catherine <Catherine.Willard@chelanpud.org>; Underwood, Alene <Alene.Underwood@chelanpud.org>; Hopkins, Scott <Scott.Hopkins@chelanpud.org>; Von Reis, Charles <Charles.VonReis@chelanpud.org>

Subject: Request for Statement of Concurrence - Flow Operations To Protect Steelhead Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival Study

PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY

P.O. Box 1231, Wenatchee, WA 98807-1231 • 327 N. Wenatchee Ave., Wenatchee, WA 98801

(509) 663-8121 • Toll free [1-888-663-8121](tel:1-888-663-8121) • www.chelanpud.org

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](tel:5096614181)

Re: Lake Chelan Hydroelectric Project No. 637 (Project)
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Redds and Complete the Chelan River Steelhead Trout Egg to Emergence Survival
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Document Content(s)

PUD Ltr re fry emergence flow reduction.PDF.....1-25