From: Osborn, Jeff
To: Bitterman, Deborah

Subject: FW: 2015 Annual Fish Stocking Report

Date: Friday, May 22, 2015 4:26:33 PM

Attachments: 2015 Fish Stocking Report draft 11915.docx

#6

From: Osborn, Jeff

Sent: Wednesday, January 21, 2015 1:45 PM

To: Alex Martinez; Annelise Lesmeister; Ashley Rawhouser; Bill Towey; Bitterman, Deborah; Bob Goedde; Gina McCoy; Graham Simon; Hays, Steve; Hugh Anthony; Jeff Korth; Justin Yeager; Kari Grover Wier; Osborn, Jeff; Pat Irle; Phil Archibald; Richard Vacirca; Smith, Michelle; Steve Lewis; Travis

Maitland; Truscott, Keith **Cc:** Sokolowski, Rosana

Subject: 2015 Annual Fish Stocking Report

Dear Lake Chelan Fishery Forum: Please find the draft Annual Fish Stocking Report for 2015. This report is a requirement of the Lake Chelan operating license, and is described in the first two paragraphs of the report. Chelan PUD is required to provide a 30-day review period to the Forum for the opportunity to provide comments and edits to the draft report. Please provide me with your comments and edits, preferably in redline in the document, by Friday, February 20.

Thank you very much.

Jeff

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Lake Chelan Hydroelectric Project FERC No. 637

Annual Fish Stocking Report

License Article 404. Lake Chelan Fishery Plan

DRAFT

May 30, 2015



Prepared by:
Public Utility District No. 1 of Chelan County
327 North Wenatchee Avenue
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On November 6, 2007, Public Utility District No. 1 of Chelan County (Chelan PUD) filed the Lake Chelan Fishery Plan (LCFP) pursuant to Article 404 of the Federal Energy Regulatory Commission Order on Offer of Settlement and Issuing New License dated November 6, 2006 for the Lake Chelan Hydroelectric Project. The Federal Energy Regulatory Commission (FERC) approved the LCFP in the Order Modifying and Approving Lake Chelan Fishery Plan, Article 404, dated December 4, 2007. Stated in the Order, under The Director Orders: section (B) is the following:

(B) The licensee shall file with the Commission by June 1, beginning in 2008, their Annual Fish Stocking Report. If any recommended fish enhancement measures are proposed to be implemented in place of stocking, the licensee's report shall be filed for commission approval. The licensee shall allow the Lake Chelan Fisheries Forum 30 days to provide comments and/or recommendations on their report before filing the report with the commission. The filing shall include comments and or recommendations from the Lake Chelan Fisheries Forum and the licensee's response to any comments. Based on review of the report, the Commission reserves the right to require changes to the project to ensure compliance with the license.

This report satisfies Article 404 requirements for annual reporting of activities associated with fish stocking in Lake Chelan. Section 4.6.3 of Chapter 6 of the Lake Chelan Settlement Agreement (SA) Comprehensive Plan requires Chelan PUD to make available to the Washington Department of Fish and Wildlife (WDFW) sufficient funding to rear annually the following resident fish for stocking in Lake Chelan:

- 1. Approximately 5,000 pounds of salmonid fingerlings (for example: 500,000 fish at 100 fish/lb, presently kokanee).
- 2. Approximately 33,000 pounds of catchable-sized salmonids (for example: approximately 100,000 fish at 3 fish/lb, presently westslope cutthroat trout (WSCT) and triploid rainbow trout (RBT).

Chelan PUD has provided funding to WDFW annually for rearing resident fish, primarily at the Chelan Hatchery, described previously since issuance of the Lake Chelan Project operating license in 2006. The Lake Chelan Fishery Forum (LCFF), which is comprised of the signatories to the SA (WDFW, USDA Forest Service, National Park Service, U.S. Fish and Wildlife Service, the Confederated Tribes of the Colville Reservation, the Yakama Nation, Washington Department of Ecology, Chelan PUD, the Lake Chelan Sportsman's Association, and the city of Chelan), recommended during relicensing negotiations to attempt to reduce, and eventually eliminate, the number of rainbow trout and increase the number of westslope cutthroat trout (WSCT) stocked into Lake Chelan. The ultimate goal of the LCFF is to stock only catchable-sized WSCT and no rainbow into Lake Chelan to support the recreational fishery and help rebuild the WSCT population in the lake. Most (80%) WSCT stocked to date have been adipose fin clipped, with fin-clipped trout legal to retain by sport fishers and non-clipped fish required to be released, per WDFW fishing regulations. Additionally, the LCFF has supported efforts by WDFW to stock WSCT fry into tributaries to Lake Chelan as an additional effort to help rebuild the WSCT population in the Lake Chelan Basin.

Significant efforts have been made between WDFW hatchery personnel and Chelan PUD staff to increase the number of catchable-sized WSCT available for stocking into Lake Chelan, including investigating alternative rearing vessels, feed type and methods, rearing vessel habitat/cover, and rearing location. WSCT are challenging to rear in the hatchery environment because they are wild-origin fish, with eggs being collected from Twin Lakes broodstock. Twin Lakes stock originated from Lake Chelan, and has been approved by the LCFF for stocking into Lake Chelan.

Planned and actual fish stocking data (stocking location, species, origin, number, fish size, and stocking date) for 2011-2014 are shown in Tables 1 - 8 below (Corey Morrison, Travis Maitland, WDFW, pers. com.). Planned fish stocking data for 2015 are outlined in Table 9 (Corey Morrison, Travis Maitland, WDFW, pers. com.).

Table 1. 2011 Fish Stocking Plan

Location	Species	Stock	Number	No. Fish/lb	Stocking date
Lake Chelan Tributaries					
Four Mile Creek	Cutthroat	Twin LK	10,000	Eyed eggs	June
Cascade Creek	Cutthroat	Twin LK	5,000	Fry	June or July
Bear Creek	Cutthroat	Twin LK	3,000	Fry	June or July
Big Creek	Cutthroat	Twin LK	2,000	Fry	June or July
Lake Chelan	Cutthroat	Twin LK	100,000	15	March
		Ad- clipped	(80%)		
	Kokanee	Lake Chelan	80,000	80	Mid-May
	Triploid Rainbows	Spokane	1,000	0.4	May - September
	Triploid Rainbows	Spokane	50,000	2.5	August-September
Mill Creek	Cutthroat	Twin LK	3,000	Fry	June or July

Table 2. 2011 Actual Fish Stocking

Location	Species	Stock	Number	No. Fish/lb	Stocking date
Lake Chelan Tributaries					
First Creek	Cutthroat	Twin LK	26,899	Fry	Early September
Lake Chelan	Cutthroat	Twin LK	137,224	Fry	Late September
	Cutthroat	Twin LK	51,949	15	April
		Ad-clipped	(80%)		
	Kokanee	Lake Chelan	0	N/A	N/A
	Triploid Rainbow	Spokane	1,686	0.4	May - September
	Triploid Rainbow	Spokane	46,829	3.4	August -
					September

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Table 3. 2012 Fish Stocking Plan

Location	Species	Stock	Number	No. Fish/lb	Stocking Date
Lake Chelan Tributaries					
Twenty Five Mile Creek	Cutthroat	Twin LK	29,091	Fry	June or July
First Creek	Cutthroat	Twin LK	14,545	Fry	June or July
Grade Creek	Cutthroat	Twin LK	3,636	Fry	June or July
Safety Harbor Creek	Cutthroat	Twin LK	2,727	Fry	June or July
Company Creek	Cutthroat	Twin LK	78,750	Fry	June or July
Blackberry Creek	Cutthroat	Twin LK	81,900	Fry	June or July
Lake Chelan	Cutthroat	Twin LK	50,000	15	March
		Ad clipped (80	%)		
	Kokanee	Lake Chelan	80,000	80	Mid May
	Triploid Rainbow	Spokane	1,000	0.5	May - September
	Triploid Rainbow	Spokane	50,000	2.5	August - September
Mill Creek	Cutthroat	Twin LK	3,000	Fry	June or July

Table 4. 2012 Actual Fish Stocking

Tubic 7, 2012 Actual Fish Stocking							
Location	Species	Stock	Number	No. Fish/lb	Stocking Date		
Lake Chelan Tributaries							
Twenty Five Mile Creek	Cutthroat	Twin LK	29,000	Fry	August		
Twenty Five Mile Creek	Cutthroat	Twin LK	7,803	10	June		
First Creek	Cutthroat	Twin LK	15,000	Fry	August		
Grade Creek	Cutthroat	Twin LK	3,000	Fry	September		
Safety Harbor Creek	Cutthroat	Twin LK	3,500	Fry	September		
Company Creek	Cutthroat	Twin LK	17,500	Fry	September		
Blackberry Creek	Cutthroat	Twin LK	0	Fry			
Lake Chelan	Cutthroat	Twin LK	72,980	15	April		
		Ad clipped (80	%)				
	Cutthroat	Twin LK	1,000	Fry	September		
	Kokanee	Lake Chelan	27,200	100	Mid May		
	Triploid Rainbow	Spokane	1,898	0.8	October		
	Triploid Rainbow	Spokane	39,339	2.5	August - September		

Table 5. 2013 Fish Stocking Plan

Location	Species	Stock	Number	No. Fish/lb	Stocking Date
Lake Chelan Tributaries					
Twenty Five Mile Creek	Cutthroat	Twin LK	29,000	Fry	June – August
First Creek	Cutthroat	Twin LK	14,700	Fry	June – August
Grade Creek	Cutthroat	Twin LK	2,700	Fry	June – August
Safety Harbor Creek	Cutthroat	Twin LK	3,200	Fry	June – August
Mitchell Creek	Cutthroat	Twin LK	4,000	Fry	June – August
Fish Creek	Cutthroat	Twin LK	6,000	Fry	June – August
Gold Creek	Cutthroat	Twin LK	1,200	Fry	June – August
Prince Creek	Cutthroat	Twin LK	4,700	Fry	June – August
Company Creek	Cutthroat	Twin LK	30,000	Fry	June – August
Blackberry Creek	Cutthroat	Twin LK	30,000	Fry	June – August
Lake Chelan	Cutthroat	Twin LK	15,000	15	March
		Ad-clipped (80	%)		
	Kokanee	Lake Chelan	0		
	Triploid Rainbow	Spokane	1,000	0.5	May - September
	Triploid Rainbow	Spokane	50,000	2.5	August - September

Table 6. 2013 Actual Fish Stocking

Location	Species	Stock	Number	No. Fish/lb	Stocking Date
Lake Chelan Tributaries					
Twenty Five Mile Creek	Cutthroat	Twin LK	29,000	Fry	August – September
First Creek	Cutthroat	Twin LK	19,000	Fry	August – September
Lake Chelan	Cutthroat	Twin LK	2,700	Fry	August – September
Safety Harbor Creek	Cutthroat	Twin LK	3,200	Fry	August – September
Mitchell Creek	Cutthroat	Twin LK	4,000	Fry	August – September
Fish Creek	Cutthroat	Twin LK	6,000	Fry	August – September
Gold Creek	Cutthroat	Twin LK	1,200	Fry	August – September
Prince Creek	Cutthroat	Twin LK	4,700	Fry	August – September
Company Creek	Cutthroat	Twin LK	30,000	Fry	August – September
Stehekin River	Cutthroat	Twin LK	30,000	Fry	August – September
Lake Chelan	Cutthroat	Twin LK	16,953	13 – 9.5	April
		Ad-clipped (80	%)		
	Kokanee	Lake Chelan	0		
	Triploid Rainbow	Spokane	2,338	0.5	May – July
	Triploid Rainbow	Spokane	69,993	2.5	September - October

Table 7. 2014 Fish Stocking Plan

Location	Species	Stock	Number	No. Fish/lb	Stocking Date		
Lake Chelan Tributaries							
Fish Creek	Cutthroat	Twin LK	6,000	Fry	July – August		
Gold Creek	Cutthroat	Twin LK	1,300	Fry	July – August		
Prince Creek	Cutthroat	Twin LK	4,700	Fry	July – August		
Cascade Creek	Cutthroat	Twin LK	600	Fry	July – August		
Four Mile Creek	Cutthroat	Twin LK	2,100	Fry	July – August		
Big Creek	Cutthroat	Twin LK	700	Fry	July – August		
Pyramid Creek	Cutthroat	Twin LK	2,300	Fry	July – August		
Company Creek	Cutthroat	Twin LK	30,000	Fry	July – August		
Blackberry Creek	Cutthroat	Twin LK	30,000	Fry	July – August		
Lake Chelan	Cutthroat	Twin LK	50,000+	2.5	July - August		
		Ad-clipped (80%)					
	Kokanee	Lake Chelan	70,000	<100	May		
	Triploid Rainbow	Spokane	50,000	2.5	August - September		
	Triploid Rainbow	Spokane	2,000	0.5	May - September		

Table 8. 2014 Actual Fish Stocking

Location	Species	Stock	Number	No. Fish/lb	Stocking Date		
Lake Chelan Tributaries							
Fish Creek	Cutthroat	Twin LK	6,000	426	August		
Gold Creek	Cutthroat	Twin LK	1,300	557	August		
Prince Creek	Cutthroat	Twin LK	4,700	557	August		
Cascade Creek	Cutthroat	Twin LK	600	426	August		
Four Mile Creek	Cutthroat	Twin LK	2,100	426	August		
Big Creek	Cutthroat	Twin LK	700	557	August		
Pyramid Creek	Cutthroat	Twin LK	2,300	557	August		
Company Creek	Cutthroat	Twin LK	30,000	402	August		
Blackberry Creek	Cutthroat	Twin LK	30,000	426	August		
Chelan River			2,000	242	October		
Lake Chelan	Cutthroat	Twin LK	47,483	3.5	June		
		Ad-clipped (80%)					
	Kokanee	Lake Chelan	70,177	85	May		
	Triploid Rainbow	Spokane	728	0.2-0.25	June		
	Triploid Rainbow	Spokane	38,846	~2.5	October - November		

A significant note for 2014 of actual fish stocked into Lake Chelan was 47,483 westslope cutthroat trout (WSCT) at 3.5 fish per pound (FPP) were stocked into the lake. This was the first time that WSCT of approximate catchable size were stocked into the lake for recreational fishing. As outlined previously in this document, WSCT have been very difficult to rear to catchable size due to eggs originating from wild stock and being much more difficult to culture (more susceptible to disease, reduced growth rates, avoidance/fright behavior, etc.) than more domesticated stocks, such as rainbow trout. However, WDFW and Chelan PUD coordinated alternative rearing practices and facilities for WSCT, and were able to produce WSCT to catchable size and stock them into Lake Chelan for the first time in 2014. This program, in

addition to refinements as more is learned regarding culturing wild-origin WSCT, will be continued into the future with the goal of producing the entire license stocking production requirement of trout to be WSCT and reducing the stocking of triploid rainbow trout, to the greatest extent practicable.

Table 9. 2015 Fish Stocking Plan

Location	Species	Stock	Number	No. Fish/lb	Stocking Date
Lake Chelan Tributaries					
Twenty Five Mile	Cutthroat	Twin LK	29,000	Fry	July – August
First	Cutthroat	Twin LK	14,700	Fry	July – August
Mitchell	Cutthroat	Twin LK	4,000	Fry	July – August
Grade	Cutthroat	Twin LK	2,700	Fry	July – August
Safety Harbor	Cutthroat	Twin LK	3,200	Fry	July – August
Cascade Creek	Cutthroat	Twin LK	600	Fry	July – August
Four Mile Creek	Cutthroat	Twin LK	2,100	Fry	July – August
Big Creek	Cutthroat	Twin LK	700	Fry	July – August
Pyramid Creek	Cutthroat	Twin LK	2,300	Fry	July – August
Company Creek	Cutthroat	Twin LK	30,000	Fry	July – August
Blackberry Creek	Cutthroat	Twin LK	30,000	Fry	July – August
Lake Chelan	Cutthroat	Twin LK	100,000	3.0	July-August
		Ad-Clipp	ed (80%)		
Kokanee	Lake Chelan	LK Chelan	70,000	<100	May
	Triploid Rainbow	Spokane	50,000	2.5	August - September
	Triploid Rainbow	Spokane	1,000	0.5	May - September

Fish stocking is a component of the Lake Chelan Fishery Forum Annual Work Plan (AWP). The AWP is requirement contained in section 4.2.2 *Monitoring and Evaluation (M&E) Program* of the LCFP and is prepared by the USDA Forest Service, National Park Service (NPS) and Washington Department of Fish and Wildlife (WDFW). The AWP is submitted to Chelan PUD for approval and planning for expenditure of annual funding for implementing the monitoring and evaluation (M&E) program as described in section 4.2.2. The LCFF is involved with the preparation of each AWP and, therefore, all aspects of the Lake Chelan fish stocking program.

The LCFF convenes a forum meeting each the fall, generally in October or November, to begin development of the next year's AWP. Forum discussions during this meeting involve review of M&E results, projects to be implemented, based on M&E results, during the next year, budgets needed to conduct the work, and data from M&E results informing decisions regarding the fish stocking program. This annual Forum meeting serves as the opportunity for annual review and revision of the fish stocking plan and management objectives for all Forum members. The LCFF held a meeting of the Forum on November 20, 2014 to begin developing the AWP and, concurrently, the fish stocking plan for 2015 presented here.