





### PUBLIC UTILITY DISTRICT NO. 1 of CHELAN COUNTY

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June 1, 2018

VIA ELECTRONIC FILING

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

Re: Lake Chelan Hydroelectric Project No. 637 Article 404 (b) – 2017 Annual Fish Stocking Report

Dear Secretary Bose:

The Federal Energy Regulatory Commission (Commission) issued the "Order Modifying and Approving Lake Chelan Fishery Plan, Article 404" on December 4, 2007 (LCFP Order). The Plan satisfied the License Article 404 requirement of the "Order on Offer of Settlement and Issuing New License" (License) and "Order on Rehearing" for the Lake Chelan Hydroelectric Project (Project) on November 6, 2006, and April 19, 2007, respectively.

Pursuant to Ordering Paragraph (B) of the LCFP Order, Chelan County Public Utility District (Chelan PUD) hereby files the Lake Chelan 2017 Annual Fish Stocking Report. The Fish Stocking Report is coordinated and prepared by the Lake Chelan Fish Forum (LCFF) during development of the LCFF's annual work planning process. Summary tables showing the numbers of fish stocked into Lake Chelan in 2017 and planned stocking levels for 2018 are included in this report. Coordination and consultation with the LCFF on the development of the Fish Stocking Report is attached as Table A.

The Lake Chelan Fishery Plan (LCFP) and Settlement Agreement Article 6(d) require Chelan PUD to make available to the Washington State Department of Fish and Wildlife (WDFW) sufficient funding to rear annually the following resident fish at the Chelan Hatchery for stocking in Lake Chelan: (1) approximately 5,000 pounds of salmonid fingerlings; and (2) approximately 33,000 pounds of catchable-sized salmonids. An Interagency Agreement exists between the Chelan PUD and the WDFW to provide funding for fish rearing and stocking.

<sup>&</sup>lt;sup>1</sup> 121 FERC ¶ 62,167.

<sup>&</sup>lt;sup>2</sup> 117 FERC ¶ 62,129.

<sup>&</sup>lt;sup>3</sup> 119 FERC ¶ 61,055.

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In 2008, the LCFF recommended eliminating stocking catchable-sized rainbow trout in the lake and focusing on stocking catchable-sized westslope cutthroat trout (WCT) as a replacement for rainbow trout. The goal was then, and continues to be, to enhance the WCT population in the lake and tributaries, while still providing for a recreational fishery. Due to the difficulty with rearing a wild-origin stock of WCT in a hatchery environment, this effort was only partially successful in previous years. WCT have been very difficult to rear to catchable size due to eggs being collected from wild stock, the offspring from which are much more difficult to culture (more susceptible to disease, reduced growth rates, avoidance/fright behavior, etc.) than more domesticated stocks, such as rainbow trout. Subsequently, WDFW and Chelan PUD have worked with the LCFF attempting to meet stocking levels with triploid rainbow trout to make up for the shortfall of WCT to support the recreational fishery. However, WDFW and Chelan PUD coordinated alternative rearing practices and facilities for WCT, and were able to produce WCT to catchable size and stock them into Lake Chelan for the first time in 2014 and again in 2015.

A significant note for 2016, of actual fish stocked into Lake Chelan was 122,367 WCT at 3.9 fish per pound (FPP) released into the lake. This was the second time that WCT of approximate catchable size were stocked successfully into the lake for recreational fishing, and the second occasion where the full license requirement of 33,000 pounds of catchable-sized salmonids was met completely with WCT. In 2017, a slight shortage in poundage of WCT stocked into Lake Chelan was compensated with only 100 triploid rainbow trout being stocked as well (Table 2).

The LCFF has remained supportive of continuing efforts to stock all catchable-sized salmonids as WCT. The Lake Chelan stocking program, in addition to refinements as more is learned regarding culturing wild-origin WCT, will be continued into the future with the ongoing goal of producing the entire license stocking production requirement of trout to be WCT and reducing or eliminating stocking triploid rainbow trout, to the greatest extent practicable.

Please do not hesitate to contact me regarding any questions or comments regarding the fish stocking report.

Sincerely,

Jeffrey G. Osborn

Senior License Compliance Specialist

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cc:

Erich Gaedeke, FERC-PRO

Lake Chelan Fishery Forum

Enclosures:

Table of Consultation Documentation

2017 Annual Fish Stocking Report

# Lake Chelan Fishery Forum 2017 Annual Work Plan Comments Regarding Fish Stocking

The Lake Chelan Fishery Forum (LCFF) met on December 21, 2017 to begin developing the 2018 LCFF Annual Work Plan and 2017 Annual Fish Stocking Report. For 2017, all LCFF participants supported continuing to rear and stock fish into Lake Chelan to enhance the recreational fishery. Emails demonstrating Chelan PUD consultation with the LCFF for developing the LCFF Annual Work Plan and Annual Fish Stocking Report are included in Table A below.

	TABLE A	- CONSULTATION	TABLE A – CONSULTATION ON DEVELOPMENT OF THE FISH STOCKING REPORT	H STOCKING REPC	RT
From	To	Date	Subject	Fish Stocking	Chelan PUD
				Report Comment	Response
USDA Forest	Chelan PUD	December 14, 2017	USFS will not be requesting funds for	No comment on fish	
Service			2018 in the LCFF Annual Work Plan	stocking	
Chelan PUD	LCFF	December 18, 2017	Meeting announcement and draft	No comment on fish	
			agenda to begin developing the 2018	stocking	
			LCFF Annual Work Plan		
WDFW	LCFF	March 27, 2018	First draft LCFF Annual Work Plan	Fish stocking tables	Tables incorporated into
				from WDFW included	Annual Fish Stocking
				in draft LCFF Annual	Report
				Work Plan	•
Chelan PUD	LCFF	April 13, 2018	Chelan PUD edits to LCFF Annual	No comment on fish	
			Work Plan	stocking plan/report	
NPS	Chelan PUD	April 16, 2018	Final edits to 2018 LCFF Annual Work	No comments from	
			Plan	NPS, WDFW, or	
				USFS on fish stocking	
				plan/report	-
Chelan PUD	LCFF	May 24, 2018	Final 2018 LCFF Annual Work Plan	No comment on fish	
			completed and distributed to the LCFF	stocking plan/report	

# Lake Chelan Fishery Forum 2017 Annual Fish Stocking Report, Final

# Lake Chelan Hydroelectric Project FERC No. 637

# **Annual Fish Stocking Report**

License Article 404. Lake Chelan Fishery Plan

## **FINAL**

June 1, 2018



Prepared by:
Public Utility District No. 1 of Chelan County
327 North Wenatchee Avenue
Wenatchee, WA 98801

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.

The Lake Chelan Fishery Forum (LCFF) convenes a meeting each fall, generally in October or November, to begin development of the next year's annual work plan (AWP). Forum discussions during this meeting involve review of monitoring and evaluation (M&E) results, projects to be implemented based on M&E results, budgets to conduct the work, and data from M&E results informing decisions relative to the fish stocking program. This annual Forum meeting and subsequent AWP development 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 on December 21, 2017 to begin developing the AWP and, concurrently, the fish stocking plan for 2018 presented here.

Fish stocking is a component of the Lake Chelan Fishery Forum Annual Work Plan (AWP). The AWP is a 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.

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 (WCT) 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 WCT stocked into Lake Chelan. The ultimate goal of the LCFF is to stock only catchable-sized WCT and no rainbow into Lake Chelan to support the recreational fishery and help rebuild the WCT population in the lake. Most (80%) WCT 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 WCT fry into tributaries to Lake Chelan as an additional effort to help rebuild the WCT 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 WCT available for stocking into Lake Chelan, including investigating alternative rearing vessels, feed type and methods, rearing vessel habitat/cover, and rearing location. WCT are challenging to rear in the hatchery environment because they are wild-origin fish, with eggs being collected from Twin Lakes adult broodstock. Twin Lakes stock originated from Lake Chelan, and has been approved by the LCFF for stocking into Lake Chelan.

Proposed and actual fish stocking data (stocking location, species, origin, number, fish size, and stocking date) for 2017 are shown in Tables 1 and 2 below (Cory Morrison, Travis Maitland, WDFW, pers. com.). Table 3 outlines the Proposed 2018 Fish Stocking Plan (2018 Annual Work Plan).

**Table 1-2017 Proposed Fish Stocking Plan** 

Location	Species	Stock	Number	No. Fish/lb	Stocking Date
Lake Chelan Tributaries					
Fish Creek	Cutthroat	Twin LK	6,000	Fry	August-September
Gold Creek	Cutthroat	Twin LK	1,300	Fry	August-September
Prince Creek	Cutthroat	Twin LK	4,700	Fry	August-September
Cascade Creek	Cutthroat	Twin LK	600	Fry	August-September
Four Mile Creek	Cutthroat	Twin LK	2,100	Fry	August-September
Big Creek	Cutthroat	Twin LK	700	Fry	August-September
Pyramid Creek	Cutthroat	Twin LK	2,300	Fry	August-September
Company Creek	Cutthroat	Twin LK	30,000	Fry	August-September
Blackberry Creek	Cutthroat	Twin LK	30,000	Fry	August-September

Lake Chelan	Cutthroat	Twin LK	105,000 <sup>1</sup>	3.0+	June -July
	Kokanee	Lake Chelan	0	<100	May - June
	Triploid Rainbow <sup>2</sup>	Spokane	TBD	2.5	August - September
	Triploid Rainbow <sup>2</sup>	Spokane	TBD	0.5	May - September

<sup>1 - 80%</sup> of cutthroat marked with adipose fin clip.

**Table 2-2017 Actual Fish Stocking** 

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Location	Species	Stock	Number	No. Fish/lb	Stocking Date
Fish Creek	Cutthroat	Twin LK	6,000	Fry	August-September
Gold Creek	Cutthroat	Twin LK	1,300	Fry	August
Prince Creek	Cutthroat	Twin LK	4,700	Fry	September
Cascade Creek	Cutthroat	Twin LK	600	Fry	September
Fourmile Creek*	Cutthroat	Twin LK	0	Fry	NA
Big Creek	Cutthroat	Twin LK	700	Fry	September
Pyramid Creek	Cutthroat	Twin LK	2,300	Fry	September
Company Creek	Cutthroat	Twin LK	64,204	Fry	August
Blackberry Creek	Cutthroat	Twin LK	0	Fry	NA

Lake Chelan	Cutthroat	Twin LK	75,561 <sup>1</sup>	2.46-2.80	July
	Kokanee	Lake Chelan	0	<100	NA
	Triploid Rainbow	Spokane	0	2.5	NA
	Triploid Rainbow	Spokane	100	0.5	August

<sup>\*-</sup> Fourmile Creek was not stocked due to lack of surface water.

<sup>2-</sup> Triploid rainbow trout will be stocked only if the full requirement of 33,000 pounds cannot be met by Westslope cutthroat trout only.

<sup>1-80%</sup> of catchable size cutthroat are marked with an adipose fin clip

Table 3- 2018 Proposed Fish Stocking Plan.

Location	Species	Stock	Number	No. Fish/lb	Stocking Date
Twenty-Five Mile Creek	Cutthroat	Twin LK	24,500	Fry	August - September
	Cutthroat	Twin LK	$4,500^2$	2.5	June - July
First Creek	Cutthroat	Twin LK	12,200	Fry	August - September
	Cutthroat	Twin LK	$2,500^2$	2.5	June - July
Railroad Creek	Cutthroat	Twin LK	41,900	Fry	August - September
	Cutthroat	Twin LK	$8,500^2$	2.5	June - July
Mitchell Creek	Cutthroat	Twin LK	4,000	Fry	August - September
Grade Creek	Cutthroat	Twin LK	2,700	Fry	August - September
Safety Harbor Creek	Cutthroat	Twin LK	3,200	Fry	August - September
Cascade Creek	Cutthroat	Twin LK	600	Fry	August - September
Pyramid Creek	Cutthroat	Twin LK	2,300	Fry	August - September
Fourmile Creek	Cutthroat	Twin LK	2,100	Fry	August - September
Big Creek	Cutthroat	Twin LK	700	Fry	August - September
Company Creek	Cutthroat	Twin LK	30,000	Fry	August - September
Blackberry Creek	Cutthroat	Twin LK	30,000	Fry	August - September
Lake Chelan	Cutthroat	Twin LK	$67,000^2$	2.5	June - July
	Kokanee	Lake Chelan	TBD	<100	May
	Triploid Rainbow <sup>1</sup>	Spokane	TBD	2.5	August - September
	Triploid Rainbow <sup>1</sup>	Spokane	TBD	0.5	May - September

<sup>1 –</sup> Triploid rainbow trout will be stocked only if the full requirement of 33,000 pounds cannot be met by Westslope cutthroat trout only.

The intent of the WCT fry plantings is to bolster WCT population in tributaries. The efficacy of this stocking program is being investigated by WDFW with fall electrofishing in selected tributaries to determine whether the percent of WCT captured compared to RBT is increasing, which would indicate that fry stocking is assisting with rebuilding WCT populations in Lake Chelan tributaries.

Triploid rainbow trout are stocked only if the full requirement of 33,000 pounds cannot be met by Westlslope cutthroat trout.

<sup>2 - 80%</sup> of catchable size cutthroat are marked with an adipose fin clip.