Osborn, Jeff
Alex Martinez; Annelise Lesmeister; Bill Towey; Bitterman, Deborah; Bob Goedde; Carl Merkle; Gina McCoy; Graham Simon;
Hays, Steve; Hugh Anthony; Jeff Korth; Justin Yeager; Kari Grover Wier; Osborn, Jeff; Pat Irle: Phil Archibald; Reed Glesne;
Smith. Michelle; Steve Lewis; Travis Maitland; Truscott. Keith
Lake Chelan tributary mouth photographs
Thursday, July 03, 2014 3:26:59 PM

Dear Lake Chelan Fishery Forum: As you all know, one requirement of Chelan PUDs Lake Chelan Project license is to provide annual photographic documentation reporting conditions existing at primary fish (Westslope cutthroat trout) producing Lake Chelan tributary mouths during the lake's lowest elevation to determine the presence or absence of barriers to upstream fish passage. The links provided below will take you to either the Lake Chelan Tributary Mouth Photographs 2014 report directly or the LCFF webpage, which contains the 2014 and previous tributary barrier reports. The photographs from 2014 show the following:

- 1. Upstream passage barriers did not appear to exist in the primary tributaries photographed during the lowest Lake Chelan elevation in March 2014;
- 2. Most tributary mouths conditions changed little from March 2013 to March 2014; and
- 3. Tributary mouth treatments to Mitchell and Gold creeks implemented in 2011 appeared to be functioning well in 2014 to provide upstream fish passage.

Link directly to document:

http://www.chelanpud.org/departments/licensingCompliance/lc_implementation/ResourceDocuments/43124.pdf

Link to web page: http://www.chelanpud.org/lc-Resource-Documents-LCFF.cfm?year=All

Please feel free to contact me if you have any questions, comments, or suggestions. Thank you very much.

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LAKE CHELAN TRIBUTARY MOUTH PHOTOGRAPHS

2014

June 2014



Public Utility District No. 1 of Chelan County Wenatchee, Washington

INTRODUCTION

This document is intended to document existing conditions occurring at the mouths of major tributaries to Lake Chelan in 2014 and compare existing conditions with those occurring between March 2008 and March 2013. Photos were taken on March 26, 2014 of conditions at the mouths of Fish, Prince, Twenty-five Mile, First, and Railroad creeks, and to view barrier removal and tributary mouth reconstruction efforts at Mitchell and Gold creeks. Unfortunately, photographs of the mouth of Safety Harbor Creek were not taken in 2014. The lake elevation on March 26 was 1086.16 feet. As demonstrated by the photos of Mitchell and Gold creeks, rock-weir structures installed in February 2011 to form step-pools continued to be intact and functioning properly, thus making upstream passage available for adult trout to migrate into the creeks to spawn.

Additional photos from previous years can be viewed for comparison on the Lake Chelan license implementation website under Resource Documents, Fisheries, Projects, Tributary Barriers. Photos were taken in March 2008, February 2009, April 2009, during a Lake Chelan Fishery Forum (LCFF) field trip to view conditions at tributary mouths of the major tributaries to Lake Chelan, and May 2011. As highlighted in previous documents, please note the changes in conditions at the mouths of Fish, Prince, and Safety Harbor creeks that have been documented since 2008. The lake level operating regime under the existing license appears to be contributing to the energy from higher flows in these tributaries being able to scour through barriers documented previously, thus maintaining spring adult upstream fish passage into all tributaries from Lake Chelan lake elevations of 1086 feet to 1100 feet.



Mitchell Creek, March 26, 2014. Lake Chelan elevation: 1086.16



Mitchell Creek, March 26, 2014. Lake Chelan elevation: 1086.16



Mitchell Creek, March 19, 2013. Lake Chelan elevation: 1086.85



Mitchell Creek, March 19, 2013. Lake Chelan elevation: 1086.85



Gold Creek, March 26, 2014. Lake Chelan elevation: 1086.16



Gold Creek, March 26, 2014. Lake Chelan elevation: 1086.16



Gold Creek, March 19, 2013. Lake Chelan elevation: 1086.85



Gold Creek, March 19, 2013. Lake Chelan elevation: 1086.85



Fish Creek, March 26, 2014. Lake Chelan elevation: 1086.16



Fish Creek, March 26, 2014. Lake Chelan elevation: 1086.16



Fish Creek, March 19, 2013. Lake Chelan elevation: 1086.85



Fish Creek, March 19, 2013. Lake Chelan elevation: 1086.85



Prince Creek, March 26, 2014. Lake Chelan elevation: 1086.16



Prince Creek, March 26, 2014. Lake Chelan elevation: 1086.16



Prince Creek, March 19, 2013. Lake Chelan elevation: 1086.85



Prince Creek, March 19, 2013. Lake Chelan elevation: 1086.85

Safety Harbor Creek



Safety Harbor Creek, March 19, 2013. Lake Chelan elevation: 1086.85



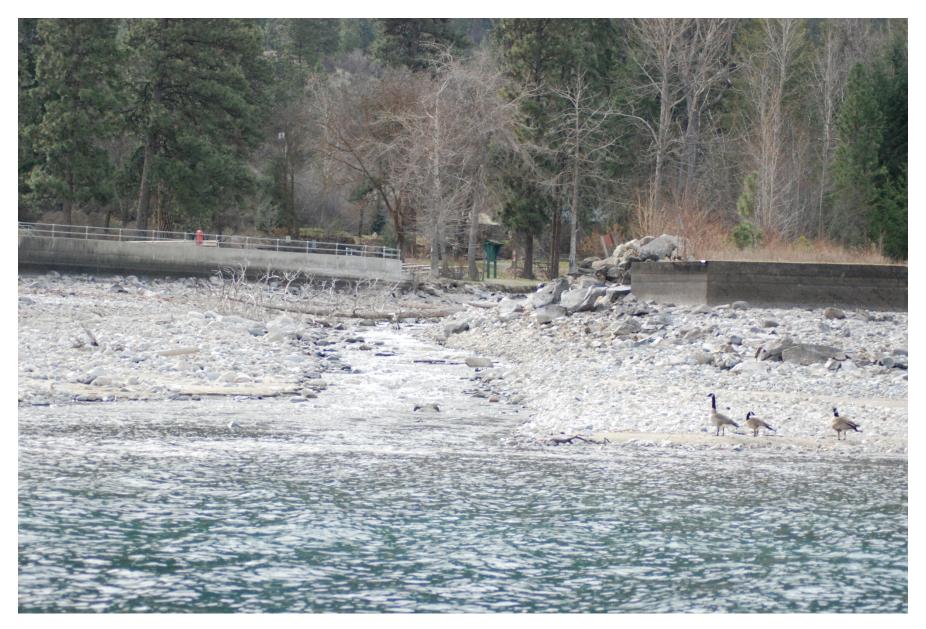
Twenty-five Mile Creek, March 26, 2014. Lake Chelan elevation: 1086.16



Twenty-five Mile Creek, March 26, 2014. Lake Chelan elevation: 1086.16



Twenty-five Mile Creek, March 26, 2014. Lake Chelan elevation: 1086.16



Twenty-five Mile Creek, March 19, 2013. Lake Chelan elevation: 1086.85

First Creek



First Creek, March 26, 2014. Lake Chelan elevation: 1086.16

First Creek



First Creek, March 26, 2014. Lake Chelan elevation: 1086.16

First Creek



First Creek, March 19, 2013. Lake Chelan elevation: 1086.85

Railroad Creek



Railroad Creek, March 26, 2014. Lake Chelan elevation: 1086.16