

Cowlitz Fish Technical Committee  
Decision Documentation

<b>Project Name</b>	Upper Riffe Collector Operations 2015
<b>Date Proposal Submitted</b>	9/12/2014
<b>Date of Requested Decision</b>	10/24/2014
<b>Completed By</b>	Matt Bleich

**FTC Decision and Justification**

The Prototype Upper Riffe Collector will be installed and operated in 2015, in a similar configuration to 2014. Adjustments in lateral positioning and the possible inclusion of guide nets will be considered as adjustments during the 2015 season. Guide nets will be implemented at lower flow if 2014 data or 2015 preliminary data warrants. Consideration for lateral adjustments will also be based on 2014 and preliminary 2015 data and will likely focus on higher flow periods. The decision to move forward is based on expectation of knowledge gained in 2014 and preliminary information expected to be gained in 2015.

**Proposed Decision or Consideration**

The Prototype Upper Riffe Collector will be installed and operated in 2015, in a similar configuration to 2014. Adjustments in lateral positioning and the possible inclusion of guide nets will be considered as adjustments during the 2015 season. These will be implemented as appropriate based on analysis of 2014 study results.

**Background**

In 2014 the Upper Riffe Collector was installed for the first time. Installation was delayed 3 weeks until the week of July 28 due to delays in shipping and fabrication. The Upper Riffe Collector was designed to be installed under conditions ranging from 0 – 5,000 cfs. Since installation discharge has exceeded 2,500 cfs only twice. Prior to installation this discharge was exceeded 18 of 21 days. There is some evidence to indicate that the current design functions better under higher discharge conditions as the highest numbers of Chinook smolt have been collected following the two days with discharge exceeding 2,500 cfs.

In 2015 it will be important to install the Upper Riffe Collector for the full study season (early July – mid or late September). It is possible that more than one configuration is required to achieve the greatest level of success.

Following evaluation of the 2014 results it will be determined if installation of lead nets and/or lateral positioning of the collector is appropriate during the lower flow collection

period. It is currently anticipated that the collector will remain in its current configuration during the higher flow collection period at the beginning of installation in 2015.

**Coordination Need**

The FTC will revisit the decision to implement the prototype Upper Riffe Collector following the 2015 season.

**Summary of Potential Impacts**

PIT tagged Chinook smolts released at the Day Use Park for Performance Monitoring will be used to evaluate Fish Capture Efficiency at the CFFF and Upper Riffe Collector. This is anticipated to include up to 8 groups of 120 (960 total). Additionally, 90 fish are anticipated to be implanted with active tags for Directed Studies evaluating Retention Efficiency, Entrance Efficiency and Discovery Efficiency around the Upper Riffe Collector.