

# **DRAFT PROPOSAL 2005 PROJECT YEAR**

**Project Title: Examination of Bull Trout Presence in the lower Walla Walla River, Washington**

**Project Leader: POC: Fred Higginbotham (COE)**

**Study Code:**

**Anticipated Duration: 2005 – 2007**

**Submission Date: August 10, 2004**

## **1. GENERAL BACKGROUND AND PURPOSE**

There is significant regional concern regarding how bull trout (*Salvelinus confluentus*) could be affected by the operation of the lower Snake River dams and McNary Dam. The US Fish and Wildlife Service (USFWS) 2000 Biological Opinion (BiOp) on the operation of the Federal Columbia River Power System (FCRPS) directs the Action Agencies to determine the presence of bull trout and their use of the main stem Snake River and McNary Reservoir. It also guides them to implement studies to provide critical information on bull trout distribution, timing, and usage of the FCRPS.

The Bull Trout Recovery Plan calls for an investigation into the connectivity between the Umatilla and Walla Walla core area populations and suggests that investigations into the use of the Columbia River begin with the Walla Walla population.

A 5 foot diameter rotary screw trap was operated in the fall of 2003 and the spring of 2004 to increase the probability of detecting sub-adult bull trout moving out of the Walla Walla River into the Columbia River. Prior to this research, there currently did not exist in the Walla Walla River basin a means to monitor the downstream movement of sub-adult bull trout below the Touchet River. The trap was located at approximately 9.3 miles upstream of the mouth of the Walla Walla River and was operated from November 24 to December 2003 and from March 17 to May 28, 2004. No bull trout were captured during the sampling efforts in the fall of 2003 or the spring of 2004. Over the entire season trapping efficiency was 5% for Chinook salmon and 4.8% for steelhead. Due to low trap efficiency it should not be seen as conclusive that bull trout do not migrate out of the Walla Walla system. Based upon these results it seems reasonable to continue trapping in subsequent years during the fall and early winter using methods which increase trapping efficiency.

## **1.1 Site Description**

The Walla Walla River is a tributary of the Columbia River. The site for the screw trap(s) is between Zanger Junction and Reese, approximately RM 4.

## **1.2 Specific Objectives**

1. Determine if bull trout migrated out of the Walla Walla River using multiple screw traps.
2. Conduct further trapping under all water conditions under which trapping is possible.
3. PIT tag all bull trout that are trapped and of sufficient size.

## **2.0 TASK DETAILS**

Operate one screw trap in a new location different from the one used in the winter of 2003-2004, or, operate two screw traps in the lower Walla Walla River. The location of the second trap is yet to be determined.

Any bull trout captured in the screw trap(s) will be scanned for a PIT or radio tag, and if not present, given a PIT tag and released [the same sampling will be done for all anadromous salmonids captured in the trap(s)]. An estimate of trap efficiency would be determined by releasing marked fish upstream of the trap(s) and monitoring the ratio of marked fish captured to total released.

## **2.1 Study Design**

The continuation of trapping and the addition of one more trap are being proposed for two reasons. The difficulty in achieving high sampling success is partially due to the lack of high quality site for the trap near the mouth of the Walla Walla River. The five-foot trap samples only about one tenth of the stream width. Also, the trap was removed from the river from late December 2003 through mid-March 2004 because high water and ice prevented safe, efficient use.

## **2.2 Coordination Between Researchers**

The Contractor will cooperate and coordinate with other researchers in the Walla Walla basin, especially in seeking information from bull trout that are tagged from the screw trap(s) and detected upstream in the Walla Walla River, Touchet River or Mill Creek.