



United States Department of the Interior

U. S. GEOLOGICAL SURVEY
BIOLOGICAL RESOURCES DIVISION
COLUMBIA RIVER RESEARCH LABORATORY
5501-A Cook-Underwood Road
Cook, WA 98605 USA
(509) 538-2299

August 27, 2014

Jerry Carroll
Operations Manager
U.S. Army Corps of Engineers
Bonneville Lock and Dam
P.O. Box 150
Cascade Locks, OR 97014

Dear Mr. Carroll:

We would like to request access to the Bonneville Project for fishery research to be conducted from mid-September to late November 2014. The research is part of the Lower Columbia River Alternative Gear Study being conducted by the Washington Department of Fish and Wildlife, now in its fourth year. The USGS has been contracted to monitor approximately 40 radio-tagged adult salmon collected, tagged, and released below Bonneville Dam as part of that study. Our objective is to determine the fate of all the radio-tagged fish using both mobile and fixed site radio telemetry. Consequently, it is essential that we are able to monitor for the arrival of these fish at the Project. The majority of our fixed sites will be located downstream of the Project, but we would like to install two fixed sites at the downstream end of Robbins Island. Our plan would be to access the Project (using two or three of our employees) one time in mid-September to install the sites and then we would have a single employee accessing the sites 1-2 times each week to download the data. Please find the attached project work plan and schedule of activities, project impact statement, activity hazard analysis, job hazard analyses, and lists of personnel, boats, and vehicles.

Sincerely,

Theresa Liedtke
Research Fishery Biologist

cc: Tammy Mackey; USACE
Ida Royer; USACE

PROJECT IMPACTS OF THE LOWER COLUMBIA
RIVER ALTERNATIVE GEAR MORTALITY STUDY

U.S. Geological Survey,
Western Fisheries Research Center,
Columbia River Research Laboratory
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THE LOWER COLUMBIA RIVER ALTERNATIVE GEAR MORTALITY STUDY

BACKGROUND

The Washington Department of Fish and Wildlife (WDFW) is evaluating short-term mortality of adult fall Chinook and coho salmon from two types of alternative collection gear (purse seine and beach seine) that will be operated by contracted fishermen downstream of Bonneville Dam during 2014. Similar studies were conducted by WDFW during 2011 and 2012 using PIT tag technology and USGS conducted a similar study in 2013 using radiotelemetry. In 2014, test fish will be collected 10-20 miles downstream of Bonneville Dam by a contract fisherman, radio-tagged, and released. Fixed sites and mobile tracking will be used to monitor fish movements upstream and downstream of the release site.

OBJECTIVE

Using radio-telemetry, determine the fate of radio-tagged coho salmon and Chinook salmon that are captured by beach seines and purse seines.

METHODS

The U.S. Geological Survey (USGS) will work with WDFW and a contract fisherman to collect, tag, and release approximately 40 adult salmon 10-20 miles downstream of Bonneville Dam for this research effort. Tagging will begin in late September and continue through late October, 2014.

We will use a combination of mobile tracking and fixed monitoring sites (fixed sites) to collect data on migration and behavior patterns of tagged fish during the study. The goal of these monitoring efforts will be to maximize the potential for detecting each of the radio-tagged individuals so that we can reliably determine the fate (alive/dead) of each study fish

Two fixed monitoring sites will be placed on the Bonneville Project (fig. 1):

- (1) One aerial antenna and receiver box near the Project construction trailers just upstream of Tanner Creek on the Oregon shore.
- (2) One aerial antenna and receiver box near the downstream end of Robbins Island.

JUSTIFICATION OF THE PROPOSED STUDY AREA

It is necessary to monitor Bonneville Dam because it is the first dam on the Columbia River that study fish will encounter after being collected, tagged, and released. It is essential to the study that we are able to determine the fate of all study fish and not being able to monitor the Project would compromise that objective.

SCHEDULE

We hope to begin installation of fixed monitoring sites on the Project during the week of 15 September 2014. Each fixed site will then be accessed by USGS personnel every 3-5 days during the study to collect data and perform maintenance. We expect the study to be completed and all equipment removed from the Project by 30 November 2014.

FACILITIES AND EQUIPMENT REQUIREMENTS

There are no facilities and equipment requirements other than permission to place antennas and receiver boxes (2' x 3' x 2') at the locations identified in figure 1 and to use AC power where available. We will use USGS-owned solar panels for power where AC is not available.

PROJECT IMPACTS

Project Services

No Project services are required.

Security

No security issues are expected other than USGS access to the areas identified on Figure 1 from 15 September to 30 November, 2014 during daylight hours.

We request permission to store 3 boats on trailers in the fenced area near the gravel parking lot behind the smolt monitoring facility. The area will be accessed daily to remove 1-2 boats for mobile tracking downstream of the dam. The storage need will start September 15th and continue until October 31st, 2014.

Safety

All USGS personnel accessing the Project will be current in HECF training. All personnel will meet the minimum dress code requirements and will be provided and utilize any necessary safety equipment. No chemicals will be used on the Project. First aid and CPR certification expiration dates, an Activity Hazard Analysis, and Personnel Job Hazard Analyses are attached.

LIST OF PERSONNEL, BOATS, AND VEHICLES

NAME	AGENCY	ACTIVITY	FIRST AID & CPR EXPIRATION
WELLS, ANDY	USGS	FIXED RT	9/2016
EKSTROM, BRIAN	USGS	FIXED RT	9/2016
HURST, WILL	USGS	FIXED RT	9/2016
TOMKA, RYAN	USGS	FIXED RT	9/2016
KOCK, TOBY	USGS	FIXED RT	9/2016

REG. NUM.	NAME	LENGTH	AGENCY	POC
NONE (FEDERAL)	Dogfish	27	USGS	KOCK, TOBY
NONE (FEDERAL)	Blue Duck	29	USGS	KOCK, TOBY
NONE (FEDERAL)	Customweld	22	USGS	KOCK, TOBY
NONE(FEDERAL)	Green Duck	29	USGS	KOCK, TOBY
NONE(FEDERAL)	Cuttlefish	27	USGS	KOCK, TOBY
NONE(FEDERAL)	Phantom Jet 1	29	USGS	KOCK, TOBY
NONE(FEDERAL)	Phantom Jet 2	29	USGS	KOCK, TOBY

LICENSE	STATE	DESCRIPTION	COLOR	AGENCY	OWNER	POC
I431840	FED	FORD F250	WHITE	USGS	DOI/USGS	KOCK, TOBY
G63-1168P	FED	DODGE 3500	BROWN	USGS	GSA	KOCK, TOBY
G62-3655L	FED	CHEVY K1500	BLUE	USGS	GSA	KOCK, TOBY
G63-1690H	FED	FORD F250	GRAY	USGS	GSA	KOCK, TOBY
G63-0834M	FED	CHEVY SUBURBAN	BLUE	USGS	GSA	KOCK, TOBY
G62-2361P	FED	DODGE 2500	TAN	USGS	GSA	KOCK, TOBY
G62-2490M	FED	FORD EXPLORER	BLUE	USGS	GSA	KOCK, TOBY
G13-7029N	FED	CHEVY CRUZE	DK.GRAY	USGS	GSA	KOCK, TOBY

ACTIVITY HAZARD ANALYSIS FOR USGS RESEARCH AT BONNEVILLE DAM

1. ACTIVITY – General Safety Considerations

HAZARD: Drowning, falling, tripping, injury, and/or damage to equipment.

SAFEGUARD:

- a) All USGS employees have experience working on large hydropower projects and are informed about appropriate safety protocols on dams. Most employees have First Aid/CPR training, and those operating boats are required to have U.S. Department of Interior motorboat safety certification. All USGS vehicles and boats are equipped with first aid kits and other safety equipment.
- b) Daily pre-work meetings will be held to discuss potential hazards and safety concerns for activities conducted on that day.
- c) In the event of an emergency, the Bonneville Control Room will be the first point of contact. The control room has established lines of connection to local emergency personnel, which will provide the quickest response time in the event of an emergency.
- d) All researchers will be equipped with personal safety gear such as life jackets, hard hats, steel-toed boots, and work gloves.
- e) All researchers will work in teams of at least two persons when working on the project or in boats.
- f) All researchers will have Government picture identification as well as Bonneville Project issued ID and will provide it upon request.

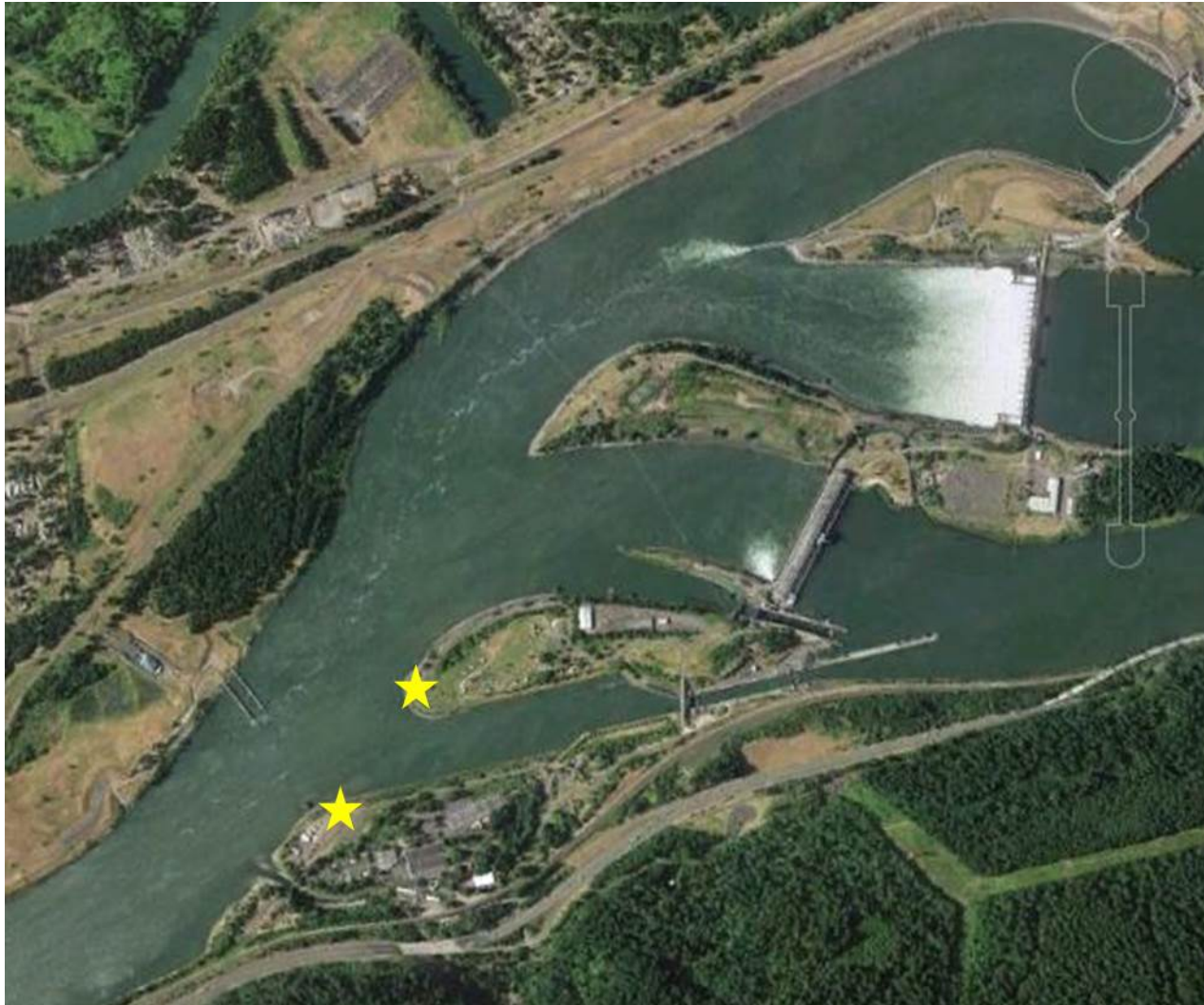


Figure 1. Map of proposed locations of USGS radio telemetry fixed site monitoring equipment at Bonneville Dam in 2014.