



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Northwest Fisheries Science Center  
Fish Ecology Division  
2725 Montlake Boulevard East  
Seattle, Washington 98112-2097

February 6, 2006

Mr. David Marvin  
PIT Tag Operations Center  
Pacific States Marine Fisheries Commission  
205 SE Spokane Street, Suite 100  
Portland, Oregon 97202-6413

FEB 8 2006

Subject: SbyC Request

Dear Mr. Marvin:

The purpose of this letter is to request Separation-by-Code (SbyC) implementation at Bonneville Dam on the Columbia River during spring/summer 2006 to support a study being conducted by our researchers. The project leader will provide tag codes and actions to you for their study. A brief study description is attached.

This research study has been reviewed and funded through the U.S. Army Corps Of Engineers' AFEP process. The project leader and contact information are listed for the attached study. The Northwest Fisheries Science Center administrative officer for this study is Mr. Kurt Gores. Appropriate Federal ESA authorization and state scientific collection permits have been requested and we anticipate receipt of the permits prior to the start of research activities.

If you have any questions, please contact the project leader.

Sincerely,

John W. Ferguson  
Director

Enclosure

cc: F/NWC3 - Gilbreath  
F/NWC3 - Gores



## Separation-by-Code Request for Bonneville Dam

Task Leader: Lyle Gilbreath

Study: Evaluation of timing and condition of yearling Chinook salmon passing through the Bonneville Dam Second Powerhouse juvenile bypass system transport flume.

The U.S. Army Corps of Engineers, Portland District, has requested that National Marine Fisheries Service conduct releases of PIT-tagged yearling Chinook salmon into the Bonneville Dam Second Powerhouse bypass system transport flume. Distortion of the flume from round toward oval in cross section has resulted in changing hydraulic conditions within the system. The effect of these changes on smolt passage timing and condition has not been documented. Data obtained from test releases in 2006 would be compared to the results of similar tests in 1999 and in 2002. Regional review of the proposed work took place at the January 26, 2006 meeting of the Fish Facility Design Review Workgroup. The Portland District POC for the work is Mr. Dennis Schwartz (503) 808-4779.

Hatchery-origin yearling Chinook salmon obtained from SMP samples would be held overnight, then anesthetised and injected with PIT tags. Following a second overnight holding period, tagged fish would be released at the upstream entrance to the transport flume. We would release fish on 10 to 12 test dates between April 16 and June 3, 2006. Each daily release would include from 50 to 60 fish. Approximately 600 fish would be used in the tests.

Prior to the start of testing (by 16 April 2006), we will provide PSMFC with a file containing PIT-tag codes to be used in the study. We request that PSMFC program the B2J system for continuous SbyC of all codes. We are aware of other potential users of the B2J SbyC system and will coordinate our efforts accordingly. Questions regarding this potential work may be directed to Lyle Gilbreath at (509) 427-8611 or via email to [Lyle.Gilbreath@noaa.gov](mailto:Lyle.Gilbreath@noaa.gov).