

Vendor for Stationary Transceiver Selected

On January 23, 1997, BPA announced the selection of Destron-Fearing Corporation (located in South St. Paul, Minnesota) as the vendor it will work with over the next couple of years to provide stationary PIT tag transceiver systems for use in the Columbia/Snake River system. These 134.2 kHz ISO FDX-B transceiver systems are intended to replace the existing 400 kHz PIT tag interrogation system. Two other companies were evaluated, Allflex USA (located in Boulder, Colorado) and Biomark (located in Boise, Idaho).

The technical evaluation of the three PIT tag transceiver systems was performed by an inter-agency team comprised of engineers and biologists from National Marine Fisheries Service, Bonneville Power Administration, US Army Corps of Engineers and Pacific States Marine Fisheries Commission. This team was established by BPA under its Federal procurement authority.

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Destron-Fearing's equipment performed exceptionally well in the technical evaluation and thus qualified for the next step in the procurement process, a field test at the US Army Corps of Engineers' McNary Dam project located near Umatilla, Oregon on the Columbia River.

The field test of Destron-Fearing's monitoring equipment will be designed to measure, among other things, the equipment's reliability while in use at a juvenile collection facility over an entire juvenile salmonid migration season. If the field test is successful, BPA will most likely begin purchasing and installing additional ISO FDX-B stationary monitors throughout the Columbia/Snake system to replace the existing 400 kHz monitors. The goal is to have the ISO system completely in place for the 1999 out-migration season.

In other activities related to the ISO Transition (see the related article on page 2), work continues on the development and procurement of 134.2 kHz ISO hand-held or portable PIT tag transceivers and ISO FDX-B PIT tags.

The ISO Transition project is intended to enhance the quality of data collected about the various life stages of anadromous fish. Better data should help the region make better decisions about what needs to occur in order to help rebuild anadromous fish populations in the Basin.

New PIT Tag System Transition Plan

As discussed in the December, 1996 newsletter, project planning and activities are underway to transition the Columbia River Basin's PIT tag interrogation system from the current 400 kHz system to one based upon the ISO FDX-B standard.

A Transition Planning Team has been created to guide the transition process. The Team members are: John Rowan, Bonneville Power Administration (BPA); Carter Stein, Pacific States Marine Fisheries Commission (PSMFC); Sandy Downing, National Marine Fisheries Service (NMFS); Blaine Ebberts, US Army Corps of Engineers (COE)-Portland Planning Division; Dave Hurson, (COE)-Walla Walla Operations; Charles Morrill, Washington Dept. of Fish and Wildlife (WDFW)/PIT Tag Steering Committee (PTSC); Ed Buettner, Idaho Dept. of Fish and Game (IDFG)/PTSC; Dave Wills, US Fish & Wildlife Service (USFWS), and Dave Marvin, Fish Passage Center (FPC)/PTSC.

The role of the Team is to ensure the success of the transition project by facilitating activities and communication, and providing a forum for sub-teams to present progress reports and resolve technical issues.

On January 16, 1997 the Transition Planning Team met to discuss the five main elements of the Transition Plan. A brief synopsis of what each element entails is included below, along with the status of each element, and the name of the Lead person for each sub-team that was established at the meeting.

1. A) <u>Selection of a stationary transceiver</u>: This includes the development of transceiver requirements, evaluation of technical proposals, and acquisition and testing of prototypes.

Status: Evaluation of prototypes was completed on Jan. 10th. The Destron-Fearing Corporation's prototype transceivers were selected (see related article on page 1). Project Lead: Larry Parrish, BPA

B) Two prototype units will be field tested in a real world operating environment at McNary dam this spring.

Status: Field Test Team Lead: Sandy Downing, NMFS

2. <u>Selection of a suitable ISO tag</u>: This includes the development of technical transponder requirements,

and procurement and evaluation of tags for use by fishery managers in the Basin.

Status: Fisheries transponder requirements are being drafted. The ISO tag certification process is still being developed by the International Committee for Animal Recording. Tag Development Team Lead: Carter Stein, PSMFC

3. Selection of a portable transceiver: This includes the development of portable transceiver requirements, evaluation of technical proposals, and acquisition and testing of prototypes. Prototypes will be field tested in a real world operating environment before production units are acquired for use throughout the Basin.

Status: Portable transceiver requirements and requests for proposals were distributed to intended bidders and proposals are due by March 7, 1997. The Portable Transceiver Evaluation Team will evaluate proposals by March 28, and select one or more companies to build prototypes. The prototypes are expected to be delivered for evaluation during June. Portable Transceiver Evaluation Team Lead: Ed Buettner. IDFG

 Infrastructure modifications: This includes modifications to the Corps of Engineers' operated Juvenile Fish Bypass Facilities, the PTAGIS database infrastructure, and coordination and communication with interested parties.

Status: Infrastructure Team Lead: Dave Hurson, COE

5. Deployment of the new frequency PIT tag detection system: This includes procurement and distribution of tags and portable readers, modifications to the infrastructure, and installation of stationary transceivers at juvenile collection facilities. The transition would be scheduled so that, by June, 1998, new frequency portable transceivers and tags would be available to hatchery managers and researchers wanting to start tagging juvenile salmonids for the spring 1999 outmigration. Installation of stationary transceivers would be scheduled so that they would be available for interrogating the juvenile out-migration in the Spring of 1999.

Status: Deployment scenarios are being considered by the Transition Planning Team.

More About On-Line Tag Data Summary Report

As we promised in the December 1996 issue of the *PTAGIS Newsletter*, we are providing you with additional information about the new tag data summary reports available on the PTAGIS web site.

Once you are on PSMFC's Home Page, select the following options: PROJECTS > PTAGIS > DATA AND REPORTS and then to one of the following pages, > TAGGING LOAD SUMMARY, > RELEASE INFORMATION LOAD SUMMARY, or > MORTALITY LOAD SUMMARY. Each summary page is discussed in greater detail below:

TAGGING LOAD SUMMARY:

(Direct Address: http://www.psmfc.org/pittag/field_load/tag_load_sum.html)

The Tag Data Summary Report consists of the following five tables of information:

- 1. Tag Files Processed On (Date): Shows the number of files and records by type that were processed on a given day;
- Load Summary: Includes data type (tagging, recapture, or mortality), coordinator identification, organization, and the number of records;
- 3. Tagging Species Load Summary: Breaks the data down by coordinator and organization and includes the species, run, and rearing type. The number of records associated with each variation in species, run, and rearing type is also included;
- 4. Recapture Species Load Summary: If there is recapture data in the tagging file, the table includes the same categories of information as are included in the Tagging Species Load Summary; and
- 5. Mortality Species Load Summary: If there is mortality data in the tagging file, the table includes the same categories of information as are included in the Tagging Species Load Summary.

By pressing a button at the end of the page, the user can view details of the tag files processed on the Tag File Detail Report. This report breaks down the total number of records, the number of tag records, and recapture and mortality records for each file. By choosing a file name link from the table at the top of the page, the user may query the database for details on that file. Also included on this page is a Tag Record Species Load Summary. Once again, if recapture and/or mortality data

are included in the tagging file, tables detailing these files by species, run, rearing type, and numbers of recaptured and mortality fish are provided.

RELEASE INFORMATION LOAD SUMMARY:

(Direct Address: http://www.psmfc.org/pittag/field_load/rel_load_sum.html)

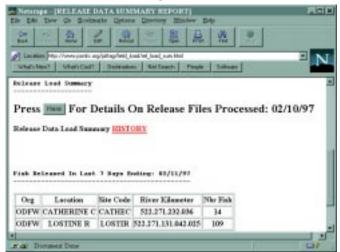
The Release Data Summary Report includes a table that shows the number of release files, along with the number of associated tag files that were processed on a given day. Also on this page, the user can press a button to view additional details for the release files, as well as view a Release Data Load Summary history. Another table (see Figure 1) shows the number of fish released over the past week, by organization, location, site code, and river kilometer.

MORTALITY LOAD SUMMARY:

(Direct Address: http://www.psmfc.org/pittag/field_load/mort_load_sum.html)

The Mort Data Summary Report includes a table that shows the number of mortality files, along with the number of mortality records that were processed on a given day. Also on this page, the user can press a button to view additional details for the mortality files, and/or view a Mort Data Load Summary history. Another table shows a Load Summary by coordinator ID, organization, and number of records.

Figure 1

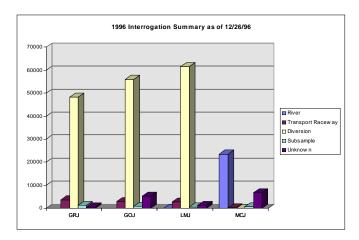


The graph below shows the final disposition of PIT-tagged fish at the four mainstem juvenile fish facilities during the 1996 outmigration (as of December 26, 1996).

Both the River and Diversion groups mean PIT tagged fish were last detected heading for the river.

Subsample and Transport groups mean the fish were transported from the facility by truck or barge.

Unknown grouping means that there is no "exit" information available.



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Announcements

- If you are planning to begin tagging activities in the next few months, and you haven't done so already, please send your Distribution Request Forms for PIT tags to PSMFC. Please indicate on the form when you would like to receive the tags. Call Liza Bauman at (503) 650-5400 or email her at liza_bauman @psmfc.org if you need forms or if you have any questions.
- The Separation by Code Workshop is scheduled to be held at Lower Granite Dam on March 5, 1997. Please refer to the November 1996 issue of the *PTAGIS Newsletter* for additional details, or contact Dr. Sandy Downing at (206) 842-4289 or Carter Stein at (503) 650-5400.

