



FISH PASSAGE CENTER

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MEMORANDUM

TO: Joan Dukes, Fish Passage Center Oversight Board

FROM: Michele DeHart, FPC

DATE: June 22, 2005

RE: Senate appropriations Report Language

In response to your request we have developed the attached list of tasks that are conducted by the Fish Passage Center and the tasks that are accomplished by DART. These tasks were taken from the statements of work submitted to the Bonneville Power Administration Pisces system.

The Senate Appropriations Report language makes three inferences; One that the FPC data has accuracy issues; 2) that Universities (DART) can carry out the tasks presently carried out by FPC; and 3) DART can do the same tasks for less costs. None of these inferences are valid.

The FPC data base has been audited by an independent auditing firm and no problems with accuracy were reported. All FPC analyses are all available for review by the public. The ISRP has reviewed the FPC and DART and other data systems (May 11, 2000 report) and concluded that these systems did not duplicate each other. A review of work statement tasks show that DART and FPC are not doing the same things.

Review of this list clearly identifies DART as a second tier data system which primarily collects data from other databases and displays the data in various ways. The FPC system is a first tier data system which collects data from the field and presents it in raw form for access by other data systems such as DART and Streamnet. The FPC in contrast to DART primarily provides technical support to the agencies and tribes through data compilations and analyses. The FPC staff has extensive practical and analytical expertise in fish passage management and analysis, computer programming for fish passage analysis, hydrology and reservoir operations expertise, fish physiology and adult and juvenile facility expertise that is not present at DART. The FPC participates in the NOAA regional forum as technical advisors to the state, tribal and federal fishery

agencies. DART can not fill the role that FPC is filling. In addition DART is housed at Columbia Basin Research Offices in Seattle which is part of the UW School of Fisheries just as the Fish Passage Center is part of the Pacific States Marine Fisheries Commission. The UW is filling the administrative role that Pacific States Marine Fisheries Commission is filling for FPC. However the UW charges a 26% indirect rate and PSMFC charges a 15% indirect rate. It is doubtful that the same products and services provided by the FPC can be provided at less cost by the UW.

The most serious concern is that the FPC plays a critical role in supporting the fishery agencies and tribes role in day-to-day fish passage management and interaction with the federal hydrosystem operators and regulators and the implementation of the Smolt Monitoring and Comparative Survival studies which inform the regions fish passage management and mitigation decisions. Eliminating funding for the FPC will collapse the regional structure for the federal, state and tribal role in fish passage management.

Fish Passage Center – DART - FACT SHEET

FPC began operation in 1984 as the Water Budget Center, through regional agreement of the Columbia Basin Treaty tribes, the state and federal fish and wildlife agencies and established as a measure in the Northwest Power Planning and Conservation Council.

The FPC carries out the following tasks which are determined by the NPCC Fish and Wildlife Program and which apply directly to the NOAA Biological Opinion(s) measures. These tasks are outlined in our statement of work.

- **Provide technical support to Oregon Department of Fish and Wildlife, Washington Department of Fish and Game, Idaho Department of Fish and Wildlife, NOAA Fisheries, US Fish and Wildlife Service, Montana Fish Wildlife and Parks, the Columbia River Inter-tribal Fish Commission and their member tribes and the thirteen Columbia Basin tribes. Provide technical assistance and data to the public at large.**
 - **The FPC provides direct technical analysis, review of research results and proposals, data analysis relative to specific hypothesis as directed by the state, federal and tribal fishery agencies. These are included on our web site and provided to the region. Some examples of analysis that were recently requested by the agencies and tribes and posted as memos on our web site are: “*Analysis of Fall Chinook Overwintering*”, “*Review of flow conditions experienced by the 2001-2005 spring migration*”, “*Calculation of water travel times*”, “*Estimated proportions of Snake River yearling migrants transported*”.**
 - **The FPC reviews and participates in the development of research proposals regarding adult and juvenile fish passage and provides comments to the agencies and tribes and the US Army Corps of Engineers in their Anadromous Fish Evaluation Program (AFEP).**
 - **Since the beginning of the year the FPC has provided 57 different data analyses and compilations for various agencies, tribes, private individuals, and organizations. This includes a wide scope ranging from individual fishing guides, to NOAA Fisheries and the Bonneville Power Administration.**

- **The FPC designs and implements the Annual Smolt Monitoring Program which is a measure in the NOAA Biological Opinion**
 - **The FPC develops, and coordinates the review and implementation of the Smolt Monitoring Program with the state, federal and tribal fishery agencies through the Fish Passage Advisory Committee.**
 - **The FPC prepares the final budget, and work statement for the regional Smolt Monitoring Program.**
 - **The FPC applies for the ESA Section 10 permit for the SMP and completes all of the required reporting for the section 10 permit.**
 - **The FPC completes the consolidated final report for the Smolt Monitoring Program.**
 - **The FPC staff writes the software programs for remote data entry from each of the FPC sites.**
 - **The FPC staff provides software, hardware and network support for the individual SMP remote sampling sites.**

- **The FPC develops and implements the dissolved gas bubble trauma monitoring program.**
 - The FPC provides technical training for gas bubble trauma monitoring components of the SMP.
 - The FPC stores and maintains dissolved gas trauma monitoring data.
 - The FPC analyses, summarizes and reports gas bubble trauma data and writes the annual report for NOAA and the US Army Corps of engineers report to Oregon Department of Environmental Quality.

- **The FPC manages the Fish Facility Inspection Program**
 - The FPC trains fish facility inspectors, oversees monthly inspection schedules, summarizes inspection reports and writes an annual inspections report.
 - FPC advises the COE of any problems with operations of juvenile or adult facilities following inspections and discusses resolution with the project operators.

- **The FPC develops the design and analysis of the Comparative Survival Study**
 - The FPC develops the design and analysis of the CSS under the Comparative Survival Study Oversight Committee.
 - The FPC coordinates marking and tagging logistics including meeting PITAGIS system requirements for acquiring and using PIT tags.
 - FPC completes CSS data summaries, tables and analyses and draft report for review by the CSS Oversight Committee.
 - The FPC staff writes the programs necessary to conduct the smolt to adult return rates analysis including the calculation of confidence intervals on all parameters.

- **The FPC advises the state, federal and tribal fishery agencies of current and historic migration data, for there use in recommendations, on a daily, weekly and monthly basis to the hydro system operators and regulators regarding hydrosystem operations for fish passage, such as implementation of BIOP passage measures, spill and flow.**
 - The FPC staff provides weekly summaries of flow and spill, projected flow and spill, hatchery releases, mark recaptures, water temperature and fish passage indices by species for the Fish Passage Advisory Committee.
 - The FPC summarizes data and prepares System Operations Requests as directed by the agencies and tribes for there submittal to the operators and regulators through the federal regional process.
 - The FPC prepares data summaries and displays as requested by agencies, tribes and federal operators and regulators.

- **The FPC maintains first tier data bases to support FPC analysis, technical support and reporting requirements.**
 - The FPC maintains flow, spill, juvenile passage index, hatchery release, water temperature, adult count, mark recapture, dissolved gas, gas bubble trauma, to support FPC analyses for agencies and tribes.
 - The FPC makes all of the data bases that are used and support FPC analysis available to the public through the FPC web site.
 - All SMP data are reported to the FPC electronically on a 24 hour basis.
 - The FPC collects hatchery data weekly through personnel contacts with hatchery personnel.
 - DART and Streamnet data systems are second tier data bases which download data from the FPC first tier data everyday and display it on their page.

- The FPC web site has averaged 578,000 hits per month and over the past 18 months, over 10 million hits. The web site has had over 330,000 user sessions, 100,000 custom graphs, 40,000 custom data tables in the past 12 months.
- The top 50 web site users are USFWS, Nez Perce, USDA, Columbia Energy, BPA, USACE, Comcast Customers, CRITFC, Idaho Power Company, Microsoft MSN Customers, Hanford, State of Idaho, Associated Grocers, Qwest Customers, CTUIR, Cutthroat.net, BLM, State of Oregon, USACE, Wildoats.com, Portland Oregon Area Residents, Cutthroat.net, Grant County PUD, Micron.com, Public residents near Spokane, MPC Corp., Seattle Area Residents, Comcast customers, Cable One customers, NW Tel Customers.

DART does the following tasks – These tasks were taken directly from the DART work statement in the BPA Pisces system.

Project: Second Tier Database and World Wide Web support service

This Project accomplishes three distinct work elements with additional administrative activities. The three pertinent work elements include:

- 1) **Manage/Maintain Database.**
- 2) **Disseminate Raw and Summary data via DART (Data Access Real Time).**
- 3) **Disseminate Raw and Summary Data - Regional Monitoring, Evaluation and Regional Services.**

1. **Manage/Maintain Database. The Project is responsible for maintaining and administering the INGRES database running on a SUN ultra 450 Enterprise server. The following is a partial list of tasks associated with database management and maintenance:**
 - **Provide, maintain and improve hardware, software and procedural systems.**
 - **Maintain and update database architecture.**
 - **Database design, tuning and development.**
2. **Disseminate Raw and Summary Data via DART. DART is a public Internet interface that allows the user to view data that is summarized in various ways and can be used to compare current information to historic information.**
 - **Juvenile and adult salmonid data is collected from primary sources and loaded into database. These include data from the Fish Passage Center, US Army Corps of Engineers, Public Utility Districts, US Bureau of Reclamation, PIT Tag Database and others.**
 - **Data are summarized in a variety of fashions including: fish travel time, survival estimates, and release and observation summaries.**
 - **Data from various sources are integrated into the database to facilitate regional modeling, monitoring and evaluation efforts.**
3. **Disseminate Raw and Summary Data for Regional Monitoring, Evaluation and Data Services. The effort will include simple posting of information on the Internet and will**

attempt to integrate online information into effective monitoring and evaluation products for recovery efforts.

- **Online data analysis includes the generation of graphs and summary tables. Summary tables of fish exposure to hydrosystem conditions (temperature, dissolved gas, flow, spill and turbidity) can be generated.**
- **Generation of survival and travel time plots.**
- **Development of smolt to adult return ratios for coded wire tag information.**