MEMORANDUM

TO: Fish Passage Center Oversight Board  
Jann Eckman, CBFWA  
Randy Fisher, PSMFC

FROM: Michele DeHart

DATE: November 5, 2012

RE: Quarterly Fish Passage Center Report for July-September 2012

Following is the Quarterly Report for the Fish Passage Center for the second quarter of 2012. This report follows the format and content agreed upon by the Fish Passage Center Oversight Board (Oversight Board).

Pisces System Work Elements

Produce environmental compliance documentation
The FPC staff conducted quality control, quality assurance for the Smolt Monitoring Program, to assure accurate reporting of SMP daily sampling data. SMP weekly sampling totals were reviewed to assure that the SMP was operating within the sampling and handling permit limitations for the Program.

Provide Technical Review
FPC staff facilitated FPAC conference calls once a week throughout the quarter and attended monthly meetings of FPAC through the quarter. FPC provided weekly updates to FPAC, regarding status of fish passage and river and migration conditions. FPC staff provides technical support to facilitate FPAC discussions as requested by the FPAC members. FPC Staff gave a presentation to the Fish Passage Center Oversight Board of the recently developed report, “The

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History of Spill and Planned Spill Programs in the FCRPS 1981 to 2011”. FPC Staff was requested to write an article for “The Osprey” journal updating their readers on the benefits to salmon and steelhead from court-ordered increased spills on the Columbia River hydro system. During this quarter, the FPC staff completed the 2011 FPC Annual Report and responded to the ISAB Review comments of the draft document.

**Analyze/Interpret data**
The FPC staff devoted the majority of staff time in the third quarter to the completion of the final Smolt Monitoring, Fish Passage Center Annual Report for the 2011 migration year, and to the preparation of the draft Comparative Survival Study Report for regional review. The FPC staff working with the Comparative Survival Study Oversight Committee completed the draft CSS Annual Report for the 2012. The CSS Draft report was posted on the FPC website on August 30, for a 45 day regional review period. Written comments are due back to the FPC on October 15. The Fish Passage Center Annual Report was completed and posted on the FPC web site on August 23, 2012. During the third quarter of 2012, the FPC responded to five requests for data analyses and interpretation and nineteen requests for data summaries, documents or graphic data representations.

2. Comments on bypass selectivity proposals to SRWG - September 10, 2012
3. Spilling water at hydroelectric projects in the Columbia & Snake rivers - September 6, 2012
4. Adult Sockeye survival in the Bonneville to McNary Dam reach - September 6, 2012

**Develop RME methods and designs**
The FPC staff worked in conjunction with the Comparative Survival Study Oversight Committee to investigate the redefinition of spill passage metrics to incorporate the operation of surface passage structures, for future modeling analyses. FPC staff continued to investigate methods and conduct analyses of fall Chinook smolt-to-adult return rates based upon PIT tag mark groups.

**Data Management**

**Disseminate raw data and analytical result**

**Software Development**
- Developed new schema to auto generate web images for water temperature aspx pages from different sources
- New dynamic images has been added to Water Temperature Graph http://www.fpc.org/tempgraphssl/NETFullYear_tempgraph.aspx page.
  - Water temperature thermometer
  - Silverlight area map component
- New application for posting Bonneville Ops data into SQL Server was developed as part of ConsoleImportTdg_spill.exe to update the flow, spill and TDG databases.
Website, Daily Reports and Data Updates

- Gas Bubble Trauma Monitoring for 2012 was concluded at all sites on August 31st.
- SMP sampling for 2012 was concluded at the following sites: 1) Rock Island Dam (August 31st), 2) John Day Dam (September 15th), 3) McNary Dam (September 30th), and 4) Lower Monumental Dam (September 30th). Regular website and database maintenance and updates.
- Created some maps on average hatchery releases for subbasins and salmonid distribution for a NPPC data request.
- Setup new development server for website:
  - Installed software needed for site including new technologies;
  - Set webserver settings to run IIS and Apache to run contiguously, setup developer security
- Installed preliminary queries and updated hatchery maps on development server and tested them
  - Copied over website webpages
  - Setup and copied over local spatial databases
  - Setup database access to FPC network databases and local spatial databases
- Developed a preliminary time mapping web component for total hatchery releases at release sites by year a selected salmon species. Users can use a time slider to see how the releases change at locations, size and year.
- Updated preliminary queries to be able to run on Internet Explorer including the older versions.
  - Created CSS templates to size datagrids components specifically for internet explorer versions; removing any automatic
  - Created CSS templates for graph components specifically for IE versions
- Presented preliminary queries and map queries (developed using new technologies dojo, extjs, geoext/openlayers, highcharts and miscellaneous jquery components) at the OSGIS 2012 conference.
- Began testing the preliminary queries, map queries and updated hatchery map on the development server to assure it runs under windows 2008 64 bit edition.
- Began development on preliminary templates for an update to the FPC website including:
  - Several navigation templates
  - Front Page templates
  - Font/ background / color template
Schema to Generate Web Images for Water Temperature Graph

Updated Water Temperature Graph

Bonneville Ops Data Posted to FPC Flow, Spill and TDG Databases Using New Posting Application
Preliminary Navigation / Design Templates

Preliminary Graph and Data Queries Copied and Tested on Development Server
Installation / Setup of Software and Spatial Databases
Updated Graphing CSS Templates to Run Graphing Components in IE versions

Updated DataGrid CSS Templates to Run Data Table Components in IE versions

Preliminary Time Map Query for Hatchery Releases by Year and Species
Salmon Distribution and Hatchery Release by Subbasin Data Request Maps

New Technology Graph, Data and Map Queries Presentation – OSGIS 2012
FPC.ORG WEBSITE STATISTICS
2012 – THIRD QUARTER July through August

The FPC website is the primary vehicle for data distribution. During the third quarter of 2012, FPC.org had 6,891,224 hits. There were a total of 1,109,678 pages viewed and 652,903 visits to the website. The total number of unique visitors to the website in the third quarter was 102,580. The current year FPC.org quarter hits were 1.06 times greater than the 2011 hits; the current year third quarter page views were 1.27 times greater than the 2011 pages views and the 2012 third quarter visits were 1.39 times greater than the 2011 third quarter visits. The average hits per day in 2012 were 984,459. The numbers of unique page views were 829,814. The average number of page views during weekdays was 169,859 while the average number of page views during the weekend was 130,243. The average visits per day during the third quarter of 2012 to the website were 93,271 staying an average of 5:15 minutes. About 97% of the visits were from the United States. Of the U.S. visits, 29% were from Washington, 20% were from Oregon, 13% were from California, 4% were from Idaho, and 34% were from other states. About 47.8% of the visits from the U.S. were from commercial and organizations, 31.9% were from individuals, and 20.3% were from government and education.

The most active days of the week was Tuesday, while the least active day of the week was Saturday. The busiest hour of the day was around 3pm. September was the busiest month with 36% of the visits, followed by August with 33% and July with 31%. The top platform (operating system) used to hit the site during the third quarter of 2012 was Windows 7 with about 34% of the hits, followed by Windows XP (26%), Windows Vista (11%), AndroidOS (7.2%), Mac OS (6.5%), iOS (1.2%), Unix/Linux (0.3%) and other platforms (13.8%). The top browser used to hit the site was Internet Explorer (58.5%) followed by Safari (18.2%), Firefox (9.4%), Chrome (6%), and other various other browsers (7.9%). A total of 9.3% of the hits during the third quarter were from mobile devices. Of the 9.3% mobile hits, 56.5% were from iPhones, 30.3% were from iPads, 10.3% were from various Android devices, 2.2% were from iPods.

The top requested page was the Daily Adult Salmon Dam Count Report. Of the top 100 requested pages and queries, 82.8% were about adult salmon, 7.2% were about FPC and the website (includes FPC homepage, contact, site map, FAQ, FPAC links, etc…), 4.2% were about river queries (flow / spill report, temperature graphs, spill update, etc…), 3.3% were about smolt data, 0.7% were about FPC documents, 1.8% were about CSS, hatchery and other data queries. We track the number of page views on the dynamic web queries which are a measure of the data requests via the website (i.e. .asp, .aspx, .php, etc). During the third quarter of 2012, there were 431,053 total data requests.
Visits per Month, FPC.ORG, 3rd Quarter 2012

- September: 36%
- August: 33%
- July: 31%

Visits by Domain Type, FPC.ORG, 3rd Quarter 2012

- Government and education: 48%
- Commercial and organizations: 32%
- Individuals: 20%
Manage and Administer projects
During the third quarter of 2012 FPC staff worked with BPA, state and federal subcontractors and PSMFC to review budgets and potential savings for 2013 and 2014 budgets for the SMP, CSS and FPC. FPC staff worked with BPA COTRs to prepare work statements and budgets for the Fish Passage Center and Comparative Survival Study project work statements and budgets for 2013. BPA Pisces requirements for new contracts were completed in preparation for the new 2013 contracts for these projects which start on December 1, 2012.

Produce status reports
All Pisces status report requirements were met for the SMP, CSS and FPC projects for this quarter. All Pisces status report requirements were met for the SMP, CSS and FPC projects for this quarter. Files and reports were uploaded into the Pisces system to Bonneville where required.

Produce annual progress reports.
All Pisces progress reports were completed successfully for the Comparative Survival Study, the Smolt Monitoring Program and the Fish Passage Center projects.

Regional Coordination, Fishway Inspections/FPAC
In the third quarter of this year during July through September of 2012, fishway inspections were conducted at all Columbia and Snake River Dams fitted with adult fish passage structures. FPC staff attended monthly Fish Passage Operation and Maintenance Committee meetings to maintain collaboration and communication regarding issues that arose at Public Utility District and Federal mainstem hydroelectric projects.