MEMORANDUM

TO: Fish Passage Center Oversight Board
   Randy Fisher, PSMFC

FROM: Michele DeHart

DATE: April 30, 2015

RE: Quarterly Fish Passage Center Report for January–March 2015

Following is the Quarterly Report for the Fish Passage Center (FPC) for the first quarter of 2015. This report follows the format and content agreed upon by the Fish Passage Center Oversight Board.

PISCES System Work Elements

Produce Environmental Compliance Documentation

During the first quarter of 2015 the FPC completed environmental compliance reporting for the 2014 Smolt Monitoring Program (SMP) and the Comparative Survival Study (CSS) consistent with reporting conditions in the NOAA Letter of Determination for sampling, marking, and handling for the SMP and the CSS. In addition FPC staff completed the documents for environmental compliance monitoring for the SMP and CSS projects for 2015 and submitted those documents to NOAA fisheries. Subsequent to the completion of the environmental compliance requirements, the Walla Walla District of the U.S. Army Corps of Engineers (USACE) issued a Request for Proposals (RFP) for the fish condition monitoring component of the SMP. The RFP was unclear and did not distinctly differentiate the USACE-funded activities from the SMP activities (in particular the environmental compliance permitting aspects of the RFP and the subsequently issued contract, since the state and federal smolt monitoring permits already issued to the FPC included fish condition monitoring). Discussions occurred over several weeks among the USACE, the federal permitting agencies, the state permitting agencies, and the states, federal and tribal fishery managers. Eventually, the decision was made that new permits would not be issued to the consulting firm contractors. Instead the contractors were directed to work under the direction supervision of the Smolt Monitoring project leader at each
sampling site when handling or sampling fish. The USACE contracting action turned what is normally an efficient and smooth start-up of the SMP into a difficult start of 2015 smolt monitoring season.

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 technical support to facilitate FPAC discussions as requested by the FPAC members, and provided technical assistance to FPAC for planning for the 2015 in-season management of juvenile salmonid migration. In addition FPC provided technical support to the USACE Fish Passage Operation and Maintenance Committee, attending meetings through the quarter. FPC staff provided technical support to the fishery agencies and tribes’ representatives on the SRWG by providing technical review of proposals and reports as requested.

Analyze/Interpret Data
The FPC staff devoted the majority of staff time in the first quarter of 2015, preparing and summarizing data sets and graphics for the FPC Annual Report of the 2014 SMP. In addition work began on summarizing data for the CSS 2015 Draft Report and preparing presentations for the 2015 CSS Annual Review meeting scheduled for April 28. During the first quarter of 2015, the FPC responded to 35 requests for data compilations and summaries and 24 of those requests required analyses. These were completed in memorandum form and posted on the FPC web site. Those responses are listed below:

1. Review Comments on the PNNL proposal Implementation plan for a multi-year biological research study at Ice Harbor Dam: Turbine characterization and acoustic telemetry - March 31, 2015
2. Transportation Proportion Table prepared for the Draft FPC Annual Report - March 24, 2015
3. Proportion of adult steelhead passing Lower Granite Dam during nighttime non-counting hours - March 18, 2015
4. UPDATE: Proportion of adult steelhead passing Lower Granite Dam during nighttime non-counting hours - March 23, 2015
7. Comments on draft of Compliance monitoring of subyearling Chinook salmon survival and passage at John Day Dam, 2014 - February 20, 2015
Develop RME Methods and Designs
FPC staff provided technical assistance to the fishery agencies and tribal FPAC members in consideration of specific passage operations and monitoring questions (e.g., potential improvement of juvenile monitoring data through the Upper Columbia projects and monitoring at McNary Dam with the elimination of smolt transportation at McNary). In addition the Fish Passage Committee members, in response to requests by NOAA Fisheries, began a review of the annual SMP. During the first quarter of 2015, the FPC staff finalized through discussions with Idaho Department of Fish and Game and the Oregon Department of Fish and Wildlife modifications of SMP trap operations at Lewiston, Whitebird, and the Lower Grande Ronde, with the objective of reducing fish handling and extending sampling throughout the juvenile salmon and steelhead passage period. Discussions of potential future design modifications of the SMP will continue throughout 2015.

Data Management

Website, Daily Reports, Database and Data Updates

- The beginning of year website maintenance was completed.
- Daily SMP reports, scripts, and databases were updated for 2015.
• Regular website maintenance and updates, including updating some SMP queries and graphs for the new season (i.e., Fish Condition graph and query, Population index data and graphs, and the passage index graphs and data queries).

• Updated CSS queries and graphs to incorporate data from CSS 2013 Annual report including: CSS SR, TIR, and D Data, CSS Overall Annual SARs for the Snake and Columbia Rivers, CSS Returning Adult Age Composition, CSS SARs by Study Category, Number of Smolts and Returning Adults by CSS Study Category, CSS annual in-river survival estimates query, and CSS number of PIT-tagged fish released by site query.

• Updated some queries and metadata for the new year on the Follow Idaho Salmon Home (F.I.S.H.) Web site.
  o Updated form, metadata and graph table result pages for both CSS SARs LGR–BON and CSS SARs LGR–LGR queries for the following species and MPGs:
    ▪ SPSU Chinook - DCW, GRI, LSN, MFS, SFS, USR & WCL
    ▪ Steelhead - CLW, GRR, HEL, IMN, LWS & SNR
    ▪ Fall Chinook - SNR (added 20 new sites)
    ▪ Coho - STB
  o Updated LGR adult count queries to include 2014, 2013, 10-year average count, metadata, download file links and a link to the live current year data on FPC.org.
  o Updated the following sockeye datasets, time series queries, and maps and metadata:
    ▪ Snake River sockeye smolt outmigration estimates graph and map
    ▪ Juvenile Snake River sockeye salmon travel time to LGR graph and map
    ▪ Juvenile Snake River sockeye salmon survival to LGR graph and map
    ▪ Adult Sockeye (hatchery and wild) return to Lower Granite Dam
    ▪ Trap return of adult Snake River sockeye graph and map
    ▪ Adult Snake River sockeye natural production - salmon returns to the Sawtooth Valley

• Updated new adult dam count query and graph to include days with a null count. Created a storage procedure to query the adult dam counts and insert the word ‘null’ on days where counts have not occurred yet. This produces a line graph for the entire year up to the current date, without adding zeros to the days where counts have not occurred yet.

• Updated FPC32.net and GBT.net data entry programs in support of 2015 SMP and Gas Bubble Monitoring (GBT) seasons. Updates included:
  o Increased validation features (i.e., caution warnings) for fish lengths and weights in FPC32.net touch screen.
  o Enhanced “autofill” feature for entering collection counts into Transportation Tab of FPC32.net.
  o Added Mark Type of PIT-tagged (PT) and to GBT.net to accommodate modifications to Gas Bubble Trauma Monitoring protocols and set default values of “not examined” for non-target fish.
Updated for 2015: The Daily SMP Passage Data Query and Graph including new logic Identifying Species Rearing Disposition (i.e., wild, hatchery, combined, unmarked) for each year
Updated for 2015: CSS Queries and Graphs Incorporating Data from CSS 2013 Report
Updated SMP 2015 Season Queries and Graphs
Updated 2015 Metadata, Forecasts, Spawning, Kelts, etc.

Updated F.I.S.H. sockeye datasets, time series queries, and maps and metadata
Updated F.I.S.H. sockeye datasets, time series queries, and maps and metadata (continued)
Updated F.I.S.H. CSS SARs LGR–BON and LGR–LGR queries and LGR adult dam count queries
Updated new adult count query and graph to include days with a null count
Red caution warnings for validation of fish lengths and weights in FPC32.net touch screen

Updated Settings dialog box for FPC32.net to accommodate new “autofill” feature for importing collection counts into Transportation Tab.
New Mark Type of PT (PIT-tag) in GBT.net data entry program to accommodate modifications to Gas Bubble Trauma protocol for non-target fish.

<table>
<thead>
<tr>
<th>date</th>
<th>site</th>
<th>flow</th>
<th>spill</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 03/27/2014</td>
<td>Bonneville</td>
<td>224.4</td>
<td>1.2</td>
</tr>
<tr>
<td>2 03/27/2014</td>
<td>Bonneville PH1</td>
<td>99.4</td>
<td>NULL</td>
</tr>
<tr>
<td>3 03/27/2014</td>
<td>Bonneville PH2</td>
<td>111.4</td>
<td>NULL</td>
</tr>
<tr>
<td>4 03/27/2014</td>
<td>Brownlee</td>
<td>12.5</td>
<td>NULL</td>
</tr>
<tr>
<td>5 03/27/2014</td>
<td>Chief Joseph</td>
<td>132.1</td>
<td>10.4</td>
</tr>
<tr>
<td>6 03/27/2014</td>
<td>Dworshak</td>
<td>19.9</td>
<td>9</td>
</tr>
<tr>
<td>7 03/27/2014</td>
<td>Grand Coulee</td>
<td>135</td>
<td>0</td>
</tr>
<tr>
<td>8 03/27/2014</td>
<td>Hells Canyon</td>
<td>18.8</td>
<td>NULL</td>
</tr>
<tr>
<td>9 03/27/2014</td>
<td>Ice Harbor</td>
<td>59</td>
<td>0</td>
</tr>
<tr>
<td>10 03/27/2014</td>
<td>John Day</td>
<td>203.9</td>
<td>0</td>
</tr>
<tr>
<td>11 03/27/2014</td>
<td>Little Goose</td>
<td>58.3</td>
<td>0</td>
</tr>
<tr>
<td>12 03/27/2014</td>
<td>Lower Granite</td>
<td>61.2</td>
<td>0</td>
</tr>
<tr>
<td>13 03/27/2014</td>
<td>Lower Monumental</td>
<td>58.8</td>
<td>0</td>
</tr>
</tbody>
</table>

New storage procedure to populate flow/spill report table
New features for FPC32.Net data entry program

Warning: You have not exported newly saved data to XML file.
Press Exit to exit program without saving data to XML file.
Press Return to return to touch screen so data can be exported to XML file.
FPC New Web Design – Adult Subsite – Adult Salmon YTD Comparison Table
FPC.ORG WEBSITE STATISTICS

2015 – FIRST QUARTER January through March

The FPC website is the primary vehicle for data distribution. During the first quarter of 2015, FPC.org had 3,555,517 hits. There were a total of 654,514 pages viewed and 380,143 visits to the website. The average hits per day in the first quarter were 39,505. The average number of page views was 7,272 with an average staying time of 4¼ minutes. About 93.2% of the visits were from the United States. Of the U.S. visits, 28% were from Washington, 22.7% were from Oregon, 7.3% were from California, 5.4% were from Idaho, and 36.6% were from other states. About 52.9% of the visits were from commercial / organizations, 37.8% were from network / individuals, 7.8% were from government and education and 1.5% were from other miscellaneous domains.

The most active day of the week was Tuesday, while the least active day of the week was Sunday. The busiest hour of the day was around 4:00 PM. March was the busiest month with 53.4% of the visits, followed by February with 26%, and January with 20.6%. The top platform (operating system) used to hit the site during the first quarter of 2015 was Windows 7 with about 39.9% of the hits, followed by Google Android (11.6%), Windows NT (8.4%), Mac OS (5.3%), Windows XP (3.8%), Windows Vista (2.9%), Linux (1%), Windows 2003 (1%) and other operating systems (26.1%). The top browser used to hit the site was Internet Explorer (31.1%) followed by Safari (24.8%), Chrome (24.2%), Firefox (6.9%) and other various browsers (13%). A total of 17% of the hits during the first quarter were from mobile devices. Of the 17% mobile hits, 71.2% were from iPhones, 28.5% were from iPads, 0.1% were from various Android devices, and 0.2% were from iPods.

The top requested page was the Daily Adult Salmon Dam Count report. Of the top 50 requested pages and queries, 72.7% were about adult salmon; 11.5% were about FPC and the website (includes FPC homepage, contact, site map, FAQ, FPAC links, etc.); 11.7% were about river queries (flow / spill report, temperature graphs, spill update, etc.); 3.5% were about smolt data; 0.3% were about FPC documents; 0.1% were about CSS; and 0.2% were about other pages. 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 first quarter of 2015, there were 632,734 total data requests.
Percentage Hits by Platform
1st Quarter 2015, FPC.org

- 39.9% Windows 7
- 26.1% Windows NT
- 11.5% Other
- 8.4% Windows Vista
- 5.3% Linux
- 3.8% Windows 2003
- 2.9% Mac OS
- 1.0% Windows XP
- 1.0% Windows Vista
- 1.0% Google Android
Manage and Administer Projects

During the first quarter of 2015 FPC staff worked with state and federal subcontractors, PSMFC, and BPA to complete SMP budget submittals for 2015. The start-up of the 2015 SMP was complicated due to the Walla Walla District USACE issuance of a contract to a consulting firm for fish condition monitoring and barge loading activities which were previously conducted by SMP staff. This action created complicated permitting issues that were discussed in the environmental compliance section of this report. In addition SMP staffing was affected. Managing the start-up of the SMP in 2015 was more difficult and involved more regional entities than has happened in the past. In addition FPC staff completed the Biological Opinion RPA
reporting requirements on the cbfish.org Web site for the CSS, SMP in March and the FPC in April. Although additional RME reporting is not required for the FPC, CSS, and SMP projects, the FPC discussed the concept of developing one combined RME report for all three projects since they are managed and implemented in a totally integrated fashion.

Produce Status Reports
All Pisces status report requirements were met for the SMP, CSS and FPC projects for this quarter. Files and reports were uploaded into the BPA’s Pisces system where required.

Produce Annual Progress Reports
All Pisces progress reports were completed successfully for the CSS, the SMP, and the FPC projects.

Regional Coordination, Fishway Inspections/FPAC

Between January 1st and March 31st of 2015, dewatered fishway inspections were performed at nine of thirteen Columbia and Snake River Dams fitted with adult fish passage structures. Monthly FPOM meetings were attended and winter maintenance at USACE dams were coordinated as were issues with PUD Dams. The draft of the 2014 Fishway Report was completed on March 31, 2015.