MEMORANDUM

TO:       FPAC
FROM:     FPC Staff
DATE:     January 21, 2015
RE:       November–February and March Adult Fish Counting

Since 2012 adult fish video counting increased at some U.S. Army Corps of Engineers (USACE) Dams through the November through February period and the month of March (Tables 1 and 2). During the 2015/2016 fish count periods, the USACE plans to discontinue many of these counts.

Fish counts at all sites that counted through these periods have been evaluated with the focus on counts during November/December and March counts over the past several years with the intent of determining if the counts at projects other than Bonneville Dam and Lower Granite Dam are useful and should be continued at some sites.

Overall in reviewing all the count information presented in this document, other than the “bookend” sites of Lower Granite and Bonneville dams, several sites should be considered for continuing fish counts over the November through February period and the month of March.

- Considerable adult passage occurs through the lower Columbia River during the November/December period. Consequently, a site such as John Day Dam is necessary to understanding both steelhead and chinook/coho passage during November/December (see Figures 3 and 4).
- As counts at Lower Granite Dam typically stop at the end of December when the ladder is down for winter maintenance (only one ladder at Lower Granite), the only Columbia and Snake River counts after this point next year will be at Bonneville Dam. November through February counts at either Ice Harbor or Lower Monumental Dams (two ladders with one in operation during winter maintenance) would provide a record of winter passage in the Snake River.
An additional site such as Ice Harbor or Lower Monumental Dam is important for evaluating steelhead passage in the lower Snake/Columbia River confluence over March.

It is unclear if this reduction in monitoring is a cost-savings effort or is merely a reduction in services. In order to determine the cost associated with monitoring the additional site counts over November–February and March, a request was made to the USACE to obtain the fish count budgets over the last several years. The USACE advised that this information was only available through the FOIA process (see attached e-mail exchange). Consequently, it is impossible at this time to determine if eliminating the additional video monitoring conducted since 2012 represents a cost savings.

November/December Counts

Over the fall and winter of 2011/12, adult video counts were performed at Bonneville (through February) and Lower Granite Dam (through December). During the following years of 2012/13 and 2013/14, two additional sites counted over this period for a total of four sites from Bonneville to Lower Granite. Over November through February of 2014, other than counts at Bonneville Dam and Lower Granite Dam, only Lower Monumental Dam was counting. Additionally, the planned operation for November through February of 2015/16 is to record counts only at Bonneville Dam and Lower Granite Dam (counts stop December 30), similar to the count operation during November and December of 2011/12.

Table 1. November through December/February adult fish video counting at USACE Dams over prior four count seasons and the planned operation for 2015/16.

<table>
<thead>
<tr>
<th>Project</th>
<th>2011/12</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
<th>2015/16</th>
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<tbody>
<tr>
<td>Bonneville Dam</td>
<td>11/1-29</td>
<td>11/1-28</td>
<td>11/1-28</td>
<td>11/1-28</td>
<td>11/1-28</td>
</tr>
<tr>
<td>The Dalles Dam</td>
<td>11/1-28</td>
<td>11/1-28</td>
<td>11/1-28</td>
<td>11/1-28</td>
<td>11/1-28</td>
</tr>
<tr>
<td>John Day Dam</td>
<td></td>
<td></td>
<td>11/1-28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>McNary Dam</td>
<td>11/1-28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ice Harbor Dam</td>
<td></td>
<td></td>
<td>11/1-28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Monumental</td>
<td></td>
<td></td>
<td></td>
<td>11/1-28</td>
<td></td>
</tr>
<tr>
<td>Lower Granite</td>
<td>11/1-30</td>
<td>11/1-30</td>
<td>11/1-30</td>
<td>11/1-30</td>
<td>11/1-30</td>
</tr>
</tbody>
</table>

To determine if valuable data were collected from the video count monitoring conducted in November and December from 2012–2014, the adult counts recorded at each project where counts were occurring were reviewed and plotted. Figures 1, 3, and 5 display steelhead counts over the years of 2012, 2013, and 2014 at projects that counted during November and December. In general, these plots show that daily numbers of steelhead can be sizeable, especially over the month of November.

In 2012, the daily count of steelhead was greatest at Lower Granite Dam, followed by McNary Dam and The Dalles Dams, with the fewest steelhead counted at Bonneville during November and December. Although steelhead counts are fewer in December as compared to November, there are periodic spikes in steelhead numbers in December especially at Lower Granite, McNary, and The Dalles.
Over November and December of 2013, steelhead were counted at Bonneville, John Day, Ice Harbor, and Lower Granite. The total counts of steelhead over this period were variable, with steelhead counts being the greatest at Lower Granite, Ice Harbor and John Day dams. John Day Dam displayed some large spikes in steelhead numbers in late November and early December. Similar to November and December of 2012, steelhead counts at Bonneville Dam were the lowest of all projects with counts during November and December of 2013.

In November and December of 2014, counts were recorded at Bonneville, Lower Monumental, and Lower Granite dams. Steelhead counts at Lower Monumental and Lower Granite followed a similar trend, with some large counts over the first half of November, followed by decreasing counts with periodic small spikes. As with previous years, the Bonneville steelhead counts in November and December were the smallest of the three projects with counts in 2014.

Figures 2, 4, and 6 display combined chinook/coho counts for the years of 2012, 2013, and 2014 at projects that counted in November and December. In general, as observed for steelhead, these plots show that daily numbers of combined chinook/coho can be sizeable, mainly over the month of November. In November and December of 2012, the daily counts of combined chinook/coho were similar at Bonneville, The Dalles, and McNary dams, with the fewest chinook/coho counted at Lower Granite Dam. Over November and December of 2013, chinook/coho counts were highest during the first half of November with the largest counts occurring at Bonneville and John Day dams. The project with the fewest counts of chinook/coho over November and December of 2013 was Ice Harbor Dam. During November and December of 2014, counts were recorded at Bonneville, Lower Monumental, and Lower Granite dams. Over this period, counts of chinook/coho were by far the largest at Bonneville Dam during November.

Overall, in considering the steelhead/chinook/coho passage over the months of November and December of 2012–2014, it appears worthwhile to maintain fish counts at Bonneville and Lower Granite Dams along with at least one or two additional sites. Steelhead counts predominate at Lower Granite in November and December, whereas counts of Chinook and coho are the greatest at Bonneville Dam. A site such as John Day Dam would be useful in terms of both steelhead and Chinook/coho (see Figures 3 and 4). Additionally, counts at Lower Granite Dam typically stop at the end of December when the ladder is down for winter maintenance (only one ladder at Lower Granite); therefore the only Columbia and Snake River counts after this point next year will be at Bonneville Dam. November through February counts at either Ice Harbor or Lower Monumental Dams (two ladders with one in operation during winter maintenance) would provide a record of winter passage in the Snake River.
**Figure 1.** Total steelhead counts at Bonneville, The Dalles, McNary, and Lower Granite dams over November and December of 2012.

**Figure 2.** Total Chinook/Coho counts at Bonneville, The Dalles, McNary, and Lower Granite dams over November and December of 2012.
Figure 3. Total steelhead counts at Bonneville, John Day, Ice Harbor, and Lower Granite dams over November and December of 2013.

Figure 4. Total Chinook/Coho counts at Bonneville, John Day, Ice Harbor, and Lower Granite dams over November and December of 2013.
Figure 5. Total steelhead counts at Bonneville, Lower Monumental, and Lower Granite dams over November and December of 2014.

Figure 6. Total Chinook/Coho counts at Bonneville, Lower Monumental, and Lower Granite dams over November and December of 2014.
March Counts

The USACE has counted in March at both Bonneville and Lower Granite dams over each of the last four count seasons. During March of 2013, counting occurred at Ice Harbor Dam in addition to Bonneville and Lower Granite dams. In 2014, March counting occurred at John Day and Lower Monumental dams in addition to Bonneville and Lower Granite. Figures 7 and 8 display steelhead counts at each project in March of 2013 and 2014.

Table 2. March adult fish video counting at USACE dams, other than Bonneville and Lower Granite (both have counted in March during all years in table), over prior four count seasons and the planned operation for this year (2015).

<table>
<thead>
<tr>
<th>Project</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Day Dam</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Lower Monumental</td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Ice Harbor</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
</tr>
</tbody>
</table>

During March of 2013, total steelhead counts were the greatest at Lower Granite Dam with several peaks of over 400 steelhead per day. Steelhead passage at Ice Harbor Dam in 2013 was generally greater than at Bonneville Dam; however Bonneville Dam did record several daily peaks that were larger than any March peaks at Ice Harbor.

Figure 7. Total steelhead counts at Bonneville, Ice Harbor, and Lower Granite Dams over March of 2013.
In March of 2014, total steelhead counts were the greatest at Lower Granite Dam with several peaks of over 250 steelhead per day. Steelhead passage at Lower Monumental Dam over March of 2014 was comparable to counts recorded at Lower Granite Dam, especially during the middle portion of March. March steelhead counts at John Day and Bonneville dams were similar during the first portion of March; however steelhead counts at John Day decreased over the second half of March.

**Figure 8.** Total steelhead counts at Bonneville, John Day, Lower Monumental, and Lower Granite dams over March of 2014.

After considering the steelhead passage in the month of March of 2013 and 2014, maintaining fish counts at Bonneville and Lower Granite Dams, along with at least one additional site, is recommended. Steelhead counts are the greatest at Lower Granite Dam in March, and counts at Bonneville are necessary for evaluating steelhead passage in the lower Columbia River. An additional site such as Ice Harbor or Lower Monumental Dam would be beneficial to evaluate steelhead passage in the lower Snake/Columbia River confluence.

In conclusion, the additional video monitoring conducted since 2012 has provided valuable information regarding the movement of adult salmonids through the hydrosystem during the winter and early spring months. Discontinuing this monitoring after so few years’ data have been collected would eliminate the ability of the fish managers to understand this new information. At this time we are unable to determine if the decision is based on cost-savings, or is merely a reduction in services for the same cost.
From: Michele Dehart  
Sent: Tuesday, December 16, 2014 9:19 AM  
To: 'Moody, Gregory P NWW'  
Subject: RE: COE Adult Fish Counting Contract (UNCLASSIFIED)

Greg:
Actually it does not help out too much, it just makes it more difficult to get public information from the COE
Michele DeHart, Manager
The Fish Passage Center
503-380-8068

From: Moody, Gregory P NWW [mailto:Gregory.P.Moody@usace.army.mil]  
Sent: Tuesday, December 16, 2014 9:09 AM  
To: Michele Dehart  
Cc: Trukositz, Amber D NWW  
Subject: RE: COE Adult Fish Counting Contract (UNCLASSIFIED)

Classification: UNCLASSIFIED  
Caveats: NONE

Hello Michele,

Your request may be submitted through our FOIA process, The form is available as a link on the District's website. It may be found at:


If you have any questions related to this form or the past contract information, Amber Trukositz may be contacted at:

Amber D. Trukositz  
Paralegal Specialist  
U.S. Army Corps of Engineers  
201 N. 3rd Ave  
Walla Walla, WA 99362  
509-527-7714  
Fax 509-527-7819  
Email: Amber.D.Trukositz@us.army.mil

Or she is CC’ed in this email.

I hope this helps you out.

Thanks

Greg
Hello Greg:

Chris Walker, USACOE, referred me to you with this question. As I understand it the current fish counting contract includes options for three years. The last year being 2016, and a new solicitation for the subsequent years to be announced in 2015. Would you please provide me with the total contract total for fish counting at FCRPS projects annually, for 2010, 2011, 2012, 2013, 2014. In addition would you please advise me of any changes in data collection in those years, ie, counting hours and dates as well as reporting time frames for video counting.

Thank you for your help with this matter.

Michele DeHart, Manager
The Fish Passage Center
847 NE 19th Ave. Suite 250
Portland, OR 97232
503-833-3901

Classification: UNCLASSIFIED
Caveats: NONE