**USACE Portland District (NWP) FFDRWG Update Form**  
**March 14, 2016**

**PROJECT INFORMATION**

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| Project Title | Bonneville Second Powerhouse Fish Guidance Efficiency |
| SCT Reference Number |  |
| Project Manager (PM) | George Medina (NWP, 503-808-4753) |
| Technical Lead (TL) | Corina Popescu (NWP, 503-808-4429) |
| Biologist/Coordination | Jon Rerecich (NWP, 503-808-4779) |

**PROJECT DESCRIPTION**

This project consists of improving juvenile salmon survival in the gatewells at the Bonneville Dam second powerhouse. Biological testing in 2008, 2009 and 2013 showed elevated mortality for juvenile salmon in the gatewells when the units are operating at the upper end of the peak efficiency range (>15 kcfs). Evidence suggests that undesirable flow conditions develop within the gatewells at the high unit flows causing the increase in mortality.

**CURRENT SCHEDULE**

* Plans & Specs -
  + **BCOE Start: 8 Feb 16**
  + BCOES end: 26 Feb 16
  + Incorporate comments: 29 Feb – 11 March 16
  + Back Check start: 14 March – 25 March 16
  + BCOE Complete: 28 Mar 16
  + Advertise/JAC: 8 Apr 16
  + Award: End of May (goal)
* VBS modifications begin this summer.

Outage schedule for flow control plate VBS -

* 1. Unit 16, 17 & 18 - during the T12 outage: Sept. 7 thru Nov. 23, 2016.
  2. Unit 11, 12, 13, 14 – targeting winter maintenance period: Dec. 1, 2016 thru Feb. 17, 2017. (*PH2 STS installation last week of Feb.)*
  3. Unit 13 & 14 – Flexibility if necessary until March 31, 2017.

**PROGRESS AND KEY ISSUES (List)**

1. 90% DDR complete.
   1. Design refined to include a flow control plate that blocks approximately 50% of the opening between the gatewell beam and the intake gate in bay A, a flow control plate the blocks approximately 25% of the opening in bay B, and no flow control plate in bay C.
   2. The proposed design also includes reducing the open areas for the porosity plates on the upper two rows of panels on the VBSs by about 50%.
   3. Unit 15 prototype based on these design recommendations.
   4. NOAA provided comments. COE will incorporate comments into DDR and provide responses and back check copy to NOAA and FFDRWG.
   5. NMFS 2016 Draft report will be sent for SRWG review soon. Will update DDR with current report.
   6. FY17 SRWG objectives development and planning underway to conduct a FGE post construction evaluation through either BiOp performance testing or as a standalone study at PH2.

**FFDRWG REVIEW NEEDED AT MEETING? (If YES, list discussion topics below)**

Regional concerns regarding why there are “missing” test fish during the latter half of the 15A vs. 14A biological evaluation. SRWG and FGE study planning to help better understand post construction passage at B2 with 2017 passage season powerhouse configuration.