**USACE Portland District (NWP) FFDRWG Update Form**  
**13 August 2014**

**PROJECT INFORMATION**

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| Project Title | Minor Fishway Modifications to Improve Lamprey Passage |
| SCT Reference Number |  |
| Project Manager (PM) | Gail Saldana (503-808-4781) |
| Technical Lead (TL) | Scott Wilcox, Small Projects Team (503-808-4435) |
| Biologist/Coordination | Sean Tackley (503-808-4751) |

**PROJECT DESCRIPTION**

The scope of this project includes relatively small-scale modifications to adult fish ladders to improve lamprey passage conditions at Bonneville, The Dalles, and John Day Dams. Examples of such modifications include floor diffuser plating, rounding corners, and modifications to entrance weir crests. This is a multi-year, phased project. Generally, the PDT will focus on modifying a single ladder per year:

* The Dalles (TDA) East Ladder: Lower ladder diffuser plating (IWW period 2013-2014); Entrance weir improvements (2017-2018).
* TDA North Ladder: Lower ladder diffuser plating/ramping and entrance weir improvements (2017-2018).
* John Day (JDA) South Ladder: Lower ladder diffuser plating (2013-2014); Entrance weir improvements (2016-2017), rounding corners and modify wall diffuser to exclude lamprey near SE1 in lower fishway (2016-2017).
* Bonneville (BON) WA Shore Ladder: Lower ladder diffuser plating and entrance weir improvements (2014-2015)
* BON Bradford Island Ladder: Lower ladder ramps or lamprey plating (TBD), entrance weir improvements, and serpentine weir modifications (2015-2016)
* Other modifications, as identified and prioritized (through 2018).

**CURRENT SCHEDULE**

* BCOE review of Bonneville WA Shore Ladder diffuser plating to begin by 15 AUG 2014; Intend to award contract by end of FY14. Planning for installation during upcoming 2014-2015 IWW period.
* Working on design for BON WA Shore entrance weir modifications. BON Project will fabricate and install during upcoming 2014-2015 IWW period.
* Initial scoping and design work for BON Bradford Island Ladder to begin

**PROGRESS AND KEY ISSUES (List)**

* 1. The project is currently in the scoping phase, including development of scopes, schedules, and budgets.
  2. Site visits were conducted to familiarize the PDT with LPS design, identify needed modifications to existing LPSs, and discuss routing with Bonneville (BON) Project staff. This information will be used to develop initial scopes and basic routing.
  3. Brent Welton (mechanical) is to develop a “parts library” of climbing flumes, traversing flumes, rest boxes, and other components to simplify the design process. The initial library should be complete by the end of November 2014.
  4. As part of their research contracts for FY14, NOAA and the University of Idaho (UI) were tasked in with supporting this design effort. Tackley has scheduled an initial conference call for August 25 to discuss information needs, project schedule(s), etc. The design will require substantial input regarding biological, hydraulic and operational criteria in the early design phase to facilitate completion of the 30% DDR.

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

No design review needed at this time.

1. FFDRWG input will be requested soon (August – October 2014) for entrance weir crest modifications that are currently being designed (Figure 1) for IWW period 2014-2015 installation.

2. The next phase of this project (2015-2016 IWW period construction) will focus on Bradford Island Fish Ladder, including possible modifications to the serpentine weir section of the ladder (rounding corners, installation of lamprey orifices, etc). FFDRWG will be engaged early as design concepts are developed.



**Figure 1.** Concept sketches for entrance weir crest modifications to improve lamprey passage. Modifications will include radiused weir caps, plating on the downstream face of the weir, and possible (not shown) plating to provide attachment surface over a small portion of guide slot(s).