**USACE Portland District (NWP) FFDRWG Update Form**  
**October 20, 2016**

**PROJECT INFORMATION**

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| Project Title | Lamprey Minor Fishway Modifications |
| SCT Reference Number |  |
| Project Manager (PM) | Mike Turaski (NWP, 503-808-4704) |
| Technical Lead (TL) Minor Modifications | Sarah Knowles (NWP, 503-808-4980) |
| Biologist/Coordination | Ricardo Walker (NWP, 503-808-4709) |

**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).
* Bonneville (BON) WA Shore Ladder: Lower ladder diffuser plating and entrance weir improvements to include lamprey orifices and rest boxes (2016-2017).
* **BON Bradford Island Ladder: Lower ladder ramps, entrance weir improvements, and serpentine weir modifications (2017-2018)**
* Other modifications, as identified and prioritized (through 2018).

**SCHEDULE, PROGRESS, AND KEY ISSUES (List)**

1. The Washington shore minor modifications are scheduled to be completed during the following 16/17 winter maintenance period.
2. Proposed Bradford Island minor modifications:

* Lamprey orifices similar to WA shore, rest boxes, and video mounting infrastructure.
* Tentative award June/July 17 and install winter maintenance period 17/18.

1. Weir cap modification plan.

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| --- | --- | --- | --- | --- |
| Weir Caps | Design | Fabrication | Current Schedule for Installation | Earliest Possible Installation |
| BON WA Shore | Complete | Complete | 2016-17 (FY17) | 2016-17 (FY17) |
| BON Bradford Isl (part 1; 2 weirs) | FY16 | FY17 | 2017-18 (FY18) | 2017-18 (FY18) |
| BON Bradford Isl (part 2; 2 weirs) | FY16 | FY17 | 2019-20 (FY20; post CRFM) | 2019-20 (FY20; post CRFM)  Not possible to dewater both entrances in single IWW period |
| JDA South (3 weirs + ramp) | TBD based on FY17 fund availability. Fabricate in FY17 would enable FY18 install. | | 2018-19 (FY19, post CRFM) | 2017-18 (FY18) |
| TDA East, west and south entrances (5 weirs) | 2018-19 (FY19, post CRFM) | 2017-18 (FY18) |
| TDA East, east entrance (3 weirs) | 2018-19 (FY19, post CRFM) | 2018-19 (FY19, post CRFM)  Conflict w AWS work in FY18 |
| TDA North (1 weir) | 2018-19 (FY19, post CRFM) | 2017-18 (FY18) |

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

YES

* Lamprey orifices in the serpentine weir section at BON Bradford Island fishway
* Weir cap modifications may impact submergence criteria
  + Bonneville Bradford Island weir caps for entrance gates 2 and 64 (2.0 ft NGVD 29) and entrance gates 1 and 65 (8.5 ft) will be 4 inches taller
  + John Day Dam south fish ladder weir caps for the entrance gates will also be 4 inches higher
  + BON WA shore and TDA weir caps should not impact submergence requirements

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| **Project / fish ladder** | **Invert (ft)** | **Min TW (ft)** | **Min submergence** | **FPP submergence requirement** |
| BON A Branch | 2 | 7 | 5 | Gates 1 and 2; >8’  Gates 64 and 6; 8’-8.4’ |
| TDA | 62 | 72.6 | 10.6 | 8’ |
| JDA south fish ladder | 150 | 158 (per FPP) | 8 | 8’ |
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