**John Day Avian Array Replacement and Upgrade**

1. **PROJECT INFORMATION**

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| **P2 Identifier** | 463071 |
| **Project Manager (PM)** | George Medina (NWP, 503-808-4753) |
| **Technical Lead (TL)** | Lindsey Roth (NWP, 503-808-4985) |
| **Biologist/Coordination** | Jake Macdonald (NWP, 503-808-4844) |

1. **PURPOSE**

The purpose of this project is to replace fallen avian lines along the powerhouse, navigation lock, spillway and north peninsula as well and installing winches to facilitate tensioning slack lines.

1. **BACKGROUND**

John Day Dam Avian Array was first installed in 2010, in accordance with the goals expressed in the FCRPS Biological Opinion. This project will address array deficiencies that have been identified since the system was installed and placed in service.

Array line creep emerged as the biggest problem since installation in 2010, becoming most prevalent along the longest lines and the least prevalent along the shortest lines. Almost all line failures have occurred along the Oregon Shore line with lines breaking within 3-8 feet of the end connection. The only rope that did not fail along the Oregon Shore was line 62 (along the spillway) which broke at the leader, suggesting that failure was due to incorrect splicing.

In addition to replacing fallen, or compromised lines, the PDT will address the need for accessible tensioning devises to allow staff the ability to make adjustments to the lines as needed. The project will also provide an O&M manual to better facilitate long-term performance and on-going maintenance through the anticipated design life

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1. **STATUS & ISSUES**

* Design and P&S are complete and ready for Phase 2, construction.
* Phase 2 package is out for solicitation (targeting November 2017 award). Construction will occur during Winter 2017/18 in-water-work period.
* The avian lines are made of synthetic material and require a long lead time for acquisition and delivery. The PDT preference is to purchase the avian lines in advance, perhaps through DLA, have the material on hand and provide the materials to the contractor as Government Furnished.

1. **SCHEDULE & COST**

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| **YEAR** | **COST** | **MAJOR ACTIVITIES** |
| **FY17 Actual Obligation** | $416,035 | Phase 1 construction (Winter 2016-17); assessment of existing conditions, and replaced/corrected 11 of 22 array lines along the Navigation Lock and replaced 62 lines along the Spillway |
| **FY18**  **PBUD** | $1,300,000 | Phase 2 construction (Winter 2017-18); Phase 2 S&A and EDC; Design and construction contract award for Phase 3. Phase 3 includes system line replacement and installation of tensioning devises. |

1. **PHOTOS & DRAWINGS**

