

Fish Facility Design Review Work Group
17 August 2011

B2 FGE (Medina/Lee/Schwartz)

- Working on completing the 60% report by second week of October 2011
- Final report completion scheduled for 19 December 2011
- CFD modeling for all identified alternatives is complete. PNNL is incorporating our single unit CFD model data into a more robust and encompassing powerhouse and forebay model. The intent is to better simulate field conditions for the proposed alternatives - both in the powerhouse and in the forebay. The forebay model will include with and without BGS conditions
- Moving forward with a field test/Proof-of-concept scenario for the slot-filler alternative. The intent is to scope; develop the design; P&S for fabrication with installation next fish season. Testing: a) concept of relationship between turbulence in the gatewell mortality, and; b) get field velocity measurements for CFD model validation.

B2 Orifice Improvement study (Medina/Kuhn/Schwartz)

- An alternatives matrix has been developed.
- 8 primary alternatives have been identified with variations to include light attraction rings
- The top three ranked alternatives are:
 - o Re-core orifice tube to larger size
 - o Reduce the orifice size but open additional orifices as needed
 - o Increase the capacity of the DSM while reducing the orifice size and opening up additional orifices as needed
- Report, with all the required reviews will be completed in May 2012

B2 Corner Collector Gate Hoist

- Fabrication of gatewell underway
- Construction and installation completion scheduled for 28 February 2012

JDA Configuration and Operation Plan (Medina/Hanson/Askelson/Tackley)

- Avian wire: contractor will be on-site last week of October/first week of November to install felled lines and height adjustment hardware
- Starting the design for TSW permanence with emphasis on easier installation/removal of TSW's
- Intent is to award a construction contract this time next year
- COP revision is under review at the division office

The Dalles North and East Adult Fish Ladder Study - (Medina/Lee/Tackley)

- Anticipating a task order award for the development of an engineering design report for a limited suit of alternatives based on minimum hydraulic needs (1400 cfs)
- Alternatives based on HDR Brainstorming Report, use of the fish-lock and variations
- Anticipate completion of EDR/DDR/P&S by next summer with the intent of awarding a construction contract in FY13

Turbine Survival Program (Medina/Amman//Langeslay)

- Working on reducing the BIT scope to the development of one, comprehensive BIT document the spells out BIT principles and concepts with appendices for individual powerhouse operations by project as they are made available
- Scoping the development of a biologic field study for Ice Harbor