

Fish Facility Design Review Work Group 6 Jun 2013

B2 FGE/Orifice Study (Medina/Lee/ Rerecich)

- TRD on site for 'proof-of-concept' demonstrated anticipated hydraulic improvements in the gatewell. However, the test was terminated because the biologic data did not demonstrate substantial survival improvement.
- Field velocity measurements were also taken as part of the test. Here is what we learned:
 - o TRD's definitely streamlined and improved gatewell hydraulic conditions. A premise and assumption for TRD's was that turbulence created poor conditions in the gatewell that caused fish to tire and succumb because they cannot 'find' the orifice
 - o We have definite 'hot-spots' in the upper portion of screens with velocities well exceeding 1.6 ft/sec at the higher flow. Field observations support these findings (visible horizontal debris stripes)
 - o These hot-spots suggest we are operating outside of established and assumed screen porosity criteria
- With this new information, the PDT is re-evaluating working assumptions and the path-forward strategy/plan. The PDT will provide the region with recommendations for comment.
- Orifice lighting was not included as part of the TRD test. The Orifice Light project is intended to be integrated into the B2 FGE DDR portion of the project starting next FY. However, there is consideration being given to the idea the light study remain a stand-alone project. The PDT is requesting input from the region.

JDA Configuration TSW Permanence (Medina/Hanson/Askelson/ Rerecich)

- TSW's are in place and operational. However, a few modifications to the TSW are being worked through with the contractor, i.e:
 - o TSW's towers will be better aligned for easier install/removal
 - o Modifications to stoplog pins for better fit and alignment
 - o Additional vertical gate (delivery in August 2013)
- Construction and contract closeout is anticipated later this FY

B2 Corner Collector Channel Repair (Medina/Hace/ Rerecich)

- Repairs completed November 2012. Repairs did not work
- The PDT is re-scoping the project and is waiting to conduct a full inspection of the channel

Turbine Survival Program (Medina/Amman/Rerecich)

- BIT document needs comment and input from the region. Anticipating completion of report by the end of the FY
- Document will comprise:
 - o Main report remain a living document with 'holes' for future work
 - o McNary Appendix
 - o John Day Appendix
 - o Partial Bonneville
- Ice Harbor Design is moving forward final 3rd iteration for fixed-blade & start of 3rd iteration of adjustable blade
- B1 report & B2 model investigation will be completed by the end of calendar year

John Day Lamprey Trap - Count Station (Medina/Welton/ Tackley)

- Installation is complete and ready for operation
- Installation of hoist has been delayed until mid-July

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

- 60% DDR under review.