Fish Facility Design Review Work Group 24 Mar 2011

B2 FGE (Medina/Lee/Schwartz)

- Alternative evaluation and model test procedures complete and available
- CFD validated against field velocity measurements and data from physical model used for constructing exiting turning vane
- CFD model will be used to screen and identify the more potentially viable alternatives this week
- Completion of 60% Alternative Evaluation Report is scheduled for end of April. Final report is scheduled for the end of September 2011.

Light attraction study (Medina/Kuhn/Schwartz)

- Site visit observations:
 - o No significant vacuum being created in the orifice tubes
 - o Jet disturbance is a result of the jet striking the valve opening prior to entering the channel
 - A combination of shortening the valve offset from the wall and increasing the valve opening may allow the jet to freely clear the valve opening.
- Project scope:
 - o Evaluate and identify alternatives with most potential
 - o Develop preliminary designs
- Schedule: 60% report by the end of July 2011, and final report completion by mid November 2011

B2 Corner Collector Gate Hoist

- P&S package complete
- Notice to proceed for fabrication: 8 April 2011
- Installation projection: winter 2011 provided no major fabrication glitches

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

- Avian wire: Contractor on-site installing connection hardware to address acoustic and vibration issues. Work to be completed by 8 April
- COP revision will be complete and ready for review by the end of April
- PDT being formulated for TSW design evaluation for permanence

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

- Alternatives report being draft
- Focus of recommendations:
 - Rehab both units & purchase spare parts
 - In the event of failure, only utilize the East ladder
 - Identify available hydraulic resources (fish-lock, tailrace or sluiceway)

- Low cost, implementable alternative/features
- Decision and recommendation document will be complete in summer 2011

Turbine Survival Program (Medina/Amman//Langeslay)

- Direct capture P&S package complete
- Data correlation Report for JDA/McNary:
 - o USGS completed the report
 - Findings indicate there is some correlation between operation and survival, but data
 is inconclusive. Historic bio test protocols may or may not have had some or all of
 the variables
- B1/B2 studies at ERDC continue, however, B2 studies may be impacted because of budgetary constraints
- Ice Harbor Turbine Design: observational model assembled and tested
- Biologic test plan for Ice Harbor being drafted
 - o Internal/external tags?
 - o Direct capture?