

## **Instream Flow Needs Assessment Objectives (Draft, Rev. 1)**

The following objectives are a starting point for focusing the instream flow needs assessment:

- Characterize/validate stream flow needs and priorities by river reach, organized consistent with reach framework established in RiverWare to support modeling;
- Characterize existing reservoir operations and identify opportunities to optimize existing operations;
- Shape management of flows to maximize biological benefits
- Focus on improving instream flows in average and wet water years (all seasons) (i.e. optimize the good years);
- Provide channel forming and maintenance flows to support habitat forming processes;
- For dry years, focus on improving winter and spring flow habitat conditions, and meet out of stream demands in a way that maximizes benefits for fish;
- Try to mimic (or move closer to mimicking) the unregulated hydrograph whenever possible;
- Provide for additional flexibility within the system to manage flows and meet water supply needs;
- Characterize how proposed habitat improvements links to flow enhancements. Identify where flow improvements will provide side channel reconnection and characterize benefits.
- Develop revised operating rules and policy framework for managing potential new supply/storage (considering items such as revised rules for increasing carryover storage by reducing October supply deliveries, and filling and spilling reservoirs earlier in the year when water is available to help with outmigration);

In conducting scenario analysis,

- Use existing conditions as the baseline, with YRBWEP currently funded conservation projects;
- Identify water management projects from the draft IWRMP that provide the most benefits (describe where and when, and expected improvements);
- Verify whether water management projects are adequate to meet the Basin's needs (and for how long.);

- Evaluate whether flood control rule curves can be revised to provide further flexibility in water management.
- Don't lock into specific water blocks dedicated for instream flows. Build in flexibility;
- Assess expected flow variation/effects from climate change
- Consider establishing an Operating Rules subcommittee to develop how new supply would be managed to meet in and out of stream needs.