December 18, 2013 Hood River Meeting Review of alts and MODSIM model

Attendees: Hugh Bonnie Niklas Mattie Toni

Notes

- 1. Niklas developed time series for
 - a. Increased demand due to et, pop, temp
 - b. Decreased demands for conservation measures
- Power inflows to LL not working correctly thought maybe inflows were off. MFID had some numbers so they BC inflows a bit. Helped some. MW/D scenario did not handle flows as expected (higher storages in the late summer months) – this was due to model not being able to handle shortages everywhere.
- 3. Diversion shortages, release avg from LL
 - a. Quarters are in WY
 - b. Alternatives
 - i. Alt 3 increase demands for water due to increase T (increase ET) + increase demand for potable use due to increase pop
 - ii. Alt 4 using alt 3, plus decrease in demand due to conservation practices
 - Conservation measures included (did not include potable water practices due to estimate costs). Irrigation in Water Conservation Report – water % of acres under impacts vs. micro sprinkler, each sprinkler type uses this much water, irrigators gave estimate of when/if shifting to improved irrigation methods (from impacts to micro is about 5% savings with others up to 12%). Also include infrastructure (piping) EFID reducing demand by about 25% due to this. EFID sprinkler 10%.
 - iii. Alt 5 3 plus 4 plus increased storage capacity. MF, EF, FID locations.

4. Results

- a. 60% of time there is a shortage of about 1.5 cfs at LL
- b. Model doesn't release extra storage because LL has priority (so others are jr).
 - i. Look at extra vol being stored, determine shortage, and then fulfill shortage with the extra vol post-processing. Can do some coding, but mostly pp likely best.

- 1. Problem is that alt 4 and alt 5 right now don't look like good investments.
- c. % of time there is a shortage in each ID
 - i. DID, EFID none
 - ii. FID less than a % different from Base to MW/D 1 cfs
 - iii. MHID 8% ~small <.5 cfs
- d. Tucker
 - i. 70% shortage in MW/D in JAS @ Tucker compared to Base.
- 5. Scheduling
 - a. Next meeting 1/14 smaller meeting
 - i. Detailed analyses between now and then + writing
 - b. Tent one 1/29 if need be
 - c. February 12 conclude results (no more input) courtesy presentation
 - d. Technical memos reviewed by tech teams only. Don't want to have to bring non-techs up to speed.
 - e. Main report reviewed by all/most of full team. Report out in March (or after a couple of weeks from conclusion of MODSIM work).