**CRSS: Modeling Assumptions**

April 2012

Updates to the January 2012 model include:

* December 31, 2012 initial conditions (from the April 2012 24-month study) for all modeled reservoirs
  + Powell: 3628.08 ft
  + Mead: 1118.66 ft
* Run duration 2012 – 2026
  + Two assumptions for post 2026 operations
    - Interim guidelines are extended through 2060
    - Revert to the no-action alternative starting in 2027
* Future inflows are represented through 3 different hydrologic scenarios
  + Index Sequential Method (ISM) used on observed historic period of record (1906-2008) – Direct Natural Flow
  + ISM used on tree-ring reconstructed streamflow (762-2005) – Direct Paleo
  + Nonparametric conditioning resampling technique that blends observed historic and tree-ring reconstructed streamflows – Nonparamteric Paleo Conditioned
    - Trace folder not yet provided
* Triennial Review 2011 Full Plan of Implementation salinity control levels
  + 1,850,000 tons of control in 2030

Additionally, the following modifications were made to the model or rulesets:

* Nevada ICS.Drop2Maximum changed from 4,000,000 to 400,000 AF
* Fixed ‘Compute Arizona Available ICS Water’ rule:
  + Arizona ICS.Drop2ActualMonthlyTake[] changed to Arizona ICS.Drop2ActualMonthlyTake[date]
  + Allows the Drop 2 take to be correctly assigned to every month throughout the year rather than only January
* Fixed ‘Adjust SNWP for Nevada ICS Take and Other’ rule:
  + The SNWPDiversion.Total Diversion Requested assignment was modified from:

to:

* + This keeps the diversion to depletion ratio the same after the assignment. Before it was fixed, the Diversion was being increased beyond what it should have been
* Set California ICS.PVID Fallow Amount[@”Dec 2012”] = 50 KAF
  + The fallowing in an odd year should equal the fallowing amount in the previous year based on logic in ‘Set PVID Fallow Amount’ rule
    - The 2012 fallow amount was based on Mead’s Dec. 2011 pool elevation
    - Dec 2011 Mead.Pool Elevation = 1132.83; so according to logic in rule, fallow 50 KAF in 2012