



Updates to anthropogenic recharge for Wood River Valley groundwater model

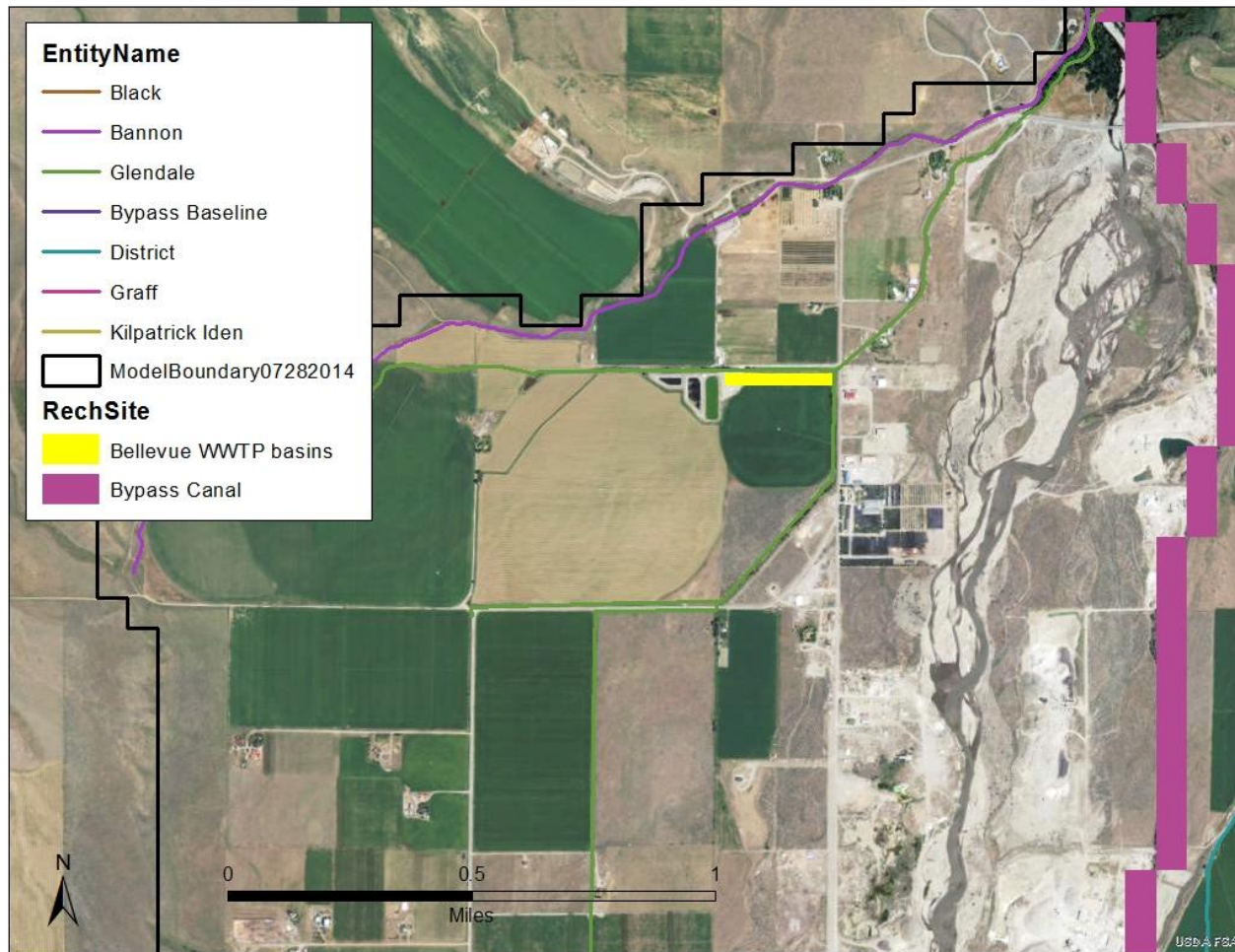
Presented by Jennifer Sukow, P.E., P.G.
December 4, 2014



Updates to Anthropogenic Recharge

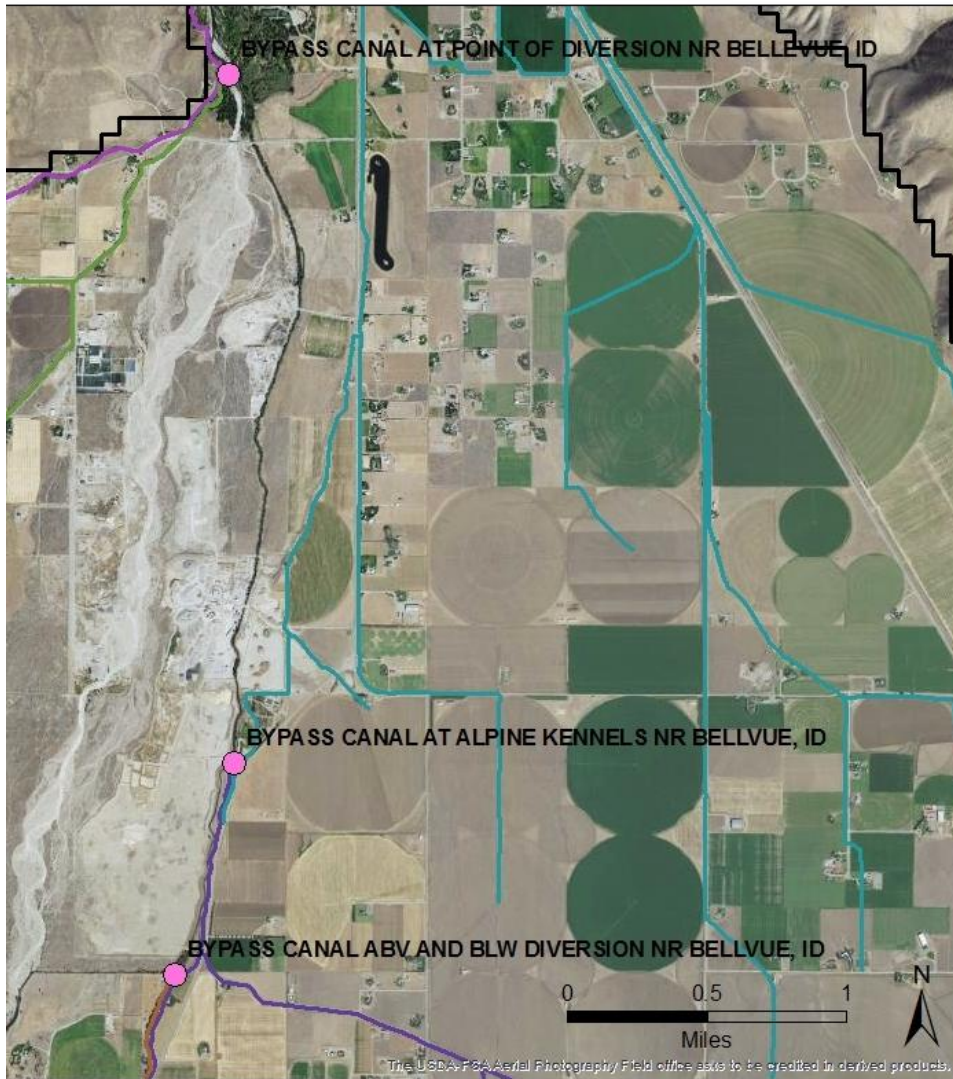
- Updated design document “Calculation of Incidental Recharge and Groundwater Pumping Demand on Irrigated and Semi-Irrigated Lands” to reflect revisions
 - Infiltration basins at City of Bellevue wastewater treatment plant
 - Bypass Canal
 - Exempt domestic wells
 - Revisions to non-irrigated lands mask
 - Dollar Mountain snowmaking
 - 2010 ET files updated to METRIC

Infiltration basins



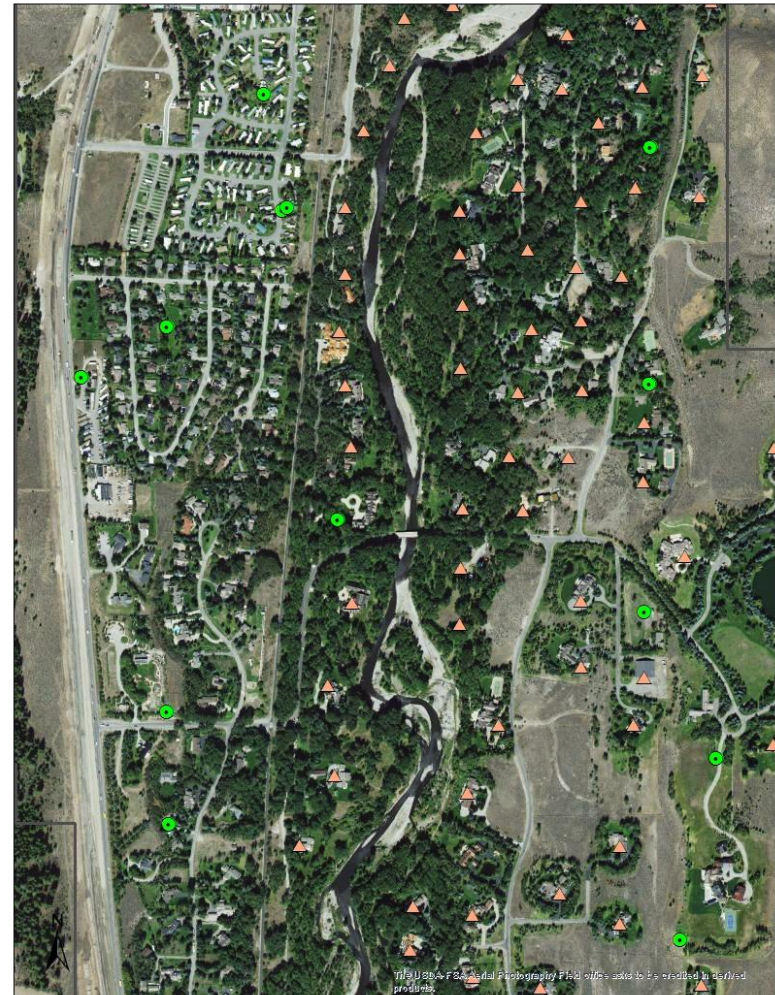
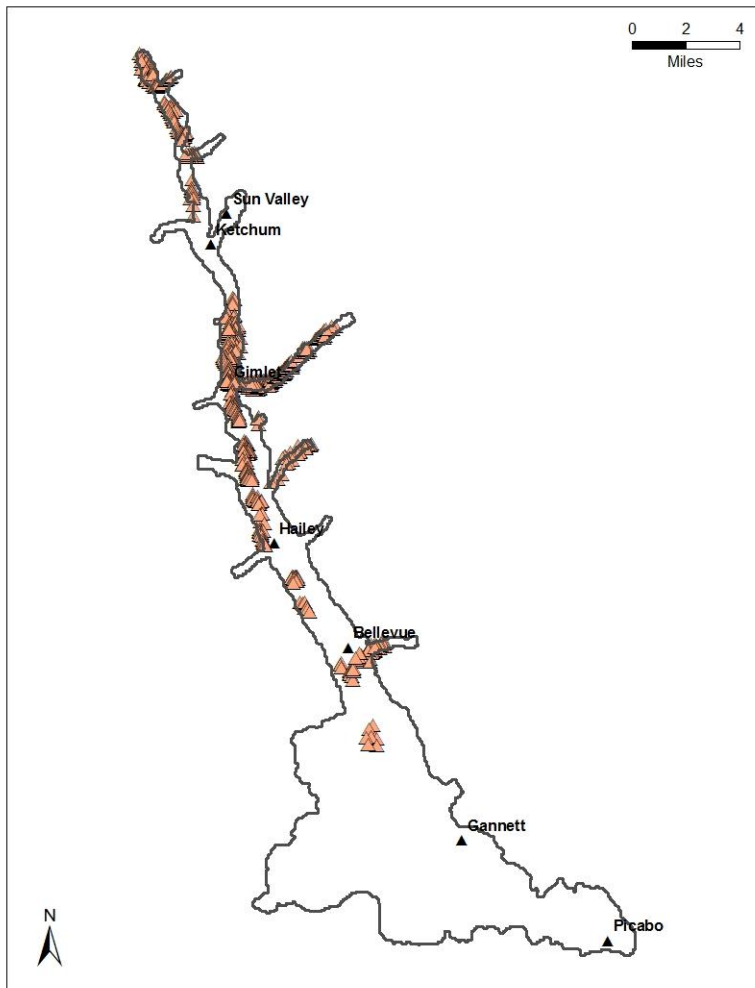
- Recorded monthly data for 1999-2010
- Applied 1999 data to 1995-1998

Bypass Canal



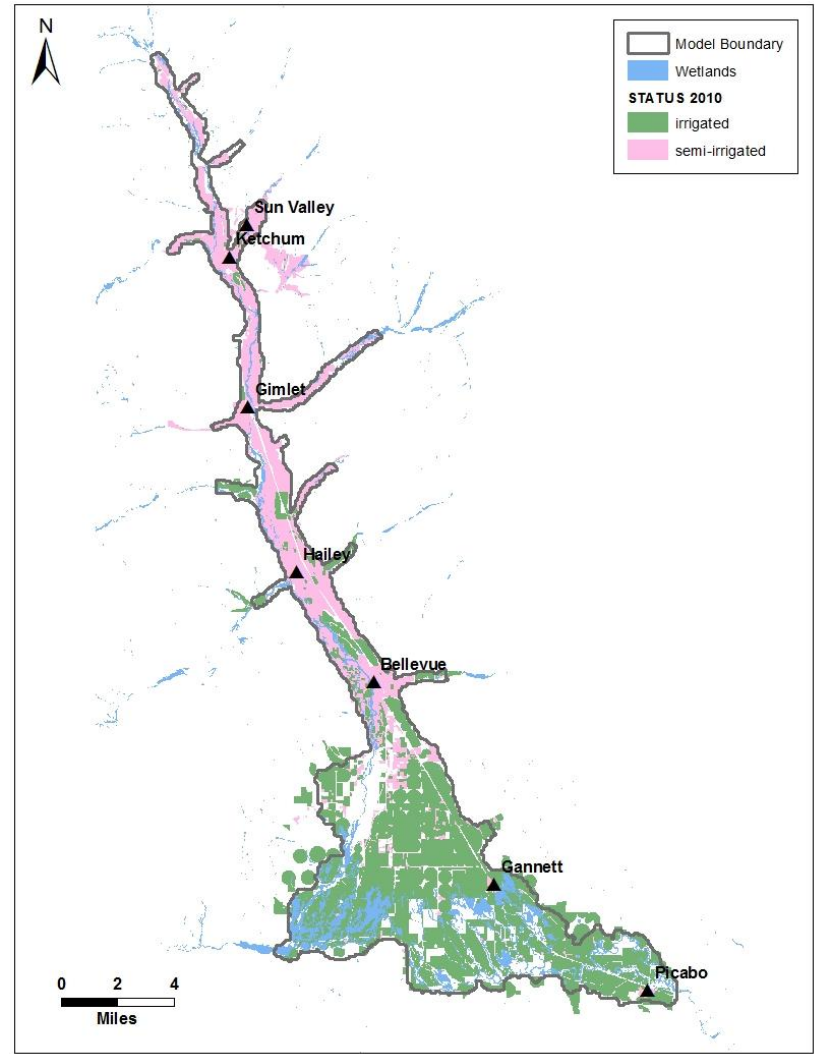
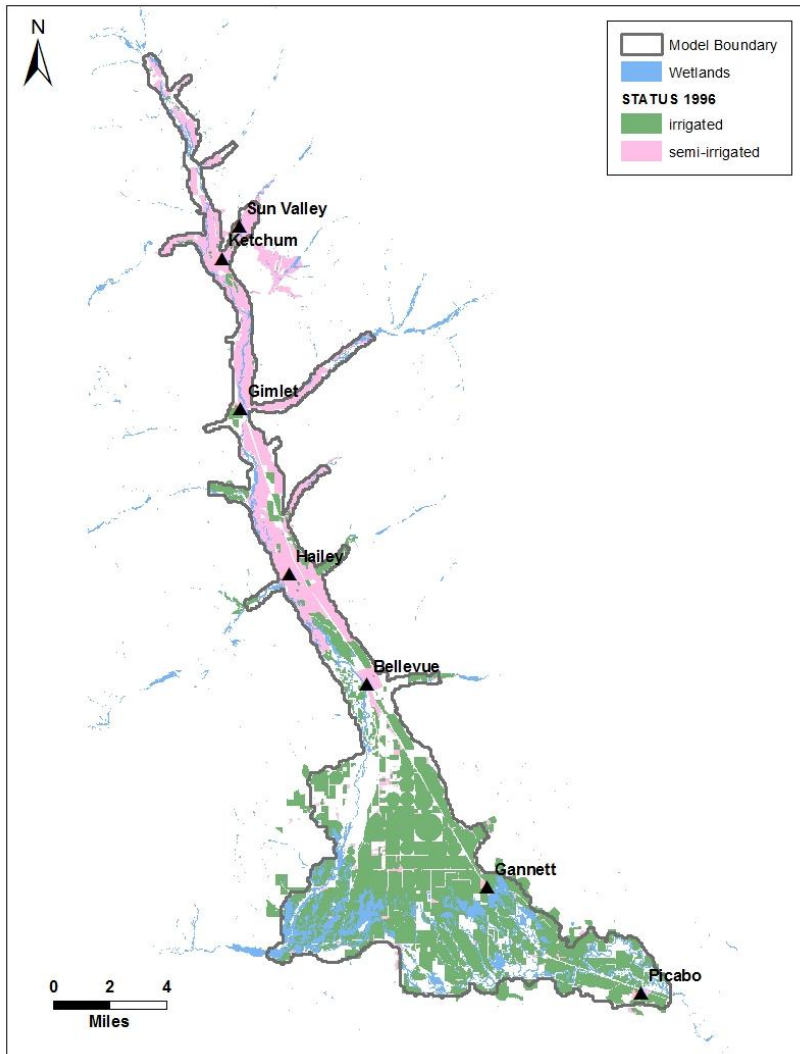
- Water District 37 does not record total flow through Bypass Canal
- USGS measurements on August 28, 2012 and October 23, 2012
 - 52 cfs at heading on Aug. 28
 - 127 cfs at heading on Oct. 23
- No diversions from upper 2.6-mile reach
 - 8 cfs seepage on Aug. 28
 - 11 cfs seepage on Oct. 23
- Baseline and Dittoe diversions from lower 0.7-mile reach
 - 1.5 cfs seepage on Aug. 28
 - no Water District records for Oct. 23

Irrigation from exempt domestic wells

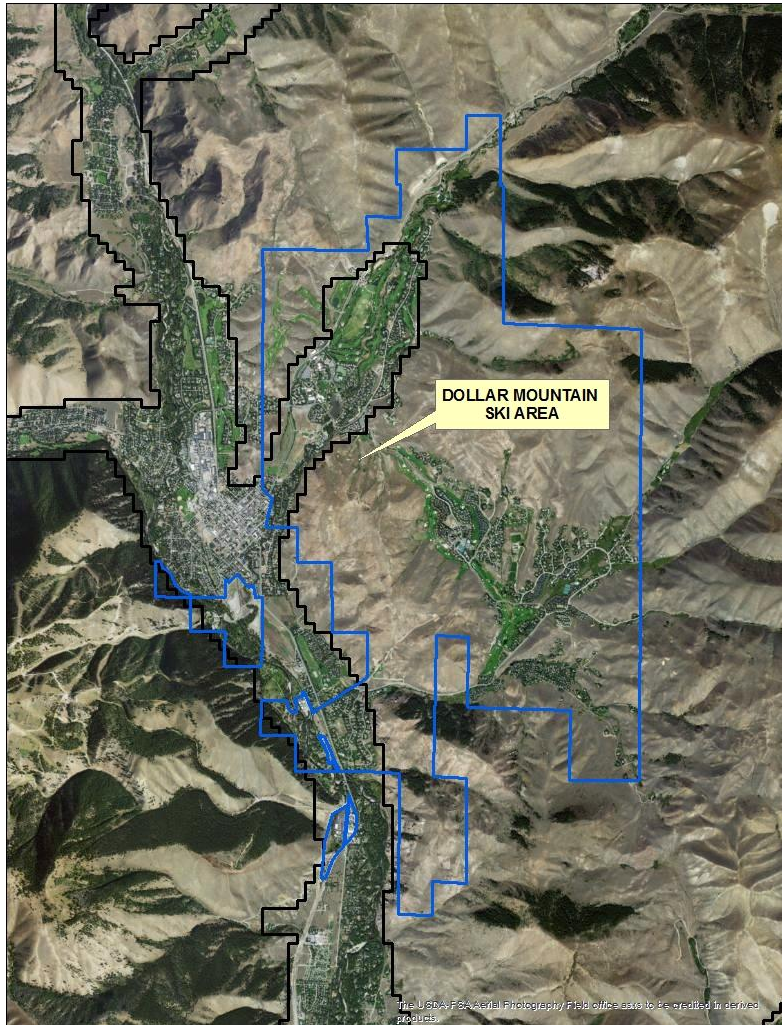


- Added 682 points to represent irrigation from exempt domestic wells
- Assigned a maximum diversion rate of 0.01 cfs for apportioning estimated groundwater pumping

Revisions to non-irrigated lands mask

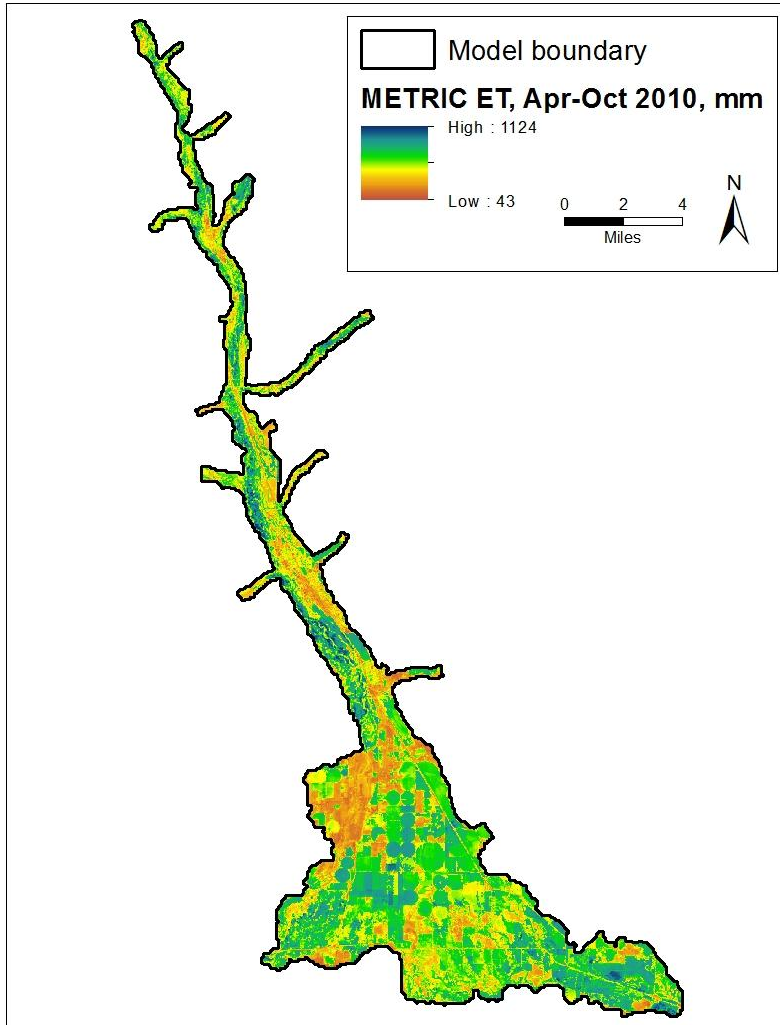


Dollar Mountain snowmaking



- Water applied for snowmaking outside of the aquifer boundary, averaged 36 AF/yr for 1995-2010
- Assumed to return to Trail Creek as surface runoff during spring snowmelt
- Deducted from water applied to SVWSD service area with other return flows (WWTP)

2010 METRIC ET



- Updated 2010 ET data with recently completed METRIC ET