

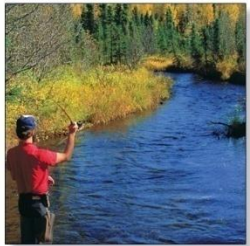
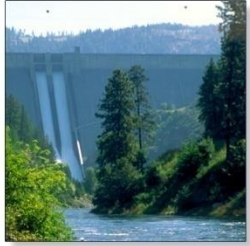


May Calibration Run

Presented by Allan Wylie, IDWR

May 24, 2017

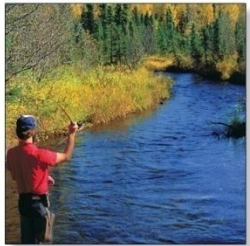
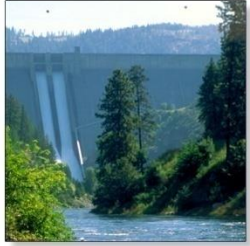




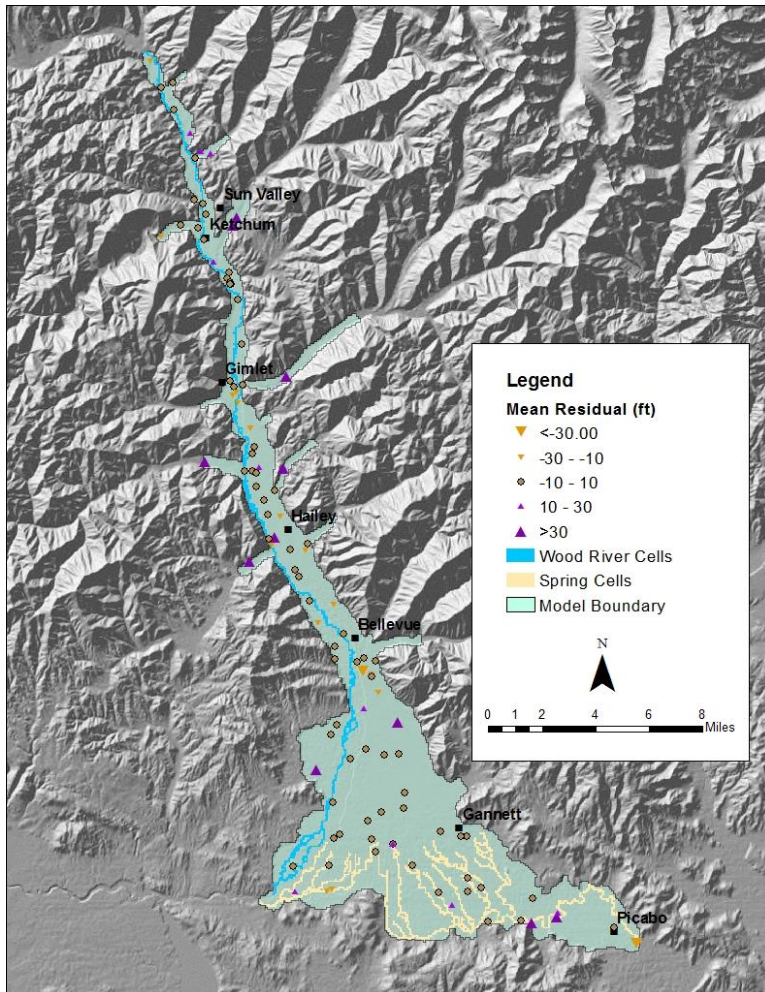
Preliminary

Important Changes

- Simulation period is Jan 1995 through Jan 2015
 - Calibration period Jan 1998 through Jan 2015
- Only retaining observation wells with two or more measurements
 - Want to lower transient predictive uncertainty
 - Probably will have to relax this criteria
- Stage at Glendale Rd set at constant elevation
- Stage at Wood River Ranch set at constant elevation
- Include seepage run data on the dates of the survey
- Include gains between Heart Rock Ranch and Stanton Crossing when it can be quantified

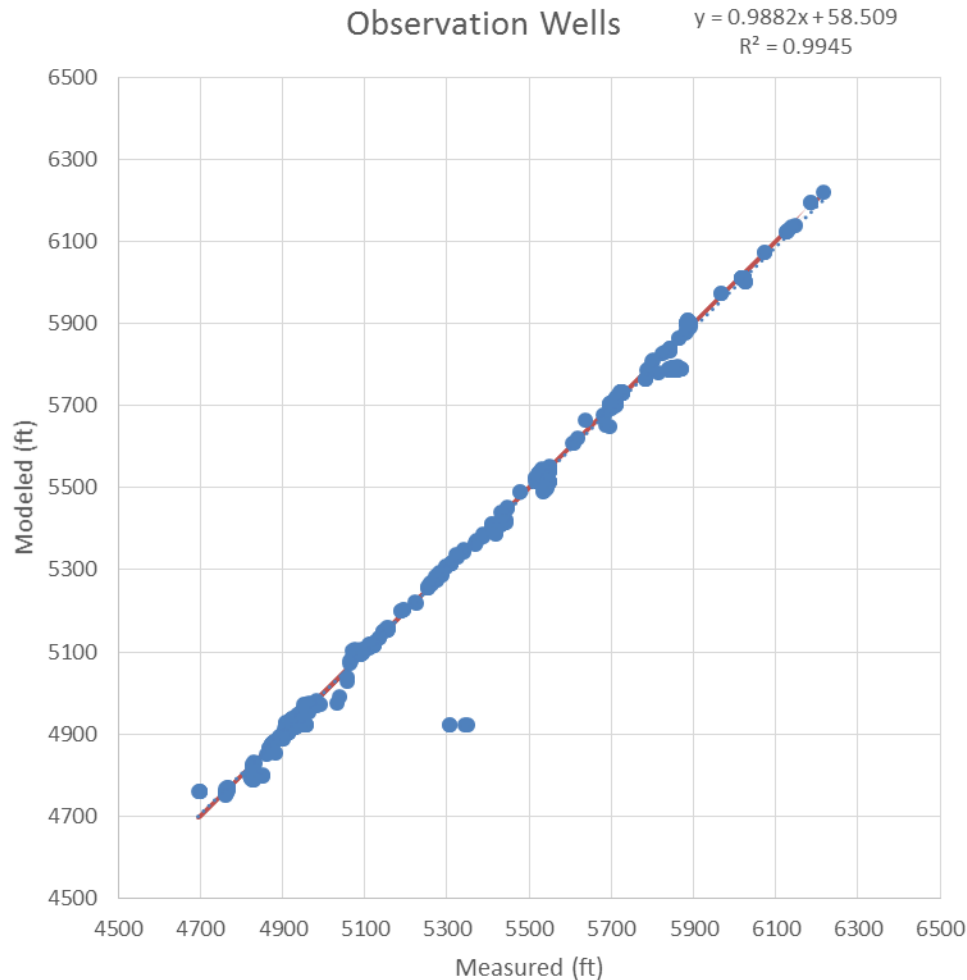


Observation Wells



- Wells with more than one water level observation within the simulation period
 - 127 wells

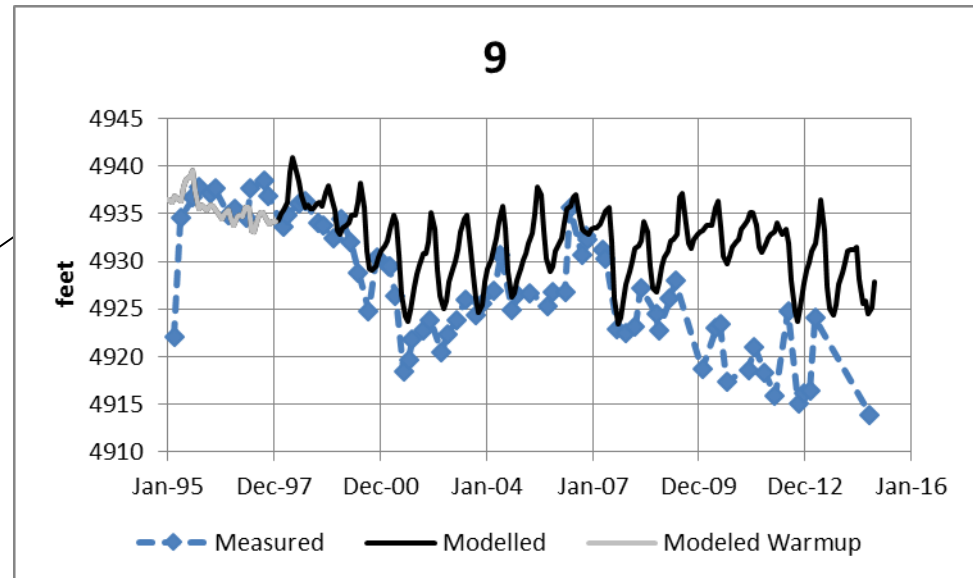
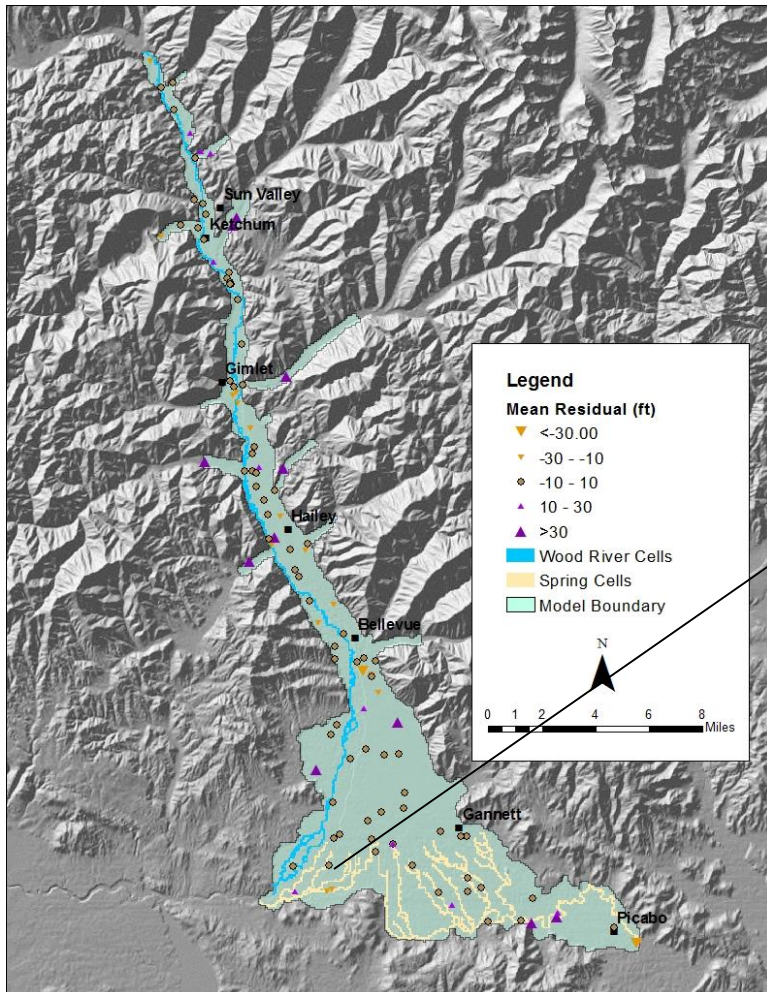
Observation Wells



- Wells with more than one water level observation
- If fit was perfect
 - Intercept = 0
 - Slope = 1
 - $R^2 = 1$
 - All points on the red line

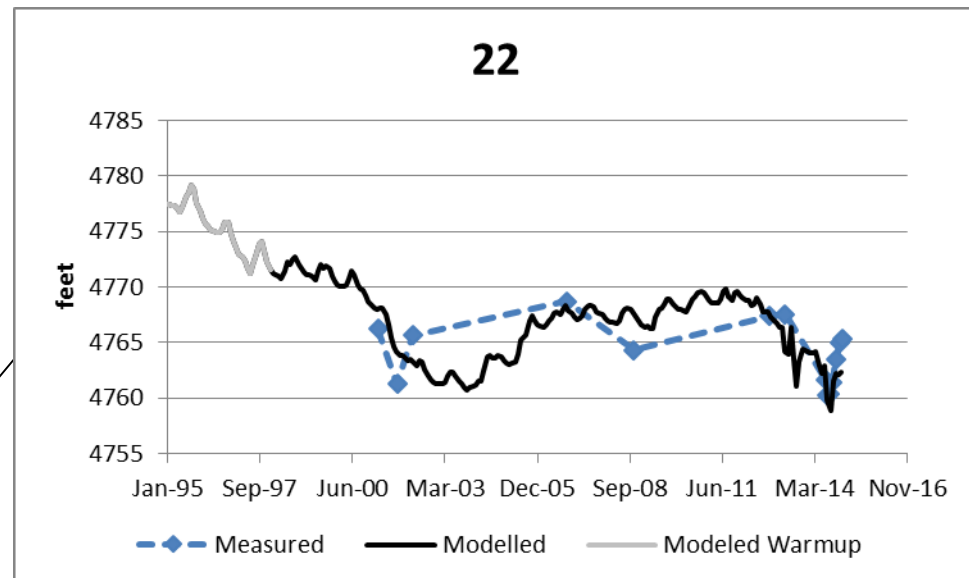
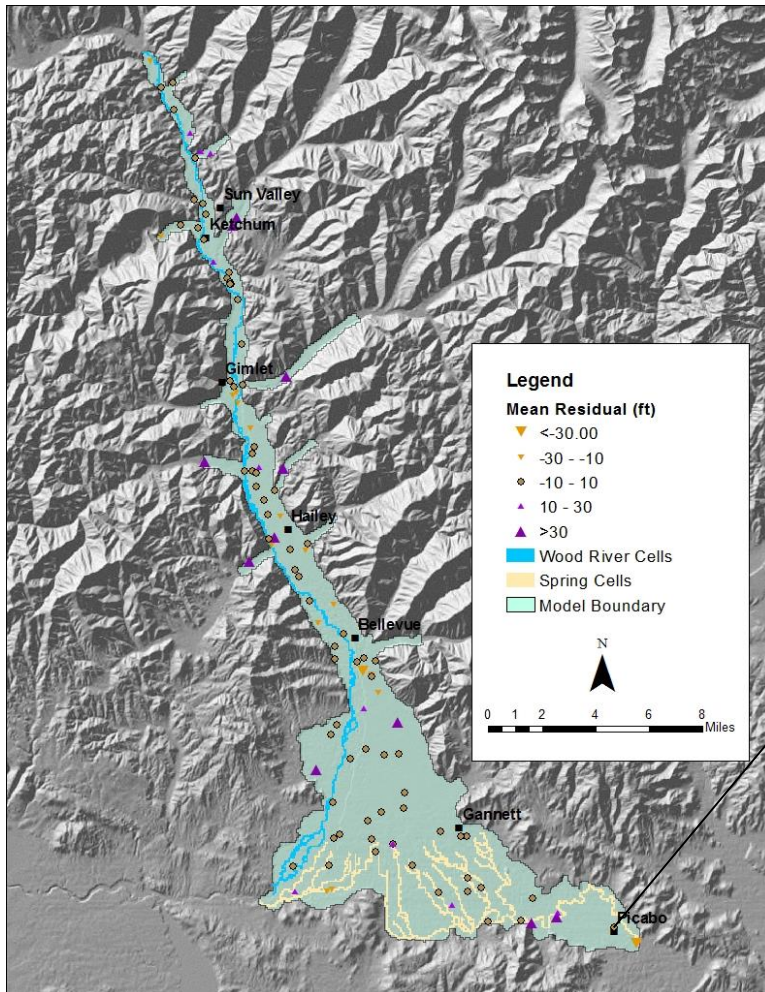
Observation Wells

- Wells with more than one water level observation within the simulation period



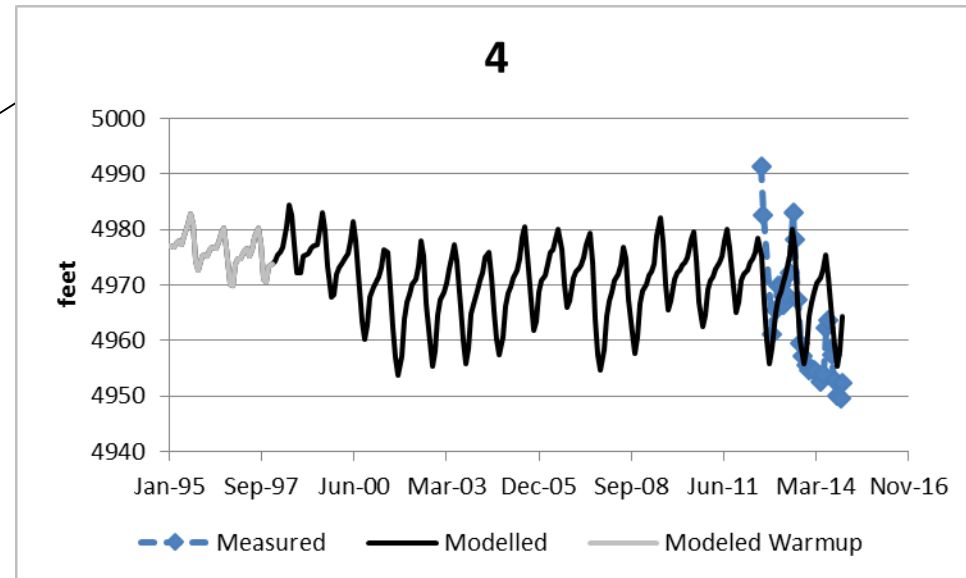
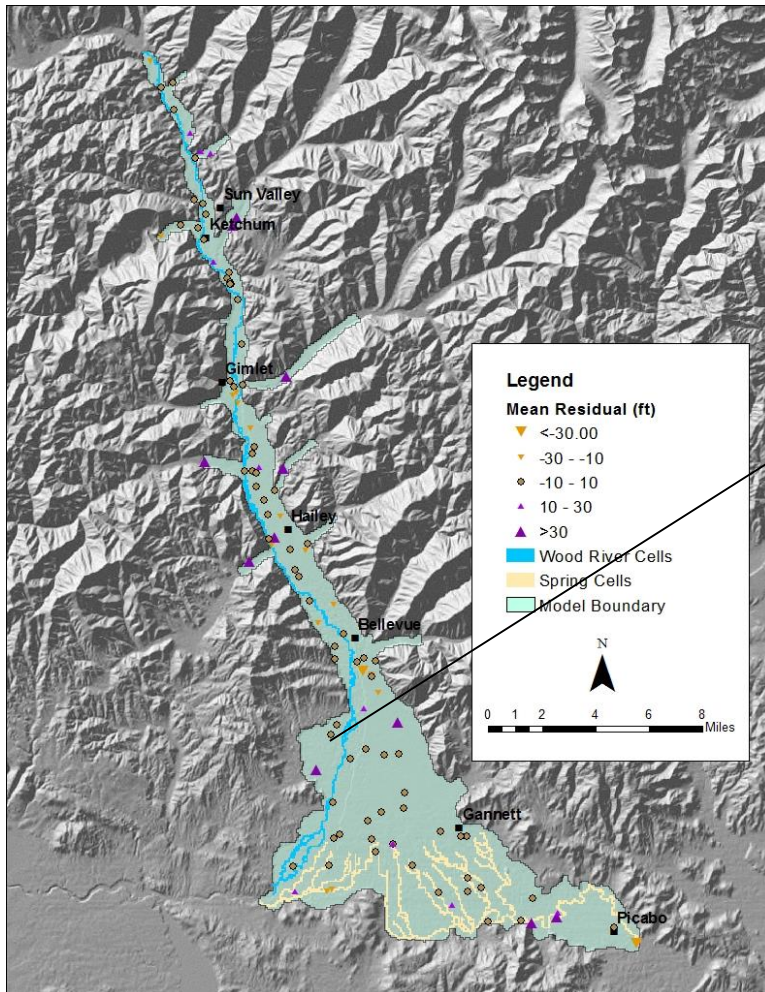
Observation Wells

- Wells with more than one water level observation within the simulation period



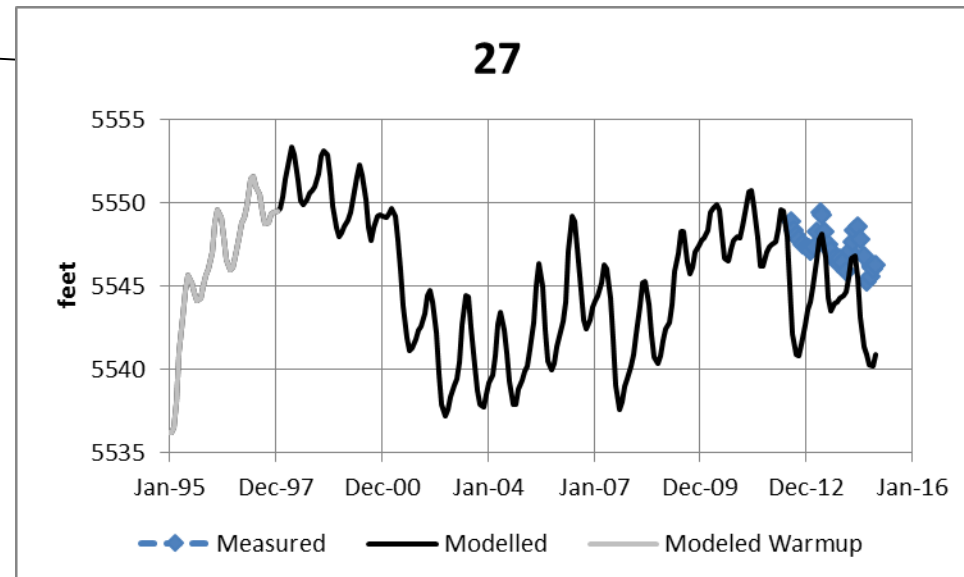
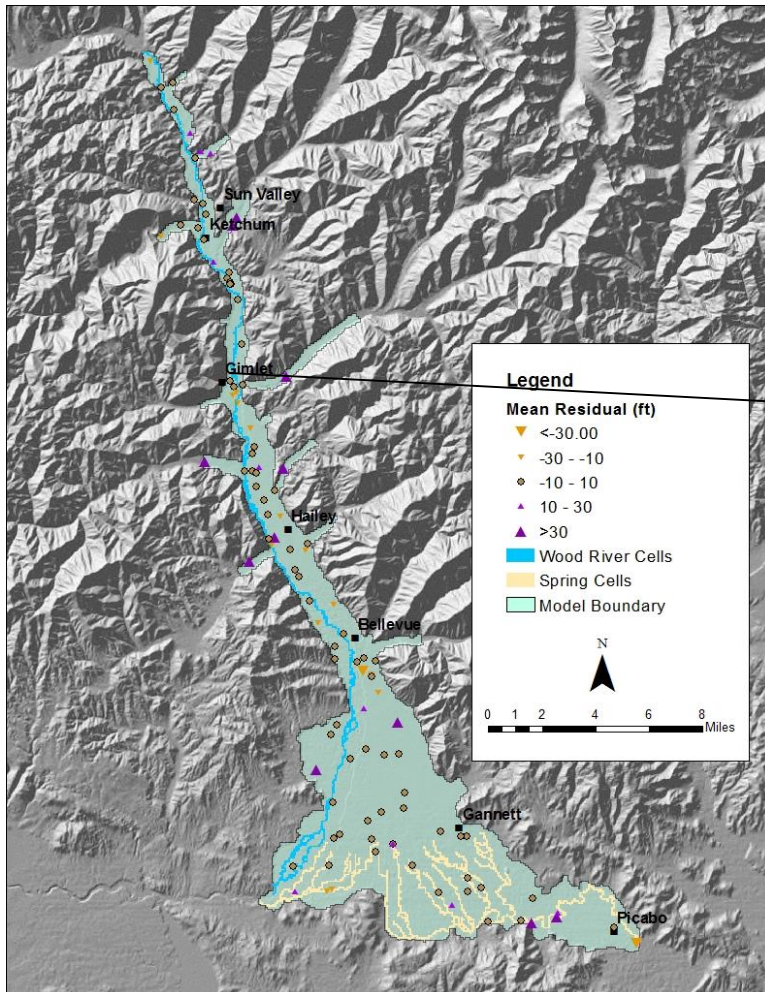
Observation Wells

- Wells with more than one water level observation within the simulation period



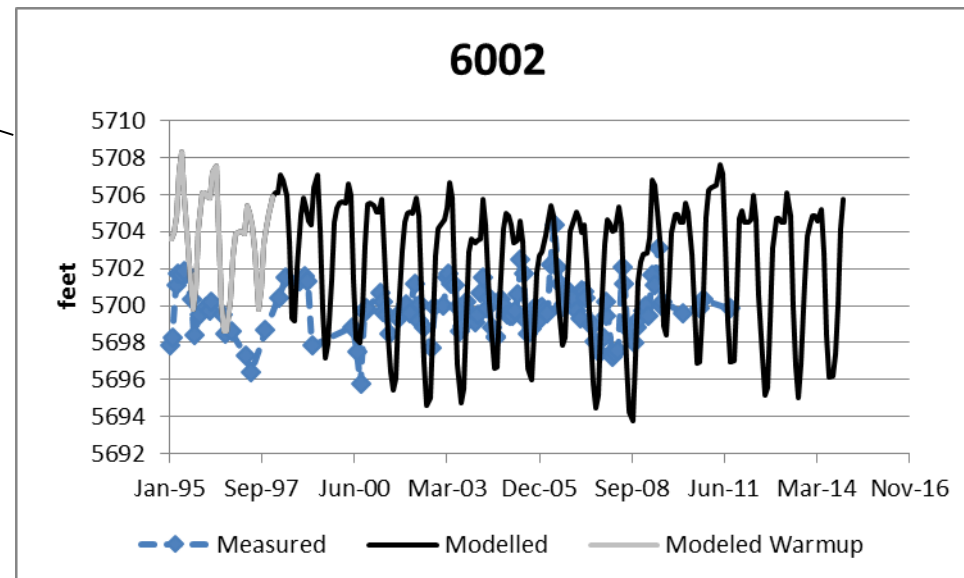
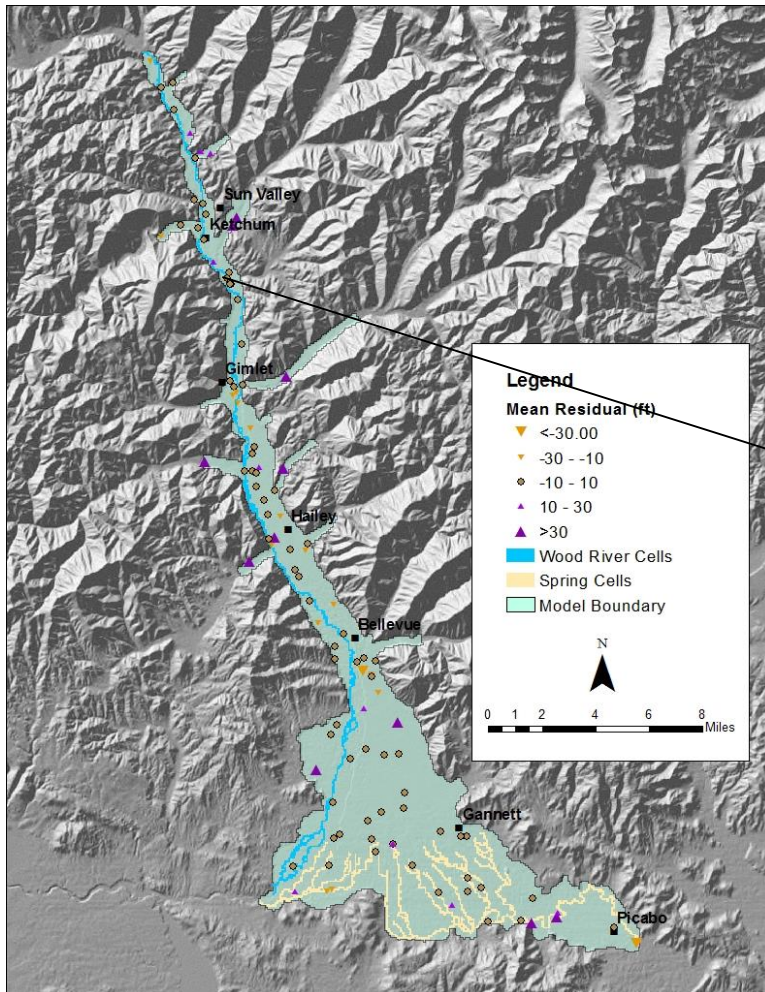
Observation Wells

- Wells with more than one water level observation within the simulation period

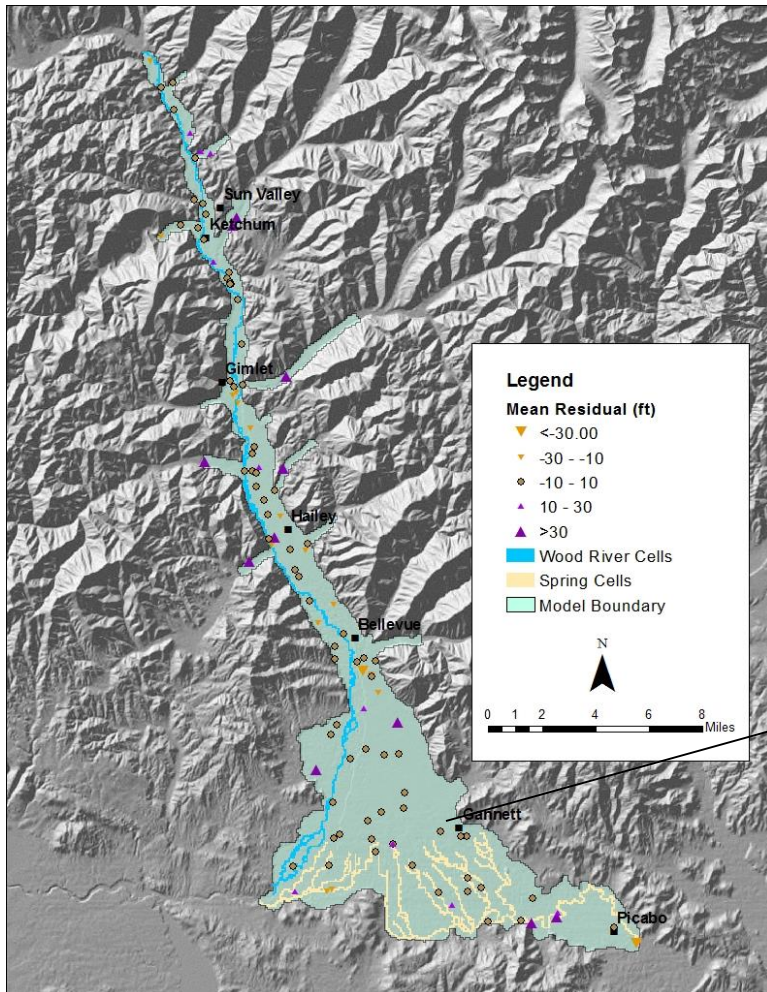


Observation Wells

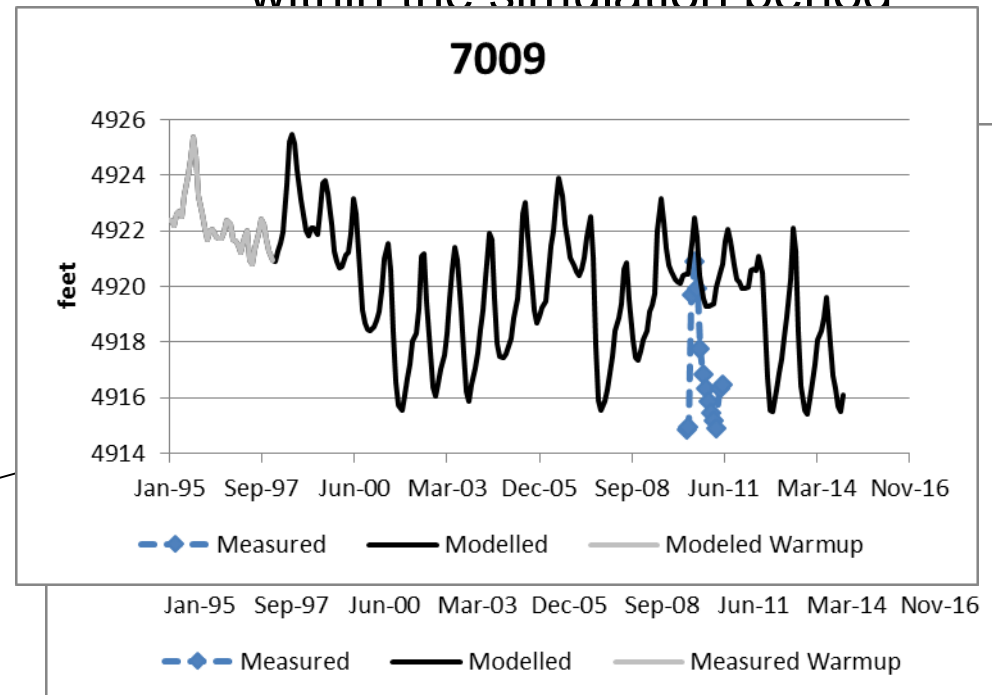
- Wells with more than one water level observation within the simulation period



Observation Wells

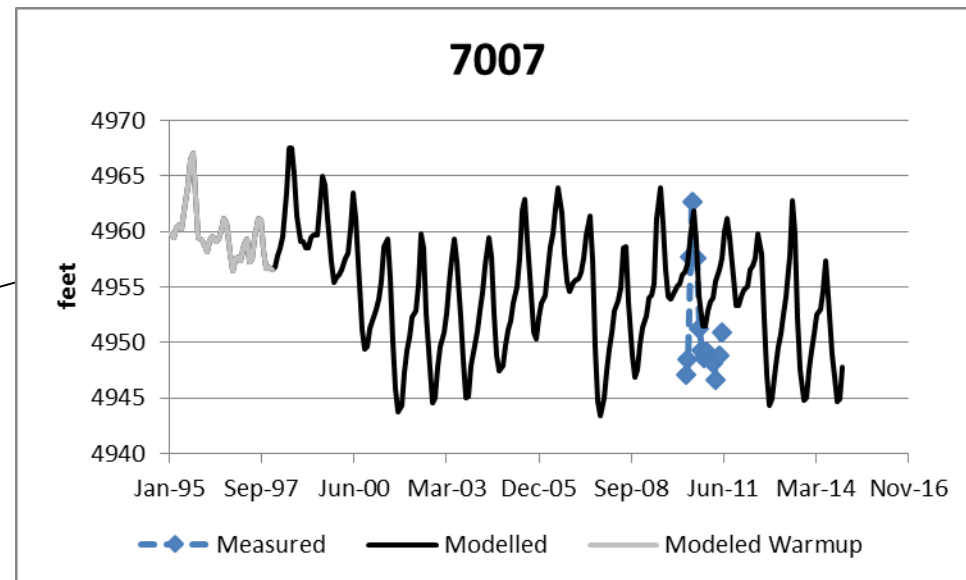
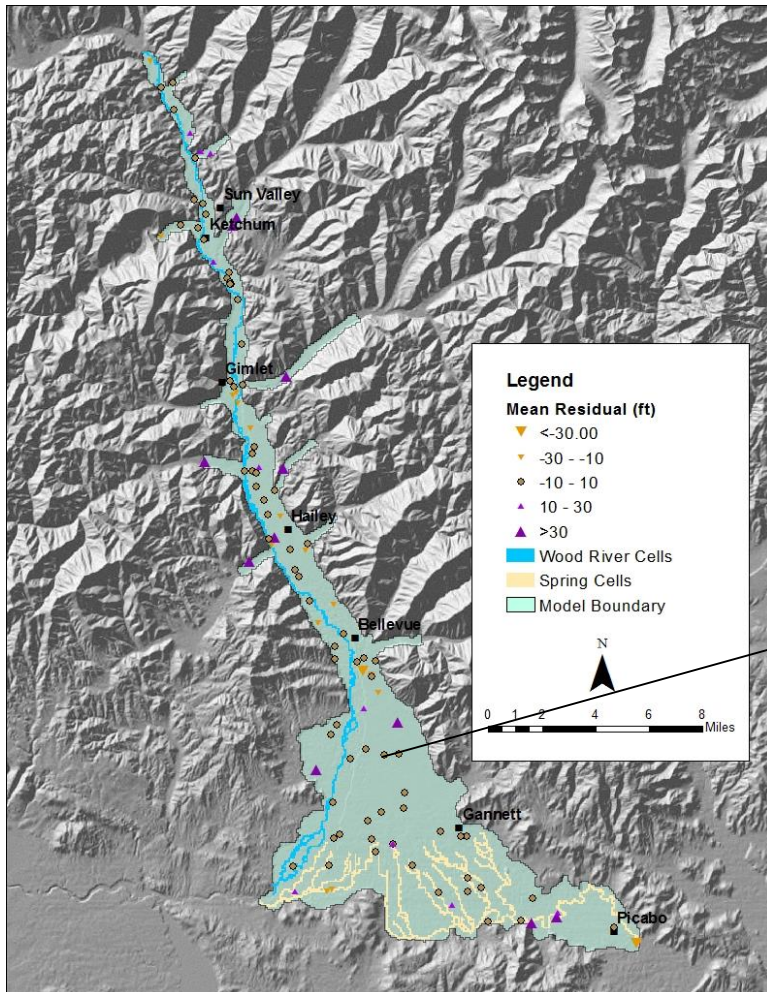


- Wells with more than one water level observation within the simulation period

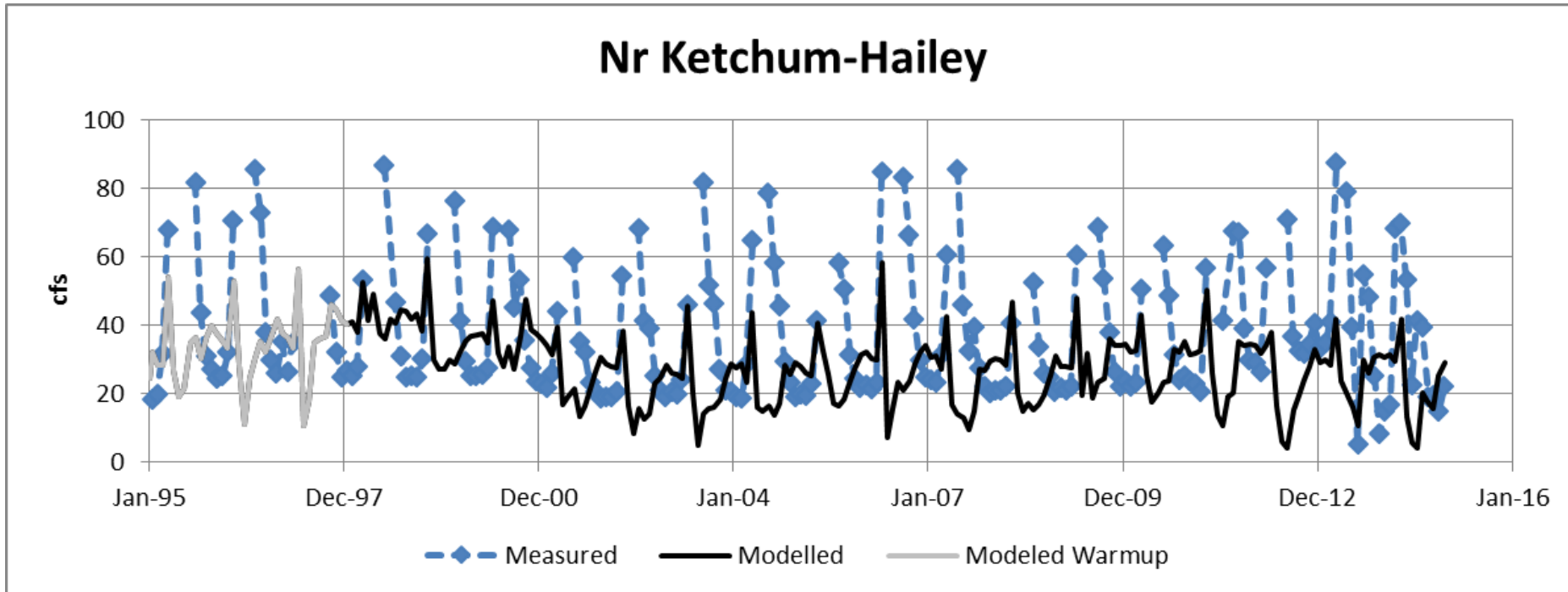


Observation Wells

- Wells with more than one water level observation within the simulation period



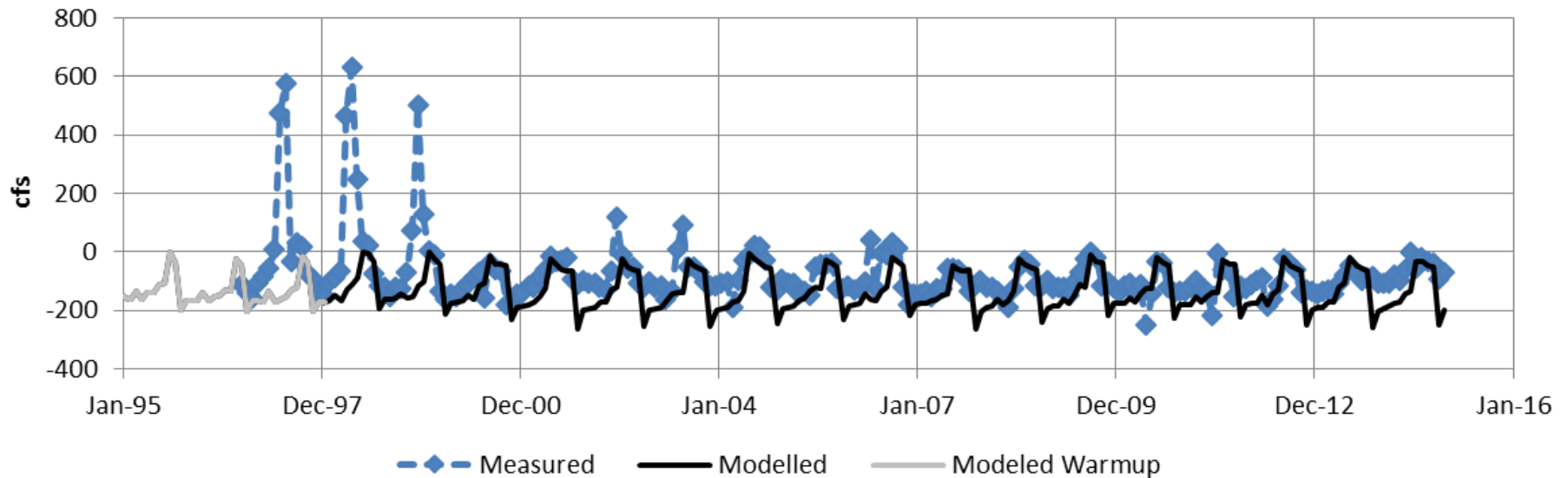
River Gains and Losses



- Silver Cr Blw Sportsman Access

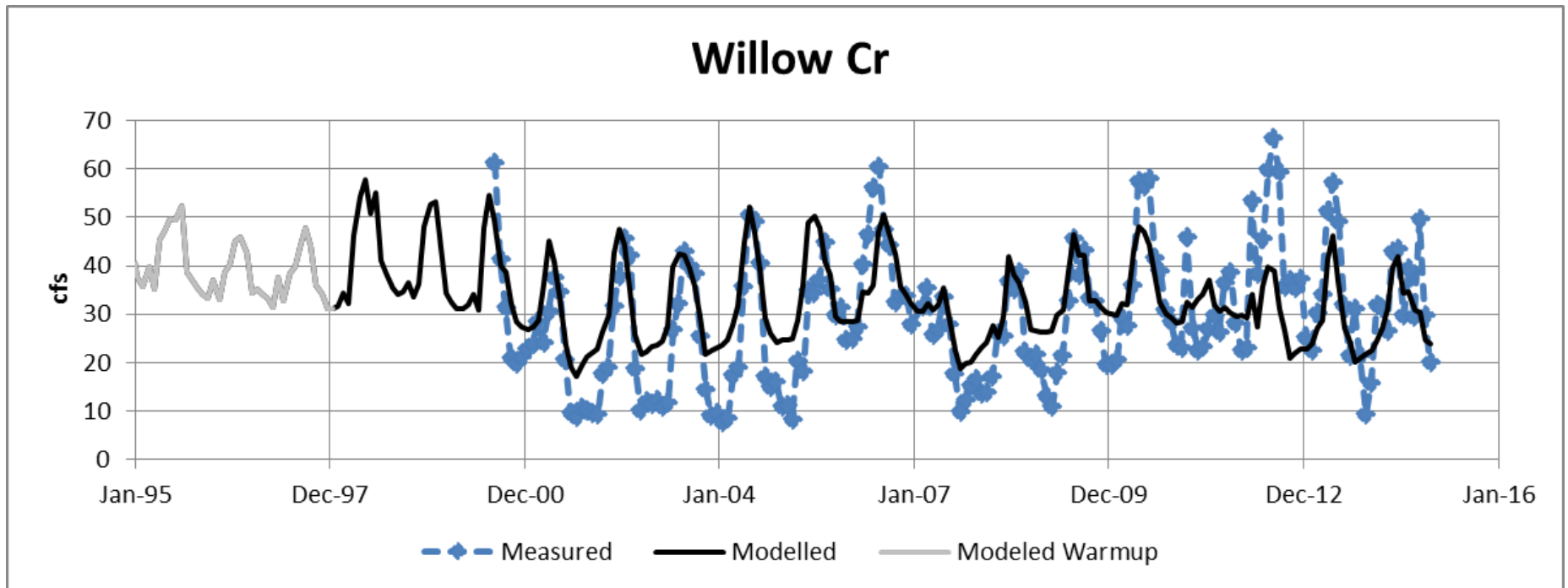
River Gains and Losses

Hailey-Stanton Crossing



- Silver Cr Blw Sportsman Access

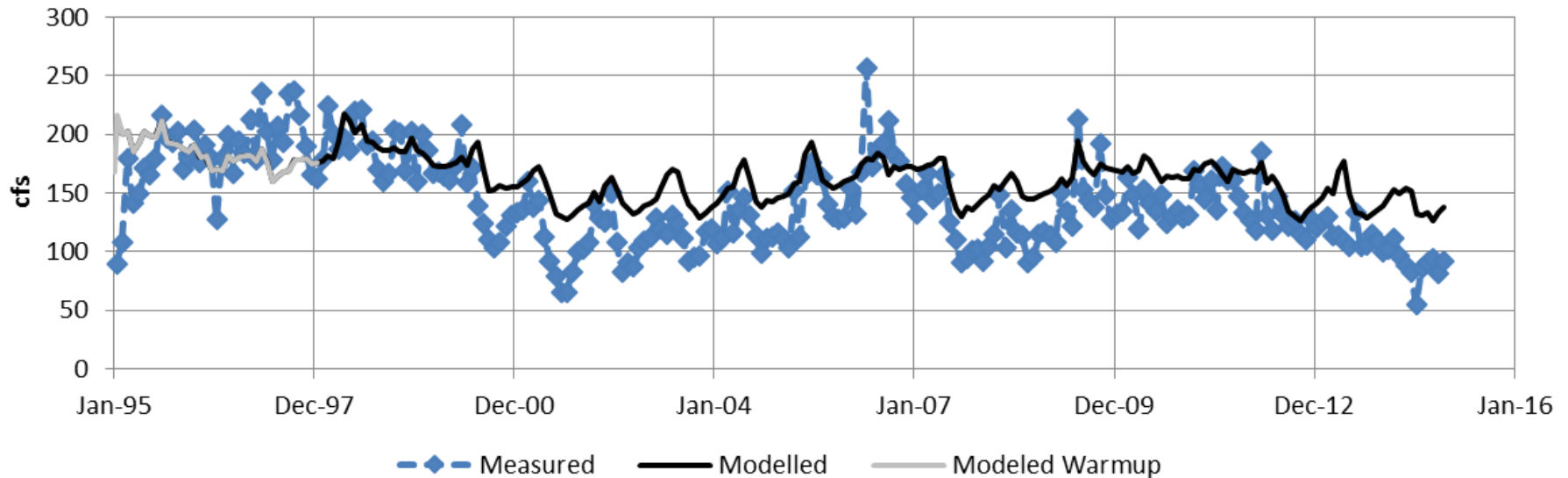
River Gains and Losses



- Silver Cr Blw Sportsman Access

River Gains and Losses

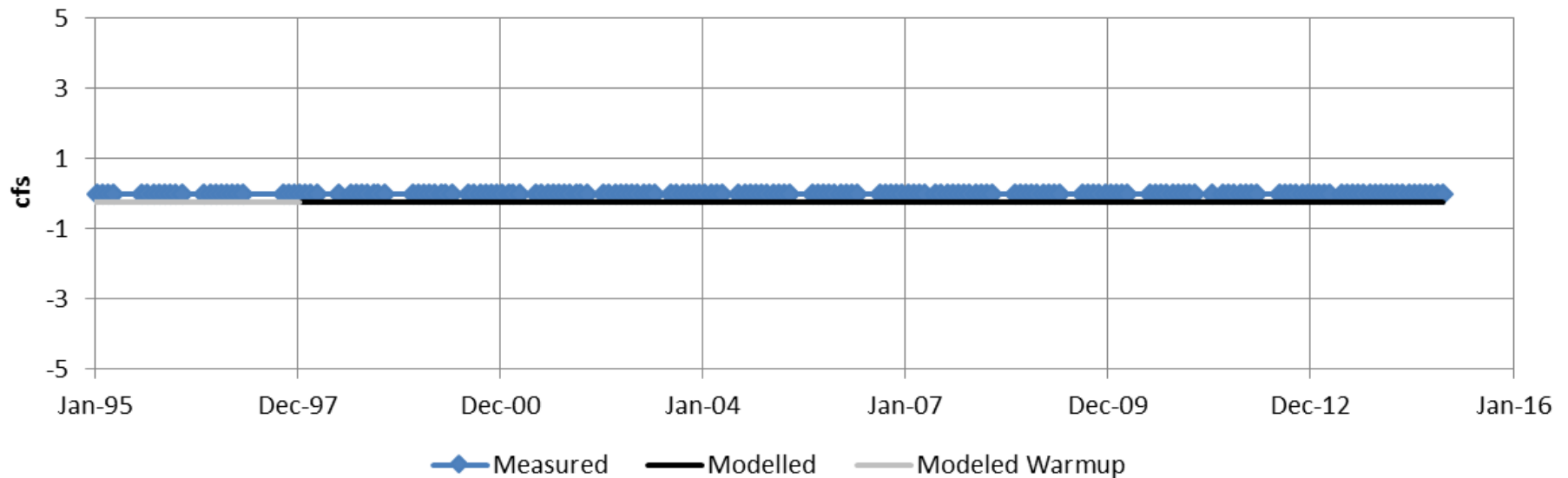
Silver Cr Above Sportsman



– Silver Cr Blw
Sportsman Access

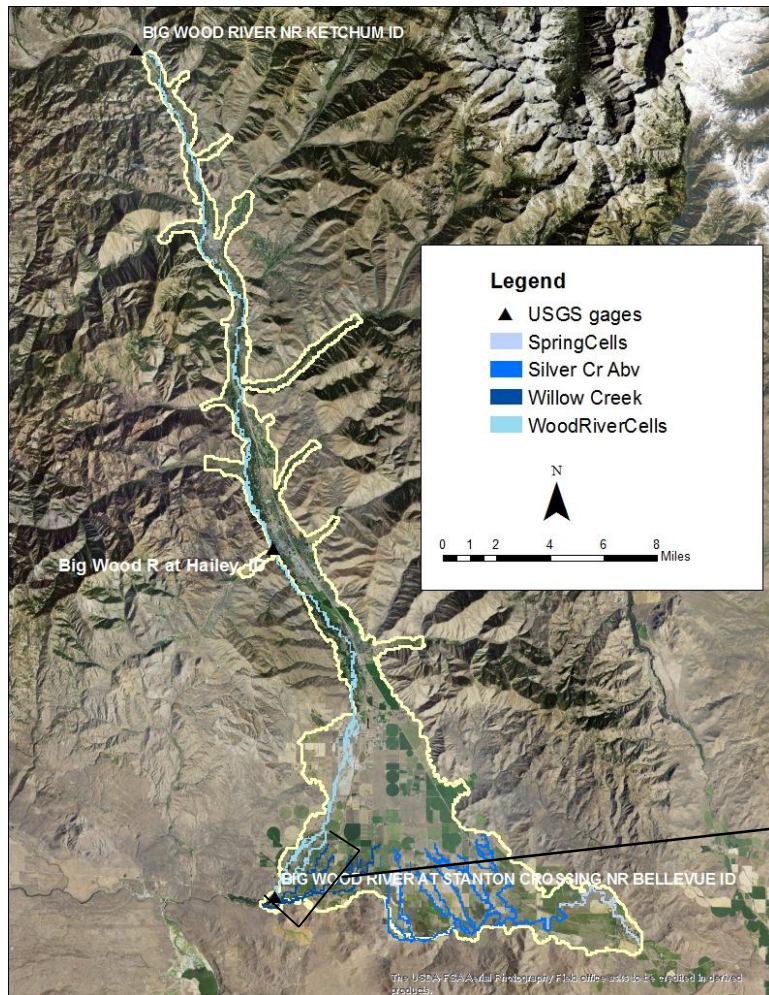
River Gains and Losses

Silver Cr Below Sportsman

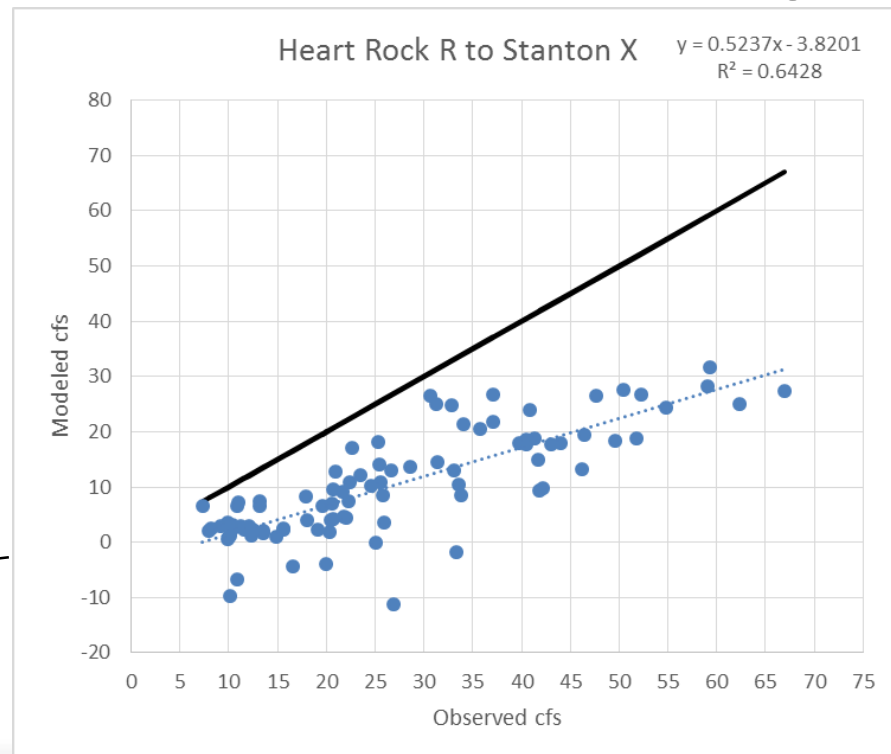


– **Silver Cr Blw
Sportsman Access**

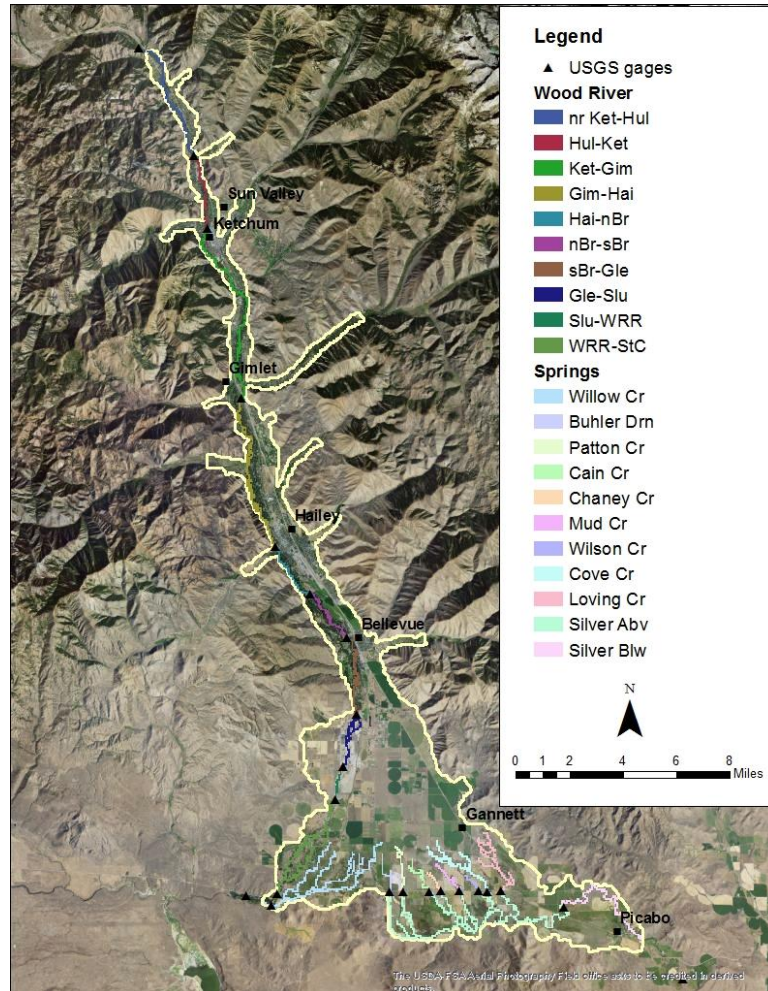
River Gains and Losses



- Heart Rock Ranch – Stanton Crossing

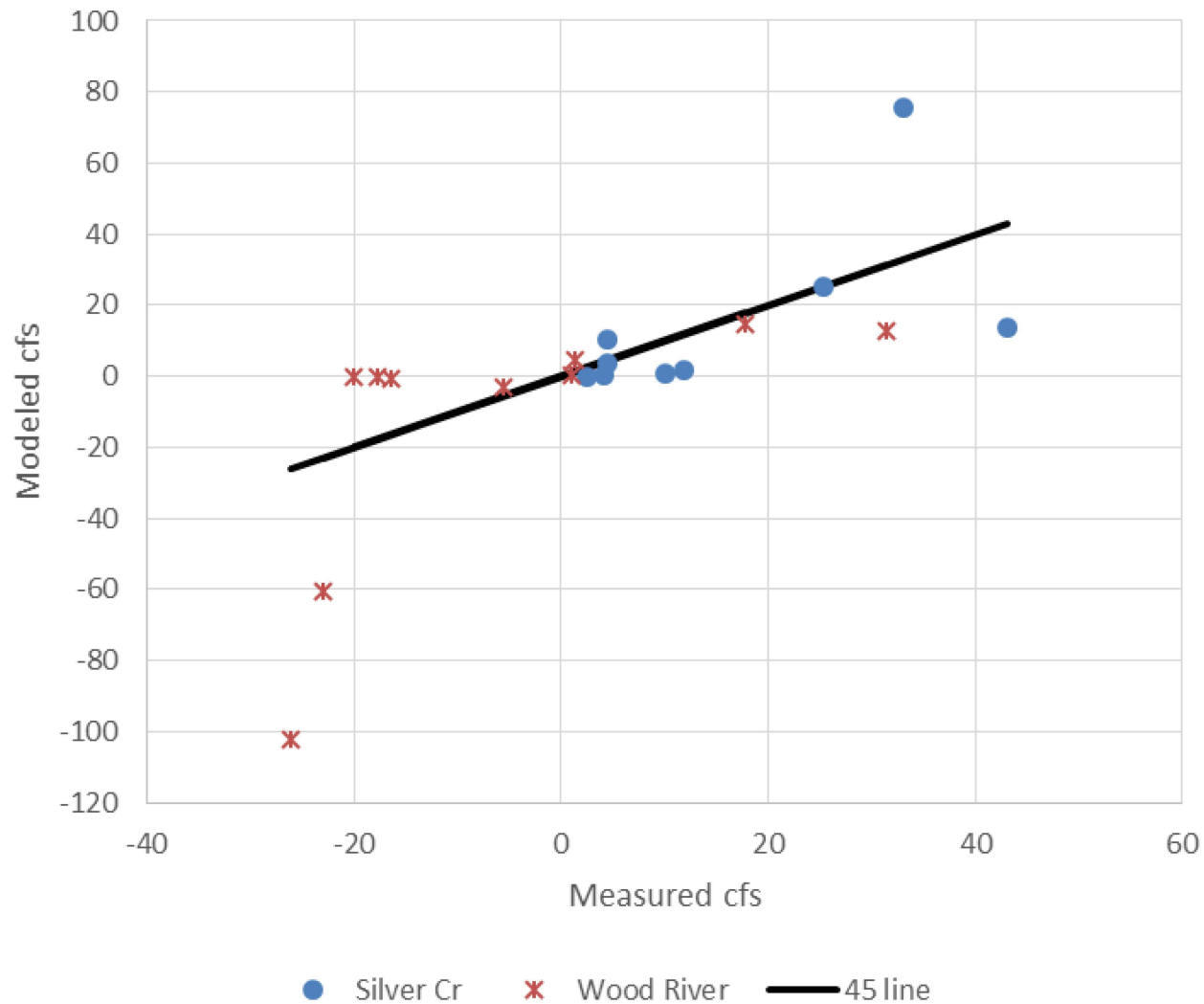


Seepage Runs

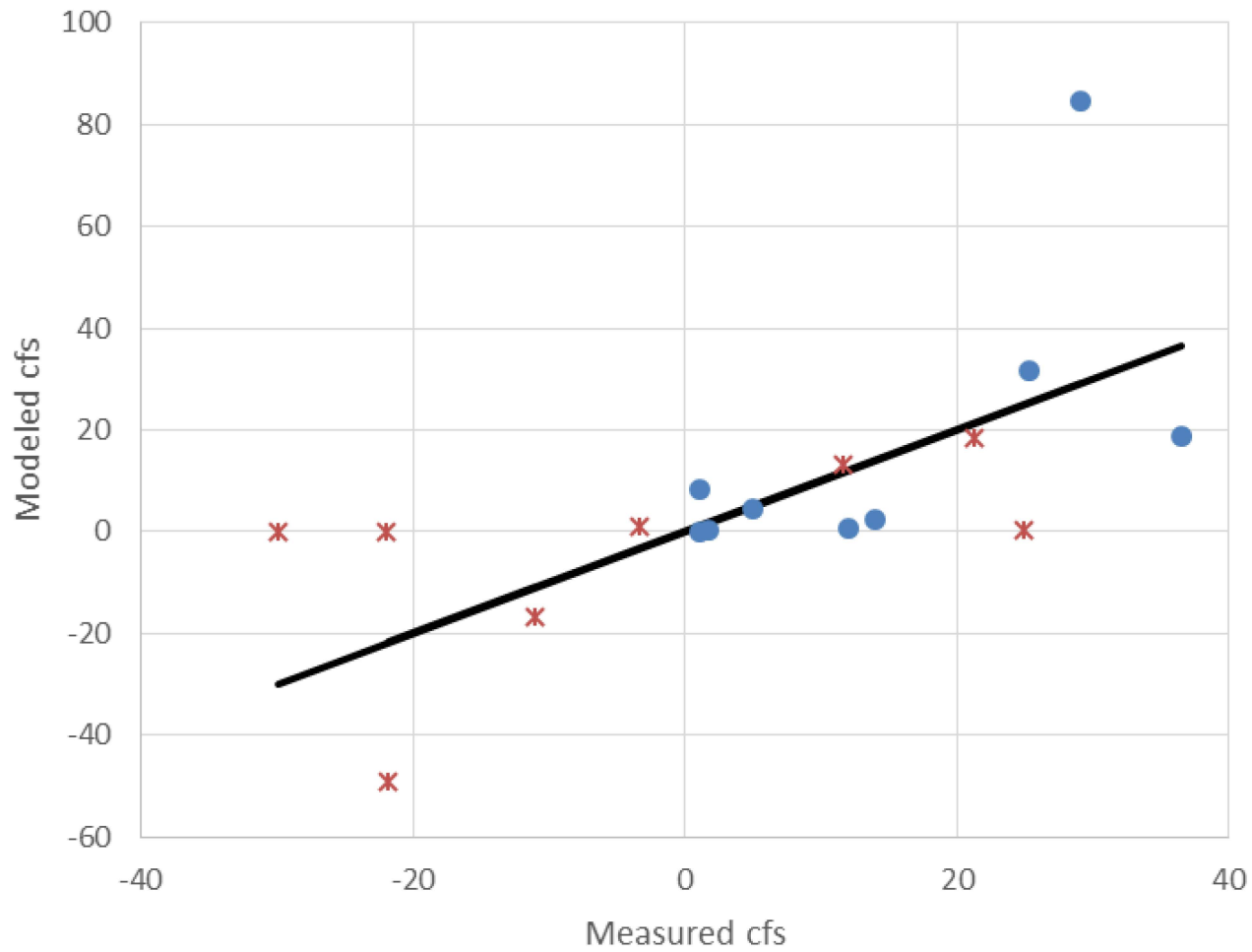


- August 2012
- October 2012
- March 2013

August Seepage Run

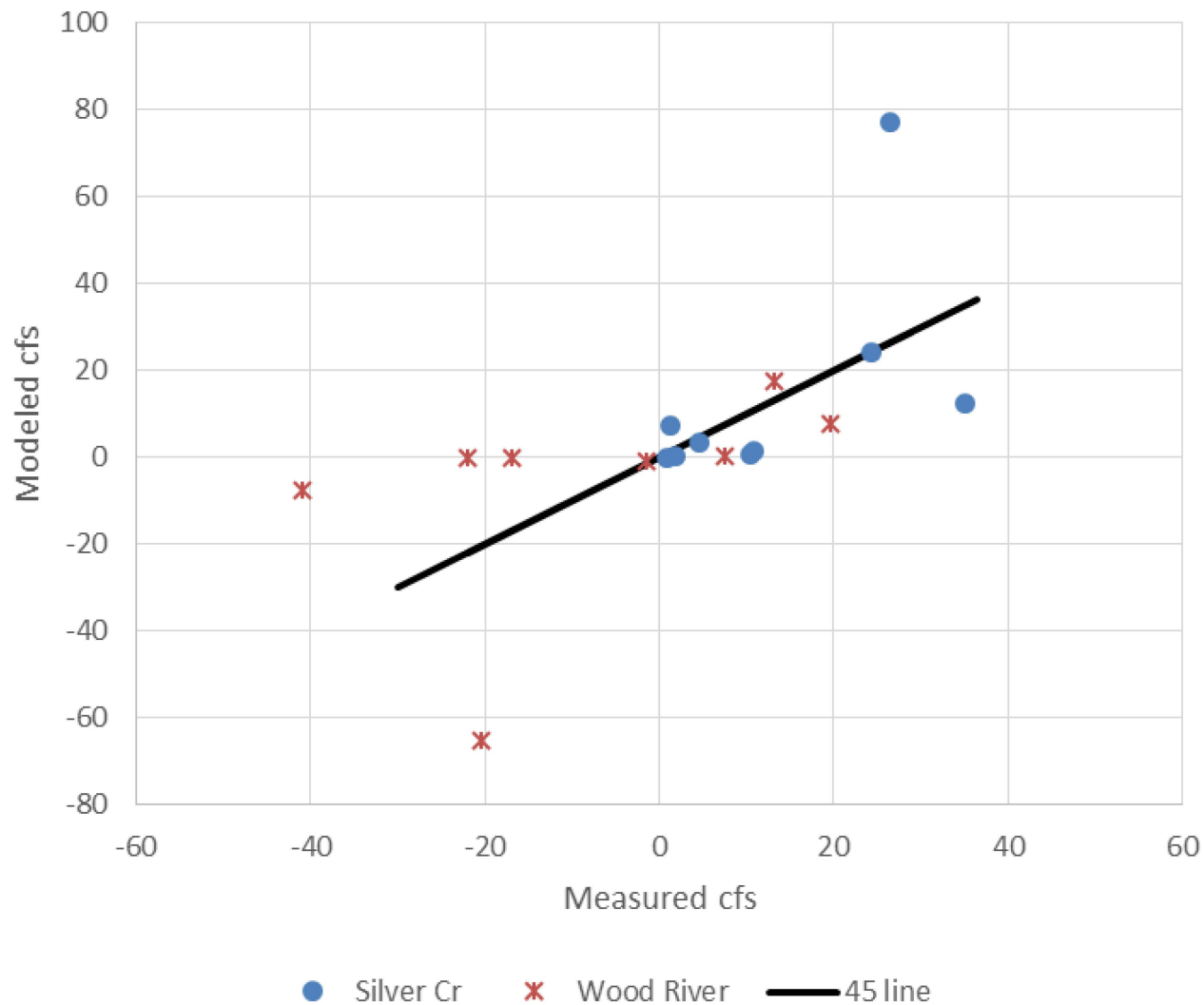


March Seepage Run



● Silver Cr × Wood River — 45 line

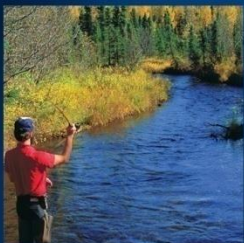
October Seepage Run



Subsurface Discharge From Model

Location	Modeled cfs	Range cfs	
Stanton C	0.03	0	0.41
Picabo	6.38	5.5	73

- Stanton Crossing
 - Estimated ~ Negligible – 300 ac-f/yr
 - 0 - 0.41 cfs
 - Modeled = 0.03 cfs
 - 24 ac-f/yr
- Picabo underflow
 - Estimated ~ 4,000 – 53,000 ac-f/yr
 - 5.5 – 73 cfs
 - Modeled = 6.4 cfs
 - 4600 ac-f/yr



End