# Wood River Water Collaborative Meeting Minutes 1/18/19

**Attendees:** Justin Stevenson, Pete VanDerMuelen, Pat McMahon, Mark Davidson, Keri York, Greg Loomis, Peter Anderson, Bob Simpson, Chris Johnson, Ron Abramovich, John Wright, David Stephenson, Carl Pendleton, Sean Vincent, Mike McVay, Ryan Santo, Kevin Lakey, Bryan Dilworth, Sarah Lien, Fred Brossy, Cooper Brossy Phone: Frank Edelmann

#### Member Updates – Glendale Water Management Project and River Restoration Project (Keri York)

- The Glendale flood mitigation and river restoration project at the Bypass canal diversion is mostly complete. This also includes Glendale canal and Bannon ditch diversions.
- The project's purposes are to realign the river for water delivery, reduce the need for ongoing instream channel manipulation, stabilize streambanks, and improve floodplain. Project photos are attached.
- Project partners are the Upper Wood River Water Users Association, Baseline Canal, Bannon
  Ditch irrigators, Glendale canal irrigators, Flood Control Dist. No. 9, and Trout Unlimited
- Funding was received from the IWRB flood mitigation program, Idaho Dept. of Environmental Quality, Flood Control Dist. No 9, Trout Unlimited, and a private donation
- Members of the Collaborative are welcome to view the project by contacting Keri. A presentation to Idaho Water Users Assoc. will be made the following week.

### Idaho Dept. of Water Resources Groundwater Model (Sean Vincent and Mike McVay, IDWR) Introductions and Background (Sean)

- Sean is the project manager for model development projects
- Once models are developed, IDWR staff continue to work on, such as the calibration of the Wood River Valley (WRV) model
- Sean is supportive of the WRWC in its efforts to hold off a water call and litigation
- There has been indirect lines of communication and confusion in the role of IDWR in the development and application of groundwater flow models and communication with members of the WRWC
- Sean is here to clarify the roles and interactions between IDWR and the WRWC

WRV Groundwater Flow Model and the MTAC (Sean)

- Groundwater flow models are tools built by IDWR and are meant for hydrogeologists that understand these types of models to run
- The models are available through IDWR's website
- IDWR provides training on the use of models; there was a WRV model training on 10/5/16 during which a baseline simulation and scenarios were run with the model
- IWRB funds model development
- USGS and IWRRI are partner organizations
- The MTAC (model technical advisory committee) is comprised of stakeholder representatives and is a vehicle for input and data sharing; it provides the exchange of ideas and transparency
- Water resource consultants participate in the MTAC so that they can use the model and obtain work to do so

- The model is applied to evaluate location-specific water use scenarios and develop mitigation plans

# WRV Model Design Objectives (Sean)

- The model provides a basis for conjunctive administration
- It represents aquifer recharge and groundwater flow and improves our understanding or the river/aquifer system
- It also helps identify data gaps and monitoring needs
- It provides a tool for long-term planning and is meant to be accessible and well-documented
- It is meant to be defensible to avoid having the model be the litigation issue instead of water rights
- Models are used in water delivery calls
  - The director of IDWR looks for injury once the call is filed the decision on a water shortfall is not determined by the model
  - Once a shortfall is determined, the model can be used to determine curtailment without mitigation, or it can be used to determine if a proposed mitigation plan is adequate

# Model Scenario Simulations by IDWR and the WRWC Proposal (Sean)

- Scenario simulations run by IDWR are not meant for curtailment date determination, as described above
- When run by IDWR, scenario simulations are not for mitigation plan development, as by consultants
- When run by IDWR, scenario simulations are not for evaluating water rights and locationspecific transactions
- They are meant to better understand the response of the river-aquifer system to a basin-wide stress (ie. Drought, change in practices, curtailment)
- IDWR scenario simulations are developed with the MTAC or requested by IWRB
- The WRWC proposal was very specific to water rights and locations, not in consultation with the MTAC, and not likely of interest to all water users
- The WRWC proposal will not be run by IDWR, and the WRWC should consider hiring a consultant
- Sean told the MTAC that IDWR would likely perform two model runs to help better understand the aquifer system and to support other purposes as developed by the MTAC, such as the 100% curtailment scenario
- Any proposal by the WRWC would need to be developed in conjunction with the MTAC or presented to the MTAC
- The development of model scenarios by the WRWC might not be best done through IDWR because they would be too specific
- IWRB can also request model scenario simulations
- The 13% reduction scenario run on the ESPA model was determined through negotiations, not the model run.

# WRV Aquifer Recharge Scenario Simulation by IDWR (Mike)

- The WRV aquifer is coarse-grained and generally unconfined
- There is a confining layer in the southern half of the Bellevue triangle with fine grained material; the confining layer is an aquitard clay layer which builds up pressure below that is released in springs

- The Silver Creek springs are a combination of shallow and deep springs
- In the scenario simulation, there were four recharge sites that are not actual recharge sites or specific locations, but are meant to represent recharge in that area
- Locations: Ketchum, dry bed of Big Wood River below Bellevue, Bellevue, Silver Creek
- The Bellevue location had the best retention time and is the furthest from discharge locations
- Recharge may benefit in the same year and at a moderate percent
- Recharge during wet years won't provide significant benefits in dry years because of variable annual precipitation
- Recharge is dependent on Magic being full or consumptive use reduction
- With recharge at Bellevue site, ~50% reaches Stanton Crossing in surface water
- With recharge at the Silver Creek site, ~70-80% discharges into Silver Creek
- Recharge may be useful in directing discharge of surface water between Big Wood and Silver Creek
- Recharge may be useful in the same season, but the aquifer won't serve as a storage mechanism like in the ESPA
  - The WRV aquifer is small so retention time is a few months
  - Results would be similar if aquifer was full
- Instead of recharge, could do directed curtailment and receive similar benefits
- In order to detect discharge, need an adequate volume for a scenario (2-3 cfs likely too small)
- Pete suggested that a potential IDWR model run scenario could be full curtailment once crops are cut, rather than pumping through the full season
- Still need tools to use any conserved water maybe through legislature?

Mark and Sarah to consider options for moving forward their proposal – maybe the recharge scenario provides enough information so a model run may not be necessary

Next meeting: Feb 14<sup>th</sup> from 1 – 3 pm. Ron Abramovich to provide water year update; group to present surface water predictions similar to last year using latest forecast