

Wood River Water Collaborative D45 Tour  
November 2, 2020

Attendees: Keri York, Ryan Santo, Kendra Kaiser, Greg Loomis, Michelle Stennett, Muffy Davis, Sally Toone, Alex Klokke, John Wright, Kevin Lakey, Chris Johnson, Peter Anderson

1. Sportsman's Access
  - a. There are many surface water diversions from Silver Creek above this gauge, but only one below
  - b. Below this point, there are points of diversion where water users pump water from Silver Creek to use as surface water
  - c. There are 13 springs on Silver Creek, and Greg has been collecting temperature data for multiple years. Three of these springs went dry this year (2 on Loving Creek and 1 on Cain Creek). In other years sometimes the spring below O'Gara goes dry.
  - d. Aquatic vegetation displaces water during summer months, and influences water levels
2. Price Rd. Recharge Pits
  - a. Excess water fills the top pit first; lower pit reflects the aquifer
  - b. Possibly affects confined layer more than unconfined because influences Cain Creek
  - c. Chaney Creek (most stable) and Wilson Creek don't seem to be affected by recharge at this location
3. Diversion Split
  - a. When looking north, left side irrigates and feeds Cain Creek; right side irrigates on Stevenson/O'Gara and feeds Grove Creek
4. End of D45 system
  - a. D45 system ends at this point and becomes private
  - b. In pivot above, Baseline Canal comes in and mixes with D45
  - c. O'Gara's northern-most measuring station is at this location
5. Gannett Rd.
  - a. Below road, when field is irrigated, springs flow; maybe a place for recharge?
6. Pero Rd. Recharge Pits
  - a. O'Gara has been monitoring input and output of this recharge pit
  - b. Can deliver water out of it when needed; have been putting more water in recently
  - c. Not sure where recharge water from this pit goes, it would be great to find out
  - d. Maybe use groundwater flow model or tracer studies?
7. Glendale Bridge
  - a. Highest flows in river under bridge are April – June
  - b. Bypass canal delivers water to Wood River Ranch and Heart Rock Ranch (Hagey's); which have the oldest priority dates and never get curtailed
  - c. Canal delivers 50 – 60 cfs; 20 cfs goes to the Hagey's
  - d. There is a lot of loss in the canal; water users discussing how to address
8. Diversion 45
  - a. Highest flow through diversion is 250 cfs
  - b. Start diverting water on April 1 and continue until Oct. 15

- c. Flows measured at diversion; also have measuring on the east, central, and west canals off D45
- d. The Board of Controls for D45 is looking into options for resolving the issue with the failing lowhead dam. A number of stakeholders are involved to determine solutions for irrigation delivery, fish passage, and river health. The NRCS may be a potential funding source, but they would want to look at other issues and inefficiencies downstream.

#### Other Topics Discussed During Tour

##### 1. Well data, recharge, and seepage

- a. Well data – Greg has been compiling available well data, Ryan has helped organize; there are only a few wells with many years
- b. Most wells are less than 300 ft deep; most in unconfined aquifer or upper confined
- c. Questions – how does lining canals and replacing with pipes affect incidental recharge? How to quantify? Some ponds seem to recharge and others don't – affected by soils?
- d. Current recharge efforts being done with excess water at Pero Rd. (most control of), O'Gara
- e. Seepage in ditches
  - a. D45 – when shuts off, decreases in Silver Creek
  - b. 75 Lateral – no seepage
  - c. Center lateral – goes to O'Gara
  - d. East lateral – ends up near Gannett, doesn't leak as much as D45, runs longest because senior users
- f. After groundwater pumping starts, difficult to measure daily effect of recharge and seepage on Silver Creek
- g. Groundwater pumping starts when irrigators run out of surface water. This year pumping started early July; good years starts early August
- h. Need to determine where are the best places to recharge, line canals, etc.
- i. Need to determine which pumps have the most impact on springs
- j. Possibly use sonar mapping, similar to oil and gas companies (very expensive)

##### 2. Groundwater measuring and monitoring

- a. All wells have measuring devices; Kevin measures annual use in Sept.
- b. No measuring during season and no curtailment
- c. Use is based on acreage or acre-feet limit; Kevin estimates most users do not go beyond

allowed use

3. Ecosystem Sciences has been collecting data on Silver Creek for TNC and for O'Gara – Peter will see if we can get access to that data