LRC Water Use Conflict – STAKEHOLDER BI-WEEKLY MEETING MINUTES

Date: November 20, 2025 8:00 AM

Location: Microsoft Teams

Attendees: Jocelyn Schlichting – Schlichting Farms
Anna Bregier – Prairie Farms
Gary Johnson – University of Idaho
Dean Zimmerman – Irrigator
Uma Vempati – Kimley-Horn Project Manager
Hans Holmberg – LimnoTech
Jason Moeckel – DNR
Brent Beste – DNR
Glen Champion – DNR

1. **November 13 Meeting Feedback**
   - General feedback on meeting execution
     - Wally Parkins - A key disappointment was the low attendance from irrigators, which makes it difficult to keep them consistently informed and engaged. It was acknowledged that forcing attendance is not possible.
   - Action items resulting from public meeting:
     - Review trout stream designation for LRC
     - Investigate the feasibility of constructing beaver dam analogue pilots in addition to impoundment scenarios
     - Meet with Emily Fairfax at University of Minnesota St. Anthony Falls Laboratory's beaver project to discuss feasibility, potential cost, and operation of BDAs in LRC
     - Next Steps on Rice-Skunk Lake Approach
     - Check with MN Pollution Control Agency regarding water quality standards and baseflow implications
     - Coordinate with Fish and Wildlife Service to validate where beaver dam analogues may be effective and where they would not be appropriate.
     - Gather crop rotation modeling input data

2. **One Watershed, One Plan**
   - It was noted that there is confusion among stakeholders regarding the distinction between the current project (focused on Little Rock Creek flow issues) and the separate One Watershed, One Plan (1W1P) project.
     - Stakeholders are asking how the two plans impact each other.
     - A suggestion was made to potentially invite 1W1P organizers to a future meeting to clarify these distinctions.
     - This suggestion was ultimately rejected due to concerns it would further confuse the issue and distract from the primary focus of fixing the Little Rock Creek baseflow issues. The consensus was to answer questions as they arise but to avoid formally merging the topics in a meeting.

3. **Rice-Skunk Lake**
   - Discussed the topic that Rice Skunk Lake acts as a large, pre-existing impoundment that recharges the deep aquifer supplying water to the Little Rock Creek watershed. The dam on Rice Skunk Lake,

controlled by the DNR, holds back a substantial amount of water (estimated at least a foot over a 5x6 mile area), which then flows south underground towards Little Rock Creek.

- It was mentioned by Dean Zimmerman that before the Rice Skunk Lake dam was built (around the same time irrigation began), Little Rock Creek would go dry annually. Now, the creek maintains flow, which is attributed to the dam's effect on base flow.
- A major point of contention is the perceived lack of "credit" in the groundwater model for the positive impact of the Rice Skunk Lake dam. The argument is that if the model subtracts water for irrigation, it must also add the water being held back by the DNR-controlled dam to be accurate and fair.
- The underground water from Rice Skunk Lake naturally flows south towards Little Rock, as the path to the north and east runs over granite with minimal aquifer capacity. This makes the southern route to the Mississippi River via Little Rock the most direct path for this groundwater.
- Stakeholders' opinion is that the DNR policy might be preventing the model from including the dam's beneficial effects.
- It was clarified that the model does, in fact, include Rice Skunk Lake and the dam. The core issue is a policy question: whether the existing recharge from the dam can be used to offset the impacts of irrigation. The discussion concluded with an agreement to model the scenario with and without the dam to quantify its impact on base flow and to seek legal clarification on how this could be applied under Minnesota statutes.

4. Beaver Dam Analogue Pilot Project

- The group discussed the feasibility and value of implementing a beaver dam pilot program to study its potential impact on base flow.
- There was general agreement among participants that investigating beaver dams further holds value and that many stakeholders would likely be open to such a project.
- The group considered reaching out to stakeholders to identify a suitable location for a pilot, similar to the approach for impoundment projects.
- A key point of discussion was how to measure the success of a potential pilot project, including quantifying the changes they produce and developing a monitoring plan to determine their effectiveness.
- It was reiterated that any proposed solution must be provable by the model. Therefore, a plan must be in place to model the effects of a pilot project using reasonable data gathered from the experiment.
- It was noted that beaver dams can create localized subsurface flow patterns that may be beneficial but could exceed the current capabilities of the model. The group needs to consider how to evaluate these potential benefits outside of the existing model.
- The success of a pilot project hinges on finding a willing landowner. It was mentioned that Randy Klaphake had previously expressed interest in having an analog dam on his property.
- It was suggested to consult with experts to guide the pilot program. Reaching out to academic resources like the University of Minnesota (Emily Fairfax from the St. Anthony Falls Lab) or Central Lakes College was also proposed to help refine the pilot design, modeling approach, and develop metrics for measuring improvements.

5. Review of Trout Stream Designation

- The group revisited the topic of the trout stream designation for Little Rock Creek.
- It was noted that the DNR had agreed to research the history and details of the designation.

- It was reiterated that even if the trout stream designation were removed, water quality standards and base flow requirements would likely still apply.
- The DNR will also consult with the Minnesota Pollution Control Agency (MPCA) regarding these implications and report the findings back to the stakeholder group at a future meeting.

6. Crop Rotation Modeling

- The group discussed what inputs are needed from stakeholders to accurately model the effects of different crop rotations. The model currently uses historical data on what crops were grown during the simulation period.
- The model has detailed, verified data for irrigated crops within the "zone of irrigation influence" from 2006 through 2024. Outside this zone, the model relies on less-verified satellite data. Minor discrepancies can occur, such as landowners reporting total field acreage rather than just the center-pivot irrigated area.
- It was highlighted that crop rotation is heavily influenced by commodity prices. The recent introduction of peas, which use less water, is an example of a market-driven shift.
- To encourage rotations that are beneficial for water use but potentially less profitable, some form of payment or offset would likely be necessary.
- Jocelyn Schlichting, with 1,000 acres in the zone of influence, proposed a direct meeting to discuss what rotation changes their family would be willing to make. This would provide a concrete, real-world scenario to run through the model as a preliminary test.

7. December 18 Meeting Agenda

- Model Updates
- Review revised SDL assessment based on model recalibration
- Update on investigation of potential impoundment areas

8. Action Items / Next Steps

- Continue efforts to encourage irrigator attendance at future meetings.
- **Jason:** To consult with legal counsel regarding the interpretation of Minnesota statutes on whether the positive base flow impact from the pre-existing Rice Skunk Lake dam can be used to offset the impacts of irrigation.
- **Jason:** To consult with the Minnesota Pollution Control Agency (MPCA) regarding the water quality standards and base flow implications that would remain even if the trout stream designation were removed from Little Rock Creek.
- **Modeling Team (Hans/Glen):** To run model simulations with the Rice Skunk Lake dam included and then without it to quantify the difference in base flow in Little Rock Creek.
- **Uma and Team:** To reach out to Randy Klaphake and potentially experts at the University of Minnesota or Central Lakes College to explore the feasibility, location, and design of a beaver dam pilot program. Look into the possibilities of a beaver dam analog pilot project, including potential permitting aspects. Consult with Fish and Wildlife Service to validate where beaver dam analogs may be effective. Contact Emily Fairfax at the St. Anthony Falls Lab to potentially get help in developing metrics to measure the impact of analog dams.
- **Uma and Team:** Reach out to Jocelyn, who offered to discuss crop rotation possibilities on their 1,000 acres to set up a meeting.

9. Next Bi-weekly Stakeholder Virtual Meeting

- December 4, 2025

10. Potential Next Workshop Meetings

- December 18, 2025 – demonstration of updated model outputs
- January 22, 2026 – initial model results on crop rotation and water conservation
- March 12, 2026 – TBD