

LRC Water Use Conflict – STAKEHOLDER BI-WEEKLY MEETING MINUTES

Date: October 23, 2025 8:00 AM

Location: Microsoft Teams

Attendees: Jason Moeckel – DNR Project Manager
 Glen Champion – DNR Groundwater Modeler
 Brent Beste – Project Management support and coordination
 Uma Vempati – Kimley-Horn Project Manager
 Hans Holmberg – LimnoTech
 Gary Johnson – University of Idaho
 Wally Perkins – Royal Farms
 Rick McCulloch – LimnoTech
 Jocelyn Schlichting – Prairie Farms
 Anna Bregier – Prairie Farms
 Dean Zimmerman – Irrigator

1. Modeling Discussions

- Modeling Update and Coordination with Limnotech (Glen, Hans)
 - Coordination between Glenn and Hans' teams to accelerate modeling tasks; a follow-up review meeting is scheduled for the same morning to examine outputs.
 - Integration of SWB (Soil-Water Balance) with MODFLOW to produce recharge and groundwater interaction outputs.
 - SWB model focuses on recharge drivers (irrigation, runoff) to inform integrated system behavior.
 - Current phase emphasizes assembling and validating outputs across models prior to detailed interpretation.
 - Glenn requested Gary to revisit and refine the prior water budget question list (originally focused on the GSSHA model and legacy system) to ensure required outputs and review needs are captured.
 - Gary agreed to adjust the list to prioritize irrigator-relevant items; Hans confirmed continued support for revisions, updates, and additional needs.
 - Preliminary simulations suggest impoundment approaches are promising but not a guaranteed solution; scenario analysis is required to strengthen confidence.
 - Modeling will assess relocating wells closer to impoundments to reduce conveyance costs and re-run scenarios excluding low-benefit sites (e.g., Paradeis, potentially Northern View).
- Modeling Coordination and Tool Development (Glen, Gary, Hans)
 - Update on Irrigators' Group Meeting (Gary)
 - ☐ Gary scheduled a working session with irrigators for 10/30/2025 to review tools and materials developed to date.
 - ☐ Objectives include determining immediate needs and defining areas where Hans' team can assist with tool development and support, with follow-up to the project team afterward.
- Survey Update (Brent)
 - One new survey response was received; detailed review pending.
 - Augmenting survey interpretation using aerial imagery for improved field-level identification and accuracy.
 - Additional support engaged for aerial photo analysis; no substantial changes reported yet.

2. Impoundment Areas – Initial Hypothetical Locations Review (Uma)

- Reviewed first draft of impoundment area maps.
- Six initial conceptual sites identified: Rice Sportsman's Club, Warzecha, David Kloss, Northern View Partnership, Kuklok, Paradeis.
- Maps illustrate conceptual impoundment extents at a one-foot berm height, approximate storage area, and schematic of impoundment construction.
- Technical intent: install a low berm (~1 ft) to back up water into upstream impoundment areas, promote infiltration, and sustain Little Rock Creek baseflow.
- Landowner consent is foundational before public presentation; contact each identified landowner privately before November 13 to and ensure informed participation.
- Kuklok site specifics: ~61.67 acres inundation at one-foot impoundment; adjacent parcels (north and east) may experience unintended flooding or wetland conversion affecting active agriculture.
- Clarify landowner rights, compensation, and permissible uses (e.g., hunting continuity, farming constraints).
- Instruments and terms to consider for easements vs. fee simple acquisition:
 - Water storage rights and operational control.
 - Allowed ongoing land uses (hunting, access).
 - Restrictions to protect storage function (no fill, no drainage alterations).
 - Compensation framework aligned with impact and value.
- Process recommendations:
 - Develop a preliminary rights/constraints template (minimum easement terms) before outreach.
 - Map hydrologic backwater extents to identify affected adjacent owners.
 - Explore fewer, larger impoundments for cost efficiency and simplicity; proceed with outreach to four owners while maintaining flexibility to consolidate or expand based on feasibility.
 - Clarify whether the four sites represent a subset of a larger pool or the complete current identification; determine if additional sites should be screened.
 - Preliminary modeling findings:
 - Paradeis (Bunker Hill Creek) exhibits very high groundwater table with negligible/negative benefits; eliminated.
 - Northern View may be eliminated due to small effective area; confirmation pending.
 - Removing Paradeis reduces nominal acreage (~12.5 acres, ~15–20% of initial total) but does not materially degrade progress due to acreage quality considerations.
 - Stakeholders requested clear articulation of site-selection criteria (proximity to Little Rock Creek, soil/aquifer properties, topography) and the property-selection process.
 - Initial candidate impoundments and parcels identified as “low-hanging fruit” for mapping and visualization; comprehensive identification remains incomplete.
 - Contingency strategy needed if targeted properties decline participation, including evaluation of other viable parcels and pathways.
 - A single larger parcel (Kuklok) perceived as critical; losing it could reduce benefits by roughly two-thirds based on acreage scale alone, though hydrologic and operational dynamics must be considered.
 - Early engagement with key owners recommended due to outsized influence on project performance.
 - Project team will initiate direct outreach to property owners; community stakeholders prefer not to act as intermediaries to avoid perceptions of endorsement and local political risks.
 - Project team will keep community stakeholders informed of scheduled meetings and progress to maintain transparency without imposing liaison duties.
 - Anticipated model-iterative cycles to determine exact acreage and placements, implying potential follow-up asks to landowners.

- Early modeling suggested impoundments could address sustainable diversion limits under certain assumptions; costs driven by maintaining constant impoundment water levels via wells and conveyance systems.
- Stakeholder feedback to relocate wells closer to impoundments to eliminate expensive conveyance infrastructure; engineering team to evaluate.
- Not all candidate sites contribute equally; eliminating high groundwater or small effective area sites can improve cost-benefit outcomes.
- Additional landowner expressed interest in hosting impounded areas - recommended to announce opportunities at the November 13 meeting, clearly stating:
 - Whether easements or buyouts are sought.
 - Rights retained by landowners and access controls.
 - Specific compensation terms (concrete dollar amounts and durations) to drive serious interest.
- Consensus that definitive offers yield better engagement than open-ended solicitations, mitigating concerns about access and restrictions.
- Comments/feedback to be addressed prior to Nov 6 in preparation for Nov 13 meeting

3. Upstream Drainage and Ditch Maintenance Inquiry

- An upstream landowner inquired about clearing ditches above the proposed Rice Sportsman's Club impoundment to improve baseflow and dry a wet hayfield.
- Potential adverse effects from added backwater or raised water levels must be assessed; location relative to parcels could mitigate or exacerbate impacts.
- Hydrologic and drainage modeling needed to evaluate upstream and downstream effects of impoundment operations.

4. Cold-season Only Impoundment Operations Proposal

- Proposal to re-evaluate Sartell WMA for impoundment with cold-season-only operation (September–May) to enhance recharge, then fully drain for summer to protect cold-water temperature criteria.
- Modeling can assess if cold-season recharge elevates groundwater enough to offset summer pumping during dry years and help meet diversion limits.
- Stakeholder viewpoint: hydrologically beneficial, but land dedication concerns remain; raising water tables likely precludes farming regardless of seasonal operation.

5. Cost Estimates and Budget Sensitivities

- Proposed using a defined budget (~\$35–\$70 million referenced for infrastructure/impoundments) to fund voluntary measures:
 - Paying for fallow years (fallow buyouts).
 - Compensating for bean-on-bean despite yield drag.
 - Incentivizing extended potato intervals (every six years vs. three).
 - Purchasing partial rotation changes (e.g., 20% peas, 30% less corn).
- Key questions:
 - Whether DNR would fund rotation-based incentives instead of infrastructure.
 - What rotation mix, quantified by the model, meets reduction targets.
 - Compensation levels needed to make landowners whole (difference in expected returns between current and incentivized rotations).
- Paying producers keeps funds local; a cost framework is required to estimate per-acre revenue differences and program-scale costs.

6. Stakeholder Meetings: Draft Agenda/Topics for November 13th Meeting

- By November 6th Stakeholder Bi-Weekly Meeting

- Concise preview to key stakeholders of planned content to gain alignment
- Status update and rationale for model revisions
- Gather input frameworks for future simulations – update from Wally on contact with following stakeholders:
 - Beaver Dams – Randy Klaphake
 - Crop Rotations
 - Water Conservation
 - Water from Rice-Skunk Lake – Dean Zimmerman
 - Proposed landowner panel
- Idea to invite two to three receptive property owners to speak about considerations (compensation mechanisms, easement vs. purchase, on-property improvements).
- Potential optics benefits by having local landowners speak; limited expectation of sway over others, uncertain willingness to participate.
- Proceed only if voluntary and constructive; expected benefits may be marginal but downside is low.
- Potential Impoundment Areas/Locations
- Leave maps out until express approval is granted from landowners
- Wrap-Up and Follow-Up

7. Crop Rotations and Model Analysis

- Enforceability concerns: mandatory rotations impractical; voluntary participation viable but effectiveness and predictability limited without incentives.
- Need for quantified model outputs on scenarios (e.g., 100% beans in specific areas, 60% beans in zone of influence, potatoes every six vs. three years) to estimate groundwater/water use impacts.
- Historical variability in rotations noted; minority of fields maintain strict 3-year potato cycles; constrained to corn/alfalfa, limiting rotation-based savings.
- Preliminary modeling indicates uniform water-use reductions across the zone of influence may need to exceed 50% if used alone; rotation changes alone likely insufficient.
- Refined model will not be ready to quantify rotation impacts by November 13; only broad perspectives from earlier versions may be available.
- Stakeholders requested targeted outputs quantifying required percentages of lower-water crops, reduced corn shares, and extended potato intervals to achieve specified reductions.
- Agreement on need to link crop water use, spatial distribution, and temporal rotation patterns to model outcomes, including year-to-year variability.

8. Action Items / Next Steps

- Modeling:
 - **Glenn:** Provide integrated SWB–MODFLOW preliminary outputs after the scheduled review meeting.
 - **Gary:** Reassess and refine the water budget question list; return priorities for irrigator-focused outputs.
 - **Hans:** Continue support on model revisions; assist with output formatting and sensitivity runs requested by Gary.
 - **Technical Team:** Define and document site-selection criteria for impoundments (proximity, hydrogeology, topography) and share with stakeholders.
 - **Technical Team:** Refine modeling to assess impacts of relocating wells closer to impoundments; re-run scenarios without Paradeis (and potentially Northern View) and quantify effects on diversion limits and cost.

- **Technical Team:** Conduct preliminary hydrologic/drainage analysis for upstream ditches and fields, including Rice Sportsman's Club area.
- **Technical Team:** Evaluate cold-season-only impoundment feasibility at Sartell WMA (model seasonal recharge benefits and summer temperature protections; determine land-use implications).
- Irrigator Engagement
 - **Gary:** Conduct the irrigators session 10/30/2025; report outcomes and tool needs to the team.
- Survey and Data:
 - **Brent:** Review the new survey response; integrate aerial imagery findings; share field-level refinements.
- Impoundment Sites and Landowner Outreach:
 - **Project Team:** Prepare a draft rights/constraints/easement template with minimum requirements, permitted uses, and compensation considerations.
 - **KHTT:** Produce backwater impact maps (one-foot impoundment) for each site to identify all potentially affected adjacent properties.
 - **KHTT:** Evaluate feasibility of fewer, larger impoundments; outline criteria and potential alternative sites if some of the six are non-starters.
 - **Project Team:** Initiate direct outreach to identified five to six property owners, prioritizing high-impact parcels.
 - **Project Team:** Develop and share a transparent meeting schedule with stakeholders as outreach progresses.
 - **Project Team:** Assess feasibility and interest of select landowners to provide statements or participate in a November 13 panel; proceed only if voluntary and constructive.
- Cost & Compensation
 - **Project Team:** Review and update the May cost estimate, explicitly detailing land acquisition/easement assumptions for impoundment areas.
 - **Technical/Financial Team:** Scope and initiate analysis for cost estimation of rotation incentives (crop value differentials, buyout structures).
- Coordination & Communication:
 - **Kimley-Horn:** Adjust November 13 agenda based on landowner outreach results; invite supportive landowners to participate; avoid public naming of sites without prior consent.
 - **Kimley-Horn:** Share selection criteria for impoundment sites
 - **Kimley-Horn:** Prepare revised maps and messaging consistent with landowner feedback and rights framework.
 - **Internal Coordination (Glenn, Hans, Brent, and others):** Determine preliminary statements for November 13 on rotation-based options and modeling trajectory; prepare refined model outputs and scenario framing for December 11.

9. Next Bi-weekly Stakeholder Virtual Meeting

- November 6: Bi-weekly call to preview the November 13 agenda and provide updates.
- November 13: Stakeholder meeting including status update, Beaver dams, Rice/Skunk Lake, crop rotations, and water conservation; decide on inclusion of hypothetical impoundment locations.

10. Potential Next Workshop Meetings

- December 11, 2025 - follow-up for refined model outputs (if feasible)
- January 22, 2026 - January session for initial results on crop rotation and conservation scenario testing
- Late February or early March: Consider additional meetings to leverage off-season availability.