Stakeholder Advisory Committee Meetings Summary

LOWER PLATTE SOUTH
natural resources district

LPSNRD Ground Water Management Plan

Stakeholder Advisory Committee Meetings #2

Tuesday, November 18, 2025
Wednesday, November 19, 2025

Overview

As part of the engagement strategy for the Lower Platte South Natural Resources District (LPSNRD) Ground Water Management Plan (GWMP) update, LPSNRD and HDR held a second round of Stakeholder Advisory Committee (SAC) meetings. The first of two meetings was held Tuesday, November 18, in Elmwood, Nebraska. The second meeting was held Wednesday, November 19, in Lincoln, Nebraska. The purpose of these meetings was to collect input from the SAC on the ground water quantity and quality life goal and supporting objectives. Activities for this meeting included a pre-meeting survey and small breakout group discussions during the meeting. The meeting agenda, attendees, survey results, and discussions are summarized below.

Agenda

- Welcome
    - Introductions and Review
- Ground Water Quantity and Quality Life Goal and Objectives
    - Objectives Review and Survey Results
- Future of Ground Water Within the LPSNRD
    - Introduction and Background
- Breakout Groups
    - Small Group Discussion
    - Report-Out
    - Summary
- Review Ground Water Quantity and Quality Triggers
- Ground Water Management Strategies and Innovations
- Next Steps

Elmwood Stakeholder Advisory Committee

(Tuesday, November 18, 2025)

The first of two SAC meetings was held in Elmwood, NE, to reach the eastern half of the district. This meeting took place at the Elmwood Fire Hall from 9:30 – 11:30 a.m., with light refreshments provided during the meeting. The meeting consisted of 14 attendees, one board member, and eight staff. Attendees are listed below, and scans of sign-in sheets are in Appendix A.

Attendees:

Name & Organization
Brad Harris - Layne
Doug Whitfield - MUD
Alan Aanerad - OPPD
Alicia Greise – Village of Elmwood
Ryan Leymen - OPPD

Name & Organization
Robert Andersen – LPSNRD Board
John Nelson - UNL
Laura Johnson - DWEE
Madeline Johnson - DWEE
Ruby Micek - NGPC
Scott Bruns – Otoe Co. RWD #3
Katie Cameron – UNL CSD/ENWRA
Crystal Powers – UNL
Kevin Huxhold – Village of Elmwood

Lincoln Stakeholder Advisory Committee

(Wednesday, November 19, 2025)

The second of the two SAC meetings was held in Lincoln, NE, to reach the western half of the district. This meeting took place at the LPSNRD office from 9:30 – 11:30 a.m., with light refreshments provided during the meeting. The meeting consisted of 15 attendees and nine staff. Attendees are listed below, and scans of sign-in sheets are in Appendix A. *(Note: not all attendees signed in).*

Attendees:

Name & Organization
Becky Schuerman - UNL
George Wesselhoft – Lincoln-Lancaster Co. Planning Dept.
Chris Schroeder – Lincoln Lancaster Co. Health Dept.
Darin Schwaninger – Agricultural Producer
Ruby Micek - NGPC
Nick Sanders- City of Valparaiso
R.M. Joeckel – UNL
Katie Cameron – UNL CSD/ENWRA
Corbin Harms – Lincoln Water System
David Stander – Agricultrual Producer
Madeline Johnson - DWEE

Name & Organization
Laura Johnson - DWEE
Chris Hobza - USGS
Steven Hentzen – Lincoln Water System

Outreach

The outreach strategy for these meetings consisted of electronic communications in the form of meeting calendar holds and emails. The initial meeting calendar holds were sent to the stakeholders established prior to the kick-off meeting, based on their location within the district. (Some stakeholders were invited to both meetings.) Emails were also sent to all stakeholders with reminders of the upcoming meetings as well as a link to a survey to get stakeholder input on the Ground Water Management Plan's water quantity and quality life goal and associated objectives.

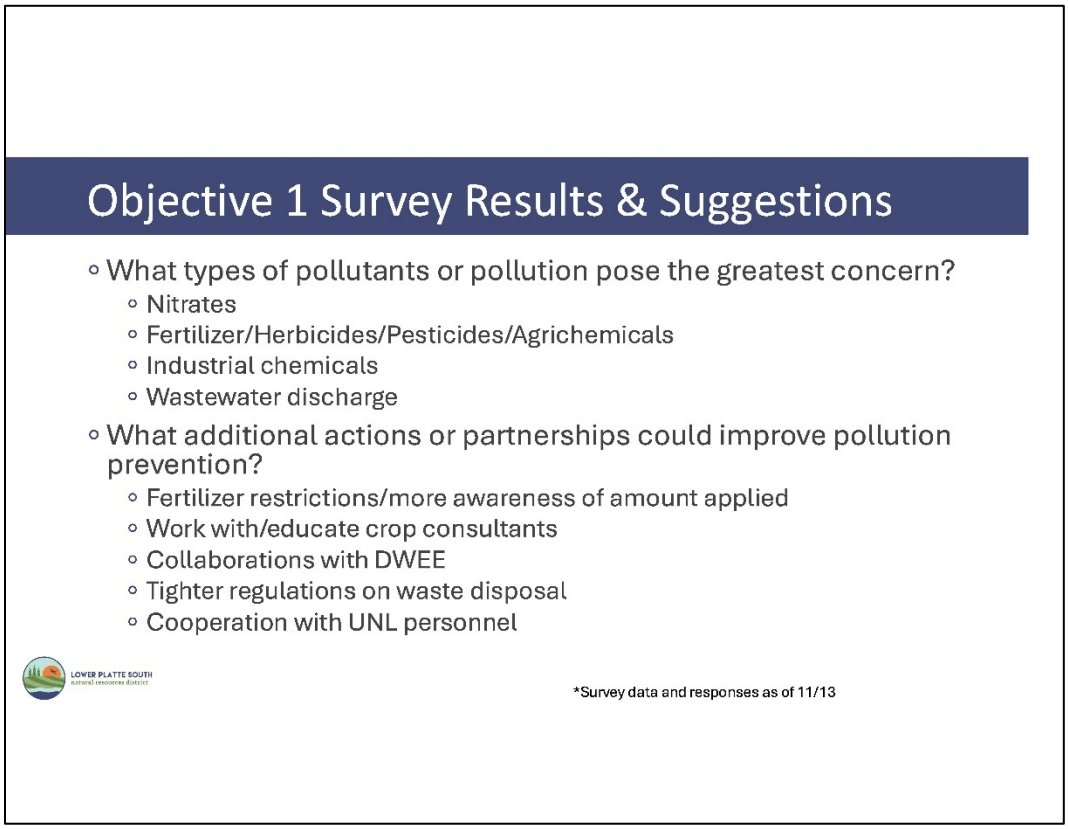
Meeting Activities

Survey

Prior to the meetings, stakeholders were sent a link to a survey to provide feedback on the existing ground water quantity and quality life goal and the associated objectives. A total of 12 submissions were received before the meetings took place. The survey results and basic analysis were shared and discussed with each stakeholder group.

The current ground water quantity and quality life goal, developed in the 1970s as part of the LPSNRD Master Plan is, "Maintain the quantity and quality of ground water for any beneficial use in conformance with state standards."

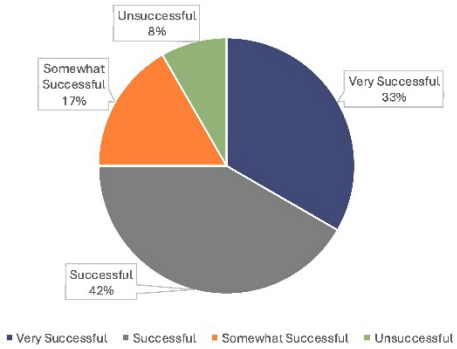
Ground Water Quantity and Quality Life Goal and Objective Survey Results



Objective 2 Survey Results & Suggestions

- Manage ground water quantity and quality levels through monitoring programs in compliance with Nebraska Ground Water Protection Standards and with provisions of Ground Water Management and Protection Act.

How successful is the District's monitoring network in providing useful data for your agency or operation?



*Survey data and responses as of 11/13

Objective 2 Survey Results & Suggestions

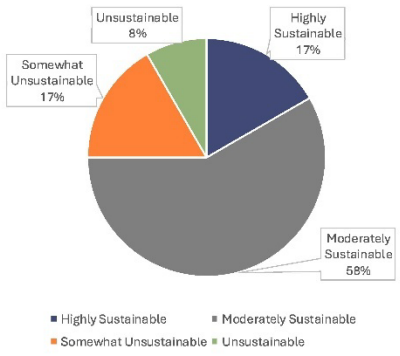
- What additional monitoring data would be most beneficial?
  - Nitrate/Depth to Water/Pesticides monitoring would all be beneficial
  - Consider monitoring nonpoint source pollutants
  - Improvements making data publicly available

*Survey data and responses as of 11/13

Objective 3 Survey Results & Suggestions

- Manage ground water for effective long-term conservation and utilization.

How sustainable is the current ground water use in the District?



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Objective 3 Survey Results & Suggestions

- What conservation tools or policies have been most effective?
  - Using AEM to assess ground water storage
  - Regulation/permitting of wells
  - Permitting programs and annual reporting
- Which need improvement?
  - Reduced irrigated acres
  - Flow meters on irrigation wells
  - Education programs
  - Requiring well drilling permits upfront
  - Zoning restrictions on development

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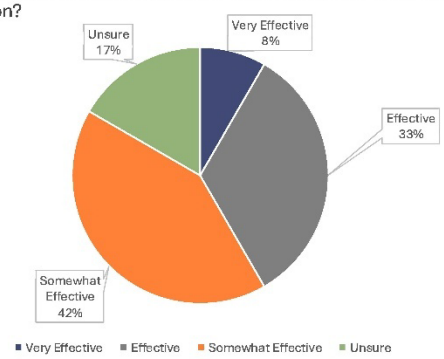
*Survey data and responses as of 11/13

Objective 4 Survey Results & Suggestions

- Encourage proper development and conservation of ground water.

How effective are the District's programs and data-sharing efforts in encouraging responsible ground water development and long-term conservation?



*Survey data and responses as of 11/13

Objective 4 Survey Results & Suggestions

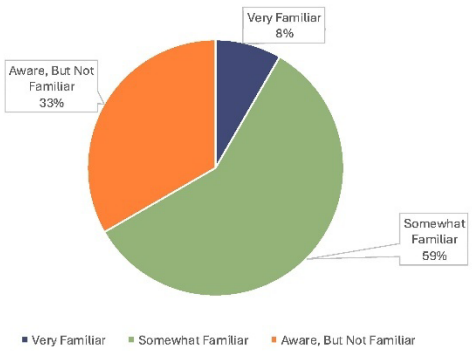
- What changes, new approaches, or programs would improve ground water conservation among users?
  - Data sharing among different web-based databases
  - Emphasis on lawn watering reduction
  - Ban gated pipe irrigation and encourage less wasteful water use
  - Support and invest in conservation related programs
  - More water quality and usage programs

*Survey data and responses as of 11/13

Objective 5 Survey Results & Suggestions

- Implement the policies in the District's Ground Water Management Plan and update as needed.

How familiar are you with the District's GWMP?



*Survey data and responses as of 11/13

Objective 5 Survey Results & Suggestions

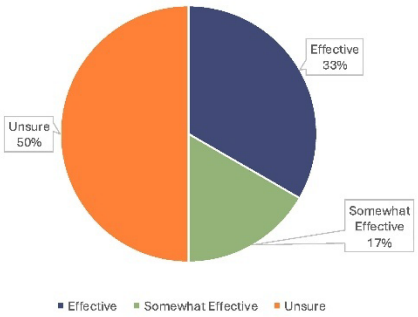
- Which GWMP strategies have had the greatest impact?
  - Not sure
  - Educational programs and monitoring wells
  - Long term monitoring and annual evaluations/public information
  - Well permits
- What emerging issues or priorities should be addressed in the update?
  - Contamination (nitrates, nuclear radiation)
  - Drought mitigation
  - Predicting spatial changes in water demand
  - Rural, residential, and business development

*Survey data and responses as of 11/13

Objective 6 Survey Results & Suggestions

- Reduce potential for contamination by pesticides and fertilizers from chemigation through irrigation systems.

How effective are current chemigation inspections and permit requirements at reducing contamination risk?



*Survey data and responses as of 11/13

Objective 6 Survey Results & Suggestions

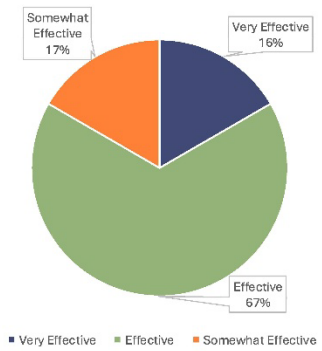
- What improvements could make the chemigation program more efficient or protective?
  - Not sure
  - Better enforcement/reduced levels
  - Current program is good

*Survey data and responses as of 11/13

Objective 7 Survey Results & Suggestions

- Work collectively with other agencies to evaluate ground water quantity and quality data.

How effective is current collaboration between your organization and the District?



*Survey data and responses as of 11/13

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Objective 7 Survey Results & Suggestions

- What barriers exist to collaboration or data sharing?
  - Difference in data formatting/making data easier to find and understand
  - Sharing of updated study results locally and regionally
- What types of joint projects or shared data efforts would be most beneficial?
  - Improved communication between agencies
  - Continue to work with state agencies and University of Nebraska
  - Cost share programs
  - Semi-annual public meetings in counties served

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Breakout Groups

Each stakeholder meeting held a breakout group activity for individuals to discuss the future of ground water in the district and express concerns and predictions. While going through the discussion questions, groups were asked to consider the following:

- Population demands
- Technology is a double-edged sword (ex: improved efficiency versus increased demand for resources, such as data centers)
- Climate influences on available water supplies
- Legacy contaminants vs. long-term management practices
- New and emerging contaminants

Each small group had a project team member facilitate conversations using a discussion guide with probing questions to obtain valuable input.

Elmwood Breakout Group Discussions

Will ground water usage increase or decrease in the future?

- The majority of attendees see water usage increasing in the future.
- Expecting steady population growth.
    - Municipalities/communities will continue to grow and increase usage.
    - Cass County is one of the largest developing and growing areas in the district.
    - Lincoln 2.0 project – would the eastern side have outcomes from this project?
    - Domestic wells will continue to increase around Lincoln, but still rural water. How should zoning work to control small development wells or domestic wells? Require a separate well for lawn vs in-home use?
    - Water distribution tends to be a problem due to the number of hookups allowed.
    - Developments are finding ways to skirt local/state rules.
        - Anything we can do to address this? It could cause problems with quantity and usage.
- Power usage in the future – need access to water to build new power production.
-
- Concern about potential industrial use increases - potential for data center and factory usage in the future.
    - Data centers are currently closer to Omaha, but there could be growth in the district.
- Irrigation may stay steady in usage, due to improvements in water usage and technology (like pivots that control the amount of discharge). Could increase slightly.
    - Current farmland and irrigated crop land turning into developments – how much water does irrigated land use versus domestic developments?
    - Some people who previously irrigated with surface water may be switching to ground water irrigation because it's easier and more cost-effective.
    - Due to increase in number of growing days, will people try to do two crops per year?

- Several towns are looking for new wellheads to either increase quantity, looking for places to drill that are less contaminated, or their infrastructure is old.

Will ground water quality improve or get worse in the future?

- Domestic wells in general – may not know what their water quality is and what that testing looks like, and how to get that information.
    - Not all homeowners are testing their private wells. How do we bridge the gap without requiring it?
        - Education is a possibility.
        - New agency/organization partnerships.
- Nitrates continue to be a problem for communities in the Elmwood/East area.
    - In the short term, nitrate accumulation between the surface and the top of the aquifer will all move down, so there will be some increase in nitrates for a period of time.
- Arsenic is a concern in southeast Nebraska.
    - Wells out west have a treatment option to combat arsenic.
- Some potential radiation concerns – nitrates can react with naturally occurring uranium in the soil.
    - Is there any monitoring for this?
- Could create a management area for anything, not just nitrates.
- PFAS is a growing concern, but we're still figuring it out – unclear of what any actual standards are or could be.
- Continued vadose zone monitoring is needed – could see quality problems get better or worse over time.
- Would like to find better ways to partner and expand on water quality efforts.

Do existing ground water management plan objectives meet future management needs?

- Overall spirit of the plan outlines things well. Long-term, the objectives seem effective/sufficient.
- No concerns with the goals and objectives, but what needs to be updated are particular action items. Are we meeting the goals and objectives?

    Protect ground water from point and non-point source pollution

    - Keep – potentially combine with chemigation objective.
    - Application of chemicals through the land – how can we account for that, potentially in this objective?

    Monitoring ground water quantity and quality

    - Look at wells being used as triggers and make sure everything is representative.

Long-term conservation and utilization

- Could potentially combine with the "encourage proper development and conservation objective.

Encourage proper development and conservation

[No comments]

Implement policies and strategies

[No comments]

Reduce the potential for contamination from chemigation

- Consider revisiting and not specifically talking about chemigation. Broaden it to other avenues of contamination.
  - Modify the language as it's currently too specific.
- Consider modifying to read as "nitrogen application".
- Consider broader application language that could apply to golf courses, light industrial uses, etc.

Work collectively to evaluate ground water data

[No comments]

What objectives are missing or need to be revised?

[No comments]

Other Topics Discussed

- May want to look for another source of water, but the problem would be distribution.
- Will water quantity limit development, or could development help pay for water if it can be found/the system can be upgraded?
- Lincoln is growing – will probably not be able to help with other communities. Would a regional water authority be needed?
- How can we let homeowners know what to test/does more need to be done?
  - Create dashboards.
  - Increase education.
  - Stronger wording in the plan to encourage testing.
  - Required water testing when selling your home to prove the water quality is ok.
- What are we doing with farmers to reduce nitrogen?
  - Cost-share programs could be beneficial for nitrogen reduction, split application, fertilizer meters, cover crops, etc.

Lincoln Breakout Group Discussions

Will ground water usage increase or decrease in the future?

- The majority of attendees see water usage increasing in the future.
- Increase largely due to population growth.
    - Lincoln population has increased. Haven't seen a lot of increase in usage yet, but that could change.
    - Lincoln expects growth to continue, with smaller communities expecting a moderate amount of growth.
        - Even communities like Louisville and Elmwood are growing.
    - Foresee domestic wells growing in certain areas.
- Industrial increase will be tied to municipal growth.
    - It will also depend on the industry – data centers, city water, power, Monolith, ammonia or ethanol production.
    - Are we addressing the problems/anticipating the potential problems we didn't know about prior (i.e. Monolith) – how can we anticipate these?
    - Consider having industries join into municipal supplies if available.
- Some acreage development will increase domestic wells.
- Don't foresee a problem with irrigation - irrigation would stay pretty steady, or potentially increase slightly.
    - The number of irrigation wells permitted by the NRD has been a small amount recently.
    - Most of the ground that is good for irrigation is already developed.
    - Not a tremendous amount of growth in irrigation.
    - Irrigation is going to become more sustainable.
- Potential for change in crops?
    - There may be a change to lower water use crops.
    - Possibility of picking up more vegetables (more water-intensive) as California is experiencing a lot of saltwater intrusion.
    - Possibility of growing two crops due to an increase in growing days.

Will ground water quality improve or get worse in the future?

- Water quality concerns depend on the contaminant.
    - Nitrates are the biggest contamination concern. They will increase as they are already in the soil and will leach down (legacy nitrates).
        - Legacy contaminants are still part of the unknown.
    - Increased nitrates can react with naturally occurring contaminants in the soil.
        - Uranium
        - Radon/Radium
    - Agricultural production will see improvements, but historical contamination is still there.
- Microplastics is a potential concern – is anyone testing for it, and how would you test for it?

- PFAS is a growing problem, but most of the exposure is not coming from water right now.
    - Perhaps mention monitoring of PFAS and microplastics in the plan.
- Pesticides aren't generally tested for unless there's a problem.
- Some saltwater intrusion in part of the district.
- Enhance partnerships.
- Hope to see improvements in quality long-term.
    - Hope to see this in vadose zone testing as time goes on.
- Fertilizer needs and reduction – sometimes out of farmer's control with the amount of precipitation.

Do existing ground water management plan objectives meet future management needs?

- Overall, objectives look fine, but action items may need to be changed.

    Protect ground water from point and non-point source pollution

    - Could potentially combine with "Reduce the potential for contamination from Chemigation".

    Monitoring ground water quantity and quality

    [No comments]

    Long-term conservation and utilization

    - Potential to combine with "Encourage proper development and conservation".
        - Dave Potter, general manager of the LPSNRD, noted that he would recommend keeping these separate.
        - Would like to see this reworded to "development efficiency" – efficiency may be what we need to educate the public on.

    Encourage proper development and conservation

    [No comments]

    Implement policies and strategies

    [No comments]

    Reduce the potential for contamination from Chemigation

    - Expand to contamination from other sources, not just chemigation.

    Work collectively to evaluate ground water data

    - Consider adding "and program effectiveness" to this objective.

What objectives are missing or need to be revised?

- Biggest concern is land development and what that will do for water quantity and quality.

Other Topics Discussed

- Water quality triggers – once the district enters Phase 1, are the activities that you must undertake as part of Phase 1, effective at preventing the district from moving to Phase 2, Phase 3.
- What does the district currently do for monitoring? What wells does the district have dedicated to monitoring?
- Are there opportunities for more education?
    - Education, when it comes to conservation – should this be stipulated in the plan?
    - Develop a half-day 'boot camp' on issues associated with water – reaching out to leaders in the community (like nurses, realtors, etc.). Perhaps it could be made into something worth CEUs or a certification process.
    - Rural water systems – people don't necessarily understand what it's for.
- Adding direction about when to start dealing with contaminants that may not have MCL.
    - Acute versus chronic MCLs.
    - Involve University of Nebraska Medical Center, Center for Disease Control, Health and Human Services.
- Desire to control development.
    - How would this happen other than education?
    - Push development efficiency.
- Should we be talking about conservation?

General Conversation Topics from Stakeholder Meetings

- Should an objective tied to public health or education be added?
    - Public health risks may not be understood by the general public. Education is going to be important and could include overall reminders of why we do certain things and why they matter.
    - Education is going to be more important as we start throwing microplastics and PFAS into the equation and determine what is a concerning level, and what isn't.
- Are currently available programs working for Stakeholders?
    - Need to keep that in mind as we move into discussions about triggers and strategies.
    - Rather than promoting contaminants and education, consider adding a trigger about when to take action and when to be concerned.
- Triggers – are they sensitive enough to effectively support and are the percentages acceptable?
    - If the district moved into Phase 2, is there a range where you can stop that from moving into Phase 3?
- Water management strategies are pretty good – there are a lot of detail in the existing plan on water quality management strategies.

    - Similar sentiment from the quantity standpoint.
- Precision Ag using satellite technology could be an umbrella strategy.
- Need to look at the bigger picture like climate change and the impact on ground water and its usag