

MINUTES

LOWER LOUP NATURAL RESOURCES DISTRICT BOARD OF DIRECTORS MEETING

January 23, 2025

Ord, Nebraska

The January meeting of the Board of Directors of the Lower Loup Natural Resources District was held at the Headquarters Office, 2620 Airport Drive, Ord, Nebraska, on January 23, 2025. Chairman Thoene called the meeting to order at 4:00 p.m.

CALL TO ORDER

Directors in attendance:

Rollie D. Amsberry, Treasurer
Robert L. Bauer
Randy Kauk
Gary A. Kruse
Todd Nitsch
Chad J. Podolak
Gerald Smith
Rick Vlach, Vice Chairman

Timothy E. Bartak
Colton R. DeBower
Justin W. King
Larry Mohrman, Secretary
Alan Petersen
John Shadle
Henry J. Thoene, Chairman

Directors absent:

James Eschliman
Thomas L. Knutson
Alexander L. Vlach

Jeremy Eschliman
Matt Lukasiewicz

Staff in attendance:

Russell G. Callan, General Manager
Irene Kreifels, Administrative Assistant
Brant Bechtold, Information Specialist
Dell Harris, Water Resources Specialist
LeeAnn Smith, Water Admin. Assistant
Aron Lewis, Dist. Conservation Forester

Tylr Naprstek, Assistant General Manager
Kim A. Lyons, Financial Secretary
Kevin Gustafson, District Engineer
Makenzi Woollen, Financial Assistant
Dan Ruterbories, Rangeland Mgt. Spec.
V. Ann Freeman, Water Programs Secy

Guests in attendance:

Bryce Bauer, DC, NRCS, Ord
Jon Mohr, LRE Water, Lincoln
N. Richard Hadenfeldt, Dannebrog

Miles Anderson, DC, NRCS, Albion
Tom Glose, LRE Water, Lincoln

VERIFICATION OF MEETING NOTICE AND ADOPTION OF AGENDA

Chairman Thoene asked for verification of the meeting notice. General Manager Russ Callan stated that the agenda was current with revisions, and that the meeting notices were properly published in all newspapers, posted at the NRD Headquarters office in Ord, on the NRD website, and in the eight field office locations.

EXCUSED ABSENCES

Thoene stated that Directors James Eschliman, Jeremy Eschliman, Knutson, Lukasiewicz, and A. Vlach had asked to be excused.

Smith motioned, seconded by R. Vlach, to excuse absent Directors James Eschliman, Jeremy Eschliman, Knutson, Lukasiewicz, and A. Vlach. Motion carried by electronic vote. Directors voting yes: Amsberry, Bartak, Bauer, DeBower, Kauk, King, Kruse, Nitsch, Petersen, Podolak, Shadle, Smith, Thoene, R. Vlach. Director not present for vote: Mohrman. Directors absent: James Eschliman, Jeremy Eschliman, Knutson, Lukasiewicz, A. Vlach.

MINUTES

Thoene asked for corrections and/or additions to the December 19, 2024, Board meeting minutes. Callan stated there was a correction on the Water Resources Committee minutes, stated that Jeremy Eschliman attended via Zoom.

Kauk motioned, seconded by DeBower, to approve the December 19, 2024, Board meeting minutes as corrected. Motion carried by electronic vote. Directors voting yes: Amsberry, Bartak, Bauer, DeBower, Kauk, King, Kruse, Nitsch, Petersen, Podolak, Shadle, Smith, Thoene, R. Vlach. Director not present for vote: Mohrman. Directors absent: James Eschliman, Jeremy Eschliman, Knutson, Lukasiewicz, A. Vlach.

TREASURER'S REPORT

Russell Callan, General Manager, highlighted expenditures of \$13,367.73 to Wadas, Inc. for furnace replacement; \$23,006.38 to Giddings Machine Company for the second half of the soil sampling equipment; \$7,350.00 to LRE Water, Inc. for the Buffalo County Model; and \$29,444.58 to JEO Consulting Group, Inc. for WFPO work. Callan also highlighted additional expenditures of \$28,781.98 to Central Nebraska Bobcat for a new Bobcat; and \$118,669.60 to NLC, LLC for Davis Creek road improvements.

Kruse motioned, seconded by Shadle, to approve the January 23, 2025, Treasurer's Report. Motion carried by electronic vote. Directors voting yes: Amsberry, Bartak, Bauer, DeBower, Kauk, King, Kruse, Nitsch, Petersen, Podolak, Shadle, Smith, Thoene, R. Vlach. Director not present for vote: Mohrman. Directors absent: James Eschliman, Jeremy Eschliman, Knutson, Lukasiewicz, A. Vlach.

The Treasurer's Report Approval Policy states that the approved expenditures are to be published and each director who has per diem and/or reimbursement of expenses included in such financial reports, abstains from voting for the approval of his or her own per diem and/or expense reimbursement.

Mohrman arrived at 4:07 p.m.

PUBLIC COMMENTS

Thoene asked for public comments. None were heard.

FORESTER'S REPORT

Aron Lewis, District Conservation Forester, reported that as of January 15th, 18,719 trees and 3,946 coco mats have been sold, and added that the numbers have gone up since then. Lewis stated that he and the technicians have been meeting with producers to design windbreaks and windbreak renovations.

Lewis also reported that he has been working on forest stand improvement and fuel reduction projects across the District and would be attending prescribed burn meetings on February 3rd in Ericson and Ord on the 4th. He added that he has been working on scoring wildland urban interface grants from other states and that the State Forester was here last Friday and looked at a potential project in Garfield County. He stated that they are applying for a \$3M grant for Jones Canyon/Calamus and possible other Loup and Garfield County tree cutting fuel reduction projects to be 100% cost-shared. Lewis stated that the canyon is unique because it has furthest east native stand of Ponderosa pine in the state.

Lewis added that he will be attending a prescribed fire operations class in Ord in February and a Nebraska Forest Service staff meeting to be held on February 17-21 in Lincoln.

Kauk asked if Jones Canyon was started with the flood of 2019 from erosion. Lewis stated he thinks that because of the topography, including straight-down cliffs, that it was made from water flowing through. Callan stated that Kauk may be thinking of the channel that was cut north of Ericson in Garfield County. Thoene asked if there is any history or record of how old the trees are. Lewis replied that the State Forester estimated them to maybe be 50 or more years old. Thoene added that the trees on top of the hills were said to be the only ones to survive during old wildfires. Lewis added that he was told that a lot of the Ponderosa pine trees were logged some time ago to build houses in Grand Island and the buildings at Fort Hartsuff. Callan added that Jones Canyon is all private property, so the NRD sourced pine cones from the trees and planted them at the Aagaard Farm to protect that seed source.

NRCS REPORT

Bryce Bauer, NRCS, Ord, reported that staff is working on 2025 EQIP applications, adding that some funds are on hold; however, they are working ahead on planning in anticipation

that they will be kept. He stated that they are giving pre-approval to contracts, letting applicants know that until funds are officially obligated, they are not guaranteed.

Bauer added that he, Callan, and Miles Anderson, DC, NRCS, Albion, met with Emily Webster to work on details of the RCPP agreement. He added that a draft has been put together and submitted to the National office for first review. He stated that April 23rd is the cut-off date for making the grant official. The ranking would begin in the next couple of weeks, based on EQIP's current ranking scale. He added that the signup date, potentially May 1st, will need to be advertised for 30 days. He hopes to process and fund projects by June 15th.

Bauer stated that they are in a hiring freeze but added that this is normal after an administration change.

Kruse asked when RCPP funds needed to be used. Bauer stated it is a 5-year program; however, once the agreement is in place, all funds are available in year one, so we can work ahead if we get the applications.

Miles Anderson introduced himself as the new District Conservationist in Albion and stated he will be covering the St. Paul and Fullerton offices as well. He added that he served as a Resource Conservationist in Pierce County, Nebraska.

He stated that Evan Liable has been serving as the EQIP State Program Manager. The position has since been filled, so he will be returning to the Albion office as RC next week.

Anderson added that there will be a local work group on February 12th at 10:00 a.m. and that he and other staff are working on signing producer contracts for current programs.

BUFFALO COUNTY MODEL REPORT – LRE

Jon Mohr and Tom Glose of LRE Water in Lincoln met with the Board and gave a report on the Buffalo County Area Groundwater Model.

Mohr reviewed the model goal as well as the construction and calibration phase. He went over the original goal of the WSF project to use as a tool for the LLNRD to look at and understand the water level declines in Buffalo County. He stated that the goal of the model was to accurately represent groundwater levels and changes in those levels depending on types of projects or other management considerations.

A map was shown of the model area, including Water Quantity Management Areas 13, 16, and 18. Mohr added that they used AEM data, well logs, and test holes for data.

Glose discussed the calibration model and explained that they used a combination of 255 test holes from UNL, approximately 19,000 well logs from Nebraska DNR, and relied heavily on the 2019 AEM survey that covered 140 square miles. Data from these sources were combined to create one cohesive geological model which our groundwater model can be based off of. He added that calibration was based on comparing observed historical data collected from LLNRD

twice-a-year surveys and simulated data from LRE's model. He also showed a map of the wells in the study area and showed the simulated data vs. collected data.

Glose also showed example scenarios that were run with the model. He added that the models that have been developed were run through the year 2060 by repeating historical data from the period of 2008-2020, which gives us a forecasting ability to see how possible future groundwater activities could impact our groundwater resources. He explained that they and LLNRD staff developed three scenarios on stream diversions, theoretical pumping increases, and allocations. He added that they assessed the water levels, stream flow impact and compared "business as usual" scenarios as well.

Glose explained that scenario #1 was stream diversion to manage aquifer recharge area as identified by the AEM survey. With this scenario, excess water flow was diverted from the South Loup River to the Sand Creek drainage area. He said the model was run diverting 1500 gpm and showed the residual drawdown from where water was being diverted that lasted only for the period of time that the groundwater was being diverted and to the groundwater rise where it was redistributed, occurring over a larger area. This manifests itself not only in a rise, but in an increase in late-season streamflow.

Glose stated that scenario #2 showed theoretically increased pumping at KAAPA ethanol plant and local groundwater elevation declined by more than five feet. Then one-third of the pumping volume was diverted back to the river. This model showed an initial increase in streamflow, but then a steady net decline in streamflow through 2060, indicating that water would be pulled from the stream as well as alluvial groundwater.

Glose explained that the final scenario looked at potential for pumping allocations. He added that four levels of allocations were simulated to assess changes in groundwater elevation and temporal and spatial changes in groundwater elevation differ depending on allocation level. Allocations from 2020 to 2060 were modeled at 12 inches, 7.5 inches, 5 inches, and 2.5 inches. The estimated increase or decline in each area was shown. He explained that they found that at 12 inches and 7.5 inches there was no improvement in the rate of groundwater level declines shown; however, groundwater elevation gains were shown at 5 inches and 2.5 inches. The estimated change in streamflow due to allocation changes were also shown. He stated that the more restrictive the allocation, the larger the increase in streamflow shown.

The recommendation was to identify desired future conditions and goals and establish quantifiable goals for groundwater elevation trends and streamflow conditions and assess which outcomes are acceptable and which are not; and also to maintain a high frequency observation network. Glose stated that biannual water table elevation measurements were essential for the model calibration and continued access to both long-term and newly collected data. Glose added that the Buffalo County model should be routinely updated with target wells using the latest measurements to ensure the model is accurately simulating and can be recalibrated if needed. He also stated that with the continued use of the model as a management tool, scenarios can be presented to the public. He added that information will be given to NRD staff so the model can be run as needed.

Kauk asked what variables were used in running figures out to 2060. Glose stated that they partnered with Flatwater Group information that used historical precipitation data, land use, and irrigation data to put into the model. He added that this period covered drought and increased precipitation so they felt it was a good representation period and felt that it would be accurate for that outlook. He added that if it goes further, we might need to look at other data as well.

Kauk asked if we have rules and regulations on ethanol plant pumping. Callan stated that we do and added that the ethanol plant usage has not changed much. He stated that if they go over 250 acre-feet per year, they must do a hydrological study. Glose added that this model can be used on predicted use, as well, to assess potential outcomes to see if acceptable before implementing.

Shadle asked how many wells were used and what the makeup of the wells was. Glose stated that they were mostly long-term groundwater monitoring wells. Within the model focus area were 46 NRD wells, 16 USGS wells and 24,000 observation points throughout the area. He stated they utilized data on surface soils, geologic data, and AEM data. They combined the data into the model with initial parameters assigned and calibrated.

Naprstek added that the Columbus recharge project started with a model similar to this. Callan highlighted the elevation model showing the variation. He explained that before the moratorium, levels were on a straight decline and the declines started to level out after it was put in place. Callan stated that if allocations on the pumping are on a targeted area, the graph shows what an increase would look like, adding that allocations between 2½ - 5 would be where groundwater levels start to level out.

The model can predict various scenarios so that Board members and staff can decide on future courses of action.

Thoene asked if ethanol plants are getting better at not using as much water. Bartak stated that enzymes are added to break down the corn leading to less water use.

INFORMATION & EDUCATION REPORT

Washington D.C. Conference

Brant Bechtold, I&E Specialist, stated that the Washington D.C. Conference will be held March 31st to April 2nd, and that arrangements have been made for flights leaving on March 30th and returning April 3rd.

Central Region Envirothon

Bechtold reported that the Central Region Envirothon will be held next Thursday and that it is a joint effort between the Lower Loup and Central Platte NRDs. He added that this will be a hand scoring event, with Central Platte is managing sign-ups, and Lower Loup preparing the materials.

ASSISTANT GENERAL MANAGER'S REPORT

Davis Creek Recreation Area 2024 Numbers

Tylr Naprstek, Assistant General Manager, reported a gross income of \$48,678 for reserved spots and \$33,966 from walk-ups at \$30 per site. Naprstek stated that expenses are not figured in, such as the custodian, maintenance staff, and any repairs that are made. Naprstek showed a comparison of totals from 2022, 2023, and 2024, adding that the recreation area was closed early this year for the road construction to begin. Naprstek also showed the numbers from 2017 and 2018 for comparison. Naprstek added that in the agenda there is a listing of the various states that visitors came from.

Flow Meter Maintenance

Naprstek stated that meter maintenance in designated water quality management areas is subcontracted out and that every site gets inspected every 3 years. He added that meters are required in management areas. He stated that some quantity areas are still in the installation process, and they will be put on a maintenance schedule once they are installed. Naprstek added that maintenance costs over \$25 are billed to the producer. A similar process is expected to be implemented in our water quantity management areas, as well.

Groundwater Management Area – Nutrient Management Plans

Naprstek reported that most producers have either signed their plans or are in process. He added that there has been mostly positive feedback and that crop consultants have been attending the meetings as well. He also reported that most annual reports are getting finished, and that people are using the online dashboard.

Drought Monitoring

Naprstek showed the drought outlook as of today which showed little change from last month's report. The report stated that most of the southern and eastern portions of our area are in "moderate" drought, while most of the northern and western parts are in "Severe" drought status. Naprstek reported that there are some "Extreme" areas showing in the upper Panhandle.

Naprstek added that the February 20th public hearing next month is for the Area 19 area between Palmer and St. Paul on the south side of the river.

ENGINEER'S REPORT

Sargent Flood Resiliency

Kevin Gustafson, District Engineer, discussed the engineering project schedule, stating that we had 6% done. He stated it was originally scheduled for September but was received in December. The final design should be done in June.

Mud Creek

Gustafson reported that we are still waiting for design funding so nothing has changed.

Mira Creek

All of the public agency reviews are done. He added that he met with JEO and they are sending public responses to NRCS. He stated he hopes to have the watershed agreement ready for Board action at the February meeting. Gustafson added that once the agreement is done, we will submit for design funding. He stated he hopes to get it contracted in August and then start on design.

Davis Creek

Gustafson reported the road work has been halted for winter and, in best case scenario, they may be able to continue concrete work in March.

Pibel Lake

Gustafson reported that he has not heard on the grant applications yet. If we are successful in being awarded grants, he hopes to get contracts on design for trail and RV areas by the end of this summer.

Groundwater Management Plan Update

Gustafson reported that, using the Beacon Bid which is the system that we use to advertise RFPs, the proposals had been sent out on the groundwater management plan update and that several firms have downloaded information on the project.

WATER RESOURCES COMMITTEE

DNR Basin Evaluation – 2025 Appropriation Status

Nitsch stated that Naprstek gave the Committee a report on the 65/85 rule about full appropriations. Discussion was held on lack of flow in the South Loup and Cedar rivers, and it was discussed that there is plenty of water overall. Callan added that there is a reduction in the Lower Loup because of higher downstream demands.

Nitrogen Reduction Incentive Act (NiRIA) – Update

Nitsch reported that applications are coming in. Callan stated that we need to let producers know if they are approved on or before March 15th. At the State level, about \$1.7M in applications has been received; however, there is \$1M in funding, so not all applications will get funded. The Lower Loup NRD has been allotted approximately \$66,000, which will fund about 47 applications.

Vadose Sampling – Update

Nitsch reported that Jason Moudry, Water Programs Specialist, gave an update and will also be presenting at the Legislative Conference in Lincoln. It was added that there will be a meeting held with landowners on February 11th. He also mentioned the new Giddings soil sampling rig is here and will be used for tracking the movement of nitrates through the soil.

2024 Irrigated Acres Violations – Status

It was reported that Dell Harris, Water Resources Specialist, and LeeAnn Smith, Water Programs Assistant, were reviewing violations and working on fixing ones with easy issues.

Water Quality Report – Data Review

It was reported that over 3,000 water samples were taken and there have been significant changes from the previous samplings. Derek Vogt, Agronomist, showed the Committee the 10-year results county and Districtwide and the triggering areas, as well as the commercial fertilizer and manure applied locations, showing changes in how things are ebbing and flowing throughout the District. Naprstek stated a draft would be ready for approval at the next Committee meeting.

Columbus Recharge Project Annual Report

Nitsch reported that Brian Kolar, Projects Technician, presented a comparison of March through November of 2024 to prior years. It was reported that in 2023, the project had 96% efficiency and in 2024 it had 95% efficiency, which shows that the project is working. Maintenance fees are divided amongst the partners that are utilizing the project.

VARIANCE COMMITTEE

Smith reported that there were two variance requests this month.

David C. & Tracy L. Cherry

Smith stated this was the first meeting and that they will be back next month when the Committee will make a decision.

N. Richard Hadenfeldt, Hadenfeldt Farms

Smith reported that the Hadenfeldt variance is a request to bring irrigated acres out of Central Platte NRD and put them into the Lower Loup NRD.

Smith motioned, seconded by Nitsch, to approve the N. Richard Hadenfeldt variance request to transfer acres from Central Platte NRD and develop 15.3 acres in the Lower Loup NRD, acres being non-transferable, and a flow meter is required. Motion carried by electronic vote, all present voting yes.

MANAGER'S REPORT

Water Strategies Update

None.

Litigation Update

None.

New Hires

None.

Non-action Reports

Callan stated that the current Board vacancy would be advertised and possibly could act on appointment at the March Board meeting.

Chairman Appointment of Committee Members

A copy of the 2025 Committee assignments was handed out. No questions or comments were heard.

NARD REPORT

Thoene stated that a meeting will be held Monday afternoon at the Legislative Conference.

NRC REPORT

Amsberry reported that the next meeting will be held in early February.

ANNOUNCEMENTS/FUTURE MEETING TOPICS

None.

ADJOURNMENT

With no further business before the Board, Chairman Thoene declared the meeting adjourned at 5:27 p.m.

Roster for attendance of this meeting and tally of votes cast on motions at this meeting are being filed with the official minutes of this meeting at the Lower Loup Natural Resources District's Headquarters Office, 2620 Airport Drive, Ord, Nebraska. Publication notification of this meeting was made via a newspaper in each county within the district. The next Board of Directors meeting will be held February 20, 2025, at 3:00 p.m., at the Headquarters Office in Ord, Nebraska.

Larry Mohrman
Secretary