LOWER PLATTE SOUTH
natural resources district
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Memorandum

Date: September 13, 2024

To: Water Resources Subcommittee

From: Drew Ratkovec, Projects Coordinator

Subject: Water Resources Subcommittee Meeting Minutes – September 2024

The Water Resources Subcommittee met on September 12, 2024, at the NRD office, at 5:30 pm to take action on 5 items. A sixth item was discussed with no action. Subcommittee members who participated included Susan Seacrest- committee chair, Bob Andersen, Melissa Baker, Deborah Eagan, Gary Hellerich, Luke Petersen, and Larry Ruth. Others participating included NRD Staff Mike Sousek, David Potter, Dick Ehrman, Steve Herdzina, and Drew Ratkovec. Travis Hazard and Kyle Reents from Hazard Engineering, Ryan Winkel from Houston Engineering, Tyler Martin and Madeline Johnson from NeDNR, and Mike Ekert from Civil Design Group also were in attendance. Director Seacrest called the meeting to order at 5:31 am. A quorum was present for the meeting.

A. Review of the 2023 Annual Integrated Management Plan Report [ACTION]–
Potter, Ehrman, and Johnson gave a detailed presentation on the 2023 annual integrated management plan report. The Lower Platte South Natural Resources District (LPSNRD) and the Nebraska Department of Natural Resources (NeDNR) jointly adopted a voluntary Integrated Management Plan (IMP). The IMP became effective on May 15, 2014, with the goal of jointly managing groundwater and surface waters within the LPSNRD to sustain a balance between water uses and supplies for the long term. This Annual Report covers the progress made toward Voluntary IMP implementation for both the LPSNRD and NeDNR in the 2023 calendar year. It is consistent with Chapter 9 of the IMP, which outlines the procedures for review and potential modification of the Voluntary IMP. In this review process, the LPSNRD and NeDNR provide an annual report on data collected, an annual report on new groundwater or surface permits and uses, and reviews progress made toward achieving the goals and objectives. Questions were asked and answered throughout by Directors, staff, and NeDNR.

It was moved by Hellerich, seconded by Eagan, and approved 7-0 by the Subcommittee to recommend that the Board of Directors accept the 2023 Annual Integrated Management Plan Report.

B. Consideration of Changes to Groundwater BMP Cost-Share [ACTION]–
Dick Ehrman, Water Resources Coordinator discussed staff proposed changes to several existing cost-share programs for groundwater protection. These changes are in line with the general guidance provided by the Board at the February retreat. They will also provide value to all groundwater on the same level to make cost-share more uniform throughout the district. Questions were answered and several directors expressed their appreciation for the proposed changes.

It was moved by Andersen, seconded by Peterson, and approved 7-0 by the Subcommittee to recommend that the Board of Directors approve the new rates for groundwater program best management practices cost-share effective immediately.

C. Consideration of a Professional Services Agreement With Houston Engineering Inc.– Weeping Water 5K Rehabilitation [ACTION]–

Drew Ratkovec, Projects Coordinator discussed that NRD staff annually inspects all 190+ dams that are located within the district. During these inspections, the Weeping Water 5K structure, which is located approximately at the corner of 334th Street and Fletcher Ave. was experiencing continued shoreline and stilling basin erosion that needed to be addressed. This structure was constructed in the 1990s and originally designed as a vegetated berm. Staff discussed with Houston Engineering Inc. that riprap would need to be laid to armor the dam from shoreline wave erosion. Houston has provided the NRD with a Professional Services Agreement proposal for Project management/Project Direction, Design, Permitting, Bid Phase, and Construction Phase. The NRD has a satisfactory working relationship with Houston on several projects past and present.

- Work Type: Professional Services – Dam Structure
- Budget: Included in FY 25 Budget
- Funding: NRD
- Proposal: $40,958.00 – Houston Engineering Inc.
- Start: Upon Board Approval
- Completion: End of FY25/Upon Construction Completion
- Bid Using Budget/List of Consultant's Hourly Rates
- Delays: weather, permitting
- Permits: USACE 404 Permit, NDNR Permit
- Access: No Concerns
- Payers, players, & Partners: NRD, Houston
- Legal Counsel Review: YES
- Deliverables: Project management/Project Direction, Design, Permitting, Bid Phase, and Construction Phase.

It was moved by Andersen, seconded by Ruth, and approved 7-0 by the Subcommittee to recommend that the Board of Directors approve the Professional Services Agreement of $40,598.00, by Houston Engineering Inc., for the Weeping Water 5K Rehabilitation.

D. Consideration of Professional Services Agreement with Hazard Engineering – Upper Salt 18-8 Rehabilitation & Upper Salt 38-3 Rehabilitation [ACTION]–

Drew Ratkovec, Projects Coordinator discussed an agreement between the NRD and Hazard Engineering for Professional Services on the Upper Salt 18-8 and 38-3 flood control structures. See below for a summary of each project.

The Upper Salt 18-8 dam structure near South 25th Street and Panama Road was completed in the 1950s. During the 2024 annual dam inspections, NRD Staff observed corrosion and holes allowing water to seep into the riser between the outlet and pipe support. Staff met with Hazard Engineering on-site to discuss repairs needed on the flood control structure. Since then, Hazard Engineering has provided the NRD with a Design, Permitting, and Construction Services proposal.

- Work Type: Professional Services – Dam Structure
- Budget: Included in FY25 Budget
- Funding: NRD
- Proposal (Exhibit A): $38,000.00 – Hazard Engineering
- Start: Upon Board Approval
- Completion: End of FY25/Upon Construction Completion
- Bid Using Lump Sum
- Delays: weather, permitting

- Permits: USACE 404 Permit, NDNR Permit
- Access: No Concerns
- Payers, Players, & Partners: NRD, Hazard
- Legal Counsel Review: Yes
- Deliverables: Survey, Design, Permitting, Bidding Services, Construction Management, Construction Observation, and Construction certification

The Upper Salt 38-3 dam structure near South 148th Street and Stagecoach Road was completed in the 1960s. During the 2024 annual dam inspections, NRD Staff observed corrosion and holes allowing water to seep into the riser between the outlet and pipe support. Staff met with Hazard Engineering on-site to discuss repairs needed on the flood control structure. Since then, Hazard Engineering has provided the NRD with a Design, Permitting, and Construction Services proposal.

- Work Type: Professional Services – Dam Structure
- Budget: Included in FY25 Budget
- Funding: NRD
- Proposal (Exhibit B): $38,000.00 – Hazard Engineering
- Start: Upon Board Approval
- Completion: End of FY25/Upon Construction Completion
- Bid Using Lump Sum
- Delays: weather, permitting
- Permits: USACE 404 Permit, NDNR Permit
- Access: No Concerns
- Payers, Players, & Partners: NRD, Hazard
- Legal Counsel Review: Yes
- Deliverables: Survey, Design, Permitting, Bidding Services, Construction Management, Construction Observation, and Construction certification

It was moved by Eagan, seconded by Baker, and approved 7-0 by the Subcommittee to recommend that the Board of Directors approve the Professional Services Agreement proposal of $76,000.00, by Hazard Engineering for the Upper Salt 18-8 and 38-3 Rehabilitation.

E. Fiscal Year 2025 Measurable Goals [ACTION]–

David Potter, Assistant General Manager gave background information on the 2025 measurable goals. In the LPSNRD 2019 Master Plan, a list of measurable goals is to be developed for each subcommittee for the fiscal year and then those goals are to be reviewed each year to see what has been accomplished. It was noted this does not change the budget in any way.

It was moved by Peterson, seconded by Ruth, and approved 7-0 by the Subcommittee to recommend that the Board of Directors approve the identified measurable goals and recommend them to the Finance and Planning Subcommittee for inclusion in the FY 25 Long Range Implementation Plan.

F. Consideration of a Partial Release of the Upper Salt 35-1 Access Easement [DISCUSSION]–

Mike Ekert from Civil Design Group, Inc on behalf of SWG4 LLC presented the Directors and staff with a proposal to release part of the Access Easement for Upper Salt 35-1. This would be part of a development being designed north of the access easement. Currently, staff and contractors access the flood control structure of South 68th Street, just north of Hickman. If the NRD would grant this release, staff/contractors would have to access the dam by driving west down Woodland Blvd and then heading north through residential before returning to the access easement. Questions were asked by staff and directors with concerns about safety, obstacles, and if other

options were discussed. Directors expressed their concerns and the district's mission on the importance of access to the flood control structures. No motion was made, or action taken.

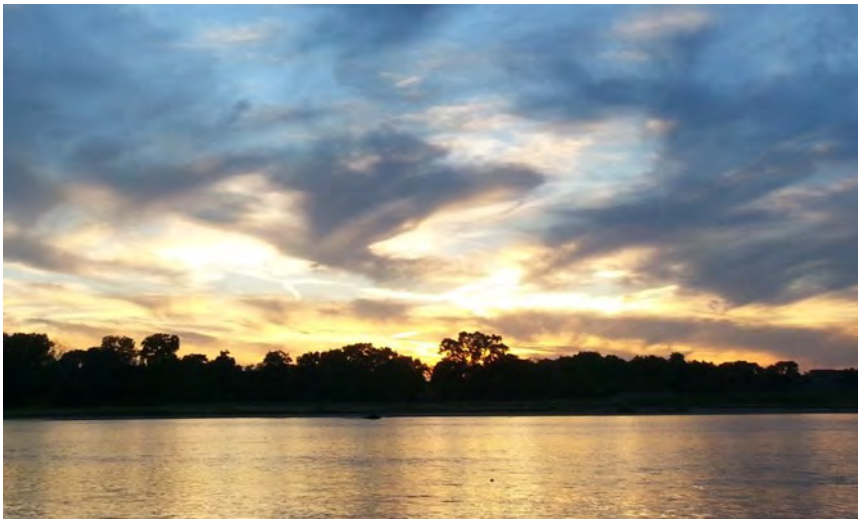
The meeting adjourned at 7:06 pm.

Enclosures.

cc: Dave Landis
Corey Wasserburger

ANNUAL INTEGRATED MANAGEMENT PLAN REPORT

2023



JOINTLY PREPARED BY THE LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT AND THE NEBRASKA DEPARTMENT OF NATURAL RESOURCES

Submitted at the Lower Platte South Board Meeting/IMP Annual Review
September 18, 2024

LOWER PLATTE SOUTH
natural resources district

NEBRASKA
Good Life. Great Water.
DEPT. OF NATURAL RESOURCES

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Jointly prepared by the Lower Platte South NRD and the Nebraska Department of Natural Resources
Submitted on September 18, 2024

Introduction

The Lower Platte South Natural Resources District (LPSNRD) and the Nebraska Department of Natural Resources (NeDNR) jointly adopted a voluntary Integrated Management Plan (IMP), which became effective on May 15, 2014. The over-arching purpose of the IMP is to jointly manage groundwater and surface waters within the LPSNRD in order to sustain a balance between water uses and supplies for the near and long term. An in-depth public involvement plan, which included focus groups, a 13-month stakeholder process, a virtual town hall, and outside agency outreach, was an integral part in developing goals and objectives for the IMP.

The 2023 Annual Report covers the progress made towards IMP implementation for both the LPSNRD and NeDNR in 2023. It is consistent with Chapter 9 of the IMP, that outlines the procedures for review and potential modification of the IMP. LPSNRD and NeDNR report on data collected, report on new groundwater or surface water permits and uses, and review progress made toward achieving the goals and objectives of the IMP.

As a part of the process, the LPSNRD and NeDNR staff met to discuss progress made in 2023 towards the goals and objectives of the plan, action steps for the next two years (see the "Jointly Identified Actions" section), and whether modifications to the IMP were needed. The LPSNRD and NeDNR jointly decided that no modifications to the IMP were needed at the time of the 2022 annual review. The LPSNRD and NeDNR will continue to discuss the need for modifications to achieve consistency between the IMP and the Lower Platte Basin Water Management Plan, which was finalized in October 2017, with possible changes to the IMP coming at a later time.

The LPSNRD and NeDNR worked collaboratively to write this report. Highlights from the report were presented to the LPSNRD Board and the public on September 18, 2024, at LPSNRD's regularly scheduled Board meeting. Notice of the Board meeting was published in the *Lincoln Journal Star* on September 5, 2024, and a public announcement of the IMP review was posted on both the LPSNRD and NeDNR websites at least one week prior to the Board meeting.

Because the LPSNRD regulates groundwater and the NeDNR regulates surface water, some sections were individually written. Wherever possible, sections were written jointly to reflect our partnership for integrated groundwater and surface water management. The 2023 annual report provides transparency to the public and ourselves about the progress made by LPSNRD and NeDNR in implementing the IMP as a means to protect interconnected groundwater

and surface water resources for the near and long term.

Monitoring and Data Collection

Surface Water Monitoring

Streamgaging

The U.S. Geological Survey (USGS) owns and operates 21 streamgages in LPSNRD (Table 1: USGS Streamgages, LPSNRD locations. All but one (Weeping Water Creek at Union, NE) are located in the IMP surface water management area (Figure 1: USGS Streamgages map). Streamflow data on these gages is available on the USGS's National Water Information System (NWIS) at http://waterdata.usgs.gov/. NeDNR regularly assesses the need for modifications to the network in the IMP area.

Table 1: USGS Streamgages, LPSNRD locations.

Gage Name	Gage Number	Begin Date	LPSNRD funding assistance
Salt Creek at Roca, Nebr.	06803000	5/14/1951	yes
Salt Creek at Pioneers Boulevard at Lincoln, Nebr.	06803080	6/20/1994	yes
Haines Branch at SW 56th St at Lincoln, Nebr.	06803093	6/20/1994	yes
Middle Creek at SW 63rd St at Lincoln, Nebr.	06803170	6/20/1994	yes
Oak Creek at Air Park Road at Lincoln, Nebr.	06803486	5/21/1987	yes
Salt Creek at Fairgrounds at Lincoln, Nebr.	06803495	6/20/1994	no
Salt Creek at 27th ST, Lincoln, Nebr.	06803500	5/11/1942	yes
Little Salt Creek near Lincoln, Nebr.	06803510	5/11/1942	yes
Salt Creek at 70th Street at Lincoln, Nebr.	06803513	5/31/1994	yes
Stevens Creek near Lincoln, Nebr.	06803520	10/14/1968	yes
Rock Creek near Ceresco, Nebr.	06803530	4/1/1970	yes
Salt Creek at Greenwood, Nebr.	06803555	1/16/1952	no
Wahoo Creek at Ashland, Nebr.	06804700	2/22/1990	yes
Weeping Water Creek at Union, Nebr.	06806500	1/11/1950	yes
Antelope Creek at 27th St at Lincoln, Nebr.	06803300	3/14/2012	yes
Deadman's Run at 38th Street at Lincoln, Nebr.	06803502	08/27/2014	no
Salt Creek near Ashland, Nebr.	06805000	10/01/2007	yes
North Oak Creek at Valparaiso, Nebr.	06803430	8/12/2016	yes
North Oak Creek near Touhy, Nebr.	06803420	8/12/2016	yes
Platte River near Ashland, Nebr.	06801000	8/20/1928	no
Platte River at Louisville, Nebr.	06805500	6/22/1952	yes

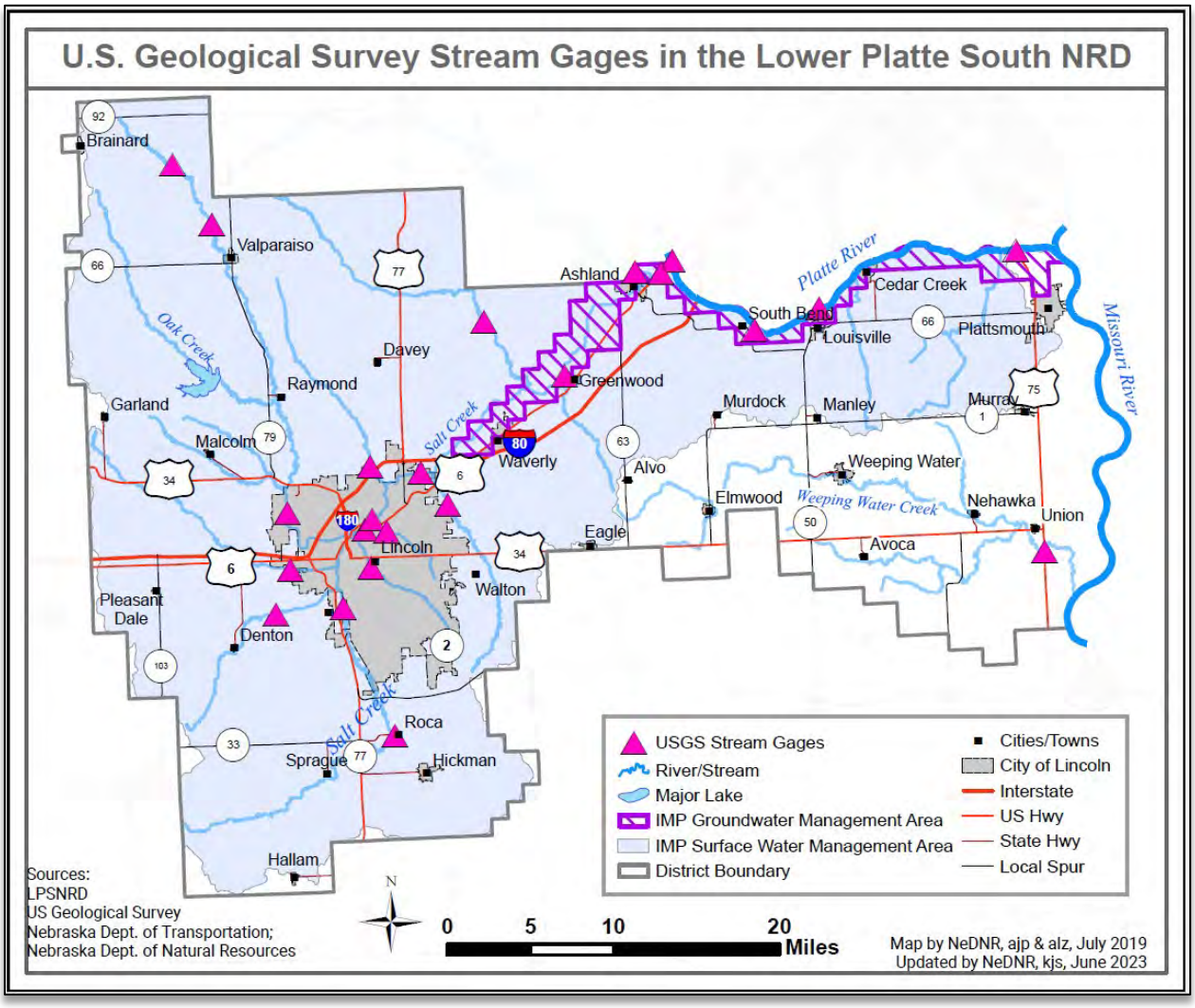


Figure 1: USGS Streamgages map, LPSNRD locations.

Streamgage data for select gages is included below. One gage is located on Salt Creek near Roca, one is on Salt Creek near 27th St. in Lincoln, and one is on the Platte River (Platte River at Louisville). These locations have long periods of record (near or over 50 years) and provide general insight into water supply trends over time.

The mean annual daily discharge over the period of record for the select streamgages is shown in Figures 2, 3, and 4.

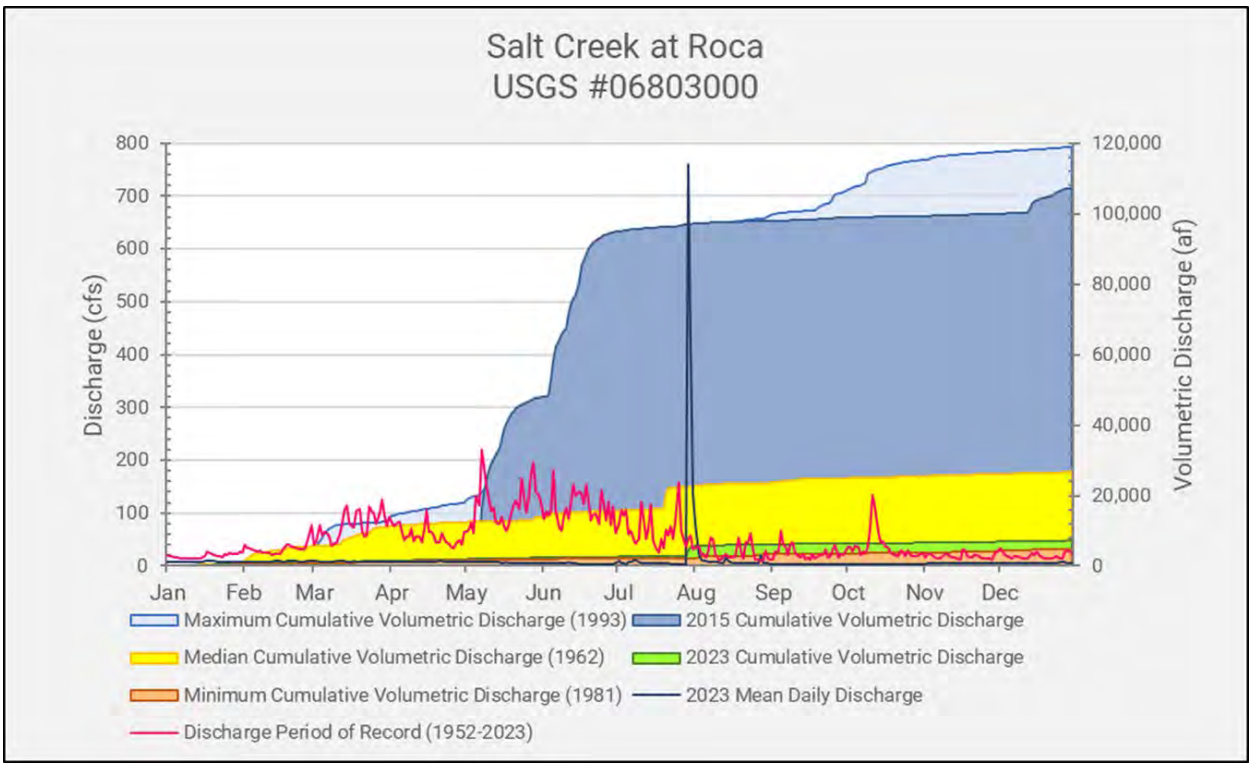


Figure 2: Streamgage measurements for 2023 for Salt Creek at Roca, NE (USGS-NWIS).

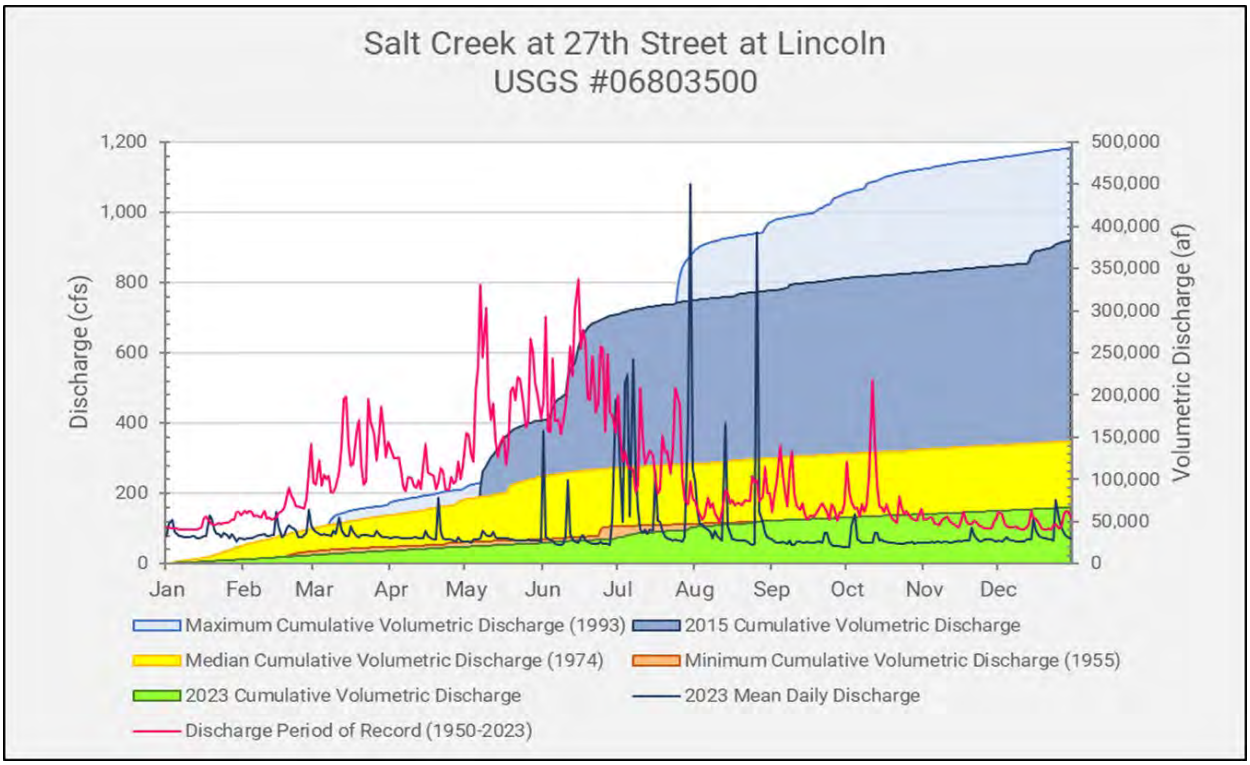


Figure 3: Streamgage measurements for 2023 for Salt Creek near 27th St, Lincoln, NE (USGS-NWIS).

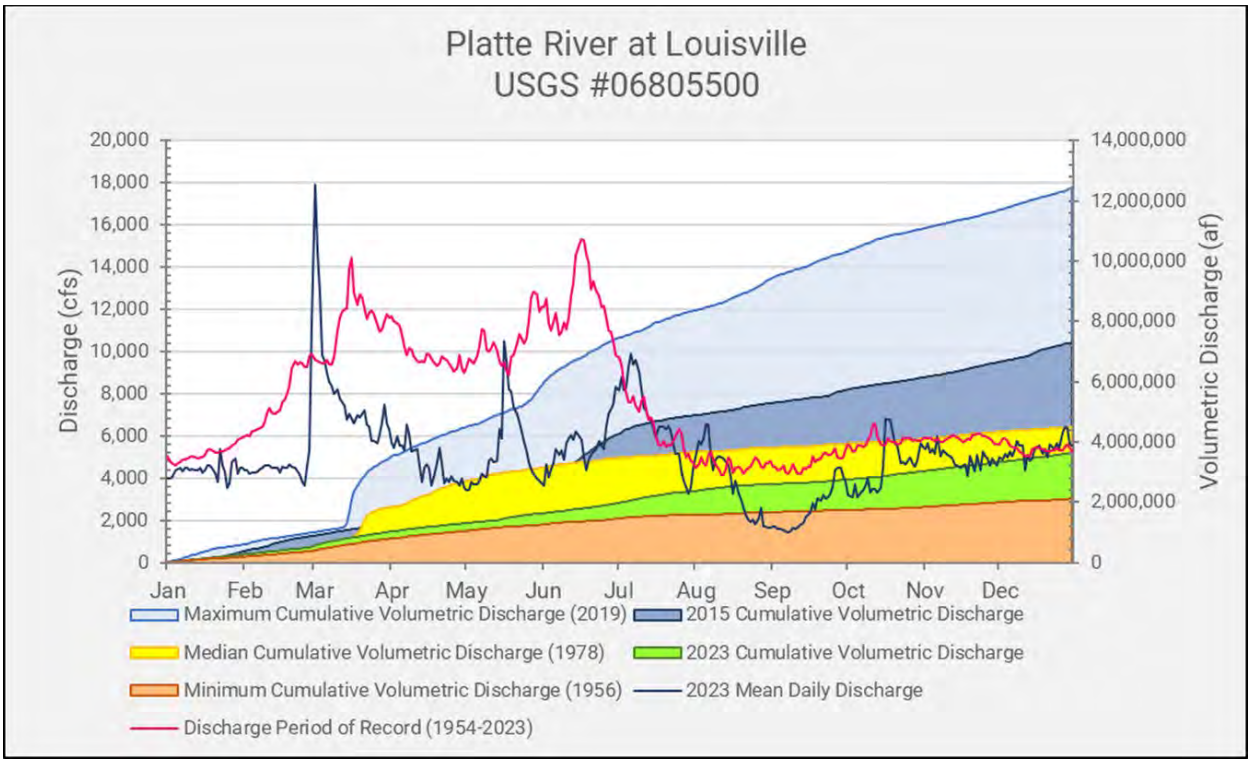


Figure 4: Streamgage measurements for 2023 for the Platte River at Louisville, NE (USGS-NWIS).

Surface Water Permitting Actions

NeDNR continued to monitor and administer surface water appropriations and maintain records for new, cancelled, or transferred surface water permits. Figure 5 shows the general location of the irrigation permits cancelled in full during 2023. Table 2: 2023 Irrigated acres changes associated with surface water permitting actions. provides a summary of the 2023 irrigated acres change from all surface water permitting actions.

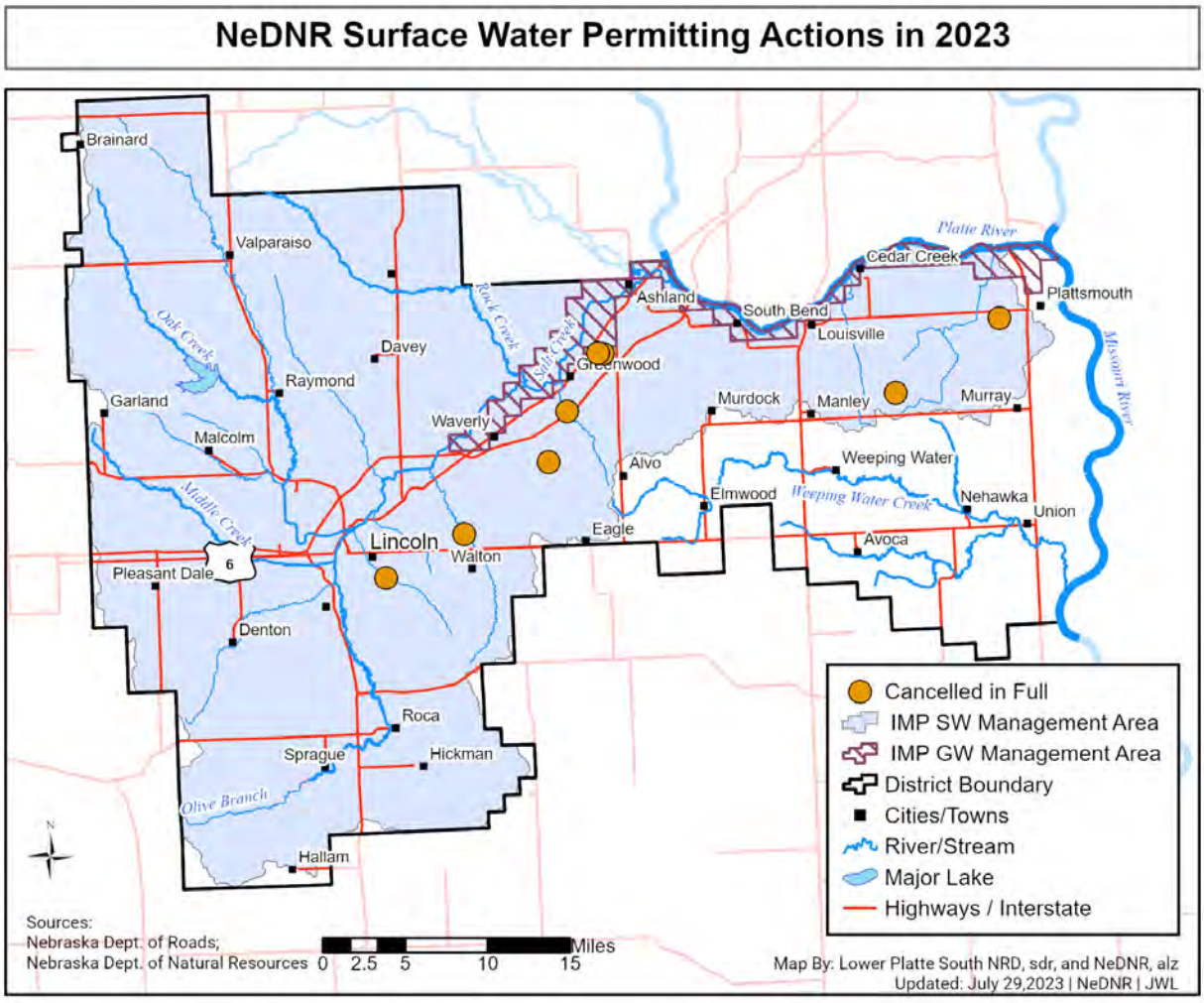


Figure 5: NeDNR surface water permitting actions occurring in 2023 within LPSNRD.

Surface water controls only apply to the area of the District within the Surface Water IMP area shown on Figure 5. There was a total of seven irrigation permits that were cancelled, five manufacturing permits that expired and a single storage permit that was never built and thus cancelled. There were no new irrigation or manufacturing permits that were approved within the Basin.

Table 2: 2023 Irrigated acres changes associated with surface water permitting actions.

2023 Irrigated Acres Changes Associated with Surface Water Permitting Actions		
Geographic Area	**Newly Permitted Acres**	**Cancelled Acres**
Lower Platte River Basin	0	0
Missouri River Tributaries Basin	0	0
Total (Whole NRD)	0	0

Table 3: 2023 Cancelled surface water permits.

Surface Water Appropriations Expired, Cancelled-in-Part or Cancelled-in-Full in 2023 Within the IMP Area											
3ppropriation Number	**Cancel Date**	**Source**	**NeDNR Action**	**Location of Diversion or Reservoir**	**Use**	**Begin Acres**	**Cancelled**			**Estimated Date of Last Use**	**Basis for NeDNR Action**
							Acres	**Grant in cfs**	**Grant in af**		
A-14126	2/1/2023	Antelope Creek	Cancelled in Full	S31 T10-R7E	IR	0.44	0.44	0.01	1.3	2013	REL-9850
A-8134	4/24/2023	Stevens Creek	Cancelled in Full	S24 T10-R7E	IR	73.5	8	0.06	24	2001	REL-9863 REL-9864
A-6002	6/20/2023	Camp Creek	Cancelled in Full	S25 T11-R8E	IR	11	11	0.08	33	1988	PDNU-9966
A-10294	4/17/2023	Greenwood Creek	Cancelled in Full	S28 T12-R9E	IR	61	61	0.87	183	Unknown	REL-9931
A-7790B	4/25/2023	West Branch Four Mile Creek	Cancelled in Full	S22 T12-R13E	IR	20	20	0.15	60	Unknown	REL-9970
A-9287B	5/22/2023	Dee Creek	Cancelled in Full	S7 T11-R9E	IR	68.3	68.3	0.98	204.9	2011	PDNU-9934
A-18581	2/1/2023	Trib. To Cedar Creek	Cancelled in Full	S9 T11-R12E	IR	139	139	1.99	417	1997	BUC-9830
A-19828	3/23/2023	Trib. To Salt Creek	Expired	S1 T8-R6E	MF	N/A	0	0	10	2023	TEMP
A-19829	3/28/2023	Salt Creek	Expired	S1 T8-R6E	MF	N/A	0	0	10	2023	TEMP
A-19841	4/21/2023	Branched Oak Lake	Expired	S32 T12-R5E	MF	N/A	0	4.5	10	2023	TEMP
A-19832	4/25/2023	Oak Creek	Expired	S6 T11-R6E	MF	N/A	0	2.2	9.6	2023	TEMP
A-19848	5/13/2023	Oak Creek	Expired	S6 T11-R6E	MF	N/A	0	2.2	9.6	2023	TEMP
A-18587	12/18/2023	North Branch Trib. To Middle Creek	Cancelled in Full	S30 T11-R5E	ST	N/A	0	0	67.87	Never Used	Never Built

Table 4 summarizes new surface water applications that were approved within the Lower Platte

South NRD in calendar year 2023. No surface water rights were transferred in 2023.

Table 4: NeDNR 2022 Approved surface water applications in LPSNRD IMP area

Surface Water Appropriations Approved in 2023 Within the IMP area								
Appropriation Number	Date Approved	Source	Location of Diversion or Reservoir	Sub-Basin	Use	Grant in cfs	Grant in af	Acres
No new Permits								

Voluntary Surface Water Use Reporting

NeDNR invites surface water irrigation permit holders within LPSNRD to participate in the voluntary reporting program. Participants could submit information via an online form or by directly calling NeDNR. Sixty-two reports from a possible 202 water rights were received in 2023 for a response rate of 30%. The data collected through the voluntary water use reporting program includes information about whether a surface water permit holder irrigated that year, if they used groundwater or surface water, how many acres they irrigated, what types of crops were grown, and reasons for not irrigating (if applicable).

Surface Water Pump-Site Visits

The NeDNR Field Office staff has been conducting surface water pump-site inspections across Nebraska for the past seven years. Pump-site inspections complement the voluntary water use reporting program and provide further information about surface water use. The field office staff's goal is to inspect each pump-site at least once every two years as time and conditions allow. In 2023, NeDNR Field Office staff inspected 175 of a possible 201 irrigation permit pump-sites (87%). 36 sites had been set up for surface water irrigation with a total of 196 observations made[1].

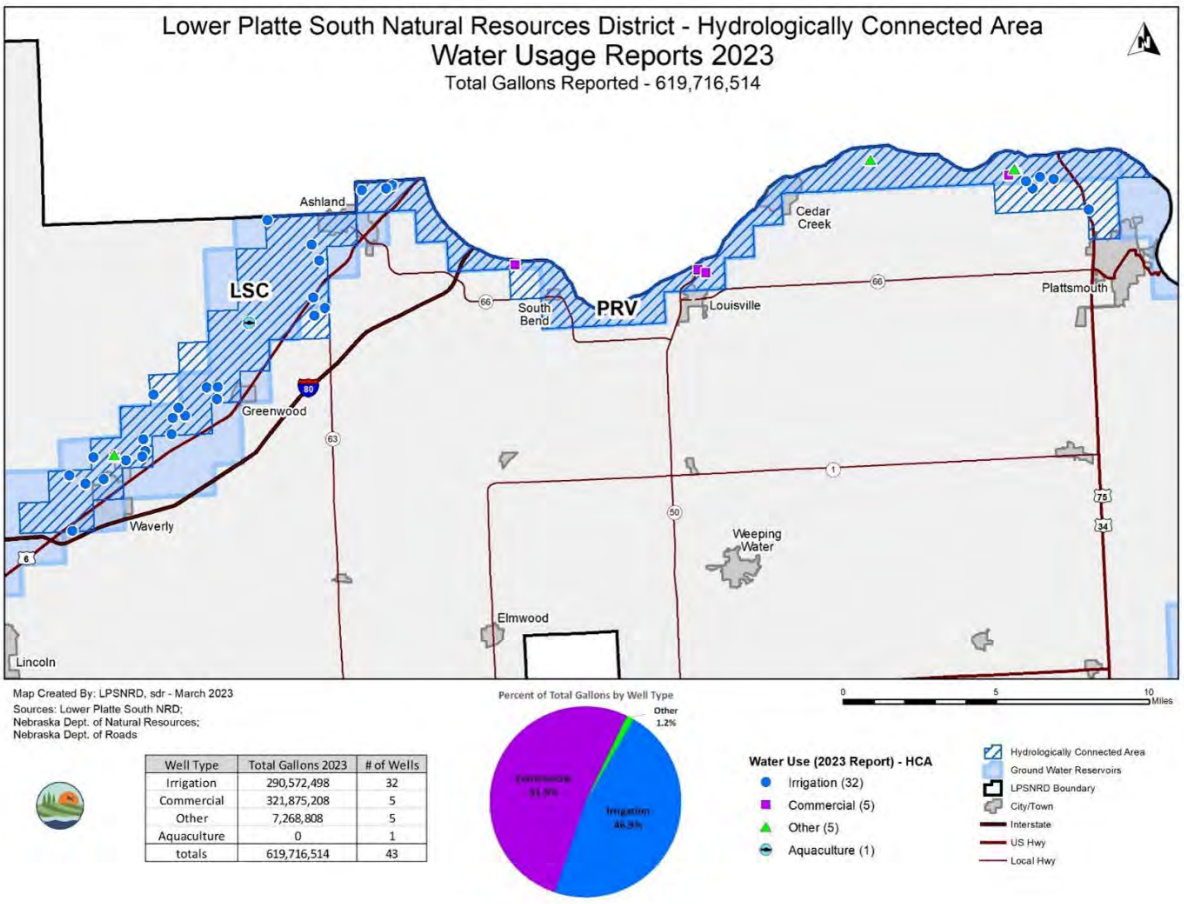
Groundwater Monitoring

IMP Groundwater Management Area

The IMP Groundwater Management Area is limited to the Hydrologically Connected Area (HCA). There are a total of 385 wells in the HCA. Flow measurement meters and water use reports are required for any well with the capacity to pump 50 gallons per minute or greater. Of these, there are 32 irrigation wells, 5 commercial wells, and 6 other wells which, when combined, account for

[1] Includes multiple visits to same site for water administration

nearly 620 million gallons of groundwater pumped. Also in the HCA area, there are 195 registered domestic wells, and 75 registered public water supply wells. Municipal water wells in the HCA include wells for Waverly, Ashland, Louisville, Lincoln, Metropolitan Utilities District, Omaha Fish & Wildlife Club, Cass SID #5, and Cass Rural Water District #1.



Well Type	Total Gallons 2023	# of Wells
Irrigation	290,572,498	32
Commercial	321,875,208	5
Other	7,268,808	5
Aquaculture	0	1
totals	619,716,514	43

Figure 6: LPSNRD 2023 Groundwater use in the hydrologically connected area (HCA).

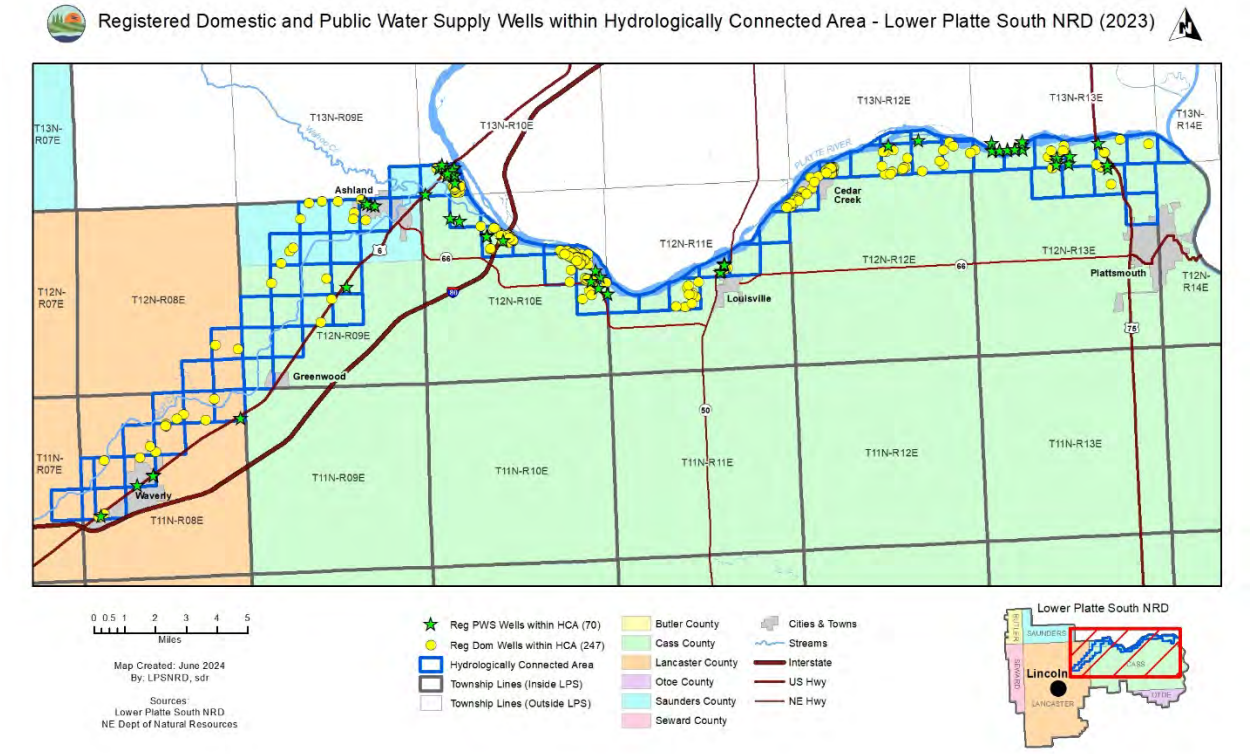


Figure 7: LPSNRD 2023 Registered domestic and public supply wells (HCA).

Metering and Groundwater Level Monitoring

All wells with capacity to pump over 50 gallons per minute (gpm) are metered. There were 371 such wells in LPSNRD at the close of 2023. LPSNRD collected records of usage from these wells and several public supply wells (PWS). The calculated total pumping for 2023 from these metered wells was 5.5 billion gallons, with 296 irrigation wells accounting for 67% of the total measured pumping. This total pumping did not include all the PWS, as the District is still establishing uniform procedures for PWS well reporting. In addition, LPSNRD inspected and read 214 groundwater well meters during 2023. LPSNRD also collected groundwater level data from 153 wells in the spring and fall of 2023 and all of those wells are part of LPSNRD's official water level network. Of those, 5 wells showed an increase and 148 wells showed a decline from spring 2022 to spring 2023; the maximum decline was 9.07 feet while the maximum increase was 3.36 feet, with an average static water level decrease of 2.21 feet. Figure 8 shows a spatial representation of groundwater level changes. The average change by groundwater reservoir is shown in Table 5.

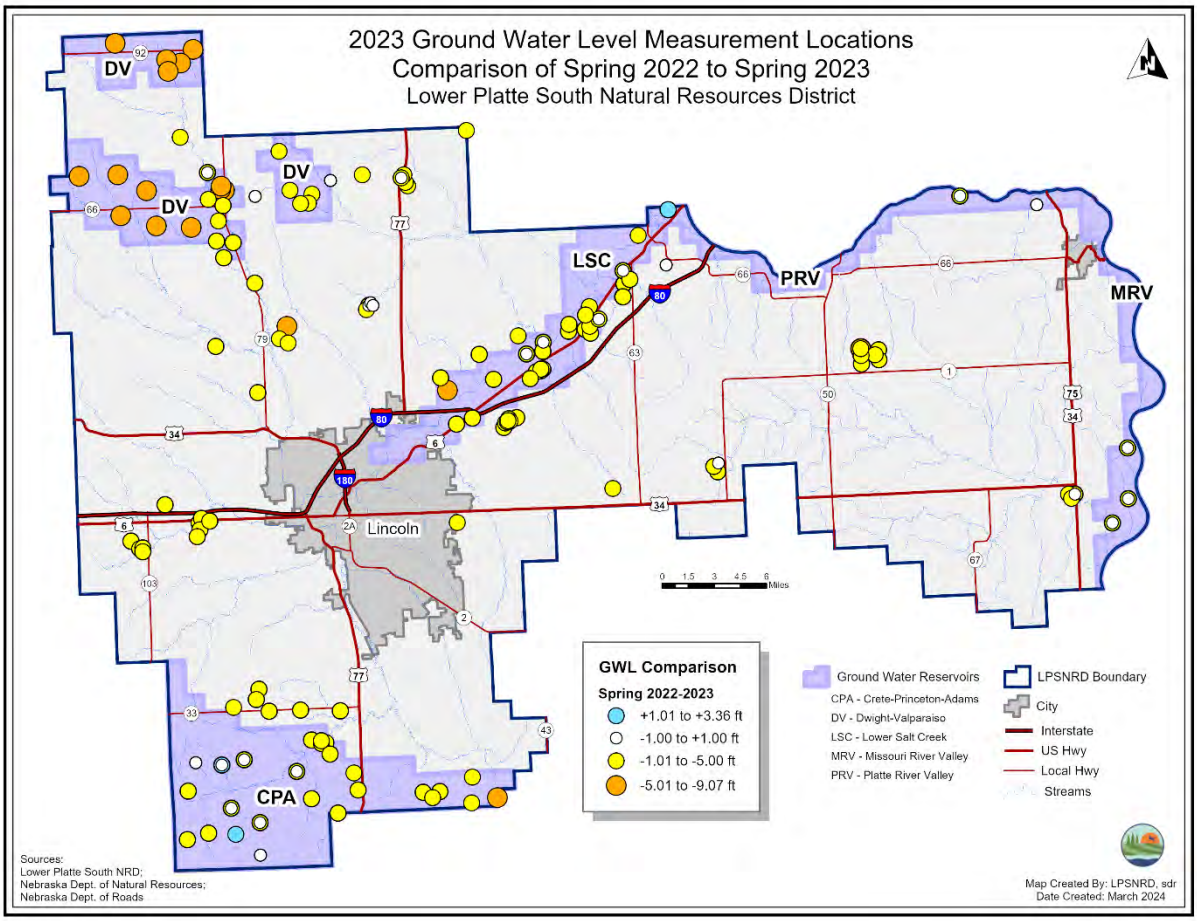


Figure 8: 2023 Groundwater level measurement comparison, spring 2022 and spring 2023.

Table 5: Groundwater reservoir average well level change, spring 2022 to spring 2023.

Average Well Level Change by Groundwater Reservoir	
GW Reservoir	**Spring 2022 to Spring 2023 (ft)**
Crete-Princeton-Adams	1.21
Dwight-Valparaiso	-4.41
Lower Salt Creek	-2.16
Missouri River Valley	-0.41
Platte River Valley	-0.07
Remaining Area	-2.03

Groundwater Permitting Activities

LPSNRD issued 9 well permits throughout the District in 2023 for varied uses, as reported in Table

6. In 2023, the one well completed was not located in the hydrologically connected area. All statutory well-spacing minimum requirements were followed for all new and replacement wells.

Table 6: LPSNRD 2023 Approved or completed groundwater wells.

Well Type	Approved Well Permits, 2023	Completed Wells, 2023[2]
Irrigation	2	2
Commercial	3	2
Domestic	2	0
Geothermal	0	0
Livestock	0	0
Other	2	0
Totals	**9**	**4**

[2] Wells completed in 2023 may have been approved in a prior year

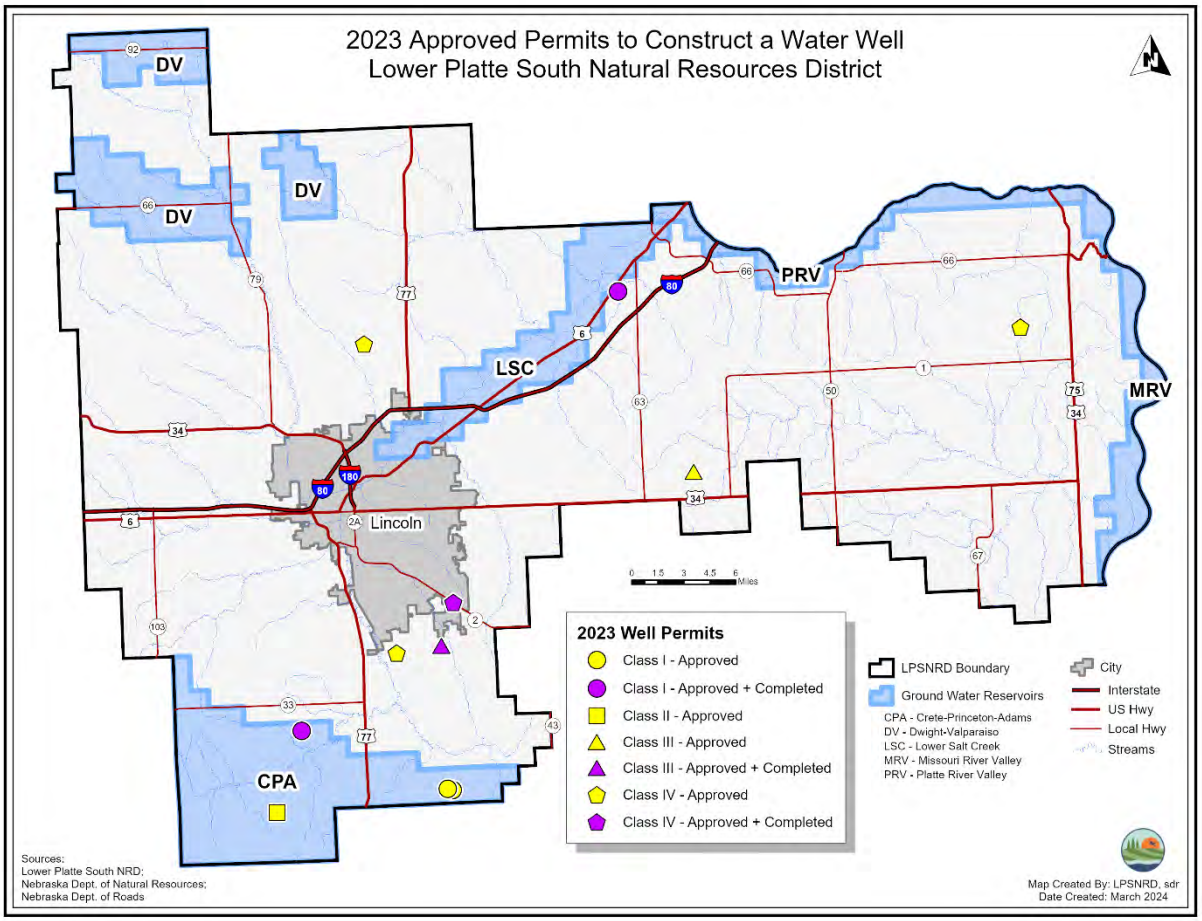


Figure 9: LPSNRD 2023 Groundwater well permits approved or completed.

Land Use and Land Cover (LULC) Monitoring and Actions

In 2023, LPSNRD did not certify any additional groundwater irrigated acres within the HCA. As specified in the IMP, newly certified groundwater irrigated acres within the HCA did not exceed the amount agreed to under the terms of the Platte River Basin Coalition agreement. The total number of certified acres in the HCA is 3,279 and the extent of these acres is shown in Figure 10. The district-wide extent of certified acres is shown in 11. There was one variance granted in 2023.

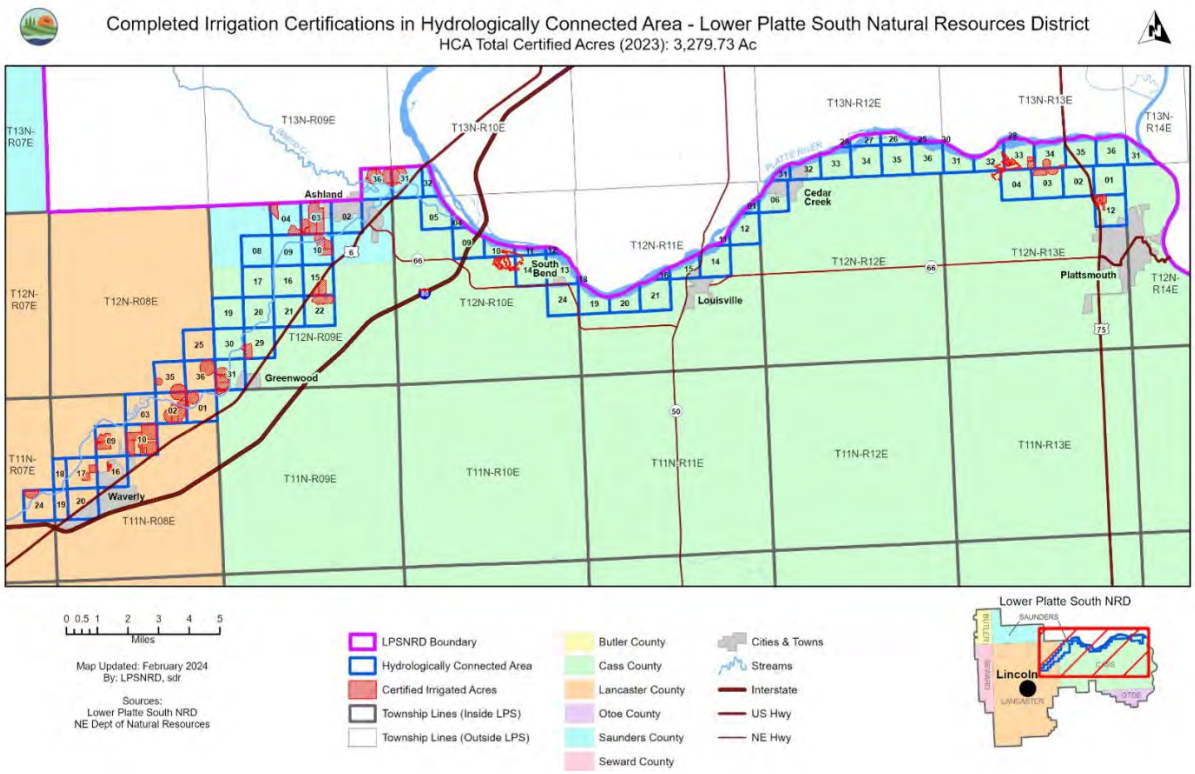


Figure 10: 2023 HCA Certified groundwater irrigated acres, LPSNRD.

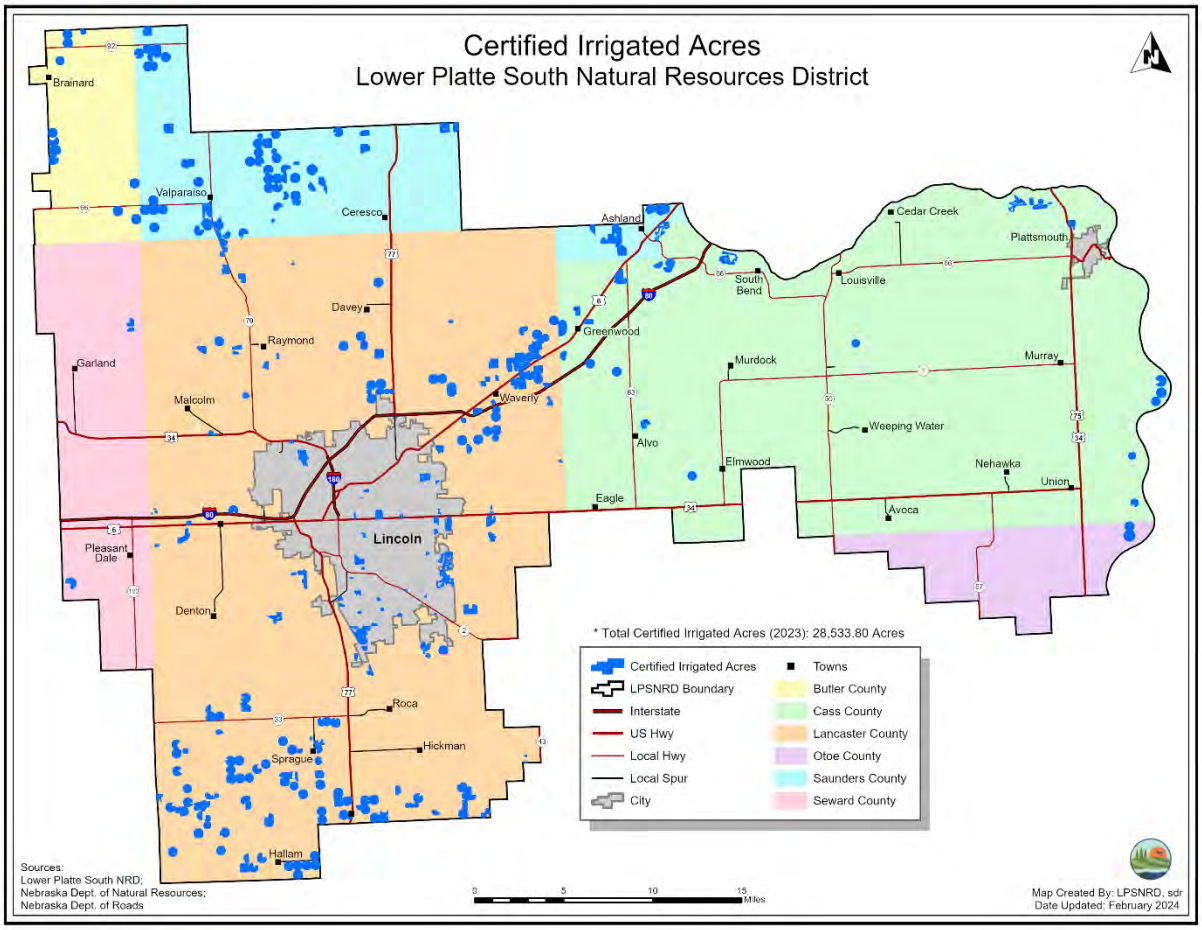


Figure 11: 2023 LPSNRD certified groundwater irrigated acres.

2023 IMP Regulatory Actions

LPSNRD Groundwater Acres Limitations

The expansion of irrigated acres in the HCA continues to be allowed as agreed by the conditions of the Lower Platte River Basin Coalition. A temporary moratorium on the Dwight-Valparaiso area was lifted in 2014 following designation of the Dwight-Valparaiso-Brainard Special Management Area (SMA). A rule to not allow an increase in irrigated acres continues to apply for the entire SMA, and pumping allocations for irrigated land continue to be in effect for the western portion of the Special Management Area.

NeDNR Surface Water Acres Limitations

Pursuant to the IMP, as of January 1st for each year NeDNR sets its surface water limitations to 1/3 the number of acres that the LPSNRD allows for groundwater irrigated acres. A limit of 198 surface water acres has been and continues to be in place for the LPSNRD's surface water management area. The surface water limit has remained consistent since the IMP was adopted, since LPSNRD's groundwater acres limit (593 acres) has stayed consistent throughout this time.

Future limits on water use

The LPSNRD and NeDNR have been and will continue to hold discussions about the method of limiting water development, relative to the adoption of the Lower Platte Basin Water Management Plan (Basin Plan). The Basin Plan has established limits on new basin wide water development and by individual NRDs for a five-year increment that ended in 2021. These limits are based on stream depletions rather than irrigated acres limitations. In 2023, LPSNRD continued to cooperate with the other Basin NRDs and agreed to implement the second five-year increment based on remaining new uses from the first increment. The LPSNRD and NeDNR will continue to work together to ensure compliance with the Basin Plan, as well as assess the need to incorporate new consistent language in the IMP with the Basin Plan.

Studies and Planning

The following studies were continued or recently completed by the LPSNRD and NeDNR to gather and evaluate data, information, and methodologies that could be used to increase understanding of surface water and groundwater supplies and uses within, and, as appropriate, outside LPSNRD. These studies help to meet the goals and objectives that were developed through the IMP stakeholder process.

Lower Platte Missouri Tributaries Model Development

NeDNR has completed the development of a regional numerical groundwater model for the Lower Platte and northern Missouri River Tributaries basins, the LPMT Model (Figure 12). The model may be used for future updates to NeDNR's Annual Evaluation of Availability of Hydrologically Connected Water Supplies. A future refinement to the model is being considered as the Lower Platte Basin NRDs discuss how airborne electromagnetic (AEM) data will be incorporated into this model. Data is collected via in-flight instrumentation.

The first AEM data step evaluation occurred via a study with the Lower Elkhorn NRD. The first phase concluded in FY 2019, the second phase was initiated in early FY 2020, and continued through FY 2022. Subsequently, the Papio-Missouri River and Lower Platte North NRDs conducted a similar scope project through a Water Sustainability Fund (WSF) award (#5303) with NeDNR in FY 2021 and FY 2022. Following FY 2022, Lower Platte South NRD was awarded WSF grant #5311: LPSNRD 3-D Hydrogeologic Framework. This project will build a three-dimensional geologic model delivered in a user-friendly platform that will be useable between NRD boundaries to support collaborative NRD and NeDNR efforts. LRE Water was contracted to complete the work required in 2022 and the project was completed in 2023.

NeDNR is currently working to update the Lower Platte Missouri Tributaries (LPMT) regional groundwater model for use in Fully Appropriated Basin (FAB) Analyses and updates to the Basinwide Plan. In September 2023, the Flatwater Group finalized the updated LPMT watershed model, extending the model with updated inputs from 2014-2021. In December 2023, Olsson completed the conversion of the LPMT to the most current groundwater model software supported by the United States Geological Survey, MODFLOW-6. NeDNR is now working with McDonald Morrissey Assoc. to prepare the LPMT for coupling with existing and in-development subregional models.

Lower Platte Missouri Tributaries 3 District Model

NeDNR is collaborating with the Lower Platte South, Lower Platte North, and Papio-Missouri River NRDs to develop a sub-regional groundwater model with JEO Consulting, HDR Consulting, and Longspring Consulting. This model will incorporate Airborne Electromagnetic (AEM) Survey data that has been collected throughout the NRDs. This is following in the footsteps of the Lower Elkhorn NRD groundwater model, a first of its kind effort in Nebraska. The resulting groundwater

model will allow the NeDNR and NRDs to build on the significant data collection investments that have been made over the past decade and utilize this information to better inform future planning efforts.

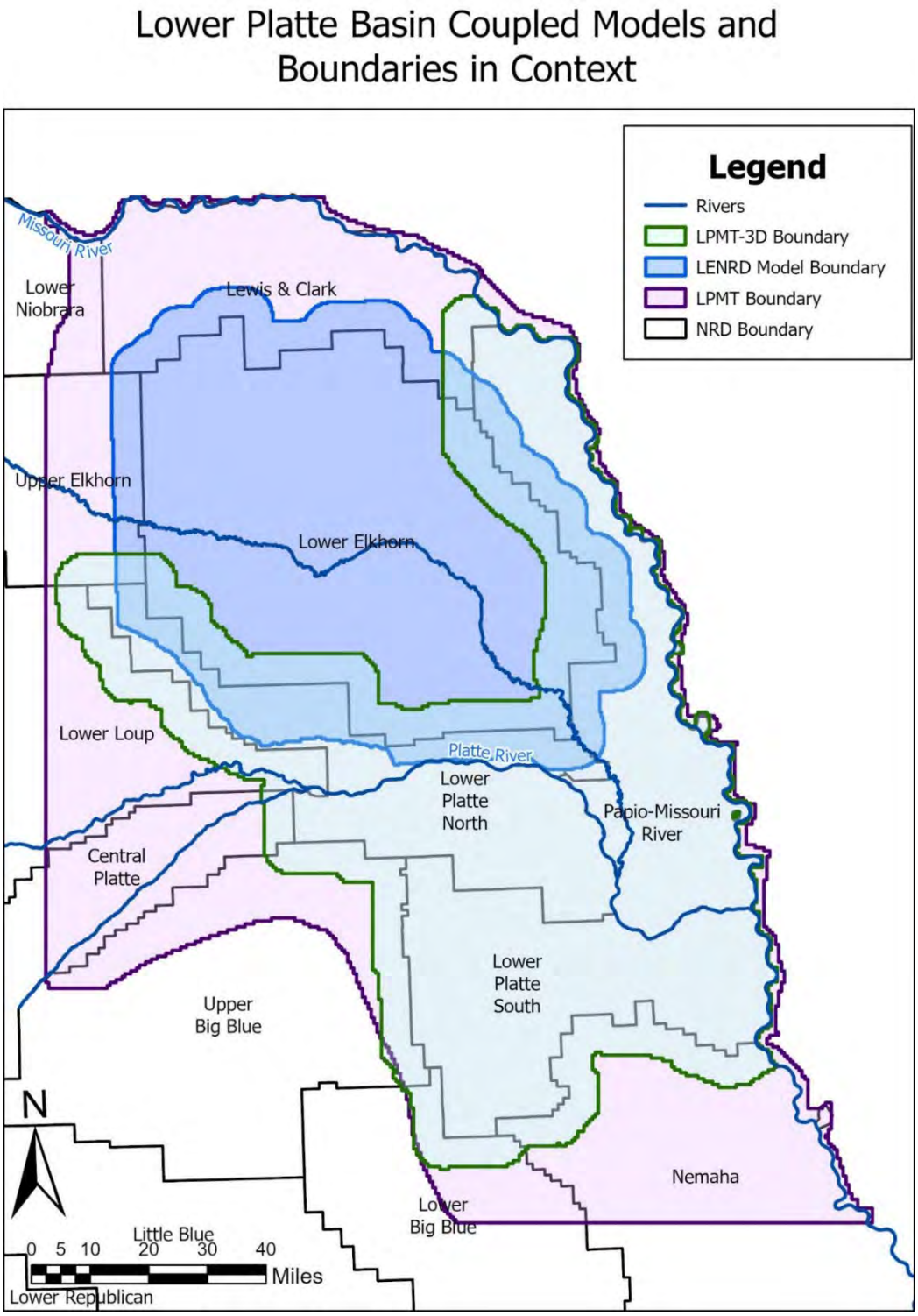


Figure 12: Lower Platte and Missouri tributaries models' geographic locations.

USGS Trend Analysis on Continuous Water Quality

The Lower Platte River Corridor Alliance (LPRCA), of which LPSNRD and NeDNR are members, has been working with the US Geological Survey (USGS) to collect continuous water quality data in the Lower Platte Basin for the past 15 years. Enough data has been collected to begin an analysis of water quality trends that may be occurring. Representing specific watersheds, the data for this study were collected from four streamgages: the Platte River at Louisville, Elkhorn River at Waterloo, Platte River at Leshara, and Salt Creek near Ashland. Data were collected for water temperature, specific conductance, dissolved oxygen, and turbidity. Nitrate data were collected at all sites except for the Salt Creek near Ashland location.

As part of this study's statistical analyses, two methodologies will be used. The first will be a trend analysis to identify any overall trends, and the second will be a linear regression done on any extreme and average trends. Once the linear regression has been completed, these trends can then be compared to any other identified trends within the period. This should provide a more complete picture of how water quality in the Lower Platte River Basin varies seasonally, during wet and dry years, and year-to-year over the study period. This trend analysis should help with determining the effectiveness of long-term management plans.

Water Inventory and Water Use/Supply Management

LPSNRD Accomplishments

LPSNRD continues to collect and share data and works to improve the database that houses the information, reviewed groundwater well permits relative to aquifer capacity and sustainability, and continues an open dialogue with public water suppliers on current and future water supplies and supported storm water capture and reuse projects in the district. Additionally, LPSNRD participates with the Lower Platte River Weed Authority and the Lancaster County Weed Authority on invasive species control relative to water supply.

NeDNR's INSIGHT Web Portal

The Integrated Network of Scientific Information and Geohydrologic Tools (INSIGHT) web portal (https://nednr.nebraska.gov/INSIGHT/) is a water use, supply, and balance tool developed by NeDNR and released in 2014. INSIGHT aids water managers and other interested parties in better understanding current and future water demands, effectiveness of water management strategies, and critical areas of water shortage. A user can access information pertaining to water supplies and demands (precipitation, irrigation, hydropower, etc.), as well as view maps with associated charts that show overall water balance (current, near-term, or long-term) at a subbasin scale. A valuable INSIGHT feature is that all the datasets used to compile the water balance analyses are also stored within the web portal and are available for download.

NeDNR continues to update the current INSIGHT analysis, adding other basins to the web portal as new data become available. At this time, NeDNR has compiled data for the Lower Platte River, from North Bend, NE, to Louisville, NE, covering a large portion of the LPSNRD IMP area. INSIGHT data has been updated for the Upper Platte and Lower Platte River Basins and Subbasins within

the last two years.

Education/Outreach

NeDNR Activities

Events

NeDNR's statewide public outreach activities are broadly focused and intended to provide all interested citizens with a better understanding of how integrated water management affects them in their daily lives. In 2023, NeDNR participated in Husker Harvest Days and the Nebraska State Fair.

LPSNRD Activities

Each February, LPSNRD compiles a Groundwater Management Plan Review, a report of all groundwater activities completed in the previous calendar year. The report includes results of well sampling and measuring, progress made in ongoing groundwater programs, the status of each groundwater management area, and more. The review is presented as a summary to the LPSNRD Board of Directors, and the complete review is posted on LPSNRD's website, http://www.lpsnrd.org. The posted review is promoted on the LPSNRD website home page and in LPSNRD's newsletter.

As noted on the following page under Collaboration with Other Entities, LPSNRD continues hydrogeologic assessment activities with the Eastern Nebraska Water Resources Assessment (ENWRA).

The NRD continues to host "Test Your Well Nights" events for specific areas and plans one or two each year. Private well owners can bring water samples for nitrates testing. LPSNRD collaborated with local FFA chapters and science students to test the water. There were two "Test Your Well Night" events held in calendar year 2023, in Denton/Sprague/Martell area in March and one in Waverly in October.

LPSNRD promotes its groundwater activities through social media platforms Instagram and Facebook. Information is shared about groundwater levels, samples, data loggers, and monitoring wells.

LPSNRD continually seeks to maintain public awareness of information about groundwater levels, available cost-sharing, and conservation best management practices through its publications, website, and LPSNRD media.

LPSNRD, in conjunction with NeDNR, held quarterly coordination meetings to discuss IMP and related action items. In 2023, meetings were held on March 31, June 22, and August 8.

Collaboration with Other Entities

Eastern Nebraska Water Resources Assessment

Both LPSNRD and NeDNR participated in the Eastern Nebraska Water Resources Assessment (ENWRA) program in 2023, a cooperative endeavor for hydrogeologic data research and modeling. LPSNRD continued financial and administrative handling in FY 2023 of ENWRA, which is organized through an interlocal cooperative agreement with the six NRDs in eastern Nebraska. As part of the ENWRA study efforts, ENWRA continued the Water Sustainability Fund (WSF) contract #5312: ENWRA Groundwater Recharge Mapping and Focus Area Assessments. It is a three-phase collaborative effort with the Conservation and Survey Division, School of Natural Resources, University of Nebraska-Lincoln (UNL CSD) and the U.S. Geological Survey (USGS) in order to better understand and map aquifer recharge in Eastern Nebraska. Additionally, LPSNRD continues to collaborate with UNL CSD on the test hole drilling program (four locations in LPSNRD in 2023) and with the 10 NRDs in the Interlocal for the Nebraska GeoCloud Project through cooperation with ENWRA.

Lower Platte River Basin Coalition

LPSNRD and NeDNR are active participants in the Lower Platte River Basin Coalition (LPRBC), a group comprised of the seven Lower Platte River Basin NRDs and NeDNR. The group's purpose is to develop and implement a voluntary water management plan for the Lower Platte River Basin. Plan components will be subsequently incorporated into individual IMPs to provide consistency in water management actions across NRD boundaries. Both NeDNR and LPSNRD have representatives that serve on the Coalition's managers and technical committees and Board. The second 5-year increment of the voluntary water management plan will end in December 2026. For more information about the Coalition, please see https://lprbc.nebraska.gov/.

Lower Platte River Consortium

LPSNRD and NeDNR are committed and participating members of the Lower Platte River Drought Consortium (LPDC). The LPDC was formed through an interlocal agreement in 2016 and also includes Lower Platte North NRD, Papio-Missouri River NRD, Omaha's Metropolitan Utilities District (M.U.D.), and Lincoln Water System (LWS) as members. The Consortium is working together to develop regional solutions for the Lower Platte River to improve water supply reliability and drought resiliency.

The Lower Platte River Drought Contingency Plan (LPRDCP) is a collaborative project among these six water management agencies along with the Bureau of Reclamation. The LPRDCP was submitted to the Bureau of Reclamation for review and was finalized in October 2019. The Coalition is currently working on the five-year Plan Review and update in 2024.

Lower Platte River Corridor Alliance

The Lower Platte River Corridor Alliance (LPRCA) is a group comprised of the eight agencies, including the Lower Platte South NRD, Lower Platte North NRD, Papio-Missouri River NRD, NeDNR, Nebraska Department of Environment and Energy, Nebraska Game and Parks

Commission, Nebraska State Military Department, and the University of Nebraska Institute of Agriculture and Natural Resources. Both LPSNRD and NeDNR are active participants. The LPRCA is dedicated to working with people to protect the long-term vitality of the Lower Platte River Corridor. The mission of the LPRCA is to foster the development and implementation of locally drawn strategies, actions, and practices to protect, enhance, and restore the vitality of the Lower Platte River's resources. Created in 1996 through an interlocal agreement, the Alliance uses a variety of tools to assist counties, communities, governments, resource management organizations, and the public to meet Lower Platte River Corridor management challenges. These tools include public awareness events, educational workshops, recreation studies, water quality studies, floodplain studies, land-use planning assistance, and a variety of other projects. For more information about the LPRCA, please see www.lowerplatte.org.

Other Collaborations

The LPSNRD and USGS cooperate to collect surface water/streamflow data. There are currently 24 USGS stream gages active in LPSNRD. The District provides funding and support for operation and maintenance of 16 of these gages. In addition, the LPSNRD has cooperatively shared groundwater data with UNL, USGS, adjoining NRDs, and NeDNR.

In mid-2021, LPSNRD applied for and received in late 2021 a Water Sustainability Fund (WSF) grant for a Three-Dimensional Hydrogeologic Framework Project. LPSNRD provided matching funds for project. A contractor was selected in early 2022, and the project was completed in December 2023. The project builds on work completed and/or underway by the Lower Elkhorn, Papio-Missouri River, and Lower Platte North NRDs.

In 2022 and 2023, LPSNRD worked with the Nebraska Department of Environment and Energy (NDEE) to obtain a Section 319 grant over three years to establish a Drinking Water Protection Specialist position. This position was filled in July 2023, and the specialist has been working with several communities, especially Waverly, or protection and management of drinking water sources.

Jointly Identified Actions for Succeeding Two Years

As the IMP states, LPSNRD and NeDNR will jointly identify action steps for the succeeding two years as a part of its annual reviews process. The following actions were identified by the LPSNRD and NeDNR as priorities for the next two years. These actions will help ensure that progress continues towards meeting the goals and objectives of the IMP.

LPSNRD and NeDNR

1. Continue to participate in basin-wide or regional groups such as ENWRA, the Lower Platte River Consortium, Lower Platte River Basin Coalition, and the Lower Platte River Corridor Alliance.
2. Continue to assess the need to amend the IMP to achieve consistency with the Lower Platte Basin Water Management Plan, specifically with stream depletion-based limits on new groundwater and surface water uses.
3. Continue respective public outreach activities and seek additional opportunities for joint public outreach events and publications.
4. Continue to evaluate the need for modifications to the LPSNRD streamgage network.
5. Continue to conduct quarterly coordination meetings with LPSNRD and NeDNR staff to discuss IMP and related action items. Include the LPSNRD Water Resources Subcommittee members on coordination meetings twice per year.
6. Development, testing, and incorporation of AEM data for the LPMT model.
7. Ongoing Annual reporting and tracking requirements for IMP and Basin Plan.
8. IMP language updates to better align with Basin Plan.

LPSNRD

9. Continue to monitor groundwater level changes through its network of groundwater monitoring wells.
10. Continue to meter and require annual pumping reports for groundwater wells that have capacity to pump over 50 gpm, as well as public supply wells, and assimilate the data into a comprehensive dataset.
11. Continue to collect information on municipal, rural water, and non-municipal industrial water use, land use and population changes, and changes in climate.
12. Develop recommendations for the development and management of geographic areas with limited aquifers.
13. Conduct discussions with municipalities and rural water districts on coordinating services with regional systems and on water shortage action plans.

NeDNR

14. Continue surface water monitoring activities including tracking surface water permit changes, pump site inspections and the voluntary surface water use reporting program.
15. Continue technical analyses and development of tools (INSIGHT) for water management,

expanding the network to eastern Nebraska as data become available.

16. Continue development of the Lower Platte Missouri Tributaries models and convey progress and outcomes to LPSNRD.

LOWER PLATTE SOUTH
natural resources district

TO: **Water Resources Subcommittee**

FROM: **Dick Ehrman, Water Resources Coordinator**

DATE: **September 6, 2024**

RE: **Background Information on Changes to Ground Water BMP Cost-Share**

As you remember from the WRS LRIP meeting this spring, ground water staff proposed some changes to several of the existing cost-share programs for ground water protection, in line with the general guidance provided by the Board at the February retreat in Nebraska City. The most general change was to provide District-wide cost-share rates for all programs at the same level as we have provided for CWSPAs and Phase areas in the past. Staff feels that this move will value all ground water throughout the District equally, whereas in the past some of the areas outside of the CWSPAs and Phase areas received somewhat less in cost-share funding. Since the LRIP process, staff has worked to provide more detail to those proposed changes. Here is a summary:

Changes to BMP Program Details:

- **Spring Nitrogen Application Program (SNAP)**
  - Establishes a deadline to apply of November 15th of the year prior to Spring fertilization (in the past, applications were open year-round)
  - Applicant will receive a flat fee of $15.00 acre for Spring application rather than the cumulative total of $8.00 per acre for custom application plus (+) $0.16/lb difference in the Spring liquid vs. Fall anhydrous cost. Applicant will receive an additional flat fee of $15.00/acre for split application in the Spring.
    This will help with budgeting allotment, and more even distribution of money to our constituents. This will also eliminate the variability in fertilizer prices among applicants and discourage the potential of over-application.
  - There are no limits on eligible acres within a CWSPA or Designated Phase II or III area. Applicants whose land lies outside of a CWSPA or Phase Area are eligible for a maximum of 160 acres.
  - Applicants will be required to report on yield, application timing, and fertilization rates.
  - Fields will be ineligible if they have been Fall and/or Winter fertilized.

Changes to Cost-Share Rates Only: (i.e. the program will operate as before, with the proposed rate changes as follows District-wide):

- **Fertilizer Meters**

    - New rate - 75% up to $10,000 (previously 50% up to $6,500)
- **Irrigation Management Assistance Practices**
    - New rate – 75%, no maximum (previously 50%)
    - All eligible items must be on NRCS NC-17 approved list.
- **Soil Sampling**
    - New rate – 90% up to $1,500 (previously up to $1,000)
- **Water Well Decommissioning**
    - New rate – 100% (previously 60% and up depending on materials)

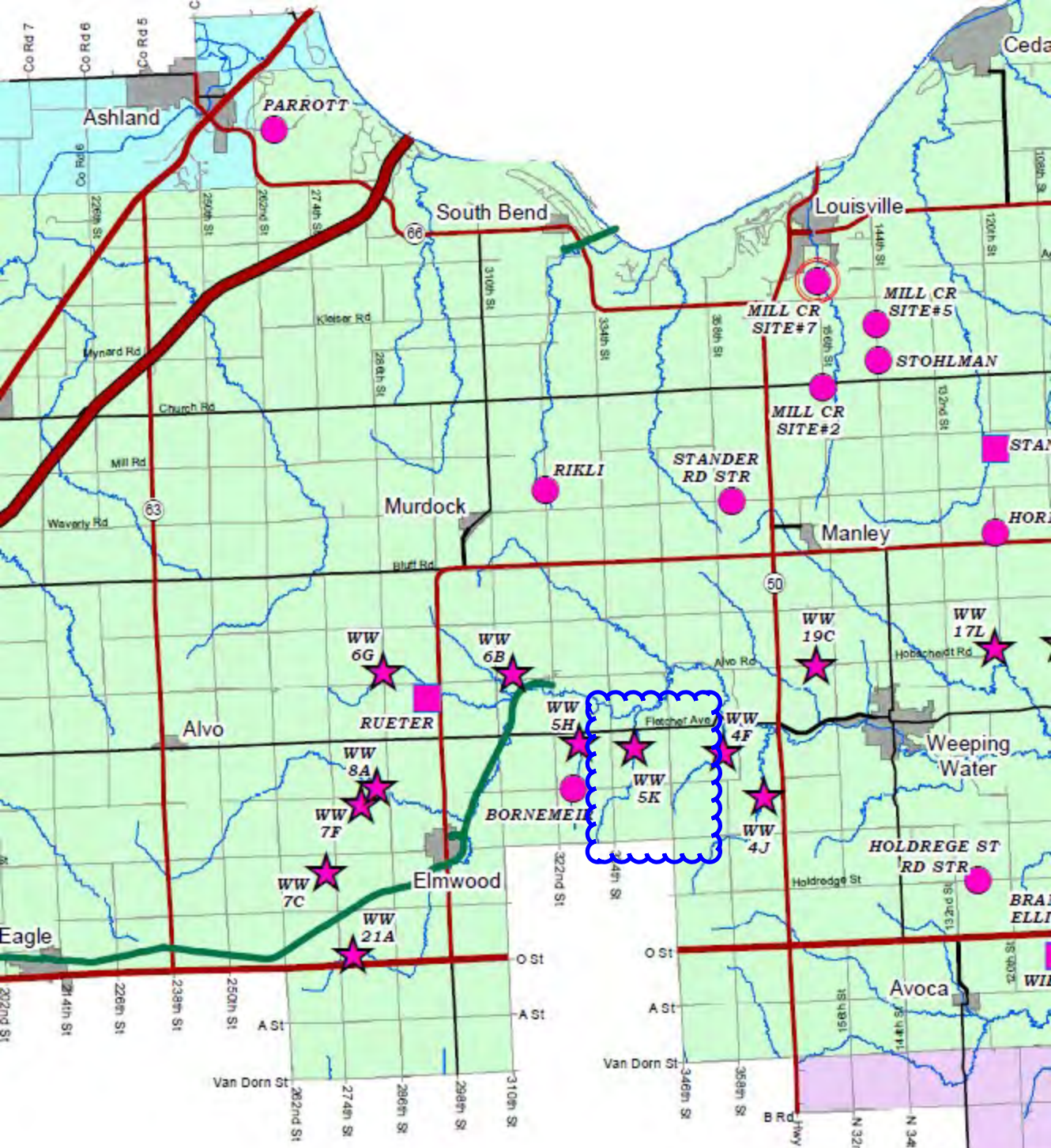
No Proposed Changes to Cost-Share Rates (for information only)

- **Water Meters –** 50% up to $750

STAFF RECOMMENDED MOTION:

The Water Resources Subcommittee recommends that the Board of Directors approve the new rates for ground water program best management practices cost-share effective immediately.

C.


Ashland
PARROTT
South Bend
Louisville
MILL CR SITE#7
MILL CR SITE#5
STOHLMAN
MILL CR SITE#2
RIKLI
STANDER RD STR
Murdock
Manley
WW 6G
WW 6B
RUETER
Alvo
WW 19C
WW 17L
WW 5H
WW 4F
WW 8A
WW 7F
WW 5K
BORNEMEIER
WW 4J
Weeping Water
HOLDREGE ST RD STR
WW 7C
Elmwood
WW 21A
Eagle
Avoca
Co Rd 7
Co Rd 6
Co Rd 5
Co Rd 9
Kleiser Rd
Maynard Rd
Church Rd
Mill Rd
Waverly Rd
Bluff Rd
Alvo Rd
Fletcher Ave
Hobscheidt Rd
Holdredge St
O St
A St
Van Dorn St
B Rd
C Rd
Hwy 50
66
63
50

Weeping Water 5K

9/5/2024, 9:52:37 AM

LPSNRD Dams

Watershed Dam (WS)

LPSNRD Boundary

1:9,028

0 0.05 0.1 0.2 mi

0 0.07 0.15 0.3 km

Cass County, Nebraska, Maxar, Esri, HERE, iPC

Web AppBuilder for ArcGIS

Digitized by JEO, March 2019 | Cass County, Nebraska, Maxar | Esri, HERE, iPC |

PROJECT:	Weeping Water Creek Watershed 5k Dam Rehab	**HOUSTON ENG JOB #:**	R000173-0012		
CLIENT:	Lower Platte South NRD				
ADDRESS:	3125 Portia Street, Lincoln, NE 68521				
CONTACT:	Craig Matulka	**TEL:**	402.476.2729	**Tax ID:**	
CLIENT EMAIL:	cmatulka@lpsnrd.org				
CONSULTANT:	Houston Engineering, Inc.				
ADDRESS:	12702 Westport Parkway #300, Omaha, NE 68154				
CONTACT:	Michael K. Sotak, P.E., BC.WRE	**TEL:**	402.934.8328	**FAX:**	
PROJECT DESCRIPTION:	Rehabilitation of wave attenuation berm and stilling basin.				

☒ **SCOPE OF SERVICES (By task assignment)** ☐ **SCHEDULE (See Attachment)**

COMPENSATION:

The total compensation under this Agreement...

Task orders under this agreement can be authorized via email or written letter.

☐ **LUMP SUM**. Compensation for these services shall be a Lump Sum of $_____.

☒ **TIME AND MATERIALS**. Compensation for these services will not exceed $ **40,598** without written authorization and will be based on the following option (per the attached Budget or List of Hourly Rates), and Reimbursable Expenses based on actual costs incurred and approved by Houston Engineering and as authorized in writing by Client.

☐ Consultant's Direct Job Wages times a factor of _____. ☒ Budget/List of Consultant's Hourly Rates.

☐ **COST PLUS FIXED FEE**. Compensation for these services shall be Subconsultant Cost plus a fixed professional fee, including Reimbursable Expenses. The estimated compensation for services is $ __ plus a fixed fee of $_____ for a total of $_____.

COMPENSATION DETAIL (As per task assignment) **SCHEDULE OF PAYMENTS** (See Following Pages)

SERVICES AUTHORIZED BY: ☒ **Execution of Agreement** ***or*** ☐ **Amendment(s) and/or NTP**

EXECUTION: Execution of this document by duly authorized representatives of Houston Engineering, Inc., and CLIENT, including Houston Engineering's Standard General Terms and Conditions (attached) and any other attachments, Additional Provisions as indicated, and addenda, represents the entire Agreement between the parties hereto and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended or modified by written instrument, but such instrument is valid only upon signature by both parties.

CONSULTANT:	Houston Engineering, Inc.	**CLIENT:**	**Lower Platte South NRD**
BY:	Michael K. Sotak, P.E., BC.WRE	**BY:**	Mike Sousek
SIGNATURE:		**SIGNATURE:**	
TITLE:	Senior Consultant	**TITLE:**	General Manager
DATE:	9 May 2024	**DATE:**	

HOUSTON
engineering, inc.

HOUSTON ENGINEERING, INC STANDARD CONDITIONS

SERVICES. Houston Engineering will perform services for the Project as set forth in attachment and in accordance with these Terms & Conditions. Houston Engineering has developed the Project scope of service, schedule, and compensation based on available information and various assumptions. The Client acknowledges that adjustments to the schedule and compensation may be necessary based on the actual circumstances encountered by Houston Engineering in performing their services.

AUTHORIZED REPRESENTATIVES. The officer assigned to the Project by Houston Engineering is the only authorized representative to make decisions or commitments on behalf of Houston Engineering. The Client shall designate a representative with similar authority.

PROJECT REQUIREMENTS. The Client shall confirm the objectives, requirements, constraints, and criteria for the Project at its inception. If the Client has established design standards, they shall be furnished to Houston Engineering at Project inception. Houston Engineering will review the Client design standards and may recommend alternate standards considering the standard of care provision.

SITE ACCESS. The Client shall obtain all necessary approvals for Houston Engineering to access the Project site(s).

PERIOD OF SERVICE. Houston Engineering shall perform the services for the Project in a timely manner consistent with sound professional practice. Houston Engineering will strive to perform its services according to the Project schedule set forth in attachment. The services of each task shall be considered complete when deliverables for the task have been presented to the Client. Houston Engineering shall be entitled to an extension of time and compensation adjustment for any delay beyond Houston Engineering control.

COMPENSATION. In consideration of the services performed by Houston Engineering, the Client shall pay Houston Engineering in the manner set forth in attachment. The parties acknowledge that terms of compensation are based on an orderly and continuous progress of the Project. Compensation shall be equitably adjusted for delays or extensions of time beyond the control of Houston Engineering.

PAYMENT TERMS. Houston Engineering shall submit monthly invoices for services performed and Client shall pay the full invoice amount within thirty (30) days of the invoice date. Invoices will be considered correct if not questioned in writing within ten (10) days of the invoice date. Houston Engineering shall be entitled to a 2% per month administrative charge in the event of payment delay. Client payment to Houston Engineering is not contingent on arrangement of project financing. Invoice payment delayed beyond sixty (60) days shall give Houston Engineering the right to stop work until payments are current. Non-payment beyond seventy (70) days shall be just cause for termination by Houston Engineering.

ADDITIONAL SERVICES. The Client and Houston Engineering acknowledge that additional services may be necessary for the Project to address issues that may not be known at Project initiation or that may be required to address circumstances that were not foreseen. In that event, Houston Engineering shall notify the Client of the need for additional services and the Client shall pay for such additional services in an amount and manner as the parties may subsequently agree.

INDEPENDENT CONSULTANT. Houston Engineering shall serve as an independent consultant for services provided under this agreement. Houston Engineering shall retain control over the means and methods used in performing their services and may retain subconsultants to perform certain services as determined by Houston Engineering.

STANDARD OF CARE. Services provided by Houston Engineering will be performed with the care and skill ordinarily exercised by members of the same profession practicing under similar circumstances. Houston Engineering will not be liable for the cost of any omission that adds value to the Project.

COMPLIANCE WITH LAWS. HOUSTON Engineering shall perform its services consistent with sound professional practice and endeavor to incorporate laws, regulations, codes, and standards applicable at the time the work is performed. In the event that standards of practice change during the Project, HOUSTON Engineering shall be entitled to additional compensation where additional services are needed to conform to the standard of practice.

PERMITS AND APPROVALS. Houston Engineering will assist the Client in preparing applications and supporting documents for the Client to secure permits and approvals from agencies having jurisdiction over the Project. The Client agrees to pay all application and review fees.

HOUSTON engineering, inc

OWNERSHIP OF DOCUMENTS. Documents prepared by Houston Engineering for the Project are instruments of service and shall remain the property of Houston Engineering. Record documents of service shall be based on the printed copy. Houston Engineering will furnish documents electronically; however, the Client releases Houston Engineering from any liability that may result from documents used in this form. Houston Engineering shall not be held liable for reuse of documents for any purpose other than those intended under the Project.

INSURANCE. Houston Engineering will maintain the following insurance and coverage limits during the period of service. The Client will be named as an additional insured on the Commercial General Liability and Automobile Liability policies.

Workers' Compensation	As required by applicable state statute.
Commercial General Liability	$1,000,000 per occurrence (bodily injury including death & property damage) $2,000,000 aggregate.
Automobile Liability	$1,000,000 combined single limit for bodily injury and property damage.
Professional Liability	$1,000,000 each claim and in the aggregate.
Excess Liability/ Umbrella Coverage	$2,000,000 per occurrence

The Client shall make arrangements for Builder's Risk, Protective Liability, Pollution Prevention, and other specific insurance coverage warranted for the Project in amounts appropriate to the Project value and risks. Houston Engineering shall be a named insured on those policies where Houston Engineering may be at risk. The Client shall obtain the counsel of others in setting insurance limits for construction contracts.

WAIVER OF SUBROGATION. Houston Engineering, INC affirmatively agrees to obtain waiver of subrogation against the client and name the client as an additional insured on the Commercial General Liability and Automobile policies.

INDEMNIFICATION AND HOLD HARMLESS. Houston Engineering, INC shall indemnify and hold harmless the Client and its employees and agents from any and all liability, settlements, loss, defense costs, and expenses in connection with any action, suit, or claim resulting from the negligent acts, errors, or omissions in services provided pursuant to this Agreement by Houston Engineering, INC its employees, or Subconsultants and/or subcontractors. Client shall indemnify and hold harmless Houston Engineering, INC and its employees and agents from any and all liability, settlements, loss, defense costs, and expenses in connection with any action, suit, or claim resulting from the negligent acts, errors, or omissions in services provided pursuant to this Agreement by the Client, its employees, or subconsultants and/or subcontractors. However, if any such liability, settlements, loss, defense costs or expenses result from the concurrent negligence of Houston Engineering, INC, and the Client this indemnification applies only to the extent of the negligence of Houston Engineering, INC.

LIMITATION OF LIABILITY. To the fullest extent permitted by law, a party's total liability to the other party and anyone claiming by, through, or under the other party for any cost, loss, or damages caused in part by the negligence of the party and in part by the negligence of the other party or any other negligent entity or individual, shall not exceed the percentage share that the party's negligence bears to the total negligence of Owner, Engineer, Subconsultant and all other negligent entities and individuals.

HOUSTON engineering, inc.

LEGAL EXPENSE. In the event that either party takes legal action against the other that is not prosecuted, is dismissed, or if the decision is rendered for the other party, the party taking legal action agrees to pay the other their attorney fees, court costs, and defense expenses that are allowable under Nebraska state law, within thirty (30) days of the court action.

CONSEQUENTIAL DAMAGES. Neither the Client nor Houston Engineering shall be liable to the other for any consequential damages regardless of the nature or fault.

ENVIRONMENTAL MATTERS. The Client to its knowledge has disclosed all potential hazardous materials that may be encountered on the Project. In the event unknown hazardous materials are encountered, Houston Engineering shall be entitled to additional compensation for appropriate actions to protect the health and safety of its personnel, and for additional services required to comply with applicable laws. The Client shall indemnify Houston Engineering from any claim related to hazardous materials encountered on the Project except for those events caused by negligent acts of Houston Engineering.

COST OPINIONS. If included in the scope of service, Houston Engineering shall prepare cost opinions for the Project based on historical information that represents the judgment of a qualified professional. The Client and Houston Engineering acknowledge that actual costs may vary from the cost opinions prepared and that Houston Engineering offers no guarantee related to the Project cost.

INDEPENDENT COUNSEL. The Client agrees to obtain independent legal and financial counsel for the Project considering Houston Engineering does not furnish these services.

CONTRACTOR SELECTION. Houston Engineering may make recommendations concerning award of construction contracts and products. The Client acknowledges that the final selection of construction contractors and products is their sole responsibility.

SHOP DRAWING REVIEW. If included in the scope of service, Houston Engineering shall review shop drawing submittals from the contractor solely for their conformance with the design intent of and performance criteria specified for the Project. Houston Engineering shall not be liable for the performance of or consequential damages of any equipment furnished by the contractor under the Project.

CONSTRUCTION REVIEW. If included in the scope of service, Houston Engineering shall observe the progress and content of the work to determine if the work is proceeding in general accordance with the Contract Documents. This construction review is intended to observe, document, and report information concerning the construction process. Observation of work at the Project site shall not make Houston Engineering responsible for the work performed by another party; the means, methods, techniques, sequences, or procedures selected by another party; nor the safety precautions or programs of another party.

REJECTION OF WORK. Houston Engineering may recommend that the Client reject work by construction contractors that does not conform to the requirements of the Project.

SAFETY. Houston Engineering shall be responsible solely for the safety precautions or programs of its employees and no other party.

INFORMATION FROM OTHER PARTIES. The Client and Houston Engineering acknowledge that Houston Engineering will rely on information furnished by other parties in performing its services under the Project. Houston Engineering shall not be liable for any damages that may be incurred by the Client in the use of third party information.

CONSTRUCTION RECORD DRAWINGS. If included in the scope of service, Houston Engineering will deliver drawings to the Client incorporating information furnished by construction contractors. In that construction record drawings are based on information provided by others, Houston Engineering cannot and does not warrant their accuracy.

FORCE MAJEURE. Neither party will hold the other responsible for damages or delay caused by Acts of God, acts of war, strikes, accidents, or other events beyond the other's control.

DISPUTE RESOLUTION. The Client and Houston Engineering agree that they shall diligently pursue resolution of all disagreements within forty-five (45) days of either party's written notice using a mutually acceptable form of mediated dispute resolution prior to exercising their rights under law. Houston Engineering shall continue to perform services for the Project and the Client shall pay for such services during the dispute resolution process unless the Client issues a written notice to suspend work.

HOUSTON engineering, inc.

SUSPENSION OF WORK. The Client may suspend services performed by Houston Engineering with cause upon fourteen (14) days written notice. Houston Engineering shall submit an invoice for services performed up to the effective date of the work suspension and the Client shall pay Houston Engineering all outstanding invoices within fourteen (14) days. If the work suspension exceeds thirty (30) days from the effective work suspension date, Houston Engineering shall be entitled to renegotiate the Project schedule and the compensation terms for the Project.

TERMINATION. The Client or Houston Engineering may terminate services on the Project upon seven (7) days written notice in the event of substantial failure by the other party to fulfill its obligations of the terms hereunder. Houston Engineering shall submit an invoice for services performed up to the effective date of termination and the Client shall pay Houston Engineering all outstanding invoices within fourteen (14) days. The Client may withhold an amount for services that may be in dispute provided that the Client furnishes a written notice of the basis for their dispute and that the amount withheld represents a reasonable value.

GOVERNING LAW. The terms of agreement shall be governed by the laws of the state where the services are performed provided that nothing contained herein shall be interpreted in such a manner as to render it unenforceable under the laws of the state in which the Project resides.

ASSIGNMENT. Neither party shall assign its rights, interests, or obligations under the Project without the express written consent of the other party.

WAIVER OF RIGHTS. The failure of either party to enforce any provision of these terms and conditions shall not constitute a waiver of such provision nor diminish the right of either party to the remedies of such provision.

WARRANTY. Houston Engineering warrants that it will deliver products under the Project within the standard of care. Houston Engineering provides no other expressed or implied warranty.

SEVERABILITY. Any provision of these terms later held to violate any law shall be deemed void and all remaining provisions shall continue in force. In such event, the Client and Houston Engineering will work in good faith to replace an invalid provision with one that is valid with as close to the original meaning as possible.

SURVIVAL. All provisions of these terms that allocate responsibility or liability between the Client and Houston Engineering shall survive the completion or termination of services for the project.

ANTI-DISCRIMINATION. Neither Houston Engineering or its subcontractors shall discriminate against any of their employees or applicants for employment, to be employed in the performance of this Agreement, with respect to their hire, tenure, terms, conditions, or privileges of employment, because of their race, color, religion, sex, sexual orientation, gender identity, disability, or national origin.

Scope of Services

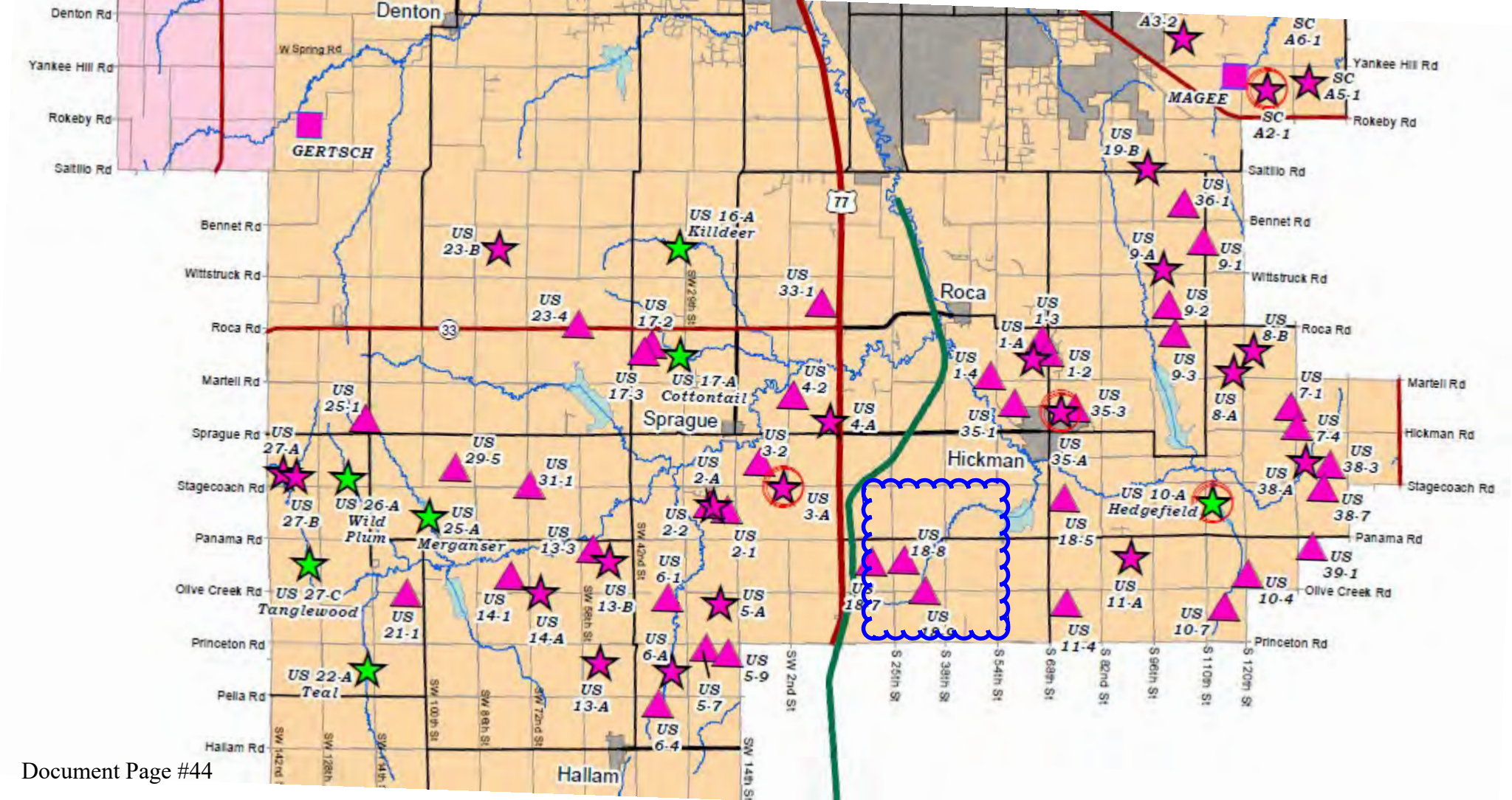
Weeping Water Creek Watershed Dam Site 5k

Lower Platte South NRD

HOUSTON engineering, inc.

Tasks	Sr Engineer Sotak $285	Prj Engineer Kaufman $238	EI Suing $187	Accounting Stroh $120	Expenses	Total
Project Management/Project Direction						
Initial Site Visit	4					
Design Alternatives Correspondence	2					
Monthly Invoicing/PM Duties	2			4		
Project Management/Project Direction Task Total	$2,280	$0	$0	$480	$0	$2,760
Design						
Review As-builts / Bring into CADD	1		4			
Site Visit/Survey			6			
Create Base Map	0.5		5			
Fetch Analysis	0.5		3			
Stilling Basin Design Analysis	1		4			
Prepare Construction Plan Set	1		26			
Prepare Project Specifications	2		4			
Develop Engineer's Opinion on Costs	1		2			
Design Task Total	$1,995	$0	$10,098			$12,093
Permitting						
Prepare and Submit USACE Section 404 Nationwide Permits		10				
Agency Coordination		2				
Prepare NDNR Permit Application	1		2			
Correspondence with NDNR	1		2			
Permitting Task Total	$570.00	$2,856	$748			$4,174
Bid Phase						
Pre-Bid Coordination	4					
Project Bidding/Engineer's Recommendation	6		2			
Bid Phase Task Total	$2,850	$0	$374			$3,224
Construction Phase (Assuming 2 Weeks with No Delays)						
Pre-Construction Coordination	4		4			
Construction Observation	8		60		$750	
Construction Reporting	2		4			
As-Built Drawings	0.5		4			
Construction Phase Task Total	$4,133	$0	$13,464		$750	$18,347
Subtotal Hours	42	12	132	4		
Subtotal Costs	$11,828	$2,856	$24,684	$480	$750	$40,598


D.
NORTH
Upper Salt 18-8


Denton Rd
Yankee Hill Rd
Rokeby Rd
Saltillo Rd
Bennet Rd
Wittstruck Rd
Roca Rd
Martell Rd
Sprague Rd
Stagecoach Rd
Panama Rd
Olive Creek Rd
Princeton Rd
Pella Rd
Hallam Rd
Denton
W Spring Rd
GERTSCH
MAGEE
Roca
Sprague
Hickman
Hallam
Hickman Rd
77
33
US 16-A Killdeer
US 17-A Cottontail
US 26-A Wild Plum
US 25-A Merganser
US 27-C Tanglewood
US 22-A Teal
US 23-B
US 23-4
US 17-2
US 17-3
US 33-1
US 4-2
US 4-A
US 3-2
US 3-A
US 2-A
US 2-2
US 2-1
US 1-3
US 1-A
US 1-4
US 1-2
US 35-3
US 35-1
US 35-A
US 36-1
US 9-A
US 9-1
US 9-2
US 9-3
US 8-B
US 8-A
US 7-1
US 7-4
US 38-3
US 38-A
US 38-7
US 10-A Hedgefield
US 18-5
US 18-8
US 18-7
US 11-A
US 11-4
US 10-4
US 10-7
US 39-1
US 19-B
SC A3-2
SC A6-1
SC A5-1
SC A2-1
US 25-1
US 27-A
US 27-B
US 29-5
US 31-1
US 13-3
US 13-B
US 14-1
US 14-A
US 21-1
US 6-1
US 5-A
US 6-A
US 5-9
US 5-7
US 13-A
US 6-4
SW 26th St
SW 42nd St
SW 58th St
SW 100th St
SW 86th St
SW 72nd St
SW 142nd St
SW 128th St
SW 114th St
SW 2nd St
S 25th St
S 33rd St
S 54th St
S 69th St
S 82nd St
S 96th St
S 110th St
S 120th St

Upper Salt 18-8

9/5/2024, 9:45:07 AM

1:9,028

0 0.05 0.1 0.2 mi

0 0.07 0.15 0.3 km

LPSNRD Dams

Grade Stabilization (GS)

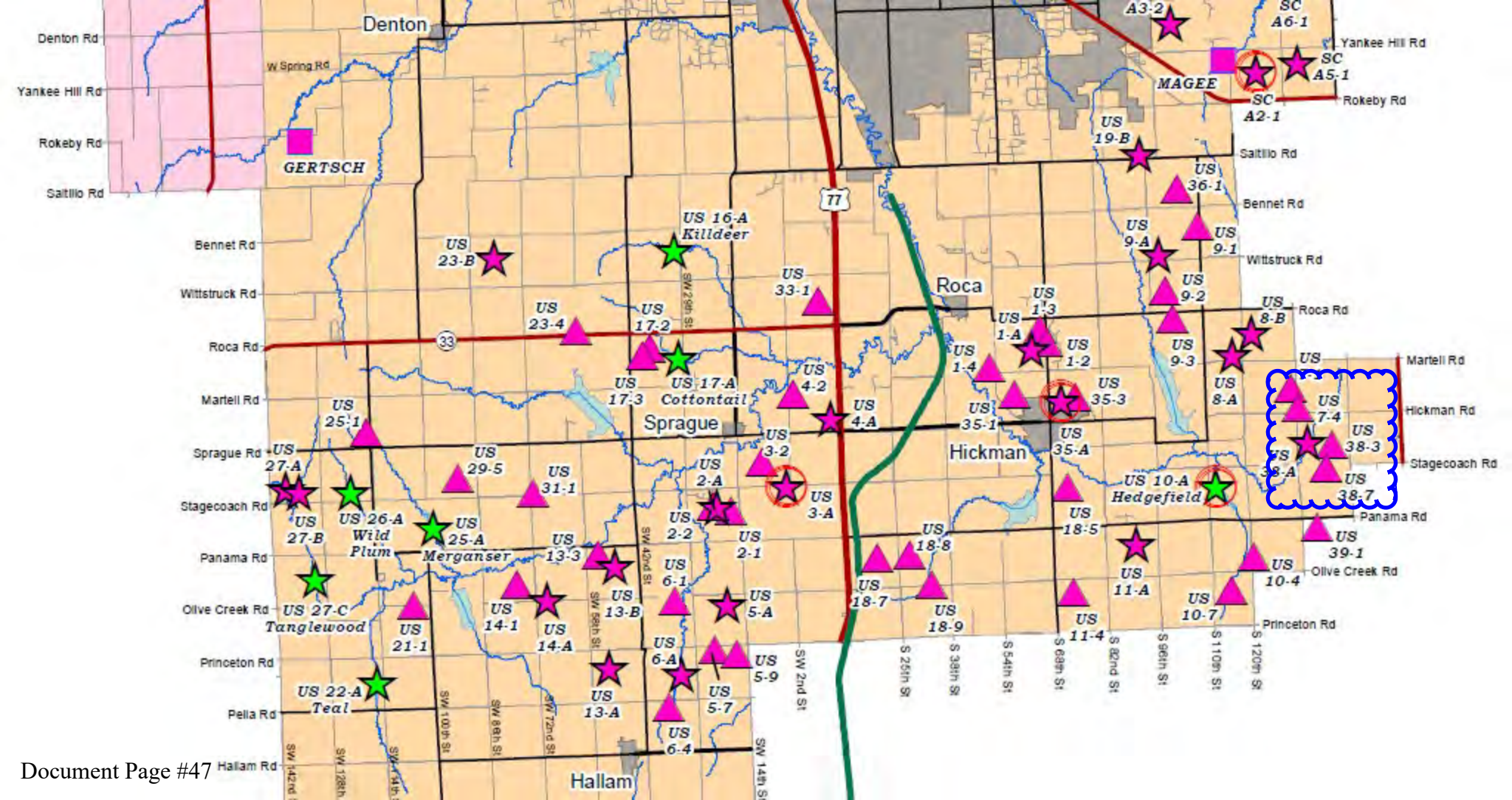
LPSNRD Boundary

Esri, HERE, iPC, Lancaster County, NE GIS, Maxar

Web AppBuilder for ArcGIS

Digitized by JEO, March 2019 | Lancaster County, NE GIS, Maxar | Esri, HERE, iPC |


Upper Salt 38-3
NORTH


Denton
Roca
Sprague
Hickman
Hallam
GERTSCH
MAGEE
Denton Rd
Yankee Hill Rd
Rokeby Rd
Saltillo Rd
W Spring Rd
Bennet Rd
Wittstruck Rd
Roca Rd
Martell Rd
Sprague Rd
Stagecoach Rd
Panama Rd
Olive Creek Rd
Princeton Rd
Pella Rd
Hallam Rd
Hickman Rd
77
33
US 16-A Killdeer
US 17-A Cottontail
US 26-A Wild Plum
US 25-A Merganser
US 27-C Tanglewood
US 22-A Teal
US 10-A Hedgefield
SW 29th St
SW 42nd St
SW 56th St
SW 100th St
SW 86th St
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SW 2nd St
SW 14th St
S 25th St
S 33rd St
S 54th St
S 69th St
S 82nd St
S 96th St
S 110th St
S 120th St

Upper Salt 38-3

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LPSNRD Dams

LPSNRD Boundary

Surrounding NRDs

NEMAHA

1:9,028

0 0.05 0.1 0.2 mi

0 0.07 0.15 0.3 km

Esri, HERE, iPC, Lancaster County, NE GIS, Maxar

Web AppBuilder for ArcGIS

Digitized by JEO, March 2019 | Lancaster County, NE GIS, Maxar | Esri, HERE, iPC |

This agreement is made between *Lower Platte South NRD (Owner), Lincoln, Nebraska*, and *Hazard Engineering (Engineer)*, *Wahoo, Nebraska*.

Recitals

The owner intends to construct *Upper Salt 38-3 & 18-8 Rehabilitation Projects*, called the project below.

The owner and the engineer in consideration of the mutual covenants set forth agree as follows:

SECTION I. BASIC SERVICES OF ENGINEER

A. General

The engineer agrees to perform professional services in connection with the project. *[He/She]* shall serve as the owner's professional engineering representative in those phases of the project to which this agreement applies and shall give consultation and advice to the owner during the performance of *[his/her]* services. See the attached Exhibit A & B for details on the scope tasks and deliverables.

SECTION II. ADDITIONAL SERVICES OF ENGINEER

A. General

If authorized in writing by the owner, the engineer shall furnish or obtain from others additional services of the following types which shall be paid for by the owner, as indicated in SECTION V(A), Paragraph 2:

1. Additions or Alterations.

Making drawings from field measurements of existing construction when required for planning additions or alterations to existing construction.

2. Changes in Scope of Project.

Additional services due to significant changes in general scope of the project or its design including, but not limited to, changes in size, complexity, or character of construction.

3. Revision.

Revising previously approved studies, reports, design documents, drawings, or specifications.

4. Alternate Bids.

Preparing documents for alternate bids requested by the owner for work that is not executed.

5. Detailed Renderings, Etc.

Preparing detailed renderings, exhibits, or scale models for the project.

6. Additional Copies and Prints.

Furnishing additional copies of reports and additional prints of drawings and specifications.

7. Investigations, Rate Schedules, Etc.

Investigations involving detailed consideration of operations, maintenance, and overhead expenses; and the preparation of rate schedules, earnings and expense statements, feasibility studies, appraisals and valuations; detailed quantity surveys of material and labor; and material audits or inventories required for certification of force account construction performed by the owner.

8. Additional Services from Multiple Contracts.

Additional services resulting from the project involving more than one general construction contract, or separate construction contracts for different building trades, or separate equipment contracts.

9. Special Change Orders.

Preparing special change orders requested by the owner.

10. Guarantee Inspection.

Making an inspection of the project prior to expiration of the guarantee period and reporting observed discrepancies under guarantees provided by the construction contract.

11. Reproducible Record Prints.

Furnishing the owner, upon request, a set of reproducible record prints of drawings showing those changes made during the construction process, based on the marked-up prints, drawings, and other data furnished by the contractor to the engineer and which the engineer considers significant.

12. Additional Services Due to Damage, Neglect, Etc.

Additional or extended services during construction made necessary by: (a) work damaged by fire or other cause during construction; (b) defective or neglected work of the contractor; (c) extension of the construction contract time by more than twenty percent (d) acceleration of the work schedule involving services beyond normal working hours; and (e) default under the construction contract due to delinquency or insolvency.

13. Additional Services Due to Out-of-Town Travel.

Additional services and costs necessitated by out-of-town travel required of the engineer, other than visits to the project as required by SECTION I of this contract.

14. Services Not Otherwise Provided for.

Additional services in connection with the project including services typically furnished by the owner and services not otherwise provided for in this agreement.

15. Expert Testimony.

Preparing to serve and serving as an expert witness for the owner in any litigation or other proceeding involving the project.

B. Resident Project Services

1. Resident Project Representative.

If requested by the owner or recommended by the engineer and approved in writing by the owner, one or more full-time resident project representatives shall be furnished and directed by the engineer in order to provide more extensive representation at the project site during the construction phase. The resident project representation shall be paid for by the owner, as indicated in SECTION V(A), Paragraph 2.

2. Duties and Responsibilities.

The duties and responsibilities, and the limitations on the authority of the resident project representative, shall be set forth in Exhibit A which is to be identified, attached to, and made a part of this agreement before services begin.

3. Protection of Owner.

Through the more continuous on-site observations of the work in progress and field checks of materials and equipment by the resident project representative (if one is to be furnished), the engineer shall endeavor to provide further protection for the owner against defects and deficiencies in the work, but the furnishing of such resident project representation shall not make the engineer responsible for the contractor’s failure to perform the construction work in accordance with the contract documents.

SECTION III. OWNER'S RESPONSIBILITIES

The owner's responsibilities in connection with the project are as follows:

1. Information.

Provide full information as to its requirements for the project.

2. Reports and Other Data.

Assist the engineer by placing at *[his/her]* disposal all available information regarding the site of the project including previous reports and any other data relative to design and construction of the project.

3. Surveys, Tests, Etc.

Furnish the engineer property, boundary, right of way, topographic and utility surveys; core borings, probing's and subsurface explorations; hydrographic and hydrologic surveys, laboratory tests and inspections of samples and materials, and other special consultations not covered in SECTION II(A), all of which the engineer may rely on in preparing the drawings and specifications.

4. Access to Lands.

Guarantee access to and make all provisions for the engineer to enter on public and private lands as required to perform *[his/her]* work under this agreement.

5. Examination of Documents.

Examine all studies, reports, sketches, estimates, specifications, drawings, proposals, and other documents presented by the engineer and render in writing decisions pertaining to them within a reasonable time so as not to delay the work of the engineer.

6. Proposals from Bidders.

Advertise for proposals from bidders, open the proposals at the appointed time and place, and pay for all related costs.

7. Counseling and Auditing Services.

Provide legal, accounting, and insurance counseling services as may be required for the project, and auditing service as the owner may require to ascertain how or for what purpose the contractor has used the moneys paid to it under the construction agreement.

8. Owner's Representative.

Designate in writing a person to act as owner's representative with respect to the work to be performed under this agreement. The person shall have complete authority to transmit instructions, receive information, interpret and define owner's policies and decisions with respect to materials, equipment elements, and systems pertinent to the work covered by this agreement.

9. Notice of Defects.

Give prompt written notice to the engineer whenever the owner observes or otherwise becomes aware of any defect in the project.

10. Approval of Authorities.

Obtain approval of all governmental authorities having jurisdiction over the project and approvals and consents from any other individuals or bodies as may be necessary for completion of the project.

11. Multiple Contracts.

If the project involves more than one general contract, or separate construction contracts for different building trades or separate equipment contracts, ensure that the general conditions of all contracts are substantially identical.

12. Additional Services.

Furnish, or direct the engineer to provide at the owner's expense, necessary additional services as stipulated in SECTION II of this agreement, or other services as required.

SECTION IV. PERIOD OF SERVICE

The services called for in the scope of services agreement shall be completed, and the report submitted, as outlined and described in the fee proposal.

SECTION V. PAYMENTS TO ENGINEER

A. Payments for Services and Expenses

1. Basic Services.

The owner shall pay the engineer for basic services performed under SECTION I:

(a) A Lump Sum fee of $76,000.00.

2. Additional Services.

The owner shall pay for additional services performed under SECTION II(A) Paragraphs 1 to 15, inclusive, and SECTION II(B), Paragraph 1 based on standard hourly rates for services provided within that calendar year.

3. Expert Testimony.

The owner shall pay the engineer for preparing to serve and serving as an expert witness at the rates provided in the hourly rate schedule.

B. Methods and Times of Payment

1. Basic Services.

Payments on account of the fee for basic services as provided in SECTION V(A), Paragraphs 1(a) and 1(b) shall be made as follows:

(a) For Hourly Not-to-Exceed Contracts: Progress payments shall be made in proportion to services performed. The compensation for basic services shall amount to the number of hours worked within that billing cycle and at the rates provided in the attached rate schedule. Rates are subject to change based on the calendar year for which services are provided.

(b) For Lump Sum Contracts: Payments will be made monthly based on the percentage of work completed as outlined in the project scope, schedule, or milestones agreed upon by both parties. Upon the project's completion and final approval by the Owner, the final payment, representing the remaining percentage of the total payment due, will be made. This final payment will include any holdbacks or retention amounts agreed upon by the parties.

2. Basic and Additional Services.

Payments for basic and additional services of the engineer based on payroll costs of salaries and wages, times a factor, shall provide for general overhead and profit, and shall be based on the following factors:

3. Basic and Additional Services and Reimbursable Expenses.

Payments for basic services, additional services, and reimbursable expenses shall be made within fifteen days upon presentation of the engineer's detailed statement.

C. General

1. Project Construction Cost Based on Percentage.

Project construction cost to be used as a basis for payment under SECTION V(A), Paragraph 1(b) shall based on one of the following sources with precedence in the order listed: (a) total cost of all work performed as designed or specified by the engineer, including labor, materials, and equipment; (b) the lowest acceptable bona fide contractor's proposal; or (c) the

engineer's most recent cost estimate for the project. All labor, materials, or equipment furnished by the owner shall be included at fair market value.

2. Exclusions from Project Construction Cost.

The project construction cost may not include the engineer's fee, the cost of the land, right-of-way, or compensation for and/or damages to property, unless this agreement so specifies, nor may it include the owner's legal, accounting, insurance counseling, or auditing services or interest charges incurred in connection with the project.

3. Penalty, Liquidated Damages, Etc.

No deductions shall be made from the engineer's compensation on account of penalty, liquidated damages, or other amounts withheld from payments to the contractor.

4. Meaning of Cost of Salary and Wages.

The payroll cost of salaries and wages used as a basis for payment under SECTION V(B), Paragraph 2 means the cost of salaries and wages paid to principals and employees engaged directly on the project, including, but not limited to, engineers, architects, surveyors, designers, drafters, specification writers, estimators, stenographers and clerks, plus cost of fringe benefits including, but not limited to, social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay.

5. Reimbursable Expenses.

Reimbursable expenses mean the actual expense of transportation and subsistence of principals, employees, and consultants when traveling in connection with the project, consultant' fees, field office expenses, resident project representative' subsistence and transportation, toll telephone calls, reproduction of reports, drawings and specifications, and similar project related items.

6. Interest.

All moneys not paid the engineer when due shall bear interest at the legal rate in force at the principal place of business of the engineer.

7. Increase or Reduction in Cost.

If the engineer's most recent cost estimate for the project or the lowest bona fide contractor's proposal is in excess of any limit stated in this agreement, the owner shall give written approval of an increase in the limit or shall cooperate in revising the project's scope or quality, or both, to reduce the cost as required.

8. Payment in Event of Termination.

If this agreement is terminated upon completion of any phase of the engineer's services, the progress payments to be made in

accordance with SECTION V(B), Paragraph 1(b) on account of that and all prior phases shall constitute total payment for services rendered. If terminated during any phase of the work, the engineer shall be paid for services performed during the phase on the basis of *[his/her]* reasonable estimate of the portion of such the completed prior to termination. In the event of any termination, the engineer shall be paid all terminal expenses resulting, plus payment for additional services then due. Any primary payment made under SECTION V(B), Paragraph 1(a) shall be credited to any terminal payment due.

9. Suspension or Abandonment of Work.

If, prior to termination of this agreement, any work designed or specified by the engineer during any phase of the work is suspended in whole or in part for more than six months, or abandoned, after written notice from the owner, the engineer shall be paid for services performed on account of it prior to receipt of such notice from the owner as provided in SECTION V(C), Paragraph 9 for termination during any phase of the work.

SECTION VI. GENERAL CONSIDERATIONS

A. Termination

This agreement may be terminated by either party by seven days' written notice in the event of substantial failure to perform in accordance with its terms by the other party through no fault of the terminating party. If this agreement is terminated, the engineer shall be paid as provided in SECTION V(C), Paragraph 9.

B. Ownership of Documents

All documents, including original drawings, estimates, specifications, field notes, and data are and remain the property of the engineer as instruments of service. The owner may, at its expense, obtain a set of reproducible record prints of drawings and copies of other documents, in consideration of which the owner shall use them solely in connection with the project, and not for the purpose of making subsequent extensions or enlargements to it, and shall not sell, publish, or display them publicly. Reuse for extensions of the project, or for new projects, shall require written permission of the engineer and shall entitle *[him/her]* to further compensation at a rate to be agreed on by the owner and the engineer.

C. Estimates

Because the engineer has no control over the cost of labor, materials, or equipment, or over the contractor's methods of determining prices, or over competitive bidding or market conditions, the estimates of construction cost provided are to be made on the basis of *[his/her]* experience and qualifications, and are to represent *[his/her]* best judgment as a design professional familiar with the construction industry, but *[he/she]* cannot and does not guarantee that bids or the project construction cost shall not vary from cost estimates prepared by *[him/her]*.

D. Disputes

Any claim, dispute, or other matter in question between Engineer and the Owner, arising out of or relating to either's obligations to the other under this Agreement, shall, if possible, be resolved by negotiation between the parties. Should negotiations fail to resolve such claim, dispute, or other matter in question within thirty (30) days, the Engineer and the

Owner shall engage in mediation with a mutually agreed-upon mediator prior to resorting to any other remedies available under law.

E. Governing Law

Unless otherwise agreed in writing, this Agreement and the interpretation thereof shall be governed by the law of the State of Nebraska and any litigation regarding this Agreement shall be filed in the District Court of Lancaster County, Nebraska.

F. Insurance

The engineer shall secure and maintain the following insurance to protect from claims for bodily injury, death, or property damage which may arise from the performance of *[his/her]* services under this agreement:

a) Workers' Compensation: Statutory
b) Employer's Liability
    a. Each Accident: $1,000,00
c) General Liability
    a. Each Occurrence (Bodily Injury and Property Damage): $1,000,000
    b. General Aggregate: $2,000,000
d) Auto Liability
    a. Combined Single: $1,000,000
e) Excess or Umbrella Liability
    a. Each Occurrence: $1,000,000
    b. General Aggregate: $1,000,000
f) Professional Liability
    a. Each Occurrence: $1,000,000
    b. General Aggregate: $2,000,000

The Engineer shall add the Owner as a named insured and waive subrogation on the General Liability and Auto Liability policies. Upon request, the Engineer shall provide certificates of insurance to the Owner indicating compliance with this paragraph.

G. Successors and Assigns

The Engineer and the Owner each binds itself and its partners, successors, executors, administrators and assigns to the other party of this Agreement and to the partners, successors, executors, administrators and assigns of such other party with respect to all covenants of this Agreement. Neither party shall assign or transfer its interest in this Agreement without the written consent of the other.

H. Anti-Discrimination

The Parties shall require every contract to which they are a party to contain a provision requiring a contactor or its contractors

not to discriminate against any employee or applicant for employment, to be employed in the performance of such contract, with respect to their hire, tenure, terms, and conditions of employment, because of race, color, religion, age, sex, sexual orientation, gender identity, genetic information, national origin, disability, familial status, veteran status, or marital status.

I. Indemnity

To the fullest extent permitted by law, Engineer and the Owner shall indemnify and hold each other harmless and their respective officers, directors, partners, employees, and consultants from and against any and all claims, losses, damages, and expenses (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals, and all court or arbitration or other dispute resolution costs) to the extent such claims, losses, damages, or expenses are caused by the indemnifying parties' negligent acts, errors, or omissions. In the event claims, losses, damages, or expenses are caused by the joint or concurrent negligence of Engineer and the Owner, they shall be borne by each party in proportion to its negligence.

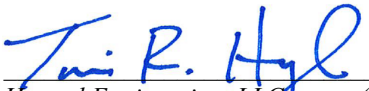
J. Special Provisions

The parties mutually agree that this agreement is subject to the following special provisions, which together with the provisions of this agreement and the exhibits to it, represent their entire agreement. They may only be altered, amended, or repealed by a duly executed written instrument.

In witness, the parties have executed this agreement on _____, _____.

_____

Lower Platte South NRD Manager *(Authorized Representative Signature)*
3125 Portia Street
Lincoln, NE 68521



Travis R. Hazard, PE, CFM

Hazard Engineering, LLC *(Authorized Representative Signature)*
567 W. 15th Street, Suite 101
Wahoo, Nebraska 68066

Exhibit A

Date	8/11/2024
Project	Upper Salt 18-8 Rehabilitation
Scope	Design, Permitting, & Construction Services
Owner	Lower Platte South NRD

Task	Description	
1	Site Survey	$ 1,640.00
	LiDAR data collection	
	Survey Existing site features	
	Existing DNR Plan Data Review/Control info	
2	Preliminary Design	$ 6,300.00
	Hydrology Analysis	
	Hydraulics Modeling	
	Prelim Site Plan	
	Prelim Grading Plan	
	Prelim Profiles	
	Customer Review Meeting	
3	Final Design	$ 9,620.00
	Final Hydrology & Hydraulics	
	Design Plans	
	Specifications	
	Cost Estimate	
4	Permitting	$ 3,500.00
	USACE Permit Application	
	USACE Supporting Impact Map	
	DNR Dam Safety Permit Application	
5	Bidding Services	$ 3,500.00
	Form of Proposal	
	Contractor Solicitation	
	Pre-Bid Meeting	
6	Construction Management	$ 3,840.00
	Pre-Construction Meeting	
	Progress Meetings	
	Shop Drawings	
	Contracting and Payment Applications	
	Punch List Meeting	
7	Construction Observation	$ 8,320.00
	Field Observation and Inspection	
	Contractor Coordination	
	Project Documentation	
8	Construction Certification	$ 1,280.00
	As-built Documentation	
	DNR Dam Safety Certification	
	PROJECT TOTAL	**$ 38,000.00**

*The proposed tasks outlined above will be completed for a **LUMP SUM** fee as shown. Invoices will be billed monthly for completed tass and are due upon receipt. It is my goal to exceed your expectations by effectively communicating and updating you on progress. I will monitor progress and allow you, the Owner, to make informative decisions on proceeding that are in the best interest of you and your project. I am happy to determine the best path forward to providing you with additional services where and when necessary.*

ASSUMPTIONS

It is understood that a Breach Analysis is not necessary for this project.
Geotechnical Investigations are not necessary or required by NDNR for this project.
The Hazard Classification is not expected to change.
Its assumed that the USACE permit will be covered under a maintenance permit.
The tasks above include the preparation and submittal of a permit application to USACE and do not guarantee the approval of a Section 404 Nationwide Permit. Additional fees may be necessary for updates or responses to USACE comments.

SCHEDULE - The following is an anticipation of the project schedule

Task 1 - Estimated to take 4 weeks from Notice to Proceed.
Task 2-4 - Estimated to take 12 weeks from Notice to Proceed. USACE review and approval to follow.
Task 5 - Estimated bid opening date in February.
Task 6-7 - Estimated to take 60 days following Construction Notice to Proceed.

Please fill out the information below and return a signed copy by email to serve as the Notice to Proceed.

Client Signature	Client Name (Printed)	Date
Billing Address	City/Town	ZIP
Client Email	Client Phone	

Exhibit B

Date	8/11/2024
Project	Upper Salt 38-3 Rehabilitation
Scope	Design, Permitting, & Construction Services
Owner	Lower Platte South NRD

Task	Description	
1	Site Survey	$ 1,640.00
	LiDAR data collection	
	Survey Existing site features	
	Existing DNR Plan Data Review/Control info	
2	Preliminary Design	$ 6,300.00
	Hydrology Analysis	
	Hydraulics Modeling	
	Prelim Site Plan	
	Prelim Grading Plan	
	Prelim Profiles	
	Customer Review Meeting	
3	Final Design	$ 9,620.00
	Final Hydrology & Hydraulics	
	Design Plans	
	Specifications	
	Cost Estimate	
4	Permitting	$ 3,500.00
	USACE Permit Application	
	USACE Supporting Impact Map	
	DNR Dam Safety Permit Application	
5	Bidding Services	$ 3,500.00
	Form of Proposal	
	Contractor Solicitation	
	Pre-Bid Meeting	
6	Construction Management	$ 3,840.00
	Pre-Construction Meeting	
	Progress Meetings	
	Shop Drawings	
	Contracting and Payment Applications	
	Punch List Meeting	
7	Construction Observation	$ 8,320.00
	Field Observation and Inspection	
	Contractor Coordination	
	Project Documentation	
8	Construction Certification	$ 1,280.00
	As-built Documentation	
	DNR Dam Safety Certification	
	PROJECT TOTAL	**$ 38,000.00**

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Hazard Engineering Hourly Rates as of 07/22/2024	
POSITION/SERVICE	HOURLY RATE
Project Management/Permitting	$160
Expert Witness	$185
Engineering Design	$185
Technical Design	$135
Survey/Staking - 1 man crew	$225
Survey/Staking - 2 man crew	$125
Construction Estimating/Bidding	$125
Construction Management	$160
Machine Control Processing	$200
Machine Control Support	$200
3D Visualization	$185
Travel	$125

FY 2025 - Measurable Goals or Outcomes

As directed in the LPSNRD 2019 Master Plan, a list of measurable goals or outcomes was identified for each standing and ad hoc subcommittee. In preparation for the following year's LRIP, these identified goals or outcomes should be rated on progress being made. It's important to note that these goals or outcomes are guidance for the staff, subcommittees and Board, and do not represent all of the possible goals or outcomes, nor does it indicate any error or false information on behalf of the staff, subcommittees and Board if they are not achieved.

Land Resources

Soil & Water Conservation (District-wide)

- Complete construction on at least one farm pond
- Approve at least 40 cost-share applications
- Complete 75% of the approved cost-share conservation practices

Soil & Water Conservation (Targeted)

- Approve at least 40 cover crop applications
- Approve at least 8 cost-share applications
- Complete 85% of the approved cost-share conservation practices

GIS Support and Imagery

- Complete GIS mapping of NRD land rights on 15-20 parcels
- Integration of new aerial imagery from counties

Water Quality Watershed Project

- Implement at least 10 BMPs in the Twin Lakes Watershed, including at least two farm ponds

Information & Education

Environmental Education

- Host eight Nature Nights at elementary schools
- Arbor Day presentations and seedlings for students at 12 schools
- Facilitate Field Trips for 1,800 High School Biology students
- Provide assistance for Lincoln Children's Zoo Habitat Field Trips for 3,000 students
- Provide assistance for Pioneers Park Nature Center School Tour Hikes for 3,000 students
- Provide assistance for Pioneers Park Nature Center and Spring Creek Prairie Immersion field trips for 1,500 students
- Five high schools participating in Envirothon

General Awareness

- Produce two new promotional videos featuring NRD areas or programs/projects to be used on social media and/or television
- Update radio ads
- Publish 150 posts per year on the NRD FB page
- Publish 175 posts/year to the NRD Instagram
- Publish 50 posts/year to the NRD LinkedIn
- Produce and publish 30 Social Media 'Reels'
- Produce and publish 15 series of engaging/interactive social media stories highlighting NRD areas or programs/projects
- Host at least 10,000 visitors to LPSNRD.org per quarter

- Move from print to digital newsletter presence
- Print a special edition newsletter for the Salt Creek Floodplain Resiliency Plan
- Engage in year-long campaign highlighting past/present/future successes of LPSNRD to raise general population awareness on who we are and what we do; build public trust

Programs and Projects

- Host two Test Your Well Night Events
- Host at least two adult environmental education events
    - Trees 101 (fall)
    - Pollinator Tour (late spring)
    - Prairie Corridor Tour (late fall)

Recreation, Forestry, and Wildlife

Conservation Easements

- Acquire one conservation easement
- Conduct conceptual trail design study for newly acquired properties

Prairie Corridor on Haines Branch

- Purchase land or conservation easement on at least one property identified in the corridor
- Conduct at least one grassland renovation and/or timer stand improvement project
- Complete at least one public access project

Saline Wetlands

- Purchase land or conservation easement on at least one property identified in the corridor
- Conduct at least one habitat improvement project

Wildlife Management Areas

- Conduct at least one angler/boating access project
- Conduct at least one grassland renovation and/or timber stand improvement project

Trails

- Complete four trail bridge repair projects on MoPac Trail
- Complete evaluation of MoPac Connector public right-of-way

Tree Plantings

- Sell a maximum of 40,000 tree seedlings
- Hold at least one tree planting workshop
- Cost-share on five community forestry applications

Platte River

Lower Platte River Corridor Alliance

- Continue to pursue Lower Platte River Aquatic Ecosystem Restoration Comprehensive Study and other Projects with the Corridor Alliance.

Platte River

- Begin project under LPRCA Water Quality Management Plan.
- Hold a lower Platte River tour for Directors identifying projects/concerns.

Urban

Community Assistance Program

- Complete and pay on four community assistance projects
    - Pine Lake Assoc. Dam Rehab Construction

- Ceresco Hobson Branch Stream Stabilization Design and Construction
- Weeping Water Stream Stabilization Design
- Beaver Lake Assoc. Dam Rehab Study

Operation and Maintenance Stormwater Facilities

- Complete at least 5 Salt Creek Levee/SWIF projects:
  - Complete Construction 98+25L
  - Complete Design, Permitting and Award Construction 183+86L
  - Complete Design, Permitting and Award Construction 184+90R
  - Complete Construction 216+50R
  - Complete Design for Pipe 238+90R
- Complete at least 3 Salt Creek Levee Non-SWIF projects:
  - Complete Construction of Driveway Access 126+27-127+82L
  - Complete Permitting and Award Bank Stabilization at 13th – 14th St.
  - Complete Design for Sheet Pile Repair at 309+312+00L

Stormwater Management

- Conduct Cost/Benefit Analysis of implementing structural measures with Lincoln (Salt Creek Resiliency Study)
- Complete at least two rainscaping projects in the District
- Complete engineering design on Masterplan projects Haines Branch #1&2 and Middle Creek #5
- Deadmans Run Flood Reduction Project:
  - Complete 95% design
  - Review final project configuration/components based on modeling results
  - Begin Landrights acquisition

<u>Water Resources</u>

Integrated Management

- Review of District drought planning resources and plans (District Drought Emergency Response Plan, Lower Plate River Drought Contingency Plan, Annual Weather Precipitation Outlook, etc.)
- Continue cooperation with other NRDs and NeDNR in Lower Platte River Basin Coalition for managing Basin groundwater and surface water supplies
- Continue cooperation with LP NRDs, MUD, LWS, and NeDNR (Lower Platte Consortium) for drought awareness and water conservation messaging

Flood Control Dams and Road Structures

- Complete construction of Piening Dam

Ground Water Management

- Approve 8 water well permits
- Approve 40 chemigation permits
- Cost-share on 3 water meters
- Decommission 20 inactive wells
- Sample 300 wells for water quality
- Install 2-3 dedicated monitoring wells
- Cost-share on 12 fertilizer meters
- Cost-share on 2 irrigation management practices
- Prepare for vadose zone sampling and identify locations
- Cost-share on 20+ soil sampling projects

- Cost-share on 30+ SNAP approvals
- Implement Hallam area well monitoring network; collect data from Monolith
- Begin update of groundwater rules and regulations
- Continue implementation of Waverly Drinking Protection Plan; contact and begin assistance to 5 additional public water suppliers


F
17879
18005
18261
18221
18231
RETAIN NRD EASEMENT
RELEASE NRD EASEMENT
S 68TH ST
KRISTI LN
KRISTI LN
CYPRUS BLVD
BIRCHWOOD DR
WOODLAND BLVD
WOODLAND BLVD
6710
6740
6750
6760
6780
1204