

Memorandum

To: Programs, Projects, and Operations Subcommittee
From: Amanda Grint, Assistant General Manager
Date: April 3, 2025
Re: Joint Funding Agreements for Water Quality Monitoring

As a member of the Lower Platte River Corridor Alliance (LPRCA), the District has been involved with real-time water quality monitoring network sites to provide comprehensive real-time water quality data for the Lower Platte River. Past agreements thru the LPRCA have led to three long term existing testing locations; Platte River at Louisville, Salt Creek at Ashland, and Elkhorn River at Waterloo. An additional location was added to the Platte River at Leshara.

These sites are operational March through October with data collected at 15-minute intervals. The data is publicly available over the internet in near real time and historical data are available. Additional constituents can be monitored upon request. Data have been collected since 2007 for the long-term gage sites, and since 2016 from the gage at Leshara.

The long-term gages are a partnership between the District, Lower Platte South NRD, and the USGS. The gage at Leshara is a partnership between the District, Lower Platte South NRD, Lower Platte North NRD, Lincoln Water Systems (LWS), Metropolitan Utilities District (MUD), and USGS. These agreements are directly between the District and LPSNRD acting as the administrating agency on behalf of the LPRCA.

The agreements with the Lower Platte South NRD along with supporting documentation on the benefits and costs are attached. The Lower Platte South NRD Board has approved the agreements. The terms of the agreement have been increased to cover a five-year span. Costs for each fiscal year are broken out in the agreements and in the following staff recommendation.

- **It is recommended that the Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute the Joint Funding Agreement with Lower Platte South Natural Resources District for the Lower Platte River Corridor Gages in the amount of \$39,600 in FY 2026, \$43,400 in FY 2027, \$46,200 in FY 2028, \$49,200 in FY2029 and \$37,400 in FY 2030 subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.**
- **It is recommended that the Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute the Joint Funding Agreement with Lower Platte South Natural Resources District for the Leshara Gage in the amount of \$8,000 in FY 2026, \$6,400 in FY 2027, \$6,400 in FY 2028, \$6,400 in FY2029 and \$5,000 in FY 2030, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.**

JOINT FUNDING AGREEMENT

For

LONG TERM REAL-TIME CONTINUOUS WATER QUALITY MONITORING GAGES

in the LOWER PLATTE RIVER CORRIDOR at LOUISVILLE in the PLATTE, at ASHLAND in SALT CREEK, and at WATERLOO in the ELKHORN RIVER

The “JOINT FUNDING AGREEMENT for the THREE LONG TERM REAL-TIME CONTINUOUS WATER QUALITY MONITORING GAGES in the LOWER PLATTE RIVER CORRIDOR at LOUISVILLE in the PLATTE, at ASHLAND in SALT CREEK, and at WATERLOO in the ELKHORN RIVER” (hereinafter referred to as “the Agreement”) to be executed by and among the Lower Platte South Natural Resources District, on behalf of the Lower Platte River Corridor Alliance and Papio-Missouri River Natural Resources District (herein after referred to as “the Partners”).

The Partners agree as follows.

Scope of work

Real-time continuous water quality monitoring data will be collected by USGS personnel and equipment in the Platte River at Louisville, in Salt Creek at Ashland, and in the Elkhorn River at Waterloo. Water quality data to be collected include temperature, turbidity, dissolved oxygen, specific conductance, nitrate/nitrite and others as available, however no nitrate/nitrite collection on Salt Creek. Data will be displayed in real-time over the internet. The data is anticipated to be collected generally from March through October in 2025, 2026, 2027, 2028 and 2029.

Funding

The Lower Platte South Natural Resources District, on behalf of the Lower Platte River Corridor Alliance, will hold and disburse funds from all Partners as needed for this study. Papio-Missouri River Natural Resources District will provide \$39,600.00 in 2025 (FY26), \$43,400.00 in 2026 (FY27), \$46,200.00 in 2027 (FY28), \$49,200.00 in 2028 (FY29), and \$37,400.00 in 2029 (FY30) for a total of \$215,800.00 for the five-year agreement. The Lower Platte River Corridor Alliance will pay the balance of the annual fee for the monitoring agreement (Lower Platte South NRD being the one other partner paying equal amounts).

Effective date

The agreement shall become effective upon execution by all parties.

Duration of agreement

The agreement shall run through the end of the calendar year 2029 when all required funds have been received and data collection completed.

This Agreement is hereby approved and executed by the following parties on the dates shown below.

Mike Sousek, General Manager LPSNRD

DATE

John Winkler, General Manager PMRNRD

DATE

JOINT FUNDING AGREEMENT

For

REAL-TIME CONTINUOUS WATER QUALITY MONITORING

in the LOWER PLATTE RIVER AT LESHARA

The “JOINT FUNDING AGREEMENT for REAL-TIME CONTINUOUS WATER QUALITY MONITORING in the PLATTE RIVER AT LESHARA” (hereinafter referred to as “the Agreement”) to be executed by and among the Lower Platte South Natural Resources District, on behalf of the Lower Platte River Corridor Alliance and Papio-Missouri River Natural Resources District (herein after referred to as “the Partners”).

The Partners agree as follows.

Scope of work

Real-time continuous water quality monitoring data will be collected by USGS personnel and equipment in the Platte River near Leshara. Water quality data to be collected include temperature, turbidity, dissolved oxygen, specific conductance, nitrate/nitrite and others as available. Data will be displayed in real-time over the internet. The data is anticipated to be collected generally from March through October in 2025, 2026, 2027, 2028 and 2029.

Funding

The Lower Platte South Natural Resources District, on behalf of the Lower Platte River Corridor Alliance, will hold and disburse funds from all Partners as needed for this study. Papio-Missouri River Natural Resources District will provide \$8,000.00 in 2025 (FY26), \$6,400.00 in 2026 (FY27), \$6,400.00 in 2027 (FY28), \$6,400.00 in 2028 (FY29), and \$5,000.00 in 2029 (FY30) for a total of \$32,200 for the five-year agreement. The Lower Platte River Corridor Alliance will pay the balance of the annual fee for the monitoring agreement (four other partners paying equal amounts).

Effective date

The agreement shall become effective upon execution by all parties.

Duration of agreement

The agreement shall run through the end of the calendar year 2029 when all required funds have been received and data collection completed.

This Agreement is hereby approved and executed by the following parties on the dates shown below.

Mike Sousek, General Manager LPSNRD

DATE

John Winkler, General Manager PMRNRD

DATE

Long-Term USGS Water Quality Gages in the Lower Platte River Corridor

USGS – Central Plains Water Science Center

Lincoln, Nebraska

Proposed 5-year extension to the Long-Term USGS-LPRCA Agreement

February 26, 2025

POC: Matt Moser

The USGS Nebraska Water Science Center, Lower Platte South NRD, and Patio Missouri NRD are interested in extending the agreement for continuous water quality monitoring in the Lower Platte River. This ongoing data collection covers the monitoring of water quality parameters and the reporting of data on the USGS's website. The proposed extension would continue data collection for the 2025 through 2029 calendar years.

Three gages have recorded continuous water-quality data seasonally since 2007. Readings of water temperature, specific conductance, dissolved oxygen, turbidity, and nitrate are taken every 15 minutes during the ice-free periods of the year. These measurements provide information for a variety of goals in the Lower Platte River, some of which include:

- Monitoring in support of the Lower Platte River's Water Quality Management Plan
- Potential to identify the water-quality impacts from management and land use changes in the contributing basin as well as to provide a baseline for future comparisons.
- Assessing the stream health for fisheries
- Better characterization of nitrate concentration in the drinking water source of many Nebraskans.
- Inform those who use the river for recreating of potential water quality risks
- Development of surrogate estimates to help better quantify loads of non-monitored parameters.
- Assessment by the USGS to determine continuous water quality trends in the lower Platte River

For this proposed extension, the data collection would continue at the three long term sites that have had continuous monitoring since the fall of 2007. These sites include the Platte River at Louisville, Salt Creek at Ashland, and Elkhorn River at Waterloo. Funding for the site would be provided from the USGS Cooperative water program, the Pappio-Missouri River NRD, and the Lower Platte South NRD.

Seasonal data collection for the current agreement is scheduled for completion in the fall of 2024, with the agreement set to expire on June 30, 2025. The proposed extension would add data collection for the 2025-2029 years and extend the agreement from June 30, 2025, to June 30, 2030. All historic and real-time data are provided on the USGS website.

For questions or additional information, contact Matt Moser, (402)328-4184 mmoser@usgs.gov

The following a **proposed** billing for each NRDs use. These funds include the data collection and approval at each of the three locations mentioned above. If the Federal fiscal year is divided out to fit State fiscal years, either the Papio-M or the LPS NRDs could expect to pay the following for each of its fiscal years. The five-year average cost to monitor would be \$43,160 per year.

<u>Nebraska State Year</u>	<u>Annual Amount per Agency</u>
7/1/2025 to 6/30/2026	\$39,600
7/1/2026 to 6/30/2027	\$43,400
7/1/2027 to 6/30/2028	\$46,200
7/1/2028 to 6/30/2029	\$49,200
7/1/2029 to 6/30/2030	\$37,400

An extended financial breakdown with expected billing dates per agency:

Agreement #	22NRJFA00350					
Billing Date	Amount	Federal Fiscal Year	Papio-M NRD	LPS NRD	USGS	
6/30/2025	\$45,000	FY25	\$9,200	\$9,200	\$26,600	
8/31/2025	\$45,000	FY25	\$9,200	\$9,200	\$26,600	
12/31/2025	\$29,000	FY26	\$10,600	\$10,600	\$7,800	
3/31/2026	\$29,000	FY26	\$10,600	\$10,600	\$7,800	
6/30/2026	\$29,000	FY26	\$10,600	\$10,600	\$7,800	
8/31/2026	\$29,000	FY26	\$10,600	\$10,600	\$7,800	
12/31/2026	\$30,300	FY27	\$11,100	\$11,100	\$8,100	
3/31/2027	\$30,300	FY27	\$11,100	\$11,100	\$8,100	
6/30/2027	\$30,300	FY27	\$11,100	\$11,100	\$8,100	
8/31/2027	\$30,300	FY27	\$11,100	\$11,100	\$8,100	
12/31/2027	\$32,800	FY28	\$12,000	\$12,000	\$8,800	
3/31/2028	\$32,800	FY28	\$12,000	\$12,000	\$8,800	
6/30/2028	\$32,800	FY28	\$12,000	\$12,000	\$8,800	
8/31/2028	\$32,800	FY28	\$12,000	\$12,000	\$8,800	
12/31/2028	\$34,500	FY29	\$12,600	\$12,600	\$9,300	
3/31/2029	\$34,500	FY29	\$12,600	\$12,600	\$9,300	
6/30/2029	\$34,500	FY29	\$12,600	\$12,600	\$9,300	
8/31/2029	\$34,500	FY29	\$12,600	\$12,600	\$9,300	
12/31/2029	\$17,400	FY30	\$6,100	\$6,100	\$5,200	
3/30/2030	\$17,400	FY30	\$6,100	\$6,100	\$5,200	
Billing Date			\$215,800	\$215,800	\$199,600	

Project completion date: 6/30/2030

For questions or additional information, contact Matt Moser, (402)328-4184 mmoser@usgs.gov

USGS Water Quality Gages on the Platte River near Leshara, Nebraska

USGS – Central Plains Water Science Center

Lincoln, Nebraska

Proposed 5-year extension to the Leshara USGS-LPRCA Agreement

February 21, 2025

POC: Matt Moser

The USGS Nebraska Water Science Center, in addition to several cooperators, are interested in extending the joint agreement for continuous water quality monitoring at the Platte River near Leshara gage. Beginning in April 2016 a continuous water quality monitor was deployed in the Platte River near Leshara to help get additional water quality information in the upper portions of the Lower Platte River. Parameters monitored include water temperature, specific conductance, turbidity, dissolved oxygen, and nitrate. Data is collected seasonally during ice free periods, and the site is operated similarly to other USGS-Lower Platte River monitoring sites.

Water quality information collected at this site helps:

- Monitoring in support of the Lower Platte River's Water Quality Management Plan.
- Potential to identify the water-quality impacts from management and land use changes in the contributing basin as well as to provide a baseline for future comparisons.
- Assessing the stream health for fisheries.
- Better characterization of nitrate concentration in the drinking water source of many Nebraskans.
- Inform those who use the river for recreating of potential water quality risks.
- Development of surrogate estimates to help better quantify loads of non-monitored parameters.
- Assess the stream health for both immediate concentrations and loads heading downstream.
- Understand nitrate concentrations above the shallow aquifers used for drinking water.
- Assessment by the USGS to determine continuous water quality trends in the lower Platte River.

The water quality gage at the Platte River Leshara has been a multi-cooperative agreement.

Funds have been contributed by Lower Platte South NRD, Lower Platte North NRD, Papio-Missouri NRD, Lincoln Water Systems, M.U.D, and USGS

For the 2025-2029 data collection, the USGS would contribute 30% of the total project cost, with Papio-M NRD, LPS NRD, LPN NRD, LWS, and M.U.D split the remaining funds.

The current agreement expires on June 30, 2025, with 2024 being the last year of data collection. A proposed extension to this agreement would start June 30, 2025, and go to June 30, 2030, and cover data collection and approval for the 2025-2029 calendar years. Funding below assumes that all parties would still be interested in operating the gage with the same scope for an additional three years beyond the 2024 data collection year.

The following is a **proposed** billing for each partner's use based on State year. The three-year average cost to monitor would be \$6,440 per year. Actual billed amounts may vary depending on direct JFAs between each partner and LPS NRD, who acts as the chair for the LPRCA.

<u>State Year</u>	<u>Annual Amount per Agency</u>
<u>7/1/2025 to 6/30/2026</u>	\$8,000
<u>7/1/2026 to 6/30/2027</u>	\$6,400
<u>7/1/2027 to 6/30/2028</u>	\$6,400
<u>7/1/2028 to 6/30/2029</u>	\$6,400
<u>7/1/2029 to 6/30/2030</u>	\$5,000
5-year average	\$6,440

For questions or additional information, contact Matt Moser, (402)328-4184 mmoser@usgs.gov

An extended financial breakdown with expected billing dates per agency:

Agreement # 22NRJFA00360		5-year		Platte River at Leshara, Nebr.				
Billing Date	Amount	Federal Fiscal Year	Papio-M NRD	LPS NRD	LPN NRD	M.U.D.	L.W.S	USGS
6/30/2025	\$16,000	FY25	\$2,400	\$2,400	\$2,400	\$2,400	\$2,400	\$4,000
8/31/2025	\$16,000	FY25	\$2,400	\$2,400	\$2,400	\$2,400	\$2,400	\$4,000
12/31/2025	\$11,000	FY26	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
3/31/2026	\$11,000	FY26	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
6/30/2026	\$11,000	FY26	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
8/31/2026	\$11,000	FY26	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
12/31/2026	\$11,000	FY27	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
3/31/2027	\$11,000	FY27	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
6/30/2027	\$11,000	FY27	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
8/31/2027	\$11,000	FY27	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
12/31/2027	\$11,000	FY28	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
3/31/2028	\$11,000	FY28	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
6/30/2028	\$11,000	FY28	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
8/31/2028	\$11,000	FY28	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
12/31/2028	\$11,000	FY29	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
3/31/2029	\$11,000	FY29	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
6/30/2029	\$11,000	FY29	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
8/31/2029	\$11,000	FY29	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$3,000
12/31/2029	\$6,100	FY30	\$900	\$900	\$900	\$900	\$900	\$1,600
3/30/2030	\$6,100	FY30	\$900	\$900	\$900	\$900	\$900	\$1,600
Billing Date			\$32,200	\$32,200	\$32,200	\$32,200	\$32,200	\$59,200

With a five-year data collection effort, this proposed agreement would have a project completion date of 6/30/2030.

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LPSNRD staff Report

The next four agenda items are all pertaining to the Lower Platte River Corridor Alliance (LPRCA) streamgage agreements for USGS monitoring in the Platte River Corridor. As a member of the LPRCA, the District has been involved with real-time water quality monitoring network sites to provide comprehensive real-time water quality data for the Lower Platte River. Past agreements through the LPRCA have led to three long-term existing testing locations: Platte River at Louisville, Salt Creek at Ashland, and Elkhorn River at Waterloo. An additional location was added in the Platte River at Leshara.

These sites are operational approximately March through October with data collected at 15-minute intervals. The data is publicly available over the internet in near real time and historical data are available. Additional constituents can be monitored upon request. Data have been collected since 2007 for the long-term sites, and since 2016 from the gage at Leshara.

The long-term gages are a partnership between the LPSNRD, Papio-Missouri River NRD, and USGS. The gage at Leshara is a partnership between LPSNRD, Papio-Missouri River NRD, Lower Platte North NRD, Metropolitan Utilities District, Lincoln Water System, and USGS. These agreements are handled by LPSNRD acting as the administrating agency on behalf of the LPRCA.

Additional information is attached including a description of the benefits of the gages and a breakdown of funding from each partner in each of the agreements. The expenses are broken down between the federal fiscal year and the fiscal year used by the NRDs.

b) Joint Funding Agreement Between USGS and LPSNRD for LPRCA for Lower Platte River Corridor Alliance Water Quality Monitoring in Platte River Corridor at Louisville in the Platte, at Ashland in Salt Creek, and at Waterloo in the Elkhorn River (ACTION)

The Funding agreement with USGS for the three long-term water quality monitoring sites expires on June 30, 2025. Staff is recommending continuation of the agreement for monitoring in the Lower Platte Corridor for five years (instead of three) to an end date of June 30, 2030. The total amount of the agreement is \$631,200 or \$199,600 for the USGS and \$431,600 for LPSNRD acting on behalf of the LPRCA. Through a joint-funding agreement (next agenda item), the \$431,600 share is equally divided between PMRNRD and LPSNRD. The average cost per year for each NRD is \$43,160. Attached is the proposed funding agreement between USGS and LPSNRD for the three long-term sites in the Lower Platte River Corridor.

Staff's recommendation is to recommend the Board of Directors approve the five-year Joint Funding Agreement between USGS and LPSNRD for LPRCA for Lower Platte River Corridor Alliance Water Quality Monitoring in Platte River Corridor at Louisville in the Platte, at Ashland in Salt Creek, and at Waterloo in the Elkhorn River.

c) Joint Funding Agreement with PMRNRD & LPSNRD for LPRCA water quality monitoring in the Platte River Corridor at Louisville in the Platte, at Ashland in Salt Creek, & at Waterloo in the Elkhorn River (ACTION)

The funding agreement with USGS for the three long-term sites is set to expire in June 2025. The continuous water quality monitoring gages have been funded equally by LPSNRD and PMRNRD for many years. The proposed agreement between the two NRDs will establish funds now for five years to match the USGS agreement. LPSNRD serves as the administrating agency for the LPRCA and will enter into an agreement with USGS for said monitoring gages. USGS will bill the LPSNRD (LPRCA) quarterly and LPSNRD will then invoice PMRNRD annually. The average cost per year for each NRD is \$43,160. Attached is the proposed joint-funding agreement between PMRNRD and LPSNRD on behalf of the LPRCA.

Staff's recommendation is to recommend the Board of Directors approve the five-year Joint Funding Agreement with PMRNRD and LPSNRD for LPRCA water quality monitoring in the Platte River Corridor at Louisville in the Platte, at Ashland in Salt Creek, and at Waterloo in the Elkhorn River.

d) Joint Funding Agreement Between USGS and LPSNRD for Lower Platte River Corridor Alliance Continuous Water Quality Monitoring in the Platte River at Leshara (ACTION)

The Funding agreement with USGS for the water quality monitoring at Leshara expires on June 30, 2025. Staff is recommending continuation of the agreement for monitoring on the Platte for five years (instead of three) to an end date of June 30, 2030. The total amount of the agreement is \$220,200 or \$59,200 for the USGS and \$161,000 for LPSNRD on behalf of the LPRCA. Through joint-funding agreements (next agenda item), the \$161,000 share is equally divided between MUD, LWS, LPNNRD, PMRNRD and LPSNRD. The average cost per year for each partner is \$6,440. Attached is the proposed funding agreement between USGS and LPSNRD for the Platte River gage at Leshara.

Staff's recommendation is to recommend the Board of Directors approve the Joint Funding Agreement Between USGS and LPSNRD for Lower Platte River Corridor Alliance Continuous Water Quality Monitoring in the Platte River at Leshara.

e) Joint Funding Agreements with MUD, LWS, LPNNRD, PMRNRD and LPSNRD for LPRCA water quality monitoring in the Platte River at Leshara (ACTION)

The continuous water quality monitoring gage located near Leshara has been funded by five partners who, as of six years ago, decided to equally fund the USGS gage. Those joint funding agreements have expired and the funding agreement with USGS is set to expire in June 2025. We are looking to extend the agreements now for five years to match the USGS agreement. LPSNRD serves as the administration agency for the LPRCA and plans to enter into an agreement with USGS for said monitoring gage.

The terms of these four joint funding agreements are identical. USGS will bill the LPSNRD (LPRCA) quarterly and LPSNRD will then invoice PMRNRD annually. The average cost per year for each partner is \$6,440. Attached are the proposed joint-funding agreements between each of the partners and LPSNRD on behalf of the LPRCA.

Staff's recommendation is to recommend the Board of Directors approve the four joint funding agreements between MUD and LPSNRD, LWS and LPSNRD, LPNNRD and LPSNRD, and PMRNRD and LPSNRD for Lower Platte River Corridor Alliance water quality monitoring in the Platte River at Leshara.