## LOWER PLATTE SOUTH

#### natural resources district

3125 Portia Street | P.O. Box 83581 • Lincoln, Nebraska 68501-3581 P: 402.476.2729 • F: 402.476.6454 | www.lpsnrd.org

## Memorandum

Date:

April 19, 2022

To:

**Board of Directors** 

From: David Potter, Assistant General Manager

RE:

Platte River Subcommittee April 18, 2022 Meeting Minutes.

The Platte River Subcommittee met in person at the District office on Monday, April 18, 2022. Subcommittee members in attendance included Ken Vogel, Don Jacobson, Gary Aldridge, Gary Hellerich, Christine Lamberty, Ron Nolte, Anthony Schutz, and Ray Stevens. Others attending the meeting were Deborah Eagan, Matt Moser with USGS, and David Potter. The meeting was called to order by Chair Vogel at 5:30 p.m. and the agenda was reviewed. There were four action items on the agenda and all were with the Lower Platte River Corridor Alliance (LPRCA) stream gage 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 longterm sites, and since 2016 from the gage at Leshara.

Potter informed the subcommittee that 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 was provided (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 out between the federal fiscal year and the fiscal year used by the NRDs.

The first item was consideration of Joint Funding Agreements with MUD, LWS, LPNNRD, PMRNRD and LPSNRD for LPRCA water quality monitoring in the Platte River at Leshara. The continuous water quality monitoring gage located near Leshara has been funded by five partners who, as of three 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 2022. The proposal is to extend the agreements another three years. Attached are the proposed joint-funding agreements between each of the partners and LPSNRD on behalf of the LPRCA. LPSNRD serves as the administrating agency for the LPRCA and will enter into an agreement with USGS for said monitoring gage. The terms of these four joint funding agreements are identical, except that LWS has agreed to pay the total amount upfront. Since the payment to USGS is on a quarterly basis and the LPRCA invoices the participating agencies once a year, the LPRCA will hold the LWS amount on account and use accordingly. Matt Moser answered various questions from the subcommittee regarding data collection, stream gage logistics, and benefits of the monitoring.

It was moved by Jacobson, seconded by Stevens, and unanimously approved to recommend the Board of Directors approve the joint funding agreements between MUD and LPSNRD, LWS and LPSNRD, LPNNRD and LPSNRD, and PMRNRD and LPSNRD for LPRCA water quality monitoring in the Platte River at Leshara.

The second item was consideration of the 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. The funding agreement with USGS for the three long-term sites is set to expire in June 2022. 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 for the next three years. 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 we will then invoice PMRNRD annually. Attached is the proposed joint-funding agreement between PMRNRD and LPSNRD on behalf of the LPRCA.

It was moved by Stevens, seconded by Hellerich, and unanimously approved to recommend the Board of Directors approve the 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.

Item number three was consideration of the Joint Funding Agreement Between USGS and LPSNRD for Lower Platte River Corridor Alliance Continuous Water Quality Monitoring in the Platte River at Leshara. The Funding agreement with USGS for the water quality monitoring at Leshara expires on June 30, 2022. Staff is recommending continuation of the agreement for monitoring on the Platte for another three years to an end date of June 30, 2025. The total amount of the agreement is \$110,800 or \$30,400 for the USGS and \$80,400 for LPSNRD. Through joint-funding agreements, the \$80,400 share is equally divided between MUD, LWS, LPNNRD, PMRNRD and LPSNRD. Attached is proposed funding agreement between USGS and LPSNRD for the Platte River gage at Leshara.

It was moved by Stevens, seconded by Hellerich, and unanimously approved to recommend the Board of Directors approve the Joint Funding Agreement Between USGS and LPSNRD for LPRCA Continuous Water Quality Monitoring in the Platte River at Leshara.

The fourth agenda item was consideration of the 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. The Funding agreement with USGS for the three long-term water quality monitoring sites expires on June 30, 2022. Staff is recommending continuation of the agreement for monitoring in the Lower Platte Corridor for another three years to an end date of June 30, 2025. The total amount of the agreement is \$313,600 or \$75,200 for the USGS and \$238,400 for LPSNRD. Through a joint-funding agreement, the \$238,400 share is equally divided between PMRNRD and LPSNRD. Attached is proposed funding agreement between USGS and LPSNRD for the three long-term sites in the Lower Platte River Corridor.

It was moved by Jacobson, seconded by Stevens, and unanimously approved to recommend the Board of Directors approve the Joint Funding Agreement between USGS and LPSNRD for LPRCA Water Quality Monitoring in Platte River Corridor at Louisville in the Platte, at Ashland in Salt Creek, and at Waterloo in the Elkhorn River.

With no further business or discussion, the meeting was adjourned at 6:06 p.m.

## **USGS Water Quality Gages on the Platte River near Leshara**

- The USGS Nebraska Water Science Center in addition to several cooperators are interested in extending the 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. This site has a joint agreement with several cooperators. This site's operation is similar to data collected at other USGS-Lower Platte River monitoring sites.
- 2) Water quality information collected at this site helps:
  - a) Monitoring in support of the Lower Platte River's Water Quality Management Plan
  - b) 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.
  - c) Assessing the stream health for fisheries
  - d) Better characterization of nitrate concentration in the drinking water source of many Nebraskans.
  - e) Inform those who use the river for recreating of potential water quality risks
  - f) Development of surrogate estimates to help better quantify loads of non-monitored parameters.
  - i) Assess the stream health for both immediate concentrations and loads heading downstream
  - g) Understand nitrate concentrations above the shallow aquifers used for drinking water
- 3) The water quality gage at the Platte River Leshara has been a multi-cooperative agreement.
  - a) Funds contributed by Lower Platte South NRD, Lower Platte North NRD, Papio-Missouri NRD, Lincoln Water Systems, M.U.D, and USGS
  - b) For the 2022-2024 data collection the USGS contributes 30% of the total cost, Papio, LPS, LPN, , LWS, and M.U.D c split the remaining funds.
- 4) The current agreement runs from April 30, 2019 to June 30, 2022. This covers data collection for the 2019-2021 calendar years. A proposed extension to this agreement would cover data collection for the years of 2022-2024. 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 2021 data collection year. Please see Table 2 for a detailed breakout of charges.

Table 1:

	Federal Fiscal Year 2022	Federal Fiscal Year 2023	Federal Fiscal Year 2024	Federal Fiscal Year 2025	Total
USGS	\$7,200	\$9,600	\$10,000	\$3,600	\$30,400
Partners	\$19,000	\$26,000	\$27,200	\$8,200	\$80,400

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

Table 2: Agreement #

16EMNE000210

Billing Date	Total Amount	Federal Fiscal Year	LPN NRD	LPS NRD	Papio-M NRD	LWS	M.U.D.	USGS	
6/30/2022	\$13,100	2022	\$1,900	\$1,900	\$1,900	\$1,900	\$1,900	\$3,600	
8/31/2022	\$13,100	2022	\$1,900	\$1,900	\$1,900	\$1,900	\$1,900	\$3,600	F1-23
12/31/2022	\$8,900	2023	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$2,400	6,400
3/31/2023	\$8,900	2023	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$2,400	
6/30/2023	\$8,900	2023	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$2,400	
8/31/2023	\$8,900	2023	\$1,300	\$1,300	\$1,300	\$1,300	\$1,300	\$2,400	FY-24
12/31/2023	\$9,300	2024	\$1,360	\$1,360	\$1,360	\$1,360	\$1,360	\$2,500	>5,320
3/31/2024	\$9,300	2024	\$1,360	\$1,360	\$1,360	\$1,360	\$1,360	\$2,500	
6/30/2024	\$9,300	2024	\$1,360	\$1,360	\$1,360	\$1,360	\$1,360	\$2,500	
8/31/2024	\$9,300	2024	\$1,360	\$1,360	\$1,360	\$1,360	\$1,360	\$2,500	FY-25
12/31/2024	\$5,900	2025	\$820	\$820	\$820	\$820	\$820	\$1,800	> 4,360
3/30/2025	\$5,900	2025	\$820	\$820	\$820	\$820	\$820	\$1,800	
	\$110,800		\$16,080	\$16,080	\$16,080	\$16,080	\$16,080	\$30,400	

Budgeting assumes all cooperators would take part and fund the agreement equally.

- 5) Beginning with the installment in 2016, a nitrate meter was also deployed at this to provide continuous nitrate concentrations in the Platte River. This location has been useful because it is above the L.W.S. and M.U.D. wellfields. The nitrate meter operates similarly to data being collected downstream at the Platte River at Louisville, and the Elkhorn River at Waterloo. Together, these monitors help provide a better understanding of nutrient concentrations and loads in the Lower Platte River.
- 6) Parameters monitored at the Platte River near Leshara include: water temperature, specific conductance, turbidity, dissolved oxygen, and nitrate
  - i) Data for the site can be accessed at: https://waterdata.usgs.gov/ne/nwis/uv?site\_no=06796500
- 7) These water quality gages are operated seasonally from April 1 to October 1 because of the risk for ice damage to the equipment.

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



New 2022 agreement

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

The USGS Nebraska Water Science Center, Lower Platte South NRD, and Papio Missouri NRD are interested in extending the agreement for continuous water quality monitoring in the Lower Platter 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 2022, 2023, and 2024 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. 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.

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 Papio-Missouri River NRD, and the Lower Platte South NRD.

Seasonal data collection for the current agreement is scheduled for completion in the fall of 2021, with the agreement set to expire on April 30, 2022. The proposed extension would add data collection for the 2022-2024 years and extend the agreement from June 30, 2022 to June 30, 2025. All historic and real-time data are provided on the USGS website.

Below are the approximate annual funding levels for the Papio-M and LPS NRD. These combined funding levels are very similar to the funding levels from the previous three-year agreement. These funds include the data collection at each of the three locations mentioned above.

Table 1:

	Federal Fiscal Year 2022	Federal Fiscal Year 2023	Federal Fiscal Year 2024	Federal Fiscal Year 2025	Total
USGS	\$14,000	\$26,000	\$27,200	\$8,000	\$75,200
Papio-M NRD	\$26,200	\$40,800	\$42,800	\$9,400	\$119,200
Lower Platte South NRD	\$26,200	\$40,800	\$42,800	\$9,400	\$119,200

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

The following is extended billing information for the NRDs use. If the Federal fiscal year is divided out to fit State fiscal years, either the Papio-M or LPS NRDs could expect to pay the following for each of its fiscal years:

7/1/2022 to 6/30/2023	\$46,600
7/1/2023 to 6/30/2024	\$41,800
7/1/2024 to 6/30/2025	\$30,800

Below is an extended breakdown with expected billing dates and amounts:

Table 2:

Agreement # 13EMNE000250

Billing Date	Total Amount	Federal Fiscal Year	Papio-M NRD	LPS NRD	USGS
6/30/2022	\$33,200	2022	\$13,100	\$13,100	\$7,000
8/31/2022	\$33,200	2022	\$13,100	\$13,100	\$7,000
12/31/2022	\$26,900	2023	\$10,200	\$10,200	\$6,500
3/31/2023	\$26,900	2023	\$10,200	\$10,200	\$6,500
6/30/2023	\$26,900	2023	\$10,200	\$10,200	\$6,500
8/31/2023	\$26,900	2023	\$10,200	\$10,200	\$6,500
12/31/2023	\$28,200	2024	\$10,700	\$10,700	\$6,800
3/31/2024	\$28,200	2024	\$10,700	\$10,700	\$6,800
6/30/2024	\$28,200	2024	\$10,700	\$10,700	\$6,800
8/31/2024	\$28,200	2024	\$10,700	\$10,700	\$6,800
12/31/2024	\$13,400	2025	\$4,700	\$4,700	\$4,000
3/30/2025	\$13,400	2025	\$4,700	\$4,700	\$4,000
	\$313,600		\$119,200	\$119,200	\$75,200

Project completion date: 6/30/2025

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 the Metropolitan Utilities 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 March through October in 2022, 2023 and 2024.

#### **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. The Metropolitan Utilities District will provide \$6,400.00 in 2022 (FY23), \$5,320.00 in 2023 (FY24), and \$4,360.00 in 2024 (FY25) for a total of \$16,080 for the three-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 calendar year 2024 when all required funds have been received and data collection completed.

This Agreement is hereby approved and executed by the follow	ing parties on the dates show
below.	
Paul Zillig, General Manager LPSNRD	DATE
— DocuSigned by:	
Michael A. Louring	02/17/2022
Michael Koenig Vice-President of Water Operations MIID	DATE



Tracking #: 118762790

## DIRECTORIAL ORDER NO. 27700

Originating Department: TRANSPORTATION AND UTILITIES - WATER

# BY VIRTUE OF THE AUTHORITY VESTED IN ME BY THE MAYOR OF THE CITY OF LINCOLN, NEBRASKA AS SET FORTH IN ADMINISTRATIVE REGULATION NO. 26:

I hereby execute and approve on behalf of the City of Lincoln the attached **Agreement**, which involves the following information:

Name of	Lower Platte South Natural Resources District					
Contractor(s)						
Duration	3/25/2022 to	12/31/2024	_			
Amount	\$16,080.00					
Purpose of Agreement	Joint funding agreement is for collecting and reporting Platte River water quality d by the USGS from a shared monitoring station located near Leshara, NE.					
Funding Source	70200	1300	6950			

Dated this 25th day of March, 2022.

Approved as to Form & Legality:

City Attorney's Office

Approved:

Transportation and Utilities

Department

Finance Department

Purchasing Department

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 Lincoln Water System (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 March through October in 2022, 2023 and 2024.

#### 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. Lincoln Water System will provide \$16,080 in 2022 (FY23) for the three-year period 2002 (FY23) through 2024 (FY25). The Lower Platte River Corridor Alliance will pay the balance of the 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 calendar year 2024 when all required funds have been received and data collection completed.

This Agreement is hereby approved and executed by the following parties below.	on the dates shown
Paul Zillig, General Manager LPSNRD	DATE
Elizabeth Elliott, Director of Transportation & Utilities, City of Lincoln	DATE

## **City of Lincoln Signature Page**

# LTU AGREEMENT City of Lincoln Lower Platte South Natural Resources District

## **EXECUTION BY THE CITY OF LINCOLN, NEBRASKA**

ATTEST:

CITY OF LINCOLN, NEBRASKA

Transportation And Utilities - Water

Approved by Directorial Order No. 27700

Dated 3/25/2022

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 Lower Platte North 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 March through October in 2022, 2023 and 2024.

#### 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. Lower Platte North Natural Resources District will provide \$6,400.00 in 2022 (FY23), \$5,320.00 in 2023 (FY24), and \$4,360.00 in 2024 (FY25) for a total of \$16,080 for the three-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 calendar year 2024 when all required funds have been received and data collection completed.

This Agreement is hereby approved and executed by the felow.	
Paul Zillig, General Manager LPSNRD	DATE
Frank Jolland Lower Platte North Natural Resources District	2-10 - 20 DATE

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 March through October in 2022, 2023 and 2024.

#### **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 \$6,400.00 in 2022 (FY23), \$5,320.00 in 2023 (FY24), and \$4,360.00 in 2024 (FY25) for a total of \$16,080 for the three-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 calendar year 2024 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.

Paul Zillig, General Manager LPSNRD

DATE

4-14-22

John Winkler, General Manager PMRNRD

DATE

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 March through October in 2022, 2023 and 2024.

#### **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 \$46,600.00 in 2022 (FY23), \$41,800.00 in 2023 (FY24), and \$30,8000.00 in 2024 (FY25) for a total of \$119,200.00 for the three-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 calendar year 2024 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.

Paul Zillig, General Manager LPSNRD

DATE

John Winkler, General Manager PMRNRD

4-14-22 DATE



## United States Department of the Interior

#### U.S. GEOLOGICAL SURVEY

Nebraska Water Science Center 5231 South 19<sup>th</sup> Street Lincoln, NE 68512-1271

March 3, 2022

Paul Zillig Lower Platte South Natural Resources District PO Box 83581 Lincoln, NE 68501-3581

Dear Mr. Zillig:

Enclosed is Joint Funding Agreement 22NRJFA00360 for the continuous water quality monitoring at Leshara. The total amount of the agreement is \$110,800 or \$30,400 for the U.S. Geological Survey and \$80,400 for the Lower Platte South Natural Resources District. The agreement end date is June 30, 2025. Please sign one copy of the agreement and return it to me by email. Please retain a copy for your records. Work cannot be started until we receive the signed agreement.

Work performed with funds from this agreement will be conducted under the authority of Statute 43 USC 50 on a fixed-price basis. Billings will be rendered quarterly. The results of all work under this agreement will be available for publication by the U.S. Geological Survey.

Please contact Matt Moser at 402-429-1672 if you have any questions concerning this agreement.

Sincerely,

STEVEN PETERSON

Digitally signed by STEVEN

PETERSON

Date: 2022.03.03 13:00:25 -06'00'

Steven M. Peterson, Director USGS Nebraska Water Science Center

1 Enclosure

DUNS No. 949286512

Form 9-1366 (May 2018)

#### U.S. Department of the Interior U.S. Geological Survey Joint Funding Agreement FOR

**Water Resource Investigations** 

Customer #: 6000000121 Agreement #: 22NRJFA00360 Project #: NR00GS1 TIN #: 47-0542969

Fixed Cost Agreement YES[X]NO[]

THIS AGREEMENT is entered into as of April 1, 2022, by the U.S. GEOLOGICAL SURVEY, Nebraska Water Science Center, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICTPARTY of the second part.

- 1. The parties hereto agree that subject to the availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation **for continuous water quality monitoring at Leshara**, herein called the program. The USGS legal authority is 43 USC 36C; 43 USC 50, and 43 USC 50b.
- 2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) include In-Kind-Services in the amount of \$0.00

(a) \$30,400 by the party of the first part during the period

April 1, 2022 to June 30, 2025

(b) \$80,400 by the party of the second part during the period

April 1, 2022 to June 30, 2025

(c) Contributions are provided by the party of the first part through other USGS regional or national programs, in the amount of: \$0

Description of the USGS regional/national program:

- (d) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.
- (e) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.
- The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.
- 4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.
- 5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.
- 6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.
- 7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.
- 8. The maps, records or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program, and if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at cost, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records or reports published by either party shall contain a statement of the cooperative relations between the parties. The Parties acknowledge that scientific information and data developed as a result of the Scope of Work (SOW) are subject to applicable USGS review, approval, and release requirements, which are available on the USGS Fundamental Science Practices website <a href="https://www.usgs.gov/about/organization/science-support/science-guality-and-integrity/fundamental-science-practices">https://www.usgs.gov/about/organization/science-support/science-guality-and-integrity/fundamental-science-practices</a>

Form 9-1366 (May 2018)

#### U.S. Department of the Interior U.S. Geological Survey Joint Funding Agreement FOR

Customer #: 6000000121 Agreement #: 22NRJFA00360

Project #: NR00GS1 TIN #: 47-0542969

#### **Water Resource Investigations**

9. Billing for this agreement will be rendered <u>quarterly</u>. Invoices not paid within 60 days from the billing date will bear Interest, Penalties, and Administrative cost at the annual rate pursuant the Debt Collection Act of 1982, (codified at 31 U.S.C. § 3717) established by the U.S. Treasury.

	USGS Technical Point of Contact		<b>Customer Technical Point of Contact</b>
Name:	Matt Moser	Name:	David Potter
Address:	Physical Scientist 5231 South 19 <sup>th</sup>	Address:	PO Box 83581
<b>-</b>	Lincoln, NE 68512		Lincoln, NE 68501
Telephone: Fax:	(402) 328-4184 (402) 328-4101	Telephone: Fax:	(402) 476-2729
Email:	mmoser@usgs.gov	Email:	
	USGS Billing Point of Contact		<b>Customer Billing Point of Contact</b>
Name:	Amanda Flynn	Name:	Paul Zillig
Address:	Budget Analyst 5231 South 19 <sup>th</sup>	Address:	General Manager
/ (dd1033.	Lincoln, NE 68512	Address.	PO Box 83581 Lincoln, NE 68501
Telephone:	(402) 328-4144	Telephone:	(402) 476-2729
Fax: Email:	(402) 328-4101 aflynn@usgs.gov	Fax: Email:	,
	U.S. Geological Survey United States Department of Interior	Lower Pla	atte South Natural Resources District
STEVEN By PETERS	PETERSON	By	<u>Signatures</u> Date:
Name: Steve	Peterson	Name:	Date
Title: Directo	r	Title:	
		Bv	Date:
		Name:	
		Title:	
		Ву	Date:
		Name:	

Title:



## United States Department of the Interior

U.S. GEOLOGICAL SURVEY Water Resources Discipline Nebraska Water Science Center 5231 South 19<sup>th</sup> Street Lincoln, NE 68512-1271

March 3, 2022

Paul Zillig Lower Platte South Natural Resources District PO Box 83581 Lincoln, NE 68501-3581

Dear Mr. Zillig:

Enclosed is Joint Funding Agreement 22NRJFA00350 for the continuous water quality monitoring at three sites in the Lower Platte basin. The total amount of the agreement is \$313,600, or \$238,400 for the Lower Platte South Natural Resources District and \$75,200 for the U.S. Geological Survey. The agreement end date is June 30, 2025. Please sign one copy of the agreement and return it to me by email. Please retain a copy for your records. Work cannot be started until we receive the signed agreement.

Work performed with funds from this agreement will be conducted under the authority of Statute 43 USC 50 on a fixed-price basis. Billings will be rendered quarterly. The results of all work under this agreement will be available for publication by the U.S. Geological Survey.

Please contact Matt Moser at 402-429-1672 if you have any questions concerning this agreement.

Sincerely,

STEVEN

Digitally signed by STEVEN

PETERSON

PETERSON

Date: 2022.03.03 13:01:53 -06'00'

Steven M. Peterson, Director USGS Nebraska Water Science Center

1 Enclosure

DUNS No. 949286512

Form 9-1366 (May 2018)

#### U.S. Department of the Interior U.S. Geological Survey Joint Funding Agreement FOR

**Water Resource Investigations** 

Customer #: 6000000121 Agreement #: 22NRJFA00350 Project #: NR00GS1 TIN #: 47-0542969

Fixed Cost Agreement YES[X]NO[]

THIS AGREEMENT is entered into as of April 1, 2022, by the U.S. GEOLOGICAL SURVEY, Nebraska Water Science Center, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICTPARTY of the second part.

- 1. The parties hereto agree that subject to the availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation to continue the operation of the continuous water quality monitoring at three sites in the Lower Platte basin, herein called the program. The USGS legal authority is 43 USC 36C; 43 USC 50, and 43 USC 50b.
- 2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) include In-Kind-Services in the amount of \$0.00

(a) \$75,200 by the party of the first part during the period

April 1, 2022 to June 30, 2025

(b) \$238,400 by the party of the second part during the period

April 1, 2022 to June 30, 2025

(c) Contributions are provided by the party of the first part through other USGS regional or national programs, in the amount of: \$0

Description of the USGS regional/national program:

- (d) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties.
- (e) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.
- 3. The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.
- 4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.
- 5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.
- 6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.
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- 8. The maps, records or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program, and if already published by the party of the first part shall, upon request, be furnished by the party of the first part, at cost, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records or reports published by either party shall contain a statement of the cooperative relations between the parties. The Parties acknowledge that scientific information and data developed as a result of the Scope of Work (SOW) are subject to applicable USGS review, approval, and release requirements, which are available on the USGS Fundamental Science Practices website <a href="https://www.usgs.gov/about/organization/science-support/science-quality-and-integrity/fundamental-science-practices">https://www.usgs.gov/about/organization/science-support/science-quality-and-integrity/fundamental-science-practices</a>

Form 9-1366 (May 2018)

#### U.S. Department of the Interior U.S. Geological Survey Joint Funding Agreement FOR

Customer #: 6000000121 Agreement #: 22NRJFA00350

Project #: NR00GS1 TIN #: 47-0542969

#### **Water Resource Investigations**

9. Billing for this agreement will be rendered **guarterly**. Invoices not paid within 60 days from the billing date will bear Interest, Penalties, and Administrative cost at the annual rate pursuant the Debt Collection Act of 1982, (codified at 31 U.S.C. § 3717) established by the U.S. Treasury.

	USGS Technical Point of Contact		Customer Technical Point of Contact
Name:	Matt Moser Physical Scientist	Name:	David Potter
Address:	5231 South 19 <sup>th</sup> Lincoln, NE 68512	Address:	PO Box 83581 Lincoln, NE 68501
Telephone: Fax:	(402) 328-4184	Telephone: Fax:	(402) 476-2729
Email:	(402) 328-4101 mmoser@usgs.gov	Email:	
	USGS Billing Point of Contact		Customer Billing Point of Contact
Name:	Amanda Flynn	Name:	Paul Zillig
Address:	Budget Analyst 5231 South 19 <sup>th</sup>	Address:	General Manager PO Box 83581
Telephone:	Lincoln, NE 68512 (402) 328-4144	Telephone:	Lincoln, NE 68501 (402) 476-2729
Fax: Email:	(402) 328-4101 aflynn@usgs.gov	Fax: Email:	
	U.S. Geological Survey United States Department of Interior	Lower Pl	atte South Natural Resources District
STEVEN	FE I ENSON		Signatures
By PETERSO		Ву	Date:
Name: Steve Title: Directo		Name: Title:	
		Ву	Date:
		Name:	
		Title:	
		Ву	Date:
		Name:	

Title: