




LOWER PLATTE SOUTH natural resources district

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Memorandum

Date: March 14, 2019
To: Directors
From: David Potter, Assistant General Manager 
Subject: Information for the Platte River Subcommittee meeting

The Platte River Subcommittee will meet on Wednesday, March 20th, 2019 at 1:30 p.m. at the Lower Platte South NRD just prior to the Board meeting. Agenda items include:

Consideration of Joint Funding Agreements with LPNNRD, Lincoln Water System, and MUD for funding of the Water Quality Monitoring Site at Leshara

LPSNRD on behalf of the LPRCA had entered into an agreement with USGS for the water quality monitoring gage at Leshara back in 2016. Funding partners for that monitoring site agreement included LPSNRD, PMRNRD, LPNNRD, Lincoln Water System (LWS), and Metropolitan Utility District (MUD). USGS also contributed to the cost of the monitoring site. The funding breakdown in the original agreement included the three NRDs equally at 22%, LWS and MUD contributing 10.5% of the cost, and USGS 13%. Participation from LWS and MUD was approved in a joint funding agreement because they were not a member of the LPRCA.

An extension or second 3-year agreement is now being considered, however LWS and MUD have agreed to be an equal funding partner with the other agencies and LPNNRD is no longer a member of the LPRCA. Therefore, three joint funding agreements have been drafted for consideration. The agreements identify each of the agencies (LWS, MUD and LPNNRD) as a partner with LPRCA for a three-year period and identify a total contribution of \$6,562 per year towards the continued operation of the real-time water quality monitoring site at Leshara. The three joint funding agreements are attached for your review. Invoices will be sent to the three agencies by the LPRCA each year and LPSNRD will authorize payments to the USGS on behalf of the LPRCA on a quarterly basis.

Staff recommendation is to recommend the LPSNRD Board of Directors, on behalf of the LPRCA, approve and authorize the general manager to sign the joint funding agreements with LPNNRD, Lincoln Water System, and MUD for funding of the water quality monitoring site at Leshara.

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Consideration of an agreement with the United States Geologic Survey for Real-Time Water Quality Monitoring Network site at Leshara.

The LPRCA has been partnering with the USGS for water quality data collection, analysis, and publication of the data at multiple sites throughout the corridor for several years. One of the more recent sites is the gage at Leshara and is part of the LPRCA Real-time Monitoring Network. The water quality monitor at Leshara was originally deployed in April 2016 that provides continuous measurements of nitrate, temperature, specific conductance, turbidity, and dissolved oxygen data in near-real time over the internet. Funding for the Leshara site has been provided by LPSNRD, PMRNRD, LPNNRD, LWS and MUD and also by USGS.

The proposed extension of the agreement would run from April 1, 2019 and end around June 30, 2022. The agreement will cover data collection for 2019-2021. See the attached information which outlines the history, benefits and costs. The current 3-year agreement for the Leshara site is funded by Lower Platte South NRD (22% of funding), Lower Platte North NRD (22%), Pappio-Missouri River NRD (22%), Lincoln Water Systems (10.5%), M.U.D (10.5%), and USGS (13%). The total cost of that project or original agreement was \$110,564 with LPRCA partners paying \$84,743 and USGS paying \$25,821. The proposed cost of the second 3-year agreement would be \$113,893 with USGS picking up \$15,468. The five agencies have agreed to equally contribute to the balance (\$98,425), which would be a cost of \$19,685 per agency or about \$6,652 per agency per year. Funds for Leshara site will be collected annually by the LPRCA/LPSNRD and then dispersed to USGS within our normal quarterly billing period.

A copy of the agreement is attached for your review.

Staff recommendation is to recommend the LPSNRD Board of Directors, on behalf of the LPRCA, approve the agreement with USGS for the continued operation of the real-time continuous water quality monitoring site at Leshara, subject to legal counsel review.

Consideration of an agreement with the United States Geologic Survey for Real-Time Water Quality Monitoring Network sites on the Elkhorn River at Waterloo, on Salt Creek at Ashland, and on the Platte River at Louisville (3 long-term sites).

The LPRCA currently partners with the USGS for water quality data collection, analysis, and publication of the data at three long-term sites in the corridor. These three sites include, the Elkhorn River at Waterloo, Salt Creek at Ashland, and the Platte River at Louisville. The water quality monitors have been collecting data since fall of 2007 and provide continuous measurements of nitrate, temperature, specific conductance, turbidity, and dissolved oxygen data in near-real time over the internet. The USGS real-time water quality monitoring stations are part of the LPRCA Real-time Monitoring Network. Seasonal data collection for the current agreement completed in the fall of 2018 and the current agreement is set to expire on March 30, 2019. The proposed extension would add data collection for the 2019-2021 years and extend the agreement from April 1, 2019 to June 30, 2022. See the attached information which outlines the history, benefits and costs.

Funding for the current 3-year agreement for the 3 long-term sites has been provided by LPSNRD and PMRNRD as part of the LPRCA and also by USGS. The total cost of that project was \$298,348 with LPRCA partners paying \$227,557 (LPSNRD 50% and PMRNRD 50%) and USGS paying \$70,791. The proposed cost of the extended 3-year agreement would be \$308,208 with USGS picking up a reduced amount of \$58,378. If extended, it would be a cost of \$124,915 for

each NRD or about \$41,638 per agency per year. Funds for the agreement will be collected by the LPRCA/LPSNRD and then dispersed to USGS within our normal quarterly billing period.

A copy of the agreement is attached for your review.

Staff recommendation is to recommend the LPSNRD Board of Directors, on behalf of the LPRCA, approve the agreement with USGS for the continued operation of the real-time continuous water quality 3 long-term monitoring sites on the Elkhorn River at Waterloo, Salt Creek at Ashland, and the Platte River at Louisville, subject to legal counsel review.

DP/dp

Encl: (7)

JOINT FUNDING AGREEMENT

For

REAL-TIME CONTINUOUS WATER QUALITY MONITORING

in the LOWER PLATTE RIVER AT LESHARA

The “JOINT FUNDING AGREEMENT—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 2019, 2020 and 2021.

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 Lower Platte North Natural Resources District will provide \$6,562 in 2019 with the intent to fund the data collection at the same amount in 2020 and 2021. The Lower Platte River Corridor Alliance, together with other participating agencies, will provide \$26,247 annually.

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 2021 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



Eric Gottschalk, General Manager LPNNRD

3-12-19
DATE

JOINT FUNDING AGREEMENT

For

REAL-TIME CONTINUOUS WATER QUALITY MONITORING

in the LOWER PLATTE RIVER AT LESHARA

The “JOINT FUNDING AGREEMENT—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 2019, 2020 and 2021.

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 \$6,562 in 2019 with the intent to fund the data collection at the same amount in 2020 and 2021. The Lower Platte River Corridor Alliance, together with other participating agencies, will provide \$26,247 annually.

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 2021 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

Steve Owen, Superintendent of Eater Production & Treatment, LWS

DATE

Miki Esposito, Director of Transportation & Utilities, City of Lincoln

DATE

JOINT FUNDING AGREEMENT

For

REAL-TIME CONTINUOUS WATER QUALITY MONITORING

in the LOWER PLATTE RIVER AT LESHARA

The "JOINT FUNDING AGREEMENT—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 2019, 2020 and 2021.

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 \$6,562 in 2019 with the intent to fund the data collection at the same amount in 2020 and 2021. The Lower Platte River Corridor Alliance, together with other participating agencies, will provide \$26,247 annually.

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 2021 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

Jim Shields, VP Water Operations, MUD

DATE

USGS Water Quality Gage on the Platte River near Leshara

During the initial stages in the development of the Lower Platte River Water Quality Management Plan, it was determined that a data and understanding gap existed regarding water quality in the section of the Platte River upstream of the confluence with the Elkhorn River. In response, a water quality monitor was deployed in April 2016 at the Platte River near Leshara, that provided continuous measurements of nitrate, temperature, turbidity, dissolved oxygen, and specific conductance in the river. 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.

The benefits of water quality data collected at this site are:

- Collection of data in support of the Lower Platte River's Water Quality Management Plan
- Characterization of the water quality of the Lower Platte River upstream of the Elkhorn River confluence
- 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.
- Provide data to assess the stream health for fisheries
- Better characterization of nitrate concentration patterns in the water source that contributes drinking water to many Nebraskans.
- Inform those who use the river for recreating

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

The USGS NEWSC operates the site and publishes the data at an approximate annual cost of \$37,000, and a three year cost of approximately \$113,893.

Funding for the site has been provided from six agencies: Lower Platte South NRD, Lower Platte North NRD, Papio-Missouri NRD, Lincoln Water Systems, M.U.D, and USGS.

The current agreement runs from April 1, 2016 to April 1, 2019. This covers data collection for the 2016-2018 calendar years. A proposed extension to this agreement would cover data collection for 2019-2021. 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 2018 data collection year.

Agreement 16EMNE000210		
2019-2021 Monitoring Cost	Partners	USGS
\$113,893	\$98,425	\$15,468

If all five agencies participate at an equal funding level, the cost per agency would be \$19,685. The proposed agreement would run from April 1, 2019 and end around June 30, 2022

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

Agreement No. 16EMNE000210
Modification No. 001
Customer No. 6000000121
Cost Center GGEMNR0000
Project NR00GS1
TIN 47-0542969

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
SUPPLEMENTAL JOINT FUNDING AGREEMENT
FOR
WATER RESOURCES INVESTIGATIONS

THE GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the **LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT**, party of the second part, hereby agree to amend the Joint Funding Agreement No. **16EMNE000210** dated April 1, 2016 as follows:

Paragraph 2(a) is hereby **increased by \$15,468** to read as follows:

- (a) \$41,289 by the party of the first part during the period
April 1, 2016 to June 30, 2022


Paragraph 2(b) is hereby **increased by \$98,425** to read as follows:

- (b) \$183,168 by the party of the second part during the period
August 1, 2016 to June 30, 2022

The end date for this agreement has been changed to June 30, 2020. Billing for this agreement will be rendered **quarterly**. Payments of bills are due within 60 days after billing date. If not paid by the due date, interest will be charged at the current Treasury rate for each 30-day period, or portion thereof, that the payment is delayed beyond the due date. (31 USC 3717; Comptroller General File B-212222, August 23, 1983.)

Geological Survey
UNITED STATES
DEPARTMENT OF THE INTERIOR

LOWER PLATTE SOUTH
NATURAL RESOURCES DISTRICT

By 
Steven M. Peterson, Acting Director
Nebraska Water Science Center

By _____

Date September 9

Date _____

USGS DUNS: 949286512

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 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 2019, 2020, and 2021 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 completed in the Fall of 2018 and the current agreement is set to expire on March 30, 2019. The proposed extension would add data collection for the 2019-2021 years and extend the agreement from April 1, 2019 to June 30, 2022. 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.

	LPS NRD & Papio-M NRD	USGS
Fiscal Year 2019	\$61,386	\$20,902
Fiscal Year 2020	\$81,616	\$15,728
Fiscal Year 2021	\$87,216	\$16,892
Fiscal Year 2022	\$19,612	\$4,856

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:

7/1/2019 to 6/30/2020	\$51,097
7/1/2020 to 6/30/2021	\$42,208
7/1/2021 to 6/30/2022	\$31,610

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

USGS Agreement # 13EMNE000250					
Billing Date	Total Study Amount	Federal Fiscal Year	LPS NRD	Papio-M NRD	USGS
7/1/2019	\$41,144	2019	\$15,346	\$15,346	\$10,452
9/1/2019	\$41,144	2019	\$15,347	\$15,347	\$10,450
12/31/2019	\$24,336	2020	\$10,202	\$10,202	\$3,932
3/31/2020	\$24,336	2020	\$10,202	\$10,202	\$3,932
6/30/2020	\$24,336	2020	\$10,202	\$10,202	\$3,932
8/31/2020	\$24,336	2020	\$10,202	\$10,202	\$3,932
12/31/2020	\$26,027	2021	\$10,902	\$10,902	\$4,223
3/31/2021	\$26,027	2021	\$10,902	\$10,902	\$4,223
6/30/2021	\$26,027	2021	\$10,902	\$10,902	\$4,223
8/31/2021	\$26,027	2021	\$10,902	\$10,902	\$4,223
12/31/2021	\$12,234	2022	\$4,903	\$4,903	\$2,428
3/31/2022	\$12,234	2022	\$4,903	\$4,903	\$2,428
Total Study Amount	\$308,208		\$124,915	\$124,915	\$58,378

Project completion date: 6/30/2022

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

Agreement No. 13EMNE000250
Modification No. 004
Customer No. 6000000121
Cost Center GGEMNR0000
Project NR00GS1
TIN 47-0542969

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
SUPPLEMENTAL JOINT FUNDING AGREEMENT
FOR
WATER RESOURCES INVESTIGATIONS

THE GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the **LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT**, party of the second part, hereby agree to amend the Joint Funding Agreement No. **13EMNE000250** dated April 1, 2013 as follows:

Paragraph 2(a) is hereby **increased by \$58,378** to read as follows:

- (a) \$216,636 by the party of the first part during the period
April 1, 2013 to June 30, 2022


Paragraph 2(b) is hereby **increased by \$249,830** to read as follows:

- (b) \$685,482 by the party of the second part during the period
April 1, 2013 to June 30, 2022

The end of the agreement is changed to June 30, 2022. Billing for this agreement will be rendered **quarterly**. Payments of bills are due within 60 days after billing date. If not paid by the due date, interest will be charged at the current Treasury rate for each 30-day period, or portion thereof, that the payment is delayed beyond the due date. (31 USC 3717; Comptroller General File B-212222, August 23, 1983.)

Geological Survey
UNITED STATES
DEPARTMENT OF THE INTERIOR

LOWER PLATTE SOUTH
NATURAL RESOURCES DISTRICT

By 
Steven M. Peterson, Acting Director
Nebraska Water Science Center

By _____

Date 06/01/19

Date _____

USGS DUNS: 949286512