

Agenda Item: 6.

MEMORANDUM

TO: Programs, Projects and Operations Subcommittee

FROM: Amanda Grint, Water Resources Engineer

SUBJECT: Contract Renewal with USGS to Operate Papio Floodwarning System for 2015

DATE: December 3, 2014

In 1993, the District worked with the US Army Corps of Engineers (USACE) to install a flood warning system for the Papillion Creek Watershed. The system was upgraded in 2012, and consists of 22 gage stations. Five stations report rain data and the remaining 17 stations report rain and stream stage data. The attached map shows the location of the gages. The data is reported real time and is available to the public through the National Weather Service (NWS) and USGS web sites. The address of the NWS website is <http://water.weather.gov/ahps2/index.php?wfo=oax>. An agreement is in place with Douglas County, Sarpy County, Washington County and the City of Omaha to share the cost of the system.

At the same time as the upgrade in 2012, the District entered in to an agreement with the USGS for them to begin maintenance and monitoring of the entire Papillion Creek system and to continue operation of the stream gage on Omaha Creek at Homer. The attached proposal is a renewal of the maintenance contract with the USGS for 2015 in the total amount of \$145,345. The USGS cost share is \$14,760, through their cooperative water program reflected in the attached contract plus \$16,865 in discretionary funds from their National Streamflow Information Program, bringing the USGS total contribution to \$31,625, which is slightly higher than last year. This year's contract maintains the same level of service from USGS as in 2014 with the District share now at \$113,720, up slightly from the 2014 contribution of \$113,435.

Throughout 2014, the USGS provided quality data and valuable information to NWS to improve the potential for forecasting in the Papio watershed and to the District for operation and monitoring of the Papio flood control system during the numerous large rainfall events of this year.

Management recommends that the Subcommittee recommend to the Board that the General Manager be authorized to execute a proposed contract with the USGS in the amount of \$113,720.00 for the operation of the District's floodwarning system for the Papillion Creek Watershed and Omaha Creek gage at Homer.

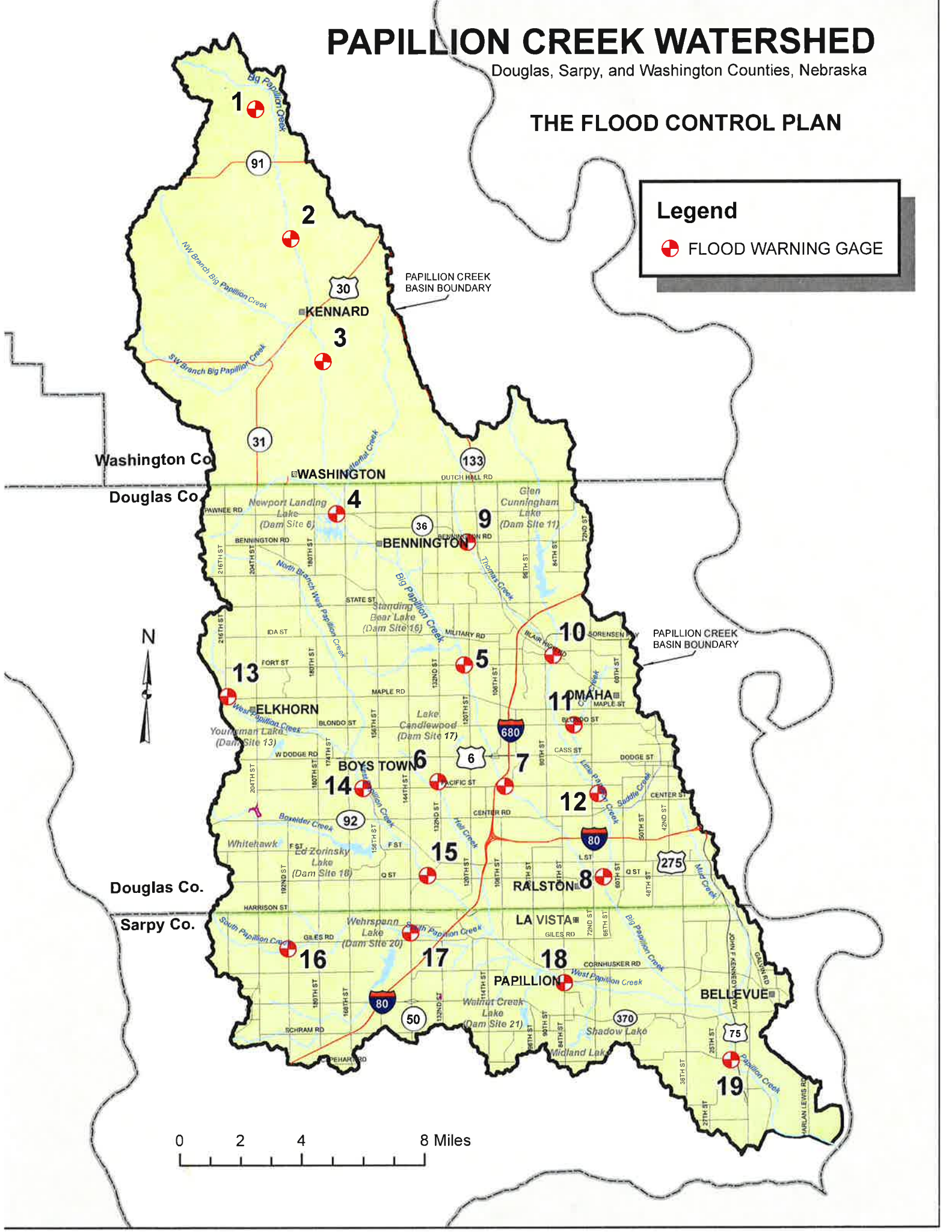
PAPILLION CREEK WATERSHED

Douglas, Sarpy, and Washington Counties, Nebraska

THE FLOOD CONTROL PLAN

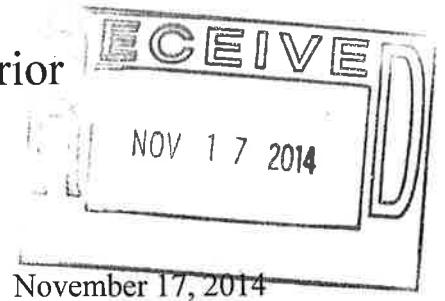
Legend

 FLOOD WARNING GAGE





United States Department of the Interior
U.S. GEOLOGICAL SURVEY
Nebraska Water Science Center
5231 South 19th Street
Lincoln, NE 68512-1271



John Winkler
Papio-Missouri River Natural Resources District
8901 South 154 Street
Omaha, NE 68138

Dear Mr. Winkler:

Enclosed are two copies of Joint Funding Agreement No. 15EMNE000130 for the operation of one streamgage at Omaha Creek at Homer and 22 gages (9 stage/discharge/precipitation, 8 stage/precipitation/rating development, and 5 rain-only) in the Papillion Creek watershed as listed in the enclosed summary of proposed funding. The total amount of the agreement for Cooperative Water program funding is \$128,480 or \$14,760 for the U.S. Geological Survey and \$113,720 for the Papio-Missouri River Natural Resources District. Funds in the amount of \$16,865 from the National Streamflow Information Program (NSIP), which are not included in the above amounts, have been used as a supplement to or in place of funds from the Cooperative Water Program. Please sign one copy of the agreement and return it to this office as soon as possible. The second copy is for your records. Work cannot be continued until we receive the signed agreement.

Work performed with funds from this agreement will be conducted on a fixed price basis under the authority of statute 43 USC 36C. Billings will be rendered quarterly in 2015. The results of all work under this agreement will be available for publication by the U.S. Geological Survey.

Publication of Annual Water-Data Reports (ADR) and Site Data Sheets (SDS) was discontinued effective October 1, 2014 and was replaced with a new evolutionary create-on demand NWISWeb product that was developed to provide water-year summary content. This NWISWeb Water-Year Summary Report provides the same information as that found in the ADR reports.

For more information or any questions about this transition, or any questions concerning this agreement, please contact Jason Lambrecht at 402-328-4124.

Sincerely,

Richard C. Wilson, Acting Director
USGS Nebraska Water Science Center

Form 9-1366
(Oct. 2005)

**U.S. Department of the
Interior
U.S. Geological Survey
Joint Funding Agreement
FOR
WATER RESOURCES INVESTIGATIONS**

Customer #:	6000000134
Agreement #:	15EMNE000130
Project #:	NR009R9
TIN #:	47-0542469
Fixed Cost Agreement	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

THIS AGREEMENT is entered into as of the 1st day of **October 2014**, by the **U.S. GEOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF THE INTERIOR**, party of the first part, and the **PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT**, party of the second part.

1. The parties hereto agree that subject to availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation the **operation of one streamgage at Omaha Creek at Homer and 22 gages (9 stage/discharge/precipitation, 8 stage/precipitation/rating development, and 5 rain-only) in the Papillion Creek watershed**, 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) includes In-Kind Services in the amount of \$0.

(a) **\$14,760** by the party of the first part during the period
October 1, 2014 to September 30, 2015

(b) **\$113,720** by the party of the second part during the period
October 1, 2014 to September 30, 2015

- (c) 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.
 - (d) 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.
 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.

Form 9-1366
continued

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

Customer #: 6000000134
Agreement #: 15EMNE000130
Project #: NR009R9
TIN #: 47-0542469

- 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 costs, 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.
- 9. USGS will issue billings utilizing Department of the Interior Bill for Collection (form DI-1040). Billing documents are to be rendered **quarterly**. Payments of bills are due within 60 days after the 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).

U.S. Geological Survey
United States
Department of the Interior

Papio-Missouri River Natural Resources
District

USGS Point of Contact

Customer Point of Contact

Name: Jason Lambrecht
Address: 5231 South 19 St
Lincoln, NE 68512


Name: Marlin Petermann
Address: 8901 South 154 St
Omaha, NE 68138

Telephone: 402-328-4124
Email: jmlambre@usgs.gov

Telephone: 402-444-6222
Email: mpetermann@papiionrd.org

Signatures

Signatures

By  Date 11/14/14
Name: Richard C. Wilson
Title: Acting NEWSC Director

By _____ Date _____
Name: _____
Title: _____

By _____ Date _____
Name: _____
Title: _____

By _____ Date _____
Name: _____
Title: _____

Table 1. Summary of proposed funding for operation of stream gaging and rain stations supported by the Pappio-Missouri River Natural Resources District and other partners for period October 1, 2014 -- September 30, 2015.

[CR, continuous-record; SR, seasonal-record (Mar. 1-Oct. 31); CSG, crest-stage gage; CWP, Cooperative Water Program; PMR NRD, Pappio-Missouri River Natural Resources District; NSIP, National Streamflow Information Program; RT, real-time (satellite telemetry); USGS, U.S. Geological Survey; Q, Discharge; ST, Stage; PR, Rain; RD, Stage-Discharge Rating Development]

USGS Station number	PMR NRD Station Number	Station name	Funding				Gage type(s)	Data to be published	Footnote
			USGS CWP	PMR NRD	USGS NSIP	Total			
06601000		Omaha Creek at Homer	\$0	\$8,430	\$6,040	\$14,470	RT CR - 12 month: Q, ST	Annual daily Q and ST for Oct. 1-Sept. 30.	a
413403096135001	1	Rain gage near Orum	\$255	\$1,250		\$1,505	RT SR - 8 month (Mar. 1 - Oct. 31): PR	Precipitation data collected, not published.	
06610705	2	Big Papillion Creek near Blair	\$670	\$3,465		\$4,135	RT SR - 8 month (Mar. 1 - Oct. 31): ST, PR, RD	ST for Mar. 1 - Oct. 31. Rain data collected, not published. Three measurements of discharge for rating development.	
06610710	3	Big Papillion Creek near Kennard	\$670	\$3,465		\$4,135	RT SR - 8 month (Mar. 1 - Oct. 31): ST, PR, RD	ST for Mar. 1 - Oct. 31. Rain data collected, not published. Three measurements of discharge for rating development.	
06610720	4	Big Papillion Creek near Bennington	\$1,625	\$8,405		\$10,030	RT SR - 8 month (Mar. 1 - Oct. 31): Q, ST, PR	Daily Q and ST for Mar. 1 - Oct. 31. Rain data collected, not published.	
06610732	5	Big Papillion Creek at Fort Street at Omaha	\$0	\$5,790	\$4,240	\$10,030	RT SR - 8 month (Mar. 1 - Oct. 31): Q, ST, PR	Daily Q and ST for Mar. 1 - Oct. 31. Rain data collected, not published.	a
411504096071601	6	Rain Gage at Boys Town at Omaha	\$255	\$1,250		\$1,505	RT SR - 8 month (Mar. 1 - Oct. 31): PR	Precipitation data collected, not published.	
06610740	7	Big Papillion Creek at Pacific St at Omaha	\$670	\$3,465		\$4,135	RT SR - 8 month (Mar. 1 - Oct. 31): ST, PR, RD	ST for Mar. 1 - Oct. 31. Rain data collected, not published. Three measurements of discharge for rating development.	
06610742	9	Thomas Creek near Bennington	\$670	\$3,465		\$4,135	RT SR - 8 month (Mar. 1 - Oct. 31): ST, PR, RD	ST for Mar. 1 - Oct. 31. Rain data collected, not published. Three measurements of discharge for rating development.	
06610750	10	Little Papillion Creek near Irvington	\$0	\$7,835	\$2,195	\$10,030	RT SR - 8 month (Mar. 1 - Oct. 31): Q, ST, PR	Daily Q and ST for Mar. 1 - Oct. 31. Rain data collected, not published.	a
06610760	11	Cole Creek at Blondo Street at Omaha	\$670	\$3,465		\$4,135	RT SR - 8 month (Mar. 1 - Oct. 31): ST, PR, RD	ST for Mar. 1 - Oct. 31. Rain data collected, not published. Three measurements of discharge for rating development.	
06610765	12	Little Papillion Creek at Ak-Sar-Ben at Omaha	\$1,625	\$8,405		\$10,030	RT SR - 8 month (Mar. 1 - Oct. 31): Q, ST, PR	Daily Q and ST for Mar. 1 - Oct. 31. Rain data collected, not published.	
06610770	8	Big Papillion Creek at Q Street at Omaha	\$1,625	\$8,405		\$10,030	RT SR - 8 month (Mar. 1 - Oct. 31): Q, ST, PR	Daily Q and ST for Mar. 1 - Oct. 31. Rain data collected, not published.	
06610773	13	West Papillion Creek at Elkhorn	\$670	\$3,465		\$4,135	RT SR - 8 month (Mar. 1 - Oct. 31): ST, PR, RD	ST for Mar. 1 - Oct. 31. Rain data collected, not published. Three measurements of discharge for rating development.	
06610780	14	West Papillion Creek at Pacific St at Omaha	\$670	\$3,465		\$4,135	RT SR - 8 month (Mar. 1 - Oct. 31): ST, PR, RD	ST for Mar. 1 - Oct. 31. Rain data collected, not published. Three measurements of discharge for rating development.	
06610785	15	West Papillion Creek at Millard	\$1,625	\$8,405		\$10,030	RT SR - 8 month (Mar. 1 - Oct. 31): Q, ST, PR	Daily Q and ST for Mar. 1 - Oct. 31. Rain data collected, not published.	
06610786	16	South Papillion Creek near Gretna	\$670	\$3,465		\$4,135	RT SR - 8 month (Mar. 1 - Oct. 31): ST, PR, RD	ST for Mar. 1 - Oct. 31. Rain data collected, not published. Three measurements of discharge for rating development.	
06610788	17	South Papillion Creek at Chalco	\$1,625	\$8,405		\$10,030	RT SR - 8 month (Mar. 1 - Oct. 31): Q, ST, PR	Daily Q and ST for Mar. 1 - Oct. 31. Rain data collected, not published.	
06610793	18	(West) Papillion Creek at Papillion	\$0	\$7,835	\$2,195	\$10,030	RT SR - 8 month (Mar. 1 - Oct. 31): Q, ST, PR	Daily Q and ST for Mar. 1 - Oct. 31. Rain data collected, not published.	a
06610795	19	Papillion Creek at Fort Crook	\$0	\$7,835	\$2,195	\$10,030	RT SR - 8 month (Mar. 1 - Oct. 31): Q, ST, PR	Daily Q and ST for Mar. 1 - Oct. 31. Rain data collected, not published.	a
411232095584201	20	Rain Gage at Hitchcock Park at Omaha	\$255	\$1,250		\$1,505	RT SR - 8 month (Mar. 1 - Oct. 31): PR	Precipitation data collected, not published.	
411701095570601	21	Rain Gage at city Maintenance Shop at Omaha	\$255	\$1,250		\$1,505	RT SR - 8 month (Mar. 1 - Oct. 31): PR	Precipitation data collected, not published.	
411857095545301	22	Rain Gage at Eppley fire Station at Omaha	\$255	\$1,250		\$1,505	RT SR - 8 month (Mar. 1 - Oct. 31): PR	Precipitation data collected, not published.	
Funding partner totals			\$14,760	\$113,720	\$16,865	\$145,345			

a USGS NSIP funds used in place of CWP funds as match with PM NRD