# City of Fayetteville Staff Review Form

2019-0057

Legistar File ID

2/5/2019

City Council Meeting Date - Agenda Item Only N/A for Non-Agenda Item

Chris Brown	1/1	17/2019	ENGINEERING (621)  Division / Department			
Submitted By	Subm	nitted Date				
	<b>Action Re</b>	commendation:				
Approval of the 2019 USGS joint fur operation and maintenance as well of Fayetteville.						
Budget Impact:						
4470.621.8810-5314.00 and 5	4470.621.8810-5314.00 and 5400.730.5800-		4470-Sales Tax Capital Improvement 5400-			
5314.00		Water and Sewer				
Account Number		Fund				
02097.1 and 10027.1001		Stormwater Quality Management and Wastewater Treatment/Water Quality				
Project Number		Project Title				
Budgeted Item?	Yes	Current Budget	\$	504,912.00		
		<b>Funds Obligated</b>	\$	143,259.90		
		Current Balance	\$	361,652.10		
Does item have a cost?	Yes	Item Cost	\$	61,721.00		
Budget Adjustment Attached?	No	Budget Adjustment				
		Remaining Budget	\$	299,931.10		
				V20180321		
Purchase Order Number: Previous Ordinance or Resolution #				#		

**Approval Date:** 

**Comments:** 

**Change Order Number:** 

Original Contract Number:





#### **MEETING OF FEBRUARY 5, 2019**

TO: Mayor and City Council

**THRU:** Don Marr, Chief of Staff

Garner Stoll, Development Services Director

Chris Brown, City Engineer

FROM: Alan Pugh, Staff Engineer

**DATE:** January 17, 2019

SUBJECT: Approval of the 2019 USGS joint funding agreement in the amount of \$61,721.00 (City's share) for stream gauge operation and maintenance as well as water quality sampling and monitoring for various locations within the City of Fayetteville

#### **RECOMMENDATION:**

Staff Recommends approval of the 2019 USGS joint funding agreement in the amount of \$61,721.00 (City's share) for stream gauge operation and maintenance as well as water quality sampling and monitoring for various locations within the City of Fayetteville.

#### **BACKGROUND:**

In 2015 the City of Fayetteville modified its contract with USGS to begin monitoring both flow and major pollutants at two location on major outfalls from the City, Town Branch and Mud Creek. This data is being gathered continuously and through sampling at various times in order to more closely model the pollutant concentrations in these streams. This combined with the flow data will give accurate information on the total amount of the various constituents being measured leaving the City at these points. The information produced by the gauges can be viewed on the USGS website by following:

Town Branch: <a href="http://waterdata.usgs.gov/usa/nwis/uv?07048495">http://waterdata.usgs.gov/usa/nwis/uv?07048495</a>
Mud Creek: <a href="http://waterdata.usgs.gov/ar/nwis/uv?site\_no=071948095">http://waterdata.usgs.gov/ar/nwis/uv?site\_no=071948095</a>

In 2015 the City of Fayetteville contributed \$61,721 to the stream gauge program and the USGS contributing \$10,000 in funds as well as providing and installing the equipment at no charge to the City. The 2016 program was approved at the same funding levels and scope of work as 2015 and modified slightly in 2017 in order to stay within budget. The program remained unchanged from 2017 in the 2018 agreement.

#### **DISCUSSION:**

The proposed program would remain unchanged from 2018. The proposed program would again include a continuous monitor stream gauge with sampling and determination of various pollutant concentrations at two locations within the City of Fayetteville. These locations would

track continuous information regarding flow, turbidity, temperature and conductance. The sampling at these locations would provide a mechanism in which these constituents could be related to other pollutants such as total suspended solids (TSS) essentially providing relatively accurate continuous pollutant loading information.

The first station is located on Town Branch near Armstrong Ave and monitors a largely developed area that discharges into the West Fork of the White River which currently has Total Maximum Daily Load (TMDL) defined by ADEQ for turbidity. Monitoring just upstream of the West Fork allows the City to determine Fayetteville's contribution to this TMDL. Initial results indicate that the stream may meet the TMDL for base flow conditions, however, it much higher during storm events.

The second station is located on Mud Creek near Greg Avenue which is a tributary to the Illinois River. As you may be aware, the Illinois River phosphorus concentration is currently under dispute between the States of Arkansas and Oklahoma. Pending the outcome of this litigation, additional enforcement measures may be placed on Arkansas municipalities regulating both point and non-point source pollution. It would be beneficial to have a base line from which to judge the potential TMDL as well as monitor the progress of measures developed to reduce pollutants. Initial results indicate that the stream may meet the considered concentration of 0.037mg/l of phosphorus during the discharge of base flow.

In addition to the items above, the recommendation also includes maintaining a crest stage gauge on Niokaska Creek at Township. This gauge has been useful in the past in determining the intensity of storm events and the extent of any flooding that they caused.

The total cost for the program described above would be \$66,721 with the USGS contributing \$5,000 in Cooperative Funding for a total cost to the City of Fayetteville of \$61,721. In addition to the Cooperative Funds, the USGS provided and installed the equipment in 2015 at no cost to the City.

#### **BUDGET/STAFF IMPACT:**

As stated the total cost of the program would be \$66,721 with the USGS contributing \$5,000 in funding. The remaining \$61,721 would be split between projects managed by the Engineering Division and the Water and Sewer Department. As the information collected would benefit both departments equally, it is proposed to split the required funds 50/50 between the two projects, or a total of \$30,860.50 each.

#### **Attachments:**

Proposed Agreement with USGS





# United States Department of the Interior

U.S. GEOLOGICAL SURVEY
Lower Mississippi Gulf Water Science Center
Little Rock Office
401 Hardin Road
Little Rock, Arkansas 72211

November 15, 2018

The Honorable Lioneld Jordan C/O Chirs Brown City of Fayetteville 113 West Mountain Street Fayetteville, Arkansas 72701

Dear Mayor. Jordan:

Enclosed are two signed originals of our standard joint-funding agreement between the United States Geological Survey (USGS) and the City of Fayetteville, during the period January 1, 2019 through December 31, 2019. The agreement includes the operation and maintenance of two streamgages and two continuous water-quality meters, one on Mud Creek and one on Town Branch; sampling nine times for nutrients, major ions, and suspended sediment, and bacteria at the streamgage on Mud Creek; and sampling nine times for nutrients, major anions and suspended sediment at the streamgage on Town Branch. Three of the nine samples at each station will be collected during a high flow event. The total cost of the program is for \$66,721. USGS's contribution is for \$5,000 and the City of Fayetteville's contribution is for \$61,721. Please sign and return one fully-executed original to Markeshia Watson, Administrative Specialist at the address above.

This a fixed cost agreement to be billed <u>quarterly</u> via Down Payment Request (automated Form DI-1040). Please allow 30-days from the end of the billing period for issuance of the bill. If you experience any problems with your invoice(s), please contact Markeshia Watson at phone number (225) 298-5481 Ext 3106 or email at mwatson@usgs.gov. Also, you can contact Bill Baldwin by phone number (501) 228-3602 or email bbaldwin@usgs.gov to make alternative arrangements.

The results of all work performed under this agreement will be available for publication by the U.S. Geological Survey. We look forward to continuing this and future cooperative efforts in these mutually beneficial water resources studies.

Sincerely,

W. Soott Gain

Director, LMG Water Science Center

Enclosure 19MLJFAARDA150 (2) Form 9-1366 (May 2018)

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

Water Resource Investigations

Agreement #: 19MUFAARDA150 Project #: ML009Z5

Customer #: 6000000775

TIN #: 71-6018462

Fixed Cost Agreement YES[X]NO[]

THIS AGREEMENT is entered into as of the January 1, 2019, by the U.S. GEOLOGICAL SURVEY, Lower Mississippi Gulf Water Science Center, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the City of Fayetteville party 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 operation and maintenance of two streamgages and two continuous water-quality meters, one on Mud Creek and one on Town Branch; sampling nine times for nutrients, major ions, and suspended sediment, and bacteria at the streamgage on Mud Creek; and sampling nine times for nutrients, major anions and suspended sediment at the streamgage on Town Branch. Three of the nine samples at each station will be collected during a high flow event, 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) \$5.000 by the party of the first part during the period January 1, 2019 to December 31, 2019
  - by the party of the second part during the period (b) \$61,721 January 1, 2019 to December 31, 2019
  - 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:

- 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.
- 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.
- 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 (https://www2.usgs.gov/fsp/).

Form 9-1366 (May 2018)

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

Customer #: 6000000775 Agreement #: 19MLJFAARDA150

Project #: ML009Z5 TIN #: 71-6018462

### **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		Customer Technical Point of Contact	
Name:	Bill Baldwin Little Rock Field Services Unit Chief	Name:	Lioneld Jordan Mayor	
Address:	401 Hardin Road Little Rock, AR 72211	Address:	113 West Mountain Street Fayetteville, Arkansas 72701	
Telephone: Fax:	(501) 228-3602 (501) 228-3601	Telephone: Fax:	(479) 575-8330	
Email:	bbaldwin@usgs.gov	Email:	mayor@ci.fayettevill.ar.us	
	USGS Billing Point of Contact		Customer Billing Point of Contact	
Name:	Markeshia Watson	Name:	Chris Brown City Engineer 113 West Mountain Street	
Address:	Administrative Specialist 3535 South Sherwood Forest Blvd.	Address:		
Telephone:	Baton Rouge, LA 70816 (225) 298-5481 Ext 3106	Telephone:	Fayetteville, Arkansas 72701 (479) 575-8330	
Fax: Email:	mwatson@usgs.gov	Fax: Email:		
	U.S. Geological Survey United States Department of Interior		City of Fayetteville	
1.1 Signature		Signatures		
By Name: W. Sa Title: Directo	Date: 11/15/2018 ort Gain or, LMG Water Science Center	By Name: Title:	Date:	
		Bv	Date:	
		Name:		
		Title:		
		Ву	Date:	
		Name: Title:		