

**City of Fayetteville Staff Review Form**

**2019-0049**

**Legistar File ID**

**2/5/2019**

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

Chris Brown

1/15/2019

ENGINEERING (621)

**Submitted By**

**Submitted Date**

**Division / Department**

**Action Recommendation:**

Approval of an amendment to Task Order #1 with the Watershed Conservation Resource Center (WCRC) in the revised total amount of \$181,226.35 (additional \$16,702.35) for work performed during the assessment of streams throughout the City associated with a Wetland Program Development Grant

**Budget Impact:**

4470.621.8810-5314.00	Sales Tax Capital Improvement																								
Account Number	Fund																								
02097.2014	EPA Streambank Assessment Grant																								
Project Number	Project Title																								
<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"><b>Budgeted Item?</b></td> <td style="width: 10%; text-align: center;">Yes</td> <td style="width: 30%; border-bottom: 1px solid black;">Current Budget</td> <td style="width: 10%; text-align: right;">\$</td> <td style="width: 10%; text-align: right;">37,497.00</td> </tr> <tr> <td></td> <td style="text-align: center;">_____</td> <td style="border-bottom: 1px solid black;">Funds Obligated</td> <td style="text-align: right;">\$</td> <td style="text-align: right;">16,622.53</td> </tr> <tr> <td></td> <td></td> <td style="border-bottom: 1px solid black;">Current Balance</td> <td style="text-align: right;"><b>\$</b></td> <td style="text-align: right;"><b>20,874.47</b></td> </tr> </table>	<b>Budgeted Item?</b>	Yes	Current Budget	\$	37,497.00		_____	Funds Obligated	\$	16,622.53			Current Balance	<b>\$</b>	<b>20,874.47</b>	<table border="0" style="width: 100%;"> <tr> <td style="width: 30%; border-bottom: 1px solid black;">Item Cost</td> <td style="width: 10%; text-align: center;">\$</td> <td style="width: 10%; text-align: right;">16,702.35</td> </tr> <tr> <td style="border-bottom: 1px solid black;">Budget Adjustment</td> <td></td> <td></td> </tr> <tr> <td style="border-bottom: 1px solid black;">Remaining Budget</td> <td style="text-align: right;"><b>\$</b></td> <td style="text-align: right;"><b>4,172.12</b></td> </tr> </table>	Item Cost	\$	16,702.35	Budget Adjustment			Remaining Budget	<b>\$</b>	<b>4,172.12</b>
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		Current Balance	<b>\$</b>	<b>20,874.47</b>																					
Item Cost	\$	16,702.35																							
Budget Adjustment																									
Remaining Budget	<b>\$</b>	<b>4,172.12</b>																							
<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"><b>Does item have a cost?</b></td> <td style="width: 10%; text-align: center;">Yes</td> </tr> <tr> <td></td> <td style="text-align: center;">_____</td> </tr> <tr> <td><b>Budget Adjustment Attached?</b></td> <td style="text-align: center;">No</td> </tr> <tr> <td></td> <td style="text-align: center;">_____</td> </tr> </table>	<b>Does item have a cost?</b>	Yes		_____	<b>Budget Adjustment Attached?</b>	No		_____																	
<b>Does item have a cost?</b>	Yes																								
	_____																								
<b>Budget Adjustment Attached?</b>	No																								
	_____																								

V20180321

**Purchase Order Number:** \_\_\_\_\_

**Previous Ordinance or Resolution #** 187-14

**Change Order Number:** \_\_\_\_\_

**Approval Date:** \_\_\_\_\_

**Original Contract Number:** \_\_\_\_\_

**Comments:**



**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 14, 2019

**SUBJECT: Approval of an amendment to Task Order #1 with the Watershed Conservation Resource Center (WCRC) in the revised total amount of \$181,226.35 (additional \$16,702.35) for work performed during the assessment of streams throughout the City associated with a Wetland Program Development Grant**

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**RECOMMENDATION:**

Staff recommends approval of an amendment to Task Order #1 with the Watershed Conservation Resource Center (WCRC) in the revised total amount of \$181,226.35 (additional \$16,702.35) for work performed during the assessment of streams throughout the City associated with a Wetland Program Development Grant.

**BACKGROUND:**

On October 21, 2014, the City Council approved resolution 187-14 accepting an Environmental Protection Agency (EPA) Region 6 Wetland Development Program Grant (WPDG) in the amount of \$142,500. This grant was to assess the condition of approximately 20 miles of stream and create an inventory of riparian and streambank conditions within these areas. The work also began to categorize the amounts and types of erosion along with their potential to impact structures so that a prioritization for stream restoration projects could be developed.

**DISCUSSION:**

The final work plan for the project included 28.2 miles of urban streams which was longer than the original estimate of 20 miles. The additional mileage mainly accounts for several tributaries to Cato Springs Branch and brought many stream further into their headwaters than originally planned due to instability. For these areas, WCRC monitored over 40 individual sites for a period of three years in order to aide in the creation of erosion prediction curves. The monitoring period was increased to three years from two years in order to improve the accuracy of the erosion prediction curves and account for years in which there were few bank full events. The purpose of the riparian and streambank assessment is to identify areas in need of restoration and preservation, develop criteria to prioritize unstable streambanks for restoration, including potential for wetland restoration. It also includes identification of stable stream and wetland areas for preservation and provides information to the City's

Engineering and Planning Divisions to use when evaluating proposed development that could potentially impact streams, wetlands, and springs.

The time period for the grant was expanded through the requests and approval of extensions through the EPA. The official grant period ended on December 31, 2018 and the work was complete. The 90-day period beginning on January 1, 2019 allows for all remaining items in order to close out the grant.

**BUDGET/STAFF IMPACT:**

The Stormwater Quality Management/Nutrient Reduction project has been designated in part to fund projects that improve stormwater quality in the City of Fayetteville and would be proposed as the source for the matching funds. The grant matching requirements included the cost of City staff time totaling \$25,840 and the actual City staffing costs were \$9,137.56. Therefore, staff recommends increasing the contract amount with WCRC by the difference (\$16,702.35) to compensate WCRC for the additional work performed on the project.

The revised WCRC task order totals \$181,226.35 and the total project budget, including \$142,500 from EPA, remains \$193,340.

**Attachments:**

Resolution 187-14

## AMENDMENT to Task Order NO.1

### Amendment 1

## INVENTORY OF RIPARIAN AND STREAMBANK CONDITIONS OF FAYETTEVILLE'S URBAN STREAMS

This Task Order Amendment, dated, \_\_\_\_\_, 2019 shall amend the original Task Order No. 1 between the CITY OF FAYETTEVILLE, ARKANSAS and the WATERSHED CONSERVATION RESOURCE CENTER, dated October 21, 2014 for watershed assessment activities in connection with the inventory of riparian and streambank conditions along certain streams within the City of Fayetteville limits. This task order amendment modifies the original Task Order No. 1 to include an expansion of the project scope, associated fees, and timeline.

Task Order No. 1 is hereby amended by modification to the following Sections which supersede the corresponding Sections in the original task order.

### **Section I - Project Description**

This project consists of developing an inventory of the riparian and streambank conditions for 28.2 miles of urban streams and develop streambank erosion prediction curves to estimate sediment and nutrient loadings from streambank erosion. The purpose of the riparian and streambank assessment is to: A) Identify areas in need of restoration and preservation; B) Develop criteria to prioritize 1) unstable streambanks for restoration, including potential for wetland restoration and 2) stable stream and wetland areas for preservation; and C) Provide information to the City's Engineering and Planning Divisions to use when evaluating proposed development that could potentially impact streams, wetlands, and springs. The inventory will include an evaluation of A) the riparian area in which wetland features, springs, and general vegetation composition will be identified and B) streambanks with accelerated erosion that includes measuring erosion rates, characterizing streambank materials, and estimating sediment and nutrient loadings.

### **Section II - Project Timeframe**

The project will be conducted over the period of the grant award which is November 1, 2013 to March 31, 2019.

### **Section III - Scope of Services**

The WCRC will conduct activities as outlined in the attached workplan. Activities include but are not limited to: 1) Development of a Quality Assurance Project Plan 2) Conducting an inventory of stream and riparian conditions for a minimum of 28 stream miles 3) Developing streambank erosion prediction curves and estimated sediment and nutrient loads, including streambank erosion monitoring over a 2-year period and 4) prioritization of areas in special need of protection or restoration by development of a GIS tool for use by the CITY and

interested conservation stakeholders.. In addition, the WCRC will contract directly any contract services needed.

**Section IV - Fees and Payments**

WCRC will perform the above-referenced Scope of Services for \$181,226.35

**Section V - Memorandum of Understanding in Effect**

Except as amended specifically herein, the Memorandum of Understanding Fayetteville shall remain in full force as originally approved.

IN WITNESS WHEREOF, the parties hereto have caused this TASK ORDER modification to be duly executed as of the date and year first herein written.

FOR THE CITY OF FAYETTEVILLE

By: \_\_\_\_\_  
Mayor Lioneld Jordan

Attest: \_\_\_\_\_  
Sondra Smith, City Clerk

Date: \_\_\_\_\_

FOR WATERSHED CONSERVATION RESOUCCE CENTER

By: Sandi Formica  
Sandi Formica

Attest: [Signature]

Date: Jan 16, 2018

**RESOLUTION NO. 187-14**

A RESOLUTION TO AUTHORIZE ACCEPTANCE OF AN ENVIRONMENTAL PROTECTION AGENCY GRANT IN THE AMOUNT OF \$142,500.00, TO APPROVE TASK ORDER NO. 1 WITH THE WATERSHED CONSERVATION CENTER IN THE AMOUNT OF \$164,524.00 FOR AN INVENTORY OF RIPARIAN AND STREAMBANK CONDITIONS IN THE CITY OF FAYETTEVILLE, AND TO APPROVE A BUDGET ADJUSTMENT

**WHEREAS**, Ordinance No. 5645, which was passed and approved on January 7, 2014, waives the requirement of formal bidding and authorizes the City to “jointly seek funding and use such funding to design and construct stream restoration projects” pursuant to a Memorandum of Understanding with the Watershed Conservation Resource Center.

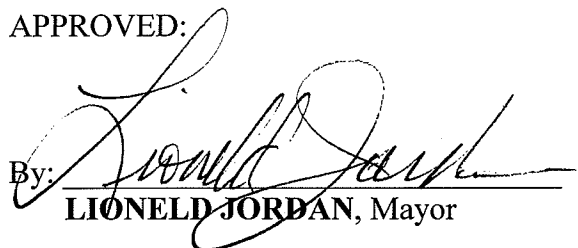
**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:**

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby authorizes acceptance of an Environmental Protection Agency grant in the amount of \$142,500.00 and approves Task Order No. 1 with the Watershed Conservation Center in the amount of \$164,524.00 for an inventory of riparian and streambank conditions in the City of Fayetteville.

Section 2: That the City Council of the City of Fayetteville, Arkansas hereby approves a budget adjustment, a copy of which is attached to this Resolution.

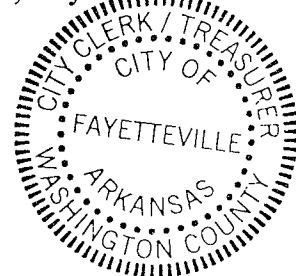
**PASSED and APPROVED** this 21<sup>st</sup> day of October, 2014.

APPROVED:

By:   
LIONELD JORDAN, Mayor

ATTEST:

By:   
SONDRA E. SMITH, City Clerk/Treasurer



**City of Fayetteville Staff Review Form**

**2014-0429**

Legistar File ID

**10/21/2014**

City Council Meeting Date - Agenda Item Only

N/A for Non-Agenda Item

Chris Brown

10/3/2014

Engineering /  
Development Services Department

**Submitted By**

**Submitted Date**

**Division / Department**

**Action Recommendation:**

Acceptance of a Wetland Program Development Grant in the amount of \$142,500.00 from the Environmental Protection Agency Region 6 for the assessment of City streams, approval of Task Order No. 01 with the Watershed Conservation Resource Center, and approval of a budget adjustment acknowledging receipt of the grant funds and required matching funds.

**Budget Impact:**

4470.9470.5817.00	Sales Tax Capital/Bridge and Drainage
Account Number	Fund
02097.2014	Stormwater Quality Mgmt/EPA Streambank Assessment Grant
Project Number	Project Title
<b>Budgeted Item?</b> <u>Yes</u>	Current Budget \$ 264,746.00
	Funds Obligated \$ 94,065.67
	<b>Current Balance \$ 170,680.33</b>
<b>Does item have a cost?</b> <u>Yes</u>	Item Cost \$ 193,340.00
<b>Budget Adjustment Attached?</b> <u>Yes</u>	Budget Adjustment \$ 142,500.00
	<b>Remaining Budget \$ 119,840.33</b>

V20140710

Previous Ordinance or Resolution # 126-13

Original Contract Number: \_\_\_\_\_

Approval Date: 10-21-2014

Comments:



## CITY COUNCIL AGENDA MEMO

### MEETING OF OCTOBER 21, 2014

**TO:** Mayor and City Council

**THRU:** Don Marr, Chief of Staff  
Jeremy Pate, Development Services Director  
Chris Brown, City Engineer

**FROM:** Alan Pugh, Staff Engineer

**DATE:** October 1, 2014

**SUBJECT:** Acceptance of a Wetland Program Development Grant in the amount of \$142,500.00 from the Environmental Protection Agency Region 6 for the assessment of City streams, approval of Task Order No. 01 with the Watershed Conservation Resource Center, and approval of a budget adjustment acknowledging receipt of the grant funds and required matching funds.

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#### RECOMMENDATION:

Acceptance of a Wetland Program Development Grant in the amount of \$142,500.00 from the Environmental Protection Agency Region 6 for the assessment of City streams, approving Task Order No. 01 with the Watershed Conservation Resource Center, and approving a budget amendment acknowledging receipt of the grant funds and required matching funds.

#### BACKGROUND:

On June 4, 2013, City Council approved Resolution Number 126-13 to apply for an EPA Region 6 Wetland Development Program Grant (WPDG). Based upon that application, Fayetteville has been notified by the Arkansas Natural Resources Commission that it is the recipient of \$142,500 in EPA Region 6 grant assistance from the Wetland Development Program.

#### DISCUSSION:

This project grant was developed in cooperation with the Watershed Conservation Research Center, WCRC, and proposes to develop an inventory of the riparian and streambank conditions for approximately 20 miles of urban streams and wetlands. The purpose is to identify areas in need of restoration and preservation, develop criteria to prioritize projects and provide information to the city's engineering and planning divisions to use when evaluating proposed development that could potentially impact streams, wetlands and springs.

Proposed locations include Town Branch, Scull, Hamestring, Owl, and Clabber Creeks. The assessment will include development of streambank erosion prediction curves to estimate sediment and nutrient loadings from streambank erosion. The stream assessment will include an evaluation of streambanks showing signs of accelerated erosion and the condition of riparian areas and identification of wetland features and springs within the stream corridor. Data will be



collected to evaluate streambank erosion rates to help identify sites in need of restoration. These unstable sites will be prioritized for restoration based on sediment and nutrient loadings, location, and threat to property and City infrastructure.

Hamestring, Owl, and Clabber Creeks are located in the western side of Fayetteville, where there continues to be rapid growth. These three watersheds are part of the Illinois basin and encompass an area of approximately 14 square miles. Accelerated streambank erosion that threatens property and City infrastructure and contributes excessive loads of sediment and nutrients to the Illinois River watershed has been observed in this area. Also, exceptional natural features, such as wetlands, springs, remnant prairies, and hydric soils have been noted in these watersheds. Evaluation of the stream corridor within these watersheds can enhance planning efforts to preserve streams, wetlands, aquatic, and terrestrial habitat and help to minimize the impact of growth on existing ecosystems. The assessment will also help the City of Fayetteville to take actions to reduce the contribution of non-point source pollution to our stream systems and direct funding for streambank restoration to the most beneficial areas.

On January 7, 2014, the City Council approved agreement memorandum of understanding with the Watershed Conservation Resource Center (WCRC), and established a method for developing Task Orders to assist the City on projects such as this. To that end, Task Order No. 01 in the amount of \$164,524.00 has been developed.

The EPA Region 6 WPDG is a 25/75 matching grant. Subsequent to City Council approval, the application was submitted and the EPA awarded a WPD Grant in the amount of \$142,500 which will cover approximately 73.7% of the \$193,340.00 total project budget. The remainder, \$50,840.00, will be addressed through combination of matching funds and City staff time.

**BUDGET/STAFF IMPACT:**

The Stormwater Quality Management/Nutrient Reduction project has been designated in part to fund projects that improve stormwater quality in the City of Fayetteville and would be proposed as the source for the matching funds. Funding from this project includes \$25,000 in matching funds and \$28,816.00 in staff time, representing approximately 450 staff hours.

**Attachments:**

- EPA Approved Work Plan
- EPA Notice of Award
- Resolution 126-13
- Task Order NO. 01
- Ordinance 5645 and Supporting Documentation

**City of Fayetteville, Arkansas - Budget Adjustment Form (Legistar)**

<b>Budget Year</b>	<b>Division:</b> Engineering	<b>Adjustment Number</b>
2014	<b>Dept.:</b> Development Services	
	<b>Requestor:</b> Chris Brown	

**BUDGET ADJUSTMENT DESCRIPTION / JUSTIFICATION:**

EPA has awarded a grant (\$142,500) to the City to assess the City's Streambanks. There is also a City match of 26.3% (\$50,840.00) bringing the total amount of the project to \$193,340.00. The work will be completed by WCRC and there will be some engineering contra.

COUNCIL DATE: 10/21/2014

LEGISTAR FILE ID#: 2014-0429

*Barbara Fell*  
10/2/2014 11:19 AM

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Budget Director Date

TYPE: \_\_\_\_\_

DESCRIPTION: \_\_\_\_\_

GLDATE: \_\_\_\_\_

POSTED: \_\_\_\_\_ / \_\_\_\_\_

RESOLUTION/ORDINANCE

Account Number	TOTAL		Project	Project.Sub#		AT	Account Name
	Expense	Revenue		Project	Sub		
	142,500	142,500					
4470.0947.4309.01	-	142,500	02097	2014	RE	Federal Grants - Operational	
4470.9470.5314.00	139,524	-	02097	2014	EX	Professional Services	
4470.9470.5314.04	2,976	-	02097	2014	EX	Engineering Contra Servs	
4470.9470.5817.00	(50,840)	-	02097	1	EX	Bridge & Drainage Improve	
4470.9470.5314.00	25,000	-	02097	2014	EX	Professional Services	
4470.9470.5314.04	25,840	-	02097	2014	EX	Engineering Contra Servs	
	-	-					
	-	-					
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v.20140829

## City of Fayetteville - Purchase Order Request (PO)

(Not a Purchase Order)

All PO Requests shall be scanned to the Purchasing e-mail: [Purchasing@fayetteville-ar.gov](mailto:Purchasing@fayetteville-ar.gov).

Purchase shall not be made until an actual PO has been issued.

Requisition No.:	Date:
P.O Number:	

Vendor #: <b>16441</b>	Vendor Name: <b>Watershed Conservation Resource Center (WCRC)</b>	Mail <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>Legistar#: 2014-0429</b>
Address: <b>380 W. Rock St</b>		FOB Point:	Expected Delivery Date:
City: <b>Fayetteville</b>	State: <b>AR</b>	Zip Code: <b>72701</b> Ship to code: <b>090</b>	
Requester: <b>Alan Pugh</b>		Requester's Employee #: <b>4073</b>	Extension: <b>8208</b>

Item	Description	Quantity	Unit of Issue	Unit Cost	Extended Cost	Account Number	Project.Sub#	Inventory #	Fixed Asset #
1	<b>Stream Assesment Grant</b>	1	Lot	164,524.00	\$164,524.00	4470.9470.5314.00	02097.2014		
2					\$0.00				
3					\$0.00				
4					\$0.00				
5					\$0.00				
6					\$0.00				
7					\$0.00				
8					\$0.00				
9					\$0.00				
10					\$0.00				
*	Shipping/Handling		Lot		\$0.00				

**Special Instructions:**  
 Fayetteville has long worked with the Watershed Conservation Resource Center (WCRC) and funded quality stream restoration projects successfully completed by the Center and therefore entered into a Memorandum of Understanding (MOU) for certain projects on January 9, 2014. This project falls under this MOU and due to the unique nature of the services required as well as the history of quality projects with WCRC the council waived competative bidding.

Subtotal:	<u>\$164,524.00</u>
Tax:	<u>\$0.00</u>
Total:	<u><u>\$164,524.00</u></u>

Approvals:

Mayor: _____	Department Director: _____	Purchasing Manager: _____
Chief Financial Officer: _____	Budget Director: _____	IT Director: _____
Dispatch Manager: _____	Utilities Manager: _____	Other: _____

**TASK ORDER NO. 1****INVENTORY OF RIPARIAN AND STREAMBANK CONDITIONS OF  
FAYETTEVILLE'S URBAN STREAMS**

STATE OF ARKANSAS

COUNTY OF WASHINGTON

This Task Order is written pursuant to the Memorandum of Understanding (MOU) as described in Ordinance No. 5645 executed on January 7, 2014. The referenced MOU pertains to potential stream restoration projects and associated services with the Watershed Conservation Resource Center (WCRC). This Task Order entered into and executed on the date indicated below the signature block by and between the City of Fayetteville and Watershed Conservation Resource Center sets forth the project description, project schedule and associated fees for these services related to Federal Assistance Grant (I.D. 00F74201) "Inventory of Riparian and Streambank Conditions of Urban Stream" awarded to the City on September 18, 2013.

**Section I - Project Description**

This project consists of developing an inventory of the riparian and streambank conditions for 20 miles of urban streams and develop streambank erosion prediction curves to estimate sediment and nutrient loadings from streambank erosion. The purpose of the riparian and streambank assessment is to: A) Identify areas in need of restoration and preservation; B) Develop criteria to prioritize 1) unstable streambanks for restoration, including potential for wetland restoration and 2) stable stream and wetland areas for preservation; and C) Provide information to the City's Engineering and Planning Divisions to use when evaluating proposed development that could potentially impact streams, wetlands, and springs. The inventory will include an evaluation of A) the riparian area in which wetland features, springs, and general vegetation composition will be identified and B) streambanks with accelerated erosion that includes measuring erosion rates, characterizing streambank materials, and estimating sediment and nutrient loadings.

**Section II - Project Timeframe**

The project will be conducted over the period of the grant award which is November 1, 2013 to October 31, 2016.

**Section III - Scope of Services**

The WCRC will conduct activities as outlined in the attached workplan. Activities include but are not limited to: 1) Development of a Quality Assurance Project Plan 2) Conducting an inventory of stream and riparian conditions for a minimum of 20 stream miles 3) Developing streambank erosion prediction curves and estimated sediment and nutrient loads and 4) prioritization of areas in special need of protection or restoration. In addition, the WCRC will contract directly any contract services needed.

**Section IV - Fees and Payments**

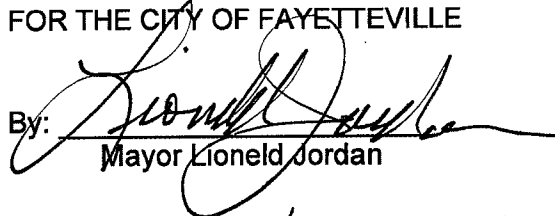
WCRC will perform the above-referenced Scope of Services for \$164,524 (\$139,524 of which will be Federal Funds) as detailed in the attached project workplan (Attachment 1).

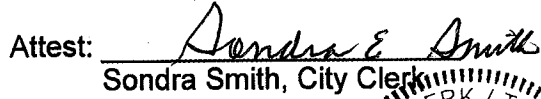
**Section V - Memorandum of Understanding in Effect**

Except as amended specifically herein, the Memorandum of Understanding Fayetteville shall remain in full force as originally approved.

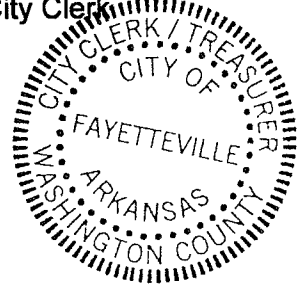
IN WITNESS WHEREOF, the parties hereto have caused this TASK ORDER to be duly executed as of the date and year first herein written.

FOR THE CITY OF FAYETTEVILLE

By:   
Mayor Lioneld Jordan

Attest:   
Sondra Smith, City Clerk

Date: 10/23/14



FOR WATERSHED CONSERVATION RESOUCE CENTER

By:   
Sandi Formica

Attest: 

Date: Oct 1, 2014

# Proposal Workplan

## Section A: Cover Page

**Project Title:** Inventory of Riparian & Streambank Conditions of Urban Streams

**Track II Application** – FY13 or FY14

**Core Elements:** Monitoring and Assessment and Voluntary Restoration and Protection

**ACTIONS:** 1. Identify program decisions and long term environmental outcome(s) that will benefit from a wetland monitoring and assessment program, 2. Consider watershed planning, wildlife habitat, and other objectives when developing your selection process restoration/protection sites, 3. Develop and evaluate restoration/protection projects, and 4. Monitor restoration sites to ensure that they are implemented and managed correctly and linked to relevant watershed planning efforts.

**Name of Applicant:** City of Fayetteville, Arkansas, DUNS #07-565-7742

**Key personnel and contact information:**

Sarah Wrede, City of Fayetteville, Engineering, [swrede@ci.fayetteville.ar.us](mailto:swrede@ci.fayetteville.ar.us), (479) 575-8208

Sandi Formica, WCRC, [formica@watershedconservation.org](mailto:formica@watershedconservation.org), (501) 352-5252

**Geographic Location:** Fayetteville, Washington County, Arkansas; HUC: 11110103, Illinois River Watershed; HUC: 11010001, Upper White River Watershed

**Total Project Cost:** \$193,340, **Federal Dollars Requested:** \$142,500, **Match:** \$50,840

**Abstract/Project Summary:** Assessing stream systems within our urban areas provides important information to help conserve natural resources, protect water quality, and plan for urban development. The City of Fayetteville (City) in partnership with the Watershed Conservation Resource Center (WCRC) proposes to develop an inventory of the riparian condition of 20 miles of urban streams and develop streambank erosion prediction curves to estimate sediment and nutrient loadings from streambank erosion. The stream inventory will

include an evaluation of the riparian area and streambanks. Wetland features, prairies, and springs within the stream corridor will be identified. Data will be collected on streambanks showing signs of accelerated erosion and erosion rates will be measured to identify sites needing restoration and quantify sediment and nutrient loadings. Criteria will be developed and applied to prioritize sites for preservation or restoration, depending on their condition.

Hamstring, Owl, and Clabber Creeks will be included in the study and are located where there continues to be rapid development. Accelerated streambank erosion contributes excessive loads of sediment and nutrients to these streams and has been observed in this area along with exceptional natural features, such as wetlands, springs, remnant prairies, and hydric soils. Evaluation of these urban stream corridors will enhance planning efforts to preserve streams, wetlands, and aquatic/terrestrial habitats and help to minimize the impact of urban growth on existing ecosystems. The streambank evaluation will help the City to take actions to reduce NPS pollution and direct funding for streambank restoration to the most beneficial area.

**Section B: Project Description:** The City of Fayetteville (City) in partnership with the Watershed Conservation Resource Center (WCRC) proposes to develop an inventory of the riparian and streambank conditions for 20 miles of urban streams and develop streambank erosion prediction curves to estimate sediment and nutrient loadings from streambank erosion. The purpose of the riparian and streambank assessment is to: A) Identify areas in need of restoration and preservation; B) Develop criteria to prioritize 1) unstable streambanks for restoration, including potential for wetland restoration and 2) stable stream and wetland areas for preservation; and C) Provide information to the City's Engineering and Planning Divisions to use when evaluating proposed development that could potentially impact streams, wetlands, and springs. The inventory will include an evaluation of A) the riparian area in which wetland features, springs, and general vegetation composition will be identified and B) streambanks with accelerated erosion that includes measuring erosion rates, characterizing streambank materials, and estimating sediment and nutrient loadings

Prioritization of unstable sites for restoration will be based on sediment and nutrient loadings, location, threat to property, and presence or potential to create natural features, such as, wetlands, prairies, etc. Documentation and prioritization of the existence of natural features will help to ensure that they will not be destroyed or damaged from development. The assessment will focus on Hamestring, Owl, and Clabber Creeks, which are located in the western side of Fayetteville, where there continues to be rapid development (Section F, Att.1). These three watersheds are part of the Illinois basin and encompass an area of approximately 14 square miles. Additional streams will be identified to include in the study within Beaver Lake watershed. Beaver Lake is the drinking water source for over 450,000 NW Arkansas residents.

1. **Program Priorities: Track Two:** The proposed project falls under two Core Elements: *Monitoring and Assessment* and *Voluntary Restoration and Protection*. The action under



*Monitoring and Assessment is 'identify program decisions and long term environmental outcome(s) that will benefit from a wetland monitoring and assessment program.'* Funding will be sought to restore sites identified as unstable with poor riparian conditions to enhance habitats and improve water quality. Wetland areas and springs will be identified along with high quality headwater streams. The information and knowledge gained from the assessment will be used to help support the City's Streamside Protection Ordinance. Information on contaminant load reduction from stream restoration will be tied to the broader watershed planning efforts. The first action under *Voluntary Restoration and Protection* is *'consider watershed planning, wildlife habitat, and other objectives when developing your selection process restoration/protection sites.'* The criteria selected to prioritize sites for restoration or protection will be based on local watershed planning efforts. Both EPA accepted watershed plans for the Illinois River and Beaver Lake emphasize the need to improve water quality through riparian enhancement and preservation and reduction of sediment and nutrient loadings through streambank restoration. Both the streambank erosion prediction curves and prioritization criteria will serve as examples of assessment techniques that other urban areas can use to manage and protect their urban stream corridors. The second action is *'develop and evaluate restoration/ protection projects.'* The project results will provide the City stream/ wetland sites prioritized for restoration or protection. The third action is *'monitor restoration sites to ensure that they are implemented and managed correctly and linked to relevant watershed planning efforts.'* The City has previously partnered with the WCRC to restore three urban stream sites that include wetland features. All three sites will be monitored and maintained to ensure objectives are being met.

2. **Description of Need:** Over the past 30 years, Northwest Arkansas' population tripled to approximately 400,000. Both forested and agricultural lands have been converted to urban areas, increasing the amount of impervious surfaces, which has increased runoff and intensified the

magnitude and frequency of high flow events in streams. This additional runoff and energy has increased channel erosion, resulting in vertical cut-banks on both City and private property. Development has also resulted in the loss of urban wetland, prairie, headwater stream, and riparian features that are connected to the stream channels and needed for healthy stream ecosystems. Conducting an inventory of the condition of 20 miles of urban streambank and riparian areas will provide information and data needed to restore disturbed sites and to preserve robust natural features. The City will use this assessment to help determine their contribution to water quality improvements in the Illinois River and Beaver Lake watersheds by restoring and protecting urban streams and wetlands. The City will become a regional example of collecting environmental data and using it to plan for urban development and natural resource protection. Prioritizing unstable stream sites for restoration based on established watershed planning goals will result in better utilization of funding for restoration and maximizes the benefits gained.

The proposed project will help the City to meet both local and regional priorities for water quality improvement and protection. Locally, the City of Fayetteville adopted a Streamside Protection Ordinance in 2011 to accomplish several goals including: reduce pollutants in waterways, preserve flood capacity, and protect the integrity of natural resources. These goals and all technical details of the ordinance were researched by staff and went through an extensive public review and comment process. The ordinance establishes streamside protection zones along streams within the City with a drainage area of 100 acres or greater. City staff reviews development plans for compliance with the ordinance, answers questions from the public and educates City staff who work near streams. The riparian and streambank assessment will provide additional data needed to help with the Streamside Protection Ordinance.

The project also addresses regional priorities and local objectives associated with the Illinois River and Beaver Lake watersheds. Both watersheds 1) have impaired or 303 (d) listed streams

or stream segments that are in need of additional data, with siltation/turbidity specified as the cause and surface erosion as the source; 2) are considered a priority by the ANRC for reducing nutrients. This project will provide scientific data and information to support actions that will reduce both sediment and nutrient loads. In addition, comprehensive watershed management plans have been developed and accepted by US EPA and include goals for water quality protection through restoration and protection of riparian buffers and streambanks.

### **3. Outputs, Outcomes, and Results**

i. Outputs: The expected environmental outputs are 1) Identification , for 20 miles of urban streams, a) sites needing streambank and riparian restoration, including wetland enhancement and b) areas of stream corridor that have unique environmental attributes, such as healthy riparian forest, wetlands, springs, and/or prairie; 2) Criteria for prioritizing sites for restoration or preservation; 3) Maps showing prioritized sites for restoration or preservation to be used as a planning tool for the City and local watershed planning; 4) A set of streambank erosion prediction curves to be used at sites without erosion data; 5) Estimates of annual loading rates of sediment, T. Phosphorus, and T. Nitrogen from streambank erosion within the 20 miles of surveyed channel; and 6) Comparison of channel dimensions and summary of vegetation and maintenance at three existing urban restorations.

ii. Outcomes: The expected environmental outcomes are 1) Improve the decision making ability of the City and watershed planners in conducting restoration of streams, wetlands, and riparian areas within the City; preservation of healthy streams, wetlands, and other natural features with respect to urban development; and reduction of sediment and nutrients from streambank erosion to improve water quality within the Illinois River and Beaver Lake watersheds; 2) Integrate the City's efforts of restoration and preservation of urban streams and wetlands into local watershed planning; 3) Have available for the City and watershed planners

both prioritization criteria and the data/information needed to estimate contaminant loadings for the evaluation of other areas within the City; 4) Improve the ability of City staff to implement the Streamside Protection Ordinance through the data and information collected; 5) Increase understanding of City's maintenance staff and volunteers on the importance of urban streams, wetlands, water quality, native vegetation management, and maintenance at three existing urban stream restoration sites; 6) Improved stream, riparian area, and wetland protection efforts; 7) Increase understanding of healthy streams and wetland condition.

iii. Link to the EPA Strategic Plan: These outputs and outcomes are directly linked to the EPA Strategic Plan's Goal 2 – Protecting America's Water because data will be collected and analyzed to provide information on the condition of streams and wetlands to local & state government and watershed planners to restore and protect urban natural resources. This information will be used to prevent the destruction of healthy sections of stream and wetlands from urban development. Restoration efforts will be based on the results of this study, which emphasizes maximizing sediment and nutrient load reductions from streambank erosion to improve the water quality of streams within the Illinois River and Beaver Lake watersheds.

iv. Tracking Outputs and Outcomes: The seven outputs will be direct deliverables associated with the project and completed during the timeframe of the project. City engineering staff will document the City's use of the project information in the manner described in outcomes 1-4). A form will be developed in which City staff will complete whenever considering the information provided in evaluating planned development both private and municipal, interaction with local watershed groups, and implementing the streamside protection ordinance. A questionnaire will be developed and distributed to City staff and volunteers who provide assistance in monitoring and maintaining existing restoration sites as described in

Outcome 5). Outcomes 6-7) will be evaluated by recording the number of stream miles, wetland acres, and other natural features restored or preserved based on the results of this study.

**4. Project Tasks** The project tasks are summarized as follows:

***Task 1: Development of Quality Assurance Project Plan (QAPP).*** A QAPP will be developed to assure that data collection activities result in quality data. The WCRC will be responsible for this task. ***Deliverable: EPA Approved QAPP***

***Task 2: Conduct Inventory of Riparian, Streambank, Wetland, and other Natural Features.***

Under this task, 1) In addition to the main stems of Owl, Hamestring, and Clabber Creeks, stream(s) will be identified to be included in the inventory and assessment; landowner access permission will be determined or obtained; 2) An inventory of riparian and streambank conditions for 20 miles of urban stream will be conducted that includes the following components: a) Information on the riparian area including presence of wetland features, springs, prairie, forest coverage, and vegetation composition; b) streambanks showing signs of accelerated erosion will be evaluated for their erosion potential using the Bank Erosion Hazard Index (BEHI) method and for Near Bank Shear Stress (NBSS); c) physical measurements of streambank height and length will be performed; d) the width of the riparian area will be evaluated using GIS. The WCRC will be responsible for Task 2 except the applicant will assist with identifying additional areas to include in the assessment and obtaining landowner permission where necessary. ***Deliverables: A summary of the inventory results with maps.***

***Task 3: Develop streambank erosion prediction curves and estimate sediment loads from eroding streambanks.***

Under this task 1) Select a minimum of 24 sites for evaluation of lateral streambank erosion rates based on the results of the inventory, install toe pins, and measure bank profiles; 2) Characterize streambank materials through sampling and analysis; 3) Following one year, measure bank profiles again; evaluate flow conditions to determine if measurements need

to be collected again; 4) Develop erosion prediction curves; 5) Estimate sediment and nutrient loads from streambanks. The WCRC will be responsible for this task. **Deliverables:** *Maps showing erosion potential for streambanks; streambank erosion prediction curves for City of Fayetteville tributaries; estimates of sediment and nutrient loads resulting from streambank erosion and at restoration sites.*

**Task 4: Develop and Implement Criteria for Prioritizing Sites for Restoration or**

**Preservation.** Activities include 1) Criteria for preservation of riparian areas associated with wetland features, prairies, and/or stable streams will be developed and applied; 2) Criteria for prioritizing the restoration of unstable streambanks will be developed and applied. **Deliverables:** *Mapping products showing prioritized sites and summary of problems and/or natural attributes.*

**Task 5: Integrate Study Results into City Engineering/Planning and Monitor and Maintain**

**Existing Restoration Sites.** Activities include 1) coordinate with City Engineering & Planning staff to develop strategies for utilizing study results to a) assist with activities associated with the streamside protection ordinance; b) evaluate urban development proposals; and c) seek and budget funding for restoration; and d) develop incentives for preservation; 2) At three existing stream restoration sites a) collect stream assessment data to determine if restoration is meeting project goals and objectives; b) conduct needed maintenance associated with vegetation and hydrology. The applicant and the WCRC will work on these tasks together. **Deliverables:** *Summary of strategies developed and monitoring and maintenance results.*

**Task 6: Technology Transfer and Outreach.** Under this task 1) work with local watershed

groups and planners to incorporate assessment information into watershed management efforts; 2) incorporate project information into local and regional workshops, meetings, conferences and/or courses attended by city planners, local decision makers, and/or environmental professionals; and 3) work with City staff and volunteers to remove invasive plants at existing

stream restoration sites a minimum of two times each at three sites. The applicant and the WCRC will be responsible. **Deliverables:** *Outreach activities summary*

**Task 7: Administrative and Reporting.** The applicant will provide project oversight and develop 1) quarterly reports and 2) a final report. **Deliverables:** *Quarterly and Final Reports*

**5. Partnership Information** – In addition to the partnership between the City and WCRC, the following organizations have agreed to participate as partners and provide assistance:

**Fayetteville Natural Heritage Commission** will provide information on their green infrastructure study and input on the prioritization of sites for preservation.

**Beaver Lake Watershed Alliance** will assist in transferring information and results to their watershed planning team and to other watershed groups. They will also assist coordinating volunteers for removing invasive vegetation from existing restoration sites.

**Illinois River Watershed Partnership** will assist with transferring information and results to their watershed planning team and coordination of volunteers for invasive plant removal.

**Arkansas Natural Resource Commission** will assist with transferring project information and results to the Arkansas Multi Agency Wetland Planning Team.

Letters of support can be found in Section F, Att. 2.

**6. Milestone Schedule**

Milestone/Task	Start Date	End Date	Product
1: Develop QAPP	11/01/13	01/30/14	Approved QAPP
2: Conduct Inventory			
1) Finalize Site Selection	12/01/13	01/15/14	Area/watershed map
2) Conduct Inventory	02/01/14	05/31/14	Inventory results
3: Develop Streambank Erosion Prediction Curves/Estimate Loads			
1) Select Streambanks/Monitoring	05/31/14	07/31/14	Map of selected locations

2) Install Toe Pins/Measure Bank Profiles/Conduct BEHI/NBSS	08/01/14	10/31/14	Summary of data collected
3) Follow-up Measurements	09/01/15	10/31/15	Summary of erosion rates
4) Sample/analyze bank materials	10/31/14	09/01/15	Results of Analysis
5) Create plot of curves	11/01/15	01/15/16	Prediction Curves
6) Estimate sediment & nutrient loads	01/16/16	02/28/16	Summary of loadings
4: Prioritization Criteria			
1) Riparian Preservation	11/01/14	10/31/15	Map of sites prioritized
2) Stream & Wetland Restoration	10/31/15	06/30/16	Map of sites prioritized
5: Integration of Study Results & Monitoring & Maintenance	02/01/14	10/31/16	Summary of Strategies and Monitoring/Maintenance
6: Outreach	04/30/14	09/30/16	Summary of activities
7. Reporting - Quarterly Report	01/31/14	10/31/16	Progress report
Final Report	08/15/16	10/31/16	Final report

7. **Detailed Budget Workplan:** If the applicant receives an award, the sub-award/sub-grant will be properly awarded consistent with the applicable regulations in 40 CFR Parts 30 or 31. The applicant will also follow all appropriate procurement standards as required by EPA. The overall project budget is summarized in the table below. The award recipient will administer the grant and procure services. The sub-award recipient, the WCRC, will execute major project tasks associated with this proposal, because of their unique expertise in the area of natural resource inventories, watershed assessment, streambank erosion monitoring and material sampling and analysis, and development of streambank prediction curves. Their budget is shown on line “h. Other: WCRC” in the budget table below. The primary responsibilities of the WCRC are outlined in Section B.4. The contract services include procurement of wetland and native plant expertise (\$15,000) and analysis of streambank material samples (\$3,000).

The federal, non-federal, and total cost for each project task identified in Section B.4 are as follows: Task 1. Develop QAPP (F-\$3,000, NF-\$1,000 T-\$4,000); Task 2. Resource Inventory



(F-\$25,000, NF-\$19,000, T-\$44,000); Task 3. Develop Prediction Curves (F-\$65,000, NF-\$10,840, T-\$75,840); Task 4. Develop and Implement Prioritization Criteria (F-\$10,000, NF-\$5,000, T-\$15,000); Task 5. Intergrate Study Results (F-\$20,000, NF-\$5,000, T-\$25,000); Task 6. Technology Transfer (F-\$10,000, NF-\$5,000, T-\$15,000); and Task 7. Administrative and Reporting (F-\$10,000, NF-\$5,000, T-\$15,000).

Object Class Cat.	Project Budget		
	Federal	Non- Federal	Total
a. Personnel	\$0	\$19,458	\$19,458
b. Fringe	\$0	\$6,382	\$6,382
c. Travel	\$2,976	\$0	\$2,976
d. Equipment	\$0	\$0	\$0
e. Supplies	\$0	\$0	\$0
f. Contract	\$18,388	\$0	\$18,388
g. Construction	\$0	\$0	\$0
h. Other: WCRC (see table below)	\$121,136	\$25,000	\$146,136
i. Total Direct	\$142,500	\$50,840	\$193,340
j. Indirect	\$0	\$0	\$0
k. Totals	\$142,500	\$50,840	\$193,340

The applicant is providing the in-kind match and cash match (\$25,000) to successfully complete tasks described in Section B.4.

A breakdown of the WCRC budget, which is part of the total project cost of \$193,340, is shown in the table below. Travel expenses will be used to complete the Section B.4 tasks and to attend professional meetings related to the scope of the work being performed. Supplies include; Computer

Object Class Cat.	<i>Other: WCRC Budget (included in the total project cost of \$193,340)</i>		
	Federal	Non- Federal	Total
a. Personnel	\$55,000	\$11,000	\$66,000
b. Fringe	\$21,835	\$4,367	\$26,202
c. Travel	\$6,000	\$3,000	\$9,000
d. Equipment	\$0	\$0	\$0
e. Supplies	\$9,035	\$780	\$9,815
f. Contract	\$0	\$0	\$0
g. Construction	\$0	\$0	\$0
h. Other:	\$0	\$0	\$0
i. Total Direct	\$91,870	\$19,147	\$111,017
j. Indirect	\$29,266	\$5,853	\$35,119
k. Totals	\$121,136	\$25,000	\$146,136

Workstation (\$1,500), Laptop Computer (\$1,500), Surveying Supplies (\$1,000), ArcMap software license (\$2,000), Project maintenance materials including native plant seed and erosion control fabric (2,000), and rental of machinery to implement prescribed maintenance activities (\$1,035). Indirect costs are based on a negotiated rate the WCRC has established with the Department of the Interior.

**8. Restoration Demonstration Project Information – N/A**

**9. Programmatic Capability/ Technical Experience/ Qualifications**

The following staff will have primary roles and responsibilities in implementing this project.

*Sarah Wrede, City of Fayetteville, Engineering Division* – As Project Coordinator, she will coordinate activities within City Divisions and with the WCRC, oversee the budget, assist with

integration of the study results into City activities, and project reporting. **Chris Brown, City Engineer for Fayetteville** – will be responsible for transferring the assessment information to the engineering, planning, and transportation departments. **Sandi Formica, WCRC** – As Project Manager, she will be responsible for the implementation of tasks; overall project management including overseeing the assessment; working with project partners to integrate results into watershed planning. **Mathew Van Eps, P.E., WCRC** – As Project Engineer, he will be responsible for overseeing the field work, data collection, and data analysis.

**Applicant's Experience** – The *City of Fayetteville* has been acknowledged for its environmental awareness for many years. The City is currently recognized as leading the State of Arkansas in sustainability and green infrastructure policies. The City partnered with the WCRC on four stream and streambank restoration projects that have been successfully implemented using the natural channel design approach. These projects included evaluating streambank erosion and creating or enhancing wetland areas. Fact sheets describing these projects can be found in Section F, Att. 3. The current administration has expressed interest and support in establishing more native grasses in the City's parks to reduce maintenance and enhance the natural settings. Additionally, the City has recently developed a city-wide phosphorus reduction plan and has restored a section of stream at Red Oak Park with the Arkansas Game and Fish Commission. The *Watershed Conservation Resource Center (WCRC)* is a 501(c) (3) non-profit organization whose mission is to protect, conserve, and restore natural resources. The co-founders and principals of the WCRC, Sandi J. Formica and Matthew Van Eps, have extensive backgrounds and are leading regional experts in watershed management, watershed assessment, stream stability analysis, natural channel restoration design and the utilization of GIS for inventory and evaluation of natural resource condition. The WCRC provides specialized assistance concerning watershed resource issues to a variety of organizations including; watershed groups; local, state

and federal governments; non-profit organizations; conservation districts; and other entities that request assistance. The staff has a broad range of experience with the watershed approach and has spent many years working throughout Arkansas on a variety of watershed issues. The WCRC is housed in Fayetteville, Arkansas. They have completed five stream and streambank restoration projects in the past five years and continue to monitor these projects. All of the projects include riparian, streambank erosion, and sediment/nutrient loading analyses. Fact sheets describing these projects can be found in Section F, Att. 3. A summary describing the WCRC and brief synopsis of Sandi Formica & Matt Van Eps experience along with City staff resumes can be found in can found in Section F, Att. 4.

**10. Transfer of Results:** Project results will be presented to key City staff personnel and meetings will be held to develop strategies to incorporate the information into current development review process and to find incentives for preservation. As part of the monitoring and maintenance of existing restoration sites, one-on-one training will be provided to City maintenance personnel and volunteers on healthy urban streams and wetlands and the removal of invasive vegetation. Events will be organized for volunteers to remove invasive vegetation. Project results will be presented to local watershed groups through local information meetings and will be incorporated into workshops, conferences and/or courses attended by city planners, local decision makers, and/or environmental professionals at both a local and regional scale.

**Section C: Past Performance** – The City in partnership with the WCRC has completed 95% of FY09 EPA Wetlands Program Development Grant to demonstrate the implementation of an urban stream restoration using natural channel design techniques and creating wetland areas. The 1600 ft project has been successful in enhancing habitat, stabilizing streambanks, and protecting City Park and private property during catastrophic flooding in 2011. The City has executed four EPA State and Tribal Assistance Grants (XP-966737-01-0; XP-976902-01-0; XP-

966062-01-1 and XP-966353-01-0) used for sanitary sewer line and manhole rehabilitation projects. Additionally, the City has executed three Outdoor Recreation Grants through the Arkansas Department of Parks and Tourism used for park development and improvements. All projects were successfully managed and completed within the established guidelines and timelines. All reporting requirements were met and projects resulted in satisfactory outcomes. The STAG projects resulted in reduced nutrients and reduced inflow/infiltration to the wastewater treatment system.

The WCRC has successfully completed the following EPA Section 319 grants administered under ANRC: Design and implement stream restoration using a natural channel design approach— 1200 ft Niokaska Creek at Gulley Park (2009), 1800 ft West Fork White River at Brentwood (2010), 1000 ft White River near Fayetteville (2011), and 1200 ft Mullins Creek at University of Arkansas Campus (2012). The WCRC successfully managed these projects and met all of the reporting requirements including developing a final report. Environmental outputs for all of these projects were the WCRC designed & implement a natural channel that reduced channel instability, reduced sediment and nutrient loads, and enhanced the aquatic/terrestrial habitat. Environmental outcomes were met— sediment, total phosphorus, and total nitrogen loadings were reduced by a minimum of 96%, 95%, and 94%, respectively. In 2010, the WCRC completed the EPA Agreement #AW832239-03, Mid-South Watershed Training Program in which the WCRC developed and conducted watershed-based training. The environmental output was seventeen training courses were conducted with over 700 students attending. Based on course evaluations, an outcome of over 80% of the participants found the course attended useful. A summary of WCRC projects can be found in Section F, Att. 4.

**Section D: Quality Assurance / Quality Control** -The applicant will be collecting environmental data and will submit a QAPP plan for review and approval. The applicant has an approved QA/QC plan.

**Section E: Invasive Species Control** - The applicant is not conducting activities that will result in introducing invasive species. Invasive vegetation will be removed as part of this project.

## **Section F: Attachments**

- Attachment 1 – Project Map
- Attachment 2 – Letters of Support
- Attachment 3 – Fact Sheets on Stream Restoration Projects
- Attachment 4 – Qualifications

**RESOLUTION NO. 126-13**

**A RESOLUTION APPROVING APPLICATION FOR AN EPA REGION 6  
WETLAND PROGRAM DEVELOPMENT GRANT IN AN AMOUNT UP TO  
\$132,500.00 FOR AN ASSESSMENT OF CITY STREAMS**

**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF  
FAYETTEVILLE, ARKANSAS:**

**Section 1. That the City Council of the City of Fayetteville, Arkansas hereby approves  
applying for an EPA Region 6 Wetland Program Development Grant in an amount up to  
\$132,500.00 for an assessment of City streams.**

**PASSED and APPROVED this 4<sup>th</sup> day of June, 2013.**

**APPROVED:**

**ATTEST:**

By:   
**LIONELD JORDAN, Mayor**

By:   
**SONDRA E. SMITH, City Clerk/Treasurer**



**ORDINANCE NO. 5645**

AN ORDINANCE WAIVING THE REQUIREMENTS OF FORMAL COMPETITIVE BIDDING AND APPROVING A FIVE YEAR MEMORANDUM OF UNDERSTANDING WITH THE WATERSHED CONSERVATION RESOURCE CENTER TO JOINTLY SEEK FUNDING AND USE SUCH FUNDING TO DESIGN AND CONSTRUCT STREAM RESTORATION PROJECTS

**WHEREAS**, the City of Fayetteville has long worked with the Watershed Conservation Resource Center (WCRC) and funded quality stream restoration projects successfully completed by the Center; and

**WHEREAS**, the provisions of the attached Memorandum of Understanding meet the City of Fayetteville's need for continuing stream restoration projects at little or no cost to the City; and

**WHEREAS**, the Watershed Conservation Resource Center can efficiently and effectively provide this service at a significant savings to the citizens of Fayetteville.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:**

Section 1: That the City Council of the City of Fayetteville, Arkansas hereby determines an exceptional situation exists in which competitive bidding is deemed not feasible or practical and therefore waives the requirements of formal competitive bidding and approves a Memorandum of Understanding (marked as Exhibit "A" attached hereto and made a part hereof) between the City of Fayetteville, Arkansas and the Watershed Conservation Resource Center to jointly seek funding and use such funding to design and construct stream restoration projects and authorizes Mayor Jordan to sign such Memorandum.

**PASSED and APPROVED** this 7<sup>th</sup> day of January, 2014.

APPROVED:

By:

  
LIONELD JORDAN, Mayor

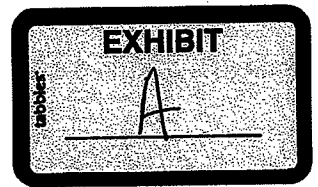
ATTEST:

By:

  
SONDRA E. SMITH, City Clerk/Treasurer







## MEMORANDUM OF UNDERSTANDING

Between

Watershed Conservation Resource Center

And

City of Fayetteville

This Memorandum of Understanding (MOU) is entered into and executed on the date indicated below the signature block, by and between the Watershed Conservation Resource Center, hereinafter referred to as WCRC, and the CITY OF FAYETTEVILLE.

### A. PURPOSE

The purpose of this MOU is to establish a general framework for cooperation between the WCRC and the CITY OF FAYETTEVILLE to 1) seek funding and conduct stream restoration projects to achieve the common goal of restoring unstable sections of streams to a morphologically stable form utilizing a natural channel design approach and 2) to work together on nonpoint source (NPS) related issues associated with reducing nutrients and improving riparian and other natural areas. Innovative approaches will be used in designing and implementing stream restorations that will result in improved water quality of the City's watersheds and will address severe streambank erosion, while restoring aquatic and terrestrial habitat and maintaining a sustainable, natural hydrology. Such cooperation will serve the parties' mutual interest.

### B. STATEMENT OF MUTUAL INTERESTS AND BENEFITS

The WCRC is a nonprofit organization that strives to protect, conserve, and restore natural resources by utilizing the watershed approach, conducting environmental outreach, and providing planning and technical assistance to landowners, communities, and government. The WCRC principals are regional experts and local leaders in implementing natural channel design-based stream restorations that meet multiple local and regional objectives relating to river channel instability, water quality, and ecological services. This MOU is of benefit to the CITY OF FAYETTEVILLE because these activities will help to meet the objectives of the City's Nutrient Reduction Plan and will lead to both aquatic and terrestrial habitat restoration, improved water quality in the form of both phosphorus and sediment reductions, reduced streambank erosion, and improve aesthetics of local streams and rivers. This effort will also help to promote the use of alternatives to traditional channel modifications in both urbanizing and rural areas.

The WCRC and the CITY OF FAYETTEVILLE partnered and have obtained several grants for restoring streams within the City and surrounding areas and for assessing streams for stability and contaminant reduction. These projects have brought over \$2,300,000 to the City for water quality and other environmental improvements and have helped to create local partnerships and outreach opportunities in the areas of river restoration, riparian enhancement, and watershed planning. Four stream and streambank restoration projects have been implemented that have resulted in over 4000 tons of sediment and 3,700 lbs of total phosphorus reductions, annually from streambank erosion, restored both aquatic and terrestrial habitat, protected City

infrastructure, and improved aesthetics of City Parks and other properties. The WCRC currently has three active projects with the City and other partners to conduct more river restoration and assess urban streams and riparian areas to identify priority sites in need of restoration. In addition, the WCRC continues to monitor and maintain the four implemented stream restoration sites.

#### C. FEES AND PAYMENTS

No fee is associated with this MOU. As projects are identified by the City, a Task Order establishing the scope, fee, and payment terms for the project will be developed. The basis of this fee and justification for the fee shall be contained in an Appendix attached to each Task Order. Adjustment of the fee may be made should WCRC establish and the CITY OF FAYETTEVILLE agree that there has been, or is to be, a significant change in scope, complexity or character of the services to be performed; or if the CITY OF FAYETTEVILLE decides to shorten the duration of work from the time period specified in the Agreement for completion of work and such modification warrants such adjustment.

In consideration of the above premises, the parties agree as follows:

#### D. THE WCRC:

1. Shall seek funding opportunities for stream restoration projects and other projects related to reduction of non-point source pollution.
2. Upon approval of specific Task Orders by the Mayor or City Council, as required by the City's procurement requirements, shall provide the services detailed in each Task Order. Said tasks may include:
  - a. Identification of stream reaches that could benefit from stream restoration and prioritize, in streams within the City limits.
  - b. Estimation of phosphorous reduction that would be realized for each priority stream restoration project.
  - c. Assistance in developing grant applications for identified stream restorations and other non-point source pollution assessment projects.
  - d. Assistance to the CITY OF FAYETTEVILLE in addressing other NPS related issues.
3. Shall accomplish other specific tasks as detailed in each Task Order

#### E. THE CITY OF FAYETTEVILLE:

1. Shall coordinate all activities within the City of Fayetteville Divisions and Departments and between the CITY OF FAYETTEVILLE and the WCRC.
2. Shall assist with project activities and tasks.
3. Shall provide review and input into the final restoration designs.
4. Shall oversee activities and coordinate staff needed for implementation of the restoration designs.
5. Shall provide documentation of all project activities and associated matching funds.
6. Recognizes that their participation in stream restoration and NPS projects acquired is an integral component in carrying out a successful project that will result in improved water quality and habitat restoration.
7. Shall accomplish other specific tasks as detailed in each Task Order.

F. IT IS MUTUALLY AGREED AND UNDERSTOOD BY ALL PARTIES THAT:

1. FREEDOM OF INFORMATION ACT (FOIA). CITY OF FAYETTEVILLE contract and documents prepared while performing city contractual work are subject to the Arkansas Freedom of Information Act. If a Freedom of Information Act request is presented to the CITY OF FAYETTEVILLE, the WCRC will do everything possible to provide the documents in a prompt and timely manner as prescribed in the Arkansas Freedom of Information Act (A.C.A. §25-19-101 et. seq.) Only legally authorized photocopying costs pursuant to the FOIA may be assessed for this compliance. Any information furnished to the WCRC under this instrument is subject to the Freedom of Information Act (5 U.S.C. 552).

2. MODIFICATION. Modifications within the scope of the instrument shall be made by mutual consent of the parties. Changes, modifications, or amendments in scope (other than as specifically established in this MOU), price or fees to this agreement shall not be allowed without a prior formal contract amendment approved by the Mayor and/or the City Council in advance of the change in scope, cost or fees.

3. PARTICIPATION IN SIMILAR ACTIVITIES. This instrument in no way restricts the WCRC or the CITY OF FAYETTEVILLE from participating in similar activities with other public or private agencies, organizations, and individuals.

4. COMMENCEMENT/EXPIRATION DATE. The instrument is executed as of the date of the last signature and is effective for five years.

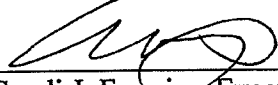
5. PRINCIPAL CONTACT. The principal contacts for this instrument are:

Sandi Formica, Executive Director  
Watershed Conservation Resource Center  
380 West Rock Street  
Fayetteville, AR 72701  
Office Phone: 479-444-1916  
Cell Phone: 501-352-5252  
Office Fax: 928-396-2546  
E-mail: [formica@watershedconservation.org](mailto:formica@watershedconservation.org)

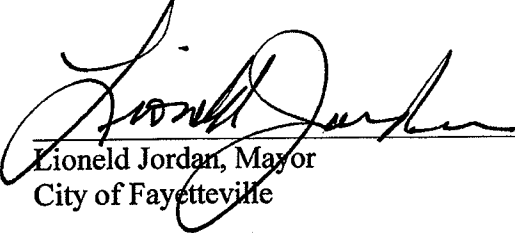
Chris Brown, P.E., City Engineer  
City of Fayetteville  
113 W. Mountain  
Fayetteville, AR 72701  
Phone: 479-575-8206  
Fax: 479-575-8202  
E-mail: [cbrown@ci.fayetteville.ar.us](mailto:cbrown@ci.fayetteville.ar.us)

Sarah Wrede, E.I., Staff Engineer  
City of Fayetteville  
Phone: 479-575-8206  
E-mail: [swrede@ci.fayetteville.ar.us](mailto:swrede@ci.fayetteville.ar.us)

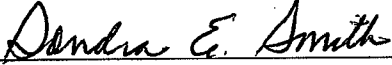
6. NONDISCRIMINATION. During the performance of this agreement, all parties will abide by the terms of Executive Order 11246 on nondiscrimination and will not discriminate against any person because of age, race, color, religion, sex, national origin, or disability.

*S.J.F.*  
  
\_\_\_\_\_  
Sandi J. Formica, Executive Director  
Watershed Conservation Resource Center

12/18/13  
Date

  
\_\_\_\_\_  
Lionel Jordan, Mayor  
City of Fayetteville

1/9/14  
Date

*S.E.S.*  
  
\_\_\_\_\_  
Sondra E. Smith, City Clerk/Treasurer  
City of Fayetteville

01-09-14  
Date



City of Fayetteville Item Review Form

2013-0244

Legistar File Number

1/7/2014

City Council Meeting Date - Agenda Item Only

N/A for Non-Agenda Item

Sarah Wrede

Submitted By

Development Services

Department

Action Required:

An ordinance to waive competitive bidding and to enter into a Memorandum of Understanding with the Watershed Conservation Resource Center to establish a general framework for cooperation to seek funding and conduct stream restoration projects and to work together on nonpoint source related issues.

Does this item have a cost?  No

\$0.00  
Cost of this request

\$0.00  
Category or Project Budget

n/a  
Program or Project Name

n/a  
Account Number

\$0.00  
Funds Used to Date

n/a  
Program or Project Category

n/a  
Project Number

\$0.00  
Remaining Balance

n/a  
Fund Name

Budgeted Item?

Budget Adjustment Attached?  No

V20130812

Previous Ordinance or Resolution # \_\_\_\_\_

Original Contract Number: \_\_\_\_\_

Comments:

*K. [Signature]* 12-19-13

Paul A. Buhner 12-19-2013

*[Signature]* 12-19-13

*[Signature]* 12/20/13

12-18-13 10:52 RCVD

*[Handwritten initials]*





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## CITY COUNCIL AGENDA MEMO

Council Meeting of January 7, 2014

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**To:** Mayor and City Council

**Thru:** Don Marr, Chief of Staff  
Jeremy Pate, Development Services Director  
Chris Brown, City Engineer

**From:** Sarah Wrede, Staff Engineer

**Date:** December 18, 2013

**Subject:** An ordinance to waive competitive bidding and renew a Memorandum of Understanding with the Watershed Conservation Resource Center to continue a general framework for cooperation to seek funding and conduct stream restoration projects and to work together on nonpoint source related issues.

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### PROPOSAL

The purpose of this Memorandum of Understanding (MOU) is to establish a general framework for cooperation between the Watershed Conservation Resource Center (WCRC) and the City of Fayetteville to 1) seek funding and conduct stream restoration projects to achieve the common goal of restoring unstable sections of streams to a morphologically stable form utilizing a natural channel design approach and 2) to work together on nonpoint source (NPS) related issues associated with reducing nutrients and improving riparian and other natural areas.

The WCRC is a nonprofit organization that strives to protect, conserve, and restore natural resources by utilizing the watershed approach, environmental outreach, and providing planning and technical assistance to landowners, communities, and government. The WCRC principals are regional experts and local leaders in implementing natural channel design-based stream restorations that meet multiple local and regional objectives relating to river channel instability, water quality, and ecological services. The WCRC and the City have successfully partnered to receive over \$2,300,000 in federal grants for water quality and other environmental improvements. WCRC has been instrumental in securing these funds due to their relationships with Federal grant agencies and their proven track record of successful stream restoration projects. This MOU will establish a continued partnership between the City and WCRC whereby the WCRC will actively seek grant funding for stream restoration projects in the City of Fayetteville, and will allow the City the opportunity to quickly take advantage of opportunities identified. The MOU is effective for a period of five years.

### RECOMMENDATION

Staff recommends approval of an ordinance to waive competitive bidding and to renew a Memorandum of Understanding with the Watershed Conservation Resource Center to continue a general framework for cooperation to seek funding and conduct stream restoration projects and to work together on nonpoint source related issues.

### BUDGET IMPACT

The proposed agreement will cause no budget impact. As tasks are identified, a Task Order, with associated fee, will be developed for approval by the Mayor and City Council.

**ORDINANCE NO. \_\_\_\_\_**

**AN ORDINANCE WAIVING THE REQUIREMENTS OF FORMAL COMPETITIVE BIDDING AND APPROVING A FIVE YEAR MEMORANDUM OF UNDERSTANDING WITH THE WATERSHED CONSERVATION RESOURCE CENTER TO JOINTLY SEEK FUNDING AND USE SUCH FUNDING TO DESIGN AND CONSTRUCT STREAM RESTORATION PROJECTS**

**WHEREAS**, the City of Fayetteville has long worked with the Watershed Conservation Resource Center (WCRC) and funded quality stream restoration projects successfully completed the Center; and

**WHEREAS**, the provisions of the attached Memorandum of Understanding meet the City of Fayetteville's need for continuing stream restoration projects at little or no cost to the City; and

**WHEREAS**, the Watershed Conservation Resource Center can efficiently and effectively provide this service at a significant savings to the citizens of Fayetteville.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:**

**Section 1:** That the City Council of the City of Fayetteville, Arkansas hereby determines an exceptional situation exists in which competitive bidding is deemed not feasible or practical and therefore waives the requirements of formal competitive bidding and approves a Memorandum of Understanding (marked as Exhibit "A" attached hereto and made a part hereof) between the City of Fayetteville, Arkansas and the Watershed Conservation Resource Center to jointly seek funding and use such funding to design and construct stream restoration projects and authorizes Mayor Jordan to sign such Memorandum.

**PASSED and APPROVED** this 7<sup>th</sup> day of January, 2014.

**APPROVED:**

**ATTEST:**

By: \_\_\_\_\_  
**LIONELD JORDAN, Mayor**

By: \_\_\_\_\_  
**SONDRA E. SMITH, City Clerk/Treasurer**