



City of Fayetteville, Arkansas

113 West Mountain Street
Fayetteville, AR 72701
479-575-8323 TDD -
479-521-1316

Text File

File Number: 2014-0412

Agenda Date: 10/21/2014

Version: 1

Status: Agenda Ready

In Control: City Council

File Type: Ordinance

Agenda Number: C. 2

AN ORDINANCE TO WAIVE THE REQUIREMENT OF FORMAL BIDDING AND APPROVE A COST-SHARE CONTRACT WITH THE BEAVER WATERSHED ALLIANCE IN THE AMOUNT OF \$58,562.00 TO FACILITATE A WATER QUALITY ANALYSIS OF BEAVER LAKE

WHEREAS, the Beaver Watershed Alliance possesses unique expertise and resources ideally suited to meet the City of Fayetteville's need for community outreach, scientific investigation and voluntary best management practice implementation related to the Beaver Lake watershed; and

WHEREAS, the Beaver Watershed Alliance is uniquely positioned to perform this work on behalf of 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 cost-share contract with the Beaver Watershed Alliance in the amount of \$58,562.00 to facilitate a water quality analysis of Beaver Lake.

City of Fayetteville Staff Review Form

2014-0412

Legistar File ID

10/7/2014

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

Billy Ammons, CH2M Hill

9/19/2014

Wastewater Treatment Plant /
Utilities Department

Submitted By

Submitted Date

Division / Department

Action Recommendation:

A Resolution to provide funding of \$60,000.00 to the Beaver Watershed Alliance to facilitate a three-phase study of the assessment methodology, uncertainty analysis, and trend analysis of water quality in Beaver Lake.

Budget Impact:

5400.5800.5314.00		Water/Sewer	
Account Number		Fund	
10027.1001		Phosphorus Standards Management	
Project Number		Project Title	
Budgeted Item?	Yes	Current Budget	\$ 99,856.00
		Funds Obligated	\$ -
		Current Balance	\$ 99,856.00
Does item have a cost?	Yes	Item Cost	\$ 60,000.00
Budget Adjustment Attached?	No	Budget Adjustment	
		Remaining Budget	\$ 39,856.00

V20140710

Previous Ordinance or Resolution # N/A

Original Contract Number: N/A

Approval Date: _____

Comments:

MEETING OF OCTOBER 21, 2014

TO: Mayor and City Council
THRU: Don Marr, Chief of Staff
FROM: Billy Ammons, Wastewater Treatment
DATE: October 3, 2014

SUBJECT: Approval of bid waiver to provide funding to the Beaver Watershed Alliance (BWA) to facilitate a three-phase study of the assessment methodology, uncertainty analysis, and trend analysis of water quality in Beaver Lake.

RECOMMENDATION:

City Administration recommends approval of a bid waiver to provide a \$58,562 cost-share to the BWA for a three phase study of water quality in Beaver Lake by the University of Arkansas. A bid waiver is necessary as it is neither practical nor feasible to bid this work competitively.

BACKGROUND:

Water quality standards for nutrients in Beaver Lake originally developed in 2008 were placed into the recently Arkansas State Legislature approved Regulation # 2. As currently written and without any additional data or technical information being provided, these standards would require the Arkansas Department of Environmental Quality (ADEQ) to designate Beaver Lake as an impaired body of water in 2016. A designation of this type could require ADEQ to perform a Total Maximum Daily Load study and to develop a Waste Load Allocation to all point sources.

DISCUSSION:

Dr. Thad Scott and Dr. Brian Haggard have already been selected by the BWA to collaborate on a three-phase study to do an evaluation of the existing data pertaining to the Lake. The initial phase will produce recommendations to ADEQ regarding how to conduct a scientifically defensible assessment of the Lake. The second phase of the study will consider uncertainties related to the existing data and the third would allow a review of water quality trends in the Lake. This evaluation is important to the City as decisions reached by ADEQ could have a dramatic impact on the City's overall wastewater and stormwater efforts. Other entities participating in this cost-share are the Beaver Water District, Farm Bureau, and the BWA.

BUDGET/STAFF IMPACT:

Funds are available within the Phosphorus Standards Management Project.

Attachments:

Staff Review Form-Beaver WQ Study
Signed Contract from Beaver Watershed Alliance
Purchase Order-Beaver WQ Study
Beaver Lake Standard 1 – Assessment Method Scope of Work.pdf
Beaver Lake Standard 2 – Uncertainty Analysis Method Scope of Work.pdf
Beaver Lake Standard 3 – Trend Analysis Scope of Work.pdf

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

Requisition No.:	Date: 9/19/2014
P.O Number:	

Vendor #: 23661	Vendor Name: Beaver Watershed Alliance	Mail <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Legistar#: 2014-0412
Address: Attn: John Pennington, 614 E Emma Ave Suite M438		Taxable <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Expected Delivery Date:
City: Springdale	State: AR	Quotes Attached <input type="checkbox"/> Yes <input type="checkbox"/> No	
Requester: Cheryl Partain		Requester's Employee #: 2548	Extension: 8224

Item	Description	Quantity	Unit of Issue	Unit Cost	Extended Cost	Account Number	Project.Sub#	Inventory #	Fixed Asset #
1	Three phase study of the assessment methodology, uncertainty analysis, and trend analysis of water quality in Beaver Lake.	1	Unit of Issue	60,000.00	\$60,000.00	5400.5800.5314.00	10027.1001		
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:	Subtotal: <u>\$60,000.00</u>
	Tax: <u>\$0.00</u>
	Total: <u>\$60,000.00</u>

Approvals:

Mayor: _____

Department Director: _____

Purchasing Manager: _____

Chief Financial Officer: _____

Budget Director: _____

IT Director: _____

Dispatch Manager: _____

Utilities Manager: _____

Other: _____

Beaver Lake Numeric Chlorophyll-a and Secchi Transparency Standard: Assessment Methodology

**Thad Scott and Brian Haggard
University of Arkansas**

Background

Site-specific water quality criteria were developed for chlorophyll-a concentrations and secchi transparency at Beaver Lake in 2008. Since that time, these standards have been adopted into Arkansas Regulation #2, which is the state regulation defining water quality standards and assessment. Although the standard for chlorophyll-a was set as a geometric mean of growing season (May – October) and the standard for secchi transparency was set as the annual average, no assessment methodology specific to the water-quality standards were developed. Thus, no guidance exists to define the number of standard exceedances allowable before water quality in Beaver Lake is considered impaired. The numeric values of the standards for chlorophyll-a and secchi transparency, and the location in the lake where these values should be attained, were set based on data collected from upstream and downstream locations in the lake.

We propose a 0.5 year study to recommend assessment methodology of the site-specific chlorophyll-a and secchi transparency standards for Beaver Lake. The objective of the study is to derive an initial assessment methodology based on the method(s) used to develop the site-specific numeric criteria for chlorophyll-a and secchi transparency in Beaver Lake.

Scope of Work

In order to meet the objective of this work, we will intensively review and utilize the findings of the original study that was used to develop the water quality standards for chlorophyll-a and secchi transparency in Beaver Lake. The following activities will also be undertaken:

- Use updated USGS data to re-create analyses from original study used to develop standards in order to derive initial estimates of uncertainty in chlorophyll-a and secchi transparency measurements
- Evaluate expectations in exceedance based on the existing documentation used to develop the water-quality standards based on a weight of evidence approach
- Recommend an initial assessment method that can be provided to the Arkansas Department of Environmental Quality in January 2015

The project will initiate on October 1, 2014. A draft final report will be provided to the Beaver Watershed Alliance on or before Friday January 9, 2015.

Proposed Budget: \$15,210 (See attached budget)

Proposed Budget Justification:

Salaries and Wages – Salary and fringe to cover time of Research Associate, PI, or Co-PI.

Supplies - Consumables such as statistical software licensing, paper, and ink.

BUDGET - University of Arkansas		Date: 8/5/2014
Proposed to (Sponsor):	Beaver Watershed Alliance	
Proposed Start & End Dates:	October 1, 2014 - January 15, 2015	
UA Lead Investigator:	Thad Scott and Brian Haggard	

Notes from RSSP: (1) Do not type in gray-shaded cells.
(2) Follow instructions in cells with a red corner triangle.
(3) Delete these notes when the budget is final.

SALARIES & WAGES	Base Salary	Type	PERSON-MONTHS			Yr 1		Yr 2		Cumulative	
			CAL	AY	SMR	Sponsor	UA	Sponsor	UA	Sponsor	UA
PI, academic or cal. year sal.		9 mo.				0	0	0	0	0	0
PI, summer salary						0	0	0	0	0	0
Co-PI #1, acad. or cal. year		9 mo.				0	0	0	0	0	0
Co-PI #1, summer						0	0	0	0	0	0
Co-PI #2, acad. or cal. year		9 mo.				0	0	0	0	0	0
Co-PI #2, summer						0	0	0	0	0	0
Postdoctoral Associate		12 mo.				0	0	0	0	0	0
Research Associate (staff)		12 mo.				8,000	0	0	0	8,000	0
Research Assistant or Tech.		12 mo.				0	0	0	0	0	0
Graduate Assistant (Ph.D.)				mo. @		0	0	0	0	0	0
Graduate Assistant (Masters)				mo. @		0	0	0	0	0	0
Hourly, non-student(s)				hrs @		0	0	0	0	0	0
Hourly, enrolled student				hrs @		0	0	0	0	0	0
Total S&W						8,000	0	0	0	8,000	0
FRINGE BENEFITS											
					Institutional Rate:						
Faculty/staff academic / calendar salary					27.10%	2,168	0	0	0	2,168	0
Faculty summer salary					16.00%	0	0	0	0	0	0
GRA(s)					3.10%	0	0	0	0	0	0
Hourly, non-student					7.30%	0	0	0	0	0	0
Hourly, enrolled student					0.40%	0	0	0	0	0	0
Total FB						2,168	0	0	0	2,168	0
Total Salaries + Benefits						10,168	0	0	0	10,168	0
TRAVEL - Domestic										0	0
TRAVEL - Foreign										0	0
MATERIALS & SUPPLIES (not fees or services, which are "Other")						250				250	0
JOURNAL PUBLICATION FEES										0	0
OTHER DIRECT COSTS (Itemize by type; insert extra rows if needed.)										0	0
										0	0
Subtotal Other Direct Costs						0	0	0	0	0	0
Modified Total Direct Costs (above subtotal costs subject to F&A Cost)						10,418	0	0	0	10,418	0
F & A COST (MTDC x RATE):					46%	4,792	0	0	0	4,792	0
F & A COST (UNRECOVERED):					0%		0	0	0		0
F & A COST (COST-SHARE):					0%		0	0	0		0
Modified Total Direct Costs (first \$25K of each subaward)						0	0	0	0	0	0
F & A COST (MTDC x RATE)SUB(S):					0%	0	0	0	0	0	0
(Direct Costs not subject to F&A Cost, with the exception that the first \$25K of each subaward is subject to F&A):											
GRA TUITION		# Credit Hours: 21			Rate: \$362	0	0	0	0	0	0
EQUIPMENT @ > \$2500 each										0	0
PARTICIPANT (TRAINEE) SUPPORT										0	0
SUBAWARD #1, total (Institution):										0	0
SUBAWARD #2, total (Institution):										0	0
SUBAWARD #3, total (Institution):										0	0
TOTAL DIRECT COST						10,418	0	0	0	10,418	0
TOTAL PROJECT COST						\$15,210	\$0	\$0	\$0	15,210	0

Note: Any slight discrepancy in calculation is due to spreadsheet rounding.

NOTE: Tuition is increased 5% per year. In the event your project is funded and there are not enough funds to cover actual tuition costs, you will be required to rebudget funds from another category to cover the additional cost.

Beaver Lake Numeric Chlorophyll-a and Secchi Transparency Standard: Uncertainty Analysis

**Thad Scott and Brian Haggard
University of Arkansas**

Background

Site-specific water quality criteria were developed for chlorophyll-a concentrations and secchi transparency at Beaver Lake in 2008. Since that time, these standards have been adopted into Arkansas Regulation #2, which is the state regulation defining water quality standards and assessment. Although the standard for chlorophyll-a was set as a geometric mean of growing season (May – October) and the standard for secchi transparency was set as the annual average, no assessment methodology specific to the water-quality standards were developed. Thus, no guidance exists to define the number of standard exceedances allowable before water quality in Beaver Lake is considered impaired. The numeric values of the standards for chlorophyll-a and secchi transparency, and the location in the lake where these values should be attained, were set based on data collected from upstream and downstream locations in the lake. Since that time, a substantial database has been created for chlorophyll-a measurements near Hickory Creek Marina and other locations in the lake. An uncertainty analysis of these data will help inform the appropriate assessment methodology.

We proposed a 1.5 year study to evaluate the uncertainty in chlorophyll-a and secchi transparency measurements in Beaver Lake. The objective of the study is to assess the variation in chlorophyll-a and secchi transparency across multiple spatial and temporal scales in order to validate the assessment method.

Scope of Work

In order to meet the objective of this work, we will intensively review and utilize the findings of the original study that was used to develop the water quality standards for chlorophyll-a and secchi transparency in Beaver Lake. We will also identify and utilize data sources that were not included in the original study and new data that has been collected from the study in order to assess the effect of spatial and temporal variation on chlorophyll-a and secchi transparency measurements. The following activities will be undertaken:

- Obtain chlorophyll-a, secchi transparency, and nutrient data for Beaver Lake from a variety of sources including USGS, Beaver Water District, peer-reviewed publications, and theses and dissertations from the University of Arkansas
- Use data to propagate error through the standard development process including variation across scales that include:
 - Horizontal variation across sites along the riverine-transition-lacustrine gradient
 - Vertical variation across the photic zone (chlorophyll-a)
 - Intra-annual variation during the growing season
 - Interannual variation
- Based on the results of the more in-depth error analysis, recommend amendments to the assessment methodology proposed in Objective 1

The project will initiate on January 12, 2015 and conclude on March 30, 2016. Results from this project could inform potential amendments to the assessment methodology recommendations previously derived for Beaver Lake.

Proposed Budget: \$29,781 (See attached budget)

Proposed Budget Justification:

Salaries and Wages – Salary and fringe to cover time of Research Associate, PI, or Co-PI..

Travel – Support for travel to project meetings and regional and national scientific meetings.

Supplies - Consumables such as statistical software licensing, paper, and ink.

Journal publication fees - Cost of scientific publication.

BUDGET - University of Arkansas		Date: 8/5/2014
Proposed to (Sponsor):	Beaver Watershed Alliance	
Proposed Start & End Dates:	October 1, 2014 - March 30, 2016	
UA Lead Investigator:	Thad Scott and Brian Haggard	

Notes from RSSP: (1) Do not type in gray-shaded cells.
(2) Follow instructions in cells with a red corner triangle.
(3) Delete these notes when the budget is final.

SALARIES & WAGES	Base Salary	Type Appoint.	PERSON-MONTHS			Yr 1		Yr 2		Cumulative	
			CAL	AY	SMR	Sponsor	UA	Sponsor	UA	Sponsor	UA
PI, academic or cal. year sal.		9 mo.				0	0	0	0	0	0
PI, summer salary						0	0	0	0	0	0
Co-PI #1, acad. or cal. year		9 mo.				0	0	0	0	0	0
Co-PI #1, summer						0	0	0	0	0	0
Co-PI #2, acad. or cal. year		9 mo.				0	0	0	0	0	0
Co-PI #2, summer						0	0	0	0	0	0
Postdoctoral Associate		12 mo.				0	0	0	0	0	0
Research Associate (staff)	\$44,000	12 mo.				7,000	3,000	10,000	0	0	0
Research Assistant or Tech.		12 mo.				0	0	0	0	0	0
Graduate Assistant (Ph.D.)				mo. @		0	0	0	0	0	0
Graduate Assistant (Masters)				mo. @		0	0	0	0	0	0
Hourly, non-student(s)				hrs @		0	0	0	0	0	0
Hourly, enrolled student				hrs @		0	0	0	0	0	0
Total S&W						7,000	0	3,000	0	10,000	0
FRINGE BENEFITS											
					Institutional Rate:						
Faculty/staff academic / calendar salary					27.10%	1,897	0	813	0	2,710	0
Faculty summer salary					16.00%	0	0	0	0	0	0
GRA(s)					3.10%	0	0	0	0	0	0
Hourly, non-student					7.30%	0	0	0	0	0	0
Hourly, enrolled student					0.40%	0	0	0	0	0	0
Total FB						1,897	0	813	0	2,710	0
Total Salaries + Benefits						8,897	0	3,813	0	12,710	0
TRAVEL - Domestic						2,500	2,500	5,000	0	0	0
TRAVEL - Foreign								0	0	0	0
MATERIALS & SUPPLIES (not fees or services, which are "Other")						250	500	750	0	0	0
JOURNAL PUBLICATION FEES						969	969	1,938	0	0	0
OTHER DIRECT COSTS (Itemize by type; insert extra rows if needed.)								0	0	0	0
								0	0	0	0
Subtotal Other Direct Costs						0	0	0	0	0	0
Modified Total Direct Costs (above subtotal costs subject to F&A Cost)						12,616	0	7,782	0	20,398	0
F & A COST (MTDC x RATE):					46%	5,803		3,580		9,383	
F & A COST (UNRECOVERED):					0%			0		0	
F & A COST (COST-SHARE):					0%			0		0	
Modified Total Direct Costs (first \$25K of each subaward)						0		0		0	
F & A COST (MTDC x RATE)SUB(S):					0%	0		0		0	
(Direct Costs not subject to F&A Cost, with the exception that the first \$25K of each subaward is subject to F&A):											
GRA TUITION		# Credit Hours: 21			Rate: \$362	0	0	0	0	0	0
EQUIPMENT @ > \$2500 each								0	0	0	0
PARTICIPANT (TRAINEE) SUPPORT								0	0	0	0
SUBAWARD #1, total (Institution):								0	0	0	0
SUBAWARD #2, total (Institution):								0	0	0	0
SUBAWARD #3, total (Institution):								0	0	0	0
TOTAL DIRECT COST						12,616	0	7,782	0	20,398	0
TOTAL PROJECT COST						\$18,419	\$0	\$11,362	\$0	29,781	0

Note: Any slight discrepancy in calculation is due to spreadsheet rounding.

NOTE: Tuition is increased 5% per year. In the event your project is funded and there are not enough funds to cover actual tuition costs, you will be required to rebudget funds from another category to cover the additional cost.

**Beaver Lake Numeric Chlorophyll-a and Secchi Transparency Standard:
Long-Term Trend Analysis**

**Thad Scott and Brian Haggard
University of Arkansas**

Background

Site-specific water quality criteria were developed for chlorophyll-a concentrations and secchi transparency at Beaver Lake in 2008. Since that time, these standards have been adopted into Arkansas Regulation #2, which is the state regulation defining water quality standards and assessment. Although the standard for chlorophyll-a was set as a geometric mean of growing season (May – October) and the standard for secchi transparency was set as the annual average, no assessment methodology specific to the water-quality standards were developed. Thus, no guidance exists to define the number of standard exceedances allowable before water quality in Beaver Lake is considered impaired. Preliminary analyses suggests that, depending on the assessment methodology used, Beaver Lake may be impaired based on violations of the standards for both chlorophyll-a and secchi transparency. Sufficient data may now exist to determine if this listing is appropriate based on long-term trends in lake water quality.

We proposed a 1.5 year study to evaluate the long-term trends in water quality in Beaver Lake and the flowing waters which enter the reservoir. The objective of the study is to quantify trends in chlorophyll-a, secchi transparency, and nutrient concentrations in Beaver Lake and the major inflowing rivers to verify any potential water quality impairment.

Scope of Work

In order to meet the objective of this work, we will intensively review and utilize the findings of the original study that was used to develop the water quality standards for chlorophyll-a and secchi transparency in Beaver Lake. We will also identify and utilize data sources that were not included in the original study and new data that has been collected from the study in order to assess the long-term trends in water quality measurements. The following activities will be undertaken:

- Trend analysis on Beaver Lake data including all USGS data since 2001 and any other data identified in Objective 2 as suitable for the analysis
- Trend analysis on inflow data from White River, Richland Creek, and War Eagle Creek
- Investigate any methodological differences in sample analysis that could be driving any observed trends in water quality

The project will initiate on January 12, 2015 and conclude on March 30, 2016. Results from this project could inform potential amendments to the assessment methodology recommendations previously derived for Beaver Lake.

Proposed Budget: \$29,781 (See attached budget)

Proposed Budget Justification:

Salaries and Wages – Salary and fringe to cover time of Research Associate, PI, or Co-PI..

Travel – Support for travel to project meetings and regional and national scientific meetings.

Supplies - Consumables such as statistical software licensing, paper, and ink.

Journal publication fees - Cost of scientific publication.

BUDGET - University of Arkansas		Date: 8/5/2014
Proposed to (Sponsor):	Beaver Watershed Alliance	
Proposed Start & End Dates:	October 1, 2014 - March 30, 2016	
UA Lead Investigator:	Thad Scott and Brian Haggard	

Notes from RSSP: (1) Do not type in gray-shaded cells.
(2) Follow instructions in cells with a red corner triangle.
(3) Delete these notes when the budget is final.

SALARIES & WAGES	Base Salary	Type Appoint.	PERSON-MONTHS			Yr 1		Yr 2		Cumulative	
			CAL	AY	SMR	Sponsor	UA	Sponsor	UA	Sponsor	UA
PI, academic or cal. year sal.		9 mo.				0		0		0	0
PI, summer salary						0		0		0	0
Co-PI #1, acad. or cal. year		9 mo.				0		0		0	0
Co-PI #1, summer						0		0		0	0
Co-PI #2, acad. or cal. year		9 mo.				0		0		0	0
Co-PI #2, summer						0		0		0	0
Postdoctoral Associate		12 mo.				0		0		0	0
Research Associate (staff)	\$44,000	12 mo.				7,000		3,000		10,000	0
Research Assistant or Tech.		12 mo.				0		0		0	0
Graduate Assistant (Ph.D.)				mo. @		0		0		0	0
Graduate Assistant (Masters)				mo. @		0		0		0	0
Hourly, non-student(s)				hrs @		0		0		0	0
Hourly, enrolled student				hrs @		0		0		0	0
Total S&W						7,000	0	3,000	0	10,000	0
FRINGE BENEFITS											
					Institutional Rate:						
Faculty/staff academic / calendar salary					27.10%	1,897	0	813	0	2,710	0
Faculty summer salary					16.00%	0	0	0	0	0	0
GRA(s)					3.10%	0	0	0	0	0	0
Hourly, non-student					7.30%	0	0	0	0	0	0
Hourly, enrolled student					0.40%	0	0	0	0	0	0
Total FB						1,897	0	813	0	2,710	0
Total Salaries + Benefits						8,897	0	3,813	0	12,710	0
TRAVEL - Domestic						2,500		2,500		5,000	0
TRAVEL - Foreign										0	0
MATERIALS & SUPPLIES (not fees or services, which are "Other")						250		500		750	0
JOURNAL PUBLICATION FEES						969		969		1,938	0
OTHER DIRECT COSTS (Itemize by type; insert extra rows if needed.)										0	0
										0	0
Subtotal Other Direct Costs						0	0	0	0	0	0
Modified Total Direct Costs (above subtotal costs subject to F&A Cost)						12,616	0	7,782	0	20,398	0
F & A COST (MTDC x RATE):					46%	5,803		3,580		9,383	
F & A COST (UNRECOVERED):					0%					0	0
F & A COST (COST-SHARE):					0%					0	0
Modified Total Direct Costs (first \$25K of each subaward)						0		0		0	
F & A COST (MTDC x RATE)SUB(S):					0%	0		0		0	
(Direct Costs not subject to F&A Cost, with the exception that the first \$25K of each subaward is subject to F&A):											
GRA TUITION		# Credit Hours: 21			Rate: \$362	0		0		0	0
EQUIPMENT @ > \$2500 each										0	0
PARTICIPANT (TRAINEE) SUPPORT										0	0
SUBAWARD #1, total (Institution):										0	0
SUBAWARD #2, total (Institution):										0	0
SUBAWARD #3, total (Institution):										0	0
TOTAL DIRECT COST						12,616	0	7,782	0	20,398	0
TOTAL PROJECT COST						\$18,419	\$0	\$11,362	\$0	29,781	0

Note: Any slight discrepancy in calculation is due to spreadsheet rounding.

NOTE: Tuition is increased 5% per year. In the event your project is funded and there are not enough funds to cover actual tuition costs, you will be required to rebudget funds from another category to cover the additional cost.

CONTRACT

The Beaver Watershed Alliance and the City of Fayetteville, Arkansas agree to enter into the following contract on this ____ day of _____, 2014.

WHEREAS, The Beaver Watershed Alliance is a non-profit corporation whose mission is to proactively protect, enhance, and sustain water quality in Beaver Lake and the integrity of its watershed through public outreach, scientific investigation, and voluntary best management practice implementation; and

WHEREAS, The City of Fayetteville has to comply with mandates of the Clean Water Act and ADEQ, and the numeric criteria set forth by ADEQ for Beaver Lake are anticipated to be accepted by the EPA in January 2015 which could result in the designated impairment of water quality in Beaver Lake by the ADEQ and EPA,

NOW, THEREFORE, the Beaver Watershed Alliance and the City of Fayetteville agree as follows:

1. The City of Fayetteville agrees to cost-share in scientific development of a chlorophyll-a and secchi disk transparency assessment methodology, and scientific investigation of an analysis of uncertainty, and long-term trend analysis from the Beaver Watershed Alliance for the sum of Fifty-Eight Thousand Five-Hundred Sixty-Two Dollars (\$58,562.00).

2. The Beaver Watershed Alliance agrees to provide source water protection, and scientific investigation services for the benefit of the City of Fayetteville and its citizens, during the period of October 31, 2014 through March 14, 2016.

3. The Beaver Watershed Alliance agrees to provide a written report about a recommended assessment methodology for chlorophyll-a and secchi disk transparency to the Fayetteville City Council due on January 31, 2015. Additionally, the Beaver Watershed Alliance agrees to provide a written report about an analysis of uncertainty and long-term trend analysis regarding the criteria and assessment methodology due in March 2016.

BEAVER WATERSHED ALLIANCE

CITY OF FAYETTEVILLE



By: _____
Executive Director

By. _____
Mayor Lioneld Jordan

