Form 9-1366 (April 2015) U.S. Department of the Interior U.S. Geological Survey Joint Funding Agreement FOR

Water Resource Investigations

Agreement#: Customer#: Project #: TIN #:

USGS DUNS #: 128821266

Fixed Cost Agreement YES[X]NO[]

THIS AGREEMENT is entered into as of the January 25, 2017, by the U.S. GEOLOGICAL SURVEY, Texas Water Science Center, UNITED STATES DEPARTMENT OF THE INTERIOR, party of the first part, and the San Antonio River Authority party of the second part.

- 1. The parties hereto agree that subject to the availability of appropriations and in accordance with their respective authorities there shall be maintained in cooperation Water Resource Investigations (per attachment), herein called the program. The USGS legal authority is 43 USC 36C; 43 USC 50, and 43 USC 50b.
- 2. The following amounts shall be contributed to cover all of the cost of the necessary field and analytical work directly related to this program. 2(b) include in-Kind-Services in the amount of \$0.00

(a) \$0

by the party of the first part during the period January 25, 2017 to September 30, 2017

(b) \$0

by the party of the second part during the period

January 25, 2017 to September 30, 2017

(c) Contributions are provided by the party of the first part through other USGS regional or national programs, in the amount of:

Description of the USGS regional/national program:

- (d) Additional or reduced amounts by each party during the above period or succeeding periods as may be determined by mutual agreement and set forth in an exchange of letters between the parties
- (e) The performance period may be changed by mutual agreement and set forth in an exchange of letters between the parties.
- 3. The costs of this program may be paid by either party in conformity with the laws and regulations respectively governing each party.
- 4. The field and analytical work pertaining to this program shall be under the direction of or subject to periodic review by an authorized representative of the party of the first part.
- 5. The areas to be included in the program shall be determined by mutual agreement between the parties hereto or their authorized representatives. The methods employed in the field and office shall be those adopted by the party of the first part to insure the required standards of accuracy subject to modification by mutual agreement.
- 6. During the course of this program, all field and analytical work of either party pertaining to this program shall be open to the inspection of the other party, and if the work is not being carried on in a mutually satisfactory manner, either party may terminate this agreement upon 60 days written notice to the other party.
- 7. The original records resulting from this program will be deposited in the office of origin of those records. Upon request, copies of the original records will be provided to the office of the other party.
- 8. The maps, records or reports resulting from this program shall be made available to the public as promptly as possible. The maps, records or reports normally will be published by the party of the first part. However, the party of the second part reserves the right to publish the results of this program and, if already published by the party of the first part shall, upon request; be furnished by the party of the first part; at cost, impressions suitable for purposes of reproduction similar to that for which the original copy was prepared. The maps, records or reports published by either party shall contain a statement of the cooperative relations between the parties.
- 9. USGS will issue billings utilizing Department of the Interior Bill for Collection (form DI-1040). Billing documents are to be rendered quarterly. Payments of bills are due within 60 days after the billing date. If not paid by the due date, interest will be charged at the current Treasury rate for each 30 day period, or portion thereof, that the payment is delayed beyond the due date. (31 USC 3717; Comptroller General File B-212222, August 23, 1983.).

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U.S. Department of the Interior
U.S. Geological Survey
Joint Funding Agreement
FOR
Water Resource Investigations

Agreement#: 17CMTX000 Customer#: 6000000621 Project #: SI009ME TIN #: 74-6011311 USGS DUNS #: 128821266

USGS Technical Point of Contact Customer Technical Point of Contact Name: Name: Address: Address: Telephone: Telephone: Fax: Fax: Email: Email: USGS Billing Point of Contact **Customer Billing Point of Contact** Name: Name: Address: Address: Telephone: Telephone: Fax: Fax: Email: Email: U.S. Geological Survey **United States** City of xxx Department of Interior Signature Signatures Date: By____ Name: Date: Name: Title: Director Title: By_ Date: Name: Title: By_ Date: Name: Title:

ATTACHMENT A

Accessibility of Records

At any time during normal business hours and as often as City may deem necessary, upon three (3) days written notice, USGS shall make all of its records pertaining to this Agreement available to City or any of its authorized representatives, and shall permit City or any of its authorized representatives to audit, examine, and make excerpts and/or copies of same.

USGS agrees and represents that it will cooperate with City, at no charge to the City, to satisfy, to the extent required by law, any and all requests for information received by City under the Texas Public Information Act or related laws pertaining to this Agreement.

Assignment

USGS shall not transfer, pledge or otherwise assign this Agreement, any interest in and to same, or any claim arising thereunder, without first procuring the written approval of City. Any attempt at transfer, pledge or other assignment shall be void ab initio and shall confer no rights upon any third person.

No Third Party Rights

This Agreement is not intended, nor shall it be construed, to create any third party beneficiary rights in any person who is not a party hereto, unless otherwise expressly herein provided.

Nothing in this Agreement shall be deemed or construed by the parties hereto, or any third party, to create the relationship of principal and agent, partners, joint venturers or any other similar such relationship between the parties hereto. It is understood and agreed that no provision contained herein, nor any acts of the parties hereto, creates a relationship other than the relationship of Lessor and Lessee.

Liability

City is governed by the Texas Tort Claims Act, which is located in Chapter 101 of the Texas Civil Practice and Remedies Code, and nothing in this Agreement shall be construed as a waiver of any of the immunities and protections from liability included therein.

Insurance

USGS, at its own expense, shall provide and maintain, during the term of this Agreement, either insurance, with or without retention, or a self-insurance program. This insurance or self-insurance shall cover liability for property damage and personal injury associated with USGS's performance of work under this Agreement.

ATTACHMENT B

Prop 1 Project Activities Summary Prior to City Council Vote

The effects of urbanization across the recharge zone in Bexar County and potential impact on the water quality in the Edwards aquifer is a topic of specific concern for the City of San Antonio. The objective of this study is to simultaneously collect water-quality data from surface-water runoff sites and paired shallow groundwater wells within the recharge zone of the Edwards aquifer to better characterize the water quality connection between surface water and groundwater. To do this, a water quality sampling network consisting of two pairs of surface water and groundwater sites will be established in conjunction with discussion with stakeholders. The associated data collection activities are outlined below. It should be noted that adjustments to the data collection plans might be needed if appropriate sampling conditions (for example, stormflows) do not occur.

Sites to be sampled are:

Groundwater: wells AY-68-21-806 and AY-68-28-211

Surface water: to be installed at Salado Cr at 1604 and Elm Crk at Encino Rio Landowner agreements for groundwater and surface water sites to be signed upon project funding.



Figure 1. Location of sampling sites in northwest San Antonio.

Data Collection Plan

I. Continuous monitoring

A. Groundwater sites (both wells)

2 year monitoring period

3 parameters at each well: water level, specific conductance, and nitrate

B. Surface water sites

Surface water will not be monitored continuously because these rivers only flow during storm events.

II. Discrete water sample collection and analyses

A. Groundwater sites (both wells)

Discrete samples: collect ~6 times per year (~8 week intervals) for 2 years

Storm event samples: collect up to 3 per site

QC samples: collect up to 3 per site

All samples analyzed for major and trace elements, pesticides, $\delta^{15}N$ and $\delta^{18}O$ of nitrate, $\delta^{18}O$ and δD of water, tritium (2 samples per site), strontium isotopes (2 samples per site)

B. Surface water sites (runoff only)

Storm runoff samples: collect up to 6 per site

QC samples: collect up to 3 per site

All samples analyzed for major and trace elements, pesticides, $\delta^{15}N$ and $\delta^{18}O$ of nitrate, $\delta^{18}O$ and δD of water, Tritium (1 sample per site)

Deliverables:

USGS Scientific Investigation Report approved for publication by the USGS Bureau Approving Official at the conclusion of the project.

USGS Fact Sheet approved for publication by the USGS Bureau Approving Official following the approval of the USGS SIR.

Presentation of results to public outreach event

(K-12, public meeting, or other event depending on City of San Antonio request).

Timeline (36 months from time of funding).

	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Qı	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Installation	x	X	B.	100	73					1		
Continuous Monitoring	b.	х	х	х	х	х	х	х	х			
Routine Sampling	THE REAL PROPERTY.	X	х	х	х	х	х	х	х		1 i	C.
Storm Sampling	,	х	X	х	х	х	х	х	х			_
Data Analysis and Reporting					57	14.5			х	х	х	х

Budget

Fiscal Year	Year 1	Year 2	Year 3
Total Requested Funding	\$159,900	\$139,100	\$133,500

Depending on start date (signed Joint Funding Agreement), Year 1 funds could be adjusted to reflect a partial year. However, given that most of the costs in Year 1 are for equipment and installation, it is requested that the full amount for Year 1 be funded this fiscal year (FY2017).