Funding Agreement for Evaluation of the Vegetation along Roadways in Edwards Aquifer Recharge and Contributing Zones for Stormwater Management and Water Quality Improvement under the Proposition 1 Edwards Aquifer Protection Projects within Urbanized Areas of Bexar County's Recharge and Contributing Zones Program

This Proposition 1 Edwards Aquifer Protection Projects within Urbanized Areas of Bexar County's Recharge and Contributing Zones Funding Agreement ("Funding Agreement") is between the City of San Antonio ("City"), the San Antonio River Authority ("River Authority"), and The University of Texas at San Antonio, an agency of the State of Texas and an academic component of The University of Texas System ("Funding Recipient"), collectively the "Parties." The Parties understand and agree that this Funding Agreement documents the roles and responsibilities of each of the Parties in the City's Proposition 1 Edwards Aquifer Protection Projects within Urbanized Areas of Bexar County's Recharge and Contributing Zones Program ("Program"). The Parties agree to comply with the terms of this Funding Agreement.

Background

Proposition 1, the Edwards Aquifer Protection Venue Project, authorizes the City to continue the voter-approved watershed and preservation project initiated in 2000 and continued in 2005, 2010, and 2015. A 1/8 cent sales tax is projected to collect \$100 million for this project. Of the \$100 million projected to be collected pursuant to the 2015 authorization, \$90 million will continue to be used toward the purchase of conservation easements and acquisition of real estate interests over the sensitive recharge and contributing zones of the aquifer. The remaining \$10 million is dedicated for Program-funded projects that will protect and improve Edwards Aquifer water quality. The Funding Recipient's project, titled Evaluation of the Vegetation along Roadways in Edwards Aquifer Recharge and Contributing Zones for Stormwater Management and Water Quality Improvement (the "Project"), has received both Conservation Advisory Board ("CAB") and City of San Antonio City Council ("Council") funding approval and is the subject of this Funding Agreement. The primary Project goals are to identify native xeric plant species in stormwater retention and swale sites along roadways that are most effective in taking in nutrients and other pollutants, to identify plant species capable of evergreen and perennial growth under extreme xeric and periodic flooded conditions, to recommend native vegetation for propagation and planting along Edwards recharge and contributing zone roadways to slow runoff and control pollutants from entering the aquifer, and to recommend best management practices for use along Edwards roadways and in other appropriate contexts.

Funding

The City has authorized and will contribute \$798,636 for the Project. The funding amount is documented by the detailed information in Exhibit A. All Parties acknowledge and agree that \$798,636 is the full amount authorized by this Funding Agreement, and no additional funds will be claimed by the Funding Recipient, unless this amount is modified through an amendment executed by all of the Parties.

Funding Agreement Term

This Funding Agreement shall be effective as of September 1, 2019 (the "Effective Date") through and including August 31, 2022 (the "Term"). The Parties may extend this Funding Agreement for a mutually agreeable period.

Limitations (as applicable)

A potential limiting factor for the Project would be drought conditions preventing collection of qualifying stormwater samples within the Project timeline. If such conditions occurs, the Parties will work together in good faith to revise the scope of the Project so as to achieve the Project objectives and will revise the budget accordingly. The revised scope and budget will require approval of all the Parties. If the revised scope and budget are not approved by all Parties, any of the Parties may elect to terminate this Funding Agreement, and the Parties shall have no further obligations to each other, except for those rights and obligations accrued by the Parties prior to the termination.

City of San Antonio Acknowledges and Agrees

- 1. Funding Recipient will be responsible for the work to be conducted under the Project.
- 2. River Authority will serve as project manager and administrator of the Program.
- 3. Funding Recipient will submit invoices for payment directly to City, with a copy sent concurrently to River Authority, to the following addresses:

City of San Antonio
Phillip Covington
Special Projects Manager
Edwards Aquifer Protection Program
Parks and Recreation Department
PO Box 839966
San Antonio, Texas 78283
(210) 207-3003
phillip.covington@sanantonio.gov

San Antonio River Authority
Karen Bishop
Senior Supervisor
Stormwater Unit
Environmental Sciences Department
100 E. Guenther
San Antonio, Texas 78204
(210) 302-3642
kbishop@sara-tx.org

4. Funding shall be paid directly to the Funding Recipient after River Authority verification of satisfactory performance of work in accordance with the payment schedule attached as Exhibit B and the completion of Funding Recipient's project schedule, attached as Exhibit C. Payment referencing Principal Investigator, Dr. Jeffery T. Hutchinson, and the Roadway Vegetation Project will be made to the following address:

The University of Texas at San Antonio Grants and Contracts Financial Services (GCFS) One UTSA Circle San Antonio, Texas 78249.

River Authority Acknowledges and Agrees

1. River Authority will serve as project manager and administrator of the Program.

- 2. River Authority is responsible to the City to ensure quality and timely implementation of Project components and future monitoring of aquifer protection and improvement projects funded through the Program.
- 3. Upon receipt of invoices and appropriate supporting documentation, River Authority will coordinate payment to the Funding Recipient in a timely manner per Exhibits A and B.

Funding Recipient Acknowledges and Agrees

- 1. Work to be conducted by Funding Recipient will be under the direct supervision of Principal Investigator, Dr. Jeffrey T. Hutchinson, an employee of the Funding Recipient.
- 2. Funding Recipient shall submit to River Authority for review, input, and approval a Quality Assurance Project Plan (QAPP) in advance of the start of monitoring.
- 3. The Project shall produce the following deliverables:
 - a. QAPP
 - b. Collection of minimum of 10 precipitation events flowing into each retention basin and swale for physical, biological, and chemical pollutants over 24 months
 - c. Vegetation surveys
 - d. Vegetation analysis and soil composition
 - e. Microbial community analysis
 - f. Vegetation greenhouse study
 - g. Sediment deposition study
 - h. Stormwater quality analysis
 - i. Stormwater basin characteristics analysis
 - j. Statistical analysis
 - k. Public Outreach to Alamo Chapter of Master Naturalists, UTSA Environmental Science and Ecology Summer Camps, and through the UTSA Department of Environmental Science and Ecology Website with links to other information on best management practices along roadways and LID programs.
 - Incorporation of study results into UTSA's Water Pollution Control and Biological Phenomena in Environmental Engineering courses
 - m. Final report reflecting the results of b through j above and best management practices recommendations for vegetation along roadways.
- 4. The Project shall answer the following questions:
 - a. What native vegetation can effectively remove nutrients and other pollutants along roadway vegetated buffers?
 - b. What native evergreen and perennial vegetation is most efficient at surviving periods of droughts and short periods of inundation?
 - c. What species are effective at trapping and slowing sediment and absorbing pollutants from stormwater runoff along roadways?
 - d. What percent cover of native vegetation is required to retain 75% of the sediment from roadway runoff?
- 5. The Project's major milestones are completion of the following:
 - a. Analysis of vegetation species, composition, percent cover, and soil types of stormwater retention sites along roadways.

- b. Greenhouse study of the response of native vegetation to soil moisture levels and nutrient (nitrogen and phosphorous) concentrations.
- c. Analysis of roadside vegetation uptake and soil absorption of nutrients and pollutants.
- d. Evaluation of sediment deposition based on vegetation species and cover.
- e. Evaluation of stormwater runoff from a minimum of 10 precipitation events flowing into retention sites for physical, biological and chemical pollutants over 24 months.
- f. Public outreach
- g. Final report.
- 6. The Project's major tasks are as follows:
 - a. Task 1: Purchasing initial materials and disposables
 - b. Task 2: Initial site assessment and surveys; GIS mapping
 - c. Task 3: Setting up stormwater sampling stations
 - d. Task 4: Vegetation surveys and analysis
 - e. Task 5: Sediment deposition study
 - f. Task 6: Collection of stormwater samples following all precipitation events
 - g. Task 7: Analysis of stormwater samples
 - h. Task 8: Statistical/data analysis and dissemination of results
 - i. Task 9: Public outreach
 - j. Task 10: Final report and BMP recommendations.
- 7. The City may withhold the funding in whole or in part if milestones and/or major tasks are missed without providing City with appropriate notice, justification, and communication of alternative plans and timelines. The City may also withhold the funding if the project falls significantly behind schedule. The exception to the preceding is in cases of force majeure.
- 8. Funding Recipient has a sixty (60) calendar-day grace period from agreed Project end date to complete the Final Report, subject to force majeure.
- 9. Funding Recipient may request an extension in writing up to fifteen business days before the original project end date or a modified project end date thereafter.
- 10. Any decisions regarding the extension to the project end date shall be made by the River Authority in coordination with the City.
- 11. The River Authority shall review and approve the Final Report in writing to verify the project has met the requirements under this Funding Agreement prior to final payment. The approval by River Authority shall not be unreasonably withheld.
- 12. Funding Recipient is aware that presentations may be requested by the River Authority, the City, the CAB, San Antonio City Council, or other governing or advisory bodies associated with the Program.
- 13. Funding Recipient agrees to be available for presentations and/or to provide materials for such presentations to the best of its ability.
- 14. Funding Recipient shall acknowledge the City's support in any signage placed at project site, or in any news releases or other publications relating to the work performed under this Funding Agreement.

- 15. News releases or other publications must be sent to the River Authority for review *before* they are sent to any outside party. Failure to send any news or publication release to the River Authority for review shall not result in a breach of this Funding Agreement.
- 16. Funding Recipient is aware that media interviews may be requested and/or coordinated by the City or the River Authority as a result of this project. Funding Recipient will reasonably cooperate to respond to these media requests.
- 17. Funding Recipient grants the City and the River Authority, their representatives and employees the right to take photographs, videos, and other forms of media of the awarded Project.
- 18. Funding Recipient authorizes the City and the River Authority, their assigns and transferees to copyright, use, and publish photographs, videos, and other forms of media in print and/or electronically that are produced by the City and/or the River Authority for this Project.
- 19. Funding in the amount of \$798,636 shall be paid by the City to the Funding Recipient according to a cost reimbursement basis per Exhibits A and B. Payments on invoices will be made after River Authority verifies satisfactory performance of work in accordance with the funding schedule attached as Exhibit B and the completion of the Funding Recipient's project schedule, attached as Exhibit C.
- 20. Funding Recipient represents that it will comply with all Federal, State, and Local laws and regulations applicable to Funding Recipient's use of City Funds for this project. To the extent applicable, Funding Recipient agrees to abide by the following laws in its expenditures of City Funds:
 - a. Chapter 252 of the Texas Local Government Code, or other competitive contracting processes allowed for as express exceptions to Chapter 252.
 - b. Government Code chapter 2258 and Ordinance No. 71312 regarding Prevailing Wage Rate regulations required for certain contracts, including ensuring that its construction contractor shall collect and monitor weekly certified payrolls and perform site visits to ensure the prevailing wage is being paid to all workmen. City has the right to audit certified payroll records as necessary in accordance with this Funding Agreement. Upon audit of the records and certified payrolls under this section, should the City or its auditors find any violations, Funding Recipient shall cause its contractor to forfeit as a penalty to the City \$60.00 for each laborer, workman, or mechanic employed, for each calendar day, or portion thereof, that such laborer, workman or mechanic is paid less than the said stipulated rates for any work done under said contract, by the contractor or any subcontractor. The establishment of prevailing wage rates in accordance with Chapter 2258, Texas Government Code shall not be construed to relieve Funding Recipient from its obligation under any federal or state law regarding the wages to be paid to or hours worked by laborers, workmen or mechanics insofar as applicable to the work to be performed under this Funding Agreement.
- 21. For the term of this Funding Agreement, at any time during normal business hours and as often as City may deem necessary, upon three-days written notice, Funding Recipient shall make all of its records pertaining to this Funding 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.
- 22. Funding Recipient agrees and represents that it will cooperate with City and River Authority, at no charge to the City or River Authority, to satisfy, to the extent required by law, any and all requests for information received by City or River Authority under the Texas Public Information Act or related laws pertaining to this Funding Agreement.
- 23. Funding Recipient shall not transfer, pledge, or otherwise assign this Funding 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.
- 24. Beginning the month after the project's commencement, Funding Recipient shall provide status reports to the City through the River Authority on the first Friday monthly. Said status report shall include project activity toward milestones in the prior month and shall note any changes to the schedule of deliverables, if any, including any delays in meeting major tasks, milestones, and deliverables. Photographs of activity at the six monitoring sites shall be provided in the reports.

No Third Party Rights

- 1. This Funding 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.
- 2. Nothing in this Funding 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 independent contracting entities.

Publication and Academic Rights

Funding Recipient's Principal Investigator has the right to publish or otherwise publicly disclose information gained in the course of the project under this Funding Agreement. Funding Recipient will, however, submit any prepublication material to City for review and comment at least sixty (60) days prior to planned submission for publication. City will notify Funding Recipient of any objections within thirty (30) days of receipt. Funding Recipient shall have final authority to determine the scope and content of any publications, subject to any objections for the protection of confidential information. Funding Recipient shall acknowledge the City's contribution, and describe in any publications, the scope and nature of City's contribution accurately and appropriately.

Ownership of Materials and Documents

Any and all drawings, documents or information in whatsoever form and character produced by Funding Recipient pursuant to the provisions of this Funding Agreement is the joint property of Funding Recipient and City and either Party shall be allowed to make use of such material without requiring the approval of the other Party. Each Party understands and acknowledges that

as the joint owner of any and all writings, documents and information, the other Party has the right to use all such writings, documents and information as that Party desires, without restriction.

Equipment

Funding Recipient shall retain title to all equipment and structures purchased and/or fabricated by it with funds provided under this Funding Agreement.

Liability

As government entities, Funding Recipient, River Authority, and City hereby expressly acknowledge that they are 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 Funding Agreement shall be construed as a waiver by either of the Parties of any of the immunities and protections from liability included therein.

Insurance

To the extent authorized by the Texas Constitution and the laws of the State of Texas, the Funding Recipient, at its own expense, shall provide and maintain, during the term of this Funding 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 Funding Recipient's performance of work under this Funding Agreement.

Notices

Any notice required by this Funding Agreement shall be given by prepaid, first class, certified mail, return receipt requested, or by a recognized overnight courier, address as follows:

In the case of City:	In the case of River Authority:	In the case of Funding Recipient
Phillip Covington	Karen Bishop	Amy Ossola-Phillips
Special Project Manager	Senior Supervisor	Director, RSC for Sciences and Engineering
Edwards Aquifer Protection Program	Stormwater Unit	Office of Sponsored Programs Administration
Parks and Recreation Department	Environmental Sciences Dept.	BSE 4.124
PO Box 839966	100 E. Guenther Street	1 UTSA Circle
San Antonio, Texas 78283	San Antonio, Texas 78204	San Antonio, TX 78249-1644
(210) 207-3003	(210) 302-3642	(210) 458-6472
phillip.covington@sanantonio.gov	kbishop@sara-tx.org	Amy.Ossola-Phillips@utsa.edu

COMPLIANCE WITH SMALL, MINORITY AND WOMAN-OWNED BUSINESS ENTERPRISES POLICY, NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY POLICY

Funding Recipient is hereby advised that it is the policy of the City of San Antonio that Small, Minority or Woman-owned Business Enterprises (SMWBE) shall have the maximum practical opportunity to participate in the performance of public contracts. Funding Recipient

further agrees that Funding Recipient will abide by all applicable terms and provisions of City's Non-Discrimination Policy, City's Small, Business Economic Development Advocacy (SBEDA) Policy and City's Equal Opportunity Affirmative Action Policy, these policies being available in City's Department of Economic Development, Division of Internal Review and the City Clerk's Office.

The City has applied the following contract-specific Affirmative Procurement Initiative to this contract: None (Waiver approved 4/12/2019).

Termination

The Parties, with or without cause, may elect to terminate this Funding Agreement by providing sixty (60) days written notice to the other Parties. Termination of this Funding Agreement shall not affect the rights and obligations of the Parties accrued prior to the termination. Upon termination, City shall pay Funding Recipient for all reasonable expenses incurred or committed to be expended as of the effective termination date. Any provisions of this Funding Agreement which by their nature extend beyond termination shall survive such termination.

Amendment

This Funding Agreement supersedes all prior agreements and understandings between the Parties regarding the Project and may only be changed by written amendment signed by all three of the Parties.

This Funding Agreement shall be governed by, construed and enforced in accordance with the internal laws of the State of Texas.

[Remainder of Page Intentionally Left Blank. Signatures on Following Page.]

Funding Recipient / /	City of San Antonio
Date: 5/4/19	Date:
Signed by: Michael Steven	Attest:
Michelte Stevenson, Ph.D., CCEP Associate Vice President of Research Administration	City Clerk
	Date:
Date: 5/15/19	Signed by:
Signed by:	Xavier D. Urrutia
SamesStott	Director, Parks and Recreation City of San Antonio
Suzaline B. Scott	
General Manager	
San Antonio River Authority	
Approved as to form:	Approved as to form:
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Director of Legal Services	City Attorney

Exhibit A
Project Budget

			Period 1	Period 2			Period 3	All		
	Start		1/1/2019		1/1/2020		1/1/2021	N.	1/1/2019	
	End		12/31/2019		12/31/2020		12/31/2021	111	12/31/2021	
Personnel	Subtotal	\$	122,862	\$	132 532	\$	73,977	\$	329,371	
G4010 G5010 Salaries		\$	103,616	\$	111,424	\$	62,187	\$	277,227	
G4020 G5030 Fringe Benefits		\$	19,246	\$	21,108	\$	11,790	\$	52,144	
Travel	Subtotal	\$	5,000	\$	5,000	\$	1,000	\$	11,000	
G4110 G5130 Travel - Domestic		\$	5,000	\$	5,000	\$	1,000	\$	11,000	
G4120 G5140 Travel - Foreign		\$	-	\$	-	\$	-	\$	-	
Capital Expense	Subtotal	\$	104,000	\$	- 1	S		\$	104,000	
G4030 G5040 Construction		S	-	\$	•	\$	12	\$	The state of the	
G4040 G5050 Equipment Fabrication		\$	•	\$		\$	7.15	\$	_	
G4050 G5060 Equipment Capital		\$	104,000	\$	-	\$	-	\$	104,000	
Other Direct	Subtotal	\$	35,000	\$	32,000	\$	27,000	\$	94,000	
G4070 G5080 Consultants		\$	5,000	\$	5,000	\$	5,000	\$	15,000	
G4090 G5110 Materials and Supplies		\$	30,000	\$	25,000	\$	20,000	\$	75,000	
G4090 G5110 Publication Costs		" \$	_	\$	2,000	\$	2,000	\$	4,000	
Student and Participant Support	Subtotal	\$	18,000	\$	18 000	\$	9,000	\$	45,000	
G4150 G5170 Tuition & Fees		\$	18,000	\$	18,000	\$	9,000	\$	45,000	
Total Sponsor Costs		\$	364,937	\$	271,733	\$	161,966	\$	798,636	
UTSA Direct Costs		\$	284,862	\$	187,532	\$	110,977	\$	583,371	
G4180 G5200 UTSA Indirect Costs		\$	80,075	\$	84,201	\$	50,989	S	215,265	
UTSA F&A Base		\$	162,862	\$	169,532	\$	101,977	s	434,371	
Cost Share Commitment		\$		\$		\$		\$		
Cost Share %			0%		0%		0%			
Direct Cost - Consortium	F&A	\$	284,862	\$	187,532	\$	110,977	\$	583,37	
Consortium F&A		\$	-	\$	-	\$	-	\$	_	
Award Costs		\$	364,937	\$	271,733	5	161,966	\$	798,636	

Exhibit B Funding Schedule

Period	Dates	Amount	Payment Date
Year 1, Quarter 1	9-1-19 - 11-30-19	\$91,234	12-31-2019
Year 1, Quarter 2	12-1-19 - 02-29-20	\$91,234	3-31-2020
Year 1, Quarter 3	3-1-20 - 5-31-20	\$91,234	6-30-2020
Year 1, Quarter 4	6-1-20 8-31-20	\$91,234	9-30-2020
Year 2, Quarter 1	9-1-20 11-30-20	\$67,933	12-31-2020
Year 2, Quarter 2	12-1-20 - 02-28-21	\$67,933	3-31-2021
Year 2, Quarter 3	3-1-21 - 5-31-21	\$67,933	6-30-2021
Year 2, Quarter 4	6-1-21 - 8-31-21	\$67,933	9-30-2021
Year 3, Quarter 1	9-1-21 – 11-30-21	\$40,492	12-31-2021
Year 3, Quarter 2	12-1-21 - 02-28-22	\$40,492	3-31-2022
Year 3, Quarter 3	3-1-22 - 5-31-22	\$40,492	6-30-2022
Year 3, Quarter 4	6-1-22 - 8-31-22	\$40,492	9-30-2022
Total Requested Funding		\$798,636	

Exhibit C
Project Schedule

No.	Task Purchasing - initial materials and disposables	Year 1 9/1/19 – 8/31/20				Year 2 9/1/20 - 8/31/21				Year 3 9/1/21 - 8/31/22			
2	Initial site assessment and surveys; GIS mapping							,			*		
3	Setting up stormwater sampling	17											
4	Vegetation surveys and analysis												Ī
5	Sediment deposition study												
6	Collection of stormwater samples following all precipitation events				iiig	H	13					-	
7	Analysis of stormwater samples									100		مر	
8	Statistical/Data analysis and dissemination of results												i i
9	Public outreach												
10	Final report and BMP recommendations												

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