



City of San Antonio

Agenda Memorandum

File Number:19-4289

Agenda Item Number: 11.

Agenda Date: 6/13/2019

In Control: City Council A Session

DEPARTMENT: Parks and Recreation

DEPARTMENT HEAD: Xavier D. Urrutia

COUNCIL DISTRICTS IMPACTED: City Wide

SUBJECT:

Edwards Aquifer Protection Program - Demonstration Projects

SUMMARY:

This ordinance authorizes Funding Agreements for three (3) water quality demonstration projects under the Proposition 1 Edwards Aquifer Protection Program with: A) University of Texas at San Antonio in an amount not to exceed \$798,636.00 for a term of three (3) years; B) University of Texas at San Antonio in an amount not to exceed \$1,035,761.00 for a three (3) year term; and C) Texas A&M University at San Antonio in an amount not to exceed \$218,937.00 for a one-and-a-half (1.5) year term. Funding for this ordinance is available from the 2015 Sales Tax Venue Fund included in the FY 2019 Adopted Capital Improvement Program.

This ordinance also authorizes the execution of necessary documents by the Director of Parks and Recreation.

BACKGROUND INFORMATION:

In May 2015, voters renewed for the third time the Proposition 1 Edwards Aquifer Protection Program, funded through a portion of a 1/8-cent sales tax in the amount of \$100 million. Previous elections set the initiative at \$90 million and included Edwards Aquifer protection efforts beyond Bexar County. The current voter-approved program includes \$10 million dedicated for aquifer water quality projects within urbanized areas of Bexar County over the Recharge and Contributing Zones of the Edwards Aquifer. These projects have come to be known as “demonstration projects” which the City is pioneering in coordination with San Antonio River Authority, Edwards Aquifer Authority and San Antonio Water System. A solicitation ran from April through September 2018 and yielded ten (10) demonstration project submissions. Three projects are recommended for

consideration under three categories: New Construction & Research (UTSA), Research/Data (UTSA) and Other/Best Management Practices training development (Texas A&M University at San Antonio) were endorsed for recommendation to City Council by the Conservation Advisory Board in February and March 2019.

The UTSA demonstration project which was selected for the New Construction & Research category will enhance a City of San Antonio 2017-2022 Bond project at the Classen-Steubing Ranch Park through the construction of a 32-stall parking area featuring the following four permeable pavement materials: permeable asphalt concrete, plastic grid pavers, permeable Portland concrete, and permeable interlocking concrete pavers. The performance of the permeable pavement cells will be compared against each other and against the performance of a planned, traditional parking lot on the same property to measure differences in stormwater quality, water runoff flow and temperatures, post-construction surface temperatures and surface condition over time. An economic analysis will be provided on the costs/benefits of the permeable pavement systems compared to conventional parking lot construction and design guidelines for the four systems may be incorporated in the San Antonio River Basin Low Impact Design Guidance Manual. Additionally, the project will enhance public and student education with respect to stormwater sustainability through incorporation of an educational module demonstrating the benefits of permeable surface best management practices into undergraduate and graduate level courses at UTSA.

This agreement will be executed in compliance with the Small Business Economic Development Advocacy (SBEDA) Program, which requires contracts be reviewed by a Goal Setting Committee to establish a requirement and/or incentive unique to the particular contract in an effort to maximize the amount of small, minority, and women-owned business participation on the contract. The Goal Setting Committee set a 12% Minority/Women Business Enterprise (M/WBE) subcontracting goal. UTSA has committed to 12% Minority, Women-Owned Business Enterprise (M/WBE) subcontractor participation.

A second UTSA demonstration project was selected for the Research, Studies & Data category. This project will evaluate soil and vegetation composition and density along roadways in the Edwards Aquifer recharge and contributing zones in Bexar County for control of sediments, nutrients, and other pollutants and make recommendations of xeric species of vegetation most adaptable to roadway conditions. UTSA has selected six (6) stormwater retention basins and grassy swales along roadways managed by the City of San Antonio's Transportation and Capital Improvements Department. Results of this project will allow for better management and design of stormwater retention sites, provide information on native vegetation that will require lower maintenance along highways, and may be applied toward other low impact design residential and commercial projects to decrease stormwater runoff and improve the quality of water recharging the Edwards Aquifer from these areas.

The Small Business Economic Development Advocacy (SBEDA) Ordinance requirements were waived due to the lack of small, minority, and/or women businesses available to provide these goods and services.

Texas A&M University at San Antonio (TAMU-SA) submitted a demonstration project proposal which will provide First Responder training in order to eliminate or reduce the impact to Edwards Aquifer water quality from runoff during emergency events over the Edwards Aquifer recharge and contributing zones. As part of this project, TAMU-SA will: 1) develop a training curriculum and a spatial/map-based database for use by first responders to access site-specific aquifer protection guidance; 2) develop emergency response Best Management Practices (BMPs) for use in the Edwards Aquifer recharge zone on actions and use of measures to prevent contamination from emergency response water runoff; 3) creation of an emergency response BMP effectiveness assessment protocol and assessment of aquifer contaminant/pollution reduction as a result of using the emergency response BMPs in Edwards Aquifer Authority sampling/monitoring programs for aquifer

water quality; 5) complete a video to educate and inform first responders and the general public; and 6) develop a workshop to share emergency response experiences and practices in karst watersheds to validate, improve, maintain, and share project activities amount water quality protection professionals.

The Small Business Economic Development Advocacy (SBEDA) Ordinance requirements were waived due to the lack of small, minority, and/or women businesses available to provide these goods and services.

In April 2016, the City entered into an interlocal agreement (ILA) with the San Antonio River Authority (SARA) to serve as project manager for the \$10 million “demonstration project” component of the Edwards Aquifer Protection Program. As project manager, SARA convened stakeholder meetings to assess demonstration project needs and define its scope. Through this process SARA created a Technical Advisory Committee (TAC), comprised of key industry experts, City staff, and representatives from both the development and conservation communities. Once convened, the TAC created the scoring tool used to assess project submissions. An eligible project includes those projects that address and improve water quality in developed areas that do not meet current Texas Commission on Environmental Quality (TCEQ) standards. Funding for projects will cover only the cost of implementing BMPs for storm water analysis that exceeds minimum TCEQ permit requirements. Projects must accommodate collection of pre- and post-construction storm water monitoring (SWM) data. Projects may also be research based and should assess major threats to groundwater quality; develop specific BMP long-term performance and life cycle costs; forecast regional impacts of urban development on groundwater quality; and/or evaluate the effectiveness of BMP innovations in preventing pollution of groundwater.

ISSUE:

This ordinance authorizes the execution of two funding agreements with UTSA in amounts not to exceed \$798,636.00 and \$1,035,761.00 and one funding agreement with TAMU-SA not to exceed \$218,937.00 for water quality demonstration projects for the Edwards Aquifer Protection Program, a Proposition 1 Edwards Aquifer Protection Venue funded Project as approved by voters in May 2015.

ALTERNATIVES:

City Council could choose not to authorize the execution of these agreements in lieu of considering future project submissions through SARA’s solicitation process. However, this delay may result in increased costs for similar projects.

FISCAL IMPACT:

This ordinance authorizes Funding Agreements for three (3) water quality demonstration projects under the Proposition 1 Edwards Aquifer Protection Program with: A) University of Texas at San Antonio in an amount not to exceed \$798,636.00 for a term of three (3) years; B) University of Texas at San Antonio in an amount not to exceed \$1,035,761.00 for a three (3) year term; and C) Texas A&M University at San Antonio in an amount not to exceed \$218,937.00 for a one-and-a-half (1.5) year term. Funds for these projects have been appropriated through Proposition 1 of the Edwards Aquifer Protection 2015 Sales Tax Fund included in the FY 2019 Adopted Capital Improvement Program.

RECOMMENDATION:

Staff recommends approval of these water quality demonstration projects under the Proposition 1 Edwards Aquifer Protection Venue Project.

The Contracts Disclosure Forms required by the Ethics ordinance are attached.