



Recommendation for Action

File #: 22-2868, **Agenda Item #:** 60.

9/29/2022

Posting Language

Authorize negotiation and execution of a Joint Funding Agreement with the United States Department of the Interior, United States Geological Survey for water resource investigation projects and stream gauge maintenance and support for Fiscal Year 2022-2023 in the amount of \$887,311, with five 12-month extensions, each allowing for an annual increase of up to 20% for potential increases in cost of service and adding to the scope of work, for a total contract amount not to exceed \$8,810,927.

Lead Department

Watershed Protection Department.

Fiscal Note

Funding in the amount of \$887,311 is available in the Fiscal Year 2022-2023 Watershed Department's Operating Budget. Funding for future fiscal years is dependent on the approved future budgets.

Prior Council Action:

Council approval of contract number NA150000102 which expires on 9/30/2022. Approval given on June 4, 2015 - Item 41.

For More Information:

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Additional Backup Information:

Beginning in 1974, the City of Austin and the United States Department of the Interior, United States Geological Survey (USGS) joined efforts to study and monitor the quantity and quality of water in local streams, lakes, and the Edwards Aquifer. The purpose of the partnership is to provide a more complete database for urban hydrological studies in order to protect and improve the water quality and quantity conditions in the Austin Area. USGS uses the information generated by the joint study to provide the public with reliable water resource information that can be used in a variety of applications. City projects that have and would continue to benefit from the information are the Flood Early Warning System, the Watershed Protection Department's Strategic Plan, the Barton Springs Aquifer Carbon Study and Harmful Algal Blooms.

The USGS performs the following services:

- Gauge maintenance and support: The USGS currently has 33 stream gauges throughout the City. These gauges automatically measure the height of the water in the creeks and determine flow rates.
- Water sampling and analysis: The USGS collects samples at Barton Springs. Based on available funding from the City, we may request that USGS install new stream gauges in order to expand our network of stream data over the life of the contract based on need for monitoring in future annexed areas.

The City uses the information and data provided by the USGS for the following purposes:

- To provide publicly available real-time measurements for flood early warning. This information is

used by the Flood Early Warning staff to determine flood risks in the community.

- To provide information on water quality of the Barton Springs Segment of the Edwards Aquifer. This is tracked over time to obtain a complete understanding of the effects of urbanization on Austin's storm water and urban watersheds that drain to aquifer. In addition, this data is used for compliance with various state and federal permits and is used to determine the effectiveness of different regulations.
- To provide estimates of the amount of water recharging the Barton Springs Segment of the Edwards Aquifer and to document the water quality and quantity discharging from Barton Springs. This information is used to verify adherence to the federal permit which allows citizens to continue to use Barton Springs Pool.
- To provide an estimate of recirculating water used in the Waller Creek Tunnel for invoicing purposes to the Lower Colorado River Authority (LCRA).

During each year of the study, the City monitors the progress of the projects. At the end of each year, both agencies jointly evaluate the results to determine if program goals have been completed, and to set data collection plans for the next year. While USGS performs the services, the cost is shared between the City and USGS. During the first year, USGS contributes \$270,875 and the City contributes \$887,311. A provision allowing for a possible 20% annual increase will accommodate increases in service costs from USGS and additional services requested by the City.

Strategic Outcome(s):

Health and Environment; Safety.