

## Legislation Text

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**Consider recommendation from the Executive Committee to approve an Interlocal Cooperation Contract between the EAA and the University of Texas at Austin Bureau of Economic Geology for the installation, operations and analysis of eddy covariance for quantifying evapotranspiration, in an amount not to exceed \$199,939.71, and to authorize the General Manager to execute the contract.**

### RECOMMENDED MOTION:

Move the board adopt Resolution and Order No. 12-20-993 of the Edwards Aquifer Authority Board of Directors approving an Interlocal Cooperation Contract No. 20-041-AMS between the EAA and The University of Texas at Austin Bureau of Economic Geology, for the installation, operation and analysis of eddy covariance for quantifying evapotranspiration, in an amount not to exceed \$199,929.71 for the period January 1, 2021, through December 31, 2023.

### SUMMARY:

The purpose of this agenda item is for the board to consider an Executive Committee recommendation to approve an Interlocal Cooperation Contract with the University of Texas at Austin Bureau of Economic Geology for the installation, operation and analysis of eddy covariance for quantifying evapotranspiration.

Climate, vegetation, and soils each exert controls on groundwater recharge. Mean annual precipitation explains 80% of the variation in recharge across Texas [Keese *et al.*, 2005], but the incredible diversity of vegetation and climate in Texas makes local recharge estimates very difficult to assess. In karst terrain, for example, the majority of recharge originates from focused direct recharge from losing streams while a smaller, less temporally dynamic proportion originates as diffuse recharge through the soil between the stream channels [Marclay, 1995; Wong *et al.*, 2012]. This means that the scale of measurement and the measurements themselves become important considerations. The need to understand recharge and other water balance components are intensive given future climate variability and increased population, which will further stress the supply and demand of regional water resources (Sharp *et al.*, 2020; Loáiciga and Schofield, 2020).

The objective of this contract is to deploy and maintain at least two eddy covariance systems for a three year period, to verify and distribute the final data streams for subsequent analyses by the research teams at BEG and EAA, and use the data to assess water balance components in the vicinity of the systems. Data collected and analyzed will complement the work recently completed by BEG at Camp Bullis.

Attached to this summary is the draft contract and Resolution and Order No. 12-20-993 which have been reviewed by legal counsel.

At the meeting on December 1, the Executive Committee voted to recommend the board adopt a resolution and order of the Edwards Aquifer Authority Board of Directors approving an Interlocal Cooperation Contract No. 20-041-AMS between the EAA and The University of Texas at Austin Bureau of Economic Geology, for the installation, operation and analysis of eddy covariance for quantifying evapotranspiration, in an amount not to exceed \$199,929.71 for the period January 1, 2021, through December 31, 2023.

M/WBE PARTICIPATION:

The University of Texas at Austin Bureau of Economic Geology is an institute of higher education conducting research for the EAA. Therefore, this section is not applicable.

STRATEGIC PLAN REFERENCE:

This agenda item supports the EAA's policy direction as set forth in the EAA 2016-20 Strategic Plan: Goal E. Conduct Research that Enhances Understanding and Effective Management of the Aquifer.

FISCAL IMPACT:

Funding in the amount of \$64,1134.16 is available in the 2021 operating budget. Funding for the remaining portions of the contract will be included in future budgets.