

## AGENDA ITEM MEMO

**BOARD MEETING DATE:** September 14, 2023

**TO:** Board Members

**THROUGH:** Jeff Walker, Executive Administrator  
Ashley Harden, General Counsel  
Rebecca Trevino, Chief Financial Officer  
John T. Dupnik, P.G., Deputy Executive Administrator, Water Science and Conservation

**FROM:** Mark W. Wentzel, Ph.D., Hydrologist, River Science and Hydrosurvey  
Mindy Conyers, Ph.D., Manager, River Science and Hydrosurvey

**SUBJECT:** Water Resources Investigations with the U.S. Geological Survey

### ACTION REQUESTED

Consider authorizing the Executive Administrator to: (a) execute a contract in an amount not to exceed \$1,973,195 (including \$1,609,460 from the Texas Water Development Board) for continuation of the Water Resources Investigations data collection program with the U.S. Geological Survey in fiscal year 2024; and (b) amend the contract in an amount not to exceed \$165,000 for additional unplanned activities.

### BACKGROUND

Water data is the foundation upon which Texas builds its water plans, protects against flood risk, and manages water resources. The first U.S. Geological Survey (USGS) streamflow gage in Texas was installed 134 years ago on the Rio Grande near El Paso. The USGS and funding partners currently maintain a network of 774 streamflow and 162 lake level gages providing near real-time data across the state. Each year, the Texas Water Development Board (TWDB) enters into a contractual agreement with the USGS to cover the cost of gaging for a portion of the statewide network. The USGS also contributes funding toward the cost of gages included in the agreement. Gages included in the agreement collect data for one of two primary purposes: water resources monitoring and planning or flood forecasting and warning.

In fiscal year 2023, the TWDB partnered with the USGS to operate and maintain 51 streamflow and 34 lake level gages for water resources monitoring and planning and

57 streamflow, 6 lake level, and 45 rain gages for flood forecasting and warning. Additionally, a total of three gages (two stream and one lake level) were flood hardened, and a one-time cost for installing a stream gage on Cypress Creek near Comfort also was included in the FY 2023 contract. Ongoing operation and maintenance costs for this gage will be funded by Kendall County. Total cost of the agreement in fiscal year 2023 was \$2,131,835, with the USGS contributing \$363,735 and the TWDB contributing \$1,768,100.

### **KEY ISSUES**

For fiscal year 2024, the USGS will maintain operation and maintenance costs for gaging at the same level as in fiscal year 2023. Funds available from the USGS for cost share also will remain constant.

The Executive Administrator proposes to continue the gaging contract with the USGS for fiscal year 2024. An allocation of the costs is illustrated in the attachment. A portion of the contract will cover operations and maintenance for 51 streamflow and 34 lake level gages that provide data for water resources monitoring and planning. A second portion of the contract will support flood warning and forecasting. Flood gaging services will include operation and maintenance costs for 57 existing streamflow, 6 lake level, and 45 rain gages.

The total cost of the fiscal year 2024 gaging contract will be \$1,973,195, with \$363,735 provided by the USGS and the remaining \$1,609,460 provided by the TWDB from general revenue and the Texas Infrastructure Resiliency Fund. An allocation of the costs is illustrated in the attachment. In addition, the contract will allow for an amendment to add up to \$165,000 to support one-time opportunities to advance water resources or flood data collection in Texas that may arise during the fiscal year. Funds budgeted from the TWDB for gaging in fiscal year 2024 are sufficient to cover the cost of this contract including the amount that may be added by amendments.

### **RECOMMENDATION**

The Executive Administrator concludes that the Water Resources Investigations data collection program for gaging furthers the objectives for statewide water resources data collection and dissemination and for collection of flood related information and recommends approval of this request.

Attachment: Summary of Water Resources Investigations program for fiscal years 2023 and 2024.

## Attachment

### Summary of Water Resources Investigations program for fiscal years 2023 and 2024.

Fiscal Year	Objective	Service	Number of gages			Funding		Total by objective
			Streamflow	Lake level	Rain	USGS	TWDB	
2023	Water resources data	Operation & Maintenance	51	34		\$347,735	\$660,100	\$1,007,835
	Flood forecasting & warning	Flood Hardening	2	1			\$119,580	\$119,580
		Installation	1				\$40,460	\$40,460
		Operation & Maintenance	57	6	45	\$16,000	\$947,960	\$963,960
Subtotal by funding source						\$363,735	\$1,768,100	
<b>Total</b>								<b>\$2,131,835</b>
2024	Water resources data	Operation & Maintenance	51	34		\$347,735	\$660,100	\$1,007,835
	Flood forecasting & warning	Operation & Maintenance	57	6	45	\$16,000	\$949,360	\$965,360
	Subtotal by funding source						\$363,735	\$1,609,460
<b>Total</b>								<b>\$1,973,195</b>