



Scope of Work and Fee Estimate

To: Stephanie Bertoux, San Antonio Basin Groundwater Sustainability Agency

From: Michael McAlpin & Dave O'Rourke, GSI Water Solutions, Inc.

Date: May 12, 2026

RE: San Antonio Creek Valley Groundwater Basin Transducer Purchase and Installation

GSI Water Solutions, Inc. (GSI), is pleased to present this scope of work and budget for the purchase and installation of 5 continuous water level data logging devices called pressure transducers (transducers) for the San Antonio Basin Groundwater Sustainability Agency's (SABGSA) consideration. Transducer installation is proposed for wells that are currently not instrumented with transducers in the San Antonio Creek Valley Groundwater Basin's (Basin) Groundwater Level Monitoring Network (Monitoring Network). All accessible Representative Monitoring Site (RMS) wells are instrumented with transducers. Wells that will be considered priority for instrumentation for this scope of work will include potential replacements for RMS wells with denied access, inability to monitor (e.g., collapsed casing or need for retrofitting), difficult to monitor (e.g., wells requiring maintenance or constructed without a sounding tube), wells located in areas of known concentrated pumping, and wells in areas of chronic groundwater level decline. GSI has developed this proposal based on the SABGSA's Fiscal Year 2025-2026 Budget Priorities and at the request of the SABGSA Executive Director.

Currently, groundwater level measurements are collected manually on a quarterly basis in the 40 accessible wells included in the Monitoring Network. There are transducers installed in 15 of the 40 wells. During the quarterly events, GSI downloads water level data from the transducers and calibrates the transducers with manual depth to water readings.

Transducers can record measurements at a predetermined frequency. The increased frequency in data points allows for identification of pump cycles if installed in a water supply well and enables a more accurate identification of static water levels and aquifer properties. Similarly, transducer data can enable identification of potential impacts, if any, from nearby groundwater pumping and can be leveraged to optimize pumping schedules.

The SABGSA is required to report at least one groundwater level measurement for each well in the Basin Monitoring Network to the California Department of Water Resources (DWR) every 6 months, representing a spring water level measurement and a fall water level measurement. DWR is encouraging collection of monthly groundwater level measurements. Although monthly groundwater level measurements are not required per Sustainable Groundwater Management Act (SGMA) regulations, transducers would enable measurement of groundwater levels at this increased frequency without increasing the frequency of the Basin's current quarterly monitoring. GSI would still collect manual depth to groundwater measurements quarterly to ensure the transducers do not require recalibration.

Likewise, the increased frequency in water level measurements would better align with the monthly reporting per the SABGSA Well Metering Program and monthly time-steps of the OpenET evapotranspiration data used to develop the Basin's Groundwater Sustainability Plan Annual Reports.

The installation of additional transducers is consistent with the Basin's Tier I Management Actions described in the Basin Groundwater Sustainability Plan. Specifically, expanding the monitoring well network to increase spatial coverage and well density by increasing the frequency of groundwater level measurement collection. A key aspect of Tier 1 management actions is addressing data gaps that are necessary to reduce uncertainty and improve understanding of basin conditions so that better information is available to the SABGSA for managing the Basin and considering the efficacy of the initial Sustainable Management Criteria (SMCs) that have been selected.

Scope of Work

The proposed scope of work includes the purchase and installation of 5 transducers in select Basin Monitoring Network wells during a 2026 quarterly monitoring event.

Task 1 – Well Prioritization, Equipment Purchase, and Field Planning

The scope of work for this task includes a review phase, consisting of the selection of wells to be instrumented with transducers, purchase of the transducer equipment, and field planning. Well depths, depths to water, and historical variations in depth to water will be analyzed in order to determine appropriate lengths of DXT cables (GSI proposes to purchase and install DXT cables to be connected to each of the transducers in order to enable download of data without raising the transducer, resulting in a quicker workflow in the field and a minimized risk of entanglement with potential downhole equipment) and appropriate transducer specifications in order to capture fluctuations in groundwater levels. The selected wells with secured access will be outfitted with transducers and DXT cables.

Task 2 – Transducer Installation

The scope of work for this task includes installation and calibration of the transducer equipment in the 5 wells, proposed to occur during a 2026 Basin quarterly groundwater level monitoring event (monitoring event). Each transducer will be programmed to make measurements at a predetermined frequency (e.g., every 4 hours). DXT cables will be fixed to the well head and transducers will be installed to the cables and set at an appropriate depth. Documentation of the installations will be included in the corresponding Quarterly Monitoring Technical Memoranda and 2026 annual reporting.

Assumptions

- The proposed work is intended to follow standard industry practices and protocols using common technologies.
- Access to the subject properties and coordination with the property owners and/or tenants will be arranged by GSI in conjunction with the Basin monitoring event scheduling.
- All fieldwork will be conducted during normal business hours.
- GSI will have unimpeded access to the work locations.
- Field activities can be accomplished within 2 days, including completion of the Basin groundwater monitoring event.
- GSI will attempt to schedule field work to avoid significant weather events when possible. However, weather-related impacts to mobilization efforts or the overall project schedule may result in additional fees. We will keep SABGSA informed if there are unanticipated weather delays.
- All fieldwork can be performed using standard personal protective equipment and procedures.
- Purchased transducer equipment will function as intended.

- The DXT cables can be secured to the well heads with reasonable effort and without major retrofit.

Fee Estimate

Our team’s proposed fee to complete the tasks on a time-and-materials basis is \$10,000. This fee estimate includes a 10-percent markup on the Van Essen Instruments quote (attached). GSI will perform the work in accordance with GSI’s Master Services Agreement with SABGSA dated December 14, 2023. The proposed fee was developed based on GSI’s 2026 fee schedule (attached). The rates included in the 2026 fee schedule are valid through the 2026 calendar year and are subject to change thereafter.

Tasks	Labor Hours	Labor Cost	Outside Services	Direct Expenses ¹	Total
Task 1 – Well Prioritization, Equipment Purchase, and Field Planning	16	\$2,000	\$0	\$6,000	\$8,000
Task 2 - Transducer Installation	12	\$2,000	\$0	\$0	\$2,000
Project Totals	23	\$4,000	\$0	\$6,000	\$10,000

Note:

¹ Van Essen Instruments quote attached. The price shown includes purchase of (5) 10-meter TD-Diver Data Loggers, (5) 50-meter DXT-cables, and a 10-percent markup.

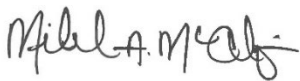
Because the transducer installation is proposed to occur during a 2026 Basin quarterly monitoring event, no mobilization costs are included in this fee estimate.

Schedule

The scope of work is proposed to be completed during a 2026 Basin quarterly monitoring event.

We thank you for your consideration of this proposal and allowing GSI to continue to serve the interests of the SABGSA. Please contact us if you have any questions.

Sincerely,
GSI Water Solutions, Inc.



Michael McAlpin, PG
Senior Managing Hydrogeologist



Dave O'Rourke, PG, CHG, PE
Principal Hydrogeologist

Approval

You may indicate your approval of this proposal by signing on the space provided below.

Approved by

Date