



**BOARD OF SUPERVISORS
AGENDA LETTER**

Agenda Number:

Clerk of the Board of Supervisors
105 E. Anapamu Street, Suite 407
Santa Barbara, CA 93101
(805) 568-2240

Department Name: Water Agency
Department No.: 054
For Agenda Of: December 8, 2015
Placement: Administrative
Estimated Tme: N/A
Continued Item: No
If Yes, date from:
Vote Required: Majority

TO: Board of Directors, Water Agency

FROM: Department Scott D. McGolpin, Public Works Director, 568-3010
Director(s)
Contact Info: Thomas D. Fayram, Deputy Public Works Director, 568-3436

SUBJECT: San Antonio Groundwater Basin Study, Third, Fourth and Fifth Supervisorial Districts

County Counsel Concurrence

As to form: Yes

Auditor-Controller Concurrence

As to form: Yes

Other Concurrence: Risk Management

As to form: Yes

Recommended Actions:

- a) Approve and authorize the Chair to execute Amendment No. 1 to the Joint Funding Agreement #15WSCA600081610.A1 with the United States Geological Survey to continue a comprehensive study of the San Antonio Groundwater Basin in order to assess current and future water availability by increasing the amount by \$246,398 in amount not to exceed \$1,025,326 (in which \$920,348 will be funded by the County Water Agency, and \$104,978 will be funded by the United States Geological Survey) and to extend the period by one year from October 31, 2019 to October 31, 2020; and
- b) Determine that the amendment to the agreement for San Antonio Groundwater Study is exempt under California Environmental Quality Act (CEQA) guidelines, Section 15262; Feasibility and Planning Studies and Section 15306 (Class 6) Basic data collection, research, experimental management, and resource evaluation activities, as previously approved by the Board on November 4, 2014
<https://santabarbara.legistar.com/LegislationDetail.aspx?ID=1940549&GUID=F61F7286-71F1-431B-8A55-561FDD88ADAA>.

Summary Text:

The San Antonio Groundwater Basin has been identified as a high priority study area by staff as groundwater serves as the sole source of water to meet the agricultural and municipal needs of the greater Los Alamos Valley, and augments State Water as part of Vandenberg Air Force Base's (VAFB) water supply. In addition, the County of Santa Barbara and all of California is in the midst of persistent drought and recent legislation will require groundwater basin management in three (3) of the Counties groundwater basins, including the San Antonio Basin. The Water Agency has elected to conduct this study in cooperation with the United States Geologic Survey (USGS) since they have the most expertise and highest level of credibility in water resources science investigations.

The initial phases of the study include the expansion of an existing groundwater monitoring network and the installation of monitoring wells, streambed water and temperature sensors, and other hydrologic equipment throughout the study area. Much of this work requires access to private land. As detailed in the November 4, 2014 board letter, the Water Agency established a consultation committee (Committee) composed of local stakeholders and stakeholder representatives to facilitate access to private property and ensure a transparent process allowing access to all of the project's information and progress.

The Committee has determined that access to private property will be administered under access agreements between the property-owner, the Water Agency, and the USGS. The creation of the access agreements has been a collaborative process, and has taken much of FY 2014-2015 to accomplish. At the request of the Water Agency, USGS staff attended several Committee meetings in the spring and summer of 2015 to describe planned new data collection and analysis and answer questions about the study. As such, much of the work that was initially planned for FY 2014-2015 will not commence until FY 2015-2016.

The study includes five main tasks: (1) data compilation, (2) new data acquisition, including an assessment of water quality, (3) model development, (4) analysis of water availability, and (5) report preparation. Work has commenced, in part, on tasks 1, 2, and 3; however most project activities have been shifted back based on the time spent on the Committee. The project timeline has been extended to FY 2019-2020 (project now ending October 31, 2020) to accommodate delays in commencement of work. Work completed to date under tasks 1, 2, and 3 includes the following:

- 1) Existing climate, land-use, geologic, water-quality, and geodetic data have been compiled and assembled into a Geographic Information System (GIS) (Task 1).
- 2) Existing water-quality data have been compiled (Task 1).
- 3) A previously operated gage at San Antonio Creek near Casmalia (11136100) has been reinstalled and is currently operating during the study (Task 2).
- 4) Multiple-well site 16C1-4 has been instrumented with pressure transducers and is transmitting water level data in real time (Task 2).
- 5) Four of eight shallow proposed monitoring wells have been sited and permits have been prepared and submitted; auger-drilling activities are tentatively scheduled for October 2015 (Task 2). In addition, two deep proposed monitoring wells have been tentatively sited pending completion of property access agreements.

- 6) Stream-bed electrical resistance sensors have been constructed and are awaiting deployment, pending the completion of property access agreements (Task 2).
- 7) The frequency of measurements in wells that are part of the existing groundwater-level monitoring network has been increased from yearly to quarterly (first quarterly measurements to be made in September 2015) (Task 2).
- 8) Construction of the 3-dimensional geohydrologic framework for the groundwater model has commenced (Task 3).

This project is being conducted over a six-year period in order to allow adequate time to collect and analyze the necessary data. Along with periodic updates to stakeholders and the Board of Directors, a final report will be published. The USGS has agreed to cost share for some elements of the project. Total cost to the Water Agency over the study period is estimated to be \$1,656,845.

This project will provide an invaluable tool for the County's compliance with SGMA as this basin is identified by the State as one of the priority basins with a Groundwater Sustainability Plan expected to be completed by 2022.

Background:

The San Antonio Groundwater Basin lies about 15 miles south of the City of Santa Maria and 50 miles north of Santa Barbara in the central portion of Santa Barbara County. The surface water drainage of the watershed is about 154 square miles and the Groundwater Basin covers an area of about 128 square miles. The Valley is bounded on the north by the Casmalia Hills and Solomon Hills, on the south by the Purisima Hills and the Burton Mesa, and on the east and west by uplifted consolidated rocks. At the western end of the Groundwater Basin, about five miles east of the Pacific Ocean, consolidated rocks form a barrier to the seaward flow of water which creates upwelling of groundwater and the 660 acre marshland known as the Barka Slough. Land in the San Antonio Creek Valley is used primarily for agriculture. Historically, the Upland parts of the Valley have been used for dry farming or pastureland and the flatlands along the streams for irrigated farming.

Significant changes in land use have occurred since the San Antonio Groundwater Basin was last comprehensively studied in the early 1980's. Since then, large sections of formerly non-irrigated pastureland in the Upland parts of the Valley have been converted to irrigated vineyards. Data has thus far been limited in the Uplands, but in areas there have been water level declines of over 50 feet since the early 1980's. The western quarter of the Valley is owned by VAFB and they have agreed to participate in the project with a discrete level of funding and interaction.

Due to the fact that groundwater serves as the sole source of water for this basin, concerns raised by Valley constituents and water managers, and the importance of groundwater to both VAFB and Valley agriculture, the Water Agency proposes to work with the USGS and VAFB to complete a thorough and detailed analysis of current and future water availability for the basin.

Fiscal and Facilities Impacts:

Budgeted: Yes

Fiscal Analysis:

<u>Funding Sources</u>	<u>Current Cost:</u>	<u>Annualized On-going Cost:</u>	<u>Total 5-year Project Cost</u>
Federal USGS	\$ 104,978.00		\$ 464,751.00
Water Agency	\$ 920,348.00		\$ 1,656,845.00
VAFB	\$ 167,727.00		\$ 533,174.00
Total	\$ 1,193,053.00	\$ -	\$ 2,654,770.00

Narrative:

The project is included in the Adopted 2015-2016 Budget in the Water Resources Division of the Public Works Department as shown on page D-302. No General Fund monies will be utilized for this project.

The USGS is providing a cost share of specific project costs. The USGS will be the lead on the project and Water Agency staff will assist as needed. Under a separate contract VAFB has entered into agreement directly with the USGS as both are federal agencies.

The scope and detail of this project may change over time to reflect changes in funding. Staff anticipates returning to the Board annually with an update and amendment adjusting scope and cost for each fiscal year. The culmination of this project will be a detailed report and fact sheet on current and future water availability in the San Antonio Groundwater Basin under current and future cultural and climatic scenarios. When complete the final report will be brought back to the Board to receive and file.

Special Instructions:

Direct the Clerk of the Board to post the attached CEQA Notice of Exemption (NOE) and to return an original of the agreement along with a copy of the stamped NOE and minute order of these actions to the Water Agency office, Attn: Christina Lopez.

Attachments:

Attachment A: Amendment No. 1 to the Joint Funding Agreement #15WSCA600081610.A1
with contract summary (2 originals)
Attachment B: Joint Funding Agreement (original agreement)

Authored by:

Fray A. Crease, Interim Water Agency Manager, 568-3542