BOARD OF SUPERVISORS
AGENDA LETTER

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

Agenda Number:

Department Name:	Water Agency
Department No.:	054
For Agenda Of:	09/09/14
Placement:	Departmental
Estimated Tme:	1 hour
Continued Item:	No
If Yes, date from:	
Vote Required:	Majority

TO: Board of Directors, Water Agency

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

SUBJECT: **Completion of Cuyama Groundwater Basin Study, First Supervisorial District**

County Counsel Concurrence
As to form: Yes

Auditor-Controller Concurrence
As to form: N/A

Other Concurrence: N/A

Recommended Actions:

A. Receive and file the **Cuyama Valley Water Availability Study**, a hydrologic study consisting of the summary fact sheet, final report, and three technical reports funded and completed by the Santa Barbara County Water Agency (SBCWA) and United States Geological Survey (USGS) listed in the Summary Text below, and authorize distribution of the study for County and public information; and

B. Find that the Cuyama Water Availability 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.

Summary Text:

In 2008, your Board authorized and initiated a Groundwater Study with the United States Geological Survey (USGS) in the Cuyama Valley. The study was initiated to determine the current water budget in the Groundwater Basin(s) in Cuyama, and further to address potential interests in future development in parts of the Valley. Portions of the Basin have shown a steady downward trend in water levels over the past 50 years with water level declines of up to 400 feet in some areas. Staff recommended conducting this study in cooperation with the USGS. The USGS served as the lead agency. The USGS is recognized as having the most expertise and highest level of credibility in water resource related scientific investigation. The project was first approved by your Board on October 28, 2008 and the following contract amendments were made each year to continue the work:

- Amendments one and two*: 10/13/2009 *(there were two original contracts)
- Amendment three: 07/06/2010
- Amendment four: 11/08/2011
- Amendment five: 09/11/2012

This five year time frame was necessary to allow adequate time for the collection and analysis of the required data. Total cost of the project to the SBCWA was $1,375,700 with the USGS providing $415,030 in matching funds.

Attached to this Board Letter is the USGS summary of study results entitled, **"**Cuyama Valley, California Hydrologic Study: An Assessment of Water Availability**"** and related reports**.** The project website and all reports listed below constitute the total work of this study (all associated reports and data collected can be accessed from the website):

Summary Fact Sheet: Cuyama Valley, California Hydrologic Study: An Assessment of Water Availability: U.S. Geological Survey Fact Sheet 2014-3075, 4 p.

Final Report: Hydrologic Models and Analysis of Water Availability in Cuyama Valley, California: U.S. Geological Survey Scientific Investigations Report 2014-5150, 115p.

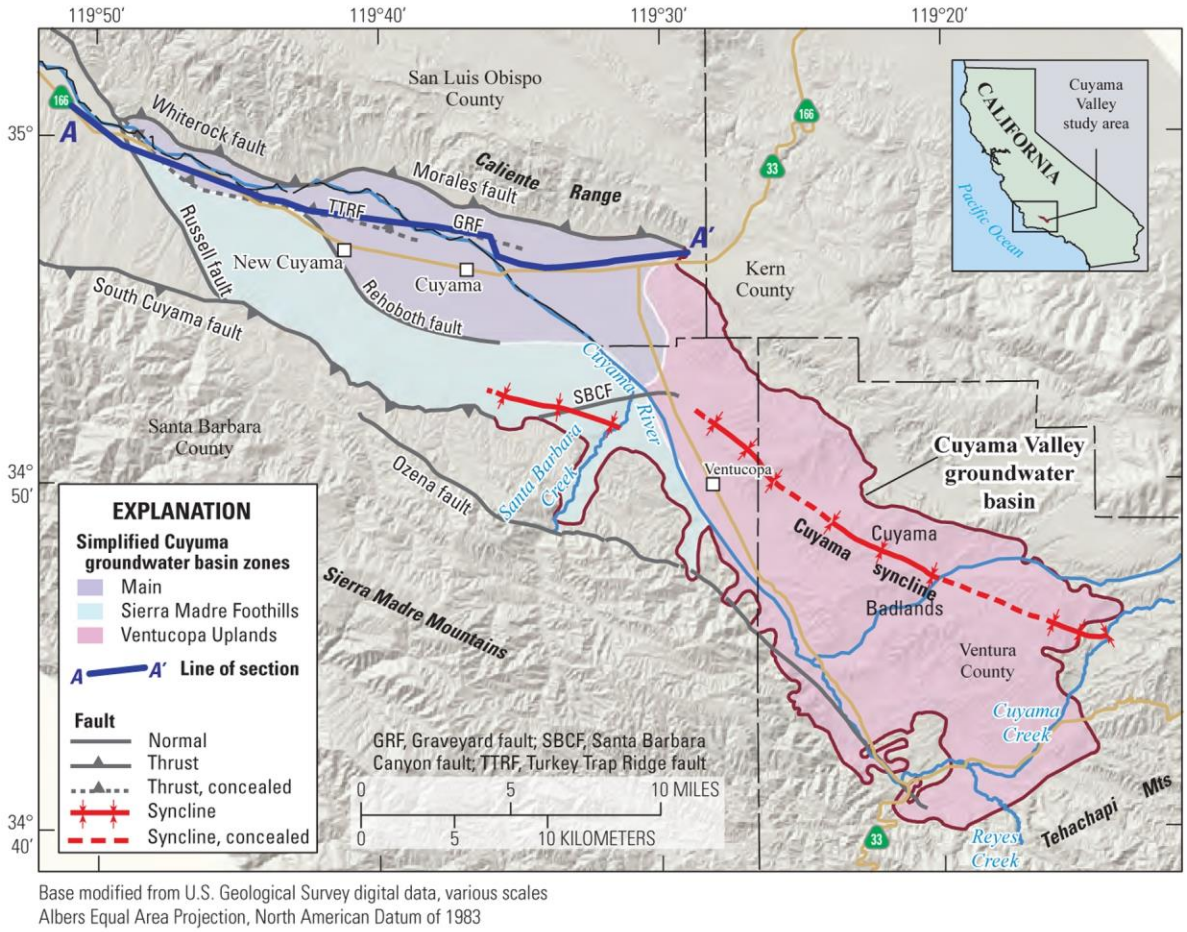
Report One: Construction of 3-D Geologic Framework and Textural Models for Cuyama Valley Groundwater Basin, California: U.S. Geological Survey Scientific Investigations Report 2013-5127, 46 p.

Report Two: Geology, Water-Quality, Hydrology, and Geomechanics of the Cuyama Valley Groundwater Basin, California, 2008-12: U.S. Geological Survey Scientific Investigations Report 2013-5108, 62 p.

Report Three: Kirschenmann Road Multi-Well Monitoring Site, Cuyama Valley, Santa Barbara County, California: U.S. Geological Survey Open-File Report 2011-1292, 4 p.

Project Website: http://ca.water.usgs.gov/user_projects/cuyama/

In summary, results of the study indicate that three different major zones of the Cuyama Groundwater Basin exist each having different geologic and hydrologic features and different responses to groundwater pumpage and recharge. These zones, entitled the Main Zone, Sierra Madre foothills, and Ventucopa Uplands, are separated by geologic features such as faults or formation boundaries. Some parts of the Basin exhibit significant decline in groundwater level. Some parts exhibit small amounts of land subsidence. Groundwater is naturally of poor quality and generally very old, indicating lack of recharge in most areas. For the Basin as a whole, demand greater than replenishment is shown to be 29,900 acre-feet per year for the three zones combined under current climatic and cultural conditions, compared to the SBCWA calculation of 28,000 acre-feet per year made in 1992. The USGS will make themselves available to address any questions in regards to this study.



Base modified from U.S. Geological Survey digital data, various scales
Albers Equal Area Projection, North American Datum of 1983

Background:

The Cuyama Groundwater Basin lies about 45 miles east of the City of Santa Maria in the northeastern corner of Santa Barbara County and extends southeast into Ventura County as well as north and east into San Luis Obispo and Kern Counties. The Basin is comprised of unconsolidated sands and gravels that fill a 225 square-mile intermountain topographic depression named the Cuyama Valley. Agricultural water use began in 1938 and has since progressively increased. Groundwater within the basin makes up 100 percent of water supply for Cuyama Valley agriculture, petroleum operations, businesses, homes and farmsteads. Agriculture accounts for over 95 percent of the water use within the Valley. Water level declines since 1950 of up to 400 feet are not unusual in some areas of the Basin. Due to concerns raised by constituents in the Valley, SBCWA undertook a thorough and detailed analysis of current and future water availability for the Basin.

Fiscal and Facilities Impacts:

Budgeted: Yes

Fiscal Analysis:

Funding Sources	Current FY Cost:	Annualized On-going Cost:	Total 5-year Project Cost
Federal USGS			$ 415,030.00
Water Agency	$ -		$ 1,375,700.00
Other:			
Total	$ -	$ -	$ 1,790,730.00

Narrative:
The funding for this project was shared by the SBCWA and the USGS with the USGS providing funds for specific project costs. Funds necessary for this project for fiscal years 2008-09 through 2012-2013 were budgeted by the Water Agency and funds from the USGS were secured.

No General Fund monies were utilized for this study.

Special Instructions:

Direct the Clerk of the Board to post the attached CEQA Notice of Exemption and to return a stamped copy of the Notice of Exemption, and a copy of the minute order of these actions to the Water Agency office, Attn: Christina Lopez.

Attachments:

- **"Cuyama Valley, California Hydrologic Study: An Assessment of Water Availability"** U. S. Geological Survey Fact Sheet Report, Reports 1 through 3, and the Final Report.
- Notice of CEQA Notice of Exemption

Authored by: Dennis Gibbs, Senior Hydrologist, Water Agency, 739-8781