

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.: 054-04-07
For Agenda Of: 7/6/10

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 McGolpin, Public Works Director, 568-3010

Director(s)

Contact Info: Thomas D. Fayram, Deputy Public Works Director, 568-3436

SUBJECT: Cuyama Groundwater Basin Study, Fifth Supervisorial District

<u>County Counsel Concurrence</u> <u>Auditor-Controller Concurrence</u>

As to form: Yes As to form: Yes

Other Concurrence: N/A

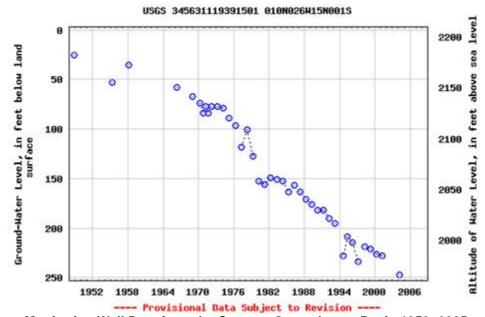
As to form: No

Recommended Actions:

Approve and authorize the Chair to execute the attached Joint Funding Agreement (No. 09W4CAD03910, Amendment 3) with the United States Geological Survey (USGS) to continue a comprehensive study of the Cuyama Groundwater Basin in order to assess current and future water availability in the amount of \$567,600 for fiscal year 2010 – 2011 (total project period being October 1, 2008 through December 31, 2012) in which \$403,800 to be funded by the County Water Agency and \$163,800 will be funded by the USGS;

Summary Text:

Due to concerns raised by constituents in the Cuyama Valley the Santa Barbara County Water Agency has been commissioned to produce a comprehensive report on current and future water availability on the Cuyama Groundwater basin. The Cuyama Basin has shown a steady downward trend in water levels over the past 30 years with water level declines of 150'-200' common in many areas. The Water Agency has elected in turn to conduct this study in cooperation with the United States Geological Survey as the USGS holds the most expertise and highest level of credibility in a water resources science investigation. This project is being conducted over a four year period. It began in the summer of 2008 and will end in late 2012. Projects of these types take a long time due to the nature of data collection and analysis. Along with periodical updates a final report will be published. The USGS will cost share for some of the elements of the project. Total cost to the Water Agency over the four year study period is estimated to be \$1,375,700.



Monitoring Well Data from the Cuyama Groundwater Basin 1950 -2005

During the previous year the following accomplishments have been made in order to conduct the study and produce the final report:

- 1. Maintained the monitoring network and increased it from 48 to 56 sites.
- 2. Installed continuous water level recorders in an additional five wells, to total 15 altogether.
- 3. Drilled two dedicated "cluster" type observation wells to a depth of 1000' in order to collect depth dependant data.
- 4. Conducted slug testing on the two new dedicated observation wells to gain information on the properties of the aquifer.
- 5. Conducted water quality testing at five sites.
- 6. Conducted geothermal mapping
- 7. Installed one additional streamgage, to total two altogether.
- 8. Continued work on a digital database and GIS system with digital stratigraphic logs attached to the sites.
- 9. Began populating a computerized simulation to project trends based on differing climatic and cultural scenarios.
- 10. Began water distribution mapping to account for where water is produced and where it is delivered in the agricultural areas.

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. Ground-water 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 the 1940's in excess of 150-200 feet are not unusual in many parts of the basin. The last ground-water analysis of the basin by the Water Agency in 1992 indicated an overdraft of approximately 28,000 acre-feet per year. Due to concerns raised by constituents in the Valley, the Water Agency has been commissioned to complete a thorough and detailed analysis of current and future water availability for the basin.

Previously two Joint Funding Agreements were executed, one for the drilling and one for all other activities associated with the study. As the three dedicated "cluster" type observation wells are now drilled and in place, the second Joint Funding Agreement (No. 09W4CAD03920) is no longer needed.

Fiscal and Facilities Impacts:

Budgeted: Yes **Fiscal Analysis**:

Funding Sources	Curr	ent FY Cost:	Annualized On-going Cost:	Total 4-year Project Cost
General Fund				
State				
USGS	\$	163,800.00		\$ 370,800.00
Water Agency	\$	403,800.00		\$ 1,375,700.00
Other:				
Total	\$	567,600.00	\$ -	\$ 1,746,500.00

Narrative:

The funding for this project is being split by the Water Agency and the USGS with the USGS providing a cost share of certain project cost. The Water Agency has \$403,800 budgeted for FY 2010-2011 for this project and the USGS has their matching funds budgeted so matching funds are secured. The USGS requires us to approve the JFA on a year by year basis therefore staff will return to the board on a year by year basis to report progress during the previous year and approve the JFA for the following year. Additional funds for the Water Agency portion of this multi-year project will be budgeted in the Water Agency Budget through the normal Budget process.

The project is included in the Adopted 2010-2011 Budget under the Water Agency cost center of the Water Resources Division of the Public Works Department as shown on page D-366.

Special Instructions:

Direct the Clerk of the Board to return all four originals of the agreement along with a copy of the minute order of these actions to the Water Agency office, Attn: Christina Lopez. The Water Agency will return the agreements to the USGS for their approval. Originals will be returned to the Clerk of the Board for your files after the agreement have been approved by the USGS.

Attachments:

Joint Funding Agreement #09W4CAD03910, Amendment 3 (4 originals) Attachment A – Summary of Work

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