

THE BOARD OF SUPERVISORS OF THE COUNTY OF STANISLAUS
ACTION AGENDA SUMMARY

DEPT: Environmental Resources *SKS*

BOARD AGENDA # *B-8

Urgent Routine

AGENDA DATE January 6, 2009

CEO Concurs with Recommendation YES NO

4/5 Vote Required YES NO

(Information Attached)

SUBJECT:

Approval to Fund the Development of the Phase VI Groundwater Models for the Stanislaus and Tuolumne Rivers Groundwater Basin Association

STAFF RECOMMENDATIONS:

Approve funding not to exceed \$21,000 for the development of the phase VI groundwater models for the Stanislaus and Tuolumne Rivers Groundwater Basin Association.

FISCAL IMPACT:

A maximum of \$21,000 will be paid to the Stanislaus and Tuolumne Rivers Groundwater Basin Association for costs associated with phase VI of the groundwater modeling work for the Modesto Groundwater Basin. The Department of Environmental Resources has accounted for this cost in its existing budget.

BOARD ACTION AS FOLLOWS:

No. 2009-37

On motion of Supervisor Grover, Seconded by Supervisor O'Brien
and approved by the following vote,

Ayes: Supervisors: O'Brien, Chiesa, Grover, Monteith, and Chairman DeMartini

Noes: Supervisors: None

Excused or Absent: Supervisors: None

Abstaining: Supervisor: None

1) X Approved as recommended

2) _____ Denied

3) _____ Approved as amended

4) _____ Other:

MOTION:

Christine Ferraro

ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

File No.

Approval to Fund the Development of the Phase VI Groundwater Models for the Stanislaus and Tuolumne Rivers Groundwater Basin Association

DISCUSSION:

The Modesto Groundwater Basin (Basin) lies between the Stanislaus River to the north and the Tuolumne River to the south, and between the San Joaquin River on the west and the base of the Sierra Nevada foothills on the east (See Attachment 1). The groundwater within the Basin plays a vital role in meeting the needs of many different uses, it sustains growth, and it contributes to the overall economy of the Basin area. Stanislaus County has identified groundwater as a resource that is used for both the agriculture industry, as well as a primary source for drinking water in some areas within the County.

Groundwater use is expected to increase in the Basin as a result of population growth. To efficiently manage water resources to ensure an adequate water supply during drought conditions and in anticipation of increased urbanization, optimization of water resources, including both groundwater and surface water, is needed.

On February 28, 2006, the Board of Supervisors authorized the signing and execution of a Memorandum of Understanding (MOU) allowing Stanislaus County to continue membership with the Stanislaus and Tuolumne Rivers Groundwater Basin Association (Association). This MOU extends through December 31, 2011. The Cities of Modesto, Oakdale, and Riverbank, along with the Modesto and Oakdale Irrigation Districts, participate in the Association. The Modesto Irrigation District (MID) serves as the coordinator of Association activities.

One of the primary purposes of the Association is to provide information and guidance for the management, preservation, protection, and enhancement of both quality and quantity of groundwater in the Basin. In order to achieve this goal, the Association has partnered with the United States Geological Survey (USGS) in developing multiple groundwater models.

Due to the extensive nature of developing these groundwater models, the project was to be completed in phases over a several year period. Phases one through five of the project included the development of three groundwater models that would be used in conjunction to better assist in decisions related to management and use of groundwater within the basin. To date the three models are a "geologic model," a steady state regional groundwater flow model, and a transient groundwater flow and optimization model (transient flow model). Phase VI will extend over a two year period through 2010 and will be the final phase of work required to compete and validate the models.

During this final phase, the transient model that was recently completed during phase V, will be re-calibrated in order to make changes to that will facilitate optimization. Optimization of the

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model will be determined through the Association's definition of objectives, constraints, and potential basin management actions. Also included during this phase is the development of a sim/opt model that will be used to evaluate several different management alternatives through the year 2030. Additional tasks include the input of recent water level measurements and the final review of the model by both the Association and the USGS.

Association members, as well as Basin water users not directly represented by agencies, will benefit from the efficiency in water planning that will come from the data incorporated into the transient flow model. MID, as the Association Coordinator, has requested that Association members pay a pro rata share for the cost of developing the models. Stanislaus County's share for the current phase of work is estimated to not exceed \$21,000. This is to be the final payment for completion of the project.

Participation in the development and future application of the groundwater models will allow Stanislaus County access to valuable information related to groundwater in the Modesto basin. It will allow for informed decisions to be made that address current and future uses of groundwater within the Basin.

POLICY ISSUE:

The Board of Supervisors should determine if funding the development of the Phase VI Groundwater Models for the Stanislaus and Tuolumne Rivers Groundwater Basin Association is consistent with the Board's priorities of effective partnerships, a strong agricultural economy/heritage, and a well-planned infrastructure system.

STAFFING IMPACTS:

There are no staffing impacts associated with this item.