

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

DEPT: Environmental Resources

BOARD AGENDA # B-12

Urgent  Routine

AGENDA DATE June 10, 2014

CEO Concurs with Recommendation YES  NO   
(Information Attached)

4/5 Vote Required YES  NO

SUBJECT:

Approval to Accept the Recommendations of the Stanislaus County Water Advisory Committee in the Form of a Countywide Groundwater Management Action Plan

STAFF RECOMMENDATIONS:

1. Accept the recommendations of the Stanislaus County Water Advisory Committee in the form of a Countywide Groundwater Management Action Plan.
2. Direct staff to implement Countywide Groundwater Management Action Plan.

FISCAL IMPACT:

The total cost of the recommended Countywide Groundwater Management Action Plan is estimated to be \$881,000 over a period of five years. The estimated cost for Fiscal Year 2014-2015 (Year 1) is \$336,400, of which \$180,000 is estimated for consultant services.

(Continued on next page)

BOARD ACTION AS FOLLOWS:

No. 2014-278

On motion of Supervisor Withrow, Seconded by Supervisor Chiesa  
and approved by the following vote,

Ayes: Supervisors: O'Brien, Chiesa, Withrow, Monteith, and Chairman De Martini

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:



ATTEST: CHRISTINE FERRARO TALLMAN, Clerk

File No.

**FISCAL IMPACT (continued):**

The total cost of the recommended Countywide Groundwater Management Action Plan is estimated to be \$881,000 over a period of five (5) years. The estimated cost for Fiscal Year 2014-2015 (year 1) is \$336,400 which includes full time staff support from the County Water Resource Manager position (\$156,400 salary plus benefits) and \$180,000 estimated for consultant services.

At the May 28, 2014, Water Advisory Committee (WAC) meeting, a position of support was taken for a conceptual cost sharing approach among the County, WAC members, and other local agencies as a potential funding mechanism for the first year activities related to 1) development of a Countywide Groundwater Management Plan; 2) the development of a centralized database repository for groundwater data; and 3) digital mapping of groundwater well locations in GIS (Geographic Information Systems) format. The suggested cost sharing approach for year one, still under consideration by the WAC participants, is as follows:

<b>Year One Organization</b>	<b>Amount</b>
Stanislaus County	\$45,000
Nine Local Cities @ \$5,000/each	\$45,000
Irrigation Districts: Modesto, Oakdale, Turlock and Eastside Water @ \$11,250/each	\$45,000
10 Local Private Sector Parties @ \$4,500/each	\$45,000
<b>TOTAL</b>	<b>\$180,000</b>

Staff will return to the Board of Supervisors once the funding strategy is finalized to seek direction and approval. The management of this program will be primarily funded by Environmental Resources staff time, in addition to in-kind services (primarily human resources) from participating WAC and Technical Advisory Committee members.

The Countywide Groundwater Management Action Plan cost estimates for a five-year period are detailed in Attachment 1. County staff and WAC members will aggressively seek State resources to assist with funding in years two through five.

**DISCUSSION:**

On October 29, 2013, the Stanislaus County Board of Supervisors (Board) adopted the Groundwater Mining and Export Prevention Ordinance. At that time, the Board also authorized the formation of a 21-member Water Advisory Committee (WAC) and approved the creation of a Water Resources Manager position to work with the WAC and other County departments on matters pertaining to water resources. The Water Resources Manager began employment on January 27, 2014.

On December 17, 2013, the Board approved the process by which representatives of the public would be appointed to the WAC. Subsequent to this action, more than 40 applications were submitted to the County for consideration. A review of these applications was conducted and on February 4, 2014, the Board appointed committee members to the WAC.

### Water Advisory Committee

The first meeting of the WAC was held on February 26, 2014. Wayne Zipser of the Stanislaus County Farm Bureau was elected as Chair of the WAC and Rob Santos of the Turlock Irrigation District was elected as the Co-Chair. The WAC was assigned to make recommendations to the Board, actions that could be taken to address groundwater management issues in the County, within the first 100 days.

Initially, the WAC addressed and adopted a Mission Statement to govern their discussions and to provide guided focus to their effort. The Mission Statement is as follows:

*“To evaluate the status of the groundwater resources of Stanislaus County in order to identify and develop programs and practices that ensure a reliable and sustainable groundwater supply for the benefit of its citizens, present and future, and to make recommendations to the County Board of Supervisors to adopt public policy that empowers such identified actions.”*

The WAC has met seven times over the last 100 days. Over this time period a number of presentations were made from local and State subject matter experts regarding groundwater and its occurrence, movement, and circulation to help educate the diverse group.

The WAC meeting agendas, minutes and presentation materials are posted on the County's website at (<http://www.stancounty.com/er/groundwater-resources.shtm>).

### Technical Advisory Committee

In addition to the formation of the WAC, the by-laws allowed for the establishment of a Technical Advisory Committee (TAC) to serve as the “science arm” of the WAC. The TAC membership is made up of both agricultural and urban water agencies across the geographic scope of the County. The TAC has received input from subject matter experts and developed the work products that were then presented to the WAC for their use in developing the recommendations that could be made to the Board. Meeting information regarding the TAC can also be found on the County's website at the following address (<http://www.stancounty.com/er/groundwater-resources.shtm>).

### Countywide Groundwater Management Action Plan

The following summarizes the recommended actions being made by the WAC to the Board of Supervisors. These actions have been grouped according to the five major elements included in the State Water Board's Groundwater Framework Action Plan. These elements and recommendations are:

#### **Governance**

- Active participation in the development and adoption of groundwater management plans; and
- Development of an integrated County-wide, comprehensive water resources management plan that addresses agricultural, urban and environmental needs and sources.

#### **Enforcement**

- Revise the existing County groundwater ordinance to address the issue of unsustainable groundwater extraction ("mining").

#### **Funding**

- Explore and identify all available private, local government, and state and federal sources of grants and loans to assist sustainable groundwater management practices in Stanislaus County.

#### **Thresholds**

- Establishment of acceptable range of fluctuation of aquifer water levels reflecting dry and wet year cycles; and
- Development of a process to evaluate and analyze reported domestic water well impacts ("dry well" issue).

#### **Monitoring**

- Improved groundwater level monitoring network by expanding existing networks to include both publicly owned and private well owner information;
- Collection and compilation of groundwater usage data (from both public and private sources);
- Development of a centralized database to serve as a repository for County-wide groundwater information; and
- Mapping (GIS format) of water well facilities.

A more thorough description of these recommendations, along with preliminary cost estimates is shown in Attachment 1. The recommendations have been prioritized in relation to their phased implementation over a five year period. Near-term actions of the highest priority have been identified in year one. Subsequent recommended actions have been placed in the mid-term (years two through four) and long-term (year five).

### Other Activities

In addition to the local WAC/TAC efforts, there are a number of parallel activities that have been underway by the State of California in response to the ongoing drought and state-wide concerns regarding groundwater management issues. Of particular interest is the focus on sustainable groundwater management.

### Sustainable Groundwater Management

It is the policy of the State that groundwater resources be managed sustainably. Sustainable groundwater management is *“the management of groundwater to provide for multiple long-term benefits without resulting in or aggravating conditions that cause significant long-term overdraft, land subsidence, ecosystem degradation, depletions from surface water bodies, and water quality degradation in order to protect the resource for future generations.”* Sustainable groundwater management requires the development, implementation and updating of local water budgets, plans and programs based on the best available science, monitoring, forecasting, and the use of technological resources.

This state-wide objective has been endorsed and is actively being promoted by the Governor’s Office, the State Water Resources Control Board, the California Water Foundation, the Association of California Water Agencies, as well as a number of bills that are currently being carried through the legislative process in California. It is expected that a number of groundwater bills will be enacted into law this summer and that these new laws will have direct bearing on what is happening in Stanislaus County.

The WAC discussions have diligently remained focused on the activities at the State level as well as focusing on the local issues and needs. The Countywide Groundwater Action Plan has been prepared in such a way that it addresses local, regional, and State issues related to groundwater management.

### Groundwater Management Planning

The WAC recommends that robust groundwater management planning in Stanislaus County be the vehicle by which it is demonstrated that sustainable groundwater management can be both achieved and maintained over the long-term. This will require examining the full suite of water management tools available to water resource managers including, but not limited to, supply and demand side management options, conjunctive use opportunities, managed artificial recharge programs, understanding the land use/water use nexus, reclaimed water reuse strategies, replacement of aging water infrastructure, and construction of new water conveyance facilities.

Groundwater management plans should also include performance metrics (water level measurement data, pumping data) and regular reporting schedules to demonstrate that such plans are in compliance with their adopted implementation timeline, and other such information as may be needed, to demonstrate sustainable groundwater management.

Included in the Countywide Groundwater Management Action Plan is a recommendation to evaluate and consider adoption of several existing Groundwater Management Plans. These plans cover much of the geographical footprint of Stanislaus County and represent planning work that has been done in a cooperative manner by existing groundwater basin associations, of which throughout the years, the County has been a member and an active funding participant. Adoption of these plans by the County would begin to establish a more regional perspective regarding groundwater management as opposed to the fragmented system that exists today. The specific Groundwater Management Plans that will be evaluated and brought back for possible adoption are:

1. Integrated Regional Groundwater Management Plan for the Modesto Subbasin;
2. Turlock Groundwater Basin Groundwater Management Plan; and
3. Groundwater Management Plan for the Northern Agencies in the Delta-Mendota Canal Service Area.

#### Integrated Regional Water Management (IRWM) Planning

Another water management plan that has recently been prepared is the "East Stanislaus Regional Water Management Plan." The entities that prepared and adopted this Plan are the cities of Modesto, Ceres, Hughson and Turlock. The Plan was prepared to develop a broader regional understanding to:

- Identify water resources solutions;
- Reflect the regional needs;
- Maximize benefits through integration of water management strategies;
- Leverage regional resources through partnerships; and
- Be eligible for State funding (Proposition 84) through the IRWM grant program.

It is recommended that County staff consult with the appropriate representatives from the cities mentioned above to explore the opportunities for using this planning tool as a means of potentially funding some of the activities identified in the Countywide Groundwater Action Plan. It is anticipated that the next step in the process will involve the County formally adopting this Plan as part of the funding approval process.

#### Groundwater Ordinance Revision

When the Groundwater Mining and Export Prevention Ordinance was adopted by the Board last October, it was clearly recognized and accepted that such action was only a "first step" and that the matter of the definition of the term groundwater "mining" would need to be re-visited in the near future. The WAC and TAC have spent considerable time and effort working on a recommended revised definition of groundwater "mining."

One of the recommended actions in the Countywide Groundwater Management Action Plan is for the Board to direct and authorize staff to initiate a public process related to amending the existing groundwater ordinance to address the concept of groundwater “mining” from the perspective of sustainable groundwater management. The term “mining” is recommended to be replaced with “unsustainable groundwater extraction” such that these activities would then be subject to regulatory oversight under the provisions of the revised ordinance. Much work remains to be accomplished in this regard and such deliberations will be conducted in a transparent and open public manner. Staff anticipates bringing this important ordinance modification back to the Board of Supervisors by the end of the summer.

#### Summary

The WAC and the TAC have made excellent progress since the establishment of the ordinance, however much more work remains to be accomplished. The State goals for local groundwater management entities, such as the model being used in the County’s WAC, demonstrate that they have developed a plan for sustainable groundwater management within a five year timeframe and that they achieve sustainable groundwater management over a 20 year period. Stanislaus County is now well ahead of the curve in this regard and in many respects is being viewed as one of the local leadership models in this area of natural resource management.

#### **POLICY ISSUE:**

The recommended actions support the Boards’ priorities of A Safe Community, A Healthy Community, the Efficient Delivery of Public Services, A Well Planned Infrastructure System, A Strong Agricultural Economy and Heritage, and a Strong Local Economy by providing adequate protection of one of the County’s most valuable natural resources: groundwater.

#### **STAFFING IMPACT:**

Department of Environmental Resources staff will continue to support the effort of the Water Advisory Committee and Technical Advisory Committee.

#### **CONTACT INFORMATION**

Walter Ward, Water Resources Manager  
Jami Aggers, Director of Environmental Resources  
Keith Boggs, Assistant Executive Officer

Telephone: 209-525-6710  
Telephone: 209-525-6770  
Telephone: 209-525-4307

COORDINATED GROUNDWATER MANAGEMENT IN STANISLAUS COUNTY

**WAC Recommendations to the Board of Supervisors**

Proposed Work Plan for FY 2014/15 through FY 2018/19

(Draft - 6/3/2014)

Governance Elements	FY2014/15			FY2015/16			FY2016/17			FY2017/18			FY2018/19		
	Consultant	Staff Hours	Labor Cost	Consultant	Staff Hours	Labor Cost	Consultant	Staff Hours	Labor Cost	Consultant	Staff Hours	Labor Cost	Consultant	Staff Hours	Labor Cost
<p><b>Governance (G-1)</b> Participate in the development and adoption of a Groundwater Management Plan (GMP) for Stanislaus County.  <i>The effort will be supported by the extensive amount of existing information contained in the existing GMP's. In addition, it is recommended that the County adopt all existing GMP's that have been developed to date in Stanislaus County.</i></p>	\$60,000	400	\$36,800	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
<p><b>Governance (G-2)</b> Adopt General Plan (cities and County) changes to protect groundwater recharge areas and to manage or mitigate land use that has an impact on groundwater use and quality.  <i>A significant amount of coordination work will be required with all of the agencies within the County (this assumes 'recharge areas of interest' have already been identified under T-1).</i></p>	\$0	120	\$11,040	\$0	120	\$11,040	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
<p><b>Governance (G-3)</b> Evaluate existing IRWMP's with regard to their relevance to sustainable groundwater management activities that enhance water supply and protects water quality.  <i>This will involve meetings and project development work with the IRWMP Project Manager and Steering Committee to possibly incorporate certain tasks from this Work Plan's Scope into the existing IRWMP document as a stand-alone 'Project' in order to be eligible for future State and/or Federal grants.</i></p>	\$0	120	\$11,040	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0



# WAC Recommendations to the Board of Supervisors

<b>Governance (G-4)</b> Discuss and develop alternate institutional mechanisms for integrated groundwater management strategies with the existing groundwater management planning agencies and associations. <i>This will involve a number of meetings on groundwater management strategies with the Groundwater Subbasin Associations and their member agencies (urban and agricultural interests). The concept of Local Groundwater Management Entities (LGME) is being fostered by the California Water Foundation and has gained traction with the Governor's Office.</i>	\$0	0	\$0	\$0	240	\$22,080	\$0	40	\$3,680	\$0	25	\$2,300	\$0	25	\$2,300
<b>Governance (G-5)</b> Systematically evaluate and integrate existing Urban Water Management Plans, Agricultural Water Management Plans, and Groundwater Management Plans into a single, integrated, county-wide water management plan focused on sustainable groundwater management programs, practices and projects and which includes robust performance metrics and implementation schedule.	\$0	0	\$0	\$75,000	250	\$23,000	\$75,000	250	\$23,000	\$0	0	\$0	\$0	0	\$0
<b>Enforcement Elements</b>	<b>Consultant</b>	<b>Staff Labor</b>		<b>Consultant</b>	<b>Staff Labor</b>		<b>Consultant</b>	<b>Staff Labor</b>		<b>Consultant</b>	<b>Staff Labor</b>		<b>Consultant</b>	<b>Staff Labor</b>	
		<b>Hours</b>	<b>Cost</b>		<b>Hours</b>	<b>Cost</b>		<b>Hours</b>	<b>Cost</b>		<b>Hours</b>	<b>Cost</b>		<b>Hours</b>	<b>Cost</b>
<b>Enforcement (E-1)</b> Revise the existing Stanislaus County Groundwater Ordinance to address unsustainable groundwater extraction and other identified enforcement provisions.	\$0	40	\$3,680	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
<b>Enforcement (E-2)</b> Establish agreed upon groundwater management mechanisms to sustainably manage the groundwater resource.	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	300	\$27,600
<b>Funding Elements</b>	<b>Consultant</b>	<b>Staff Labor</b>		<b>Consultant</b>	<b>Staff Labor</b>		<b>Consultant</b>	<b>Staff Labor</b>		<b>Consultant</b>	<b>Staff Labor</b>		<b>Consultant</b>	<b>Staff Labor</b>	
		<b>Hours</b>	<b>Cost</b>		<b>Hours</b>	<b>Cost</b>		<b>Hours</b>	<b>Cost</b>		<b>Hours</b>	<b>Cost</b>		<b>Hours</b>	<b>Cost</b>
<b>Funding (F-1)</b> Evaluate and recommend alternatives for relief funding related to domestic well impacts (linked to element T-2).	\$0	40	\$3,680	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
<b>Funding (F-2)</b> Evaluate the existing East Stanislaus Integrated Regional Water Management Plan (IRWMP) with regard to its relevance as a potential funding mechanism (in particular Proposition 84 or funds identified for such in the Governor's Water Bond) for any of the qualifying activities included in this Work Plan. Linked to G-3.	\$0	80	\$7,360	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0

# WAC Recommendations to the Board of Supervisors

Thresholds Elements	Consultant	Staff Labor		Consultant	Staff Labor		Consultant	Staff Labor		Consultant	Staff Labor		Consultant	Staff Labor	
		Hours	Cost		Hours	Cost		Hours	Cost		Hours	Cost		Hours	Cost
<b>Thresholds (T-1)</b> Obtain technical information and develop the planning and policy needs to protect and enhance groundwater recharge opportunities. <i>This would include numerous Planning Commission, Council Committee, Council, and Board meetings with the various agencies in the County.</i>	\$0	0	\$0	\$0	0	\$0	\$0	160	\$14,720	\$0	0	\$0	\$0	0	\$0
<b>Thresholds (T-2)</b> Provide technical evaluation and analysis procedures that address the issue of groundwater users that have lost their ability to pump groundwater ("dry well"). This will further involve exploring federal/state/local relief funding mechanisms available to the County. <i>This item is directly tied to item F-1.</i>	\$0	80	\$7,360	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
<b>Thresholds (T-3)</b> Evaluate long-term groundwater elevation trends to establish an acceptable range (maximum/minimum/average) of fluctuation of groundwater levels (aquifer specific) that supports sustainable management. This activity is linked to E-2. <i>This will involve the statistical analysis of long-term water level trends and numerous meetings with the Groundwater Subbasin Associations and their member agencies.</i>	\$0	0	\$0	\$0	0	\$0	\$30,000	220	\$20,240	\$30,000	200	\$18,400	\$0	0	\$0
Monitoring Elements	Consultant	Staff Labor		Consultant	Staff Labor		Consultant	Staff Labor		Consultant	Staff Labor		Consultant	Staff Labor	
		Hours	Cost		Hours	Cost		Hours	Cost		Hours	Cost		Hours	Cost
<b>Monitoring (M-1)</b> Map the location (geography and aquifer zone) of all available groundwater well facilities. Such mapping (GIS format) must protect private property rights and be consistent with all state/federal regulations pertaining to confidentiality disclosure issues such as public security. <i>This will include the compilation and mapping (GIS format) of all available well completion reports available from DWR, County records and well drillers.</i>	\$60,000	220	\$20,240	\$50,000	40	\$3,680	\$30,000	40	\$3,680	\$0	0	\$0	\$0	0	\$0
<b>Monitoring (M-2)</b> Develop a centralized database and information management system needed to collect, store and retrieve county-wide groundwater data pertaining to well facilities, water levels and groundwater pumping information, in addition to other pertinent information.	\$60,000	200	\$18,400	\$20,000	80	\$7,360	\$0	80	\$7,360	\$0	140	\$12,880	\$0	40	\$3,680
<b>Monitoring (M-3)</b> Enhance the County water well permitting process to provide more meaningful information regarding groundwater management.	\$0	80	\$7,360	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0

## WAC Recommendations to the Board of Supervisors

<b>Monitoring (M-4)</b> Develop a County-wide groundwater level monitoring network that is coordinated across the various groundwater subbasins, County boundaries (Merced and San Joaquin) and is conformable with existing monitoring networks such as the DWR CASGEM program. <i>A significant amount of coordination work will be required with all of the public agencies and participating voluntary private landowners within the County.</i>	\$0	120	\$11,040	\$0	100	\$9,200	\$0	40	\$3,680	\$0	40	\$3,680	\$0	40	\$3,680
<b>Monitoring (M-5)</b> Develop a reliable accounting system to measure aggregated monthly groundwater usage (to the nearest agreed upon geographic area unit) from public agencies <i>and private landowners</i> while protecting private property rights and public security disclosure issues.	\$0	120	\$11,040	\$0	20	\$1,840	\$0	20	\$1,840	\$0	20	\$1,840	\$0	20	\$1,840
<b>Monitoring (M-6)</b> Develop a Groundwater Data Policy that establishes methodologies to receive data from private parties and to respond to data requests that ensures the confidentiality of the data submitted and maintained.	\$0	80	\$7,360	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0	\$0	0	\$0
<b>TOTAL</b>	\$180,000	1700	\$156,400	\$145,000	850	\$78,200	\$135,000	850	\$78,200	\$30,000	425	\$39,100	\$0	425	\$39,100
<b>ANNUAL TOTAL</b>	\$336,400		\$223,200			\$213,200			\$69,100			\$39,100			
<b>FINAL COST</b>	\$881,000														

**NOTES:**  
 The estimated 'staff time' cost of \$92/hr for the Water Resources Manager Position. Groundwater Management Program WRM labor distribution: Year 1 @ full-time, Years 2 & 3 @ half-time, Years 4 & 5 @ 1/4 time. (Using 1,700 productive hours/year = 100%)  
 The Work Plan does not include any environmental review (CEQA) or public outreach work.

6/10/14 B-12 F

JUNE 10<sup>TH</sup> TALK TO SUPERVISORS

I AM VANCE KENNEDY AND LIVE AT 5052 TULLY ROAD IN MODESTO. I AM A VERY SENIOR CITIZEN WITH A SCIENTIFIC BACKGROUND.

THE BUDGET FOR THE PROPOSED WATER PLANNING IS WOEFULLY SHORT OF WHAT WILL, IN ALL PROBABILITY, BE NEEDED TO DO THE JOB RIGHT. WATER IS FUNDAMENTAL TO THIS AREA'S ECONOMY. I HAVE SEEN FIGURES OF 3 BILLION DOLLARS IN FARM SALES AND AN IMPACT OF \$9 BILLION ON THE LOCAL ECONOMY THAT IS ON AN ANNUAL BASIS. A FIGURE OF ABOUT 500 THOUSAND HAS BEEN ESTIMATED OVER SEVERAL YEARS FOR NEEDED STUDIES, MANY OF WHICH SHOULD HAVE BEEN STARTED YEARS AGO. THE CONTRAST BETWEEN WHAT IS AT STAKE AND THE PROPOSED EXPENDITURE IS TREMENDOUS. IN FACT, IT AMOUNTS TO ABOUT A DOLLAR PER PERSON IN THE COUNTY TO UNDERSTAND A FACTOR LONG UNDERVALUED AND FUNDAMENTAL TO LIFE AND THE ECONOMY

WALTER WARD IS, WITHOUT DOUBT, A VERY CAPABLE SCIENTIST, BUT HE COULD USE SPECIALIZED HELP IF DATA ARE TO BE ACCUMULATED, INTERPRETED AND PRESENTED IN A PROMPT AND USABLE FASHION, SO THAT INTELLIGENT DECISIONS CAN BE MADE WITHIN MUCH LESS THAN 5 YEARS. MOREOVER, WE MAY WELL NOT HAVE ANYTHING LIKE 5 YEARS TO DECIDE WISE PROCEDURES, DEPENDING ON WHEN THIS DROUGHT ENDS.

SUPERVISORS SHOULD HAVE REQUIRED ENVIRONMENTAL IMPACT STUDIES FOR LARGE WELLS IN THE PAST AND SHOULD REQUIRE SUCH STUDIES FOR ANY LARGE DEEP DRILLED OR UNDRILLED (BUT APPROVED) WELLS THAT CAN BE DONE LEGALLY NOW. IT IS NO SECRET THAT WATER CAN FLOW Laterally UNDERGROUND MUCH EASIER THAN VERTICALLY IN SEDIMENTARY ROCKS OF THE TYPE WE HAVE HERE IN THE VALLEY. I UNDERSTAND THAT WATER CAN FLOW SIDEWAYS UNDERGROUND 10 TO 100 TIMES AS EASILY AS VERTICALLY BECAUSE CLAY LAYERS ACT LIKE BARRIERS TO VERTICAL FLOW. THE CLASSIC PICTURE OF A SYMMETRICAL CONE OF DEPRESSION AROUND A WELL IS SIMPLY WRONG IN MANY SEDIMENTARY ROCKS. WHAT THIS MEANS IS THAT A WELL OWNER CAN DRAW WATER FROM NEIGHBORS Laterally MUCH EASIER THAN FROM HIS OWN WATER COLUMN. A BIG DEEP WELL CAN DEplete THE WATER TABLE FOR MANY THOUSANDS OF FEET AROUND, IF THE GEOLOGY IS RIGHT. THE ONLY WAY TO KNOW IS BY AN EIR FOR LARGE DEEP WELLS. NO NEED TO TAKE MY WORD FOR IT. CHECK WITH ANY QUALIFIED HYDRO-GEOLOGIST

YOU SUPERVISORS HAVE THE OPPORTUNITY TO TAKE THE BEST ADVICE FROM YOUR COMMITTEE AND GO BEYOND IT, AS NEEDED. THE STATE WONT HAVE TO INTERVENE IF WE MAKE THE POLITICALLY HARD DECISIONS HERE. I THINK YOU FOLKS UNDERSTAND THE SITUATION CLEARLY. YOU HAVE THE POWER TO CHANGE THINGS, THE QUESTION IS "WILL YOU DO IT", YOU COULD BE SETTING VERY VALUABLE PRECEDENTS FOR THE WHOLE STATE. REVIEW WHAT OTHER STATES HAVE DONE AND ADAPT AS SEEMS APPROPRIATE.

## JUNE TALK SUMMARY

IN SUMMARY, BIG PRODUCTIVE DEEP WELLS DRAW GROUNDWATER FROM A LARGE AREA AROUND THEMSELVES., EXTENDING FAR BEYOND THE AREA OF THE WELL ITSELF. THAT GROUNDWATER IS A RESOURCE SHARED WITH NEIGHBORS A FACT NOT COVERED BY EXISTING CALIFORNIA LAW. IF NEIGHBORS ARE HARMED, THEY SHOULD BE MADE WHOLE. YOU HAVE THE POWER TO MAKE SUCH RULES OR LET THE STATE LEGISLATURE DO IT FOR YOU. I URGE THAT YOU DECLARE A MORATORIUM ON DRILLING ANY NEW LARGE DEEP WELLS AND REQUIRE ENVIRONMENTAL IMPACT REPORTS ON ANY RECENT OR PROPOSED LARGE DEEP WELLS THAT CAN LEGALLY BE REQUIRED TO DO AN EIR.

IT SEEMS QUITE UNLIKELY THAT SOPHISTICATED OWNERS OF SUCH LARGE WELLS WERE UNAWARE OF THE HYDROLOGIC IMPLICATIONS WHEN THEY DRILLED THOSE WELLS. THEY MUST NOT BE ALLOWED TO HARM OTHERS. THIS IS AN URGENT PROBLEM AND MUST BE ADDRESSED NOW BEFORE MORE HARM IS DONE. YOUR LEGAL DEPARTMENT CAN PROBABLY TELL YOU WHAT YOU MUST DO. I DON'T KNOW. THANK YOU.

**Stanislaus County  
Water Advisory Committee  
Recommendations Regarding  
Groundwater Management**

Jami Aggers, Director, Dept. of Environmental Resources

Wayne Zipser, Chairman, Water Advisory Committee

Walter Ward, Water Resources Manager

June 10, 2014

# Background

- On October 29, 2013, the Stanislaus County Board of Supervisors adopted the “Groundwater Mining and Export Prevention Ordinance”
- At the same time, the Board approved the creation of a 21 member Water Advisory Committee and the creation of a Water Resources Manager staff position to facilitate the committee

# Background

- On December 17, 2013, the Board approved the process by which the public would be appointed to the committee
- The recruitment of the Water Resources Manager position was conducted and the new hire began employment of January 27, 2014
- The WAC members were appointed by the Board of Supervisors on February 4, 2014



# Water Advisory Committee

- The WAC first met on February 26, 2014, at which time the following elections were made:
  - Chair: Wayne Zipser, Farm Bureau
  - Vice-Chair: Rob Santos, TID
- The WAC was charged to produce and deliver a report to the Board within 100 days addressing the needs of groundwater management in Stanislaus County

# WAC Mission Statement

- *“To evaluate the status of the groundwater resources of Stanislaus County in order to identify and develop programs and practices that ensure a reliable and sustainable groundwater supply for the benefit of its citizens, present and future, and to make recommendations to the County Board of Supervisors to adopt public policy that empowers such identified actions.”*

# Sustainable Groundwater Management

- Governor's Office Policy Statement
- Proposed Legislation
- Association of California Water Agencies Groundwater Committee
- California Water Foundation Report
- California Department of Water Resources Basin Prioritization Report

# Sustainable Groundwater Management, Cont'd.

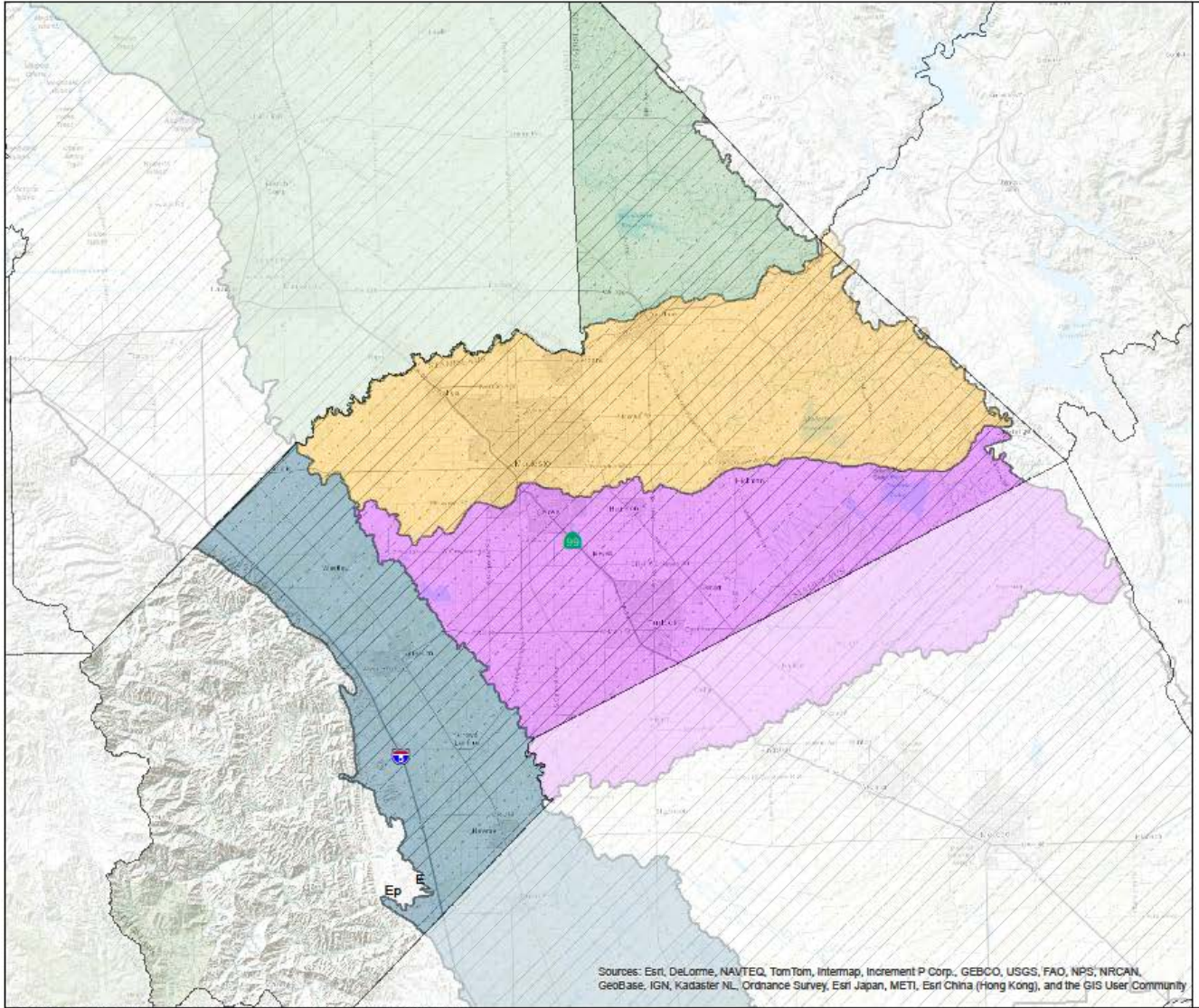
- *“The management of groundwater to provide for multiple long-term benefits without resulting in or aggravating conditions that cause significant long-term overdraft, land subsidence, ecosystem degradation, depletions from surface water bodies, and water quality degradation in order to protect the resource for future generations.”*

# **Groundwater Management Action Plan Elements**

- **Governance**
- **Enforcement**
- **Funding**
- **Thresholds**
- **Monitoring**

# Governance

1. Active participation in the development and adoption of a Countywide groundwater management plan
2. Address the protection of groundwater recharge areas via coordination with County and municipal land use planning efforts and General Plan policy language



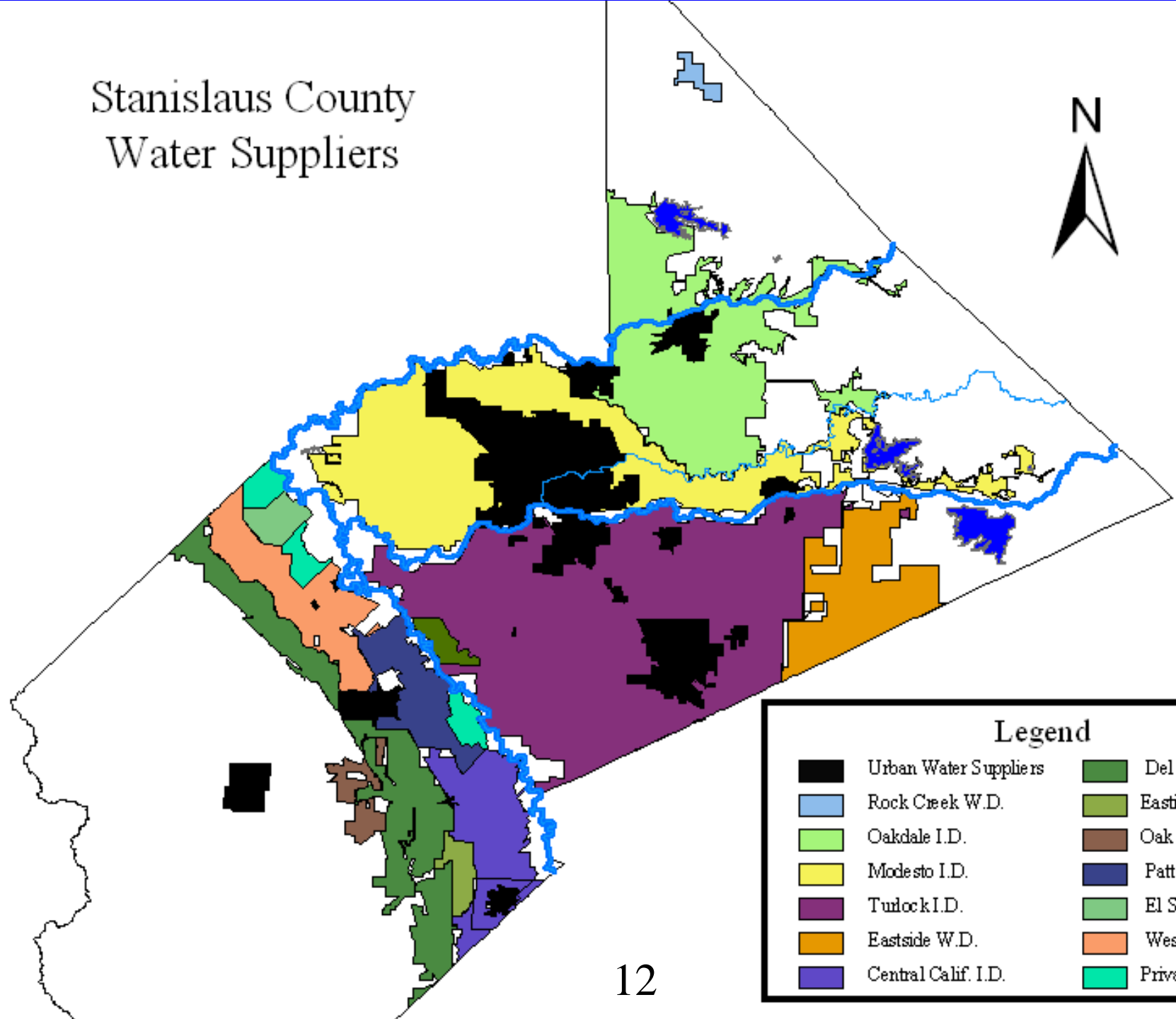
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







# Governance

3. Evaluate the IRWM Planning process as an effective and appropriate planning tool
4. Explore alternative institutional management mechanisms regarding regional groundwater management (Local Groundwater Management Entities)



# Stanislaus County Water Suppliers



	Urban Water Suppliers		Del Puerto W.D.
	Rock Creek W.D.		Eastin W.D.
	Oakdale I.D.		Oak Flat W.D.
	Modesto I.D.		Patterson I.D.
	Tuolock I.D.		El Solyo W.D.
	Eastside W.D.		West Stanislaus I.D.
	Central Calif. I.D.		Private W.D.

# Governance

5. Development of an integrated Countywide, comprehensive water resources management plan that addresses agricultural, urban and environmental needs and sources.

# Enforcement

1. Revise the existing County Groundwater Ordinance to address the issue of unsustainable groundwater extraction (“mining”).
2. Identify, evaluate, and develop a full suite of tools to achieve and maintain sustainable groundwater management; in particular drought response mechanisms.

# Funding

1. Evaluate opportunities for relief funding to repair/replace adversely affected domestic supply wells.
2. Explore and identify all available private, local government, and state and federal sources of grants and loans to assist sustainable groundwater management practices in Stanislaus County.

# Five Year Estimated Program Costs

Phase	Consultants (\$)	Staff (\$)	TOTAL
Year 1	180,000	156,400	336,400
Year 2	145,000	78,200	223,200
Year 3	135,000	78,200	213,200
Year 4	30,000	39,100	69,100
Year 5	0	39,100	39,100
TOTAL	490,000	391,000	881,000

# Estimated Outside Services Costs by Activity

Phase	Outside Services	Program Elements
Year 1	\$180,000	Mapping (\$60k) Database (\$60k) Countywide GMP (\$60k)
Year 2	\$145,000	Mapping (\$50k) Database (\$20k) Integration Planning (\$75k)
Year 3	\$135,000	Mapping (\$30k) Integration Planning (\$75k) WL trending evaluation (\$30k)
Year 4	\$ 30,000	WL trending evaluation (\$30k)
Year 5	0	None
TOTAL	\$490,000	\$490,000

# First Year Cost-Share Proposal for Outside Services

Entity	Cost-Share
Stanislaus County	\$45,000
Municipal (9 Cities): \$5,000/each	\$45,000
Special District (4 Water Purveyors): \$11,250/each	\$45,000
Private Parties (10): \$4,500/each	\$45,000
TOTAL	\$180,000

# Thresholds

1. Explore managed groundwater recharge opportunities and mechanisms.
2. Development of a process to evaluate and analyze reported domestic water well impacts (“dry well” issue).
3. Establishment of acceptable range of fluctuation of aquifer water levels reflecting dry and wet year cycles.



# Monitoring

1. Digitized Mapping (GIS format) of water well facilities location and use type.
2. Development of a centralized database to serve as a repository for Countywide groundwater information.
3. Review the County's water well permitting process to look for ways of collecting more meaningful groundwater related information.

## Monitoring

4. Improve groundwater level monitoring network by expanding existing networks to include both publicly owned and private well owner
5. Collection and compilation of groundwater usage data (from both public and private sources).
6. Develop a groundwater data Confidentiality Agreement to protect private property rights.

## **Recommendations**

- Accept the recommendations of the Stanislaus County Water Advisory Committee as contained in the Countywide Groundwater Management Action Plan.
- Direct staff to implement the Countywide Groundwater Management Action Plan.

# Questions and Discussion