

# California Groundwater

## The Sustainable Groundwater Management Act

Too Much Too Soon,  
or  
Too Little Too Late?



TULARE FFA CHAPTER  
591 West Bardsley Ave  
Tulare, CA 93274  
(559) 687-7390  
May 2, 2015



**1. List course(s) in which instruction occurred including the number of students involved in the instruction of the issue.**

Agricultural Business Management (31 students) evaluated the impact of the Sustainable Groundwater Management Act's (SGMA) imposed regulations on the cost efficiency of local agriculture businesses (i.e. farms, dairies, labs, etc.) as well as the current financial and job losses the drought itself has caused. Agriculture Biology (68 students) studied the environmental impacts of subsidence and its effect on endangered species as well as groundwater management and quality.

**2. Why is this issue important now?**

Water is an invaluable resource in any economy, but especially in that of agriculture-rich California. There are three sources of water available to farmers: surface water, groundwater, and rain. Surface water and rain water depend on weather conditions; therefore, groundwater becomes the most reliable source for farmers to use. During a normal year, 30% of the state's water supply comes from groundwater. In times of intense drought, groundwater consumption can rise to 60% or more. (UC Division of Agriculture and Natural Resources, 2015). The lack of adequate amounts of surface water and the rapid depletion of groundwater basins are impacting agriculture and causing land to be idled with an estimated \$2.2 billion dollars in crop loss (California Farm Water Coalition, 2014). Some economists are estimating losses as high as \$5 billion dollars. (UC Davis, 2014). Idled farmland will also have a ripple effect, resulting in a loss of approximately 17,000 jobs (California Farm Water Coalition, 2014). As we entered the fourth year of the most severe drought in the history of the state of California, there had been no legislation to regulate groundwater use. The SGMA will regulate groundwater use for agricultural and environmental needs, as well as those of the growing population.

**3. What is the nature of this issue?**

From the beginning of California's history, the controversy surrounding water scarcity has been about acquisition, control, distribution, and storage. The monitoring and control of groundwater has not had new legislation enacted in the past 100 years. Governor Brown's signing of the Sustainable Groundwater Management Act (SGMA) drastically changed the regulation of groundwater use in the state of California. The legislation was passed before adequate information was presented to lawmakers. The lack of clear direction and specific information about the management of groundwater has created a great deal of controversy among the three (3) primary users of groundwater: agriculture, the environment, and the urban population. The primary debate in this issue centers around who will regulate and determine the amount of groundwater that can be used by these three shareholders.

**4. Who is involved in the issue?**

Water usage is a complex issue that impacts everyone in the state of California, which is the only state without a groundwater regulatory program. The authors of the SGMA, Assembly Member Roger Dickinson and Senator Fran Pavley, believe that it is important to implement groundwater management immediately. Governor Jerry Brown showed his support by signing the SGMA into law, effective in January 2015. Organizations such as the California Farm Bureau Federation actively oppose the legislation in the interests of California's agriculture sector. Environmental organizations support the state legislature for taking action on the groundwater management issue in order to reduce the effects of subsidence as well as to enforce the protection of endangered species and natural habitats. Municipalities that rely on groundwater are concerned as well as those who use wells for residential purposes. Ultimately the situation has proven that every California citizen is affected by this legislation.

**5. How can the issue be defined?**

The issue of groundwater can be defined by one simple question: If California's government does not implement water regulations now, is California going to have enough water for farmers to produce food for the growing population? We chose to examine this question by researching perspectives from farmers, government officials, the Farm Bureau, and environmentalists. Comparing these viewpoints revealed strong differences in opinion between the stakeholders. This issue, at its core, is a debate over legislation. Will it bring relief to a water system that is being overstressed by drought conditions, groundwater use, and a growing population, or will it simply provide a regulatory agency control of one of the state's most vital resources?

## **6. What is the historical background of the issue?**

Significant dates regarding the SGMA's role in the California water crisis are listed below.

- December 19, 1914: The Water Commission Act of 1913 goes into effect, "establishing the state's water right permit process" (State Water Resources Control Board).
- 1960: This is the last time a dam was built in California.
- 1992: Passage of AB 3030- Local agencies began development of groundwater management plans.
- January 2014: Governor Jerry Brown declares the drought an emergency situation. He issues a conservation mandate, urging California residents to reduce water consumption by 20% in 2014.
- March 1, 2014: Governor Jerry Brown signs the Drought Relief Package
- September 16, 2014: Governor Jerry Brown signs the bill package that makes up the Sustainable Groundwater Management Act, which "allows local agencies to customize groundwater sustainability plans to their regional economic and environmental needs" (Groundwater.ca.gov).
- November 2014: Passage of Proposition 1 (\$7 billion Water Bond) - \$100 million for groundwater projects
- January 1, 2015: The provisions of the Sustainable Groundwater Management Act come into effect.
- March 2015: Department of Water Resources releases Groundwater Sustainability Strategic Draft Plan.

## **7. What caused the issue?**

Groundwater on average makes up over one-third of California's water supply, and it serves as a critically important savings account in dry years. Surface water supplies have been managed for a century. However, groundwater has never been formally managed. A landowner could extract an unlimited amount of water if put to reasonable and beneficial use without seeking permission to use that water. California endured a third year of drought in 2014, and groundwater levels reached all time historic lows in most areas of California (Water.ca.gov). Governor Brown worked with the California Legislature to create the Sustainable Groundwater Management Act (SGMA), creating a new structure for managing California's groundwater that will be regulated by the Department of Water Resources (DWR). The current drought has increased Californians' awareness of groundwater management issues, but how that management will happen still remains controversial.

## **8. What are the risks?**

Those in opposition are concerned that the SGMA will lead to:

- Potential high cost to implement plans, exceeding the allocated \$100 million from Proposition 1.
- Farmers not receiving the water needed for production, leading to further financial consequences in addition to the previous \$5 billion loss due to the drought itself (UC Davis, 2014).
- Over-regulation of water use by state and local agencies.
- Violation of current water and property rights by state and local agencies, leading to a multitude of lawsuits.

## **9. What are the benefits?**

Supporters of groundwater regulation feel that it will benefit the state of California by:

- Establishing a more accurate record of ground water use to eliminate overdraft.
- Reducing land subsidence, thus preventing a decrease in underwater storage capacity and infrastructure damage – affecting 5,200 square miles of agricultural land and \$1.3 billion in infrastructure damage to date (Land Subsidence from Groundwater Use in California, 2014).
- Formulating a groundwater management plan that provides legislative direction, which has been non-existent in our state up until this time.

## **10. Is there strong disagreement on the issue?**

Yes, and as California's drought continues and groundwater supply decreases, the debate becomes more intense. There is a clear division between the two major viewpoints of groundwater management: those who advocate for groundwater regulations and those who do not. Those seeking groundwater regulations advocate for the implementation of groundwater regulations to properly manage the groundwater we have and to limit the effects of land subsidence, also noting that California was the only state without a groundwater plan in place. Those opposing groundwater regulations believe that implementing groundwater regulations is doing more harm than good. The agriculture sector's main concern is that water rights will not be respected with lawmakers and local governments taking control of water distribution, leading to a multitude of lawsuits.



# LOCAL FORUM PRESENTATION

| When           | Where      | To Whom                                      | # Present |
|----------------|------------|----------------------------------------------|-----------|
| March 11, 2015 | Tulare, CA | Tulare Noon Kiwanis                          | 22        |
| March 17, 2015 | Tulare, CA | Tulare Morning Kiwanis                       | 26        |
| March 20, 2015 | Tulare, CA | Tulare Rotary                                | 43        |
| March 24, 2015 | Tulare, CA | Tulare County Farm Bureau                    | 9         |
| March 25, 2015 | Tulare, CA | Tulare Farmer of the Year Luncheon           | 348       |
| April 12, 2015 | Tulare, CA | 4 Creeks Incorporated—Water Engineering Firm | 12        |
| April 15, 2014 | Tulare, CA | Tulare Morning Rotary                        | 23        |

Tulare Noon Kiwanis  
March 11 2015 at 12:00P.M.  
Apple Annie's Banquet Room  
Number in Attendance: 22



Kiwanis Club of Tulare  
P.O Box 505  
Tulare, CA 93275

March 11, 2015

To whom it may concern:



The Tulare Kiwanis Club was honored to have the Ag Issues Team as our program on March 11, 2015; there were 22 Kiwanis in attendance.

The debate was well informed, the power point presentation with visual comments and issues on Groundwater was very helpful in addressing the Water crisis in our state.

The team was very professional; our Club enjoyed the presentation and being informed about the current Groundwater issue.

Sincerely,

Celeste Thomas

Club Secretary

Tulare Morning Kiwanis  
March 17, 2015 at 6:30 A.M.  
Apple Annie's Restaurant, Banquet Room  
Number in Attendance: 26



Kiwanis of Greater Tulare

March 17, 2015

To Whom It May Concern:

The Tulare High School FFA Ag Issues team made a presentation to our Kiwanis group today, March 17, 2015. The topic, water issues in California, was informative and timely given the current drought status in our state. We thank them for a very professional and clear presentation of the issues. They were accompanied by their advisor Mr. Dave Caetano.

Sincerely,

Vern Barlogio  
President  
Greater Tulare Kiwanis

Tulare Rotary  
March 20, 2015 at 12:00 P.M.  
Tulare Masonic Lodge  
Number in Attendance: 43



March 20, 2015  
The Tulare Rotary Club  
Masonic Lodge, Tulare, CA

Dear Dave,

On behalf of the Tulare Rotary Club, I would like to thank you and your FFA students for the wonderful and educational presentation they made to our club on March 20, 2015. Their research and preparation was evident in the arguments they presented "pro and con" on the new groundwater management bills. They received a positive and in one instance educational response from members in attendance. There were 43 members in attendance, among those were school administrators, and leaders from the business and civic sectors of the community.

We wish you and your group success in your upcoming competition.

Sincerely,

Jessy Malli  
President, The Tulare Rotary Club

Executive Director Patricia Stever Blattler and Staff  
March 24, 2015 at 300 P.M.  
Tulare County Farm Bureau Conference Room  
Number in Attendance: 9



**TULARE COUNTY FARM BUREAU**

*Mission: to promote and enhance the viability of Tulare County agriculture.*

April 1, 2015

Tulare Joint Union High School District Farm  
FFA Program  
C/O Krim Caetano, FFA Coach  
591 West Bardsley Avenue  
Tulare, California 93274

RE: Ag Issues Contest preparation & presentation

Dear Coach Caetano and Tulare FFA members,

Thank you for presenting your recent Ag Issues presentation on the regulatory and water supply issues associated with the drought on March 24, 2015, your preparation and planning for this effort was excellent. I enjoyed meeting with you recently to prepare for this topic and to offer you suggestions and access to research, industry contacts, and web resources to support your planning efforts. As you have developed your presentation, it is commendable that you have reached out to the agriculture industry for assistance with this endeavor.

The Tulare County Farm Bureau staff that heard your presentation were impressed with your knowledge of the subject and encourage you to continue to streamline your presentation and fine tune your comments and goals with the assignment. As you are well aware the controversy over this issue has impacted views held by environmental groups, Farm Bureau, private property advocacy groups, and has many far reaching impacts. The research that has been required to learn this topic I know has been rigorous, but you are off to a great start!

Having local water attorney, Aubrey Mauritsen also participate in this meeting was a great way to include more technical and legal expertise in your preparation and practice.

I know you have also contacted many local civic clubs, and service organizations to present to in the upcoming days, best wishes on your competition! Congratulations to your team in their preparation efforts!

Best wishes and good luck with your contest!

Sincerely,

PATRICIA STEVER BLATTLER  
Executive Director



Tulare Farmer of the Year Luncheon  
March 25, 2015 at 12:00 P.M.  
Heritage Complex- International Agri-Center  
Number in Attendance: 348





4 Creeks Incorporated—Water Engineering Firm  
April 12, 2015  
4Creeks Incorporated—Visalia, Calif.  
Number in Attendance: 12

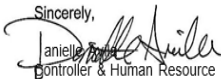


April 20, 2015

To Whom It May Concern:

The Tulare High School FFA Ag Issues team made a presentation to our group today, April 12, 2015. The topic, Water Issues in California, was informative and correctly aligned with today's current Water Issues, especially regarding our current drought status. We thoroughly enjoyed watching a group of young, educated and ambitious students present on such an important topic to the state of California.

We thank them for their professional and clear presentation of the issue. They were accompanied by their advisor Mrs. Krim Caetano.

Sincerely,  
  
Danielle Miller  
Controller & Human Resource Administrator  
4-Creeks, Inc.

Tulare Morning Rotary  
April 15, 2015 at 6:30 AM  
Tulare Masonic Lodge  
Number in Attendance: 27



April 15, 2015  
The Tulare Rotary Club  
Masonic Lodge, Tulare, CA

Dear Dave,

On behalf of the Tulare Rotary Club, I would like to thank you and your FFA students for the wonderful and educational presentation they made to our club on April 15, 2015. Their research and preparation was evident in the arguments they presented "pro and con" to the much debated water crisis here in California. They received a positive and in one instance educational response from members in attendance. Among those in attendance were school administrators, and leaders from the business and civic sectors of the community among others.

We wish you and your group success in your upcoming competition.

Sincerely,

Jennifer Pinheiro  
President, The Tulare Rotary Club

## Interviews

Airoso, Joey. Tulare Irrigation District Board.  
Tulare, California. February 7, 2015

Amaral, Joey. February 12, 2015.

Avila, Danielle. Four Creeks Water Engineering.  
Visalia, California. January 31, 2015.

Blatter-Stever, Tricia. Executive Director of the  
Tulare County Farm Bureau. Visalia, California.  
February 7, 2014; March 21, 2015.

Crain, Carrie. Tulare County Farm Bureau,  
Visalia, California. February 7, 2015.

Mauritsen, Aubrey. Local Water Attorney.  
Visalia, California. April 1, 2015

Pitigliano, Charlie. Lower Tule Water Irrigation  
Board. Tulare, California. March 26, 2015.

Tristao, Louie. Dairyman and Local Farmer.  
Porterville, California. April 17, 2015

Watte, Mark. Dairyman and Local Farmer. Tulare,  
California. March 26, 2015.

## E-mail Contacts

Blatter- Stever, Tricia. Executive Director of Tulare  
County Farm Bureau. [ptever@tulcofb.org](mailto:ptever@tulcofb.org)

Pavley, Fran. United States Senator of California.  
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Avila, Danielle. Water Management Engineer.  
[danielle@4-creeks.com](mailto:danielle@4-creeks.com)

Wenger, Paul. State Farm Bureau President.  
[cbbf@cbbf.com](mailto:cbbf@cbbf.com)

Feinstein, Diane. United States Senator of California.  
<https://www.feinstein.senate.gov/public/index.cfm/e-mail-me>

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Fresno Bee*. p. 1, 6A.

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"Court halts water exports." (2014, March 20).  
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"Economists: California drought impact to be minor."  
(2014, April 2). *Visalia Times-Delta*. p. 4A

"Feinstein applauds water decision." (2014, April 3).  
*Visalia Times-Delta*. p. 5A

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<http://agcomm.co.tulare.ca.us/default/assests/File/2012%20Final%20Report.pdf>

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Reservoirs in California. (September 16, 2014)

California Water Action Plan: Final Version.  
California Water Woes. Retrieved 26 September  
2014 from Tulare County Farm Bureau Executive  
Director, Tricia Stever Blattler.

Groundwater Sustainability Program. Draft Strategic  
Plan. Department of Water Resources. (March 9,  
2015) Retrieved 24 November 2013 from  
<http://www.water.ca.gov/nav/nav.cfm?loc=t&id=102>

Land Subsidence from Groundwater Use in  
California. James W. Borchers and Michael  
Carpenter. (April, 2014)  
[www.californiawaterfoundation.org](http://www.californiawaterfoundation.org)

Proposition 1. California Natural Resources Agency.  
(January 12, 2015)  
[www.ca.gov/bondaccountibility.resources.ca.gov/pl.a.spx](http://www.ca.gov/bondaccountibility.resources.ca.gov/pl.a.spx)

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UC Division of Agriculture and Natural Resources.  
Groundwater in the News. (January 5, 2015)  
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[http://groundwater.ucdavis.edu/Groundwater\\_in\\_the\\_News/](http://groundwater.ucdavis.edu/Groundwater_in_the_News/)

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August 30). *Reactions: Legislators and organizations  
respond to the passage of groundwater legislation*.  
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<http://mavensnotebook.com/2014/08/30/reactions-legislators-and-organizations-respond-to-the-passage-of-groundwater-legislation/>

Association of California Water Agencies. (2014, December 10). *The Sustainable Groundwater Management Act – What You Need to Know*. Retrieved 7 January 2015 from <http://www.acwa.com/events/gra-webinarthe-sustainable-groundwater-management-act-what-you-need-know>

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