

TULARE COUNTY WATER COMMISSION
MEETING MINUTES
April 13, 2015

Members Present:

Allen Ishida, Board Representative and Chairman
Roger Everett, At-Large Appointee
Dale Brogan, District 2 Appointee
Mark Larsen, District 3 Appointee
Richard L. Schafer, District 5 Appointee
Chris Kapheim, District 4 Appointee
Susana De Anda, At-Large Appointee

Members Absent:

Mike Ennis, Board Alternate Representative
Paul Boyer, District 1 Appointee
Rudy Mendoza, TCAG Representative

Staff Present:

Julieta Martinez, Tulare County Board of Supervisors
Denise England, Water Resources Program Manager
Will Jackson, County Counsel

Members of the Public Present:

Bill Gilmour
Kristin Dobbin
Carole Combs
Carole Clum
Ken Bowers
Michael Hickey
Michael Tharp
Richard Garcia
Shane Smith

1. Call to Order

The meeting was called to order at 3:02pm.

2. Public Comment Period

Carole Clum of Three Rivers provided a handout on Aquifer recharge from the December issue of High Country News.

Please see attachment for comments.

3. Approval of February 9, 2015 minutes

Commissioner De Anda and Commissioner Larsen abstained from the vote because they were not present at the February 9th meeting. Due to this, there was not enough Commissioners to vote as a quorum. The minutes from February 9th and March 9th were tabled until the next meeting.

4. Approval of March 9, 2015 minutes

Tabled for next meeting.

5. Sources of Water in the Tulare Lake Basin, presentation by John T. Austin

John T. Austin presented in regards to sources of water in the Tulare Lake Basin. He thanked the Commission for the opportunity to present his results and clarified that the book was not commissioned or authorized by the National Park Service.

He began with a brief overview of the Central Valley Basins, 10 altogether. He explained that the San Joaquin Valley is divided into two hydrologic units. The Tulare Lake Basin occupies the southern half of the San Joaquin Valley. The data he shared is largely based on the DWR water portfolios, and data from the USACE, USBR, NOAA, EPA, and various researchers.

The presentation is based on his book, "Flood and droughts in the Tulare Lake Basin." The book contains over 1600 years of information. One topic discussed was Megadroughts in the Tulare Lake Basin. According to Mr. Austin, most of our droughts last about 3-4 years. He is only aware of 10 droughts in the last 11 centuries that lasted 6 or more years. Megadrought last much longer, generally 10 or more years.

He also discussed elevation of water in the Tulare Lakebed. He shared that despite periodic droughts, the late 1800s were a period of average runoff. Beginning in about the 1870s, canals started tapping the rivers to irrigate fields and orchards. The canals greatly diminished the water supply to the lake. The canals were the primary reason that Tulare Lake declined from full-pool in 1878 to bone-dry in 1898.

John Austin stated that Sometimes a high pressure ridge will develop off the West Coast, deflecting the Pacific storm track north of its typical cool-season position along the West Coast. This ridging pattern has preceded some of the worst West Coast droughts. The 1934 drought was caused by a high pressure ridge over the West Coast. It preceded the first year of the 1976-77 drought. It was the cause of the dry winters of 2013-14 and 2014-15.

Part of the presentation also touched base on the Hadley Cell. Visalia is located at 36 degrees North. The Hadley cell is what causes the trade winds you feel in Hawaii. The cell is expected to expand toward the poles as temperature increases. Descending air on the outside of the cell suppresses rain by drying the lower atmosphere. The climate models show this drying will almost certainly affect the South West. This descending air has the power to block rain coming from the Pacific. Our basin is on the edge of the highest-risk drought area.

Mr. Austin then discussed California drought severity. Most severe droughts have occurred when conditions were both warmer and drier than average. Dry years have been twice as likely to produce a severe drought if they occur in a warm year. The number of warm years has been twice as high in the last two decades as in the previous century. The odds of a dry year occurring in a year that is warm have doubled in the last two decades. The probability of a dry year producing a drought has doubled in the last two decades. The result? Severe droughts have occurred twice as often in the past two decades as in the previous century. This doubling in the risk of severe droughts has occurred despite precipitation staying the same. The future with continued rising temperatures? Virtually every dry year will be warm. The frequency of droughts will increase.

Sources of Water. The Tulare Lake Basin uses more water than any other region of California — about 13 million acre-feet a year. Local rivers are only able to provide 18% of that water, so we have a long history of looking to other sources to meet our needs. Delta imports (exports) and San Joaquin River diversion supply about 24% via the State Water Project and Central Valley Project. 97% of the category "Total reuse of water (reuse of return flows)" are flows dedicated to wild and scenic rivers above the reservoirs. Once that water flows through those river segments, it is reclassified and made available for use by agriculture and urban users. It is "reuse" only from an accountant's point of view. Groundwater withdrawals of various types supply 46%. There is other

water out there as well. It is the water that comes from the sky; direct precipitation. Discussion followed.

Mr. Austin went on to discuss change in water sources in the Tulare Lake Basin, Artesian Wells, New Well Permits, Land Subsidence, and more.

Commissioner Schafer purchased Mr. Austin's book and enjoyed it. Based on the research and considering the future, he asked Mr. Austin if he believed that the global warming and climate change predicted by the federal and state government is a result of man.

Mr. Austin stated that he did believe it is the result of man.

Commissioner Schafer stated that we are in 4th year of drought. He noted that in the presentation is states that there is usually 3 or 4 years of drought. He asked Mr. Austin for his prediction?

John Austin shared that back in 1976, the state had plans in place in case the drought continued. He does not know how you can predict drought so much further ahead. Discussion followed.

Commissioner De Anda suggested to Mr. Austin potentially adding to the presentation and using more information to show what the water was being used in past years. She shared that it could help us see if we are changing habits.

6. Subcommittee Reports

None at this time.

7. Staff Reports

a. Sustainable Groundwater Management Act

Denise England and a group from the Kaweah Delta Conservation District met again on March 23rd. They would like to move forward with some facilitations services.

Commissioner Kapheim stated that the Alta Irrigation District's legislative council is going through it. Committee hearings will start in May. This will create a GSA with governance of 3 cities. Each would have one vote. Alta would have one vote and the counties would each have one vote.

Commissioner Schafer reported on the Tule Basin. They had an educational meeting of all the public districts, within the Tule Basin. There was about 25 people and it was a well discussed, well attended meeting. The result of the meeting was that they will continue to look at the formation of GSA.

Commissioner De Anda shared that the Community Water Center will be hosting a SIGMA workshop to go over what the law is. They are doing this in collaboration with the County and other organizations. The meeting will take place on April 28th at the County Administrative Building from 5-7pm.

8. Commissioners Comments

Commissioner Larsen noted that in 2014, after the Governor designated an emergency situation, there were curtailment orders present throughout the state where the State Water Services Control Board came across the state and looked at water rights. Specifically in our areas, from the Kings all the way to the Kern, noted curtailment orders for our area. The four water masters got together with the state and were able to convince the state that we, with our areas and entities, had control

of the situation. The state did allow us to function as we normally do and we expect that to happen this year. We were looking for the State Water Resources Control Board to document the discussions that we had and the conclusions that were arrived at. Now they have a draft, a type of feedback evaluation of how things went.

9. Next meeting – Monday, May 11, 2015, 3:00 p.m. – Board of Supervisors Chambers

10. Adjourn

The meeting adjourned at 4:12pm.