



**Butte County
Department of
Water and Resource
Conservation**

308 Nelson Avenue
Oroville, CA 95965
Phone (530)538-4343
Fax (530)538-3807
Email:
bcwater@buttecounty.net

Website: <http://www.buttecounty.net/waterandresource/>

**Water and Resource
Conservation Staff**

- Paul Gosselin, Director
- Vickie Newlin, Assistant Director
- Christina Buck, Water Resources Scientist
- Lynne Pillus, Administrative Assistant, Senior

**Butte County Water
Commission**

George Barber, Chair
DC Jones, Vice-Chair
Larry Grundmann
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Brad Mattson
Ryan Schohr
David Skinner
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Our Mission:

“To manage and conserve water and other resources for the citizens of Butte County”

Water Solutions

January 2013

Greetings to 2013

By Paul Gosselin

The New Year offers a great sense of optimism and hope. The severe economic downturn appears to be softening. Butte County agriculture continues to be vibrant and strong. On the “water front”, the 2013 Water Year is off to a positive start. Hopefully, favorable conditions will continue to offset the less than favorable 2012 hydrologic conditions. Looking back, the Department had a very active and productive year.

To improve the reporting of information groundwater conditions, the annual Groundwater Status Report and the Basin Management Objective (BMO) reports were compiled into a single report for the first time. On a related front, we are integrating the California Statewide Groundwater Elevation Monitor-

ing Program (CASGEM) into our monitoring efforts. The CASGEM program is a state requirement for local agencies to report groundwater monitoring data as a condition to secure water related loans and grants. The Department was approved as the CASGEM monitoring and reporting agency for Butte County.

After three years, the Lower Tuscan Aquifer Monitoring, Recharge and Data Management Project is nearing completion. The field monitoring activities led by the consultant team of Brown and Caldwell are done and final reports are being prepared. In December, the preliminary data and initial conclusions were presented at a well-attended public workshop and to the Water Commission. The final report of the Tuscan Aquifer Project will be released in the spring of 2013.

Regional coordination

through the Northern Sacramento Valley Integrated Regional Water Management (NSVIRWM) planning process achieved major milestones in 2012. The NSVIRWM Governing Board adopted regionally based goals and objectives for the IRWM Plan. A region-wide solicitation of potential projects generated a strong response and excellent proposals.

The NSVIRWM Governing Board and the Technical Advisory Committee (TAC) are on-schedule to complete the IRWM Plan by September 2013. Information on the NSVIRWM can be found on their website - <http://www.nsvwaterplan.org>.

The management of Butte County’s State Water Project Table aAllocation took a major step forward this year. In July, Butte County entered into two-year agreements to lease portions of the County’s Table A amount that are not needed for in-county

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Happy New Year



Internal Water Wars

By Vickie Newlin

We ran out of water in our building sometime over the weekend. The beginning of this shortage actually began right after lunch last Thursday. I know the exact time because I am the one who hoisted the last bottle up onto the decanter in the break room. Interestingly, no one really reacted or did anything proactive to prevent this disaster from playing out. I did my due diligence and informed the folks up front who deal with the delivery guy. I'm assuming that they walked in there and saw that there was still a full bottle and didn't panic. Therefore no one got him in here before it was totally gone. Probably one thing led to another and it slipped down their priority list. But, the bottom line is that this morning there was no water to make coffee.

Now before everybody hits the

ceiling about how disgraceful it is that we folks at the County are drinking bottled water, let me explain. This is a very old building. The water coming out of the pipes is a health hazard and we have been told not to drink it. It seems that the system is corroded, pollutants have been acquired along the delivery route and the water that comes out the other end is not fit for human consumption.

Anyway the conversation heated up this morning when the well, or in our case, the bottle, ran dry. We all dug into our emergency kits and pulled out our private water supply. The debate centered on whether or not we should reserve this "new" water supply for coffee, drinking water or whether or not we should save it for a rainy day, or I guess the proper vernacular would be a non-rainy day.

Now, I don't drink coffee, so you can imagine where my vote landed. But, it seems that I was outvoted, and the decision was made

about **all the water**, even the jug that I had thrown into the mix. This didn't really seem like a fair deal to me, so I attempted to pull mine out of the pool. Not a chance. I was told that we all need to work together for the greater good and that even though I had paid for my water myself it should still remain part of the building pool.

I guess that I should feel good about that, parched or not. But, as I walked back to my office, I couldn't help but see the analogy to our statewide water wars. I could only muse about having an intelligent conversation, including all parties, which might actually solve the water supply problem in our little microcosm of the world. As I sat down at my desk, I decided to write someone a letter about it. We'll have to wait and see how far that gets me. Maybe the next step will be to form a committee...

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use. The agreements will offset over \$1.3 million in State charges and will generate about \$2.5 million over the course of the two year agreement.

Efforts on long term solutions for managing the Table A allocation will continue.

State proposals continue to present many challenges to the sustainability of Butte County water resources. The implementation of the 2009 Delta Reform Act, the Bay Delta Conservation Plan and the State Water Resources Control Board's Bay Delta Water Quality Plan are the three Delta related initiatives of interest. At the heart of the Delta Reform Act is the development of the Delta Plan that is expected to be completed in 2013. The Bay Delta Conservation Plan (BDCP) took a step forward with

the announcement in July by State and federal officials on their preferred options for the nearly \$24 billion program. The State Water Resources Control Board (SWRCB) began holding workshops on their Bay-Delta Plan. The Bay-Delta Plan will create enforceable requirements for the Delta's water quality and flow standards. The SWRCB has jurisdiction over water rights to implement the water standards. Last October, we were fortunate to have a forum held by the Northern Sacramento Valley Water Forum highlighting the Delta-related initiatives and the implications to the region.

Finally, water is the focus of the Book In Common series. Each year the California State University Chico and community leaders select a Book In Common to promote a shared, community read. It is designed to promote discussion and understanding of important issues

facing the broader community. In 2012, the Book In Common selection was *Unquenchable: America's Water Crisis and What to Do About It* by Robert Glennon. The book chronicles some of the more compelling water challenges across the country. On September 11, 2012 the Butte County Board of Supervisors adopted a resolution in support the Book In Common. We were pleased to participate on a number of Book In Common events in 2012 and will continue to do so in 2013. Events can be found by visiting the Book In Common website at: <http://www.csuchico.edu/bic/index.shtml> and through the link on the Department's website.

These are some but not all of the highlights from the past year. As we enter the new year, we remain committed to conserve and manage water - the life blood to our economy, communities and environment. We wish you a happy and prosperous New Year.

Lower Tuscan Aquifer Study Initial Results

By Christina Buck

Initial results from the Lower Tuscan Aquifer Study were presented at a public meeting the evening of December 11 in Chico. Attendees heard a brief presentation recapping the activities of the project and what we are learning from the results. Then they had a chance to speak directly with members of the Brown and Caldwell team during a poster session to learn more about the details of different aspects of the study and its preliminary conclusions. This study set out to: 1) improve understanding of ground-

water recharge to the Lower Tuscan Aquifer (LTA) from streams, foothill areas, and other aquifers; 2) evaluate surface water and groundwater interaction; 3) increase the knowledge of hydrogeologic characteristics of the aquifer material, and; 4) enhance the groundwater monitoring well network by installing three additional multi-completion wells. The collection of field activities and the resulting data sets all help develop a scientific foundation that advances our understanding of the LTA hydrology. Preliminary findings of what we have learned are summarized in the following points:

1. Creeks provide little recharge to the LTA where they cross outcrops
2. Recharge is likely occurring

over broad areas where saturated alluvial materials overlie the LTA

3. Recharge waters appear to indicate a lower elevation precipitation source, at or below 2,500 feet (the Town of Paradise is approximately 2,300 feet.)
4. The Lower Tuscan Formation is composed of fluvial and reworked lahar material forming channelized deposits preferentially controlling the movement of groundwater. In other words, water moves through some materials better than others and this affects recharge and flow paths.
5. Observations during normal agricultural pumping provide valuable insights to groundwater flow, aquifer interactions, and recharge

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Meeting

Schedules

Butte County Water Commission

1/2/13, 1:30 p.m.
Board of Supervisors
Chambers
25 County Center Drive
Oroville, CA 95965

2/6/13, 1:30 p.m.
Board of Supervisors
Chambers

Technical Advisory Committee

1/17/12 2:00 p.m.
Water & Resource Conservation Conference Room
308 Nelson Avenue,
Oroville

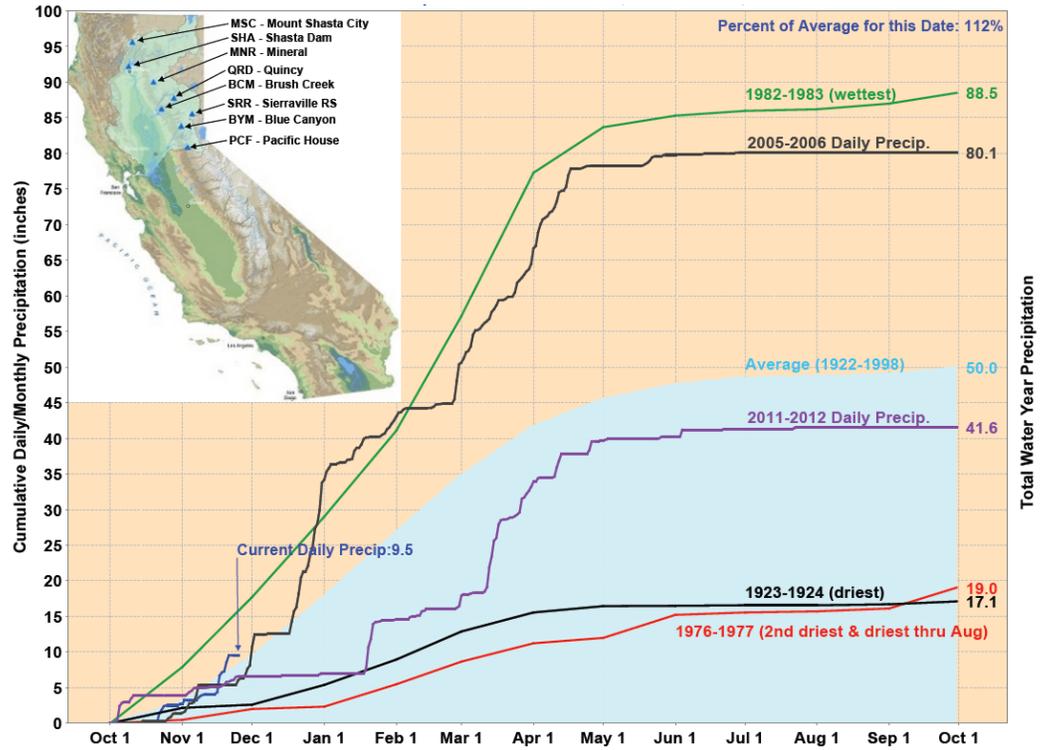
Drought Task Force

TBA

Butte County Board of Supervisors

1/8/13, 9:00 a.m.
Board of Supervisors
Chambers

1/29/13 9:00 a.m.
Board of Supervisors
Chambers



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sources. This approach was used for the aquifer tests in the study and proved useful.

6. Data suggest a direct connection through confined response of LTA with rise in river stage of the Sacramento River

7. Depositional environment of the Tuscan Formation, and thus LTA, changes from north to south.

8. LTA exhibits confined or semi-confined aquifer response. This is important for understanding how the aquifer recharges and responds to pumping and for future representation in groundwater modeling.

9. Significant vertical

movement of water (leakage) occurs through aquitards separating the LTA from other aquifer zones. Aquitards are zones of low permeability meaning water cannot move through the material very well.

Results of the project indicate that localized management of resources such as the LTA should not be conducted under broad assumed aquifer characteristics. In other words, the system is complex and use of appropriate tools and analysis should reflect the scale of the question. Supporting these take home messages is a collection of data that suggests these conclusions.

But with any research project, more questions re-

main unanswered and new ones arise. The next steps for concluding this project includes developing the final report which will present the study's findings, conclusions and recommended next steps.

Once the final report is completed another public workshop will be held to present the finalized conclusions. For a newsletter of initial results, visit <http://www.buttecounty.net/waterandresource/> and go to "Tuscan Aquifer Project" and then "Newsletters".