GLENN COUNTY WATER ADVISORY COMMITTEE TECHNICAL ADVISORY COMMITTEE Joint Meeting

Glenn County Department of Agriculture 720 North Colusa St., Willows, CA 95988 Phone: 530.934.6501 FAX: 530.934.6503 Email: wateradv@countyofglenn.net Website: http://www.glenncountywater.org/

AGENDA

MEETING DATE: Monday, July 8, 2013

TIME: 1:30 P.M.

PLACE: Glenn-Colusa Irrigation District

344 East Laurel Street Willows, CA 95988

I. <u>INTRODUCTIONS:</u>

Water Advisory Committee Members:

David Alves Central River Irrigation Districts

Kelly Boyd East County Reclamation and Irrigation Districts
Ted Trimble East County Reclamation and Irrigation Districts

Sandy Willard Denn Glenn-Colusa Irrigation District Larry Domenighini Glenn County Farm Bureau

Ken Sullivan Orland Unit Water Users Association
Donnan Arbuckle Resource Conservation District

Mike Vereschagin Tehama Colusa Canal Authority Districts
Mike Alves Tehama Colusa Canal Authority Districts

Mark Lohse At-Large Private Pumpers (Agricultural/Municipal/Industrial)
Bruce Roundy At-Large Private Pumpers (Agricultural/Municipal/Industrial)
Darin Titus At-Large Private Pumpers (Agricultural/Municipal/Industrial)
John Garner At-Large Private Pumpers (Agricultural/Municipal/Industrial)

Technical Advisory Committee Members:

Lance Boyd At-Large, South Area

Roy Hull Department of Water Resources
Allan Fulton UC Cooperative Extension

Vacant Glenn County Planning and Public Works
Kevin Backus Glenn County Environmental Health

Ben Pennock At-Large, Central Area

Jim Donnelly Glenn County Department of Agriculture

Anjanette Shadley Martin At-Large, East Area George Wilson At-Large, North Area

Leigh McDaniel Board of Supervisor (ex-officio)

II. APPROVAL OF MINUTES:

Minutes will be continued to the next regular meeting of the committees.

III. AGENDA ITEMS:

A. Public Comment:

Any person wanting to address the Water Advisory Committee on any item <u>NOT ON TODAY'S AGENDA</u> may do so at this time. The Water Advisory Committee will not be making decisions or determinations on items brought up during Public Comment.

B. Discussion and/or Action Items:

- 1. Report on TAC Recommendations to the WAC from May 28, 2013 TAC meeting.
- 2. Announcements
 - a) Board of Supervisors Report tentatively planned for August 2013.
- 3. Water Transfers for 2013-- Update
- 4. Presentation on Land Use Changes-- Davids Engineering
- 5. Western Glenn County Water Level Declines

C. Communications:

D. Member Reports:

At this time WAC and TAC members are encouraged to discuss upcoming or ongoing activities that may be of interest to the committees.

IV. NEXT MEETINGS:

The next WAC and TAC meetings will be tentatively scheduled at this meeting.

Joint Glenn County Water Advisory Committee/ Technical Advisory Committee July 8, 2013 Agenda Item 3

Subject: Water Transfers for 2013-- Update

Discussion:

There has been continued coordination with RD 1004 and Glenn-Colusa Irrigation District with the proposed groundwater substitution transfers for 2013. An update will be provided.

Reclamation District No. 1004



June 11, 2013

Ms. Lisa Hunter, Water Resources Coordinator County of Glenn Department of Agriculture P.O. Box 351 Willows, CA 95988

Subject: Reclamation District No. 1004 Proposed 2013 Water Transfer

Dear Ms. Hunter:

Thank you for your letter identifying the results of your review and comment to Reclamation District No. 1004's (District) Proposal for its 2013 Water Transfer. We appreciate the efforts from you and the Glenn County Technical Advisory Committee to expedite a review of the Proposal and provide comments for the proposed water transfer, which is scheduled to begin July 1, 2013. As you have discussed with Darren Cordova of MBK Engineers, the purpose of this letter is to provide the information requested of the District, as identified below.

As indicated in your letter, there are two items requested of the District: (1) record quantities of groundwater pumped at the groundwater wells participating in the District's proposed 2013 Water Transfer on a weekly basis and provide those quantities to your office, and (2) contact the Glenn County Water Advisory Committee for any disputes in Glenn County relative to the District's proposed 2013 Water Transfer. In accordance with your request relative to quantities of groundwater pumped, these quantities will be measured weekly for the groundwater wells located within Glenn County and reported to your office by November 1, 2013. In regard to a dispute involving groundwater pumped for the District's proposed 2013 Water Transfer, the District included a draft Groundwater Mitigation Plan with its Proposal to identify actions that will be undertaken by the District to respond to claims of significant adverse impacts. In the event of a dispute regarding a claimed impact, the District will contact the Glenn County Water Advisory Committee.

We believe this letter includes the information requested by your letter; and thus, the District plans to proceed with its proposed 2013 Water Transfer. Following your review of this letter, please call if you have any questions or require additional information.

Sincerely,

Jack Baber

DC/bl

cc: Dustin Cooper, Legal Counsel for Reclamation District No. 1004 Darren Cordova, MBK Engineers

Joint Glenn County Water Advisory Committee/ Technical Advisory Committee July 8, 2013 Agenda Item 4

Subject: Presentation on Land Use Changes by Davids Engineering

Discussion:

Grant Davids of Davids Engineering attended the WAC meeting on June 11, 2013 and noted the discussion of expanding irrigated acreage and water use in Glenn County. Grant has agreed to present results of an analysis of land use changes in the Sacramento Valley conducted by his firm, with particular emphasis on Glenn County. He will be joined by Byron Clark, also of Davids Engineering.

Joint Glenn County Water Advisory Committee/ Technical Advisory Committee July 8, 2013 Agenda Item 5

Subject: Western Glenn County Water Level Declines

Discussion:

Continuation of the discussions regarding declining groundwater levels in western Glenn County. A presentation will be given.

Ideas previously discussed for further consideration include modeling, and specifically western Glenn County, outreach and education to growers/landowners, coordination with Glenn County Farm Bureau for further outreach, and engage growers in active participation in groundwater management.

Recommendation: Consider options for further investigation:

- a. Create an ad-hoc committee of WAC and TAC members
- b. Provide direction to the TAC to prepare a report of investigation

Lisa Hunter

From:

Allan Fulton <aefulton@ucanr.edu>

Sent:

Thursday, June 06, 2013 9:12 AM Leigh McDaniel; Lester Messina

To: Cc:

Lisa Hunter; Thad Bettner

Subject:

Groundwater conditions on west side of Glenn County

Hi Leigh and Lester,

I have been thinking more about the TAC discussion about groundwater conditions on the west side of Glenn County and possible educational steps that could be taken to help address some of the challenges. By the way, the problem of greater reliance on groundwater and less use of surface water is prevalent on the west side of Tehama County too and I would suspect Colusa County. Although it is not quite as expansive and not hitting quite as intensely, yet.

One possible education step might be to work with at least one willing grower and possibly two or three to actually develop the full costs of pumping groundwater along the west side. I am aware of a grower in Tehama County who would be willing to anonymously share the capital and operational costs of their deep turbine wells located west of Corning as a source of data to conduct the analysis. Maybe we could locate one or two more willing operators to broaden our sample size, geography, and data base. Their deep turbine wells are new (2-5 years old) and as deep as 750 feet. They also farm within Corning Water District and use their full annual allocation of surface water to grow almonds and walnuts with microsprinkler and drip irrigation. They admittedly don't fully understand the cost comparison of their two water sources. Possibly, I could work with Sam Sandoval from UCD and maybe another UCD Ag Economist (Karen Klonskey) to conduct the full analysis. I would be willing to approach them about this to sound out their availability. I thought an economic exercise like this might be useful to develop the issues, provide information for outreach, and encourage thought and attention to it. It of course, would depend on the what the actual results suggest. I don't think this would be a terribly expensive first step and place to begin taking action and I think it might be accomplished over this irrigation season or definitely by the end of the year.

After the analysis were completed, the outcomes might also provide some insight as to how to develop incentives to balance the use of groundwater and surface water. For example, based upon the short discussion I have had with this one grower, when they run the deep turbines they are operating 200 to 250 hp electric motors and when they are using district water they are only operating 40 to 50 horsepower booster pumps. This is a potential of 200 hp savings per hour of operation which equates to about 150 kw per hour of electrical demand. If this these pumps are in operation 24 hours per day at least 6 days a week and most likely 7 days per week for at least 135 days (4.5 months) a year, this equates to about 500,000 kw per year savings in electric power per well and pumping plant. Plus, I think these should be fairly conservative estimates. If some new work and economic analysis of actual costs of irrigating with groundwater reveal anything close to these off the cuff estimates, there might be a chance to approach PGE about ways to work with them and the water districts to address the question of incentives to encourage use of surface water and balance it better with reliance on groundwater. I would guess that PGE would like to encourage the use of the surface water with lower hp demand by operating the booster pumps opposed to deep turbines.

By the way, I'd be remiss if I didn't mention that Thad Bettner leaned over and suggested this potential concept as we discussed the matter in the TAC meeting. That is part of reason it has remained on my mind. Give this some thought and let me know if you would like to talk about this more.

Allan Fulton UC Irrrigation and Water Resources Farm Advisor Tehama, Glenn, Colusa, and Shasta Counties