GLENN COUNTY WATER ADVISORY COMMITTEE

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

AGENDA

MEETING DATE: TIME: PLACE: Tuesday January 12, 2010 1:30 P.M. Glenn-Colusa Irrigation District 344 East Laurel Street Willows, CA 95988

I. <u>INTRODUCTIONS:</u>

Water Advisory Committee Members:

David Alves	Princeton-Codora-Glenn Irrigation District
Jack Baber	Reclamation District No. 1004
Mark Lohse	BOS District 5 Private Pumpers
Gene Clark	Reclamation District No. 2106
Ted Trimble	Western Canal Water District
Larry Domenighini	Glenn County Farm Bureau
Leigh McDaniel	Glenn County Supervisor
Wade Danley	Kanawha Water District
Donnan Arbuckle	Resource Conservation District
Ken Sullivan	Orland Unit Water Users Association
Larry Maben	BOS District 3 Private Pumpers
Mike Vereschagin	Orland-Artois Water District
Del Reimers	West Colusa Basin Private Pumpers
James Weber	East Corning Basin Private Pumpers
Thad Bettner	Glenn-Colusa Irrigation District
Bob Coruccini	Willow Creek Mutual Water Company
Jere Schmitke	City of Orland
Elwood Weller	Provident Irrigation District
Vacant	Stony Creek Water District
Vacant	West Corning Basin Private Pumpers
Joel Mann	Glide Water District
Rosanna Marino	City of Willows

Technical Advisory Committee Members:

Lance Boyd	South
Kelly Staton	Department of Water Resources
Allen Fulton	UC Cooperative Extension
Randy Murphy	Planning and Public Works Agency
Kevin Backus	Environmental Health
Ben Pennock	Central
Mark Black	Agricultural Commissioner
Andrew Farrar	East
George Wilson	North
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II. <u>APPROVAL OF MINUTES:</u>

Approval of the Minutes from the meeting of October 13, 2009.

III. <u>AGENDA ITEMS:</u>

A. Public Comment:

Any person wanting to address the Water Advisory Committee on any item <u>NOT ON</u> <u>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. Continue Discussion on Strategic Planning for Water Resources
 - 1) Water Transfer Guidelines: WAC Recommendation to move to BOS*
 - 2) Board of Supervisors meeting discussions
- 2. Capay Recharge Project
- 3. Private Pumper Organizational Outreach
- 4. BMO Revisions: Recommendation from TAC*
 - 1) Forward to Board of Supervisors
- 5. Prop 84 Regional Acceptance Process
 - 1) Contract with West-Yost
- 6. SB 6 Groundwater*
- 7. Fall Groundwater Measurements
- 8. 2010 Water Transfers

C. Communications:

D. Member Reports:

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

IV. <u>NEXT MEETINGS:</u>

The next Water Advisory Committee meeting will be scheduled today.

The next TAC meeting will be scheduled at a later date.

* Backup for these agenda items are only being sent to WAC members for their review. A limited number of additional copies will be available at the meeting or by request prior to the meeting.

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Phone: (530) 934-6501 Fax: (530) 934-6503

E-mail: wateradv@countyofglenn.net Web Page: www.glenncountywater.org

MINUTES

Meeting Date: October 13, 2009

Time: 6:00 pm

Place: Glenn-Colusa Irrigation District 344 East Laurel Street Willows, CA 95988

Water Advisory Committee Members Present:

David Alves	Princeton-Codora-Glenn ID
Donnan Arbuckle	Resource Conservation District
Thad Bettner	Glenn-Colusa Irrigation District
Gene Clark	Reclamation Dist # 2106 & 1004
Bob Coruccini	Willow Creek Mutual Water Co.
Wade Danley	Kanawha Water District
Larry Domenighini	Glenn County Farm Bureau
Mark Lohse	BOS District 5 Private Pumpers
Larry Maben	BOS District 3 Private Pumpers
Rosanna Marino	City of Willows
Leigh McDaniel	Glenn County Supervisor Dist. 5
Ken Sullivan	Orland Unit Water Users Assoc.
Ted Trimble	Western Canal Water District
Mike Vereschagin	Orland-Artois Water District
James Weber	E. Corning Basin Private Pumpers

Water Advisory Committee Members Absent:

Jack Baber	Reclamation District No. 1004
Joel Mann	Glide Water District
Del Reimers	West Colusa Basin P P
Jere Schmitke	City of Orland
Elwood Weller	Provident Irrigation District

Technical Advisory Committee Members Present:

Glenn Co. Ag Commissioner
South Area
Glenn Co. Public Works
Central Area
North Area

Others in Attendance:

WAC/TAC Secretary
Citizen
Tri County Newspaper
Glenn Co. Dept. of Agriculture
Glenn Co. Public Works
Colusa Basin Drainage District
Glenn Co. Dept. of Agriculture
Butte County
Citizen
Citizen
Sacramento Valley Mirror
Citizen
Malcolm Pirnie
TCCA
Citizen
Citizen

I. <u>INTRODUCTIONS:</u> Those in attendance introduced themselves.

II. <u>APPROVAL OF MINUTES:</u> The minutes for June 9, 2009 were approved with corrections.

III. <u>AGENDA ITEMS:</u>

A. Public Comment: It was mentioned that the WAC will not be making decisions or determinations on items brought up during the public comment period. It was also noted that there are a lot of people present tonight for the Crystal Geyser issue. Everyone was informed that the WAC is an advisory committee to the Board of Supervisors and the committee has no authority to make decisions one way or the other on a project under the jurisdiction of the City of Orland.

B. Discussion & Action Items:

1. Continue Discussion on Strategic Planning for Water Resources -

- Water Transfer Guidelines: Latest Sub-committee revision The Sub-committee met on Sept.
 8, 2009. There were some minor changes made. Three water districts representatives present expressed their concerns on why surface water was the focus and groundwater users were not being discussed. It was re confirmed that the guidelines are being developed to provide a fair and agreeable strategy for the county and transferring districts to proceed. On that note, Thad informed the group that one of the pieces being discussed at the state level through the legislature is a groundwater component which is going to require that all local agencies monitor their groundwater. Currently this is provided free by DWR. If this passes either the county and/or water districts will be monitoring and collecting their own data and submitting it to DWR. If not completed, DWR has the authority to collect the data and charge the county/water districts a fee.
- 2) Recommendation of Deadline to Complete It was recommended that the WAC representatives take the water transfer guidelines back to their districts and/or attorneys for review and bring back comments to the next WAC meeting for discussion.
- 3) Water Resources Presentation to Board of Supervisors An update regarding the September 15, 2009 presentation given to the BOS discussed previous meetings in 2008 for Strategic Planning for Water Resources. The BOS asked that Ag Department provide monthly updates on different issues. At the upcoming October 20th board meeting Mark and Lester will brief the BOS on the Groundwater Ordinance.
- 2. **TCCA Transfer -** Jeff Sutton gave an update on TCCA allocations which depend on storage levels of Shasta. Early in the year allocations started at 0%, increasing to 15% in late March, and it did not appear that they would increase due to the impacts of three years of drought. In order to avoid the pending disaster to permanent and other crops throughout the service area, the Districts served by the TCCA purchased approximately 90,000 acre feet collectively from settlement contractors. In late May, due to unexpected rains, the allocation was increased to 40%, resulting in a surplus water supply for many of the participating landowners. As such, an agreement to transfer surplus water at cost from TCCA participating districts to districts within the San Luis Delta Mendota Water Authority.
- 3. **RD 1004 Transfer -** A report from the transfer previously presented must be submitted. If the information is now available, the committee proposed that this report be done as soon as possible.
- 4. 2010 Drought Water Bank Thad Bettner reported that 80,000 acre feet were transferred to the water bank in 2009 along with 20,000 acre feet from rice fallowing. He anticipated that given the current groundwater conditions and the price, there will be no more than the same amount transferred in the drought water bank next year. Due to high administrative costs, buyer-seller negotiations will increase and state and federal sponsorship will decrease.
- 5. **Prop. 84 Regional Acceptance Process** The proposal submitted by the Regional Water Management Group formed by the five counties (Glenn, Butte, Tehama, Colusa, and Sutter) has

been conditionally accepted. The group is waiting for DWR to release the final guidelines and planning funds so a plan can be developed. A major component will be the formation of an acceptable governance structure pursuant to Prop. 84. A request for proposals by qualified consultants to develop a scope of work for planning purposes has been sent. The result of the request for qualifications should be available at the end of October 2009.

- 6. **Crystal Geyser Update**—Jim Strandberg, of Malcolm Pirnie, gave a PowerPoint presentation regarding the results of the nine day aquifer performance test performed for Crystal Geyser. Eleven private domestic wells and the facility monitoring wells were equipped with pressure transducers to determine water level behavior in a 2000 +/- foot radius. The test concluded that the production well at the facility could sustain pumping of 100 gallons per minute over the long term and not have a negative impact to private domestic wells near the facility. Some citizens present at the meeting expressed concerns about the Crystal Geyser plant coming into the Orland area. Chairman Vereschagin explained that WAC is an advisory committee to the Board of Supervisors with no authority to make decisions regarding this project.
- 7. Summer BMO's and DWR Monthly Measurements Kelly Staton from DWR was to give this presentation. However, due to the weather, she could not attend.

Lester mentioned that some of the interim summer BMO measurements taken in early August are below the recommended Stage 1 alert. Again, these measurements are only being considered as interim for the development of future BMOs. In the following months we should see an increase in groundwater levels due to the fact that less water is being used and recharge should be occurring. DWR will be out next week collecting fall measurements.

- 8. **BMO Graphing Effort** There will be some follow up on proposed changes for the BMO evaluations to include increased groundwater usage and changes in land use not previously considered when the BMOs were developed. The time frame has been expanded to accommodate the period of record available for the well. A meeting with private pumper areas is needed to discuss the changes prior to the next scheduled TAC meeting.
- C. Communications: None.

D. Member Reports:

- **1.** The grant submitted by Thad and Lester for recharge feasibility in Capay area has been approved. Meetings to develop interest in the program in will be conducted in early 2010.
- **2.** Larry Domenighini requested that the committee be briefed on DTSC reports on the dry cleaner plume in Orland.

The next WAC Meeting will be on the second Tuesday in December tentatively.

The next TAC Meeting at this date has not been scheduled.

Meeting adjourned at 7:30 pm.

Sincerely submitted by, Tina Brothers, WAC/TAC Secretary

Senate Bill No. 6

CHAPTER 1

An act to add Part 2.11 (commencing with Section 10920) to Division 6 of, and to repeal and add Section 12924 of, the Water Code, relating to groundwater.

[Approved by Governor November 6, 2009. Filed with Secretary of State November 6, 2009.]

LEGISLATIVE COUNSEL'S DIGEST

SB 6, Steinberg. Groundwater.

(1) Existing law authorizes a local agency whose service area includes a groundwater basin that is not subject to groundwater management to adopt and implement a groundwater management plan pursuant to certain provisions of law. Existing law requires a groundwater management plan to include certain components to qualify as a plan for the purposes of those provisions, including a provision that establishes funding requirements for the construction of certain groundwater projects.

This bill would establish a groundwater monitoring program pursuant to which specified entities, in accordance with prescribed procedures, may propose to be designated by the Department of Water Resources as groundwater monitoring entities, as defined, for the purposes of monitoring and reporting with regard to groundwater elevations in all or part of a basin or subbasin, as defined. The bill would require the department to work cooperatively with each monitoring entity to determine the manner in which groundwater elevation information should be reported to the department. The bill would authorize the department to make recommendations for improving an existing monitoring program, and to require additional monitoring wells under certain circumstances. Under certain circumstances, the department would be required to perform groundwater monitoring functions. In that event, prescribed entities with authority to assume groundwater monitoring functions with regard to a basin or subbasin for which the department has assumed those functions would not be eligible for a water grant or loan awarded or administered by the state.

(2) Existing law requires the department to conduct an investigation of the state's groundwater basins and to report its findings to the Governor and the Legislature not later than January 1, 1980.

This bill would repeal that provision. The department would be required to conduct an investigation of the state's groundwater basins and to report its findings to the Governor and the Legislature not later than January 1, 2012, and thereafter in years ending in 5 or 0.

(3) The bill would take effect only if SB 1 and SB 7 of the 2009–10 7th Extraordinary Session of the Legislature are enacted and become effective.

The people of the State of California do enact as follows:

SECTION 1. Part 2.11 (commencing with Section 10920) is added to Division 6 of the Water Code, to read:

PART 2.11. GROUNDWATER MONITORING

CHAPTER 1. GENERAL PROVISIONS

10920. (a) It is the intent of the Legislature that on or before January 1, 2012, groundwater elevations in all groundwater basins and subbasins be regularly and systematically monitored locally and that the resulting groundwater information be made readily and widely available.

(b) It is further the intent of the Legislature that the department continue to maintain its current network of monitoring wells, including groundwater elevation and groundwater quality monitoring wells, and that the department continue to coordinate monitoring with local entities.

10921. This part does not require the monitoring of groundwater elevations in an area that is not within a basin or subbasin.

10922. This part does not expand or otherwise affect the powers or duties of the department relating to groundwater beyond those expressly granted by this part.

Chapter 2. Definitions

10925. Unless the context otherwise requires, the definitions set forth in this section govern the construction of this part.

(a) "Basin" or "subbasin" means a groundwater basin or subbasin identified and defined in the department's Bulletin No. 118.

(b) "Bulletin No. 118" means the department's report entitled "California's Groundwater: Bulletin 118" updated in 2003, or as it may be subsequently updated or revised in accordance with Section 12924.

(c) "Monitoring entity" means a party conducting or coordinating the monitoring of groundwater elevations pursuant to this part.

(d) "Monitoring functions" and "groundwater monitoring functions" means the monitoring of groundwater elevations, the reporting of those elevations to the department, and other related actions required by this part.

(e) "Monitoring groundwater elevations" means monitoring groundwater elevations, coordinating the monitoring of groundwater elevations, or both.

(f) "Voluntary cooperative groundwater monitoring association" means an association formed for the purposes of monitoring groundwater elevations pursuant to Section 10935.

Chapter 3. Groundwater Monitoring Program

10927. Any of the following entities may assume responsibility for monitoring and reporting groundwater elevations in all or a part of a basin or subbasin in accordance with this part:

(a) A watermaster or water management engineer appointed by a court or pursuant to statute to administer a final judgment determining rights to groundwater.

(b) (1) A groundwater management agency with statutory authority to manage groundwater pursuant to its principal act that is monitoring groundwater elevations in all or a part of a groundwater basin or subbasin on or before January 1, 2010.

(2) A water replenishment district established pursuant to Division 18 (commencing with Section 60000). This part does not expand or otherwise affect the authority of a water replenishment district relating to monitoring groundwater elevations.

(c) A local agency that is managing all or part of a groundwater basin or subbasin pursuant to Part 2.75 (commencing with Section 10750) and that was monitoring groundwater elevations in all or a part of a groundwater basin or subbasin on or before January 1, 2010, or a local agency or county that is managing all or part of a groundwater basin or subbasin pursuant to any other legally enforceable groundwater management plan with provisions that are substantively similar to those described in that part and that was monitoring groundwater elevations in all or a part of a groundwater basin or subbasin or subbasin or substantively similar to those described in that part and that was monitoring groundwater elevations in all or a part of a groundwater basin or subbasin on or before January 1, 2010.

(d) A local agency that is managing all or part of a groundwater basin or subbasin pursuant to an integrated regional water management plan prepared pursuant to Part 2.2 (commencing with Section 10530) that includes a groundwater management component that complies with the requirements of Section 10753.7.

(e) A county that is not managing all or a part of a groundwater basin or subbasin pursuant to a legally enforceable groundwater management plan with provisions that are substantively similar to those described in Part 2.75 (commencing with Section 10750).

(f) A voluntary cooperative groundwater monitoring association formed pursuant to Section 10935.

10928. (a) Any entity described in subdivision (a) or (b) of Section 10927 that seeks to assume groundwater monitoring functions in accordance with this part shall notify the department, in writing, on or before January 1, 2011. The notification shall include all of the following information:

(1) The entity's name, address, telephone number, and any other relevant contact information.

(2) The specific authority described in Section 10927 pursuant to which the entity qualifies to assume the groundwater monitoring functions.

(3) A map showing the area for which the entity is requesting to perform the groundwater monitoring functions.

(4) A statement that the entity will comply with all of the requirements of this part.

(b) Any entity described in subdivision (c), (d), (e), or (f) of Section 10927 that seeks to assume groundwater monitoring functions in accordance with this part shall notify the department, in writing, by January 1, 2011. The information provided in the notification shall include all of the following:

(1) The entity's name, address, telephone number, and any other relevant contact information.

(2) The specific authority described in Section 10927 pursuant to which the entity qualifies to assume the groundwater monitoring functions.

(3) For entities that seek to qualify pursuant to subdivision (c) or (d) of Section 10927, the notification shall also include a copy of the current groundwater management plan or the groundwater component of the integrated regional water management plan, as appropriate.

(4) For entities that seek to qualify pursuant to subdivision (f) of Section 10927, the notification shall include a statement of intention to meet the requirements of Section 10935.

(5) A map showing the area for which the entity is proposing to perform the groundwater monitoring functions.

(6) A statement that the entity will comply with all of the requirements of this part.

(7) A statement describing the ability and qualifications of the entity to conduct the groundwater monitoring functions required by this part.

(c) The department may request additional information that it deems necessary for the purposes of determining the area that is proposed to be monitored or the qualifications of the entity to perform the groundwater monitoring functions.

10929. (a) (1) The department shall review all notifications received pursuant to Section 10928.

(2) Upon the receipt of a notification pursuant to subdivision (a) of Section 10928, the department shall verify that the notifying entity has the appropriate authority under subdivision (a) or (b) of Section 10927.

(3) Upon the receipt of a notification pursuant to subdivision (b) of Section 10928, the department shall do both of the following:

(A) Verify that each notification is complete.

(B) Assess the qualifications of the notifying party.

(b) If the department has questions about the completeness or accuracy of a notification, or the qualifications of a party, the department shall contact the party to resolve any deficiencies. If the department is unable to resolve the deficiencies, the department shall notify the party in writing that the notification will not be considered further until the deficiencies are corrected.

(c) If the department determines that more than one party seeks to become the monitoring entity for the same portion of a basin or subbasin, the department shall consult with the interested parties to determine which party will perform the monitoring functions. In determining which party will

perform the monitoring functions under this part, the department shall follow the order in which entities are identified in Section 10927.

(d) The department shall advise each party on the status of its notification within three months of receiving the notification.

10930. Upon completion of each review pursuant to Section 10929, the department shall do both of the following if it determines that a party will perform monitoring functions under this part:

(a) Notify the party in writing that it is a monitoring entity and the specific portion of the basin or subbasin for which it shall assume groundwater monitoring functions.

(b) Post on the department's Internet Web site information that identifies the monitoring entity and the portion of the basin or subbasin for which the monitoring entity will be responsible.

10931. (a) The department shall work cooperatively with each monitoring entity to determine the manner in which groundwater elevation information should be reported to the department pursuant to this part. In determining what information should be reported to the department, the department shall defer to existing monitoring programs if those programs result in information that demonstrates seasonal and long-term trends in groundwater elevations. The department shall collaborate with the State Department of Public Health to ensure that the information reported to the department will not result in the inappropriate disclosure of the physical address or geographical location of drinking water sources, storage facilities, pumping operational data, or treatment facilities.

(b) (1) For the purposes of this part, the department may recommend improvements to an existing monitoring program, including recommendations for additional monitoring wells.

(2) The department may not require additional monitoring wells unless funds are provided for that purpose.

10932. Monitoring entities shall commence monitoring and reporting groundwater elevations pursuant to this part on or before January 1, 2012.

10933. (a) On or before January 1, 2012, the department shall commence to identify the extent of monitoring of groundwater elevations that is being undertaken within each basin and subbasin.

(b) The department shall prioritize groundwater basins and subbasins for the purpose of implementing this section. In prioritizing the basins and subbasins, the department shall, to the extent data are available, consider all of the following:

(1) The population overlying the basin or subbasin.

(2) The rate of current and projected growth of the population overlying the basin or subbasin.

(3) The number of public supply wells that draw from the basin or subbasin.

(4) The total number of wells that draw from the basin or subbasin.

(5) The irrigated acreage overlying the basin or subbasin.

(6) The degree to which persons overlying the basin or subbasin rely on groundwater as their primary source of water.

(7) Any documented impacts on the groundwater within the basin or subbasin, including overdraft, subsidence, saline intrusion, and other water quality degradation.

(8) Any other information determined to be relevant by the department.

(c) If the department determines that all or part of a basin or subbasin is not being monitored pursuant to this part, the department shall do all of the following:

(1) Attempt to contact all well owners within the area not being monitored.

(2) Determine if there is an interest in establishing any of the following: (A) A groundwater management plan pursuant to Part 2.75 (commencing with Section 10750).

(B) An integrated regional water management plan pursuant to Part 2.2 (commencing with Section 10530) that includes a groundwater management component that complies with the requirements of Section 10753.7.

(C) A voluntary groundwater monitoring association pursuant to Section 10935.

(d) If the department determines that there is sufficient interest in establishing a plan or association described in paragraph (2) of subdivision (c), or if the county agrees to perform the groundwater monitoring functions in accordance with this part, the department shall work cooperatively with the interested parties to comply with the requirements of this part within two years.

(e) If the department determines, with regard to a basin or subbasin, that there is insufficient interest in establishing a plan or association described in paragraph (2) of subdivision (c), and if the county decides not to perform the groundwater monitoring and reporting functions of this part, the department shall do all of the following:

(1) Identify any existing monitoring wells that overlie the basin or subbasin that are owned or operated by the department or any other state or federal agency.

(2) Determine whether the monitoring wells identified pursuant to paragraph (1) provide sufficient information to demonstrate seasonal and long-term trends in groundwater elevations.

(3) If the department determines that the monitoring wells identified pursuant to paragraph (1) provide sufficient information to demonstrate seasonal and long-term trends in groundwater elevations, the department shall not perform groundwater monitoring functions pursuant to Section 10934.

(4) If the department determines that the monitoring wells identified pursuant to paragraph (1) provide insufficient information to demonstrate seasonal and long-term trends in groundwater elevations, and the State Mining and Geology Board concurs with that determination, the department shall perform groundwater monitoring functions pursuant to Section 10934.

10933.5. (a) Consistent with Section 10933, the department shall perform the groundwater monitoring functions for those portions of a basin or

subbasin for which no monitoring entity has agreed to perform the groundwater monitoring functions.

(b) Upon determining that it is required to perform groundwater monitoring functions, the department shall notify both of the following entities that it is forming the groundwater monitoring district:

(1) Each well owner within the affected area.

(2) Each county that contains all or a part of the affected area.

(c) The department shall not assess a fee or charge to recover the costs for carrying out its power and duties under this part.

(d) The department may establish regulations to implement this section.

10933.7. (a) If the department is required to perform groundwater monitoring functions pursuant to Section 10933.5, the county and the entities described in subdivisions (a) to (d), inclusive, of Section 10927 shall not be eligible for a water grant or loan awarded or administered by the state.

(b) Notwithstanding subdivision (a), the department shall determine that an entity described in subdivision (a) is eligible for a water grant or loan under the circumstances described in subdivision (a) if the entity has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.

10934. (a) For purposes of this part, neither any entity described in Section 10927, nor the department, shall have the authority to do either of the following:

(1) To enter private property without the consent of the property owner.

(2) To require a private property owner to submit groundwater monitoring information to the entity.

(b) This section does not apply to a county or an entity described in subdivisions (a) to (d), inclusive, of Section 10927 that assumed responsibility for monitoring and reporting groundwater elevations prior to the effective date of this part.

10935. (a) A voluntary cooperative groundwater monitoring association may be formed for the purposes of monitoring groundwater elevations in accordance with this part. The association may be established by contract, a joint powers agreement, a memorandum of agreement, or other form of agreement deemed acceptable by the department.

(b) Upon notification to the department by one or more entities that seek to form a voluntary cooperative groundwater monitoring association, the department shall work cooperatively with the interested parties to facilitate the formation of the association.

(c) The contract or agreement shall include all of the following:

(1) The names of the participants.

(2) The boundaries of the area covered by the agreement.

(3) The name or names of the parties responsible for meeting the requirements of this part.

(4) The method of recovering the costs associated with meeting the requirements of this part.

(5) Other provisions that may be required by the department.

10936. Costs incurred by the department pursuant to this chapter may be funded from unallocated bond revenues pursuant to paragraph (12) of subdivision (a) of Section 75027 of the Public Resources Code, to the extent those funds are available for those purposes.

SEC. 2. Section 12924 of the Water Code is repealed.

SEC. 3. Section 12924 is added to the Water Code, to read:

12924. (a) The department, in conjunction with other public agencies, shall conduct an investigation of the state's groundwater basins. The department shall identify the state's groundwater basins on the basis of geological and hydrological conditions and consideration of political boundary lines whenever practical. The department shall also investigate existing general patterns of groundwater pumping and groundwater recharge within those basins to the extent necessary to identify basins that are subject to critical conditions of overdraft.

(b) The department shall report its findings to the Governor and the Legislature not later than January 1, 2012, and thereafter in years ending in 5 or 0.

SEC. 4. This act shall take effect only if Senate Bill 1 and Senate Bill 7 of the 2009–10 Seventh Extraordinary Session of the Legislature are enacted and become effective.

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GLENN COUNTY EXPORT WATER TRANSFER GUIDELINES

Part 1: Background

Preliminary Planning

The Preliminary Plan for Groundwater and Coordinated Water Management (Plan) was approved by the Glenn County Water Advisory Committee (WAC) in 2004 and adopted by the Glenn County Board of Supervisors (Board) in May 2006. Items presented in the Plan identified the "next steps" that should be undertaken as components of a program to facilitate the management of water resources by local entities within Glenn County. Below is the text from the Plan as Item G) Evaluate Water Transfer Guidelines with some minor changes:

Evaluate Water Transfer Guidelines

Glenn County, by virtue of its physical and hydrologic setting and foresight of its residents in the past, enjoys an enviable water supply situation in relation to many counties in California. The fact that water transfers within and/or outside the county can be considered is a fortunate circumstance. As stewards of the water resources available to Glenn County the resource should be managed to meet the needs of Glenn County, the Sacramento Valley, and California, to the extent practicable. Water law and guidelines or parameters for water use exist. It would be helpful to the community to have guidelines documented that represent established water law and water use parameters that represent the basis for particular types of water transfers.

Types of water transfers that should be considered include:

- Surface water with groundwater substitution.
- Surface water with fallowing.
- Groundwater.
- Surface water originating in Glenn County.

To the extent water transfers are configured consistent with adopted guidelines, there should be no need for discussion of a mitigation fund or third party impacts. Having water transfer guidelines in place can facilitate the management of water resources within the county.

Strategic Planning

A presentation was made to the Board on August 5, 2008 discussing the need for the development of a strategic planning process. From that meeting, the Agriculture Department (Department) was directed to bring forward practical options that would be necessary to achieve the objectives presented. The first goal of this process would be to identify a secure and sustainable funding source for water related activities.

A proposal was submitted to the Board on November 4, 2008 that detailed methods which could provide the necessary level of secure funding. The proposal was met with mixed opinion, prompting the Board to revisit the proposal presentation on a later date when all supervisors would be present.

On December 16, 2008 the topic was brought back to the Board and public discussion followed. As a result of that presentation, the Board directed staff to begin the process of developing sustainable funding sources. Of the options identified, two were selected to move forward with in the short term that would not require an "Engineer's Report" pursuant to Proposition 218. They were:

1) Additional well permit fees for domestic and agricultural well installation, with consideration for other existing permitted activities (Additional well permit fees were activated in May 2009) and;

2) A per acre fee for each acre of land fallowed associated with an export transfer, and a per acre foot fee for each acre foot of groundwater pumped in a groundwater substitution program associated with an export transfer.

By definition of County Code 20.03.020:

"Export" means the use of County groundwater outside of the boundaries of County and outside of the boundaries of any local agency that is partially within County. Surface water which is sold, exchanged and replaced by groundwater extraction shall be considered export.

"Groundwater Substitution Program" means the voluntary substitution of an available surface water supply by a groundwater supply for the purposes of enhancing in-stream flow or export.

It should be noted the proposed fees discussed above will only assess short term (one year or less) out-of-County programs. Arrangements for long-term programs related to cropland idling may be developed if the situation arises. Appropriate documentation will determine the number of years acceptable for such a program is intended to help protect the local farm economy and to avoid some environmental impacts. Long-term transfers are potentially detrimental to the welfare and the economy of the county and as a whole are discouraged.

Part 2: County Policy

Proposed Transfer Fee Policy and Monitoring Requirements:

Water transfer fees will be charges the County would impose on the export of water from the County that would have been used in the County, where the County would normally benefit economically from the use of the transferred water for agricultural, municipal, or industrial purposes. Water transfer fees would only be placed on water agencies transferring surface water out of the County through groundwater substitution or land fallowing export programs. The fees are intended to offset the County's administrative and technical expenses ensuring that the water resources of the County are not transferred in a manner that economically harms other legal users of water, causes harm to the health and safety of the citizens of Glenn County, or conflicts with existing legal principles of California Water Code. The water transfer fees will provide the following benefits:

- 1. The County's groundwater management activities include reviewing environmental documentation for water transfers, outreach and education, and assist with ongoing monitoring efforts during water transfers which effectively enforce the established Basin Management Objectives as detailed in County Code 20.03. Consequently, the County incurs significant costs as a responsible agency in reviewing proposals, therefore, it is necessary that a schedule of fees be imposed to offset these costs and to ensure that these costs are not imposed on the general citizenry of Glenn County.
- 2. The County will use a portion of the proceeds to offer clear transfer guidelines and monitoring oversight services as part of the transfer fee in an effort to simplify transfers for water agencies within the County and not to discourage business development in the County.
- 3. Fees collected by the County are not intended to address mitigation of third party impacts or injury, but are intended to be used to offset expenses the County incurs for document review, additional monitoring during the term of a proposed transfer program, and possible conflict resolution.

Currently the minimum requirements for a water agency in reporting activities associated with a substitution program are:

County Code 20.03.110 (E). The Water Advisory Committee shall collect the following data from any local agency (and) or person engaged in a groundwater substitution program or groundwater export program: the weekly amounts of groundwater extracted from each well, the precise location of the wells, all pumping and non-pumping groundwater level measurements made during the groundwater substitution period, the time periods during which the groundwater substitution program will occur, and all required environmental documentation. It shall be the responsibility of the local agency and (or) person involved in the groundwater substitution program to provide this information to the Water Advisory Committee including any monetary costs of providing such data.

These requirements are very basic and they are in place from the efforts of a dedicated group of County citizens committed to preserving their water rights.

Conflict Resolution

Incorporated in to County Code 20.03 is the procedure for all water users in the county to register abnormal groundwater level reports for the purposes of determining its cause. The process begins when a report is received and reviewed by the Technical Advisory Committee who then prepares an initial investigation report and notifies the local sub-watershed Water Advisory Committee member(s). Local groundwater information is assembled and committee representatives make site visits, collect and assemble additional data, and prepare and present their findings and recommendations to the Water Advisory Committee for action. County Code 20.03 and the adopted Basin Management Objective (BMO) concept have provisions for the County's authority to intervene in a

tiered fashion that include the implementation of an adaptive management program or the cessation of pumping from wells involved in substitution programs or other agricultural wells.

Monitoring

Incorporated into these water transfer guidelines will be program specific components of the Sacramento Valley Water Resource Monitoring, Data Collection, and Evaluation Framework (developed by the Department of Water Resources, DWR) and the Preliminary Plan Comprehensive Groundwater Monitoring Plan (Glenn County). The Framework document was developed in 2007 by the DWR staff with valuable assistance from a panel of local and regional water resource scientists and engineers that have a vast knowledge of the region. The Comprehensive Groundwater Monitoring Plan was completed in 2007 as part of an AB 303 Local Groundwater Assistance grant with the work performed by Wood Rodgers Inc. Specific monitoring requirements will be identified, discussed, and agreed upon by the County and sellers. Every effort will be made to design program monitoring which is intended to gather information that will be beneficial to overall water resource planning and designed in a manner that promotes sound coordinated water management activities.

Mitigation

All water transfers require a mitigation plan that needs to address factors that may arise as a result of the transfer. The monitoring program required of each transferor is an important component of the mitigation plan. The level of detail in the mitigation plan will be a factor in determining the success of the transfer. The County will assume the lead role for conflict resolution. Specific mitigation factors will be identified, discussed, and agreed upon by the County and sellers. Every effort will be made to design a mitigation plan that is intended to adequately address responsibility, response, finances, and methods of avoiding third party impact or injury.

Part 3: Proposed Water Transfer Fees

Water transfer fees being developed will be consistent with the adopted Glenn County Groundwater Management Plan (Ordinance 1115) adopted in February 2000 (codified as County Code 20.03) and local irrigation and water local agency (local agency) policies. As a result of actions by the Board, it is necessary for the County to impose fees on outof-County groundwater substitution transfers and out-of-County land fallowing transfers. Transfer fees will be paid by the local agency with no added cost to individual participants. These fees are in no way to considered part of any level of mitigation for third party impact or injury.

Protection of Water Rights

California law protects the underlying water rights of those parties who wish to transfer a portion of their surface water supply to others. California Water Code Section 1745 et seq. protects the underlying water rights from forfeiture for water transfers. Any water transfer agreement between the buyer and seller for water purchases needs to expressly recognize the legal protections afforded the seller's underlying water rights in a water

transfer.

Use of Funds

All funds received by the County from these transfers will be strictly utilized for groundwater and coordinated water management activities in the County.

Proposed Fees Are As Follows:

Document Review

There will be a onetime document review fee of \$2,500 for any local agency proposing a groundwater substitution or land fallowing program, regardless of the ability to deliver water under the program. If the program proceeds, this cost will be absorbed into the overall program fees.

Substitution

For each acre foot of groundwater extracted by any local agency in the County that is replacing an acre foot of surface supply that is not utilized in the County or local agency there will be a fee of **\$5.00 per acre foot** paid to the County.

Fallowing

For each acre of ground fallowed by a local agency that is associated with an out-of-County transfer of surface supply that is not utilized in the County, the County will assess a fee as follows:

0 – 1,999 acres	\$2,500
2,000 – 5,999 acres	\$5,000
6,000 – 12,000 acres	\$7,500
>12,000 acres	\$10,000

Part 4: Guidelines and Legal Principles

California laws (Water Code Section 1810 *et seq.*) contain numerous protections that apply to water transfers. However, there are three fundamental principles that typically apply: (1) no injury to other legal users of water, (2) no unreasonable affects to fish, wildlife or other in-stream beneficial uses of water, and (3) no unreasonable affects on the overall economy or the environment in the counties from which the water is transferred. The Project Agencies (Department of Water Resources and the Bureau of Reclamation) will not support or participate in any water transfer where these basic principles have not been adequately addressed.

The following water transfer principles and guidelines have historically been implemented by the Department of Water Resources and the Bureau of Reclamation (Project Agencies). In some instances, private transfers can be developed between buyers and sellers outside of an organized program sponsored by the Project Agencies. Glenn County will consider adopting this edited version to be specific to Glenn County based upon thorough review by its WAC and TAC. Their input will be incorporated into the following guidelines prior to adoption:

Glenn County recognizes the importance of local leadership in making decisions on how best to manage their local and regional water resources. Accordingly, the County and the Project Agencies will work cooperatively with local water agencies and other regional governments in the Sacramento Valley, and others to ensure that local interests have the opportunity to manage their resources in a manner that meets their local objectives. Water agencies are encouraged to contact the Department and the Board and inform them of their intent to export water out of the County as soon as possible.

Before water agencies voluntarily sell and export water out of the County, it is recommended that supplies be made available first within the County if feasible pursuant to similar terms and conditions. The County needs assurance that critical local public health and safety needs are not adversely affected by water being exported out of the County. The Project Agencies will coordinate with local water agencies and interests in the Sacramento Valley and other regions to assure that supplies are reasonably available to meet local needs first.

Water transfers in Glenn County are to be made without injuring other legal users of water and without unreasonably affecting fish, wildlife, or other in-stream beneficial uses, and shall be designed to avoid unreasonable effects on the overall economy or the environment in the county. For land fallowing, Water Code Section 1745.05(b) states that no more than 20 percent of the water that would have been applied can be transferred unless the agency approves, following reasonable notice and a public hearing, a larger percentage may be considered. Investments of income from water transfers typically go back into local businesses or operations and improvements to local water supply systems. Coordination with transferring water agencies, county government representatives, and Project Agencies is needed to help identify situations where actions may become necessary if the cumulative economic effects of a water transfer in the county appear to be significant. Water transfer programs need to establish effective mechanisms to ensure that injury to other legal water users is identified and avoided or mitigated. In addition, evaluations of possible economic and environmental effects of the transfer at the county wide level need to be identified. Real-time monitoring programs will be developed to trigger corrective actions that help avoid possible impacts as they may develop. This is especially important for groundwater substitution transfers in where a well defined mitigation program is required that specifies the actions the seller will take to prevent injury from occurring.

Actions to develop additional supplies for water users need to be implemented in a manner that is compatible with ongoing environmental protection and restoration programs. Examples of such programs include the Ecosystem Restoration Program and the Central Valley Project Improvement Act (CVPIA) implementation efforts, which may

be out of the jurisdiction of the County, as well as any local actions to protect environmental resources. In fulfilling its obligations, the Project Agencies recognize that it must represent the interests of all parts of the State, both those areas needing additional supplies and those that can make supplies available.

Types of Water Transfers Allowed

Groundwater Substitution – Is defined as the reduction in surface water use which is offset with additional groundwater pumping. A groundwater substitution transfer generally consists of the following components:

- The location and characteristics of the wells that will be pumped
- The volume and schedule of transfer-related groundwater pumping
- Monitoring plan designed to assess the effects of the groundwater pumping
- Mitigation measures to alleviate possible injury issues

Prior to the transfer, the transfer proponent will develop a groundwater substitution transfer proposal and provide it to the County. The proposal will include a detailed description of any transfer-related changes to water management operations and a description of the facilities used in the operation. The details of the proposed water management operations will be included as contractual commitments in the water purchase agreement with the seller or agent of the seller. The proposal shall include a description of the following program components:

- Surface water source that will be replaced by groundwater pumping
- Location and construction details of wells that will be pumped
- Schedule and volume of water to be pumped
- Baseline from which the additional pumping will be measured
- Method of measuring and reporting the volume of water pumped
- Monitoring program
- Mitigation measures

The seller will be responsible for assessing and mitigating significant adverse effects resulting from the transfer within the transfer source area. In addition to the details of the water transfer operations, the seller's proposal shall provide an assessment of potential adverse effects due to transfer-related operations.

Cropland Idling/Crop Shifting – Is defined as the reduction in surface water use resulting from a reduction in the evapotranspiration of applied water (ETAW) to agricultural crops that would have occurred in the absence of the water transfer.

Prior to fallowing, the program proponent will develop a fallowing proposal and provide it to the County. The proposal will include a detailed description of any transfer-related changes to water management operations. The details of the proposed water management operations will be included as contractual commitments in the water purchase agreement with the seller or agent of the seller. At a minimum the proposal shall include the number of acres, their location, and recent crop history.

Types of Water Transfers Not Allowable

Direct Pumping of Groundwater – Water Code Section 1220 establishes significant barriers to the export of groundwater outside the Sacramento Valley. The Project Agencies are not interested in facilitating the direct transfer of groundwater from one area to another.

Transfers that Injure Legal Users of Water or Cause Unreasonable Effects to the Environment – Water transfers that simply reclassify existing stream flows from one category to another, making these flows no longer available to historic downstream users, have the potential to injure other legal users of water and cause harm to the environment. Water transfers should focus on either making new surface flows available or reducing surface water use in such a way as to expand the availability of surface water resources for use by others.

Environmental Documentation

The California Environmental Quality Act and the National Environmental Policy Act (CEQA/NEPA) environmental review will be considered adequate if it meets all the requirements of the Project Agencies legal requirements to the extent they assure that the proposed transfers and related actions are in compliance with applicable federal and state laws to prevent unreasonable environmental impacts. For groundwater substitution, a greater level of site specific review may be required. Glenn County may be a responsible agency for any project under CEQA and will comment and request mitigation measures as appropriate.

Verification and Reporting

Verification of the actions taken to make water available in a crop shifting or cropland idling program will be conducted by the Project Agencies and participating local agencies with the resulting information made available to the County. Water transfers are based on estimates of water made available through cropland idling/shifting. A mutually agreeable program needs to be developed for each proposed transfer that allows for monitoring of appropriate field data that can be used to verify the water that was actually made available by the transfer action(s) and to modify future guidelines if warranted. Accurate reporting of the activities undertaken as part of a crop shifting and cropland idling program is an essential provision of any water transfer program agreement. Reporting is the responsibility of the seller and needs to be acceptable to the Project Agencies. Reporting requirements will be outlined in the contracting process and communicated to Glenn County staff.

GLENN-COLUSA IRRIGATION DISTRICT PROVIDENT IRRIGATION DISTRICT PRINCETON-CODORA-GLENN IRRIGATION DISTRICT

January 11, 2010

Steve Soeth Glenn County Board of Supervisors 525 W. Sycamore Street Willows, California 95988 Leigh McDaniel Glenn County Board of Supervisors 525 W. Sycamore Street Willows, California 95988

Re: Draft Water Transfer Guidelines

Dear Steve and Leigh:

We are sending this joint letter to advise you of the views our Districts share about the Water Transfer Guidelines (Guidelines) pending before the Water Advisory Committee.

Our managers have been participating in all of the substantive discussions on the Guidelines, and have provided comments. We are not completely comfortable with the current direction, however. Our attorneys have reviewed the most recent draft of the Guidelines, and we are providing the enclosed outline of our primary concerns to County staff today.

We understand that the intention of the WAC staff is to bring a draft ordinance to you this spring. It is appropriate at this point, however, to let you know about the current issues. We hope that as we continue to work with the staff and the other members of the WAC, that we will be able to find a workable solution that addresses the County's interests in assuring protection of the water resources available in the area and the rights of our Districts and our landowners.

Steve Soeth Leigh McDaniel January 11, 2010 Page 2

We will continue to keep you informed. In the meantime, if you have any questions, or comments, please do not hesitate to contact any of us.

Sincerely yours,

DONALD BRANSFORD, President Glenn-Colusa Irrigation District

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ELWOOD WELLER, President Provident Irrigation District

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DAVID ALVES, President Princeton-Codora-Glenn Irrigation District

cc: Andrew Hitchings J. Mark Atlas

MEMORANDUM

Т	Thad Bettner Lance Boyd
Fam:	J. Mark Atlas Andrew M. Hitchings
Subject:	Draft Glenn County Export Water Transfer Guidelines (dated Dec. 11, 2009)
Dte:	January 11, 2010

As requested, we have reviewed the above-referenced draft Guidelines. This monorandum provides our initial comments, questions and concerns associated with the draft Guidelines. Given the nature of our comments, we believe it would be prudent for the County Causel's office to thoroughly review the draft Guidelines for legal sufficiency before any significant additional effort is undertaken on them.

- 1. The December 11, 2009 draft is labeled "Guidelines," but in many places it reads like an initial draft ordinance. Which is it?
- 2. State pre-emption. It appears the County intends to regulate and approve the substantive terms of water transfers between willing buyers and sellers (as opposed to exercising its police powers under a lawful groundwater ordinance). There is a significant legal question as to whether State law has pre-empted such County regulation of water transfers.
- 3. Federal pre-emption. Section 3405(a) of the Central Valley Project Improvement Act (CVPIA), and provisions of settlement and water service contracts implementing the CVPIA, control, authorize and grant the right to transfer CVP water. Section 3405(a)(1) establishes a process for Department of Interior Secretarial review of proposed project water transfers. The County may have a right to participate in that federal review process, but has no right to establish guidelines or charges that will impair the rights of contractors or their landowners to utilize the provisions Section 3405(a) of the CVPIA.
- 4. The Guidelines fail to acknowledge the limitations that exist on the County's ability to regulate the water transfer activities and actions of special districts within the district's boundaries.
- 5. The proposed fee provisions in the Guidelines present numerous areas of concern, including, but not limited to, the following:
 - (a) There is a significant question as to whether the County must comply with the procedural and substantive provisions of Proposition 218 before imposing any of the proposed fees.

-1-

- (b) In any event, all of the fees must prove their relationship to the actual costs the County would incur, and the fees cannot exceed the costs of County services.
- (c) In the "Document Review" section, for instance, regarding the flat \$2,500 fee for "Document Review," an additional level of scrutiny is what work must the County do in reviewing documents? How much of this work will be duplicative of review done by others? What is meant by, "If the program proceeds, this cost will be absorbed into the overall program fees?"
- (d) The Guidelines are not clear on the purpose of the fees. The opening section of "Part 2" talks about loss of economic benefits to the county of transferred water. *If* there is a mitigation element to the fees, that is inappropriate for a groundwater substitution transfer since there will be no reduction in economic activity in the County.
- (e) In addition, the Guidelines suggest that the fee schedule will be \$2,500 for each acre (for instance, \$2,500 for transfers involving 0 to 1,999 acres).
- 6. With respect to groundwater substitution transfers, why does the county assume that the mechanism established in chapter 20.03 of the Glenn County Code (Groundwater Management) will not protect, and, if necessary, bring to the attention of the WAC and Board of Supervisors, any Basin Management Objective (BMO) issues?
- 7. Related to Number 6, there is no need for preliminary document review of a groundwater substitution transfer. If problems with BMOs develop, chapter 20.03 provides the necessary corrective mechanisms. At most, perhaps the transferor should file a notice with the County of the transfer but, because there would be no work necessary on the part of the County, there should be no fee.
- 8. The section entitled "Part 4: Guideline and Legal Principles" is irrelevant. The section begins by citing Water Code §1810 *et seq*. Those code sections address entities that may have availability of excess conveyance capacity to facilitate transfers by wheeling water. The County has no jurisdiction under that statutory scheme. The remainder of Part 4 appears to be a repetition of DWR and /or USBR policies. Those policies may be relevant to some transfers, but they are *not* relevant to a County policy.
- 9. In several areas, the Guidelines appear to require the inclusion of specific terms and conditions in the actual water transfer agreements between sellers and buyers (*See e.g.* page 4, "Any water transfer agreement . . . needs to expressly recognize the legal protections afforded the seller's underlying water rights"; page 7, "The details of the proposed water management operations will be included as contractual commitments in the water purchase agreement . . ."). Does the County intend to control the negotiated terms of transfer agreements?

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Basin Management Objective Glenn County Sub-area 8 East Corning Basin Private Pumpers Revision January 2010

Basin Management Objective Glenn County Sub-area 8 East Corning Basin Private Pumpers

Calendar Year: 2010

Glenn County Water Advisory Committee Representative: James Weber

Objective: To maintain the groundwater surface elevation at a level that will assure an adequate and affordable irrigation water supply. It is the intent of this objective to assure a sustainable agricultural water supply now and into the future. The objective is also to assure an adequate groundwater supply for all domestic users in the sub-area.

Location of BMO Key Wells: See attached map.

Well # 1 – East of Rogers Ranch Road, South of Road 23 Well #2 – North of Wyo, West of 1st Ave Well #3 – South of Hamilton City, East of Road 206

Groundwater Level Monitoring Network: Department of Water Resources - Northern District

Groundwater Level Measurements By: Department of Water Resources – Northern District

Period of Record: 1976 - 2009

Groundwater Level Monitoring Frequency: Semiannual.

> Spring (March-April) Fall (October-November)

Groundwater Well Numbering Systems: State

Well Number	Well ID	Method	Stage 1	Stage 2	Stage 3
	—		Elev./Depth*	Elev./Depth*	Elev./Depth*
1	21N01W04N01M	2	115.6/19.4	115.6/19.4	112.2/22.8
2	22N02W11Q01M	2	139.6/24.4	139.6/24.4	133.8/30.2
3	22N01W29K01M	2	119.9/22.1	119.9/22.1	112.7/29.3

*Elev. = feet above mean sea level, Depth = Ground surface to groundwater surface

BMO Alert Stage Method and Definitions:

Method 2 – Standard Deviation

All existing groundwater level monitoring wells within the BMO area were identified. For all wells with a record dating back to at least 1976¹, groundwater levels were obtained using the Department of Water Resources' Water Data Library (WDL). The Spring data for groundwater surface elevation (WSE) was further analyzed. The average and standard deviation were then calculated for these data. The Stage 1 & 2 alerts were determined to be the average of the Spring data minus one standard deviation. The State 3 alert was the average minus two standard deviations.

The Glenn County Water Advisory Committee (WAC) upon a recommendation of its Technical Advisory Committee (TAC) shall declare a Stage 1, Stage 2, or Stage 3 Alert based on the technical criteria presented below. The technical criteria for the WAC to rescind the Stage 1, Stage 2, or Stage 3 Alert is also presented.

A Stage 1 Alert will be declared when any measured Spring groundwater surface elevation is below 1 Standard Deviation from the Average of the time of record utilized for the corresponding BMO Key Well.

A Stage 2 Alert will be declared on the second and subsequent sequential years, when any measured Spring groundwater surface elevation is below 1 Standard Deviation from the Average of the time of record utilized for the corresponding BMO Key Well.

A Stage 3 Alert will be declared when any measured Spring groundwater surface elevation is below 2 Standard Deviations from the Average of the time of record utilized for the corresponding BMO Key Well.

Stage 1, 2, and 3 Alerts shall be rescinded by the WAC when the measured groundwater surface elevations returns to an elevation above 1 Standard Deviation for the corresponding BMO Key Wells.

BMO Compliance Evaluation and Action Procedures:

Compliance² with the BMO will be determined following the Spring groundwater level measurement periods. The groundwater surface elevations at each monitoring well will be compared against the corresponding compliance (condition) graph and stage definition criteria to determine if the groundwater surface elevations are above or below specific alert trigger levels. The TAC will perform this evaluation and report the results of the evaluation to the WAC.

¹ In 1976 the Tehama-Colusa Canal became operational, changing the relative surface water supply and groundwater supply mix in sub-areas served by the canal. The Glenn County Technical Advisory Committee concluded that groundwater levels from this date forward are representative of recent historical conditions and when possible this historical period of record should be used for developing groundwater level BMOs in these sub-areas.

² The use of the word "compliance" in County Code 20.03 should be regarded as "in agreement or conforms" with the "condition" that existed on the day groundwater levels were taken and not an exceedance of a regulatory objective.

Groundwater Management Actions

Stage 1. Groundwater management actions to be undertaken following a Stage 1 condition shall be informational to the WAC and by notification to the public.

Stage 2. Groundwater management actions to be undertaken following a Stage 2 condition shall be informational and investigational. Upon identification of the Stage 2 condition, the noncompliance will be reported to the WAC and the public. Following review and concurrence, the WAC shall direct the TAC to initiate an investigation to determine the cause(s) of the noncompliance and make recommendations as to the nature of the noncompliance as well as how to address and possibly avoid similar conditions in the future. The TAC shall report their findings and recommendations back to the WAC in a timely manner to adequately reflect on the issue.

Stage 3. Groundwater management actions to be undertaken following a Stage 3 condition shall be informational, investigational, and actionable. Upon identification of the Stage 3 condition, the noncompliance will be reported to the WAC and the public. Following review and concurrence, the WAC shall direct the TAC to initiate an investigation to determine the cause(s) of the noncompliance and make recommendations as to the nature of the noncompliance as well as how to address and correct the noncompliance. The TAC shall report their findings and recommendations back to the WAC in a timely manner to adequately take action. The WAC will then work with the local and adjoining sub-areas to implement needed adaptive management activities necessary to correct the problem. Such adaptive management activities shall include, but not limited to, voluntary water conservation measures, redistribution or reduction of groundwater extraction, and/or other measure(s) referred to or identified in Ordinance 1115 as recommended by the WAC and approved by the Board of Supervisors.

Monitoring Recommendations:

Efforts should be made to identify possible additional wells that could be added to the existing monitoring well network in the northern and southern portions of the sub-area to improve the overall coverage within the region.

In the summer of 2007 interim summer BMOs for groundwater level were adopted by the Board of Supervisors. These BMOs utilize the existing dedicated monitoring network. In Sub-area 8 there have been three dedicated wells that have been selected to this effort. At a time in the future, more zones of more wells will be added to the network for summer measurements and ultimately will replace the wells originally designated as BMO wells in 2001.

Attached Supporting Data: * - Hydrographs



Sub-Area 8 East Corning Basin Private Pumpers Well #1 21N01W04N001M North of Road 28, East of Highway 45



Sub-Area 8 East Corning Basin Private Pumpers Well #2 22N02W11Q001M North of Wyo, West of 1st Ave



Sub-Area 8 East Corning Basin Private Pumpers Well #3 22N01W29K001M South of Hamilton City, East of Road 206



Basin Management Objective Glenn County Sub-area 9 Board of Supervisors District Five Private Pumpers Revision January 2010

Basin Management Objective Glenn County Sub-area 9 Board of Supervisors District Five Private Pumpers

Calendar Year: 2010

Glenn County Water Advisory Committee Representative: Mark Lohse

Objective: To maintain the groundwater surface elevation at a level that will assure an adequate and affordable domestic and irrigation water supply. It is the intent of this objective to assure a sustainable water supply now and into the future.

Location of BMO Key Wells: See attached map.

Well # 1 – North side of Road 24, West of Hwy 45 Well # 2 – East side of Road S, South of Road 27 Well # 3 – North side of Road 29, East of Road V

Groundwater Level Monitoring Network: Department of Water Resources - Northern District

Groundwater Level Measurements By: Department of Water Resources - Northern District

Period of Record: 1976 - 2009

Groundwater Level Monitoring Frequency:

Semiannual.

Spring (March-April) Fall (October-November)

Groundwater Well Numbering System: State

Well #	Well ID/Surface Elev.*	Method	Stage 1	Stage 2	Stage 3
	—		Elev./Depth**	Elev./Depth**	Elev./Depth**
1	21N02W02B02M/162.6	2	136.1/26.5	136.1/26.5	130.3/32.3
2	21N02W09M02M/179.0	2	142.0/37.0	142.0/37.0	132.7/46.3
3	21N02W23G01M/152.0	2	125.1/26.9	125.1/26.9	118.7/33.3

* Surface Elev. = Ground surface elevation, **Elev. = feet above mean sea level, Depth = Ground surface to groundwater surface

BMO Alert Stage Method and Definitions:

Method 2 – Standard Deviation

All existing groundwater level monitoring wells within the BMO area were identified. For all wells with a record dating back to at least 1976¹, groundwater levels were obtained using the Department of Water Resources' Water Data Library (WDL). The Spring data for groundwater surface elevation (WSE) was further analyzed. The average and standard deviation were then calculated for these data. The Stage 1 & 2 alerts were determined to be the average of the Spring data minus one standard deviation. The State 3 alert was the average minus two standard deviations.

The Glenn County Water Advisory Committee (WAC) upon a recommendation of its Technical Advisory Committee (TAC) shall declare a Stage 1, Stage 2, or Stage 3 Alert based on the technical criteria presented below. The technical criteria for the WAC to rescind the Stage 1, Stage 2, or Stage 3 Alert is also presented.

A Stage 1 Alert will be declared when any measured Spring groundwater surface elevation is below 1 Standard Deviation from the Average of the time of record utilized for the corresponding BMO Key Well.

A Stage 2 Alert will be declared on the second and subsequent sequential years, when any measured Spring groundwater surface elevation is below 1 Standard Deviation from the Average of the time of record utilized for the corresponding BMO Key Well.

A Stage 3 Alert will be declared when any measured Spring groundwater surface elevation is below 2 Standard Deviations from the Average of the time of record utilized for the corresponding BMO Key Well.

Stage 1, 2, and 3 Alerts shall be rescinded by the WAC when the measured groundwater surface elevations returns to an elevation above 1 Standard Deviation for the corresponding BMO Key Wells.

BMO Compliance Evaluation and Action Procedures:

Compliance² with the BMO will be determined following the Spring groundwater level measurement periods. The groundwater surface elevations at each monitoring well will be compared against the corresponding compliance (condition) graph and stage definition criteria to determine if the groundwater surface elevations are above or below specific alert trigger levels. The TAC will perform this evaluation and report the results of the evaluation to the WAC.

¹ In 1976 the Tehama-Colusa Canal became operational, changing the relative surface water supply and groundwater supply mix in sub-areas served by the canal. The Glenn County Technical Advisory Committee concluded that groundwater levels from this date forward are representative of recent historical conditions and when possible this historical period of record should be used for developing groundwater level BMOs in these sub-areas.

² The use of the word "compliance" in County Code 20.03 should be regarded as "in agreement or conforms" with the "condition" that existed on the day groundwater levels were taken and not an exceedance of a regulatory objective.

Groundwater Management Actions

Stage 1. Groundwater management actions to be undertaken following a Stage 1 condition shall be informational to the WAC and by notification to the public.

Stage 2. Groundwater management actions to be undertaken following a Stage 2 condition shall be informational and investigational. Upon identification of the Stage 2 condition, the noncompliance will be reported to the WAC and the public. Following review and concurrence, the WAC shall direct the TAC to initiate an investigation to determine the cause(s) of the noncompliance and make recommendations as to the nature of the noncompliance as well as how to address and possibly avoid similar conditions in the future. The TAC shall report their findings and recommendations back to the WAC in a timely manner to adequately reflect on the issue.

Stage 3. Groundwater management actions to be undertaken following a Stage 3 condition shall be informational, investigational, and actionable. Upon identification of the Stage 3 condition , the noncompliance will be reported to the WAC and the public. Following review and concurrence, the WAC shall direct the TAC to initiate an investigation to determine the cause(s) of the noncompliance and make recommendations as to the nature of the noncompliance as well as how to address and correct the noncompliance. The TAC shall report their findings and recommendations back to the WAC in a timely manner to adequately take action. The WAC will then work with the local and adjoining sub-areas to implement needed adaptive management activities necessary to correct the problem. Such adaptive management activities shall include, but not limited to, voluntary water conservation measures, redistribution or reduction of groundwater extraction, and/or other measure(s) referred to or identified in Ordinance 1115 as recommended by the WAC and approved by the Board of Supervisors.

Monitoring Recommendations:

Efforts should be made to identify possible additional wells that could be added to the existing monitoring well network in the northern and southern portions of the sub-area to improve the overall coverage within the region.

In the summer of 2007 interim summer BMOs for groundwater level were adopted by the Board of Supervisors. These BMOs utilize the existing dedicated monitoring network. In Sub-area 9 there have been three dedicated wells that have been selected to this effort. At a time in the future, more zones of more wells will be added to the network for summer measurements and ultimately will replace the wells originally designated as BMO wells in 2001.

Attached Supporting Data: * - Hydrographs



Sub-Area 9 Board of Supervisors District 5 Private Pumpers Well #1 21N02W02B002M North side of Road 24, West of Hwy 45



Sub-Area 9 Board of Supervisors District 5 Private Pumpers Well #2 21N02W09M002M East side of Road S, South of Road 27



Sub-Area 9 Board of Supervisors District 5 Private Pumpers Well #3 21N02W23G001M North side of Road 29, East of Road V



Basin Management Objective Glenn County Sub-area 10 Board of Supervisors District Three Private Pumpers Revision January 2010

Basin Management Objective Glenn County Sub-area 10 Board of Supervisors District Three Private Pumpers

Calendar Year: 2010

Glenn County Water Advisory Committee Representative: Larry Maben

Objective: To maintain the groundwater surface elevation at a level that will assure an adequate and affordable domestic and irrigation water supply. It is the intent of this objective to assure a sustainable water supply now and into the future.

Location of BMO Key Wells: See attached map. (Location of Cal Water Well, Willows Station 002-01, approximated.)

Well # 1 – North of Road 31, West of Highway 99
Well # 2 – North of Road 33, East of Road P
Well # 3 – North of Road 33, East of Highway 99 (Discontinued)
Well # 4 – South of Road 35, West of Road P
Well # 5 – South of Road 39, West of Road P
Well # 6 – South of Road 45, East of Road J
Well # 7 - South of Willow Street, West of Lassen Street

Groundwater Level Monitoring Network: Department of Water Resources - Northern District

Groundwater Level Measurements By:

Department of Water Resources – Northern District (Wells No. 1 through 6) California Water Service Company (Cal Water) (Well No. 7)

Period of Record: 1976-2009

Groundwater Level Monitoring Frequency:

Semiannual.

Spring (March-April) Fall (October-November)

Groundwater Well Numbering System:

State (Wells No. 1 through 6) Other (Well No. 7) – Independent numbering system used by Cal Water

Well Number	Well ID	Method	Stage 1	Stage 2	Stage 3
	_		Elev./Depth*	Elev./Depth*	Elev./Depth*
1	21N03W33A04M	2	131.0/43	131.0/43	119.5/54.5
2	21N02W31M01M	2	131.2/29.8	131.2/29.8	123.8/37.2
3	20N03W03D02M	2	Discontinued		
4	20N03W12C01M	2	124.6/34.4	124.6/34.4	117.0/42
5	20N03W23G02M	2	118.0/28	118.0/28	112.0/34
6	20N03W33J01M	2	113.6/22.4	113.6/22.4	104.7/31.3
7	Cal Water 002-01	2	116.1/17.9	116.1/17.9	111.4/22.6

*Elev. = feet above mean sea level, Depth = Ground surface to groundwater surface

BMO Alert Stage Method and Definitions:

Method 2 – Standard Deviation

All existing groundwater level monitoring wells within the BMO area were identified. For all wells with a record dating back to at least 1976¹, groundwater levels were obtained using the Department of Water Resources' Water Data Library (WDL). The Spring data for groundwater surface elevation (WSE) was further analyzed. The average and standard deviation were then calculated for these data. The Stage 1 & 2 alerts were determined to be the average of the Spring data minus one standard deviation. The State 3 alert was the average minus two standard deviations.

The Glenn County Water Advisory Committee (WAC) upon a recommendation of its Technical Advisory Committee (TAC) shall declare a Stage 1, Stage 2, or Stage 3 Alert based on the technical criteria presented below. The technical criteria for the WAC to rescind the Stage 1, Stage 2, or Stage 3 Alert is also presented.

A Stage 1 Alert will be declared when any measured Spring groundwater surface elevation is below 1 Standard Deviation from the Average of the time of record utilized for the corresponding BMO Key Well.

A Stage 2 Alert will be declared on the second and subsequent sequential years, when any measured Spring groundwater surface elevation is below 1 Standard Deviation from the Average of the time of record utilized for the corresponding BMO Key Well.

¹ In 1976 the Tehama-Colusa Canal became operational, changing the relative surface water supply and groundwater supply mix in sub-areas served by the canal. The Glenn County Technical Advisory Committee concluded that groundwater levels from this date forward are representative of recent historical conditions and when possible this historical period of record should be used for developing groundwater level BMOs in these sub-areas.

A Stage 3 Alert will be declared when any measured Spring groundwater surface elevation is below 2 Standard Deviations from the Average of the time of record utilized for the corresponding BMO Key Well.

Stage 1, 2, and 3 Alerts shall be rescinded by the WAC when the measured groundwater surface elevations returns to an elevation above 1 Standard Deviation for the corresponding BMO Key Wells.

BMO Compliance Evaluation and Action Procedures:

Compliance² with the BMO will be determined following the Spring groundwater level measurement periods. The groundwater surface elevations at each monitoring well will be compared against the corresponding compliance (condition) graph and stage definition criteria to determine if the groundwater surface elevations are above or below specific alert trigger levels. The TAC will perform this evaluation and report the results of the evaluation to the WAC.

Groundwater Management Actions

Stage 1. Groundwater management actions to be undertaken following a Stage 1 condition shall be informational to the WAC and by notification to the public.

Stage 2. Groundwater management actions to be undertaken following a Stage 2 condition shall be informational and investigational. Upon identification of the Stage 2 condition, the noncompliance will be reported to the WAC and the public. Following review and concurrence, the WAC shall direct the TAC to initiate an investigation to determine the cause(s) of the noncompliance and make recommendations as to the nature of the noncompliance as well as how to address and possibly avoid similar conditions in the future. The TAC shall report their findings and recommendations back to the WAC in a timely manner to adequately reflect on the issue.

Stage 3. Groundwater management actions to be undertaken following a Stage 3 condition shall be informational, investigational, and actionable. Upon identification of the Stage 3 condition , the noncompliance will be reported to the WAC and the public. Following review and concurrence, the WAC shall direct the TAC to initiate an investigation to determine the cause(s) of the noncompliance and make recommendations as to the nature of the noncompliance as well as how to address and correct the noncompliance. The TAC shall report their findings and recommendations back to the WAC in a timely manner to adequately take action. The WAC will then work with the local and adjoining sub-areas to implement needed adaptive management activities necessary to correct the problem. Such adaptive management activities shall include, but not limited to, voluntary water conservation measures, redistribution or reduction of groundwater extraction, and/or other measure(s) referred to or identified in Ordinance 1115 as recommended by the WAC and approved by the Board of Supervisors.

² The use of the word "compliance" in County Code 20.03 should be regarded as "in agreement or conforms" with the "condition" that existed on the day groundwater levels were taken and not an exceedance of a regulatory objective.

Monitoring Recommendations:

Efforts should be made to identify possible additional wells that could be added to the existing monitoring well network in the northern and southern portions of the sub-area to improve the overall coverage within the region.

In the summer of 2007 interim summer BMOs for groundwater level were adopted by the Board of Supervisors. These BMOs utilize the existing dedicated monitoring network. In Sub-area 10 there have been three dedicated wells that have been selected to this effort. At a time in the future, more zones of more wells will be added to the network for summer measurements and ultimately will replace the wells originally designated as BMO wells in 2001.

Attached Supporting Data: * - Hydrographs



Sub-Area 10 Board of Supervisors District Three Private Pumpers Well #4 20N03W12C001M South of Road 35, West of Road P



Sub-Area 10 Board of Supervisors District Three Private Pumpers Well #5 20N03W23G002M South of Road 39, West of Road P



Sub-Area 10 Board of Supervisors District Three Private Pumpers Well #6 20N03W33J001M South of Road 45, East of Road J



Sub-Area 10 Board of Supervisors District Three Private Pumpers Well #2 21N02W31M001M North of Road 33, East of Road P



Sub-Area 10 Board of Supervisors District Three Private Pumpers Well #1 21N03W33A004M North of Road 31, West of Highway 99



Sub-Area 10 Board of Supervisors District Three Private Pumpers Well #7 CAL Water Well, Willows Stat. 002-01 South of Willow Street, West of Lassen Street

