

TEHAMA COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT MEETING MINUTES OF MARCH 28, 2006

Present: Ron Warner; Charles Willard; Ross Turner; Gregg Avilla; George Russell. Also present: Ernie Ohlin, Water Resource Manager; Jim Lowden, Chairman AB3030 TAC; Roger Sherrill, Rio Alto Water District; Dan McManus of DWR; Glenn Pearson of the Department of Water Resources; Chris Johnson, Water Hydro-geologist of Kleinfelder, Inc., and Eric Wedemyer of Shasta County.

1. Call to Order: The meeting was called to order by Chairman Warner at 8:30 a.m.
2. Approval of Minutes: Motion by Director Turner, Second by Director Avilla to approve the February 28, 2006 minutes. Carried 5-0 with 0 absent.
3. Public Comment:

Director Turner thanked Ernie Ohlin and Gary Antone for the repair work on Chipman and Mountain View.

Roger Sherrill of Rio Alto Water District announced that the California Water Series, by ACWA, airs on Channel 9, KIXE, April 23 and 28.

4. Claims: Motion by Director Turner and second by Director Russell to approve the claims in the amount of \$3,614.58. Carried 5-0 with 0 absent.
5. Emergency Repair of Deer Creek Levee: Ernie Ohlin reviewed that hi-flows, and rain occurring over January 1, 2006, caused major erosion to the Deer Creek Levee. PL84 assistance was requested from the Corps of Engineers February 28, 2006. As of today, the Corps has not responded. The erosion was considered an emergency, and after conferring and receiving authorization with the Director of Public Works, the emergency work was completed.

Results of diverting water away from the erosion site was presented by way of picture presentation. It should be noted that the main purpose was to protect erosion from further damage and when the Corps comes to visit the site, and/or if not authorized to repair, the County will reuse the rock on the levee itself.

The County is responsible for maintaining the Deer Creek and Elder Creek levee systems and DWR is responsible for the channel maintenance on Deer Creek and Elder Creek. No channel maintenance has been performed to date, but staff will request a schedule from DWR for maintenance to the channels.

Director Turner questioned if correspondence from this Board would assist staff in their efforts and Ernie Ohlin agreed a more formal approach may be needed to get the Corps of Engineers to act in a timely manner.

Motion by Director Turner and Second by Director Avilla to approve the contract and Amendment

#1 to Carl J. Woods in the amount of \$11,523.16. Carried 5-0 with 0 absent.

6. Sun City Tehama Water Supply Analysis - Overview: Ernie Ohlin presented information on the water supply analysis for review of past meetings of the Flood Control Board, flow charts and processes such as SB221 and SB610 which are required. Additional information and work completed was also discussed which was provided by Klienfelder and Del Webb/Pulte.

The proposed Urban Development project is approximately 3300 acres and 3700 homes with a golf course. Staff and DWR have provided groundwater data to Del Webb/Pulte for the project. Data loggers were installed around the project. The 1630 ft. test drilling revealed several aquifers in the area. 10-day pump tests were completed at the 200-500 ft. level and also at the 800-1,000 ft. level. Water quality test results were acceptable with the exception of elevated arsenic levels in the 800-1000 ft. level. Potable water supplies are proposed to be pumped from the 200-500 ft. aquifer.

Klienfelder developed a groundwater model for the project to determine the effects of pumping in the future. Through the analysis the model predicts draw down of 1-3 ft. up to 1-1/2 miles from the project. This is an accumulative total over a 20-year period. The demand for the project is approximately 2400 gallons per minute. The next step will be developing a monitoring plan. Future Staff and DWR comments will request a monitoring plan that would address where and how to monitor, and methodology to address possible adverse impacts in the future. All four sides of the project will be required to have multi-completion monitoring wells.

Ernie Ohlin added that dialogue is important with these projects to insure the County interest is represented. Also, the intent of the project to date is to pump potable water from the 225 to 500 ft. aquifer layer, the 950 ft. aquifer will supply water for construction, the golf course and green areas, until there is enough build-out to supply treated water from the treatment plant.

Drawdown was questioned by Director Avilla and if there a baseline or is there a good aquifer system or sense of what we have. Ernie Ohlin answered that when the project began, there was not much information available. From investigative work completed and the modeling, it appears that the aquifer they are proposing to pump potable water from is sustainable. The model indicates that there is a high degree of recharge.

Dan McManus added that there is not much information in the basin except from this project and from testing for the area, and it appears to have a sustainable water supply source. The questions are the boundary between the Southern Redding basin and the Northern Sacramento Valley groundwater basin and how it will react to development. Monitoring will give more information in the future. There is more development in that area and we will find out in the future.

Director Avilla added that a tremendous amount of work has been accomplished and the water basin is a concern with the development in the area.

Chris Johnson, National Director for the groundwater services for Klienfelder, Inc., discussed the tested wells installed and monitored prior to any work on the site. The deep test hole/well was due to the unknown and the law requiring characterizing what would or could occur in the future. A

tremendous amount of preliminary work was accomplished to allow understanding the hydraulic behavior of these aquifers at the site and input into the numerical model allowing long-term predictions based on certain factors. It should be noted, Mr. Johnson continued, that the aquifer was pumped harder than it would ever be required to work by this project. It is unusual in a model to assume no precipitation for the drought analysis, but we went ahead and did that. A small amount of water was assumed that would actually infiltrate from the surface, recharging groundwater. As far as recharge, a number of different scenarios were used, such as 1-year, 3-year drought, and added boundary conditions. Basically, when looking at boundary conditions, they turned off the supply of water to the site and it was only using the water that was physically underneath the site inside the model grid. The very deepest aquifer responded significantly with turning that boundary off. There are times during the year when the aquifer is releasing water into the River. There are other times when you see water moving from the River to the site. They also modeled around the property. We know there is approximately 3700 units proposed for the site. We modeled 3500 units on the north, east, and the south side of the property. We mirrored a large capacity well on each one of the sites and examined water levels and their response due to that additional development. Using all conservative factors, at the end of the 20-year period, we are seeing between one and four feet of permanent drawdown. The Plan monitoring is underway and the objective is to work with the County to provide long-term information. A post-audit will be done after construction has occurred and at an agreed upon time, running the model and determine if it is giving what was anticipated. We are confident that it will.

Dan McManus added that with the corridor of development in this area, which is expected to continue, the Redding Water Council has developed a model for the Redding Basin. Mr. McManus encouraged working together with Redding Water Council and collect data from all projects.

Ernie Ohlin introduced Eric Wedemyer of Shasta County and agreed that coordination is important and the influences with development will involve Shasta County. Modeling is a tool and perimeters need to be set to reveal any affects for mitigation.

Roger Sherrill stated that Rio Alto Water District has wells east of the project in the Lake California area. Klienfelder did come to monitor the deepest well at our location. Rio Alto Water Well #5 is at 545 ft. ground surface elevation and 650 ft. below ground surface elevation, the depth of the well. We go down about 400 ft. below the Sacramento River. Monitoring revealed no change in the static level.

Ernie Ohlin informed the Board that updates monthly will be done by staff to keep the members informed.

Director Willard questioned the golf course would provide water for deep recharge and staff answered that the water used would only be enough to sustain the course itself with very little recharge being provided.

7. North of the Delta, Off-stream Storage Update: Glenn Pearson informed the Board that what the department has been working on for a number of years is north of the Delta, off-stream storage consisting of four possible reservoirs: The Red Bank Project, on Red Bank Creek; Thomas Newville Project, north fork of Stoney Creek with the diversion off Thomas Creek; Colusa

Reservoir, and a smaller Sites Reservoir west of Maxwell. After a number of years collecting data, alternatives were formed. Through the environmental documentation, Sites will become the preferred alternative. Sites Reservoir, being 10 miles west of Maxwell, is 15,000 a.f. of local runoff, and a 1.8 million a.f. reservoir site. The rest of the water comes from the Sacramento River and the department is looking for diversion at the Red Bluff Diversion Dam; GCID canal; a pipeline in the town of Dellivan; and a 70,000 a.f. diversion out of Black Butte Reservoir.

The Bureau is a partner and a feasibility study must be completed by them, Mr. Pearson continued. DWR is writing the EIR. Field studies are complete and after an alternative is chosen, re-surveying of the Sites Reservoir will need to be done. The cost is expected to be \$1 billion up to \$2.5 billion and 60% of the project can be built with taxpayer dollars, which is speculative. Interested water agencies to contribute to the project are Metropolitan Water District in Southern California and Bay area water agencies.

Director Willard questioned the amount of acres that would be under water with this project and the cost for the acquired land. Mr. Pearson answered 14,000 acres, and cost is somewhere in the “thousands of dollars an acre”.

Director Avilla questioned the amount of water coming out of the selected sites and the Sacramento River. Mr. Pearson answered approximately 500 c.f.s. (1 c.f.s. running for 24 hours is 2 a.f., which is 10,000 a.f. per day.) and that 98% is coming out of the Sacramento River.

8. Adjourn: With no further business, the meeting adjourned at 9:47 a.m.