

BY EMAIL AND US MAIL

John Goss
12190 Cuyamaca College Drive East, #1410
El Cajon, CA 92019
johngoss@earthlink.net

July 23, 2012

Dan Ferons, Chief Engineer
and Board of Directors
Santa Margarita Water District
26111 Antonio Parkway
Rancho Santa Margarita, CA 92688
johns@smwd.com
danf@smwd.com

Supervisor Chair Josie Gonzales (supervisorgonzales@sbcounty.gov)
Supervisor Neil Derry (supervisorderry@sbcounty.gov)
Supervisor Brad Mitzelfelt (supervisormitzelfelt@sbcounty.gov)
Supervisor Gary Orvitt (supervisororvitt@sbcounty.gov)
Supervisor Janice Rutherford (supervisororrutherford@sbcounty.gov)

Chirstine Kelly
Director, Land Use Services Department (Christine.kelly@lus.sbcounty.gov)
San Bernardino County
385 N. Arrowhead Ave.
San Bernardino, CA 92415-0130

RE: Cadiz water project, groundwater management plan and memorandum of understanding (MOU)

Dear Mr. Ferons and Ms. Kelly,

I am writing to express my concerns with the Cadiz water project and its exemption from the San Bernardino County Desert Groundwater Management Ordinance. I recently learned that the San Bernardino County Board of Supervisors adopted a Memorandum of Understanding (MOU) in connection with the Cadiz water project, with the intent to exempt the project from the San Bernardino County Ordinance, Code Sec. 33.06551. Normally, it is not my practice to comment publicly on issues related to my previous public employment, but after having spent 1 ½ years of my professional life working on and developing the Desert Groundwater Management Ordinance, and seeing the manner in which the ordinance is now being

interpreted, public comment on this subject seems in order. For both procedural and substantive reasons stated in this letter, the Santa Margarita Water District (SMWD) should not approve the Cadiz water project, including the groundwater plan and the accompanying environmental impact report (EIR). As the letter makes clear, the purpose of the desert groundwater ordinance is to conduct a rigorous review of a project such as the one being considered through a groundwater management, monitoring and mitigation plan (GMMMP), which is adopted by the County in its proper role as the lead agency under CEQA.

By way of introduction, I was an Assistant County Administrator at the time the ordinance was adopted in 2002, and led a staff team from the County Counsel's Office and the Land Use Services Department in its formulation. During the 1 ½ years required to develop the ordinance, it was vetted with various local water agencies, private firms and the public. It was a long, and sometimes contentious process, but the result was an excellent ordinance designed to protect the adjudicated water basins in San Bernardino County. This experience may be helpful in providing some insight into the content and purpose of the ordinance and how it should be applied.

Also at that time, I became familiar with the previous version of the Cadiz Water Project, and reviewed the "science" from Cadiz, USGS, and County sources regarding the potential of impacts of the Cadiz proposal on the surrounding area. I also represented the County in testifying before the Metropolitan Water Board when the right-of-way permit to connect the Cadiz wells to the MET aqueduct from the Colorado River was denied. (Curiously, the current iteration of the project does not mention this denial, nor apparently, does it rely on Colorado River water to replace pumped groundwater during "wet" years in the Colorado River Basin to maintain the health of the aquifer).

Based on that knowledge and background, the following comments and observations are offered.

Ordinance Background. The purpose of the Groundwater Management Ordinance is clear: to ensure "...that extraction of groundwater does not exceed the safe yield of affected groundwater aquifers..." The ordinance was designed to protect "...groundwater resources within the unincorporated and adjudicated desert region of San Bernardino County..." The main motivation for creating the ordinance was concern over the size and potential impacts of the Cadiz Project, and the "science" used to support the original project. For example, the Cadiz scientists estimates of recharge back into the water basin was more than three times the estimates offered by USGS scientists and the County's consultants, Durbin and Foster. ("Comments on Draft EIR/EIS, Cadiz Groundwater Storage Project, Cadiz and Fenner Valleys, San Bernardino County, California," Feb. 21, 2000). Given such huge discrepancies between the government and Cadiz reports, the intent of the ordinance was to create a measured, thoughtful, scientific review process which would protect the County's desert groundwater resources.

The ordinance provides for a permitting process which is designed to meet the purpose of the Ordinance. This process, however, can be avoided, but only if both of the following steps have been taken:

1. An adopted Groundwater Management Plan, which adheres to “groundwater safe yield” and “aquifer health” as defined in the ordinance; and
2. An executed Memorandum of Understanding which requires the parties to share monitoring data and coordinates efforts at monitoring groundwater resources, and ensures that measures identified in the AB 3030 plan, or the County-approved groundwater management, monitoring, and mitigation plan (GMMMP) are fully implemented and enforced.

Order of Adoption. The sequence of these two paragraphs is critical. It was intended in the ordinance as written that the groundwater management plan would be first adopted, presumably by the County (which is the permitting authority), and then the MOU would be executed as a means to implement the groundwater plan. Simply, that is why adoption of the plan was stated as paragraph 1 and execution of the MOU as paragraph 2. (See Sec. 33.06552 (b)(1) & (2)).

It was contemplated that the Plan would be prepared first, properly vetted, with any appropriate environmental documents, in order to protect “groundwater safe yield” and “aquifer health” of the desert area being studied. After the Plan was adopted by the County, then the MOU to implement this Plan would be considered and adopted.

In contrast, in the current scenario, the County binds itself to the terms of the MOU without approving the very management plan it is then bound to adopt and implement. The GMMMP is supposed to contain enforcement parameters set by the County, including the County established level of safe yield, yet the MOU was approved before these levels were set. It is unclear whether these levels are contained in the GMMMP at all.

Process Issues. It does not appear that the intended process described in the Desert Groundwater Management Ordinance is properly being followed. As just mentioned, the ordinance contemplates the “adoption” by the County (the permitting authority) of an AB 3030 plan, or a GMMMP, which has not occurred in this case. The development and review of an unadopted groundwater plan attached to the EIR being considered by the SMWD Board, is not the same as development and review of an “adopted” plan by the County. Rather, the County appears to be “approving” the GMMMP as a “responsible agency” under CEQA, which deprives the county the scope and authority necessary to review and approve a project subject to the Desert Groundwater Management Ordinance.

In fact, this problem is spelled out on page 5, May 1, 2012, of the staff report to the Board of Supervisors, when it states under “Next Steps, #4,” “If, upon certification, the County believes that the Final EIR does not satisfy CEQA, the County may file a legal challenge to the EIR in

court.” This means that the County as the permitting authority is giving up its absolute right to approve or disapprove the FEIR, and replacing that with only a right to sue if the County does not feel the FEIR satisfies CEQA. Why the County would give up this right to an agency in a different County, 200 miles from the project, and which agency represents only certain Orange County water consumers, not those impacted by the water withdrawals, is beyond rational comprehension.

The County staff report prepared for this issue and submitted to the San Bernardino Board of Supervisors on May 1, 2012, is important since it, along with public input, is supposed to provide the Board of Supervisors accurate information and professional advice upon which to make an informed decision. The comments which follow express concern about the adequacy of some portions of the staff report to the Board. In that respect, the Board received inaccurate, incomplete or inappropriate staff advice when they acted on May 1st.

An example of inappropriate advice, please see the previous paragraph concerning “Next Steps, #4.”

An example of incomplete advice, the May 1, 2012, staff report (p. 3) advises the Board, “The operator must execute a “Memorandum of Understanding” or other binding agreement with the County that remains enforceable by the County.” While this is true as far as it goes, the staff report does not further inform the Board that the purpose of the MOU is to “share groundwater monitoring information” and that “...the measures identified in the AB 3030 Plan or County-approved groundwater management...plan are fully implemented and enforced.” Basically, the staff report does not reveal to the Board that the MOU is only the tool by which the adopted water management plan is implemented and enforced.

As an example of inaccurate advice, the staff report states (again on p. 3), “The MOU is intended to establish a process for completing a GMMMP...” **This is just plain wrong.** The MOU provision in the ordinance says nothing about the process for completing a GMMMP. Instead, the MOU is intended to provide the data and a monitoring scheme to implement an adopted GMMMP, and to ensure that the adopted GMMMP is properly implemented and enforced. This is another example where the staff report provided inaccurate advice to the Board of Supervisors.

Another inaccurate statement in the staff report designed to advise the Board is found on pp. 3 and 4. The report states:

“Key elements of the MOU include;

- The GMMMP is anticipated to include a 50-year term... (and)
- The GMMMP will include groundwater management thresholds, including a “floor” for maximum groundwater drawdown levels...”

These two provisions should be key elements of the GMMMP, not the MOU. The MOU is designed to be the implementing document of the GMMMP, not contain elements of the GMMMP. Conversely, it appears that the groundwater management threshold (to be set by

the County) is absent from the project's (unapproved) GMMMP. Again, this is another example where the County staff report provided incorrect information to the Board of Supervisors on this project.

Why is this process issue important? Because the issues raised by this project proposal, including the prospect of mining of ancient water, which likely has taken thousands of years to accumulate, should not be addressed until a final GMMMP is presented to the Board of Supervisors for approval. In the meantime, the project now "has legs," and an air of legitimacy, with the adoption of the MOU by the Board, and possible action by the SMWD to certify an EIR and approve the Cadiz Project. How that even happen is beyond comprehension when there is no "plan" (GMMMP) being considered by the permitting authority, the County, upon which a proper EIR (with the County as lead agency) can be based. Instead, the County appears to be improperly approving the GMMMP as a "responsible agency" which deprives the County of its proper role and authority. It is incredible that San Bernardino County would give up its authority in this matter and not follow the law of the County as it is reflected in the Desert Groundwater Management Ordinance adopted by the Board of Supervisors in 2002.

Another issue is that certain baseline commitments are apparently already included in the MOU according to the staff report, such as assuming that 20% of the water produced from this project will be used within San Bernardino County. Maybe that commitment should be 25%, 30%, or more. Why make that commitment in an implementing document (MOU) before the GMMMP is adopted by the County? It is the adopted GMMMP which should contain these provisions, not the MOU.

Substance Issues. One of the concerns in reviewing the very impressive scientific data provided by Cadiz 12 years ago was that the amount of water proposed to be extracted (32,000 – 34,000 AFY) far exceeded the projected annual recharge projected by County advisors and USGS scientists. This estimate of average annual recharge was over three times the amount estimated by USGS and the County's consultant. (See above reference, Durban and Foster). It appeared to staff that this was a blatant effort to "mine" ancient water that likely had taken thousands of years to accumulate. Normal recharge would likely take centuries to correct the water deficit created. The current proposal to now extract 50,000 AFY would deplete the aquifer at an even greater rate based on that earlier analysis.

While more "real" data is available for Cadiz II, compared to Cadiz I 12 years ago, the current projections of recharge and evaporation are essentially based on computer modeling. While this is useful to a limited extent, the science associated with this project can have wildly difference results in terms of recharge and water availability. By contrast, however, the amount of water extraction is a firm 50,000 AFY. Compared to developing a city budget, for example, this is like budgeting a firm number for your expenditures, but not really having any idea what your revenues will be. Of course, with a city budget you can make annual adjustments if your revenue estimate is wrong. With Cadiz II, however, you are "stuck" with your "expenditure" amount, likely for 50 years.

In summary, some basic questions remain to be answered as part of the analysis and environmental review prior to the adoption of a GMMMP by the proper permitting authority, the County, which has not yet occurred. These questions concern the true impact of the water mining effort, the depletion of water for future generations, the potential impairment of a nearby mining business, the loss of streams and springs in the Mojave, and the increase in future air pollution. Without the County conducting a proper initial review as the permitting authority, these questions remain unanswered, and the environmental review incomplete.

Here are some observations and questions regarding the current project.

1. The last Cadiz project iteration claimed that water from the Colorado during “wet” years would replace the pumped groundwater. Now that the Colorado River water is considered speculative at best, the project claims it will be naturally replenished/recharged at the very same (or even higher) rate. Even if the 32,000 AFY extraction were covered by an equal amount of evaporation from the salt extraction areas, which is doubted by commentators to the EIR, the remaining additional amount of extraction (18,000 – 43,000 AFY) still vastly exceeds the amount of recharge projected 12 years ago by the County and USGS. (Note: The 18,000 AFY is based on an extraction level of 50,000 AFY, and the 43,000 AFY is based on 75,000 AFY extracted in some years).
2. If an article in my local newspaper (the San Diego Union-Tribune, July 14, 2012) is accurate, Cadiz has offered to pay to drill deeper brine wells for Tetra’s salt extraction operations. If this is the case, clearly Cadiz expects a significant draw down on the underlying aquifer. This appears to be an admission that there will be a significant overdraft, which in turn will adversely affecting the health of this aquifer.
3. If Cadiz will spend money to drill deeper brine wells for Tetra, what will they do to protect the seeps, streams, and springs the health of which is essential to the desert environment and ecology that otherwise will be compromised? Will they offer to drill deeper streams and springs?
4. If overdraft of the aquifer occurs, and the brine wells must be dug deeper, what will be the impact on air quality? It stands to reason that the dry lakes in the area will be more susceptible to the creation of more dust and causing more air pollution with the lowering of the water table. Examples of dust causing air pollution across large expanses include the San Joaquin Valley and areas around Mono Lake and the Salton Sea.
5. While the project commits that 20% of the extracted water will be used within San Bernardino County, why isn’t this percentage higher? And, even if 100% of the water is used in the County, is that worth possibly destroying the health of this aquifer for future generations of the County?
6. Procedurally, why is a public entity outside of San Bernardino County conducting a public hearing on “The Project” and the Final EIR when the approval authority for the GMMMP is, or should be, San Bernardino County? This does not conform to the County’s Desert Groundwater Management Ordinance, and makes it very difficult for members of the affected public to attend this public hearing and state their views and concerns.

It is hoped that these comments will contribute to the ongoing discussion and deliberation concerning the proposed Cadiz project. The Santa Margarita Water District and San Bernardino County should not approve the EIR for the Cadiz project without first having approved a groundwater management plan in accordance with the County's Desert Groundwater Management Ordinance, with the County acting as lead agency under CEQA. As currently proposed, the Cadiz project's approach to groundwater management is flawed in the letter of the law, and speaking from experience, in the spirit of the law as well.

Sincerely,

John Goss