



## Memorandum

To : Ms. Victoria A. Whitney, Chief  
Division of Water Rights  
State Water Resources Control Board  
Post Office Box 2000  
Sacramento, CA 95812

Date: December 22, 2005

Attention Mr. Paul Murphey  
Via Fax: (916) 341-5400

*Original signed by*

From : Robert W. Floerke, Regional Manager  
Department of Fish and Game – Central Coast Region, Post Office Box 47, Yountville, California 94599

Subject : Geotechnical Review of the Technical Reports in Support of Water Rights Application 30166, El Sur Ranch, Monterey County, California, May 2005

### The Proposed Project

Water Right Application 30166, submitted by the El Sur Ranch (ESR), proposes to divert 1800 acre-feet of water per annum on a year-round basis. The diversion wells are located in Andrew Molera State Park and tap underflow from the Big Sur River not far upstream from the lagoon at the mouth. The SWRCB is the state lead agency for the California Environmental Quality Act (CEQA) review of the project and is currently preparing an Initial Study. Protests to this water right application have been filed by Department of Parks and Recreation (DPR), Department of Fish and Game (DFG), and California Sportfish Protection Alliance (CalSPA).

DFG's interest in this application is based on its status as trustee and responsible agency for fish and wildlife resources in California. As such, DFG has, in the past 3 years, reviewed and commented on various documents provided by the State Water Resources Control Board (SWRCB). This memorandum 1) summarizes the findings of the geotechnical review completed for the Technical Reports and 2) provides information regarding the soils of the place-of-use of the proposed water allocation.

### **Geotechnical Review of Technical Reports**

This Department contracted for expert review of "Technical Reports in Support of Water Rights Application 30166, El Sur Ranch, Monterey County California" (May 2005), a report prepared by the applicant's consultants. That review has now been completed, and the comments of our contracted reviewer, Mr. Kit Custis of the Department of Conservation are attached (Attachment 1). In addition, we are providing additional information from the "Soil Survey of Monterey County, California" (USDA Soil Conservation Service).

The conclusions of Mr. Custis' review have been summarized on the second page of his memorandum and are reiterated as follows:

- Results and conclusions from the 2004 study period may not represent the potential impacts from the maximum permit extraction rate or total volume.
- The pumping of the ESR wells results in a reduction in the flows of the Big Sur River as extracted ground water is recharged from surface waters.
- The depletion of surface water flows due to ESR well pumping is spread along several hundreds of feet of river reach. While the loss at any one location may be small, the cumulative loss can exceed 90% of the well yield for prolonged periods of pumping.
- Losses from the river due to pumping extend beyond the period of pumping as the aquifer is recharged. For the highly conductive water table aquifer in the study area, this extended depletion period may extend for several days after cessation of pumping.
- Additional hydraulic data and analysis are needed to document the upwelling of ground water in the area of water quality stations 7, 8, and 9 to demonstrate its presence, rate of inflow and response to ESR pumping.
- Documentation of the methodology for collecting water quality data is needed to evaluate the impact of short-term variations on the report's conclusions.
- Additional documentation and discussion of the saltwater model setup is needed to evaluate the applicability of the model results in assessing potential pumping impacts from the ESR well field on the rate and extent of saline water intrusion.

### **Santa Ynez Soil Series**

Approximately 85% of the pasture proposed as the place-of-use, with a request for an appropriation that results in the use of 6 feet of water per acre per year, is mapped as Santa Ynez soil series. Based on information in the "Soil Survey of Monterey County" (see Attachment 2), this soil type typically has a clay layer 18 to 30 inches below the surface, rendering this soil type as having low permeability. It is questionable as to how the applicant can apply the requested quantity of water to this site without it resulting in prolonged soil saturation.

### **Status of Information Requests**

In response to the NOP for this project, DFG requested information be provided on twelve topics, covering three basic areas of concern. The applicant then proposed a Monitoring Plan, intended to provide data responding to three of the twelve original topics (6, 7 and 8) listed in the NOP comments. In response to a

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SWRCB request, DFG provided comments on that Monitoring Plan to further refine it to be more responsive to the concerns listed in the NOP comments. None of the modifications suggested were incorporated into the Monitoring Plan.

The applicant has now provided three Technical Reports, the first two reporting on aspects of the Monitoring Plan, and the third partially addressing two other topics (9 and 12) identified in our NOP comments. After review of the Technical Reports, DFG provided detailed comments to the SWRCB concerning the information that still requires clarification and disclosure, with the caveat that final comments would be provided after a contract for outside expert review was approved. The applicant responded to our preliminary comments on October 10, 2005, largely defending the scope and accuracy of the information presented in the Technical Reports and providing very little new information. We have now completed our geotechnical review of the Technical Reports, including the information provided in the applicant's October 10, 2005, "Responses to DFG Comments." Our additional review requests clarification regarding the previously supplied information, and questions the conclusions drawn from the data collected (see Attachment 1). Again, we would like clarification from you if it is your expectation that the applicant will be providing any additional information to you.

In addition to the specific deficiencies identified above, we do not believe the information provided by the applicant is responsive to our original comments provided to the SWRCB on November 6, 2002, in response to your NOP, identifying 12 general areas of information which would be needed to adequately identify and analyze the impacts of the proposed project. Again, we would like clarification from your agency whether you have the expectation that the applicant will be providing that information to you for your use in preparation of the EIR, or whether the EIR consultant will be developing the additional information.

If you have any questions or concerns, please contact Ms. Linda Hanson, Staff Environmental Scientist, at (707) 944-5562; or Mr. Carl Wilcox, Habitat Conservation Manager, at (707) 944-5525; or by writing to DFG at the above address.

Attachments

cc: See Next Page

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e9: Larson, Wilcox, Urquhart, Hanson, Hillyard, Hill (CCR), N. Murray (OGC)

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