



# State Water Resources Control Board



**Terry Tamminen**  
*Secretary for  
Environmental  
Protection*

## Division of Water Rights

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**Arnold Schwarzenegger**  
*Governor*

FEB 11 2004

Mr. Geoffrey L. Rabone  
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Dear Mr. Rabone:

COMMENTS ON THE BIG CREEK ALTERNATIVE LICENSING PROCESS, FERC NO. 67,  
120, 2085, AND 2175

These comments are provided to inform Southern California Edison (SCE) of the requirements for a complete application for Section 401 certification. Section 401 (water quality certifications) of the Clean Water Act (33 USC §1341: CWA) requires any applicant for a federal license or permit that may result in any discharge to navigable waters to obtain certification from the State that the discharge will comply with the applicable water quality standards identified in the basin plans developed by the Central Valley Regional Water Quality Control Board and adopted by the State Water Resources Control Board (SWRCB). The SWRCB must receive a complete application before it can consider issuance of a 401 certification.

SCE has elected to use an alternative licensing process for relicensing the Big Creek Hydroelectric Projects (Big Creek). The premise of an alternative licensing process is that it allows for greater collaboration and consultation from stakeholders for the relicensing of a hydroelectric project. SWRCB staff agrees that an alternative licensing process offers opportunities not available in a traditional process, and that the alternative process is intended to be a more open and efficient process.

SWRCB staff endeavors to collaborate with SCE to develop technical studies that determine impacts to beneficial uses caused by controllable factors due to the operation of the Big Creek projects. The technical study plans can be found in the Final Technical Study Plan Package (SCE 2001). The Combined Aquatics Working Group (CAWG) 8 Amphibians and Reptiles study plan contains study objectives that, if met, will allow the SWRCB to determine impacts caused by project-related changes in flow to special status amphibians and reptiles. Specific species of interest are foothill yellow-legged frog (FYLF), mountain yellow-legged frog (MYLF), Yosemite toad (YT), and western pond turtle. The purpose of SWRCB staff participation in this process is to advise SCE on the informational needs of the SWRCB when considering impacts to freshwater aquatic life and habitat. Unfortunately, this input and direction has been disregarded by SCE. As a result, the studies conducted by SCE will likely not provide adequate data to support an affirmative action regarding Section 401 water quality certification for the Big Creek Projects.

SWRCB staff have consistently and clearly expressed concern with the methodology of the amphibian and reptile studies conducted by SCE. Consequently, SWRCB staff has consulted recognized amphibian technical expert Dr. Sarah Kupferberg, who provided us with an evaluation of the CAWG 8 study plan methodology. In addition, Amy Lind (USDA Forest Service) has been selected by the CAWG to peer review the methodology. On January 16, 2004, SWRCB staff received SCE's responses to Dr. Kupferberg's and Ms. Lind's comments on the CAWG 8 report. The intent of the following comments is to express our support for the comments made by Dr. Kupferberg and Ms. Lind, and to correct statements made by SCE.

### **Multiple Sampling**

Dr. Kupferberg states, "there needs to be more than one visit to a stream to search for amphibians and reptiles. These animals, especially FYLF, can be cryptic and inactive if the weather conditions are not suitable." "Repeated visits increase the chance of "hitting it right". Ms. Lind also indicates that several surveys are necessary during a field season; "if one wanted to determine the reproductive status of the foothill yellow-legged frog within a study area, reaches that were known to have characteristics of breeding habitats (e.g. low gradient, relatively shallow, low water velocity areas) would be identified and surveyed several times in the spring (for eggs) and/or the summer (for larvae). Several times is recommended because egg masses can be difficult to detect, especially if there are only one or two of them." SWRCB staff agrees with the comments that Dr. Kupferberg and Ms. Lind provided, and has consistently expressed concern that surveys for amphibians and reptiles were conducted in a manner that is insufficient to find them in the Project Area (Final and Draft Meeting Notes dated March 19, 2002, May 8, 2002, May 13, 2002, May 24, 2002, June 11, 2002, June 12, 2002, May 6, 2003; SWRCB staff comments dated August 12, 2003.) According to the meeting notes dated May 13, 2002: "SWRCB expressed concern regarding the sampling regime proposed by the group. They felt that the sampling regime did not address how habitat was being utilized by different life stages. Completing surveys only once at selected sample sites would not allow enough information to determine how the species was using different habitat components at different life stages."

SCE's response is, "the purpose of the surveys were twofold – to look for presence of amphibians and reptiles and to verify in the field whether the habitat scores calculated by the query corresponded with habitat quality as determined in the field by biologists." SCE also states, "The entire length of every stream in the project area has been surveyed at least once, and many areas have been surveyed multiple times by biologists conducting fisheries, riparian, geomorphology, and wildlife surveys for the project. There have not been any sightings of FYLF in the project area except Jose Creek." This statement appears to suggest that SCE biologists have conducted extensive surveys in the project area for amphibians and reptiles. First, both Dr. Kupferberg and Ms. Lind have expressed that these species are difficult to find during surveys; it is disingenuous to suggest that surveys developed to evaluate fish, plants, terrestrial species, or geomorphology are equivalent to focused surveys for amphibians and reptiles. Second, the statement that the "entire length of every stream in the project area has been surveyed" is false. According to Appendices I – P in the CAWG-8 Draft Technical Study

Report, ENTRIX technicians spent a total of 49 hours and 90 minutes looking for FYLF, 30 hours and 23 minutes surveying for MYLF, 22 hours and 52 minutes surveying for Yosemite Toad, and 2 hours and 30 minutes surveying for Western Pond turtle. SWRCB staff find it difficult to believe that 100 miles of stream could be adequately sampled for these amphibians and reptiles in the equivalent of four and a half days. Additionally, 734 minutes, or a little over a half day, of that time was spent surveying populations in Jose Creek, a non-project stream historically known to have FYLF. Regardless, ENTRIX technicians did not survey the entire length of every stream. They surveyed 1,000 ft segments of reaches; 15 segments for FYLF, 17 segments for MYLF, 12 segments or meadows for YT, and 5 segments for western pond turtle that were chosen on the basis of habitat quality and accessibility. SWRCB staff would like to point out that SCE's statement that "only one population with only 12 individuals was detected in nearly 100 miles of stream surveyed," is also disingenuous.

### **Verification of the Model**

Both Dr. Kupferberg and Ms. Lind comment on SCE's attempts to verify the queried habitat scores. Dr. Kupferberg expresses a "need to see whether the model is a good predictor of the FYLF abundance and/or presence/absence within Jose Creek." She further indicates, "this approach has merit, but there needs to be some verification of the model's predictive ability. At this point, it is a hypothesis, and therefore needs testing." SCE responded, "The intent prior to the field surveys was to test the ranking system by statistically comparing the habitat where frogs were observed versus where they were not. However, during the surveys, the only frogs found in the project area were in Jose Creek, which is a non-project stream, and only 12 individuals were detected. Unfortunately, a single small population on one creek does not provide the required statistics to adequately test whether the habitat usability scores correlate with abundance." If the purpose of the surveys were to validate the habitat usability scores, and the surveys did not detect amphibians or reptiles in the project area, the model is useless. SWRCB staff expressed this concern on July 28, 2003; "SWRCB does not believe that validation of the queries has occurred because of the lack of species in the sample locations. Britt said that her understanding was that the habitat would be identified, and then if they are not there then the sample would be done to observe species presence or absence." (Final Meeting Notes) Amy Lind indicates that, with respect to validating the approach, "the main idea here is to be able to show that species are more likely to occur (or be in higher abundance) along higher ranked reaches than along lower ranked reaches. **note:** This is not the same as the query verification that is presented in section 5.1.5. because all that verification does is compare the opinion of someone in the field with the query results. Ideally the actual presence and relative abundance of the species of interest is what determines whether the habitat ranking was correct."

SWRCB staff believe that surveys need to be conducted according to a scientifically defensible protocol to determine first whether amphibians and reptiles are present or absent in the study area; and second, whether the areas where amphibians and reptiles are found correlate with high usability scores. SWRCB staff has consistently expressed concern that the surveys conducted by SCE are not scientifically defensible, nor are they adequate to find the amphibians and reptile of

concern if they are present in the project area. Unfortunately, our repeated requests for adequate sampling have been ignored. Therefore, we disagree with SCE's response that "the methodology of the study was determined by the Combined Aquatics Working Group in a multiyear, collaborative, working group atmosphere."

### **Study Objectives**

Ms. Lind comments that "the study objective 'document the occurrence of native and non-native amphibian and reptile populations, their predators, and their habitats' is far too general," and indicates "there is no way to gauge by the end of the report whether this objective has been met." The SWRCB believes that this objective has, in fact, not been met. SCE's statement is "the objective was not meant to imply that the presence and absence of all native and non-native amphibians and reptiles, their predators, and their habitats would be determined through surveys. Documentation includes information obtained from literature review and agency and expert consultation, as well as surveys." SWRCB staff disagree. Our understanding was that surveys would be conducted for the presence or absence of these species. The CAWG has discussed the need for presence/absence surveys repeatedly:

"There is concern over the extent of the sample survey, will it be sufficient to capture everything. Two levels of study, reconnaissance level to identify habitat, then more detailed surveys would be developed for presence/absence." (Final Meeting Notes, December 13 & 14, 2000)

"We need to only determine the effect of the project on frogs, we should not need to determine presence. ENTRIX was told that the USFWS will not assume the absence of special status amphibians if focused surveys are conducted and no special status amphibians are found. If there is potential habitat then USFWS assumes presence, then we will need to evaluate the effect of the project on the habitat, (i.e. flow water quality, functionality etc). The issue is not the presence of the species, it is the effect on the project on the habitat.

"We need to know where they are because we are going to have a long term monitoring program for these species." (Final Meeting Notes, March 15, 2001)

"If we need to use a habitat based approach why do we need to do special status surveys. We are really deferring decision on the number of sites we will be visiting for protocol surveys. We are defining the process that will be implemented to determine the protocol survey and the number sites. If everything utilizes a habitat based approach and we go out and do focused protocol surveys will this be useful in the decision making process and useful in determining the mitigation measures.

"Yes, the surveys are important. The populations and life stage data collected will help determine the type and level of mitigation that will be implemented/required. There was agreement that the protocol surveys will be useful in determining the level of mitigation measures in the decision making process." (Final Meeting Notes, April 18 and 19, 2001)

“We are still taking a habitat-based approach, but we will do some presence absence surveys.”  
(Final Meeting Notes, February 13, 2002)

“SWRCB is concerned with taking habitat based approach. They are charged with protecting beneficial uses and they need to know how the habitat will be affected by Project operations. They need the habitat information, but also need to know where the species occurs within the watershed. This would allow them to have the information necessary to make decisions on where, for example, whitewater runs should occur versus fisheries management, etc. SWRCB is concerned that the sampling regime, as proposed by the Subgroup, is not consistent with the study objectives identified in the study plan.”

“SWRCB reaffirmed that they are concerned we are unable to meet the study objectives for evaluating the foothill yellow-legged frog with the proposed survey methodology.”

“The SWRCB explained that they are concerned that the group is using the model to determine the amphibian habitat for the project area rather than only for identifying potential sampling sites. The SWRCB needs to look for the presence of amphibians and reptiles in the field to be able to make their management decisions and to balance the protection of beneficial uses. [SWRCB staff believes that they need data on presence/absence to be able to reasonably justify recommendations for management decisions for the protection of all beneficial uses, which is why they normally do not base management decisions on whether habitat is available for the species.]” (Final Meeting Notes, May 6, 2003)

Further, the CAWG-8 Draft Technical Study Report, indicates that MYLF and YT were not detected during the amphibian and reptile surveys, and western pond turtle were detected only incidentally. However, there are reports of historic occurrences of MYLF, YT, and western pond turtle. SWRCB staff reiterates that the surveys conducted by SCE are inadequate. Amy Lind states, “Having had some experience on the Trinity River and in Hayfork Creek with western pond turtles, I know it is not always possible to detect them with visual surveys. On warm days, they often spend long periods of time underwater or near the surface and are best detected by snorkeling. This may be why western pond turtles were not detected using your survey methods but were seen incidentally during other sampling. The turtle survey methods could use a review by a turtle biologist.” SCE’s response is, “The methodology was selected by the Amphibian and Reptile Subgroup.” This statement is wrong. SWRCB staff believes that the surveys conducted for western pond turtles did not follow the methodology agreed to by the subgroup, and are inadequate to determine the presence of the species. Please note the following comment from SWRCB staff on the Amphibian and Reptile Draft Technical Study Report, dated August 13, 2003:

“SWRCB staff note that no WPT were observed during the surveys for WPT. Despite this, surveys were conducted as follows: Big Creek Powerhouse 2 – Dam 4, 50 min. Big Creek Powerhouse 8 to Dam 5, 1 hour, 30 min. North Fork Stevenson Creek below the Tunnel 7 outlet, 1 hour, 40 min. Pitman Creek below the diversion, 2 hours, 50 min. San Joaquin River,

Mammoth Reach, 2 hours, 25 min. This is not in accordance with the agreement made during the 7-09-02 Amphibian Subgroup meeting, which states:

'The Subgroup determined that the Reese protocol should be followed with modification to time spent at each pool. The Subgroup discussed spending a minimum of thirty minutes at each pool. If the species was observed, surveyors would move to the next pool. If not, they would spend up to two hours, are required by the protocol. The Subgroup agreed to include a two-hour time period would be spent at those areas that met the Subgroup approved pool definition.' Therefore, either the Subgroup approved approach for sampling Western Pond Turtle was not followed by the surveyors, or there were no pools that fit the preceding criteria in Big Creek Powerhouse 2 – Dam 4, Big Creek Powerhouse 8 to Dam 5, or North Fork Stevenson Creek below the Tunnel 7 outlet. In addition, the Amphibian and Reptile Subgroup has not determined whether additional surveys are necessary."

Please also note comments in the Draft Amphibian/Reptile Subgroup Meeting Notes July 19, 2002:

"The Subgroup was reminded of the importance to assess the need for additional WPT studies in 2003 in areas not previously surveyed in 2002. Additional focused surveys for the WPT in 2003 may be needed."

"Site selection is focused on spatially distributed sites that have not been previously surveyed this year. Therefore the WPT protocol (Reese) is being used on a small number of sites, and the subgroup will assess the need for revisiting good quality sites next year."

From Final Meeting Notes May 6, 2003: "Janelle answered that the group will review the need for additional survey sites later this year."

SWRCB staff cautions SCE of the risks taken in proceeding with environmental studies without agreement on the adequacy of studies. Additional effort and investment on the part of SCE may be required before analysis of data can proceed. It is our hope that SCE will cooperate with SWRCB staff in the future to ensure the success of the collaborative and a positive outcome with respect to water quality certification.

If you have any questions concerning these comments and requests, please call me at (916) 327-9149.

Sincerely,



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Environmental Scientist

cc: See next page.

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