



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**REGION IX**  
75 Hawthorne Street  
San Francisco, CA 94105

January 10, 2007

John P. Clancy  
Section 10 Supervisor  
Arcata Area Office  
Southwest Region  
National Marine Fisheries Service  
National Oceanic and Atmospheric Administration  
1655 Heindon Rd.  
Arcata, CA 95521

Subject: Final Environmental Impact Statement, Issuance of Federal Incidental  
Take Permits / Enhancement of Survival Permits and Implementation of a  
Multiple Species Aquatic Habitat Conservation Plan for Green Diamond  
Resource Company Lands in Northern California, Del Norte and  
Humboldt Counties (CEQ # 20060476)

Dear Mr. Clancy:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced Final Environmental Impact Statement (FEIS) pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. Thank you for agreeing to consider our comments beyond the December 27<sup>th</sup> due date.

EPA reviewed the Draft Environmental Impact Statement (DEIS) and provided comments to the National Marine Fisheries Service (NMFS) and U.S Fish and Wildlife Service (USFWS) on December 12, 2002. We rated the DEIS as Environmental Concerns - Insufficient Information (EC-2) primarily because of concerns related to water temperature impacts.

In our comments, we had recommended modeling to better predict the impact that the Proposed Action's 15-20% canopy reduction would have on water temperature. NMFS and USFWS responded that the EIS contains sufficient information for the analysis and concluded that modeling is not necessary. Instead, the Class II Paired Watershed Temperature Monitoring (Class II study) was referenced, with conclusions that reductions in canopy cover would not significantly affect water temperature. The FEIS also concludes that slight changes in temperature will not significantly impact beneficial uses.

We have concerns with the use of the Class II study for supporting conclusions in the impact assessment. The FEIS acknowledges the limitations of this study, including the small sample size and short timeframe (a single season in 1995). Since the study is

small and largely inconclusive, EPA believes any conclusions based on the study are unsound and should not be used for decision-making.

We disagree with the conclusion that slight changes to water temperature are not significant. As previously stated, in relation to Total Maximum Daily Loads (TMDLs), EPA has concluded that any increases in stream temperature, including temporary increases, are adverse to beneficial uses, especially the most sensitive beneficial use – cold water fish. Thus, such impacts would adversely affect water quality. The FEIS acknowledges that slight increases in water temperature may occur as a result of minor reductions in overstory canopy closure following timber harvesting but concludes that the impact is insignificant because canopy cover will eventually increase as stands recover. However, the time period between canopy removal and regrowth does not appear to have been considered; regrowth of the canopy that is adequate to return stream temperatures to their pre-harvest condition could take 10 to 20 years. This could adversely affect many cycles of returning salmonids. The determination of significance should consider impacts in relation to the time scale of the resource.

Given that the scope of the Class II study limits its ability to effectively determine the significance of the proposed actions on stream temperatures, EPA continues to recommend modeling be performed to address deficiencies in data needed for the impact analysis. If decisions are made based on the Class II study results, we recommend the uncertainties of this study's conclusions be emphasized in the Record of Decision (ROD) and additional protections be included in the project to account for the study's substantial limitations.

Specifically, EPA recommends additional prescriptions be considered for the geographic areas showing temperature impacts under existing conditions. Long-term monitoring described in the FEIS shows that temperature may be a limiting factor for salmonids in Redwood Creek, portions of the Mad River Hydrographic Region, and the lower mainstem North Fork Mad River<sup>1</sup> (FEIS, p. 3-38, 3-39). Additionally, the stream assessment showed summer water temperatures at five sites to be above monitoring thresholds that would trigger an adaptive management response under the Plan (AHCP/CCAA p. S-6). These areas should receive prescriptions that acknowledge their less than ideal existing condition for salmonids.

Measures to address temperature should also be part of the adaptive management program. The response to comment F1-2 states that effectiveness monitoring will be performed to determine if water temperature measures are producing the intended results, and changes to the conservation measures will be implemented via the adaptive management process. The adaptive management process allows for changes to Riparian Management Zone (RMZ) widths (AHCP/CCAA p. S-19) but does not indicate an allowance for changes in canopy cover. We recommend that changes to canopy cover be included in the adaptive management program as a mechanism for addressing adverse

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<sup>1</sup> The State of California has listed the Mad River for temperature under the Clean Water Act 303(d) list, indicating that it does not meet current water quality standards for temperature, and a temperature TMDL will be developed for this water body.

temperature results, because both the height of the tree canopy as well as the width of the RMZ will be important factors in determining the success of the Plan in protecting water quality.

We appreciate the opportunity to review this FEIS. When the ROD is available, please send one copy to the address above (mailcode: CED-2). If you have any questions, please contact me at (415) 947- 4184 or Karen Vitulano, the lead reviewer for this document, at (415) 947-4178 or [vitulano.karen@epa.gov](mailto:vitulano.karen@epa.gov).

Sincerely,

/s/

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Communities and Ecosystems Division