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September 6, 2000

Nina Bicknese
U.S. Army Corps of Engineers
1325 J Street
Sacramento, CA 95814

Terry Neudorf
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118

Re: Draft General Re-Evaluation and Environmental Report for Proposed Project Modifications: Guadalupe River Project (June 2000)

Dear Ms. Bicknese and Mr. Neudorf:

We attach a technical review prepared by Dr. Stacy Li.

We submit one additional comment. The draft report concludes that the preferred alternative may have a significant adverse impact on channel form in Segments 1 and 2. (Table 5.15-1, p. 5-87). Erosion there may increase five-fold on an average annual basis, and ninety-fold in the design flood. (Figure 5.2-1 and 5.2-2). If so, this impact may extend far downstream where eroded sediments will eventually be transported, and even upstream. Although we acknowledge that these estimates of erosion rates may be overstated (p. 5-15), and further that the project sponsors are generally committed to maintenance or other corrective action on the basis of post-construction monitoring (p. 5-16), this impact may threaten the achievement of management objectives (p. 8-1) for this Project. It may degrade the capacity of the lower Guadalupe Project to pass the design flood, and also the stability and effectiveness of environmental mitigation measures undertaken in Segments 1and 2 and downstream. We request that the final report contain a systematic analysis of alternative strategies to prevent or reduce this impact. GCRCD-1

As a general matter, I express our gratitude for the outstanding quality of the draft report, and for the project sponsors' continuing commitment to provide flood protection in a manner that protects and enhances the other beneficial uses of the Guadalupe River.

Thank you for your consideration of these comments.

Sincerely,

Richard Roos-Collins

Richard Roos-Collins
NATURAL HERITAGE INSTITUTE

Attorney for GUADALUPE-COYOTE RESOURCE CONSERVATION DISTRICT, TROUT UNLIMITED, AND PACIFIC COAST FEDERATION OF FISHERMENS' ASSOCIATIONS

TECHNICAL COMMENTS OF DR. STACY LI, CONSULTANT, GUADALUPE-COYOTE RESOURCE CONSERVATION DISTRICT, TROUT UNLIMITED, AND PACIFIC COAST FEDERATION OF FISHERMENS' ASSOCIATIONS, ON DRAFT GENERAL RE-EVALUATION AND ENVIRONMENTAL REPORT: GUADALUPE RIVER PROJECT (June 2000)

Chapter 4. Affected Environment

4.6.3.5 Water Temperature (p. 4-52)

General comment: This entire section relies on general literature that may or may not be relevant in the Santa Clara Valley. It uses a classification (optimal, suboptimal, and lethal) that most readers will assume is reality, when it is merely inference. GCRCD-2

Statement: "In the Guadalupe River between the Guadalupe River-Los Gatos confluence and at I-880, existing water temperatures for some life stages are frequently lethal."

Comment: This statement is misleading. There are no data demonstrating lethality. The assumption of lethal temperatures is based upon literature review and the creation of a class called lethal. There is a lack of site specific suitability criteria for water temperature for anadromous salmonids. GCRCD-3

Statement: "Water temperatures currently limit successful spawning of steelhead in the mainstem Guadalupe River to January and February. Water temperature lethal to incubating steelhead eggs generally occur in the main stem Guadalupe River by April."

Comment: This statement is also misleading. There are no data on steelhead spawning success in the Guadalupe River. The statement is an inference based upon literature review of anadromous salmonid water temperatures. The literature has a geographical bias since virtually all studies have been in Oregon, Washington, and British Columbia. The physiological and ecological responses of anadromous salmonids from Central California to water temperature may be much different than those from the Pacific North-west. GCRCD-4

Chapter 5. Environmental Consequences

5.1.3.1 Channel Capacity (p. 5-4)

Statement: "The HEC-RAS modeling results show ….." GCRCD-5

Comment: Does this HEC model account for effects of bedload transport on channel capacity or is this a clear water model? If HEC does not account for geomorphological processes what other studies account for this effect? Section 5.2.3.12, "Channel Erosion and Deposition," essentially states that effects of erosion and sedimentation can not be determined.

5.3.3.4 Water Temperature (page 5-22)

Statement: "Therefore, the actual postproject effect of the Guadalupe River Project with Proposed Action on water temperature will be less than indicated by the JSATEMP simulation"

Comment: Since work in segments 1 and 2 removed SRA, these works increase river water temperatures. It is true that the magnitude of water temperature increase is less, but the increase in water temperatures related to this project is as bad as the JSATEMP simulation because the increase in water temperature is from an elevated temperature and less suitable for anadromous salmonids. GCRCD-6

Statement: "Postproject water temperature decrease in the downtown area because riparian vegetation would be removed."

Comment: This makes no sense. Water temperatures will increase with the removal of shade. GCRCD-7

Id. (page 5-27)

Statement: "New SRA cover vegetation and riparian vegetation planted for project mitigation would begin to reduce water temperatures from the postproject peak values as soon as they begin to provide shade to the water surface approximately five years following construction."

Comment: What is planned to mitigate for loss of SRA in the meantime? GCRCD-8

Chapter 5.6.4.1 Adult and Juvenile Anadromous Fish Migration, River Morphology Effects (page 5-59)

Statement: "The proposed Action includes armoring a portion of the channel bed with concrete cellular mattresses (CCM)."

Comment: This increases velocity and perhaps stage. Does it also increase the risk of bank failure? GCRCD-9

Chapter 5.6.4.3 Resident and Anadromous Fish Rearing, Water Temperature Effects (page 5-64)

Statement: "Most juveniles probably migrate from the river prior to May."

Comment: What data were used to make this inference? GCRCD-10

Id. (page 5-65)

Statement: "Juvenile steelhead could move, relocating from warm areas in segments 1, 2, and 3 to habitat with more suitable water temperatures, including deeper pools, and local areas of cool water inflows in Segments 1, 2, and 3 and cooler upstream reaches and tributaries." GCRCD-11

Comment: This is a real reach. The Proposed Action will warm the stream. Having the fish move to more ideal areas assumes access to these areas (there are many passage impediments, especially to juveniles) and no impact of increasing abundance density. GCRCD-11

Id. (page 5-65)

Statement: "Water temperatures would cool in the entire project area...."

Comment: This paragraph is misleading because it provides no time frame when post mitigation would occur. How long will it be before any cooling occurs? Is this thirty or forty years? GCRCD-12

Chapter 6.2.4.4 Temperature (page 6-28)

Statement: "Under postmitigation conditions for the combined Upper Guadalupe River Project and the Guadalupe River with Proposed Action, shade provided by plantings of riparian vegetation would reduce water temperatures to below postproject levels."

Comment: When? GCRCD-13