September 8, 1982

District Engineer
Corps of Engineers, U. S. Army
P. O. Box 1580
Albuquerque, New Mexico 87103

Dear Colonel Pylant:

This planning aid letter presents suggestions for fish and wildlife improvement and data gaps for the Truth or Consequences Flood Control Project, Sierra County, New Mexico (CE).

Our involvements in the project began in fiscal year 1980. Planning aid letters were sent in August and September 1980, March and April 1981, and June 1982. The June report described the biological resources in the project area.

The wetland at the junction of Cuchillo Negro Arroyo and the Río Grande should be preserved and enhanced to benefit wildlife. Figure 1 is a map of the wetland. Improving the water supply to the wetland would benefit wildlife. This can be accomplished by pumping water from the Río Grande and by building dams in Mescal and Cuchillo Negro Arroyo and storing runoff to be used in the wetland. Constructing dikes and installing pipelines and valves would control water levels. Additional measures which may be necessary to improve the wetland include: blasting ponds, clearing vegetation, establishing food and cover plants, restricting livestock grazing, constructing roosting and resting sites and managing a fishery. As this project progresses, specific measures will be recommended.

The fisheries in Elephant Butte and Caballo Reservoirs and the Río Grande between the reservoirs could be improved by developing a comprehensive fisheries management plan. The plan would involve the New Mexico Department of Game and Fish, and the Bureau of Reclamation. Specific measures which the plan would consider include:

a. Determine proper releases from Elephant Butte Dam to benefit the fisheries in the Río Grande.

b. Construction of a small re-regulating reservoir below Elephant Butte Dam to maintain instream flows in the Río Grande.
Figure 1. Vegetation in the Wetland Management Area.
c. The construction of dams on tributaries to release floodwaters into the Rio Grande when it is low. This would also reduce sediment inflows into the Rio Grande.

d. Increase dissolved oxygen in the water released from Elephant Butte Dam.

e. The possible need for a low flow channel or other structures to provide aquatic habitat during periods of no flow from Elephant Butte Dam.

The riparian habitat along the Rio Grande should be preserved and could be enhanced. Eliminating grazing along the river would benefit wildlife. Planting trees such as cottonwoods, willows and Russian olive to enlarge riparian areas would also benefit wildlife.

Watershed treatment by controlling land use such as grazing and establishing vegetation on eroded areas would be beneficial. Small check dams and other structures which reduce erosion would benefit fish and wildlife. Establishment of water catchments in drier areas would increase the wildlife carrying capacity.

Additional fishing could be provided by improving access to the Rio Grande especially on the east side of the river. Providing roads and clearing saltcedar would provide fishing spots. Hunter access should be improved in Mescal Arroyo and Cuchillo Negro Arroyo. Purchasing easements for public fishing and hunting may be appropriate.

Flood control could be accomplished by channelization, floodplain evacuation, floodplain zoning, dams or watershed treatment. We oppose any channelization of the Rio Grande. Field studies and the literature demonstrate the high value of the riverine, riparian and wetland habitats. Floodplain evacuation and zoning should be explored. Dams constructed in Cuchillo Negro and Mescal Arroyos would trap sediment flowing into the Rio Grande and thereby benefit the fishery in the river and in Caballo Reservoir. Watershed management would also reduce peak flood flows and benefit wildlife habitat.

To complete our analysis of this project, we plan to use Habitat Evaluation Procedures (HEP). Final evaluation species should be selected by an inter-agency team. Habitat Suitability Index Curves should be selected or developed for each species. When specific information is available for each alternative, additional surveys and analysis will be needed to
identify resource concerns. The HEP needs to be conducted, summarized and analyzed. A Fish and Wildlife Coordination Act report will be written to identify and document impacts, mitigation and enhancement measures for each alternative.

Sincerely yours,

Richard A. Hoppe
Field Supervisor

cc:
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