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Trout Project
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OPTIMAL HABITATS AND FOOD PREFERENCES FOR TROUT IN THE GUADALUPE RIVER

Project:

Conduct a quantitative macroinvertebrate benthic and drift study along the fourteen mile stretch of the Guadalupe river below the Canyon Reservoir tailrace. The goal of this research is to establish the preferred food and favorable foraging locations of the trout population. The results of this survey will focus on improving the existing fishery and allowing a carry over trout population to thrive.

Food. This examination will include a survey of the abundance of invertebrates and identify the preferred food sources of importance to the trout. Both mobile benthos and benthic drift will be collected in order to give a comprehensive picture of the food available. Sampling techniques will include day-long drift netting, examination of stomach contents, kick netting and seining to determine the primary food species.

Habitat. Locate the sites where the trout are most prevalent. Determine what environmental features on the Guadalupe River constitute the optimal locations based on trout utilization. This information will allow informed stocking by both Trout Unlimited (TU) and Texas Parks and Wildlife (TPW). This will provide some insight into possible alterations that might improve the existing river environment.

Stocking. Study sections of the river in an attempt to determine the optimal locations which are the best release sites for the stocking of both adults and fingerlings. Informed stocking, a direct result of locating both prime habitat location and food sources, will allow long term success for the trout population.

Recommendations. Make proposals based on a literature search and the results of the foregoing study to focus on improving stocking habitats and/or enhancements to the tailrace.

The long-term goal of this work is to improve the existing trout population and create an informed stocking program that will make the Guadalupe River the southernmost carry over trout population in the United States and possibly serve as a model for other southern tailrace streams.