Flood Protection and Stream Channel Habitat Improvement Project

Proposed by Lake County Watershed Protection District – February 2024

This project will occur within 10 miles of natural and modified streams in Upper Lake, Lake County, CA. The town of Upper Lake is surrounded by a complex and aging system of levees built by state and federal agencies and currently under the management of the local Lake County Watershed Protection District ("District"). The levee system of channels and diversions is interwoven among several small and large natural creeks that provide vital habitat to the Clear Lake Hitch ("hitch"), a CA state-listed threatened minnow fish species and is on the pathway for a potential listing under the Federal Endangered Species Act.

The goals for managing a high flow, conveyance systems of levees and channels to provide winter and spring flood protection sometimes do not align with the restoration and conservation of in-stream habitat for Clear Lake hitch, which swim upstream in spring to spawn. Several plans and ongoing local efforts have been made by local agencies, state agencies, and tribal partners to better understand the needs of the hitch in regards to stream habitat. However, insufficient funding combined with recent and recurring droughts and flood disaster events have made managing levees for both flood protection and habitat restoration very difficult.

A congressional community funds project would provide the necessary resources available for local levee flood managers and tribal partners to holistically and effectively manage in-stream channels to allow high flows through the rainy winter months, and maintain baseline flows in spring to support hitch spawning runs. This project's major tasks include strategic vegetation management, targeting invasive and nuisance species growth, removal of sediment and in-stream barriers that both restrict flood flows and block migrating fish, installation of stream and levee shoreline protection that also provides spawning cover and reduces erosion and levee wall sloughing, and restoration that provides habitat but allows flood protection. This project would require local collaborations between the State and Local agencies managing the levees and local tribal partners that are focused on hitch habitat and species recovery, and private property owners.

Local tribal partners include Habematolel Pomo of Upper Lake (HPUL) and Robinson Rancheria (RR), the tribal organization Tribal Eco Restoration Alliance (TERA), and state partners include California Department of Water Resources (CDWR) and California Department of Fish and Wildlife (CDFW), Northshore Fire District (NFD), and Supervisor for District 3.

Project Tasks, Partners and Estimated Line –Item Budget

Task Description	Partners	Estimate Budget
Project Management	HPUL, RR, TERA, CDWR	\$125,000
Planning and Design	HPUL, RR, CDWR	\$300,000
Nuisance Vegetation Management	TERA, NFD	\$150,000
Erosion Prevention / Stream Shoreline Stabilization	CDWR	\$225,000
Stream Restoration	HPUL, RR, TERA	\$400,000
Monitoring	HPUL, RR, TERA	\$150,000
	Subtotal	\$1,350,000
	Project Match / Contribution	\$350,000
	Project total for funds request	\$1,000,000