Offstream Storage and Flow Restoration Project Upper Grape Creek, Russian River

The Russian River's once-vibrant population of coho salmon has dwindled to near-extinction levels in recent years, due in part to diminished streamflows in the tributaries where adult coho spawn and newly-hatched juveniles spend their first year of life. Many wine grape growers need water to apply water to their crops not just for irrigation, but also to protect them from springtime frost, and diversions for frost protection can contribute to sudden drops in streamflow that impact young coho salmon and steelhead.

The Upper Grape Creek Offstream Storage and Flow Restoration Project eliminated the last known direct diversion for frost protection in the Grape Creek watershed. The project called for removing an on-stream flashboard dam, which diverted water directly from the creek, and replacing it with a new offstream storage reservoir, which is filled with a combination of rainwater and groundwater. The project enhances streamflow in approximately 1.6 miles of Grape Creek, improving rearing and passage conditions for juvenile coho salmon and steelhead trout. With the new 1.4 acre-foot reservoir in place, the landowner has discontinued the use of the flashboard dam, which formerly provided both frost protection and irrigation water from May through September. The landowner signed an agreement stating that he will no longer divert water from the stream for either purpose for a minimum period of 20 years.

The Upper Grape Creek Project provides important benefits to both coho and steelhead in a critical Russian River tributary. It also serves as a tangible demonstration of how sound science, careful planning, and collaboration with landowners, funders, and permitting agencies can produce water supply solutions that meet the needs of both fish and farmers.





Project Partners: G. Mazzera Company, Russian River Coho Partnership (Center for Ecosystem Management and Restoration, Gold Ridge Resource Conservation District, Occidental Arts and Ecology Center, Sonoma Resource Conservation District, Trout Unlimited, UC Cooperative Extension/California Sea Grant), National Fish Habitat Action Partnership, National Fish and Wildlife Foundation, National Oceanic and Atmospheric Administration, Storesund Consulting/Noble Consultants, USDA – Natural Resources Conservation Service, U.S. Fish and Wildlife Service.