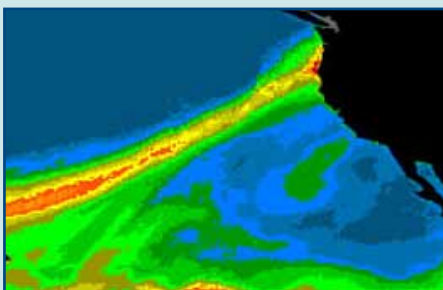


NOAA

**Habitat
Blueprint**



Grapes growing in the Russian River watershed.



Atmospheric Rivers—long lines of rain storms that stream in from the Pacific—are often the cause of flooding in the Russian River watershed.

California's Russian River: A Conservation Partnership

As the first Habitat Focus Area under NOAA's Habitat Blueprint, the Russian River has been identified as a place where NOAA and partners can work to meet multiple habitat conservation objectives on a watershed scale.

Objectives:

- Rebuild endangered coho and threatened Chinook and steelhead stocks to sustainable levels through habitat protection and restoration.
- Improve frost, rainfall, and river forecasts in the Russian River watershed through improved data collection and modeling.
- Increase community and ecosystem resiliency to flooding and drought through improved planning and water management strategies.

Top Tier Collaborative Projects

Improve frost forecasting and protection methods

The Russian River serves as a source of community drinking water, agricultural irrigation, and fish habitat for many species. In the spring, during frost events, vineyards withdraw water from streams to spray plants to protect them from damaging frost. Sometimes water extraction can cause reduced stream flows that negatively impact aquatic species and ecosystems.

NOAA scientists will improve frost forecasting using digital systems and augmenting the number of temperature inversion towers with real time data accessible to vineyard managers. With advanced notice, growers will be able to adequately predict the timing of frost events and use less water or rely on other methods, such as fans, to combat frost.

Participating NOAA Offices: NOAA Office of Oceanic and Atmospheric Research, NOAA Fisheries & National Weather Service

Improve weather and river flow forecasting to maximize water captured for reservoirs and fisheries

This project will apply advanced forecasting techniques to *atmospheric rivers*—a long line of rain storms that stream in from the Pacific Ocean that often cause flooding. These advanced techniques will potentially support forecast-based reservoir operations and allow for improved water management. It may also provide better flood control and help in the recovery of salmon and steelhead populations.

Participating NOAA Offices: NOAA Office of Oceanic and Atmospheric Research, NOAA Fisheries & National Weather Service

For more information visit: habitat.noaa.gov/blueprint



Juvenile coho salmon in the Russian River.



The Russian River estuary.

Have a Comment on these Projects?

E-mail us:

noaarussianriver.blueprint@noaa.gov

Restore floodplain habitat through reclamation of abandoned gravel pits

This project aims to restore a functional Russian River floodplain-wetland complex that will provide wildlife habitat and support the recovery of salmon populations.

The project may also help to reduce flooding in the lower reaches of the watershed, stabilize property and increase recreational opportunities.

Participating NOAA Offices: NOAA Fisheries & National Weather Service

Study Russian River tributary hydrology

The streams in the Russian River watershed vary widely in their geology and hydrology. To understand the complexities of stream flow patterns, we will be studying historical, current, and future stream conditions and associated water demands and availability. We will also look to define the needs of salmon—in various life stages—during critical water flow periods. Ultimately, we hope to improve water management by reducing uncertainties in water availability, identify high priority restoration streams, and assist with salmon and steelhead recovery.

Participating NOAA Offices: NOAA Office of Oceanic and Atmospheric Research, NOAA Fisheries & NOAA (CA) Sea Grant

Manage and restore the Russian River estuary for multiple uses

With this project, we seek to convene and support an estuary workgroup comprised of local, state, and federal agencies and community members to support estuary conservation plans. The workgroup would identify estuarine habitat restoration and enhancement projects and potentially make management recommendations. The group's considerations will extend to coastal and marine resources, community resources, transportation infrastructure, and recreational areas and will integrate planning for climate change and sea level rise.

Participating NOAA Offices: National Ocean Service & NOAA Fisheries

Our Partners

California Department of Fish and Wildlife	U.S. Army Corps of Engineers
California Department of Parks and Recreation	USDA NRCS
California State Coastal Conservancy	United States Geological Survey
Gold Ridge Resource Conservation District	CEMAR
Sonoma County Water Agency	Sonoma County Wine Grape Commission
Sonoma Resource Conservation District	Trout Unlimited
Mendocino Resource Conservation District	The Nature Conservancy
UC Berkeley	National Fish and Wildlife Foundation
UC Cooperative Extension	Endangered Habitats Conservancy
(Sonoma and Mendocino)	Russian Riverkeeper