

US EPA ARCHIVE DOCUMENT

Targeted Watersheds Grant Upper Klamath, OR



The river levees on the C7 ranch will be removed, reconnecting the river to its natural floodplain.



At the Williamson Delta project, The Nature Conservancy leads a tour highlighting the restored marsh.



The Sprague River Working Group visits the Sycan Preserve to learn about watershed functions, from the top of the system to the bottom.

Ducks Unlimited

The Watershed

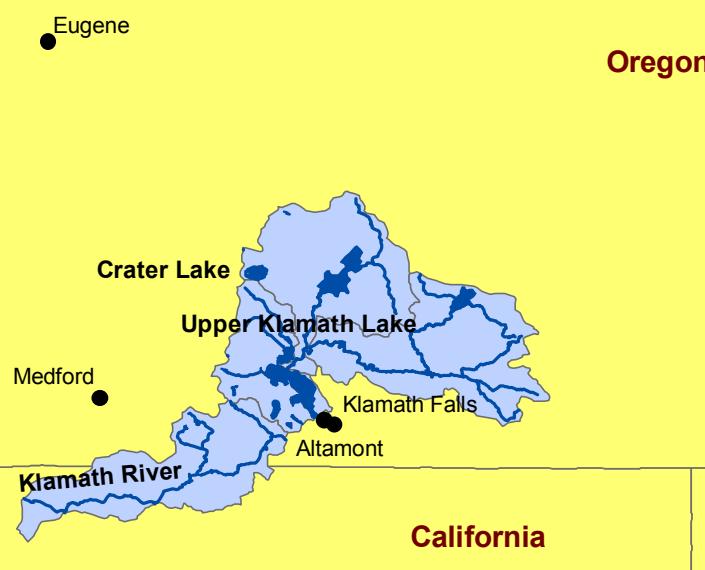
The Upper Klamath watershed provides aquatic habitat for 17 fish species, eight of which are native to the watershed. The area also serves as a critical juncture along the Pacific Flyway, its wetlands supporting more than 2 million waterbirds. Located in southern Oregon, the Upper Klamath Lake basin drains an area of 3,774 square-miles, and the Klamath Tribes call it their home. The U.S. Forest Service owns more than half of the land in the watershed. Forests comprise approximately 70 percent, with shrubland/grasslands comprising another 13 percent. About 5.5 percent of the land supports agriculture.

Issues

The Oregon Department of Environmental Quality identified excessive phosphorus as the primary factor in the eutrophication (i.e., low dissolved oxygen levels) and impaired water quality in Upper Klamath and Agency Lakes. Recovery of endangered Lost River and short-nosed suckers, two species of lake-dwelling fish that migrate into streams to spawn, depends upon improved water quality. The Sprague River, a tributary to the Klamath River is impaired due to high water temperatures. The warmer waters, resulting from point source discharges and a lack of riparian vegetative cover, threaten fish and other aquatic life. Sprague River is also impaired for low dissolved oxygen and high pH, resulting from excess periphyton (algae, bacteria and detritus mixture) growth due to excess nutrients.

Project Activities

- **Wetlands and Habitat Restoration:** Ducks Unlimited and their partners will restore wetland and riparian habitat in the Williamson River Delta and restore lake fringe wetlands along Agency Lake by breaching levees and filtering irrigation return flow. An emergent wetland adjacent to the Klamath River, the Tule Smoke Hunt Club, will also be enhanced and restored, with channels excavated and re-opened, allowing the river water to circulate through the wetlands.



Project Partners:

- Klamath Watershed Partnership
- Klamath Basin Range Land Trust
- The Nature Conservancy
- Oregon Department of Environmental Quality
- Oregon Department of Agriculture
- Klamath Tribes
- Working Landscapes Alliance
- Klamath County Natural Resource Advisory Committee

Leveraged Resources:

EPA Grant: \$783,563

kind services: \$2,345,583

For More Information Contact:

Mike Shannon

Ducks Unlimited

mshannon@ducks.org

www.ducks.org

- **Treatment Wetlands:** To reduce irrigation return flow nutrient levels and provide wetland habitat, treatment wetlands will be built at two sites. The treatment wetland at Shady Pine will also improve flow from an adjacent spring and provide high quality water for aquatic species.

- **Streambank Restoration:** Two miles of riparian fencing will be installed at the Harris Ranch to exclude cattle from the Sprague River, and riparian plantings will stabilize degraded streambanks. Artificial levees along three miles of the Sprague River will be removed to reconnect the floodplain with the river.

- **Education and Outreach:** Landowner outreach will demonstrate that conversion of ranching from flood irrigation to dry land ranching can lead to improved forage quality and reduce costs, as well as eliminate the need to manage and move irrigation and pipes. Workshops will also emphasize the importance of uplands management for proper watershed function, such as controlling invasive species to improve soil water storage.



EPA's Targeted Watersheds Grant program is a competitive grant program designed to encourage collaborative, community-driven approaches to meet clean water goals.

For more information about the selected watersheds, please visit:

<http://www.epa.gov/twg>

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