Sprague River Subbasin

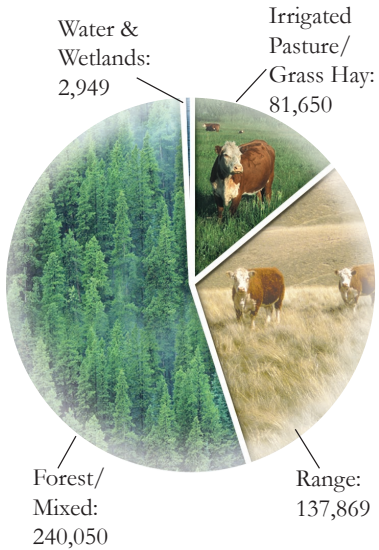
The Sprague River Subbasin is located 25 miles northeast of Klamath Falls and covers approximately 1.02 million acres. Forested mountain ridges enclose the Sprague River Valley, which includes large marshes, meadows and irrigated pasture. Juniper and sagebrush steppes dominate rangeland.

Irrigated Pasture is the predominant land use in the Sprague River Valley. Approximately 65 percent of the water used for irrigation is diverted from streams, and 35 percent is pumped from wells. Flooding is the most common form of irrigation. Most diversions do not have fish screens and lack devices to measure water deliveries. Overall irrigation application efficiencies are low.

Private forest and rangelands in the Sprague River subbasin are generally used for livestock grazing. Most forest stands are significantly overstocked with trees, and rangeland has been heavily encroached by Western Juniper. Pasture condition is generally poor to fair. The riparian areas within pastures have little to no riparian vegetation and high, eroding banks.

Wildlife habitat in most of the upper reaches of the Sprague River and its major tributaries appears to be fairly stable, indicating good watershed condition. However, there are considerable habitat improvements that can be made in the lower portion of the basin.

Sprague River Subbasin
Agricultural Land Use/Cover



Sprague River Subbasin

Land Ownership

Private Lands	448,200
Public Lands	573,100
Total Land Area:	**1,021,300**

Irrigated Acres

USBR Project:	0
Non-USBR:	61,600
Total:	**61,600**

Resource Concerns

Water quality is the major resource concern in the Sprague River Subbasin, directly impacting fish and wildlife habitat throughout the Upper Klamath Basin.

Lost River and shortnose suckers, interior redband and bull trout are key fish species present in the subbasin. All species are listed as Endangered Species Act threatened, candidate, or species of concern. The Sprague River has been identified as an important stream for both spawning and rearing habitat for suckers.

Loss of riparian habitat, fish entrapment and fish migration impediments have also been identified as resource concerns in the Sprague River Subbasin.

Conservation Accomplishments

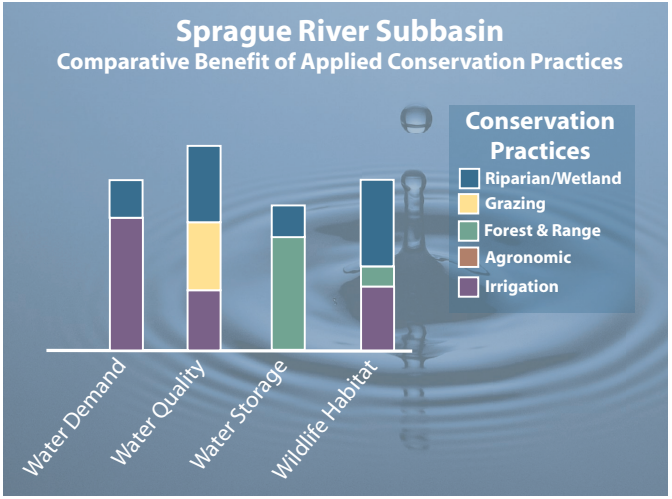
In the Sprague River Subbasin during the last two years, significant conservation progress has been made. With assistance from NRCS and local conservation districts, land managers have improved the condition of 2,153 acres of grazing land, improved irrigation water management on 903 acres of irrigated land, and have restored 1,644 acres of riparian and wetlands areas.

Fencing and riparian area restoration has been initiated or installed by private land managers with assistance from NRCS, US Fish & Wildlife Service and others on approximately 50 miles of stream and several thousand additional riparian and wetland acres.

Conservation Opportunities

Water Quality & Wildlife Habitat: Riparian restoration can be accomplished by converting pastures to permanent riparian wildlife lands or establishing riparian vegetation. Riparian pasture units should be managed as a part of an overall grazing plan with cross-fencing and off-stream water for livestock.

Forest stands should be managed to ensure optimum health of both the trees and grazed understory. Thinning overstocked trees and controlling juniper on rangelands are both effective management opportunities.



Water Demand: Irrigation water management, including measuring water use and scheduling irrigation will help managers to maintain base river flows through late summer and early fall. Efficiencies can also be gained by leveling land, lining or piping irrigation ditches and incorporating tailwater recovery systems. Conversion from flood to sprinkler irrigation is also beneficial.

Conservation Investment

Projected Conservation Acres to be Treated*

Irrigated Land.....34,500
Range & Forestland 164,400
Wildlife Habitat.....2,400

Estimated Installation Cost

Irrigated Land
.....$10,948,000
Range & Forestland
.....$31,305,000
Wildlife Habitat
.....$4,779,000

Estimated Annual Operation, Maintenance & Management Cost

Irrigated Land
.....$1,768,000
Range & Forestland
.....$1,665,000
Wildlife Habitat
.....$133,000

*Based on conservation need and projected participation rates.