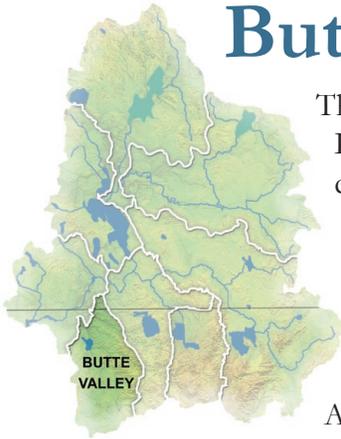


Butte Valley Subbasin



The Butte Valley Subbasin lies southwest of Lower Klamath Lake. While part of the Upper Klamath Basin, it is an internal drainage basin with only an artificial outlet. Groundwater flows from west to east out of the subbasin under the Mahogany Mountains toward the lake. A channel and pump plant were built to remove floodwaters. This channel is used infrequently and for only short durations. The Klamath National Forest, Butte Valley National Grassland, and the Butte Valley Wildlife Area make up the majority of the public lands.

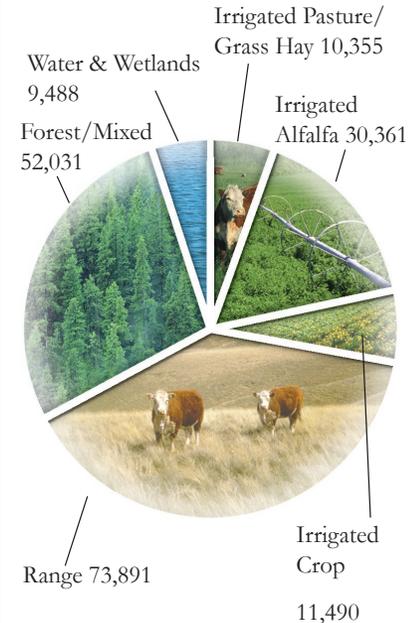
Irrigated agriculture includes alfalfa hay as the predominate crop. Cereal grains, potatoes and strawberry plants are also grown. Crops are usually sprinkler irrigated, and sprinklers are well maintained. Few irrigators measure water applied or schedule irrigation. Cattle operations graze irrigated pastures and meadows scattered throughout the subbasin along with range and forestlands. Pastures are generally flood irrigated and are supplied by streams. Most farm irrigation diversions lack water measuring devices.

Mixed conifer forests are found at higher elevations and are generally operated as industrial forests.

Range sites are dominated by Western Juniper and are generally in poor condition.

Wildlife habitat is generally wetlands in the state wildlife refuge or on national grasslands. Approximately 26 miles of streams on private lands have inadequate riparian vegetation.

Butte Valley Subbasin
Agricultural Land Use/Cover



Butte Valley Subbasin

Land Ownership

Private Lands	188,400
Public Lands	<u>199,700</u>
Total Land Area:	388,100

Irrigated Acres

USBR Project:	0
Non-USBR:	<u>52,300</u>
Total:	52,300

Resource Concerns

The expense of deepening wells and pumping from deeper elevations for irrigation water is a major resource concern.

Generally, streams in the upper portions of the subbasin support good populations of Brown and Rainbow trout.

The Tulelake National Wildlife Refuge and Lower Klamath Lake National Wildlife Refuge support large populations of migratory and permanent waterfowl. Farmland on the refuges is leased to area farmers to supply grain for the waterfowl and shorebirds.

The large bird populations depend on the refuges, leased lands and adjacent farms throughout the fall and spring migratory periods for habitat. Both refuges depend upon tailwater from the USBR project to maintain their marshes and ponds.

Conservation Accomplishments

In the Butte Valley Subbasin during the last two years, some conservation progress has been made. With assistance from NRCS and local conservation districts, local land managers have restored 27 acres of riparian and wetland areas in the last two years.

Priority Conservation Opportunities

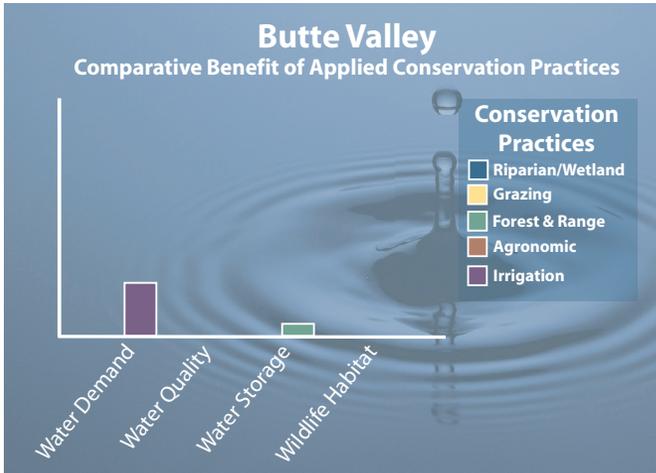
Water Demand: Butte Valley is an internal drainage basin. Other than limited contributions to groundwater in the Upper Klamath Basin, reductions in water demand only benefit the subbasin.

Sprinkler-irrigated hay, cereal crops and row crops dominate land use on the better soils. Highly effective conservation on hay and cropland should focus on improving the overall irrigation efficiency of existing systems. This can be accomplished by upgrading systems and scheduling irrigation. An estimated 40 percent of the existing systems would benefit from maintenance.

On controlled flood irrigated pastures, there are opportunities for land leveling or smoothing, lining or piping delivery ditches, and recovering tailwater.

Additional water savings and water quality benefits could be gained by converting existing surface irrigation to sprinklers if power is available and affordable.

On rangelands, juniper control and improved grazing management are the primary conservation opportunities.



Conservation Investment

Projected Conservation Acres to be Treated*

Irrigated Land	35,000
Range & Forestland ..	49,400
Wildlife Habitat.....	55

Estimated Installation Cost

Irrigated Land	\$6,652,000
Range & Forestland	\$5,243,000
Wildlife Habitat	\$109,000

Estimated Annual Operation, Maintenance & Management Cost

Irrigated Land	\$1,569,000
Range & Forestland	\$625,000
Wildlife Habitat	\$3,000

*Based on conservation need and projected participation rates.