



CONSERVATION EFFECTIVENESS PARTNERSHIP

PULLING TOGETHER TO IMPROVE NATURAL RESOURCE
INVESTMENTS IN OREGON

Working together for Watershed Health in Prairie Creek

WALLOWA COUNTY - Between Joseph and Enterprise, Oregon, the Prairie Creek watershed offers prime agricultural land. But it wasn't always this way.

The watershed was a dry alkali flat before Wallowa Lake was dammed in 1917 to provide more water for crops and livestock. To get the water where it needed to go, a series of ditches crisscrossed the landscape, increasing flows in Prairie Creek. With the increased lake level came a series of ditches that crisscrossed the landscape, bringing water to crops and livestock.

As agriculture and economy flourished with the reliable flow of water, so too did bacteria and nutrients in Prairie Creek. But, landowners recognized the links between the health of Prairie Creek, healthy fish and watersheds, and a healthy community.

FOR CREEK AND COMMUNITY

Beginning in the 1980s, farmers and ranchers took it upon themselves to work with conservation and natural resource agencies to voluntarily protect and improve Prairie Creek while maintaining agricultural growth. Wallowa Soil and Water Conservation District worked with landowners to implement conservation actions and to look at the results of those actions over time.

Improving irrigation efficiency, reducing runoff and eliminating ditches that potentially carry runoff into Prairie Creek were the primary goals of their conservation work. Farmers also worked to reduce livestock feedlots along the creek; provide alternative water sources to livestock; plant cover crops; and use proper fertilizer timing and application techniques.

Over three decades, water quality monitoring shows Prairie Creek's health is improving thanks to the cooperative conservation efforts of Wallowa County's conservation community. Now the community is looking to the future. As farmers work to improve remaining areas that lack irrigation efficiencies, they are also working to keep the stream habitat healthy for native fish like steelhead.

MEASURING CONSERVATION IMPACT

The [Conservation Effectiveness Partnership \(CEP\)](#) is a collaboration of natural resource agencies including Oregon Watershed Enhancement Board, USDA Natural Resources Conservation Service, Oregon Department of Environmental Quality and the Oregon Department of Agriculture. In addition, the Oregon Department of Fish and Wildlife provides guidance about fish habitat. CEP works together to understand, optimize and communicate the benefit of conservation investments throughout Oregon.

FRUITS OF THEIR LABOR

The risks posed to Prairie Creek prompted Wallowa Soil and Water Conservation District to measure bacteria and pollution levels in the creek from 1991-1993 and again from 2012-2015. This crucial move made smart conservation planning and sustained improvement possible in the Prairie Creek watershed.

The following map shows data collected from water quality monitoring locations throughout Prairie Creek.

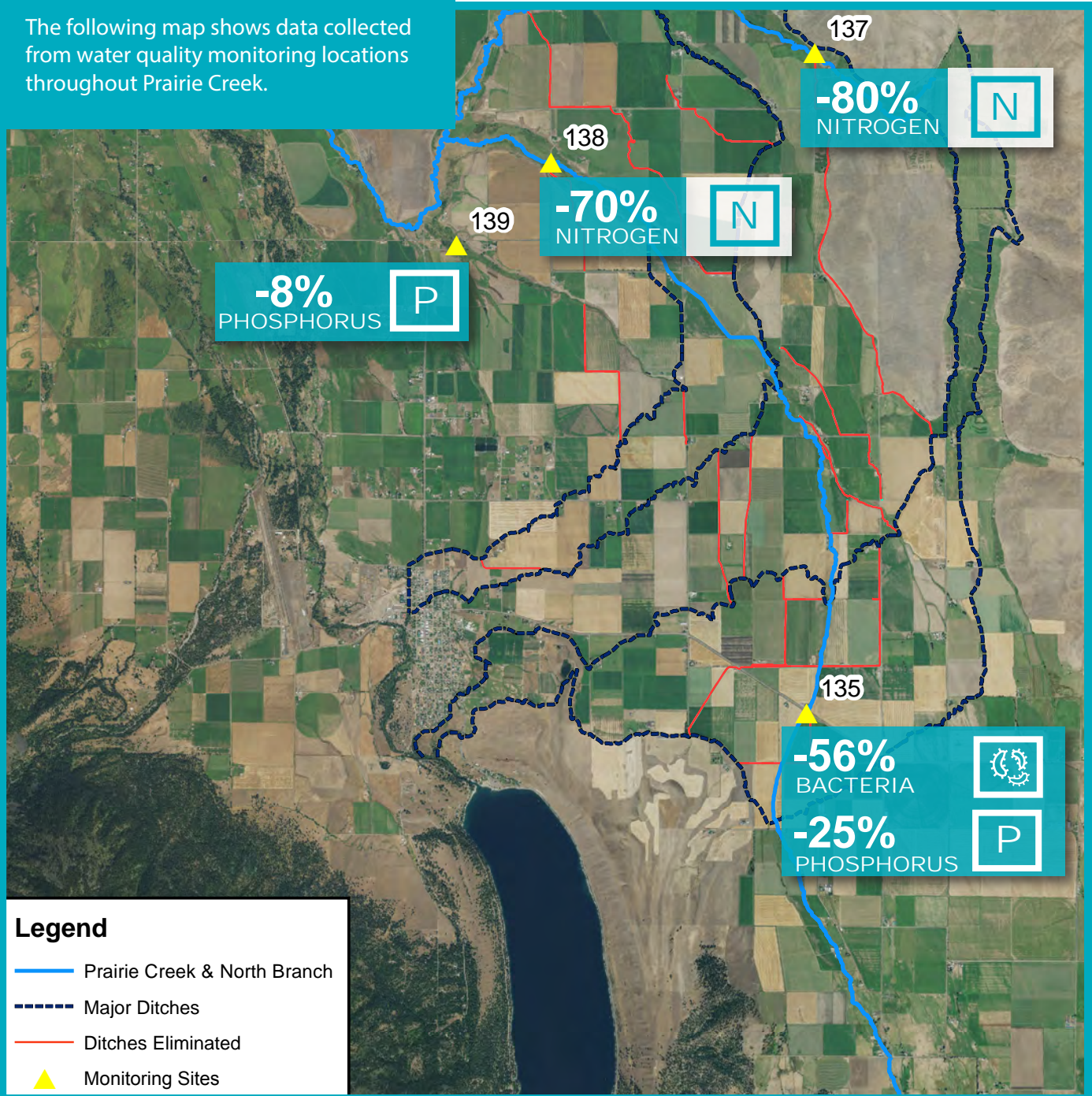


PHOSPHORUS and NITROGEN

are key nutrients in fertilizer.

They're also found in livestock waste along with high amounts of **BACTERIA**. When water runs off fields into streams, a cocktail of nutrients and bacteria can harm fish and other aquatic life.

No-till farming and healthy vegetation along streams can reduce runoff and filter nutrients before water reaches streams.



REDUCTIONS in bacteria, phosphorus and nitrogen at some monitoring sites are a great start to stream recovery, and overall, the data shows a trend toward water quality improvement. However, there's still work to be done. Data at some monitoring sites showed significant increases in bacteria and nitrogen.

The SWCD and partners are working with landowners to find and address the source of the increase. Now the community continues to use results from water quality monitoring as they look ahead to keep farms and natural areas resilient.