



Napa Sanitation District's Restoration on Suscol and Sheehy Creeks

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The Napa Sanitation District produces high quality recycled water that is used to irrigate pastureland, parks, landscaping, vineyards and golf courses in the southern Napa Valley. Use of recycled water for irrigation conserves drinking water and groundwater supplies.

Why is the Napa Sanitation District involved in restoration?

The Napa Sanitation District owns ranchland that is used in the management of recycled water and biosolids. Both Jameson Ranch and Somky Ranch are traversed by creeks that were traditionally habitat for steelhead trout and other aquatic life.

The District's mission is to protect public health and water quality through wastewater treatment. Good stewardship of the land under our care complements this mission



Right: Steelhead adults and juveniles.
Photo courtesy of Napa County Resource Conservation District.

Suscol Creek Native Vegetation Restoration Project

Project Background

Suscol Creek runs through the District's Somky Ranch just south of Hwy 29 before emptying into the Napa River. Since 2005, the Institute for Conservation Advocacy and Education (ICARE) has monitored steelhead trout populations and habitat conditions in Suscol Creek. ICARE has consistently observed both juvenile and adult steelhead in the creek. The reach on Somky Ranch has a healthy canopy of oak, willow and cottonwood, but the understory is overgrown with Himalayan Blackberry.

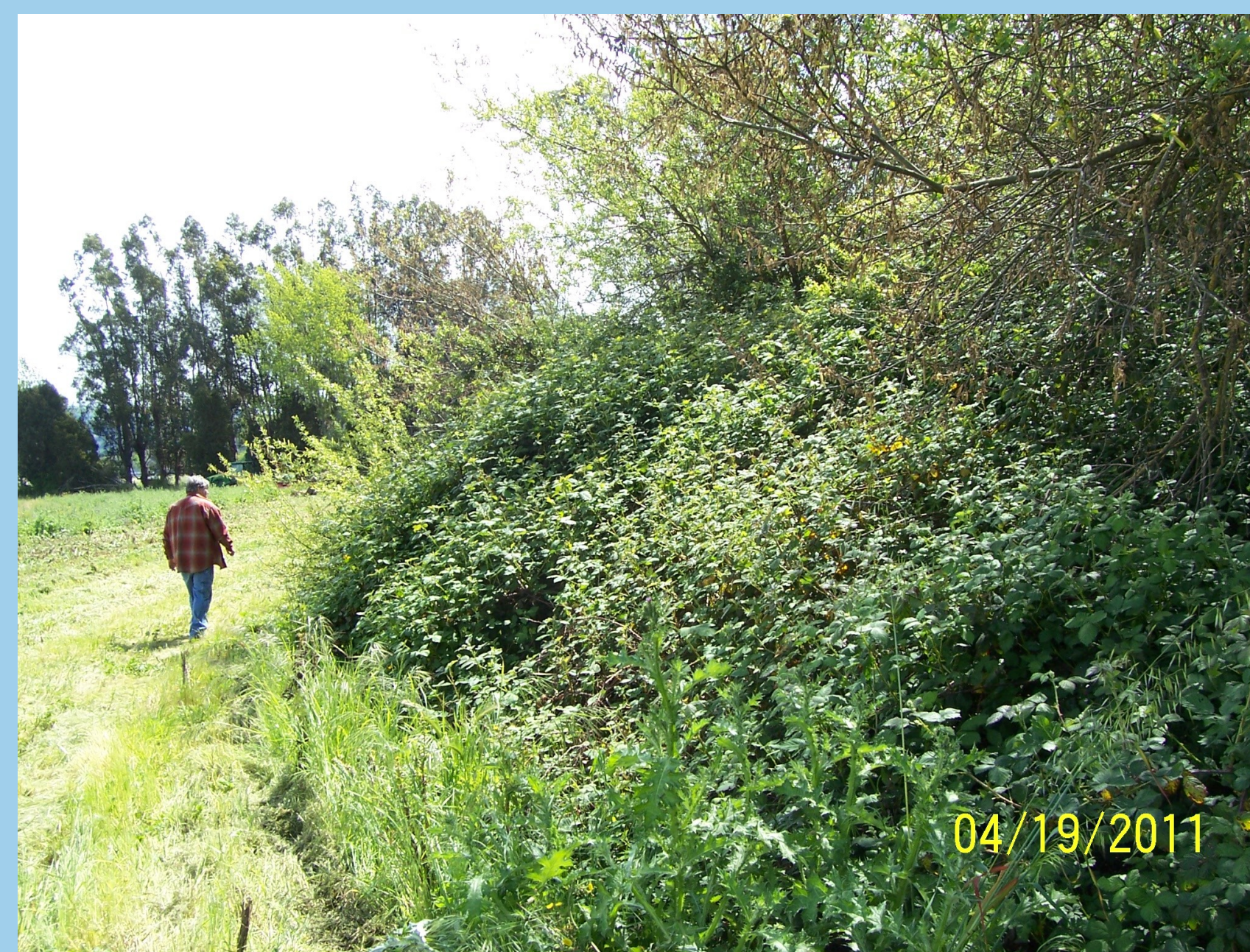
The Siege of the Blackberry

In spring of 2011, NSD launched a multi-phase project to remove the invasive blackberry and replant the area with native plants.

With guidance from the Napa County Flood Control and Water Conservation District, NSD developed a work plan that complies with the conditions of Flood Control's Routine Maintenance Agreement with the Department of Fish and Game.



Himalayan Blackberry along Suscol Creek was so thick that in some areas the creek was not visible. Above: Blackberry removal supervisor extraordinaire Bruce Ormbau walks past a thicket destined for destruction. Left: Blackberry bushes formed an impenetrable barrier to the creek for people and most wildlife.



Phase I & Beyond...

In April 2011, crews began removing blackberry from the upper banks of the creek, working downstream from the upper end of the reach. The cleared areas will be treated with an appropriate herbicide during summer 2011, and replanted with native riparian vegetation in fall/winter 2011.

The remaining reaches of Suscol Creek will be treated in the same way, with project completion expected in winter 2012/13. NSD will continue to monitor the site for success of the native vegetation and to remove regrowth of blackberry.



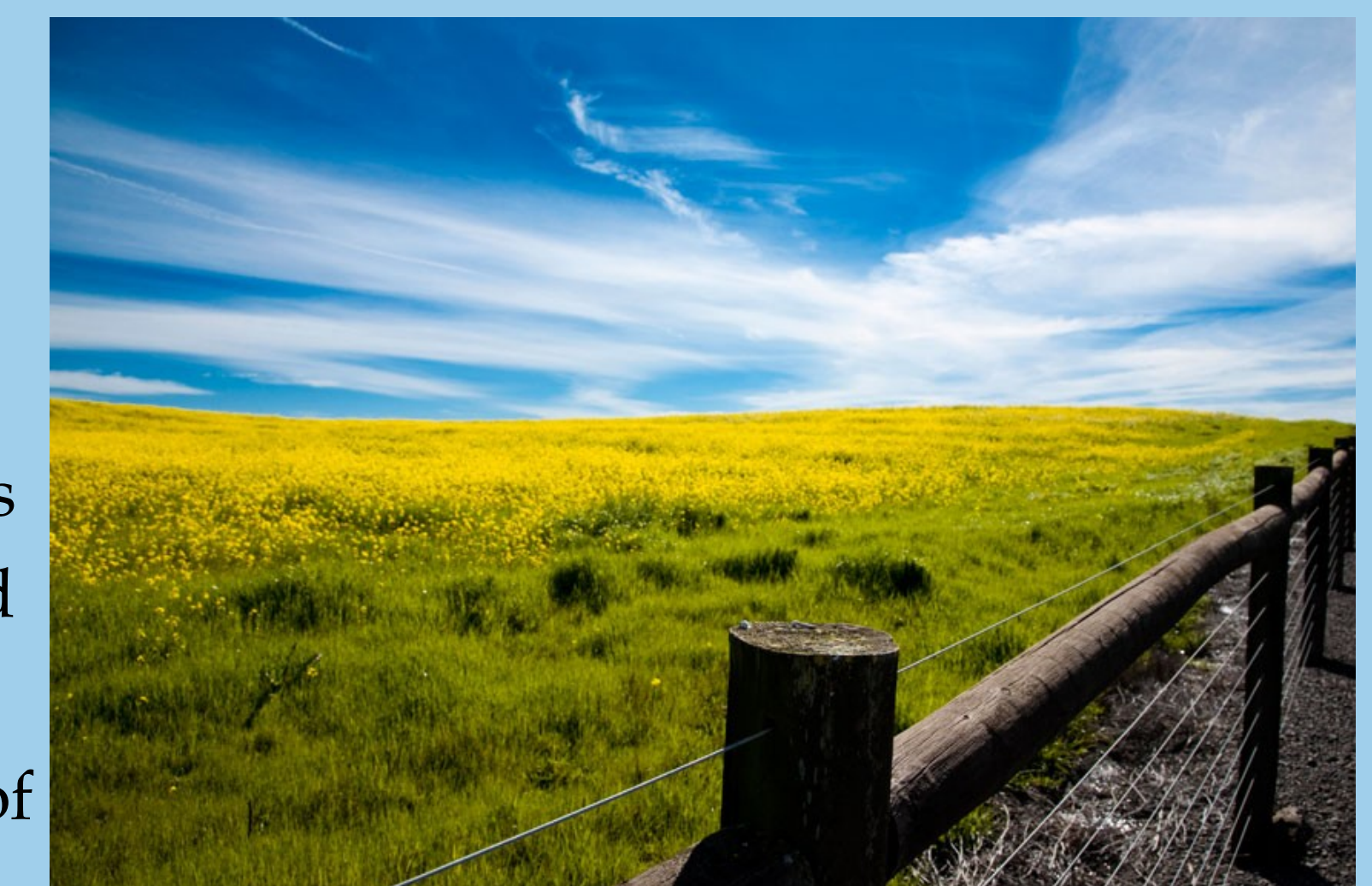
Much of the blackberry removal along Suscol Creek was done by hand to avoid damage to or removal of native plants. Above: A crewmember removes blackberry from a willow stand. Right: Shredded debris is all that remains of a huge blackberry thicket.



Fish Friendly Farming at Jameson Ranch

Recycled Water & Biosolids

Jameson Ranch comprises 508 acres at the northeast intersection of North Kelly Road and Hwy 12. NSD manages this ranch to dispose of recycled water and biosolids (treated sewage sludge). From May 1 to October 31 each year, Jameson Ranch is irrigated with an average of 512 acre feet of recycled water, and an average of 125 tons/month of biosolids are plowed into the soil.



Jameson Ranch (above), formerly known as the Kirkland Ranch, was once used for cattle grazing.



Changes to Sheehy Creek

Sheehy Creek bisects Jameson Ranch before flowing into the Napa River. Over the years, this reach of the creek was straightened and berms were built along the banks to prevent biosolids from washing into the creek.

Biosolids are disposed at Jameson Ranch by spreading and plowing them into the soil (left). The biosolids act as a soil conditioner and encourage vigorous plant growth. Parts of the ranch are leased for growing livestock feed.

Farm Conservation Plan

Through the Fish Friendly Farming Program, NSD is currently gathering data and developing a Farm Conservation Plan to improve habitat conditions in Sheehy Creek and the seasonal drainages that run through the ranch. NSD also plans to restore native vegetation along Sheehy Creek, particularly canopy trees, which are completely absent in this reach.



The Farm Conservation Plan developed through the Fish Friendly Farming program will outline best management practices (BMPs) for the many farm roads that traverse Jameson Ranch. The plan will also contain BMPs for riparian restoration and management.