



Winter 2023-24 News

Shasta Valley Resource Conservation District

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Do you have a project idea for your property? We are actively working with private landowners who want to improve their natural resources by tailwater reductions, forestry thinning, prescribed burning or other project types. Email us at info@svrccd.org

West Mt. Shasta Defensible Space

The California Governor's Office of Emergency Services (CalOES) has partnered with CalFire and the Shasta Valley RCD to implement defensible space around habitable structures and outbuildings in the west Mt. Shasta VTP. This work is a part of the California Wildfire Mitigation Program (CWMP) in conjunction with five other CWMP projects existing throughout the state. The project will complement other fuels projects in the area such as the Shasta-Trinity National Forest's South Fork Public Safety and Forest Restoration project as well as the RCD's own West Mt. Shasta Forest Resilience project.

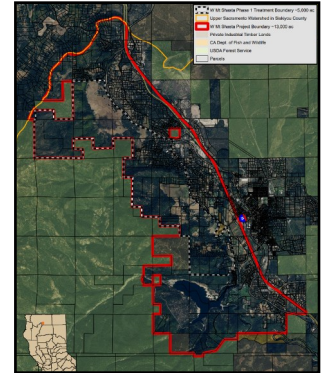
Work will consist of manual and mechanical treatments within the Zone 0, 1, and 2

defensible space zones.

Zone 0 is everything within 0 feet to 5 feet from the structure. There can be no combustible material here, live or dead. Removed material will be replaced with a non-combustible hardscape. Zone 1 extends from 5 feet to 30 feet from the structure. Treatments will aggressively target fuel continuity vertically and horizontally. Zone 2 extends from 30 feet to 100 feet from the structure, and work will continue to disrupt fuel continuity.

Property owner income will dictate the amount of financial responsibility the owner can expect, not to exceed 25% of the total cost.

Interested landowners located in the Old Stage road corri-



The West Mt. Shasta California Vegetation Treatment Program (CalVTP) boundary.

dor in west Mt. Shasta are encouraged to register and fill out an application [HERE](#).

Questions about the project can be directed towards firesmart@svrccd.org.

The Future of Shasta Valley Irrigation

Ryan Walker, Board President



The Shasta River Photo by TNC

The relatively wet 2023 water year represented a welcome departure from the drought conditions of the prior three years. Nonetheless, the combination of drought and regulatory curtailments in 2021 and 2022 resulted in some tough years for many Siskiyou County farmers to navigate. When Governor Newsome issued his emergency drought declaration the State Water Resources Control Board (SWRCB) developed emergency regulations that set minimum flows that provided for water curtailments. These curtailments hit surface water diverters on the Shasta particularly

hard in 2022. Unfortunately, recent regulatory actions suggest that Shasta Valley irrigators will face increasing curtailments and water use limitations into the future.

Despite substantial rains in 2023, the Governor has not rescinded his emergency drought declaration for the Shasta and Scott watersheds. This August, in response to a petition calling for permanent minimum flows in the Scott River, the SWRCB gave staff direction to develop another round of emergency regulations for both the Scott and Shasta Rivers. It seems likely that a similar petition for permanent minimum flows in the Shasta will be filled with the Waterboard and the process to develop a **CONTINUED ON PAGE 3**

A Cross-Boundary Philosophy at the Shasta Valley RCD



Siskiyou RCD staff and former boardmember Ric Costales (center, no hat) work in the Scott.

Ayn Perry, Project Manager

SVRCD works to foster conservation throughout Siskiyou County, inside and outside of our 'official' district boundaries. We are always looking for partnerships that are cross-boundary in nature, and these can involve any of the three other RCDs in Siskiyou County and sometimes in neighboring counties. These are always in service to the local needs and with the approval of the RCD.

These are in addition to traditional multi-RCD projects and partnerships that we are involved with such as the RCCP, the NCRP and KBMP.

In the past, SVRCD has worked in the Fall River RCD service area, serving as a lead agency for a meadow restoration project on the Shasta-Trinity National Forest. We have worked on forestry thinning in Soap Creek, just over the hill within the Siskiyou RCD service area. The type of sup-

port needed depends on the project and SVRCD has been able to assist due to project efficiency, specific staff skills or organizational capacity.

Currently SVRCD has several forestry projects in partnership with CalFire that encompass project areas in Butte Valley and Scott Valley. A new partnership project in Scott Valley is supporting the work of the Siskiyou RCD with a grant from the California Department of Conservation. The grant is geared to habitat assessment and planning on a reach of the Scott River from French Creek to Horn Lane. Valuable field data is being collected on three ranches for future implementation proposals.

SVRCD enjoys dynamic working relationships with new connections and long-term partners as we all work to address resource challenges throughout our big beautiful county.

Yreka Ridge Fuel Break

Michael McGill, Project Manager

Mastication and handwork began on the Yreka Ridge Fuel Break in April 2023. Masticators made quick work of the brush on the south aspect and understory trees on the north aspect. Where slopes were too steep for equipment, hand crews were employed to

make piles for burning in the future. Heavy equipment was tethered to the ridgeline to masticate as much of the project as possible.

When completed, the ridge will be treated 300 feet down both sides. The forested north slope will retain a canopy at a spacing that will moderate fire be-

havior, while the brushy fuels on the south slopes receive more complete treatment.

The Project is highly visible from the city of Yreka and Interstate 5, and if you have driven through Yreka this summer, you've undoubtedly seen it. This fuel break will serve to protect the city from catastrophic wildfire that approaches from the north. Recent fire activity in the area including the McKinney and Badger fires emphasize the need for strategic fuel breaks in the Yreka area.

Select areas on the north aspect as well as all junipers in the project area remain to be masticated. The project is anticipated to be completed before March 2024. Keep an eye out for upcoming fuel reduction projects in the Yreka area in the near future.

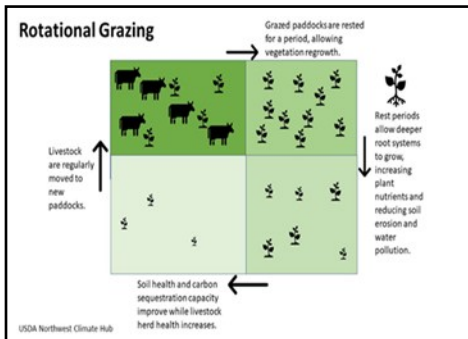


The south aspect of Yreka Ridge looking east.

Rotational Grazing: Making the Most of Your Rangeland

Mallory Pappas, Project Manager

You may have heard of rotational grazing before, in fact you may already be using some form of it. Simply put, rotational grazing is a management system that divides large pastures into smaller ones, allowing for cattle to be concentrated and moved frequently across your pasture or range. This management tool has the potential to improve water infiltration, animal health, pasture health, plant biodiversity, and most importantly your profits.



Source: USDA Pacific Northwest Climate

How can it increase your profitability? Compare it to cutting hay or mowing your lawn. We can get multiple cuttings off a hay field because we allow the grass to grow with periods of rest. Similarly, when cattle are concentrated into smaller pasture segments, they can utilize more of the forage present and then be moved before the area is overgrazed; giving those pastures time to rest and regrow. For example, if you split your pasture into 6-8 segments and you graze them individually for 1 week, then each segment is allowed 6-8 weeks rest for the grass to regrow. Cattle can then be returned to the original pasture segment and have fresh feed to start the process over again. This means there is potential to grow more grass and stock a higher density of animals on the same pasture simply by splitting it up. In some cases, the additional grass growth can be enough to stockpile for the winter which reduces the need to feed hay.

Are you interested in learning more about rotational grazing and how it may benefit you and your properties?

The Shasta Valley RCD is looking for willing landowners to partner with! Contact us or stop by the office- we would love to be able to talk to you about your grazing goals or provide additional resources!



Strip grazed pasture in Grenada, CA

The Future of Shasta Valley Irrigation

CONTINUED FROM PAGE 1 permanent flow regime in both watersheds will begin after the issuance of new emergency regulations. At the same time, the North Coast Regional Water Quality Control Board (NCRWQCB) announced it would only renew the Shasta TMDL waiver for another two and a half years. At the expiration of this TMDL waiver, it is expected that the NCRWQCB will move from a waiver system to a system requiring discharge permits for irrigators who do not fit within a stewardship partial waiver. These permits will come with fees and requirements for irrigators.

So, what does all this mean for Shasta Valley irrigators? I think it means that, more than ever, local landowners need to prove that we can solve the water and fish problems in the Shasta River. We are well past the days of fighting the increasing wave of water regulations in the hopes that we can continue operating the way we did 50 or even 25 years ago.

The producers that will survive the next decade will be the ones that can adapt their operations to meet these increasing demands for flow and water quality while at the same time developing the data that proves good stewardship. Shasta Valley RCD has been at the forefront of assisting landowners doing this sort of work. The one silver lining on the increased focus on Shasta and Scott is an increase in the availability of funds for irrigation infrastructure improvements. If you are interested in projects to increase irrigation efficiency, tailwater management, point-of-diversion relocation or other improvements to increase water quality or quantity in the Shasta River, now is the time to contact the Shasta Valley RCD and prepare to meet these demands.

Parks Creek Riparian Improvement Project

Ethan Brown, Project Manager

Parks Creek is a dynamic stream and primary tributary of the Shasta River. Originating in the Klamath Mountains, Parks Creek derives its flow from seasonal rains and snowmelt. When rain-on-snow events occur, Parks Creek can produce a tremendous amount of water, as witnessed in the 97' flood. These high flow events, or freshets, spill out from the hills near Edgewood, CA, and into the working lands on the valley floor below, delivering cold water, fresh gravels, and seeds from the serpentine-loving plant communities of the upper watershed. Supported by the unique soils and creek water, mature Jeffrey pines, Incense cedar, and Water birch line Parks Creek beyond the old highway.

SVRCD recently put the finishing touches on the Parks Creek Riparian Improvement Project with primary funding from the State Water Boards Nonpoint Source Pollution Reduction program. In the reach between Highway 99 and Interstate 5. The Project was meant to protect and improve an already thriving riparian corridor and help extend its presence and benefits farther downstream. The SVRCD worked with ranch management and Water Board staff to locate project features for improved grazing and ecological benefits.

Project improvements include:

- 22,500 ft. of livestock management fencing
- over 17,000 ft. of buried pipeline
- 7 off-channel livestock water systems
- 1,000 lineal ft. of riparian planting



Photo: Construction of off-channel stockwater trough with healthy Parks Creek riparian corridor and Mt. Shasta in background.

The west side of Parks Creek within the project area is now entirely fenced, and livestock are completely excluded from the Soda Springs complex which serves as an important thermal refugia for salmonids during the summer months.

In addition to the riparian planting work, reduced livestock pressure within the ripari-

an corridor of Parks Creek will encourage natural recruitment of riparian vegetation, improve bank stability, and reduce pollutant loads. Vegetation buffers are known to filter out sediment that can contain oxygen consuming bacteria, thereby improving dissolved oxygen levels. Using the EPA's Pollutant Load Estimation Tool (PLET) to model the practices implemented as a part of this project, SVRCD staff determined a total pollutant load reduction of **6,379 lbs/year** of Biological Oxygen Demand and sediment/siltation reduction of **2,319 tons/year** as a result of this Project!

The Project also leverages previous work that was recently completed by the SVRCD that improved fish passage for all life stages through an identified velocity barrier at the Interstate-5 bridge over Parks Creek.

The Project improves water quality objectives within Parks Creek and enhances thermal refugia critical for juvenile salmonids. While this project did not cover cross-fencing, new grazing management opportunities are now available as a result of the improvements. Those practices would further compound the improvements to ranch operations and water quality objectives

The SVRCD truly appreciates the funding, knowledge, and time contributed by the ranch management on behalf of this Project, all of which helped make it a success.



Photo: Before (left) and After (right) images of the Parks Creek Riparian Improvement Project treatment areas. Before images were captured in March of 2021. After images were captured in December of 2023. Visible in both images is the Klamath Mountains and robust riparian habitat (background) and water birch and juniper (foreground). The livestock management fencing can be seen, along with gates and panels to help move cattle through a narrow corridor while still protecting the streambank. Barely visible in the post-treatment photo is a stockwater trough on the right-hand side.



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Stewardship Through Collaboration

We are excited to announce
that we are hiring.

Join a dynamic team making a
difference in Siskiyou County.

Check out our website for job
announcements and bid
outreach for local contractors.

Welcome GrizzlyCorps Fellows!

Jose Alberola

Jose Alberola graduated UCLA with a degree in Civil and Environmental Engineering. Jose is born and raised in Oklahoma City, OK. Jose will support the RCD's hydrology work while also providing technical project management experience with the RCD's roads projects.



Jon Theodore

Jon graduated Southern Oregon University in 2023 with an interdisciplinary major in Environmental Science and Political Science specializing in GIS/Remote Sensing. Jon will support our forestry and fuels project management while also providing GIS support to the entire agency.



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