

FEBRUARY 2024

Scott Watershed Informational Forum (SWIF)



Scott River Restoration Field Tour

Siskiyou County Water Transaction Workshop

Scott Watershed Informational Forum

Soil Health & Scott Valley Agriculture Water Conservation





Siskiyou County Water Transaction Workshop
February 21st | 5:00 – 7:00pm | 11219 N. Hwy. 3, Fort Jones



Salmonid Restoration Federation (SRF) and Scott River Watershed Council will host a Water Transaction workshop with two water leaders from Trout Unlimited and Cal Trout. This workshop is designed for ag landowners, ranchers, and watershed planners to learn more about appropriative and riparian water rights, different forms of water transactions, and the permitting pathways for various types of water projects. Presenters include Matt Clifford, JD, Water Project Attorney, for Trout Unlimited and Ada Fowler, PhD from Cal Trout who will discuss local issues including water leasing, emergency regulations and evolving instream policies.

An Overview Of California Water Law for Small Water Users

This will be a brief overview of California water law, including the basics of appropriative and riparian water rights, how they are established and enforced, how adjudications work, the regulation and use of groundwater, and the role of agencies including the State Water Board and the Department of Fish and Wildlife. The presentation will also describe common types of projects to change water management to increase flow for fish and wildlife while improving water security for farms and communities, including how these projects can be funded and permitted.

Matt Clifford is the California Director of Law and Policy for Trout Unlimited. In addition to leading TU's policy work on issues related to instream flow, water rights, and habitat restoration in Sacramento, he maintains an active portfolio of instream flow projects and transactions throughout coastal California and the northern Central Valley. Matt is a 1988 graduate of Northern Arizona University and a 1995 graduate of the University of Montana School of Law.



Environmental Water Transaction

The purpose of this talk is to help water rights users and practitioners understand some of the options available to them for putting water instream in California. The discussion will focus on different types of water transactions, such as changes in water management, moving a point of diversion, source switching, and conveyance and on-ranch efficiencies. When possible, I will use actual projects as examples. The discussion will include the difference between consumptive and non-consumptive uses and ways to reduce consumptive use. Finally, I will talk about permissive and permanent water dedications and the use of 1707s.

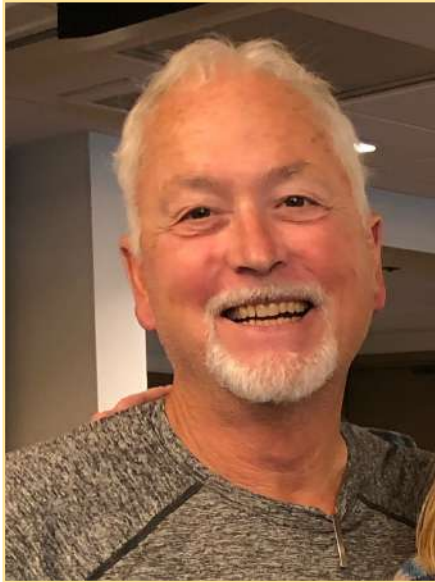
Dr. Ada Fowler has been working for CalTrout for almost 5 years as a Senior Project Manager. Ada has been managing stream restoration and flow enhancement projects in the Shasta Valley focusing on the Upper Shasta and Little Shasta Watersheds for almost 20 years now. Before CalTrout, she worked for The Nature Conservancy and managed large restoration projects on TNC's Shasta Big Springs Ranch. Ada holds a M.S in Wildlife Ecology from Colorado State University and a PhD in Conservation Biology from UC Davis.





Welcome to SWIF 2024

Meet our Moderators



Scott Watershed Informational Forum (SWIF) Moderator **Clayton Creager**

Clayton recently retired from the CA North Coast Regional Water Quality Control Board serving as the Region’s Watershed Stewardship Coordinator. For the Regional Water Board Clayton was the lead for the Klamath River Total Maximum Daily Load (TMDL) and dam removal efforts. Prior to working at the Regional Water Board, Clayton worked in environmental consulting for 20 years specializing in water quality, ecological restoration, and watershed stewardship projects. He served as Project Manager and was coauthor of the 2007 report “The Altered Laguna: A Conceptual Model for Watershed Stewardship”. Clayton lives in Sebastopol within the Atascadero Creek watershed and is an enthusiastic gardener.

Soil Health & Scott Valley Agriculture’s Water Conservation Efforts Forum Moderator **Emma Morris**

Emma is a Program Manager for Resiliency and Sustainability at the Siskiyou Economic Development Council. She also works on her family's ranch, the Bryan-Morris Ranch, in Scott Valley, California, where she is the sixth generation. She graduated from Cal Poly, San Luis Obispo in 2018 and then moved home to Scott Valley where she currently lives. She cares deeply for the water, wildlife, food, and soil systems of the Klamath Basin.



Thursday, February 22, 2024 - SWIF Presentation Day – The Towers, Fort Jones

Time	Presenter	Title
8:00am	Check in & Morning Social	The Towers at 11219 N. Hwy. 3, Fort Jones
9:00am	Clayton Creager	Welcome & Opening Commentary
9:15am	Charnna Gilmore, Executive Director, Scott River Watershed Council	Scott River Recovery Action Plan Project
9:45am	Kathleen Hitt, Executive Director, Siskiyou Land Trust	Working on conservation easements in Siskiyou County
10:15am	Jodi Aceves	Siskiyou County Noxious Weed Management
10:45am	BREAK	
11:00am	Megan Ireson, Mountain Meadow Coordinator, Scott River Watershed Council	Meadow Restoration in the Scott Watershed
11:15am	Justin Garwood & Braden Herman, California Department of Fish and Wildlife	Frogs And Fish: Reversing widespread legacy impacts of introduced sportfish on declining amphibians in glacial lake basins of the Klamath Mountains
12:15pm	LUNCH	
1:00pm	Molly Alves, Utah State University	Scott River Watershed Beaver Management Plan
1:30pm	Danika Carlson, Deputy District Ranger, Scott and Salmon Rivers, Klamath National Forest	Update on Salmon Scott River project updates and wildlife crisis strategy.
2:00pm	Jeremy Ravenscroft	Cal Fire Siskiyou Unit’s Vegetation Management Program
2:30pm	BREAK	
2:45pm	Kip Van de Water, Fire Analyst with the Pacific Northwest Region of the US Forest Service	Fire Return Interval Departure (FRID): A useful metric for assessing ecological integrity at the scale of the Scott River Watershed
3:35pm	Luna Buchin, Scott River Watershed Council, former YESS crewmember and now Weed Warrior Crewmember and Media Tech	Short video on the use of recent good fire in the Scott Valley
3:45m	Will Harling, Director, Mid Klamath Watershed Council	Bringing Beneficial Fire Back to the Klamath Mountains
4:45pm	Clayton Creager	Closing
5:00pm	Adjournment	
5:00pm	Happy Hour (No Host)	
6:00pm	Good Night for the evening	



Scott River Recovery Action Plan Project (SRRAPP)

Charnna Gilmore, Scott River Watershed Council, Executive Director

Why hasn't the Scott River's channelization, confinement, and incision, which are the fundamental drivers of the loss of groundwater, in-stream flow, and associated habitat, been addressed to date? For decades the required scale of the restoration, and the social and economic complexity in achieving it, have been daunting and overwhelming barriers. However, with climate change, drought, regulatory, and economic pressures there is increasing recognition that now is the time to "Go big or go home" if we are to have any chance of warding off extirpation of species and the loss of human communities.

The "Scott River Recovery Action Plan Project" ("Project") is working to integrate and make actionable existing restoration and management plans and prioritizations with a comprehensive geophysical and economic analysis, regulation issues and community engagement to achieve landscape scale recovery of the Scott River's ecological function.

In 2023, a committee of people, all interested in seeking meaningful solutions, met quarterly to begin work on developing a cooperative and comprehensive recovery plan for the basin. By bringing people from all sectors of our community to develop this plan we feel there will be a stronger chance of maintaining the Valley's social and resource based economic cohesion, which, in the long run, will result in improved and sustainable outcomes.

Charnna Gilmore became a part of the Scott River Watershed Council in 2006, initially serving as a Board of Directors member. In 2014, she assumed the role of Executive Director. With a strong belief in community service, committed over 30 years coaching youth and serving two terms on Scott Valley United School District's School Board and currently serving on the City of Etna's City Council.



Kathleen Hitt, Executive Director of the Siskiyou Land Trust, will share the work she and her team do throughout Siskiyou County using conservation easements and other tools to help support our community.



Shannon Wedgley and Harrison Morrow from the Scott River Watershed Council attaching Marlahan Mustard on French Creek.

Jodi Aceves, Senior Deputy Ag Commissioner/ Sealer, will discuss Siskiyou County Noxious Weed Program. In effort to protect native and endangered species as well as important crop and forest land, Siskiyou County operates one of the largest noxious weed programs in the state. Noxious weeds reduce livestock forage, displace native plant and animal species, and create fire hazards, increase soil erosion and cause economic losses to the agricultural industry and more.





Meadow Restoration in the Scott Watershed

Meagan Ireson, Scott River Watershed Council, Mountain Meadow Project Coordinator

Functional mountain meadows provide important ecosystem services such as moderating stream flow and sediment, decreasing downstream erosion and flooding, storing carbon and providing habitat for a diverse range of plants and animals. Additionally, they are traditionally utilized by indigenous tribes for both basket weaving materials and medicinal plants. Recognizing the value that meadows have on the Scott River, and the history of human impacts that have damaged meadow systems, the Scott River Watershed Council is expanding our work in mountain meadows. With ongoing aspen monitoring and release, new work involving hydrologic restoration and conifer removal in meadows, planning efforts for meadow restoration across the watershed, SRWC is working with both public and private partners to address degradation in our meadows.

Megan Ireson has a BS in Earth Systems from Stanford University and a MA in Education from Humboldt State University. As the Mountain Meadow Project Coordinator, she manages SRWC's meadow restoration and monitoring projects.

For more information on some of Scott River Watershed Council's mountain meadow work, please visit our [Big Meadow and Aspen Restoration 2017 – 2023 Report.](#)



Frogs And Fish: Reversing widespread legacy impacts of introduced sportfish on declining amphibians in glacial lake basins of the Klamath Mountains

Braden Herman. California Department of Fish and Wildlife. 5341 Ericson Way Arcata CA 95521, braden.herman@wildlife.ca.gov, 540-255-4825

Justin Garwood. California Department of Fish and Wildlife. 5341 Ericson Way Arcata 95521, justin.garwood@wildlife.ca.gov, 707-499-7492



The high mountains of the Klamath Range have been dramatically shaped by ancient glaciers which left behind hundreds of natural lakes, thousands of ponds, and extensive networks of peatland meadows. These unique high-elevation wetlands host distinct wetland communities found nowhere else in the region. Cascades Frogs are an aquatic breeding amphibian that strictly inhabit high-elevation wetlands of the Klamath Mountains and the Cascades Range in Northern California. California Cascades Frog populations have been declining for decades. Due to this decline, the species is a California Species of Special Concern and in 2017 was advanced to candidate status pursuant to the California Endangered Species Act by the Fish and Game Commission. Three dominant risk factors include introduced predatory salmonid fishes, recent outbreaks of the fungal pathogen *Batrachochytrium dendrobatidis* (i.e. chytrid fungus) and habitat alteration and desiccation through climate change. Because introduced trout occupy only permanent waters, amphibians often overlap with this predator when axillary shallow waters dry up. To combat these threats, California Department of Fish and Wildlife (CDFW) changed their fish stocking policies nearly a decade ago by ceasing stocking waters that contained Cascades Frogs until an inventory of fish and amphibian populations could be completed. This management shift has reduced trout population distributions, especially in small shallow lakes. Based on an extensive survey from 2021 to present, CDFW is now actively managing trout populations through a multi criteria decision analysis where fishery quality and amphibian resilience are measured for each site. A pilot project was initiated in 2023 to remove Brook Trout in several small lakes that are important to Cascades Frog persistence but are also not considered high-value fisheries. This talk will discuss the expected benefits for both amphibians and for future trout fisheries based on leveraging extensive real-time datasets collected across the landscape.

Braden is a fish and wildlife biologist with the California Department of Fish and Wildlife working in the Klamath Mountains of Northern California. Braden is from Virginia and obtained his M.S. from Humboldt State University with a focus in Fisheries Biology. His research interests include applications of environmental DNA and meta-population genetics for monitoring and managing sensitive species, managing competing interests of fish, wildlife, and human use in wilderness areas, and understanding how differences in local environments impact fish and amphibian populations. In his spare time, you can find him gardening, rafting, fishing, foraging, and water fowling on the North Coast.

*Justin is an Environmental Scientist with the California Department of Fish and Wildlife's Northern Region Fisheries where he has worked on landscape-level population monitoring for coastal salmonids and Klamath Range amphibians over the past 20 years to inform species recovery. He grew up in Trinity County and holds a B.S. in Fisheries and an M.S. in Wildlife at Cal Poly Humboldt. Justin is co-editor of the book: *The Klamath Mountains: A Natural History*.*



Scott Valley Beaver. Photo credit Charnna Gilmore. 2018

Scott River Watershed Beaver Management Plan

Molly Alves, Utah State University

The project is aimed at compiling data in the Scott River Watershed on restoration potential and current beaver status and then drafting an evidence-based beaver management plan that prioritizes increased landscape drought and fire resilience and minimizes human-beaver conflict. Through a combination of geospatial and in-situ data, we will analyze the current state and restoration potential of river networks within the Scott Watershed, then make recommendations for how each portion of the river network would best manage current and future beaver populations to maximize climate resilience benefits and minimize conflict with humans and human infrastructure. The plan will align with statewide beaver management goals described in the new California Department of Fish and Wildlife (CDFW) Beaver Restoration program (3600-071-BCP-2022-MR) and help to inform the creation of a California State Beaver Management Plan.

Molly Alves is a Wildlife Biologist for the Tulalip Tribes of Washington, manager of The Tulalip Beaver Project, and a master's student of Wildlife Biology at Utah State University. She has over a decade of beaver translocation experience in Washington state. Her graduate research is focused is on beaver translocation methodologies and policies and creating a scientific guiding document for beaver translocation practitioners to increase success rates of existing and future programs. Her research assistantship involves developing a beaver management plan for the Scott River Watershed, to be adopted by the California Department of Fish and Wildlife, as a member of their Technical Advisory Board, to assist in the creation of a California State Beaver Management Plan.

Scott Valley Beaver. Photo credit Betsy Stapleton. 2023



Molly Alves, wildlife biologist on the Tulalip Tribes Reservation in Washington State, captures nuisance beavers in the greater Seattle area and relocates them to headwater streams of the Skykomish River.



Natalie Kelly, District Ranger, and Danika Carlson, Deputy District Ranger, Salmon/Scott River Ranger District, Klamath National Forest

Natalie and Danika will provide an update on Salmon Scott River project updates and wildlife crisis strategy.



Jeremy F. Ravenscroft, VMP Forester I – Siskiyou Unit, CalFire

The California Vegetation Treatment Program (CalVTP), developed by the Board of Forestry and Fire Protection, is a critical component of the state's multi-faceted strategy to address California's wildfire crisis.



Quartz Valley Indian Reservation, Scott River Watershed Council, Mid Klamath Watershed Council, Etna Fire Department, Shasta Valley RCD, Jefferson Resource Company and Kip (as a community member) burning outside of Etna in the fall of 2023.



Fire Return Interval Departure (FRID): A useful metric for assessing ecological integrity at the scale of the Scott River Watershed

Kip Van de Water, Fire Analyst with the Pacific Northwest Region of the US Forest Service

Fire return interval departure (FRID) quantifies the difference between current and historical fire regimes by comparing fire return intervals recorded within the last century to fire return intervals estimated from the period prior to Euro-American settlement. FRID is measured as a percentage, with positive values indicating a fire deficit, and negative values indicating an overabundance of fire. Differences in FRID across a landscape are primarily a function of vegetation type (which determines pre-settlement fire return interval) and recent fire history. FRID can be a useful indicator of ecological integrity in ecosystems where frequent fire was historically a keystone process, such as the mixed conifer/evergreen forests of the Klamath Mountains, as well as ecosystems where infrequent fire was the historical norm, like the juniper/sagebrush steppes of the east side. Many areas dominated by frequent fire ecosystems still have a fire deficit (positive FRID) despite numerous recent fires (e.g. Salmon River), while others dominated by infrequent fire ecosystems have experienced too much fire recently (e.g. negative FRID near Lava Beds).

The Scott River basin has a gradient of vegetation types (and associated fire regimes) ranging from moist mixed conifer and mixed evergreen on the west side, to oak and yellow pine surrounding the valley floor, to juniper and dry grass/shrubland on the east side. However, all six HUC10 subwatersheds of the Scott River basin currently have a substantial fire deficit which will be challenging to overcome at the current pace and scale of meaningful fuels treatments (i.e. those which include prescribed fire). A change in our acceptance of wildfire, and associated approach to fire management, will likely be a necessary component of restoring ecological integrity in the Scott River Watershed, especially given projected increases in fire frequency and severity with a changing climate.

Kip Van de Water is a Fire Analyst with the Pacific Northwest Region of the US Forest Service. He was previously the Fire Planner on the Klamath National Forest for about a decade, and served in a variety of other fire and fuels-related positions on the Klamath and Plumas National Forests before that. He grew up in the woods of the Scott River Watershed, and currently lives in Etna with his wife and two kids. In his free time, he enjoys doing anything outdoors with his family. Photo of Kip on the night shift in Hayfork.



Bringing Beneficial Fire Back to the Klamath Mountains

Will Harling, Director, Mid Klamath Watershed Council

The 2023 wildfire season was the first time wildfires were leveraged to achieve landscape scale fuels treatments on National Forest lands in California. And exceptionally wet winter and frequent mid-summer thunderstorms kept fuels and weather conditions in the Western Klamath Mountains within prescribed fire parameters through most of the hot season. The 2023 SRF Lightning Complex was managed from 24,000 acres to 50,000 acres using strategic ignitions along ridges, bringing the fire to containment lines that reduced risk to firefighters and achieved 26,000 acres of treatment with less than 8% high severity in areas that had not burned in over 50 years. Communities, local forests, Tribes and Incident Management Teams worked together to demonstrate how we can utilize natural fire to protect communities and rapidly pay down our fire deficit. Complementary prescribed and cultural burns directly around neighborhoods reduced risk in areas where the wildfire reached communities along the Klamath and Salmon Rivers. These fire management strategies apply to communities across the West, and are dependent on grassroots organizing between local fire organizations including Fire Safe Councils, Prescribed Burn Associations, and local fire districts, as well as local CALFIRE units, USFS Ranger Districts, Tribes and County governments. Together we can turn our fire problem into an opportunity to restore our human-fire relationship, our forests and our rivers.

Will recently was a Burn Boss for burning in Scott Valley.



Will Harling was born in a log cabin on the Salmon River to a bigfoot hunter from Kansas City and a gypsy fleeing San Francisco. His hipneck sensibilities have allowed him to see across political divides, and help bring folks in the Western Klamath Mountains together to restore community and cultural vitality, restore upslope and instream habitats, and build an economy based on stewardship and sustainable harvest. After graduating from Humboldt State in 1999, Will returned home and helped start the Mid Klamath Watershed Council (www.mkwc.org). In 2014, Will helped form the Western Klamath Restoration Partnership, which has brought national focus to restoring fire process in the Klamath Mountains over the past decade, culminating in the Klamath Basin being included as the largest Wildfire Crisis Strategy landscape in the nation in 2023. Will carries a story of hope born from hard times, that there may once again be a harvestable surplus of natural resources here to build communities upon which is not susceptible to the ever shifting political winds in Washington. Hope grounded in the reality that it will take all of us working across party lines and maintaining dignity and respect for each other to build resilient communities, economies and ecosystems.



**Friday, February 23, Soil Health & Scott Valley Agriculture's Water Conservation Efforts
The Towers, Fort Jones**

Time	Presenter	Title
8:00am	Check in & Morning Social	The Towers at 11219 N. Hwy. 3, Fort Jones
8:45am	Emma Morris	Welcome & Opening Commentary
9:00am	Charnna Gilmore, Executive Director, Scott River Watershed Council	A Comprehensive Initiative for Water Management and Ecological Restoration in the Scott River Basin
9:15am	Emma Morris	Working on a Healthy Soils Program in Siskiyou County
9:30am	Dr. Kabir Zahangir	Soil Health and Climate Change
10:00am	BREAK	
10:15am	Dr. Kabir Zahangir	Soil Health and Climate Change
11:00am	Dr. Laura Foglia	SVID Groundwater Recharge Project
11:45pm	Ryan Walker	Looking for Collaborative Solutions with Unlikely Partner
12:15pm	Emma Morris	Closing
12:30pm	End of Event – See you next year!	



***A Comprehensive Initiative for Water Management
in the Scott River Basin***

**Charnna Gilmore, Executive Director,
Scott River Watershed Council**



With the changing climate, increasing frequency, duration, and intensity of these dry conditions into the future is almost certain, this Project will specifically focus on the conjunctive use of surface water and groundwater. This approach to assess different strategies in water management will identify potential challenges, uncertainties, and possible opportunities related to water resources. While imperiling fish, and the tribal communities who depend on them, these conditions, with associated regulatory pressures, are also stressing Scott Valley agricultural producers.

A conjunctive water use study on ~230 acres within Reach 9 of the Scott River involves examining the integrated management of surface water and groundwater resources by changing the timing of water supply withdrawal, and potential application rates. By combining the use of both sources of water the goal would be to minimize the undesirable physical, environmental and economical effects of each solution and to optimize the water demand/supply balance.

Healthy Soils Block Grant Pilot Program **Emma Morris, Program Manager, Resiliency and Sustainability, Siskiyou Economic Development Council**

The [Siskiyou Economic Development Council](#) has received funding from CDFA to administer their [Healthy Soils Block Grant Pilot Program](#), which will give funding directly to Siskiyou County agriculture producers to implement healthy soils practices using the [NRCS Conservation Practice Standards](#). The program will run from early 2024 until summer 2027 (or until funding runs out). Each producer can apply for up to \$200,000 to implement their projects. Shasta Valley RCD is our Technical Assistance Provider and will provide no-cost technical assistance to producers with everything from project design to implementation and reporting. Producers can show their interest by filling out our [JotForm](#), and then be prepared for more information via email. Interested producers can also reach out directly to Program Manager Gillies Robertson (gillies@siskiyoucounty.org, (530).680.7118) or Emma Morris (emorris@siskiyoucounty.org, (530).598.9883).



Soil Health and Climate Change

Dr. Kabir Zahangir, West-Regional Soil Health Specialist, USDA NRCS



Soil health plays an imperative role in addressing climate change. Healthy soil has sequestered more organic matter, helping to mitigate climate change. In addition to carbon sequestration, healthy soil contributes to climate change adaptation. Healthy soil also increases water infiltration rates, thus increasing water holding capacity, which can help mitigate the impacts of droughts and floods. Soil health and climate change are interconnected and foster a diverse biological community essential for soil fertility and ecosystem functioning. Healthy soil management is crucial for maximizing its potential in mitigating and adapting climate change.

Education: *B.Sc. Agriculture (Honors) Major in Agronomy & M.Sc. in Agricultural Chemistry from Bangladesh Agricultural University; M.Sc. in Soil Chemistry for the University of Ghent, Belgium; Ph.D. in Soil Microbiology from McGill, University, Montreal, Canada*

Work Experience: *Scientific Officer, National Ag. Research Institute, Bangladesh; Postdoctoral Associate, Pennsylvania State University, Pennsylvania for three years; Research Faculty, Sustainable Agricultural Farming Systems (SAFS), Department of Land, Air and Water Resources, UC Davis for eight years; Research Scientist, California Department of Pesticide Regulation for two & half years; In 2009 started working with the CA NRCS as Area Agronomist – for Area II then conservation Agronomist for the State Nutrient Management Team for Area I & II; Currently working as a Regional Soil Health Specialist for CA, NV, Hawaii & Pacific Islands Area with the National Soil Health Division, USDA-NRCS*

Publications: *Published 25 manuscripts in peer reviewed journals; Numerous extension publications*



SVID Groundwater Recharge Project

Laura Foglia, PhD., Larry Walker and Associates

The SVID recharge project was initiated in 2016 with an application to the State Water Resources Control Board (SWRCB) that was submitted to obtain permits to divert water from January through March to underground storage for fish and wildlife enhancement. The 2016 pilot project highlighted the potential benefits, showing a response of groundwater storage proximal to recharge sites and citing hydrological modelling results that indicated benefit to instream flows. In 2022, 2023, and, most recently 2024, 180-day temporary permits were obtained for diversion from Scott River to continue this recharge project. Monitoring has been significantly improved over the past few years with installation of an expanded monitoring network to better track and evaluate benefits from the project as well as development of a biological monitoring program during the period of diversion from January through March. Due to these limitations in streamflow, and consequent limitations in water available for recharge, benefits were difficult to fully evaluate in 2022 and 2023. In 2024, the project expanded to include better quantification of the groundwater recharged through the earthen irrigation ditch, in addition the water recharged through application to fields. To support this, additional flow stations were installed along the SVID ditch, enabling quantification of ditch infiltration, along the ditch. Additionally, an expanded geochemical monitoring plan was developed and is currently underway. This geochemical sampling includes radon, which is used to identify groundwater discharge to surface water, both spatially, and over time. Isotope and major ion analyses are used to characterize different sources of water, and act as natural tracers to evaluate recharge dynamics and contribution to streamflow. Updates hydrologic modelling is also being used evaluate both ditch infiltration and quantify recharge benefits based on conditions and implementation in 2023 and 2024. Current efforts are being made to secure a longer-term permit and fully transition to an upscaled project with a maximum of 5,400 ac-ft applied to fields for recharge. There is an understanding of the importance of continuing monitoring and evaluating benefits over time and during multiple water year types and differing conditions as well as look at the potential of longer-term, sustained benefits over time.



Dr. Foglia is a Vice President assisting with projects in the areas of hydrological modelling, groundwater management assistance, and managed aquifer recharge. At LWA, she leads the groundwater services for the Ukiah Basin Groundwater Sustainability Agency, the development and implementation of Groundwater Sustainability Plans for Siskiyou County, and for the South American Subbasin Sacramento Central Groundwater Authority, and she is designing and implementing groundwater recharge projects for the Omochumne-Hartnell Water District, the Scott Valley Irrigation District, and the Dunnigan Water District. Since January 2016, Dr. Foglia is also an Adjunct Faculty Staff in the Land, Air, and Water Resources (LAWR) Department at the University of California, Davis, where she teaches a graduate class on groundwater models and model calibration. She also teaches Groundwater Modeling classes for the State Water Resources Control Board. She holds a Master in Physics from University of Milan, Italy, and a PhD in Environmental Engineering from ETH Zurich, Switzerland.





Looking for Collaborative Solutions with Unlikely Partners

Ryan Walker, Siskiyou County Farm Bureau

The history of resource use in Siskiyou County has largely been one characterized by conflict. Whether considering the Spotted Owl controversy of the 1990's or the more recent experience of dam removal on the Klamath, landowners, tribes, environmental groups, and government agencies often find themselves fighting what seems like a zero-sum game where one side “wins” and the other side “loses”. A future that includes both a profitable ag industry and a healthy and vibrant ecosystem will require all the stakeholders along the Klamath and its tributaries to work on changing this acrimonious narrative. Siskiyou County Farm Bureau has focused much of its recent activity to do just this. Such a change will require finding shared goals for our common landscape and foraging new relationships with our neighbors up and down the Klamath to reach those goals. One aspect of this effort has been Farm Bureau's work to secure grant funding for restoration and drought mitigation programs. This grant funding includes a \$3 million grant from CDFW to implement a temporary fallowing program that could prove to be a template for a mechanism to provide agricultural water users the financial means to adaptively manage farming practices and water use to align more closely with variable hydrologic conditions. Siskiyou County Farm Bureau's experience in securing and implementing this grant illustrate both the promise of new collaborative relationships and the difficulties in overcoming past conflicts and distrust.

Ryan Walker; President, Siskiyou County Farm Bureau. Ryan grew up on the historic JJJ Ranch on Bogus Creek in Siskiyou County, California where he spent his childhood assisting his parents run their family sheep ranch. He attended Stanford University where he studied economics and went on to earn a law degree from Yale Law School. After law school, Ryan practiced law in Los Angeles for 10 years. In 2005, Ryan and his wife Jennifer returned to Siskiyou County with their two young sons where Ryan began taking over operations of the JJJ Ranch. Since he returned, Ryan and his wife have expanded the ranch and made the transition from raising sheep to raising commercial beef cattle. Along with his Farm Bureau duties, Ryan also serves as board chair of the Shasta Valley Resource Conservation District. As president of Siskiyou County Farm Bureau, Ryan has advocated for ag interests in a number of areas, including: TMDL waivers and permits, state and federal ESA listings of coho salmon and gray wolves, dam removal on the Klamath River, California's Sustainable Groundwater Management Act, and, most recently, the State Water Resources Control Boards' efforts to curtail both surface and groundwater use in the Scott and Shasta Watersheds.



Scott River Watershed Council is proud to host this annual event!

This 3-day forum presents a chance for our community to listen to a diverse range of professionals, both local and from broader regions, discussing issues that impact our local ecosystem and economy.

Promoting a shared comprehension of the challenges confronting our watershed and the broader Klamath River basin remains highly significant.

Our river, ecosystem, and fires serve as connectors, uniting us into a larger community.

To the many presenters, thank you for your willingness to share your knowledge with our community. We appreciate your dedication to your respective fields of expertise.

We would also like to thank the California Department of Fish and Wildlife for funding and community members who have donated and who find this an invaluable opportunity for our community.

Many of the amazing photos featured throughout the event's program were taken by our very own talented Mel Fechter.

SAVE THE DATE

SWIF 2025 – February 19th, 20th & 21st 2025

Thank you to our private landowner partners who allow restoration work to be done on their property!



*Michael McGill overlooking the Scott River.
Photo credit Harrison Morrow.*