FEBRUARY 2025

Scott Watershed Informational Forum (SWIF)

SCOTT RIVER WATERSHED FORUM

FOREST HEALTH AND RESLIENCY FORUM

To register please click here

SCOTT RIVER
WATERSHED COUNCIL





Meet our 2025 SWIF Moderators!

Welcome to SWIF 2025

Scott Watershed Informational Forum Moderator

Ethan Knechtle

Ethan Knechtle was a crewmember in the 2023 Scott River Watershed Council's (SRWC)Youth Environmental Summer Studies (YESS) Program and enjoyed all of the experiences and activities he did while working at the SRWC.

Ethan is the son of Kristi and Morgan Knechtle and brother to Owen and Jacob. Ethan is a senior at Etna High School and is excited to start a new chapter of his life. Ethan enjoys participating in extracurricular activities such as Future Farmers of America (FFA) Veterinary Science team, Drama, Associated Student Body (ASB), and raising an animal for fair.

He has many hobbies such as hiking, fishing, hunting, playing his guitar, and singing. He plans to attend a college (undecided) during the fall of 2025 and study Animal Sciences. After he is done with his undergraduate studies, he plans to attend veterinary school and become a licensed veterinarian.

Forest Health and Resiliency Forum Moderator

Molly Breitmün

Molly Breitmün is the Klamath Stewardship Project Associate for The Nature Conservancy. As a dedicated conservation professional with extensive experience in land and water stewardship, she focuses on ranch & forest management, river habitat restoration, and collaborative conservation efforts in the Scott and Shasta Watersheds. She has a background in hydrology and wildfire resource advising, with experience spanning nonprofit, tribal, private landowner, and government partnerships. In addition to her professional work, Molly is a proud landowner and engaged community member in Scott Valley.

February 20, 2025 - Scott Watershed Informational Forum (SWIF)			
Scott Watershed Informational Forum (SWIF) 2025			
Time	**Minutes**	**Presenter**	**Topic**
8:00 AM	45	SRWC Board of Director Meeting, sign in and morning social	
9:00 AM	15	Welcome	Moderator Ethan Knechtle
9:15 AM	15	Quartz Valley Indian Reservation - Sarah Schaefer	Harmful Algal Blooms (HABs) Monitoring in the Scott River
9:30 AM	30	California Department of Fish & Wildlife - Morgan Knechtle	Status and Trends of Adult Chinook Salmon and Coho Salmon in the Scott River
10:15 AM	30	Scott River Watershed Council - Erich Yokel	Scott River Watershed Council's Fisheries Program
10:45 AM	**15**	**Break**	
11:00 AM	30	Scott River Watershed Council - Betsy Stapleton	French Creek Comprehensive Restoration Project
11:30 AM	15	Siskiyou County Emergency Services - Bryan Schenone	Siskiyou County Drought Plan
11:45 AM	15	Morning Panel	Wrap up questions
12:00 PM	**60**	**Lunch Break**	
1:00 PM	15	Scott River Watershed Council - Charnna Gilmore	Scott River Recovery Action Plan Project (SRRAPP) - Overview
1:15 PM	30	Adaptation Insight - Jennie Hoffman	Scott River Recovery Action Plan - Community Valuation of future actions
1:45 PM	30	Larry Walker and Associate - Dr. Laura Foglia	Scott River Recovery Action Plan - Hydrologic Modeling and Upland Management Scenario
2:15 PM	**15**	**Break**	
2:30 PM	60	CBEC Eco Engineering, A Verdantas Co. - April Sawyers & Scott Wright	Building Blocks of the Scott River Recovery Action Plan Project: The Hydrogeomorphic Study
3:30 PM	60	ECOnorthwest	Demand for and Value of Water in the Scott River Watershed
4:30 PM	20	SRRAPP Panel	Wrap up questions
4:50 PM	10	Closing statement	
5:00 PM	60	Happy Hour	

A HUGE thank you to
Larry and Peggy Alexander and
Northern California Resource Center
(NCRC) for allowing us to have this
event at the REC!

For more information about NCRC,
please visit https://ncrcusa.org.

Harmful Algal Blooms (HABs) Monitoring in the Scott River

Sarah Schaefer, Quartz Valley Indian Reservation, Environmental Director
Sarah.schaefer@qvir-nsn.gov

This presentation will provide an in-depth look at the Quartz Valley Indian Reservation's monitoring program for harmful cyanobacteria blooms in the Scott Basin. Attendees will gain insight into the types of cyanobacteria present, the latest research on contributing factors, and best management practices (BMPs) to mitigate harmful blooms. This session aims to enhance understanding of water quality challenges in the region and promote effective strategies for protecting aquatic ecosystems and others that rely on safe water supplies.

Sarah Schaefer serves as the Environmental Director for the Quartz Valley Indian Reservation (QVIR), where she leads initiatives to address environmental issues impacting the health and safety of the community. Her work focuses on the protection and restoration of natural resources, ensuring their sustainability for current and future generations. In addition to her responsibilities at QVIR, Sarah is an active member of the Klamath Basin Monitoring Program, contributing to regional efforts in water quality monitoring and environmental stewardship. Sarah has also been involved in discussions regarding water management in the Scott River tributaries, highlighting her commitment to addressing environmental challenges in the region. Her background is in Wildlife Management, split career between environmental science work and teaching. mother of four, lover of dogs and all things outdoors.

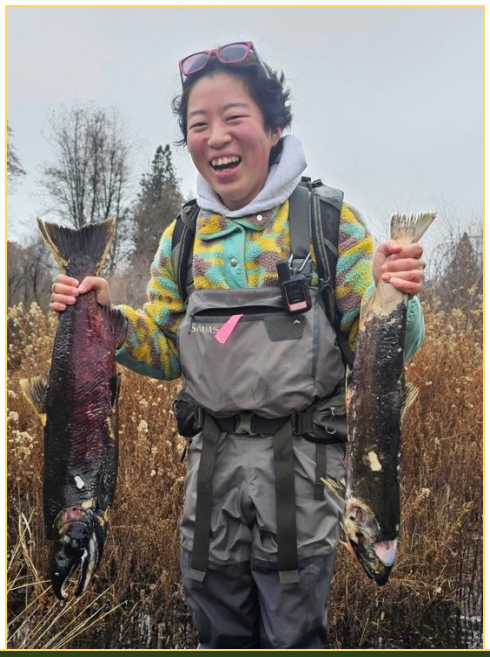
Status and Trends of Adult Chinook Salmon and Coho Salmon in the Scott River

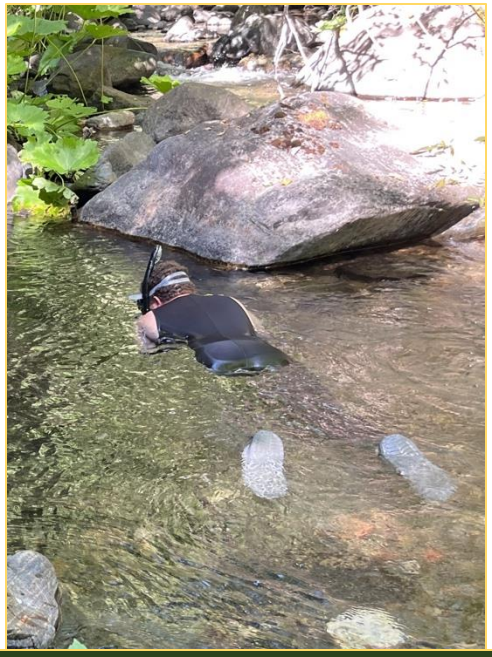
Morgen Knechtle, California Département of Fish & Wildlife, Senior Environmental Scientist
Morgan.Knechtle@wildlife.ca.gov

This presentation will focus on the status and trends of Adult Chinook Salmon and Coho Salmon escapement in the Scott River. There will be a brief overview of the methods used to generate these estimates. The data presented for Chinook Salmon will be from the years 1978- 2023 and the Coho Salmon data presented will be from 2007-2023. Preliminary data from the 2024 season will be discussed.

Current trends in abundance will be presented annually and by brood year. These adult data will be compared to the number of juveniles produced by cohort to evaluate in-river and out of basin productivity.

Morgan has been monitoring adult salmonids with the Department for 25 years. Morgan has worked on the Mendocino County Coast conducting salmonid life cycle monitoring and has been working in the Klamath Basin since 2005. Currently, he is working within the Department's Coastal Fisheries Program supervising the Klamath and Trinity River Project based out of Arcata, Weaverville and Yreka. The Klamath and Trinity River Project is primarily charged with monitoring the in-river recreational harvest, natural area and hatchery escapement of fall run Chinook Salmon within the Klamath basin. In Yreka, monitoring is specifically focused on Chinook and coho escapement in the Shasta River, Scott River, Bogus Creek, Jenny Creek, Shovel Creek Fall Creek and Fall Creek Hatchery.





SPAWNING SURVEYS ***DIRECT OBSERVATION*** ***PIT TAGGING***

Scott River Watershed Council's Fisheries Monitoring Program

Erich Yokel, Scott River Watershed Council, Monitoring Supervisor
erich@scottriver.org

The SRWC's Fisheries Monitoring Program is a collaborative initiative between the Scott River Watershed Council (SRWC) and the Quartz Valley Indian Reservation (QVIR). This program aims to enhance ongoing efforts to document juvenile and adult coho salmon (*Oncorhynchus kisutch*) populations within the Scott River and its tributaries. By integrating with broader monitoring and research efforts throughout the basin, this work provides critical data to inform fisheries and water management decisions while guiding future habitat restoration activities. Key components of the monitoring program include:

- **Spawning Surveys** – Conducted to assess the abundance, distribution, and habitat use of adult salmon during their spawning migrations.
- **Juvenile Direct Observation** – Snorkel surveys and other visual assessment methods help track juvenile salmon presence, distribution, and habitat preferences.
- **Passive Integrated Transponder (PIT) Tagging** – Utilizing PIT tags to track fish movement, migration patterns, and survival rates, providing valuable insights into population dynamics and environmental influences.

This presentation will highlight this integrated effort and how SRWC is working to understand how the restoration efforts are impacting the Scott River coho salmon.

Erich Yokel has dedicated over 20 years to natural resource management in Western Siskiyou County, with a primary focus on coho salmon conservation, stream habitat restoration, and water quality improvement. Since 2015, he has been an integral part of the Scott River Watershed Council, contributing his expertise to habitat restoration projects, watershed health initiatives, and collaborative conservation efforts. His work supports sustainable ecosystem management and the long-term viability of local fish populations.



Siskiyou County Drought Plan – Strategies for Resilience

Bryan Schenone, Siskiyou County, Director of Emergency Services (OES)
bschenone@co.siskiyou.ca.us

Siskiyou County faces increasing challenges from prolonged drought conditions, impacting local communities, agriculture, and natural ecosystems. This presentation will explore the Siskiyou County Drought Plan, a comprehensive strategy designed to enhance water conservation, improve drought preparedness, and promote long-term resilience.
We will discuss the historical and current drought patterns in the region, key factors influencing water availability, and the critical role of monitoring and early warning systems. Additionally, the presentation will outline essential water management strategies, including sustainable groundwater use, irrigation efficiency improvements, and emergency response measures.

Collaboration is vital in addressing drought-related challenges, and we will highlight the partnerships between local agencies, tribal governments, conservation groups, and state and federal programs. Through proactive planning, innovative solutions, and community engagement, Siskiyou County is working toward a more sustainable and resilient future.
Join us to learn how the Siskiyou County Drought Plan aims to mitigate drought impacts and how individuals, businesses, and policymakers can contribute to water conservation efforts.

Bryan Schenone serves as the Director of the Office of Emergency Services (OES) for Siskiyou County, California. In this role, he leads the county's disaster management efforts, focusing on preparedness, response, recovery, and mitigation to protect the lives and property of residents.

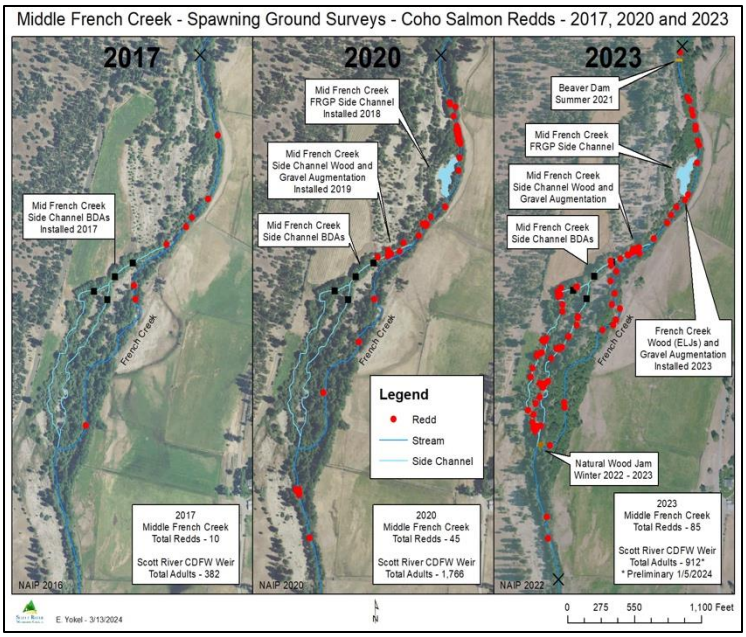
Under his leadership, the OES has implemented initiatives such as ReadySiskiyou-Alerts, an upgraded emergency notification system designed to provide timely alerts to the community.
Bryan's commitment to emergency management is evident in his proactive approach to disaster preparedness and community safety. He emphasizes the importance of timely and accurate emergency communications to ensure the well-being of Siskiyou County residents.
His leadership has been instrumental in enhancing the county's readiness to handle various emergencies, including wildfires, winter storms, and earthquakes. By fostering collaboration among local agencies and promoting public awareness, Bryan continues to strengthen Siskiyou County's resilience against disasters.

Thinking Comprehensively: A Whole Watershed Approach to Restoration Planning

Betsy Stapleton, Scott River Watershed Council, Project Development and Permitting Specialist, betsy@scottriver.org

The French Creek Watershed contains the "Miracle Mile" (one square mile with the highest number of different conifer species in the world), might be the most productive coho spawning and rearing stream in California, and supports agriculture and other human uses. Restoration planning to enhance and protect all of these needs requires a holistic and comprehensive approach. The Scott River Watershed Council has assembled a broad team of landowners, experts, Tribes and agencies to undertake a whole watershed approach to restoration planning. Learn about our approach in this session and how our past successes are going to inform an expanded effort.

To underscore the potential positive impact of restoration efforts on coho salmon populations, French Creek may offer valuable insights. Since 2017, various restoration measures have been initiated to support coho salmon. The increased utilization of this reach by returning coho salmon can serve as a metric for assessing project effectiveness and identifying actions that may contribute to coho recovery.



Betsy Stapleton is the Scott River Watershed Council Project Manager for the French Creek project, as well as SRWC's Project Development and Permitting Specialist. She has spent the last 11 years growing her expertise in all aspects of restoration planning, permitting and implementation as SRWC has continually increased the scale and scope of its efforts. She brings skills in project management, data integration and community engagement from her former career as a Nurse Practitioner and health plan manager.

Scott River Recovery Action Plan Project (SRRAPP)

Charnna Gilmore, Scott River Watershed Council, Executive Director
charnna@scottriver.org

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*** 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.

Over the past several years, a committee of people, all interested in seeking meaningful solutions, have been meeting 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, she committed over 20 years coaching youth, served two terms on Scott Valley United School District's School Board, and is currently serving on the City of Etna's City Council.

Decision-Making for a Resilient Future for Scott Valley

Jennie Hoffman, Adaptation and Insight
hoffrau@gmail.com

Jennie is working with the Scott River Recovery Action Plan Project team to develop effective decision-making processes that accounts for more than analyzing physical and financial factors. This presentation will explore a structured approach to decision-making that highlights underlying values, perspectives, and trade-offs often overlooked in traditional planning.

By integrating diverse stakeholder input, this process aims to enhance understanding, foster inclusive dialogue, and facilitate the negotiation of risks and tradeoffs associated with future actions. The approach encourages creative problem-solving to develop solutions that align with community values while addressing complex challenges such as climate adaptation, resource management, and sustainability.
Join us to discover how decision-making criteria can help communities navigate uncertainty, strengthen resilience, and create strategies that are both practical and equitable.

Jennie Hoffman specializes in decision-making frameworks that extend beyond conventional physical and financial assessments. Her work focuses on bringing to light values and issues that might otherwise be overlooked when planning for future actions. Through her facilitation, Jennie helps stakeholders engage in meaningful discussions, understand diverse perspectives, and negotiate trade-offs associated with different strategies.

Upland Management and Precipitation-Runoff Modeling System in Scott Valley

Laura Foglia, Ph.D., Katrina Arredondo, Ph.D., P.G., Chris Dory (Larry Walker Associates)

Multiple studies have demonstrated that targeted plant removals, controlled burns, and other activities occurring on the uplands of a watershed have the potential to profoundly impact downstream flow. However, the extent and nature of these effects are site specific, and the specific implications for streamflow in Siskiyou County watersheds remain largely unexplored. Of particular interest is the Scott River due to its important role as both a tributary of the Klamath River and a habitat for endangered salmon species. To better understand streamflow streamflow and upland recharge contributions in the valley, a Precipitation-Runoff Modeling System (PRMS) was constructed to estimate runoff and streamflow in the entire Scott Valley Watershed. The PRMS model was designed to provide improved modeled the Scott Valley Integrated Hydrologic Model (SVIHM), a MODFLOW-based groundwater model.

SVIHM is used by the local groundwater sustainability agency (GSA) of the Scott Valley groundwater basin for groundwater sustainability plan (GSP) implementation. The GSA and stakeholders are interested in upland management projects as a mechanism to sustainably manage the groundwater basin. Upland management scenarios for meadow restoration, juniper removal, and wildfire have been run using the Scott Valley PRMS model. To ensure model outputs match real watershed responses, statistical relationships between streamflow and precipitation were compared before and after a large wildfire in the South Fork watershed. Wildfires were chosen as a sufficient proxy for human driven upland management due to their occurrence at single points in time, measurable vegetation impacts, and well-mapped extents. Both analyses demonstrate the impact of upland management on streamflow, ET, recharge, and groundwater baseflow. Results will be used to enhance the monitoring network to better characterize impact/benefit of different management activities.

Laura Foglia, Ph.D. | Vice President

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.

LWA

LARRY WALKER ASSOCIATES

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Building Blocks of the Scott River Recovery Action Plan Project (SRRAPP): The Hydrogeomorphic Study

April Sawyer and Scott Wright, CBEC Eco Engineering, A Verdantas Co.
a.sawyer@cbecoeng.com or s.wright@cbecoeng.com

A comprehensive chronology of the natural- and human-caused fluvial geomorphic events, processes, and drivers is needed to provide context to today's river conditions along the mainstem Scott River and its tributaries. The Scott River has been channelized, leveed, and straightened, which has reduced channel complexity. These actions have likely impacted lateral, longitudinal, and vertical connectivity with floodplains, groundwater availability, and timing of baseflows, as well as the quantity and quality of habitat for various life stages of anadromous salmonids and Pacific lamprey. Additionally, the timing, amount, and location of sediment deposition and erosion, which can affect surface water-groundwater connectivity as well as habitat conditions, are poorly understood. Thus, the reach-scale and system-wide impacts of localized recovery actions are often poorly defined and could lead to unintended outcomes or maintenance concerns. The Hydrogeomorphic Study component of the Scott River Recovery Action Plan Project (SRRAPP) intends to evaluate the watershed-wide hydrologic and geomorphic processes and sediment routing patterns, and augment Larry Walker and Associates' (LWA) Scott Valley Integrated Hydrologic Model. By coupling LWA's hydrologic and groundwater modeling tools with system-wide hydraulic and sediment transport models of the mainstem Scott River, we will assess existing conditions of channel hydraulics, surface water-groundwater interactions, and sediment transport patterns. We aim to identify and prioritize specific restoration actions that consider watershed-wide sediment conditions and hydraulic connectivity by overlaying the geomorphic process assessment with the coupled groundwater-surface water models and an understanding of habitat, fish, and agricultural utilization. This pillar of the SRRAPP will provide detailed information to support the development of a comprehensive, holistic river action plan with prioritized recovery actions and identified benefits and challenges. We will integrate and leverage multiple existing planning and design efforts into the larger watershed setting to gain momentum toward a project implementation phase of SRRAPP-identified actions.

April Sawyer is a Senior Ecohydrologist at CBEC, Eco Engineering (A Verdantas Company) in West Sacramento, California. April has a M.S. from the University of Montana in fluvial geomorphology and background in hydraulic modeling to assess habitat suitability and restoration design alternatives for various aquatic species. April has 15 years of consulting experience in fluvial geomorphology, hydraulic modeling, aquatic biology, project implementation, and project management, with an emphasis on habitat rehabilitation. She has managed planning, permitting, design, monitoring, and five years of implementation of a large floodplain restoration project and public-private partnership funded by multiple federal and state grant sources and a local water agency. She enjoys working on challenging multidisciplinary projects crossing the physical and biological domains. April is the project manager for the Hydrogeomorphic Study component of the Scott River Recovery Action Plan.

Dr. Scott Wright is a Civil Engineer with over 25 years of experience in the private sector and government, with expertise in the areas of fluid mechanics, hydraulics, sediment transport, and geomorphology. He is a Senior Ecohydrologist at CBEC, Eco Engineering (A Verdantas Company). He holds a master's degree from the University of Iowa, and a PhD from the University of Minnesota, Saint Anthony Falls Laboratory. Scott then served for 20 years as a researcher for the U.S. Geological Survey, where he worked on river systems throughout California and the western United States, conducting research and providing information to resource managers and stakeholder groups. Over his career, he has authored or co-authored 80+ articles in peer-reviewed outlets and 100+ abstracts and presentations for technical and non-technical audiences. Scott is motivated by a desire to understand river ecosystems, to document natural processes and human impacts on rivers, and to help resource managers implement solutions to complex water resources problems. Scott is a technical advisor on this project.

Demand for and Value of Water in the Scott River Watershed

Dr. Mark Buckley, ECOnorthwest, Natural Resource Economist and Partner
buckley@econw.com

ECOnorthwest has been working with SRWC and SRRAP to assess the demand and economic value of water within the Scott River Watershed. Specifically, the analysis focuses on estimating the current values of agricultural production, salmon populations, recreation, and cultural and tribal values supported by the Scott River within the watershed. The analysis estimates the value for current conditions and discusses the expected trajectory of these values under a Business-As-Usual Scenario i.e. in the absence of a Scott River Recovery Action Plan. ECOnorthwest will share findings from their analysis.

ECONorthwest
ECONOMICS · FINANCE · PLANNING

Dr. Mark Buckley, a natural resource economist and partner at ECOnorthwest, designs and manages economic analyses for water resources and land management. He brings an intuitive, strategic approach to understanding incentives for policy design, focusing on context-specific scarcities to value goods and services. His work improves watershed investment efficiency, including integrated planning, restoration, conservation, and damage recovery. He's conducted research integrating ecosystem service restoration in heavily-used areas, such as urban areas, and designed systems for economic benefits from joint investments in natural and physical capital. Mark collaborates with interdisciplinary teams, often serving as an expert witness on natural resource issues. He's published research, edited books, and taught environmental economics at Portland State University.

February 21, 2025 - Community Resilience through Health Forest Initiatives			
SWIF - Soil Health & Scott Valley Agriculture - Tentative Schedule			
Time	**Minutes**	**Presenters**	**Topic**
8:00 AM		Sign in and morning social	
8:30 AM	15	Welcome	Moderator Molly Breitmün
8:45 AM	15	Family Water Alliance, Inc. - Nadine Bailey	Boots on the Ground-The key to protecting the things we cherish
9:00 AM	15	Siskiyou Prescribed Burn Association - Patty Grantham	2025 Siskiyou Prescribed Burn Association Update
9:15 AM	15	Scott River Watershed Council - Megan Ireson	Scott River Mountain Meadows Program
9:30 AM	45	California Department of Fish & Wildlife - Justin Garwood	We can have frogs and catch fish too: Reversing widespread legacy impacts of introduced sportfish on declining amphibians in glacial lake basins of the Klamath Mountains
10:15 AM	**15**	**Break**	
10:35 AM	20	USFS Klamath National Forest - Chris Gentry	East Fork Forest Management
10:55 AM	20	Scott River Watershed Council - Dane Roesle	Scott River Watershed Council Forest Health Projects
11:15 AM	45	Hearst Forests - Cole Humphrey	Uneven-aged Forest Management: Effects on species composition & stand health
11:45 AM	30	Forest Health Panel & Closing	Wrap up questions
12:15 PM		Adjournment	

Boots on the Ground - The key to protecting the things we cherish

Nadine Bailing, Family Water Alliance, Inc., Chief Operations Officer
Baileynf@gmail.com

Partnerships = Accomplishments
Boots on the ground = solutions for the future

Family Water Alliance Inc. and Jefferson Resources are excited to be a part of the effort by Cal Fire to reduce the impacts of climate change on local communities, by reducing the fuel load and cleaning up after recent fires. The Weed Community Forest and Restoration Project will focus on forest health and resiliency by restocking forests to establish strong environments capable of surviving future wildfire, endemic, and exotic pests, drought and temperature fluctuations.

The project will take place in the footprint of the Boles and Mill fires in Siskiyou County and will allow the public to see that there are measures that can be taken to reduce the hazards of fire. This is a unique partnership that underscores the importance of a healthy watershed to fish and farms as well as communities. The location next to Interstate 5 will give us some excellent opportunities to talk about the benefits of fuel reduction to the health and future of our forests.

Siskiyou Prescribed Burn Association

Patty Grantham, Siskiyou Prescribed Burn Coordinator
pgrantham@svrcd.org

Update on the Siskiyou Prescribed Burn Association - 2024 progress and 2025 plans

Patty holds a Bachelor of Forest Science degree from the University of Washington, College of Forest Resources. She spent more than 40 years working for the US Forest Service in a wide variety of technical and leadership positions. Patty possesses a deep natural resources management background, with an emphasis on wildfire prevention and response and strategic hazardous fuels reduction planning and implementation. She joined the Siskiyou Prescribed Burn Association as coordinator in January 2024, focusing on public outreach, partner/landowner communications and support, and grant management.

Meadow Restoration in the Scott Watershed

Meagan Ireson, Scott River Watershed Council,
Mountain Meadow Project Coordinator
megan@scottriver.org

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. Through ongoing monitoring, hydrologic restoration, and conifer removal in meadows, SRWC collaborates with public and private partners to restore degraded meadows across the watershed..

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 Cabin Meadows and Rock Fence Creek Meadows Baseline Conditions Report.

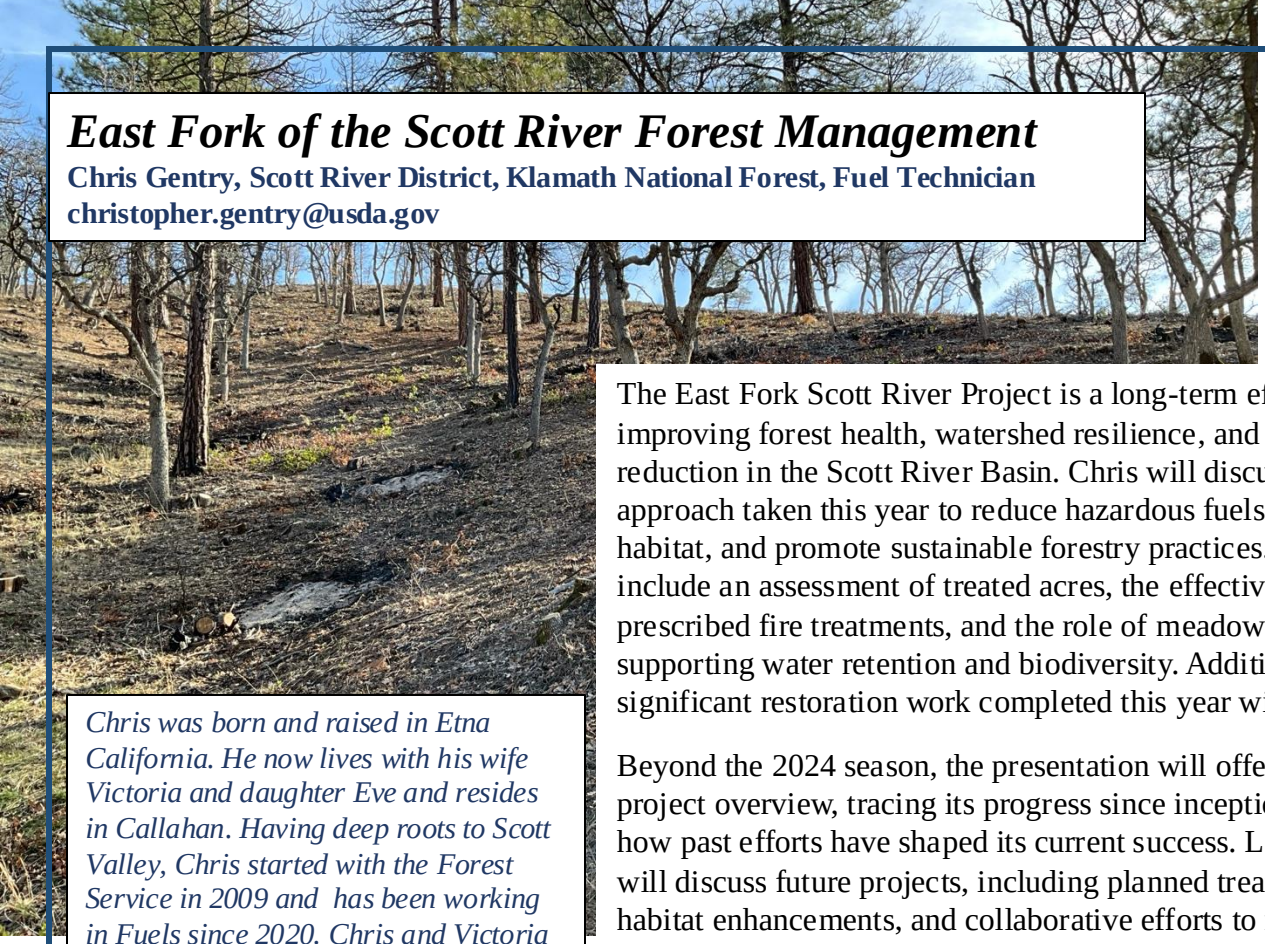
We can have frogs and catch fish too: reversing widespread legacy impacts of introduced sportfish on declining amphibians in glacial lake basins of the Klamath Mountains

Justin Garwood, California Départements of Fish & Wildlife, Environmental Scientist
justin.garwood@wildlife.ca.gov

The high mountains of the Klamath Range have been dramatically shaped by ancient glaciers which left behind hundreds of natural historically fishless 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 and populations have been declining for decades. The Cascades Frog is a California Species of Special Concern and is currently a candidate species pursuant to the California Endangered Species Act. 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 lake restoration 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 provide an update on our amphibian and fish population inventories, our lake restoration progress, and the status and direction of our existing trout fisheries.

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. Justin grew up in Trinity County and enjoys backpacking, fishing, and rafting with his family and being a mentor to emerging field biologists. He holds a B.S. in Fisheries and an M.S. in Wildlife at Cal Poly Humboldt and is co-editor of the recent book: The Klamath Mountains–A Natural History.



East Fork of the Scott River Forest Management

Chris Gentry, Scott River District, Klamath National Forest, Fuel Technician
christopher.gentry@usda.gov

The East Fork Scott River Project is a long-term effort aimed at improving forest health, watershed resilience, and wildfire risk reduction in the Scott River Basin. Chris will discuss the strategic approach taken this year to reduce hazardous fuels, enhance wildlife habitat, and promote sustainable forestry practices. The presentation will include an assessment of treated acres, the effectiveness of thinning and prescribed fire treatments, and the role of meadow restoration in supporting water retention and biodiversity. Additionally, any other significant restoration work completed this year will be highlighted.

Beyond the 2024 season, the presentation will offer a comprehensive project overview, tracing its progress since inception and illustrating how past efforts have shaped its current success. Looking forward, Chris will discuss future projects, including planned treatments, continued habitat enhancements, and collaborative efforts to maintain and expand the project's impact.

Chris was born and raised in Etna California. He now lives with his wife Victoria and daughter Eve and resides in Callahan. Having deep roots to Scott Valley, Chris started with the Forest Service in 2009 and has been working in Fuels since 2020. Chris and Victoria love traveling and all things outside.

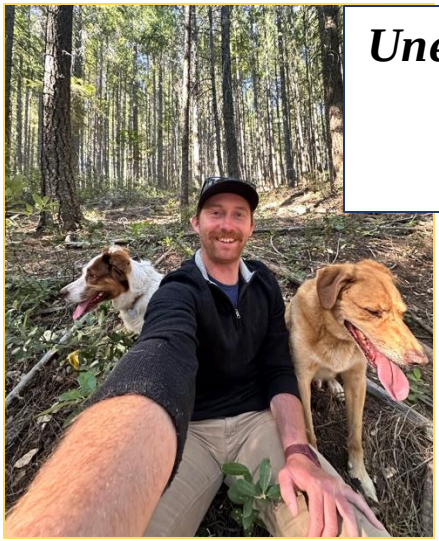
Scott River Watershed Council Forest Health Projects

Dane Rosele, Scott River Watershed Council, Fuel Technician
dane@scottriver.org

The health of our forests is integral to the well-being of the entire watershed ecosystem. This presentation will highlight the Scott River Watershed Council's ongoing efforts to restore and maintain forest health in the Scott River Watershed. We will delve into the importance of forest management practices that reduce wildfire risk, enhance habitat for wildlife, and improve water quality.

Topics will include collaborative restoration projects, such as forest thinning and prescribed burns. Working with landowners to emphasizes the connection between forest health, watershed resilience, and the long-term sustainability of our natural resources. Through community partnerships and scientific research, we strive to create a balanced approach to forest stewardship that benefits both the environment and local communities.

Dane Rosele serves as the Forest Management Project Coordinator for the Scott River Watershed Council. In this role, Dane is instrumental in overseeing and managing forest health initiatives within the Scott River Watershed. His work focuses on forest restoration projects aimed at reducing wildfire risk, enhancing habitat quality, and improving the overall ecological resilience of the area. With a deep understanding of forest management, Dane collaborates with local communities, agencies, and researchers to implement strategies that ensure the long-term sustainability of the watershed's forests and natural resources. His efforts are key to preserving the health of both the forest ecosystems and the local communities that rely on them.



Uneven-aged Forest Management: Effects on species composition & stand health

Cole Humphrey, Hearst Forests, Forester
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Uneven-aged forest management is the most common management strategy for small forest landowners throughout the U.S. However, is this management strategy conducive to the current risk of intense fire behavior or potential forest pathogens impacting these landowners? We will be reviewing what is uneven-aged silviculture, uneven-aged forest structure, deviations from historic forest structures, regulatory and economic considerations, and impacts on fire behavior and forest health.

Cole Humphrey is a Forester for Hearst Forests in McCloud CA. Cole grew up in Siskiyou County splitting his time between the Shasta and Scott Valleys. Cole holds a Bachelor of Science in Forestry with an emphasis in Forests Operations from Humboldt State University. Cole graduated in 2016 on a Saturday and started his professional career that Monday with Michigan-California Timber Company in Yreka. At MCTC, Cole started out as a technician, timber marking, laying out timber sales, check cruising, and conducting owl surveys. Cole quickly progressed into plan writing and received his registered professional foresters license in 2020. At the end of 2021 Cole was promoted as the inventory forester at MCTC until the timberlands were sold in the summer 2022. Cole stayed with the timberlands joining FWS Forestry and assisting managing Acer Klamath timberlands till 2023. Since 2023 Cole has been with Hearst Forests helping manage their 82,000 acres timberlands. Cole considers himself a generalist with his current skill set but particularly enjoys forest inventory and forest planning.

Thank you for participating in this year's SWIF 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, economies, 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.

The amazing photos featured throughout the event's program were taken by our very own talented Mel Fechter. Mel, we truly appreciate how you've captured the depth and beauty of our community and home with such artistry and care.

SAVE THE DATE
SWIF 2026 – February 18th, 19th & 20th 2026

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