



Salmon River Restoration Council



2016 Annual Report





News from the Watershed Center

We're excited to have installed a new renewable energy system to power our off-grid office and Watershed Center in Sawyers Bar. With funding from the Shasta Regional Community Foundation we were able to install a 2300 watt solar power system this year and significantly reduce our impact on the environment. With the addition of a low wattage heating fan, and LED lights, this system has allowed us to essentially stop using our diesel generator. This saves approximately 1,200 gallons of diesel fuel, cuts our bills by \$5,000, and reduces our CO2 emissions by 27,000 lbs (the equivalent of taking 3 cars off the road) every single year!

We've also made some great additions to our staff this year. Emily Ferrell accepted our Noxious Weeds Program Coordinator Position last spring. She came to us having just finished her MS in Environmental and Natural Resource Sciences at Humboldt State University. Kristen Sellmer took over our Fisheries Program Coordinator position during the summer. She was an AmeriCorps Watershed Steward for the Yreka CA Department of Fish & Wildlife in 2013 and has since been working as a biological sciences technician for University of Alaska and US Fish & Wildlife Service in Fairbanks Alaska. Bonnie Bennett, who was an AmeriCorps Watershed Steward for SRRC in 2011 and has since been a program staff member, began coordinating our Water Monitoring Program. They've all been doing a wonderful job and we are very happy to have them.

The Watershed Center serves as a valuable community hub, hosting meetings, providing computer/internet access and other resources to the community, and offering watershed information for travelers. We've been occupying the old school in Sawyers Bar for over 15 years now. Our membership and fund raising drives contribute significantly towards our ability to operate the Watershed Center, and your contributions are much appreciated.

SRRC Board

- Toz Soto, President
- Ben Beaver, Vice President
- Kathy McBroom, Secretary/Treasurer
- Petey Brucker
- Will Harling
- Creek Hanauer
- Jennifer Silveira
- Josh Saxon
- Hawk White

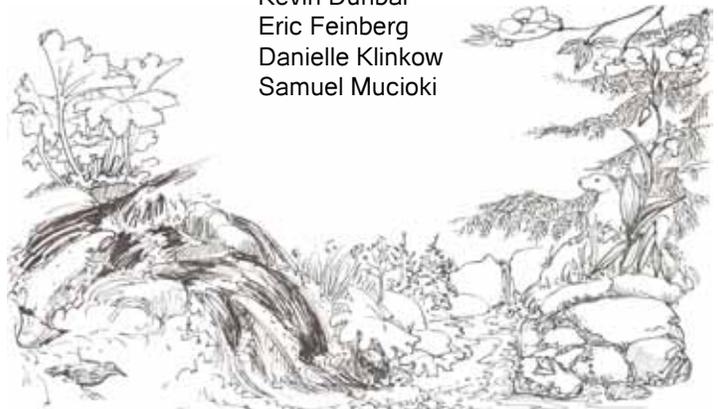
SRRC 2016 Staff

- Karuna Greenberg, *Restoration Director*
- Lyra Cressey, *Associate Director*
- Kathy McBroom, *Office Manager*
- Sarah Hugdahl, *Program Staff*
- Scott Harding, *Fire, Fuels & Forestry Coordinator*
- Melissa Van Scoyoc, *Habitat Restoration Coordinator*
- Tom Hotaling, *Fisheries Coordinator through July 31*
- Kristen Sellmer, *Fisheries Coordinator*
- Bonnie Bennett, *Monitoring Coordinator & Program Staff*
- Emily Ferrell, *Noxious Weeds Coordinator*
- Brenda Hurlimann, *Bookkeeper*
- Steve Adams, *Watershed Center Maintenance*



2016 Employees and Field Crews - Fuels, Fisheries and Noxious Weeds

- | | | |
|-----------------|------------------|----------------|
| Thomas Balsz | Matt Cavin | Beau Quinter |
| Jordan Bartlett | Eddie Collins | Katie Reinhart |
| Bonnie Bennett | Mike Cress | James Stewart |
| Sheri Campbell | Lino Darling | Alex Varga |
| Anne Cavin | Alex Denney | Todd Whitmore |
| | Kevin Dunbar | |
| | Eric Feinberg | |
| | Danielle Klinkow | |
| | Samuel Mucioki | |





View from the ridge behind Sawyers Bar photo by Scott Harding

As we enter our 25th year of restoration work in the Salmon watershed, we are working on a larger scale than ever before. Some of our exciting work this year included:

- Working on several large restoration projects to create and enhance fish habitat so young salmon and steelhead can find much needed shelter from wintertime floods and summer droughts. We've completed designs for a couple of sites and are moving toward getting these projects built.
- We are continuing to control invasive noxious weeds without the use of herbicides on more than 450 infested sites throughout our 751 square-mile watershed. We achieved a 68% reduction in oblong spurge in 2016. All of our diligent work is paying off!
- In our ongoing effort to make our community more fire-safe, we completed 58 acres of fuels reduction on 14 different private properties this year. We're focusing on creating long, linear fuels reduction zones that protect neighborhoods against wildfire and help facilitate the use of prescribed fire.

SRRC's Program Updates



Fisheries

Increases in precipitation throughout the state made 2016 a friendlier water year for fish in the Salmon River than the last couple. This was a relief for many and kept our fisheries crew on their toes and producing exciting results. The SRRC Fisheries Program continued ongoing habitat enhancement efforts through brush bundling in juvenile fish rearing habitats and fish passage improvement at creek mouths. Adult and juvenile salmonid population monitoring continued through the annual Spring Chinook Dives, Fall and Spring Chinook Spawning Surveys and the Coastal Monitoring Plan Aquatic Survey Program for juvenile coho salmon. SRRC assisted the US Forest Service with lamprey distribution investigations, and also continued operating the Juvenile Outmigration Screw Trap at the mouth of the Salmon River and Big Bar on the Klamath in cooperation with the Karuk Tribe.

While the 2016 return of adult spring Chinook and summer steelhead remained below historical averages (rank 17th out of 27 survey years),

numbers were up from 2015 with 406 total spring Chinook and 327 summer steelhead counted. During formal summer snorkel surveys for juvenile coho salmon, 82 juvenile coho were observed throughout the survey area which is an increase from 0 in 2015.

2016 really ended with a splash on the Salmon River. Northern CA was hit with its wettest October in 30 years and higher than normal amounts of rain have continued through January. These persistent storm events created challenging river conditions for surveyors and spawner estimates were difficult to obtain. While these intense precipitation events can sometimes be challenging for managers and fish alike, they offer some hope of relief for the state's severe drought conditions. The regional snow pack is 57% of the April average, putting us on track for at least an average snowpack year, similar to the 2015-2016 season. This is good news for Salmon River fish whose dwindling numbers are threatened by the low stream flows and high water temperatures characteristic of drought years.

For 2017, the fisheries program is looking forward to collaborating with the habitat restoration program on monitoring efforts to assess the effectiveness of restoration activities on fish populations. Our dedication to collecting sound data that supports the restoration of the anadromous fisheries resources of the Salmon River continues into 2017 with our talented fisheries staff, both old and new.



A generous thank you goes out to all of the volunteer participation and support during the 2016 spawner surveys and other fisheries projects, we couldn't do it without you!

The Fisheries program was funded this year by the Karuk Tribe, CA Department of Fish & Wildlife, Mid Klamath Watershed Council, National Fish & Wildlife Foundation-Coho Enhancement Fund, US Fish & Wildlife Service and the US Forest Service.

Noxious Weeds



A vigorous crop of invasive plants emerged in 2016 after much-needed rains ended a long drought in the Salmon River Watershed. Thankfully, SRRC's Noxious Weeds crew and volunteers also emerged and worked hard to stop the most threatening weed populations from damaging native ecosystems. Once again we managed to keep tight control on prioritized weeds without using chemical pesticides by strategically surveying for, digging up, and bagging the seedheads of oblong spurge, spotted knapweed (*left*), Italian thistle (*below left*) and others. We also removed weeds from areas with a high likelihood of dispersal, such as trailheads, campgrounds, river accesses, and roadways.

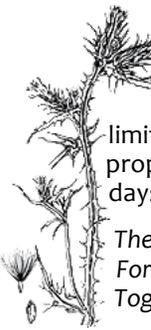
In early spring we began pulling all known patches of oblong spurge while conducting thorough surveys of riparian areas along the navigable mainstem Salmon River. In addition to removing thousands of plants from previously known sites, two large infestations were discovered and successfully treated thanks to the keen eyes of dedicated Salmon River paddlers. After six years of intensive treatments, it seems that our persistent hand digging method is impacting the population's growth: this year we found 68% fewer plants along the mainstem compared with the 2015 season.

Oblong spurge (*right*) thrives in our region's riparian habitats, so SRRC will continue to prioritize treatment and surveying for the species in order to limit spread as much as possible.

This summer kicked off the knapweeding crew's 19th official season of successfully controlling spotted knapweed. With most of the old spotted knapweed sites down to a few plants at most, our crew was able to thoroughly treat several large, recently-discovered sites. In the past few years, through increased surveying and well trained eyes, our team discovered several dense, new patches at disturbed upland sites. The two most accessible sites were tarped with help from the USFS. This year our team kept a close eye on these high-risk areas, surveying along the North Fork corridor and controlling a tight perimeter around the tarps, in order to contain and eventually eradicate this pest.



Our program also goes after the noxious weeds that **we can potentially eradicate** from our watershed due to their small population sizes, even if they are more widely spread regionally, namely Scotch broom, Canada thistle, and tree of heaven. With more widely established weed species, such as Marlahan Mustard, we focused our efforts on clearing high-risk areas, such as river accesses and trailheads, to limit dispersal. Many landowners did their part this year by treating mustard and starthistle on their own properties. The progress made on these lesser-rated species was primarily the result of community work days with our partners at MKWC, local river school children, and groups of dedicated resident volunteers.



The Noxious Weeds program was funded this year through the CA Dept. of Food and Agriculture's State & Private Forestry Funds, Siskiyou County Resource Advisory Council, and the National Forest Foundation's Pulling Together Initiative.

Water Monitoring



Annually SRRC monitors around 50 sites for air and water temperature in various locations around the Salmon River drainage. These sites are then added into the data-set that SRRC has been compiling for over 20 years. We also collect flow measurements for around 15 locations each month throughout the summer to compliment the temperature dataset.

The Water Monitoring Program expanded its focus in 2016 to include more restoration monitoring, in addition to our regular temperature and flow monitoring. Two of our upcoming restoration projects - Kellys Bar and Red Bank Riparian & Fisheries Habitat Enhancement - required ground water monitoring for the planning and design phase. Wells were placed in multiple locations around the study areas and monitored for groundwater levels, temperature and dissolved oxygen. Flood plains and side channels are being analyzed up and down the river for potential summer cold water refugia and winter rearing habitat which could benefit all aquatic species of the Salmon River.

Another exciting development has been the processing of our entire 20 plus year temperature dataset with the help of Riverbend Sciences in Eureka, CA. Our long term dataset is being input into a regional database and model called NorWeST that is being used for climate change modeling. This cooperative effort includes multiple agencies and goes from the Rocky Mountains to the West Coast. The goals are to assist climate change research and climate modeling for a large range of river systems including the NW coast. The link to this research program is below for anyone who wants to see for themselves their area or investigate on a larger scale. Riverbend Sciences is also using the data to do a long-term trend analysis for Salmon River stream temperatures, which will be available for SRRC and the public to use for research and projects.

SRRC has multiple projects on the horizon which are intended to reduce river temperatures and increase a variety of habitat for all aquatic species of the Salmon River. Water monitoring is working with the fisheries and habitat restoration programs to assist in any way needed to help our beautiful river stay healthy. <https://www.fs.fed.us/rm/boise/AWAE/projects/NorWeST.html>

Fire, Fuels, & Forestry



photo by Scott Harding

The Fire, Fuels, & Forestry Program continued working on a strategy that combines on-the-ground fuels reduction work with innovative fire planning and the use of prescribed fire to help create a fire adapted community that is prepared to live with a restored natural fire regime in the Salmon River watershed. Achieving this goal is a long term effort, and we have made good progress on laying a solid foundation to help us move forward.

In 2016, SRRC focused fuels reduction work on private properties in Forks of Salmon and the Bear Country Neighborhood as part of two projects funded by the USFS. In Forks of Salmon, we treated several properties that burned in the 2013 Butler Fire to remove fire-killed vegetation and prune hardwood re-sprouts so that they grow back as upright trees rather than in brushy form where they pose a greater future fire risk. We also worked around other homes and properties, for a total of 25 acres in Forks of Salmon. Upslope, we utilized the new Bear Country Neighborhood Fire Plan to guide the layout and implementation of 13 acres of fuels reduction. This included the creation of a half-mile long fuel break that runs through the heart of Godfrey Ranch. Spanning four different private properties, this fuel break links together previously treated areas, defensible space around three homes, natural meadows, and roads to create a strategic barrier to the movement of wildfire. Additionally, the fuel break will help facilitate the future use of prescribed fire to maintain the fuels reduction work and to help restore the fire-dependent forests of Godfrey Ranch. We will be implementing more projects like this one as we link together innovative fire planning, fuels reduction, and the use of prescribed fire.

SRRC participated in the Klamath River Prescribed Fire Training Exchange (TREX) for the third consecutive year. This year's geographic focus was in Orleans and Happy Camp but we also conducted a prescribed burn in the lowermost reach of the Salmon River watershed near Highway 96. Significant rainfall in early October made it seem like it might be too wet to burn but we learned to burn in more moist conditions than we have in the past and found that we were able to cover as much ground as if it had been drier. Altogether, the TREX program trained about 75 fire practitioners and successfully and safely performed over 450 acres of complex burning in 10 days. SRRC provided staff and support with our classic 1979 wildland fire truck and assisted in planning the overall event. SRRC continues to participate in the Western Klamath Restoration Partnership (WKRK), a large collaborative effort aimed at restoring natural fire resiliency across 1.2 million acres in the Klamath Mountains. In addition to serving a core organizational role in the collaboration, SRRC is also cooperating with the Klamath National Forest to plan a WKRK project in the Salmon River watershed. The goal of this proposed project along Yellow Jacket Ridge is to restore healthy fire processes to a frequently burned landscape and to provide community wildfire protection.

The Fire, Fuels, & Forestry Program was funded in 2016 by the USFS Steven's Authority grants, CA Fire Safe Council Grants Clearinghouse, Karuk Tribe, Fire Adapted Communities Learning Network, and the exceptional volunteerism of landowners and community members throughout the watershed.

Watershed Education



SRRC's Watershed Education Program integrates environmental sciences and watershed stewardship into the curricula of our two Salmon River schools. During 2016 students focused their watershed education studies on water quality and fisheries monitoring. Students have been doing twice yearly monitoring and biological assessment field trips at four local study sites. Students learned to measure temperature, dissolved oxygen, pH, and stream flow. They also identified macroinvertebrates and removed invasive plants from their sites. Student's participation in the annual Fall Chinook Spawning Surveys was cut short this year by our unusually high flows in October and November, but they were able to get out on the river for a day of collecting carcass data. The annual Watershed Education Fair was held in May, and the students had the opportunity to share their knowledge and projects with the community.



We also held a couple of fun community education workshops. In June we hiked into Devil's Canyon in the Marble Mountain Wilderness to re-measure the Salmon River's record holding incense cedar and identify wildflowers. In August we collaborated with the Bigfoot Trail Alliance to hike into the Russian Wilderness and set up some long term photo monitoring points for the Big Foot Trail.

The Watershed Education Program was funded this year by the Jiji Foundation, CA Dept. of Fish & Wildlife and USFWS.

Habitat Restoration



The Habitat Restoration Program continues to build momentum. We now have multiple projects funded for planning, implementation and design. The Salmon River In-Stream Restoration Working Group has nearly finalized and prioritized a restoration Candidate Action Table for the river and major tributaries. SRRC has also received additional funding to continue river-wide floodplain and mine-tailing restoration planning with Stillwater Sciences.

As for site specific projects, in 2016 SRRC completed the designs for both the Kelly Bar Off-Channel Fisheries and Riparian Habitat Enhancement Project and the Taylor Creek In-Stream Barrier Removal and Bridge Project. We now have funding and permits in place to implement the Taylor Creek project in 2017 for removing a collapsed crossing, restoring the stream channel, opening up over two miles of fisheries habitat, and constructing a single-width flatcar replacement bridge. We are currently seeking funding for implementation of

the Kellys Bar project, creating off-channel habitat for juvenile and spawning salmonids. It will be the largest stream/river restoration project attempted on the Salmon so far. Additionally, SRRC received funding to implement the South Fork Salmon River Tributary Habitat Enhancement Project in 2017, with intensive monitoring to follow. This project will add 23 large woody debris structures (such as seen above) to Knownothing and Methodist Creeks for juvenile and spawning salmonids. Another project moving forward is an off-channel habitat enhancement project for Red Bank. We have completed our first year of water monitoring at Red Bank, which is being incorporated into the 30% designs for this project.

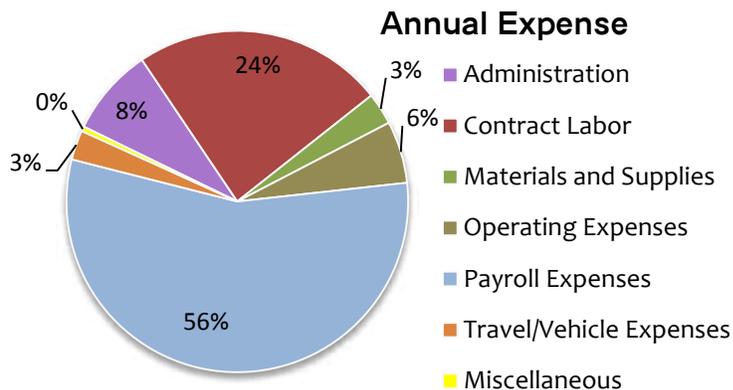
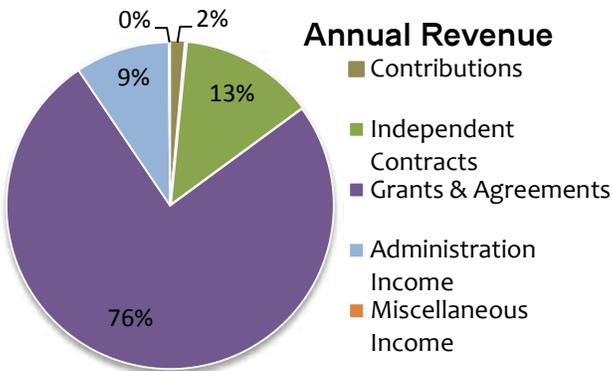
As larger scale projects move towards implementation SRRC has become increasingly involved in the NEPA (National Environmental Policy Act) planning process. We are currently working on completing the Design Plans and NEPA for the Hotelling Gulch Fish Passage and Stream Restoration Project with the USFS. Melissa, with her strong background in NEPA planning, is taking the lead role in NEPA for the South Fork Tributary Enhancement Project. Additionally we are building capacity within our other programs to continue to lead and participate in NEPA for restoration projects within the watershed.

Funding sources for this program include: CA Dept of Fish & Wildlife; National Forest Foundation; US Fish & Wildlife Partners and Fish Passage programs; US Forest Service; National Fish & Wildlife Foundation – Bring Back the Natives.

Marble Mountain Livestock Grazing Allotment Assessments



This summer SRRC took on an unusual project of assisting the USFS with completing monitoring and assessments of grazing impacts in the Marble Mountain Wilderness, for allotments that are coming up for assessment and renewal in coming years. Melissa Van Scoyoc, our Habitat Restoration program coordinator, riparian vegetation nerd, and a back country packer, packed into the Wilderness on multi-day hikes to collect data on botany, hydrology, and bank stability using Multiple Indicator Monitoring (MIM) protocols. She also traveled to remote photo monitoring locations to collect long-term grazing impact observational trend information. The MIM protocols were developed by a multi-agency technical team in order to provide a consistent approach to evaluating livestock grazing impacts in streams and riparian areas.



Financial Report

Ordinary Income/Expense

Annual Revenue

Administration Income	\$70,644.00
Contributions	\$10,789.00
Earned Income	\$1,173.00
Grants and Agreements	\$572,797.00
Miscellaneous Income	\$1,002.00
Total Revenue	\$757,432.00

Annual Expenses

Administration	\$66,249.00
Contract Labor	\$188,497.00
Miscellaneous	\$3,558.00
Operating Expenses	\$46,602.00
Payroll Expenses	\$441,785.00
Materials and Supplies	\$24,005.00
Travel Expenses	\$22,279.00
Total Expense	792,976 .00
Net Income	-\$35,544.00
Volunteer & In-Kind Contribution	\$89,000.00



**Thank You Volunteers!
We couldn't do it without you.**

and Thank You Members, Donors and Funders! You keep the lights on!

New and Renewed Members for 2016:

Business Memberships - Pacific Watershed Associates, Michael Kauffmann/Backcountry Press, Klamath River Lodge, Michael Love & Associates, Salmon River Outpost, Sandy Bar Ranch

Spring Chinook Memberships - Autumn Beinbauer, Jon Grunbaum, Danny Hagans, Creek & Betty Ann Hanauer, Ed & Marcia Nute, Joseph & Faye Sofaer

Green Sturgeon Memberships - Mary Ciavonne & John Ziegler, David Jacques & Donna Brucker, George Martin & Sharon Hoppas, Diane Wickstrom

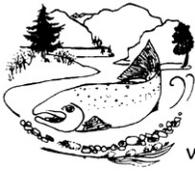
Coho Memberships - Bob & Judy Beaver, Harriet Beinfeld, Andy Berman & Pamela Kaul, Mat & Myrna Berry, Millie Brucker, Petey Brucker & Geba Greenberg, Don Comstock, Lynn Decker, Elaine Dvorak, Carl & Marie Flarity, Daniel Grunbaum, Guasco Family, Ethan Guerra, Lynn Halpern, Les & Bobbi Harling, Jim & Suzanne Jennings, Warren Jones, Daniel & Eva Krall, Nick & Marilyn Letsos, Bill & Patsy Marcy, Gene Millburn & Jan Kieth, Don & Carol Monkerud, Barbara Rohr & Michael Korejko, She'om Rose Family, Cedar & Mahaj Seegar, Chad Smith, Lee & Sandy Smith, Mary & Peter Sobol, Kristy & Peter Sturges

Fall Chinook Memberships - Eli Asarian, Susanne Cardiff, DeNight Family, Jud Ellinwood & Andrea Webb, Donna England, Yew Ferrara, Scott & Casey Gilroy, Lee Greenberg, Janet & Ronn Harding, Greg King, Dieter King, Luna Latimer, Nancy Gerdt & Glen Lyons, Judy Meyer, John Moriarty, Cathi Nelson, Richard Cormier & Myanna Nielsen, Felice Pace, Liz & Jody Pullen, Ahni & Kit Robison, Linc & Ripley Else & Galena Seegar, Don Flickenger & Jennifer Silveira, Karen Anderson & Barry Snyder, Karin & Terry Swanson, Chris Walton

Winter Steelhead Memberships - Nancy Bailey, Ben Beaver, Jeff Buchin, Karen & Dean Davis, Nancy Doman, Bee Fournier, Sarah Jacobs, Nancy Kenyon, Peter Leaf Kleinert, Linda & Les Libow, Cheryl Lieber & Robert Taubenfeld, Ethan & Trea Robinson, David & Valerie Van Scoyoc, Matt Van Scoyoc, Mel Van Scoyoc, Michael Seeber, Steve & Lee Stefanki, Alan & Sala Steinbach, Malcolm & Sue Terence, Edna Watson

Thank you Donors in 2016 - Kristina Aguire, Wind Beaver, Elissa Breitbard, Allegra Brucker, Maria Chao, Sam Commarto, Anne Colvig-Bier, Allan Craig, Clayton Creager, Jan Darling, Aaron David, Allison Davis, JanJaap Dekker, Susan Duncan, Micah Eckhardt, Don Elder, FRN, Tyler Faires, Iris Gardner, Charna Gilmore, Michael Goglin, Karuna Greenberg, Anna Hall & Mat Miles Smith, Merlin & Erin Hanauer, Tesilya Hanauer, Eric Hansen, Lynda Hardy, Will Harling, Joseph Hatcher, Cassandra Hensher, Bob-o & Kathleen Jarschke-Schultze, Aida Kastel, Crawford Kiyasu, Efram Korngold, Natasha Korngold-Feldthouse, Peter Laughingwolf, Larry Lestelle, Randy Lew, Davide Longoni, Jessica D. Manor, Catherine Meinert, Bobbi Miller, Fred Mindlin, Myeba Mindlin, Jack Moore, Emma Neumann, Yeshi Neumann, Rachel Neumann, Robert Pagliuco, Nat Pennington, Deanne Prchal, Rathbun Family, Matt Robbins, Steven Roberts, Erik Ryberg, Kathy Sartorius, Kristen Sellmer, Jonathan Shaw, Tom Snell, Joe Stoltz, Rush Sturges, Sara Tannenbaum, Emily Troisi-Rauschenberger, Brendan Twieg, Milagra Tyler, Conner Wishard, Judy Zola

Thank you to our Funders - CA Dept. of Fish & Wildlife, CA Dept. of Food & Agriculture, Clif Bar Family Foundation, US Fish & Wildlife Service, US Forest Service, Karuk Tribe, CA Fire Safe Council, Firedoll Foundation, Jiji Foundation, Mid Klamath Watershed Council, Norcross Wildlife Foundation, National Fish & Wildlife Foundation, National Forest Foundation, Sidney Stern Memorial Trust, the Siskiyou County Resource Advisory Committee, and our valued members.



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Etna Summit photo by Jennifer Smith