

*Salmon River  
Restoration Council  
2019  
Annual Report*



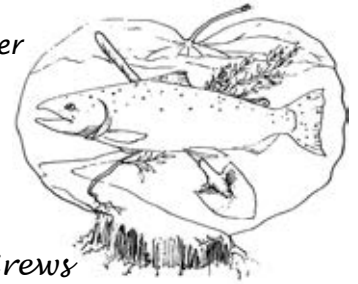
## News from the Watershed Center

2019 was a sensational year for SRRC. We completed both our largest instream habitat restoration project, and our largest single fuels reduction project to date. Our staff and crew also continued to manage the many long term projects that benefit our watershed, from fisheries monitoring, to noxious weeds management to watershed education. We had one major change in staffing this year. Our Fire, Fuels and Forestry Coordinator Scott Harding, took a job working for American Whitewater this fall, but he will still be helping SRRC with technical support and special projects. We are excited to welcome Brendan Twieg to the position. Brendan brings a great skill-set and a lot of experience with him to SRRC and is a welcome addition to our staff.

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 18 years now. Our membership and fund raising drives contribute significantly towards our ability to operate the solar powered Watershed Center, and your contributions are much appreciated.

## SRRC Board

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## SRRC 2019 Staff and Field Crews

Karuna Greenberg, *Restoration Director*  
Lyra Cressey, *Associate Director*  
Kathy McBroom, *Office Manager*  
Melissa Van Scoyoc, *Habitat Restoration Program Coordinator*  
Amy Fingerle, *Fisheries Program Coordinator*  
Scott Harding, *Fire, Fuels & Forestry Program Coordinator*  
Bonnie Bennett, *Monitoring Program Coordinator*  
Deja Malone-Persha, *Noxious Weeds Program Coordinator*  
Stefan Dosch, *Watershed Education Coordinator*  
Sarah Hugdahl, *Program Staff*  
Brendan Twieg, *Program Staff*  
Emily Ferrell, *Program Staff*  
Brenda Hurlimann, *Bookkeeper*  
Steve Adams, *Watershed Center Maintenance*

## 2019 Field Crews

Bonnie Bennett, Fabien Kassaris, Todd Whitmore, Eric Fieberg, Carol Cook, Lino Darling, Sarah Hugdahl, Stephanie Kaufman, Jordan Lambert, Deja Malone-Persha, Kai McCrummen, Oren Nardi, Elijah Swift

# SRRC's 2019 Program Updates

## Fisheries



SRRC Fisheries Program Coordinator Amy Fingerle holding a sheet of ice while staying warm on a snorkle survey

for salmonids throughout the summer. Unfortunately, this year's count of 161 spring Chinook at our annual dive event is the second lowest in a record dating back to 1990. This makes 2019 the fifth year in a row with critically

2019 was a busy and productive year for our fisheries crew! We were able to purchase new equipment to help us stay safe and comfortable in the river and tributaries year round. Importantly, with items like dry suits and neoprene gloves, we can snorkel during our spawning ground surveys for steelhead and coho. Without them, we would be limited to walking the streambank in waders. By putting our faces underwater, we can tell a more complete story about habitat utilization and the presence of salmonids in our watershed throughout the year.

Our annual creek mouth enhancement efforts began in June. A highlight of the summer was the week we spent engaging in fisheries and noxious weeds activities with high school students from Scott Valley through the Youth Environmental Summer Studies (YESS) program. We also stayed busy with pre- and post-implementation monitoring at habitat restoration sites, some of which remains ongoing throughout the winter as conditions allow.

We were pleased to observe good conditions  
*continued...*

*Fisheries continued...*

low numbers. However, the summer steelhead total was 583, making 2019 the second highest count on record. Despite the mixed results, this event remains a great example of the importance of collaboration and community in pursuit of our mission to assess, protect, and maintain the Salmon River.

This fall the fisheries crew was engaged in spring and fall Chinook spawning surveys. SRRC coordinated and participated in the first spring Chinook spawning survey of Wooley Creek in recent history. Wooley Creek, the largest tributary to the Salmon River, is surveyed annually for fall Chinook, but no similar effort has been made for spring Chinook. This collaborative effort between SRRC, MKWC, and USFS revealed that Wooley Creek was busy with spawning salmon at the end of September! This is an important and rewarding effort that we hope to continue in future years.

On a regional scale, SRRC has been participating in the Klamath/Trinity Spring Chinook Recovery Working Group, a diverse coalition working to co-develop knowledge that will catalyze the recovery of spring Chinook and protect their unique evolutionary history. We wish to sincerely thank the volunteers and cooperators who participated in this year's dive, as well as other volunteers who assist us in various and important ways throughout the season. We are grateful for your participation and continued support!



*A joint training and workday building step-pools on Stanshaw Creek with the Karuk Tribe, MKWC, USFWS and SRRC*

A big year for SRRC's Habitat Restoration Program! We implemented our largest in-stream restoration project to date. The Kelly Bar Habitat Enhancement Project, a large-scale floodplain restoration project on the North Fork, constructed according to plans and on schedule with guidance from Michael Love & Associates, and construction by Travis Carmesin Construction. We enhanced side channels and alcoves with excavation and large wood features, constructed three engineered log jams, constructed two off-channel ponds, and enhanced riparian areas with improved growing conditions and many native plants. We are so proud of this project and are very excited to see how it evolves within the river system.

In coordination with Pacific Watershed Associates, we completed our in-depth monitoring of the large wood enhancement project on Knownothing and Methodist Creeks that we implemented in 2017. Analysis of the data shows that even though we had moderate flows in those creeks we are seeing scouring and gravel sorting as a result of the structures we placed, creating much needed habitat for salmonids on the South Fork. The barrier removal project on Taylor Creek continues to be successful; and it was great to see the willow planting by the Forks School kids the previous fall was 100% successful.

We are excited to announce that we've completed conceptual plans for a watershed-wide planning effort to restore floodplains and mine tailings. This step in the long-term planning process is essential for completing environmental planning in preparation for future implementation projects. We have also developed conceptual plans to restore the lower portion of Nordheimer Creek, and initiated environmental compliance and revegetation planning for the Red Bank Habitat Enhancement Project.

More challenges and exciting restoration are in store for the river as we move into 2020. Coming up next year we will be implementing a project at Hotelling Gulch to replace the culverts under the county road with a bridge allowing fish migration and restoring the lower portion of the gulch. We will also be initiating our newest project to restoration designs for Windler Bar and Gallia Pond on the North Fork.



## *Habitat Restoration*

*SRRC crew and volunteers look forward to watching the growth of hundreds of native trees and shrubs they planted.*



## Water Monitoring

Each year the water naturally changes geomorphic features of the river bar and observations of these changes assist in planning for the future habitat construction.

Water temperatures peaked later in the summer and at lower temperatures this year, reducing the serious algae bloom. It is a growing possibility that large algae blooms like the one seen in the summer of 2018 will become a common trend due to changing river conditions. SRRC will continue to monitor for increased levels of algae and for the possibility of toxic algae.

The analysis of SRRC's long term water temperature data set by Riverbend Sciences is completed and the paper has been published! A variety of modeling techniques were used to find trends and patterns specifically related to climate change. It can be found on the publications page of our website titled "Evidence of Climate-Driven Increases in Salmon River Water Temperatures". The monitoring program is excited to be using our long term datasets, implementing restoration projects, increasing fisheries habitat and actively working to keep the entire river system healthy!

This summer we saw a break from the extreme temperatures and low flows that seem to be the new normal for the Salmon River. Fortunately snowpack was just above average and helped to keep the river levels in balance.

During the summer, SRRC continued to monitor air and water temperature at 50 sites throughout the watershed, and collect flow measurements for at least 15 locations. This data was added into the long term dataset we have been compiling for over 20 years.

Habitat restoration project monitoring needs are ever changing. The Kelly Bar Habitat Enhancement Project pre-implementation surveys and measurements were conducted up until construction began. Post-implementation monitoring is planned for the next 3 years. Although the project has not yet seen a high water event, it is already showing signs of doing what it is supposed to do. The groundwater-fed off-channel pond is beginning to connect to the river and one of the alcoves immediately began providing fish refugia habitat.

We continue to monitor the future Red Bank Habitat Enhancement Project site. It has been very interesting to be on the ground there for multiple summers to observe what is living through the hot summer temperatures in the small, cold backwater pools that will be enhanced as part of our project.



## Noxious Weeds

Our commitment to the control weeds in the watershed without the use of chemical herbicides has been a continued success, focusing on priority species that are most capable of degrading our native ecosystems, including Italian thistle, spotted knapweed, and oblong spurge, amongst others.

Ongoing in-stream restoration throughout the watershed has provided an opportunity for staff and crew to work across programs. Recent and upcoming fisheries restoration sites were surveyed and treated for noxious weeds. Particular care will be taken with noxious weed surveys at Kelly Bar as pioneer species thrive in sites of disturbance and the recent restoration project there may have activated the seedbed left by the historical spotted knapweed infestation. We continue to see a reduction in spotted knapweed throughout the watershed thanks to vigilant community members and persistent and thorough treatments.

Due to the cool, wet spring the Italian thistle near Forks of Salmon was slow to germinate. The 113-acre site has been receiving consistent treatments for more than a decade and hotspots have been mapped extensively in recent years. The slow germination and reduced population size enabled us to cover more ground, which led to us finding a new patch of over 23,000 plants. We were able to treat this patch four times in 2019 and have since developed a plan to seed native grasses there in 2021. In addition, the US Fish & Wildlife Service (USFWS) provided funds to address the leading edge of Italian thistle, alongside yellow starthistle and marlahan mustard, at the Siskiyou County Roads Department property in Forks of Salmon.

Taking an all-lands approach to invasive plant management, we focus a significant portion of our fieldwork to treating weeds on private property. The USFWS is currently funding work for a variety of species at a total of seven private properties. We treat oblong spurge on both private and public lands, and in 2109 we received funding from the National Forest Foundation to launch a concerted effort to tackle the infestation on the lower Salmon River. Late spring meltwater presented a challenge to reach our sites, but crew and volunteers took to the water and made tremendous headway in treating the spurge infestation. We are grateful to landowners in the basin for volunteering their time to address Marlahan mustard, starthistle and other noxious weeds on their properties. The progress that we have made this year would not be possible without the help of our partners at MKWC, local river schools, and dedicated volunteers.

In 2019, the Fire, Fuels, & Forestry Program worked on implementing two different fuels reduction projects as well as focusing on two important planning projects that will affect our fire-related work for many years to come.

Every fuels reduction project we undertake includes a detailed and often lengthy planning phase. In 2019, we made significant progress toward streamlining this part of our work by completing the required endangered species wildlife analysis for fuels projects on nearly all private lands in the watershed at once rather than doing it on a project-by-project basis. We teamed up with a professional biologist for this effort and, in June the US Fish & Wildlife Service reviewed our analysis and agreed that our projects would not only protect endangered wildlife but that they would benefit them and their habitat. Our analysis also covers National Forest land surrounding private properties and the US Forest Service can use it to streamline their fuels reduction work around private properties. This analysis covers nearly 12,000 acres of land and is valid for the next 15 years.

## Fire & Fuels



Over 10 beautiful November days, we completed 115 acres of cutting and hand-piling for our Upper North Fork Salmon River Fuels Reduction Project (*photos above & below*). We worked with a contractor from Yreka to treat a contiguous area across multiple high-elevation properties between Etna Summit and the Taylor Lake trailhead. In addition to reducing hazardous fuels near multiple cabins, the project is improving northern spotted owl habitat by thinning dense clusters of fir trees and decreasing the likelihood of a stand-replacing wildfire. We will return to burn the hand-piles this coming fall. This project was the first to use our watershed-wide wildlife analysis mentioned above and is funded by the US Forest Service.

The program's work this past fall also included burning 28 acres of brush piles to conclude our fuels reduction and upland forest habitat restoration project at Harris Ranch. The weather was first too dry to burn and, then, when it finally turned wet, the piles were buried beneath snow. Despite these challenges, we worked with our contractor to get the burning done and finish up the entire project in December.

After four years of searching for financial support to develop a new Salmon River Community Wildfire Protection Plan (CWPP), both CAL FIRE and the California Fire Safe Council extended support for this much-needed plan in 2019. We have outlined an innovative CWPP that incorporates geospatial fire planning, fire history, and community protection needs in a modern, digital data format that can be easily updated and shared. Watch for announcements about opportunities to participate and share your ideas for this plan at Salmon River Fire Safe Council meetings in 2020.

Having moved through the planning process in 2019, we will be starting work on our Butler Creek Habitat Improvement Project in early 2020 and will begin a separate forest habitat improvement project in the Bear Country area later in the year.



# Watershed Education



Our 2019 Watershed Education Program with “A Changing River” theme focused on the historic and present conditions of the river. In collaboration with the Mid Klamath Watershed Council (MKWC) and Karuk Tribe education programs, we’ve been providing curriculum to help our next generation of river scientists create a vision of what the future Klamath-Salmon could look like. This year we focused more on field work with it’s informal, scientific learning opportunities and field trips - essential teaching elements!

Our annual water monitoring field trips were followed up by stream restoration visits to Kelly Bar and Nordheimer Creek and invasive weed removal days. Weekly classes focused on geologic and social histories and keystone species as students prepared their beautiful Watershed Fair projects. We were granted a Coastal Commission Whale Tail grant providing the unusual opportunity of an ocean unit led by SRRC in partnership with MKWC and five local schools. At the end of the ocean unit, older students joined together for a 3-day ocean science camp on the coast. Students visited the HSU marine labs, explored tide-pools, hiked around the Trinidad Head and presented their research projects to one another. It was a memorable experience capped off with a picnic at the mouth of the Klamath, the river they are so familiar with upstream. We are so grateful for this wonderful opportunity and can’t thank the Coastal Commission enough for making it possible.

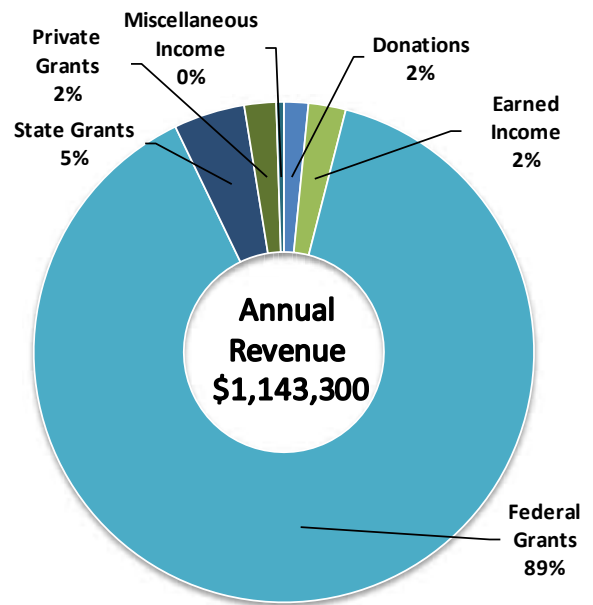
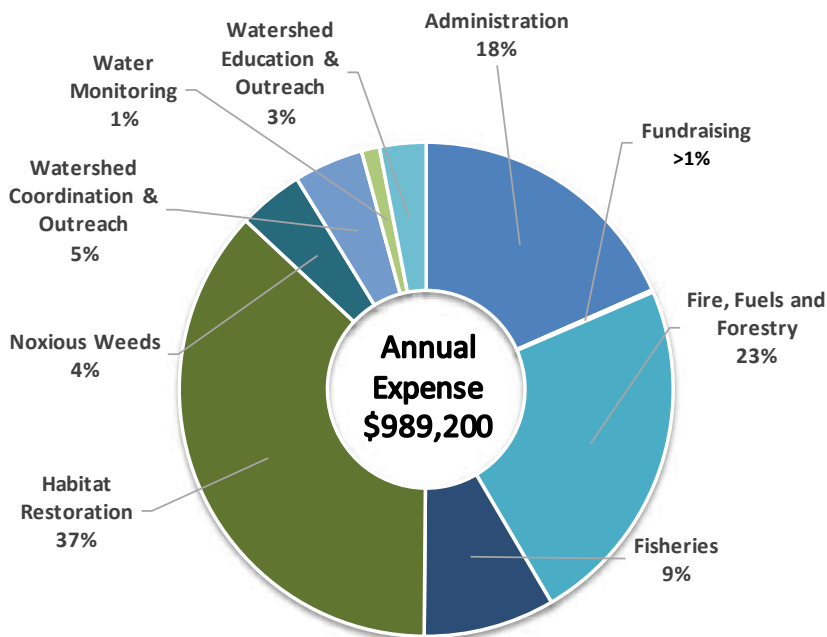
The school year was capped off with the annual Watershed Fair. Thirteen natural resource professionals and local mentors attended. There were many impressive projects including cultural interviews, historic landscape

presentations and a wide range of water science/ animal research projects. With an interactive fishery displays, plant pressing, art stations and a wildlife presentation from Nature Joe - a great way to celebrate another fun year of Watershed Ed.

This summer the week-long Klamath Siskiyou Outdoor School had more students than ever before. MKWC and SRRC Watershed Ed programs coordinated rafting trips with Klamath River Outfitters and visits from Karuk DNR Fisheries Biologists and local history/ geology mentors. Our camping trip into the Marble Mountains was incredible despite snow in the air and nearly freezing temperatures. We kept warm by the fire, built shelters and everyone had an unforgettable time.

We packed the fall months with field trips and garden days, visiting the Klamath River prescribed fire TRES, harvesting and planting willow cuttings at the Kelly Bar restoration site, and monitoring aquatic in-sects at Nordheimer and Dillon Creeks. Students built and deployed willow baffles at their adopted streams and enjoyed the last of summer weather snorkeling to look for fish. Remarkably dry fall weather allowed us to spend more time outside with Fall Chinook Spawning Surveys. Back in the classroom, we focused on fish, local food sources and general water quality factors. We spent many days in the gardens of both schools, had pollinator lessons and winter garden prep/ seed lessons. SRRC continues to work with Karuk Tribe and MKWC education staff to source funding as we gear up for 2020 spring curriculum with lots of fun food-focused lesson plans.

## 2019 Organizational Financials





*Thank You Volunteers!  
and  
Thank You Members,  
Donors & Funders!*

A list of 2019 Members and Donors:

**Spring Chinook Donor Level and up** - Bedrock Sandals' Nick Pence & Dan Opalacz, Eileen Fisher, Inc., Ed & Marcia Nute, Tony Lunt, Danny Hagans, Nick & Marilyn Letsos, Frank Colver, John Fingerle, Daniel & Eva Krall

**Green Sturgeon Donor Level and up**- Richard Bruce, Mary Ciavonne & John Ziegler, Jon Grunbaum, Anonymous, Earl & Trace Landberg, Mike Love & Associates, Chad Smith, Stillwater Sciences

**Coho Donor Level and up**- Donna Brucker & David Jacques, Carl & Marie Flarity, Lee Greenberg, Jo & Philip Guasco, Ethan Guerra, Hanauer & Sanford Family, Klamath River Lodge, Ken Miller, Seegar & Else Family, Sobol Family, Kathryn Wild, Winette Winston Segianno, Elaine Dvorak, Lynn Halpern, Jan Kieth & Gene Millburn, Efremer Korngold, Milagra Tyler Family, Susanne Cardiff, Dan Grunbaum, Jeye Aeronson, Jay Anderson, Denise & Bob Bearding, Harriet Beinfeld, Frank Berry, Don Comstock, Dean & Karen Davis, Janjaap Dekker, Sandy Bar Ranch, Elissa Englert, Flickinger & Silveira Family, Dennis Grady, Geba Greenberg & Petey Brucker, Creek & Betty Ann Hanauer, Les & Barbara Harling, Salmon River Outpost, Korejko & Rohr Family, Andy Kaul & Pamela Berman, Greg King & Joanne Rand, Glenn Kubaki, Luna Latimer & Frank Lake, Angelo Medaglia, Don & Margery Osterhoudt, Carol Pearson, Kate Rowe, Lee & Sandy Smith, Strote Family, Kristy & Peter Sturges, Dee Tolson

**Fall Chinook Donor Level and up**- John & Susan Brennan, Laura Denight family, Karuna Greenberg, Jackson Vanfleet-Brown, Rachel Neumann, Josh Asarian, Rajesh Westerberg, Linda Ciavonne, Clayton Creager, Nancy Doman, Susan Duncan, Jud Ellinwood & Andrea Webb, Charna Gilmore, Jan & Ronn E. Harding, Jim & Suzanne Jennings, Backcountry Press, Peter Leaf Kleinert, Linda & Les Libow, Felice Pace, Ahni & Kit Robinson, Michael Seeber, Jonathon Shaw, Steve & Lee Stefanki, Edna Watson

**Winter Steelhead Donor Level** - Bill Condon & Julie McDowell, Fran Forim, Charles Gillingham, Will Harling, Bob-o & Kathleen Jarschke-Schultze, Kristen Kittleson, Ken Liberman, Paul Liotsakis, Catherine Meinert, Judith Meyer, Yeschi Neumann, Doug Parkinson, Barry Snyder & Karen Anderson, Marsha Stone & Jerry Tecklin, Michael Tierra, Bill Tripp, Thalia Truesdale, Chris Valle, David & Valerie Van Scoyoc

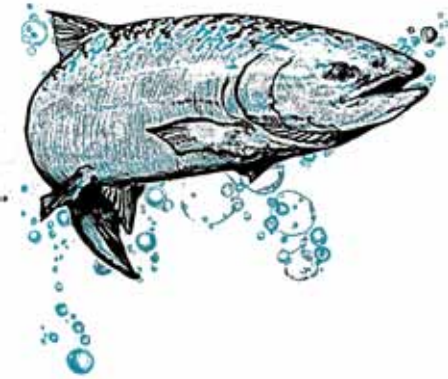
**Other Donors include** - Waylon Brucker, Jerry Edgar, Fred Ehmke, Bill House & Allison Blackwell, Eileen Kurtzman, Fred Mindlin, Deanne Prchal, Emily Trois-Rauschenberger

**2019 Funders** - CA Dept. of Fish & Wildlife, CA State Coastal Conservancy, CA Coastal Commission, CA Dept. of Food & Agriculture, CAL FIRE, US Fish & Wildlife Service, US Forest Service, National Fish & Wildlife Foundation, National Forest Foundation, Marine States Marine Fisheries Foundation, Karuk Tribe, Mid Klamath Watershed Center, Firedoll, William H. Moffat Jr. Foundation, Clif Bar Family Foundation, Trees Foundation, Sydney Stern Memorial Trust, Humboldt Area Foundation



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### *2019 Major Accomplishments*

*We completed the largest salmon habitat restoration project ever undertaken in the Salmon River watershed! This complex project created off-channel fish habitat to protect juvenile fish during high winter flows. They can rest and feed in the floodplain rather than getting washed downstream. The goal is to send increased numbers of bigger, healthier salmon and steelhead out to the ocean so that they'll return to fill our river with bounty.*

*Powered by an exceptional contract crew of 25 hard workers, we cut and piled hazardous fuels on 115 acres across multiple private properties just outside the Russian Wilderness Area near Etna Summit. The project was designed to reduce wildfire risk for several summer residences, enhance and protect northern spotted owl habitat and high elevation fir forests, and to create strategic opportunities for the future use of prescribed fire.*

*We continued working collaboratively to advance spring Chinook recovery in the Klamath watershed. As part of this work our crews collected samples that are contributing to ground-breaking genetic research on our river's salmon. This photo is a backwater alcove on the Kelly Bar Project which was enlarged and enhanced with large wood creating juvenile salmonid habitat for years to come*

