

CALIFORNIA TROUT



FISH · WATER · PEOPLE

Annual Report

2018



“The work we do at CalTrout addresses the biggest, most complex water and conservation issues facing California. Those issues intensified this past year. In response, we stepped up our game.”

- Andrew Bassak, Board Chair

Ann Lake. Photo: Don Henry

California. Amplified.

A BETTER PLACE FOR FUTURE GENERATIONS

Dear Friends,

We envision a California with an abundance of resilient wild fish and healthy waters.

Our work is based on a passion for this great state, its waters and its wild fish. But passion alone can’t get us there. Our work must start with science. Data and other evidence-based information set the course for our restoration and advocacy work. For us there is no other way.

This is where you come in. Your support enables us to lead with science. We prove up concepts that lead to on-the-ground solutions, leveraging your dollars for maximum impact.

The work we do at CalTrout addresses the biggest, most complex water and conservation issues facing California. Those issues intensified this past year. In response, we stepped up our game. We took it up a notch and amplified our impact—bigger projects, larger scale, more areas of California. Amplified.

The results are highlighted in this report. Take pride in reading about how your support and the collaboration of our many partners made a significant impact in 2018. The work we do matters and your part in that cannot be diminished, only amplified. You help us make California a better place today, and for future generations.

Thank you.



Curtis Knight, CalTrout Executive Director



Drew Bassak, CalTrout Board Chair

Impact

ADOPTION OF A 3-YEAR ACTION PLAN

“In the face of climate change, we must connect native fish to diverse habitats to return them to resilience.”

- Curtis Knight, CalTrout Executive Director

Over the last three years, California Trout has increased capacity and doubled its impact on the ground. Our working model continues to get stronger. Starting with a foundation in science, we implement proof-of-concept projects and scale up success through policy and partnerships to achieve our mission of ensuring resilient wild fish in healthy waters for a better California.

In 2018, we developed and adopted a Strategic Plan to carry us through the next three years maintaining the same pace and impact to amplify our efforts. A group of board members, staff, and consultants met over a six-month period to develop the plan.

Based strongly on the findings of the 2017 **State of the Salmonids II: Fish in Hot Water Report**, our work will be structured around Five Key Initiatives—strategies that the science-based findings in **SOS II** identified as necessary to return California’s native fish to resilience.

Through our work, we aim to:

Protect the Best

Salmon and Steelhead Strongholds and Wild Trout Waters

Integrate Wild Fish and Working Landscapes

Fish and People

Reconnect Habitat

Dams Out, Removing Migration Barriers

Steward Source Water Areas

Water Security for Fish and People

Restore Estuaries

The Land Sea Interface

In the coming years, synthesizing our work around these five initiatives will allow us to build on the strength of our community-based regional work and collaborate cross-regionally on science, restoration, and policy.

The result? Greater impact, broader scope, and increased scale.

181

PARTNERS ACROSS CALIFORNIA WHO ARE PART OF CALTROUT’S HUGE NETWORK

6

REGIONAL OFFICES FROM NORTHERN TO SOUTHERN CALIFORNIA, SOURCE TO SEA

30

STAFF MEMBERS INCLUDING FIVE PhDs

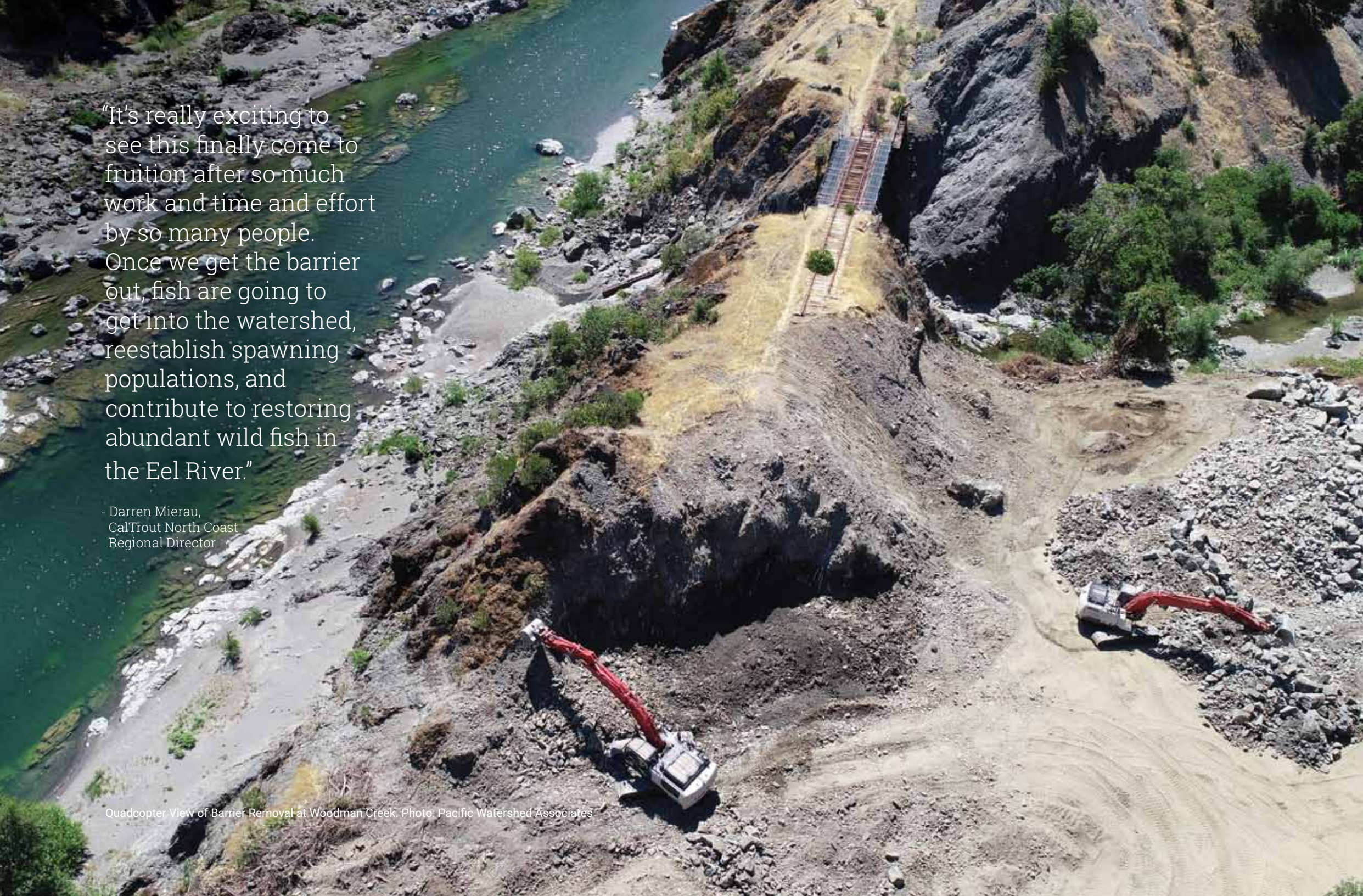
62

PROJECTS ACROSS THE STATE TO HELP NATIVE FISH AND HEALTHY WATER

“Our five initiatives represent the heart of our work. We will build on the strength of our community-based regional work and collaborate cross-regionally on science, restoration, and policy. The result? Greater impact, broader scope, and increased scale.”

- Curtis Knight, Executive Director

Pickel Meadow. Photo: Mike Wier



“It’s really exciting to see this finally come to fruition after so much work and time and effort by so many people. Once we get the barrier out, fish are going to get into the watershed, reestablish spawning populations, and contribute to restoring abundant wild fish in the Eel River.”

- Darren Mierau,
CalTrout North Coast
Regional Director

Quadcopter View of Barrier Removal at Woodman Creek. Photo: Pacific Watershed Associates

Action on the Ground

THE WOODMAN CREEK FISH PASSAGE PROJECT

Persistence. Patience. Perseverance.

CalTrout’s large-scale restoration projects take a healthy dose of all three. Our work to remove barriers and reconnect habitat for the state’s salmon and steelhead requires them in abundance. From removing dams on the Klamath River (15 years and counting), studying and negotiating options for the Eel River’s Potter Valley Project (5 years in), engaging in the Matilija dam removal process (12 years), it’s a big moment when one reaches the desired end result.

Such was the case with The Woodman Creek Fish Passage Project in 2018. The project has taken the better part of seven years for CalTrout and numerous partners to plan and prepare. Woodman Creek, located five miles north of Dos Rios, is a tributary of the Eel River, one of California’s most significant salmon and steelhead strongholds. Fish passage was permanently blocked when the Northwestern Pacific Railroad was constructed back in 1914. CalTrout’s North Coast Regional Director Darren Mierau, oversaw this major project, in which crews removed the railroad embankment that buried the mouth of Woodman Creek, moving more than 48,000 cubic yards of earth. This opened access to 14 miles of prime salmon and steelhead spawning and rearing habitat for the first time in over a century.

The project supported 33 quality local jobs, putting \$2.2 million into the local economy while providing significant ecological benefits to the region.

We are excited to see salmon and steelhead swimming up the creek this winter.

14

MILES OF PRIME SPAWNING
AND REARING HABITAT
RECONNECTED

33

LOCAL PEOPLE EMPLOYED:
CALTROUT STAFF, LABORERS,
ENGINEERS, TECHNICIANS.

\$2.2M

PUT INTO THE LOCAL ECONOMY

48,000

CUBIC YARDS OF EARTH MOVED

3

TENTS DESTROYED BY BEARS



Samples taken from the Sacramento River, the canal, and the flooded rice field clearly demonstrate that the fish food is on the floodplain. Photo: Lisa Morehouse.

51

LOCATIONS SAMPLED
ACROSS NINE RIVERS
AND FARMS

5

RICE FIELD DRAINAGE
EXPERIMENTS CONDUCTED

3,191

ACRE-FEET OF RICE-FIELDS
FLOODED

Innovative Solutions to Resource Challenges

COLLABORATING TO HELP SALMON IN THE CENTRAL VALLEY

A farmer looks at the glass and says “It’s half full.”

An angler looks at the glass and says “It’s half empty.”

CalTrout looks at the glass and says “Why is the glass so big?”

The resource challenges facing California require looking for solutions in new, innovative ways. CalTrout’s Fish Food on Floodplain Farm Fields does just that. The project works with farmers and water suppliers to pioneer new practices aimed at reintegrating floodplain food sources back into the greater Sacramento Valley ecosystem with the hopes that it will recover fish and wildlife populations. In simple terms, it’s getting the food from the floodplain to the river.

After establishing in 2017 that flooded farm fields grow a virtual “bug buffet” at a rate 149x greater than the river, the project’s focus in 2018 shifted to moving the fish food that grows in wetlands on the dry sides of levees through canals and back to fish-bearing waterways. In other words, exporting the fish food from the puddles back to the river. We then researched the reintegration of floodplain food, studying how the zooplankton, or “fish food”, responded to draining, re-flooding, and moving through drainage canal systems, and whether there were observable effects from boosting the Sacramento River with the drain water rich in floodplain-derived food and nutrients.

This second phase put us one step closer to putting together the entire story of fish food benefits from where it is generated, to moving it back to the river, to within the river, and finally into fish. The project has compelled the state’s Scientific Integration Team to include the effects of fish food management in their Central Valley salmon life-stage and habitat model that will be used to prioritize and measure success of conservation action.

This science-based approach to managing California’s resources is demonstrating that, with altered management practices, there is potential to boost the depleted food resources in Central Valley rivers and help recover endangered fish populations.



“California gets far more ‘pop per drop’ from water used when we put it to work to create multiple benefits for both fish and people on its way downstream. The innovative water management pioneered in our projects demonstrate that California can have both its fish and its farms.”

- Dr. Jacob Katz, CalTrout Senior Scientist

Managed Agricultural Floodplain at Knaggs Ranch. Photo: Dr. Jacob Katz



“After five years and more than 2,600 fish tagged, the program has grown to one of the largest wild trout genetics and tracking efforts in the state. The results shape our strategies for protecting native salmonids in the face of a changing climate.”

- Drew Braugh, Mt. Shasta/Klamath Regional Director

Fall River Fish Tagging. Photo: Val Atkinson

Using Genetics and Tracking to Protect the Best

THE FALL RIVER WILD TROUT MONITORING PROJECT

Studying fin clippings in a lab or tracking the whereabouts of trout with 'Find-My-Fish'-like software may not seem like much in the way of fisheries restoration. It's certainly not the 'boots-on-the-ground' approach of other projects. But this ongoing fish monitoring project exemplifies how science forms the foundation for protection.

The Fall River Wild Trout Monitoring Program was started in 2013 to learn more about trout populations in the fishing haven of the Fall River and protect and restore their habitat, ensuring healthy trout populations into the future.

In 2018, the collection and tagging of the native fish continued. Team members and volunteers from CalTrout, UC Davis Center for Watershed Sciences and Fall River Conservancy, went to work in stormy weather ultimately collecting and tagging 400 fish with Passive Integrated Transponders (PIT). The PIT tags track fish movement, allowing us to monitor population trends and life history patterns to identify key habitat areas for protection.

At the same time as the tagging, researchers collected small samples from the fins to collect genetic data. Over the last four years of collecting and analyzing data, the genetic analysis has revealed that there are genetically-different sub-populations of rainbow trout in the Fall River. These sub-populations encounter each other in the main Fall River system, but are segregated in spawning locations with very little gene flow between populations. The genetically distinct sub-populations of Fall River fish experience different hydrological conditions. Understanding these conditions will ultimately lead to better management.

The Fall River is California's largest spring-fed river with over 30 miles of wild and native trout habitat. The data will allow us to monitor the health of the trout population which aids in the protection of the fishery for future generations.

This program illustrates how CalTrout uses partnerships, technology, and innovative science to drive fisheries management.

2,655

FISH TAGGED OVER THE LAST FIVE YEARS. 400 IN 2018.

492

TAGGED FISH RECORDED SWIMMING THROUGH THE ANTENNAS (18.5%)

2

DISTINCT SUB-POPULATIONS OF RAINBOW TROUT IN THE FALL RIVER SYSTEM

50

VOLUNTEERS: STUDENTS, DEANS, NGOS, DFW, LOCAL CITIZENS, BIOLOGISTS.

5

PIT TAGS TRANSPORTED FOR 50 MILES BY PELICANS

An Innovative Fish Science Model

THE PETER B. MOYLE UC DAVIS ENDOWED PROFESSORSHIP

The Peter B. Moyle and California Trout Endowed Professorship is exceptionally unique in its genesis and potential. While there are a number of endowed wildlife chairs in the USA, there are few fish chairs. The endowment was made possible because of the vision and generosity of many people and donors.

The appointment of Dr. Andrew Rypel to the position last year was a solid step forward to ensuring that water resource issues with major policy and management implications continue to be informed by robust science. The findings from these collaborations have and will continue to inform broad-scale coldwater fish conservation strategies throughout California.

In the last year, Dr. Rypel traveled the state familiarizing himself with

the fish, issues, and projects where science could amplify impact on the ground. Areas where this 'actionable science' could be most effective—where findings could be used immediately by conservation practitioners include:

1. Developing standards for rice farmers in the Central Valley to participate in the raising of Chinook salmon on winter-flooded fields
2. Acquiring a multi-year grant to track and monitor juvenile Spring-run Chinook salmon through the San Joaquin River
3. Continued scientific efforts aimed at conservation and management of salmon in Putah Creek.



\$5.1M

SECURED IN RESEARCH FUNDING

8

GRADUATE STUDENTS WORKING IN DR. RYPEL'S LAB

125

STUDENTS ENROLLED IN HIS COURSE, WITH 20 ON THE WAIT LIST

"I was drawn to this opportunity by the potential to partner with a dynamic and forward-thinking organization like CalTrout. Working with people and organizations that are passionate, organized, and driven by science—that is what has always been needed to do conservation science right."

- Dr. Andrew Rypel

Kern River Rainbow. Photo: Nick Ise

Amplified Reach

BAY AREA PROGRAM LAUNCH



In 2018, CalTrout launched a new regional conservation program focused on efforts in the San Francisco Bay Area, headed by Program Manager, Patrick Samuel. During an eight-month fact-

finding mission Samuel met with stakeholders and conducted site visits throughout the greater Bay Area. Outreach in 2018 included: events with Bay Area Youth Fly Fishers at Golden Gate Casting Ponds; launch of a Bay Area Young Professionals group to meet other Bay Area conservation anglers; overseeing two local volunteers to assist in research and fieldwork; angler meet-ups at Pescadero Marsh; and helping to build a partnership with Walker Creek Ranch Outdoor School, providing outdoor education for Northern California fifth graders.

Following this outreach phase, an assessment was conducted to determine where CalTrout could have a positive influence. The assessment looked at fisheries conservation, restoration, and educational outreach opportunities from Marin to Santa Cruz counties.

The Bay Area Program is critical to addressing the recovery of critically endangered Central California Coast (CCC) coho salmon and threatened Central California Coast steelhead. Marin County is the southernmost extent for wild CCC coho salmon.



Pescadero Marsh. Photo: Patrick Samuel

A Growing Community

BUILDING SOLIDARITY ONLINE

CalTrout's growth and expansion over the last year was not just limited to projects and regions but included an increased number of YOU, our friends and supporters. Our communication and outreach efforts amplified our message across the state and across print and digital platforms to reach an ever-wider audience of conservation-minded individuals. Some 2018 highlights included:

- Sponsorship of Outbound Collective's Pursuit Series, an "adventure summer camp for adults." Over a three-day weekend, CalTrout along with Tenkara Rods taught 225 participants in fly casting, fly tying and knot tying clinics. CalTrout staff also held a brown bag lunch seminar about source water and the benefits of restoring mountain meadows.

- Hosted events around the state including: 8 International Fly Fishing Film Festival events, 6 screenings of *A River's Last Chance* by filmmaker Shane Anderson.

- Hosted the annual Five Rivers Challenge and a ribbon-cutting ceremony for the new Hat Creek pedestrian bridge,

- Received more than 300 entries in the 2018 Photo Contest—the most, ever!

Be sure to follow us on Facebook, Twitter, Instagram and LinkedIn.

6,236

FACEBOOK FOLLOWERS

6,737

INSTAGRAM, TWITTER,
AND LINKEDIN FOLLOWERS

90,872

CALTROUT VIDEO VIEWS
(ACROSS 42 VIDEOS)

45

EVENTS HELD ACROSS THE
STATE, REACHING 5,246 PEOPLE

2,887

ACTIONS INSPIRED THROUGH
OUR TROUT CLOUT ADVOCACY
MESSAGES

Legal and Legislative Efforts

ESSENTIAL ADVOCACY WORK IN SACRAMENTO

Ensuring wild fish thrive in healthy waters requires a multi-pronged approach of restoration, sound science, and advocacy. CalTrout's legislative and legal efforts help to direct funding for our large-scale restoration projects, advance policy critical to protecting our natural resources, and establish programs that provide solutions to resource allocation challenges.

Overall, 2018 was a productive year for moving policy and programs forward to benefit native fish and healthy water. Highlights from efforts with CalTrout's involvement and support include:

- Proposition 68 was passed on the June Ballot. This important \$3.9 billion bill contains over a billion dollars' worth of natural resources and water funding including language for supporting multi-benefit flood plain and barrier removal projects.
- Proposition 64, the bill that legalized adult marijuana use, was implemented in January. CalTrout helped shape the conservation focus of the bill and has been closely monitoring the outcomes. While the tax revenues have been slower than expected, we will continue to work with conservation partners to ensure that, when the money does filter in, it can be a consistent funding source for environmental regulations on water use in California.

- AB 2975: This important bill, authored by Assemblymember Friedman, was signed by Governor Brown and serves to counteract any federal move to delist or remove protections for Wild and Scenic River systems in California. CalTrout fully supported the bill, which protects 750 miles of river from Federal overreach by building a state safety net for Federal, but not previously State, Wild and Scenic River systems.

We did face a setback with the Governor's veto of AB2528, Assemblymember Bloom's measure to establish source watersheds, mountain meadows, strongholds and estuaries as climate resiliency areas in need of protection. We successfully championed the bill through the senate and house and thank all of the supporters who joined our letter signing campaign in support of the bill. While we were disappointed by the Governor's veto, it has strengthened our resolve to continue to push for protections and prioritization of these areas in the years to come.

1

SPONSORED BILL PASSED THROUGH THE LEGISLATURE

2

LEGISLATIVE STAFF FIELD TRIPS TO SEE SOURCE WATERSHEDS

15

BILLS THAT CALTROUT SUPPORTED SIGNED BY THE GOVERNOR

92

LEGISLATIVE OFFICES VISITED

750

RIVER MILES PROTECTED FROM FEDERAL OVERREACH

Financial information

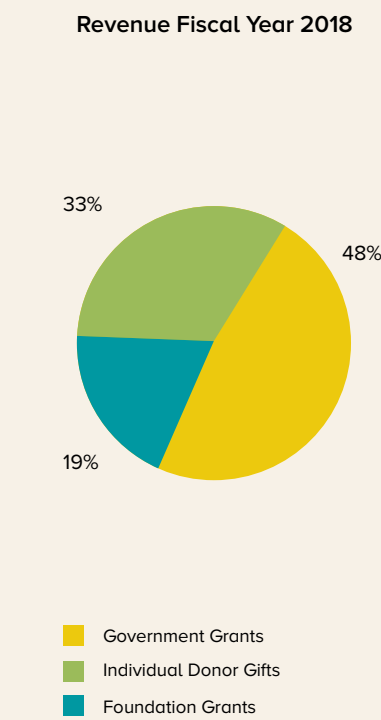
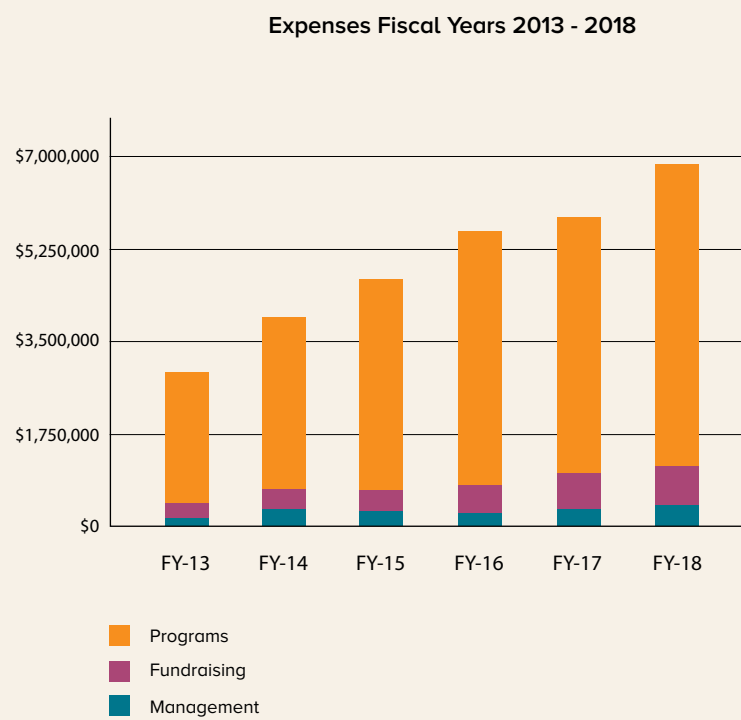
83% OF OUR BUDGET GOES DIRECTLY TO OUR PROGRAMS

2018 marked a new milestone for CalTrout as we grew our operating revenue to over \$6.8M. That growth has come through a balanced portfolio of government and foundation grants as well as your support. Thank you. Gifts from individuals like you fortify the foundation of our organization, allow us to leverage larger grants, and provide the stability to amplify efforts to fulfill our mission. As we've grown, our expenses remain balanced with operating revenue and we continue to be lean and efficient with 83% of our budget going directly to program work.

Thank you for your ongoing trust and support.



CalTrout continues to receive top honors from Charity Navigator, the country's trusted charity evaluator.



32

GOVERNMENT AND FOUNDATION GRANTS RECEIVED IN 2018

17.6%

INCREASE IN OPERATING REVENUE OVER 2017

175

SUPPORTERS IN CALTROUT'S MONTHLY GIVING PROGRAM, STRONGHOLD CIRCLE.

Why I Support CalTrout

SYDNIE KOHARA, CALTROUT MEMBER SINCE 2017

Sydney graduated from Louisiana State University and is currently a media strategist and storyteller. Previously, she spent over 30 years as a television journalist. Her interests include flyfishing, hiking, and running a retirement home for lazy chickens.

“For years, I’d seen CalTrout bumper stickers on cars and thought wow, a group dedicated to trout fishing. I loved to fish but knew nothing about trout except what I had read in ‘Field and Stream’ when I was a kid and watching Brad Pitt (I know, I know, his body double) land that huge trout in the movie, ‘A River Runs Through It’. Then board member Loretta Keller invited me on last year’s CalTrout steelhead trip to the Trinity River. Not only did I meet an amazing group of women who love to fish, but I learned so much about the rivers the fish call home and the people dedicated to saving those waters.

As I’ve gotten to know the organization, I am truly amazed at the level of inclusion and network of partners they have developed. From the farmers raising young trout in their rice fields to the ranchers offering access to rivers flowing through their property. I recently attended a bridge dedication on the Hat River and met members of the local tribe whose youth worked with CalTrout to restore wetlands around the river. PG&E reps were there to support the project. So many groups focused on the same goal of preserving our waters. It is truly inspirational to witness the depth and breadth of outreach for such a small organization and its team. CalTrout brings people together to do good. And they do. That is no small feat.

I consider it an honor to be able to support their efforts. That CalTrout bumper sticker means so much more when I see it now. I’m proudly showing off mine.”

CalTrout Board & Staff

SIX REGIONS, 30 EMPLOYEES

Board of Governors

Andrew Bassak

Board Chair

Richard West

Treasurer

Rick Kaufman

Secretary

Linda Rosenberg Ach

Gary Arabian

Kelly Barlow

George Choe

Edward De La Rosa

Bill Epstein

Dick Galland

Amelie Kappes

Loretta Keller

Charles Linker

Laurie McLellan

Taylor Moore

Bob Payne

George Revel

Bob Rosenberg

Scott Tucker

Paul Vais

San Francisco Central Office

Curtis Knight

Executive Director

Alan Roesberry

Finance Director

Gaby Roff

Institutional Giving Director

Tracey Diaz

Development & Communications Director

Melissa Racklyeft

Grants Associate

Patrick Samuel

Bay Area Program Manager

Walter Redgie Collins

Staff Attorney

Nathan Lubarov

Finance & Compliance Manager

Casey O’Sullivan

Membership Manager

Megan Nguyen

MarCom Associate

Ashley White

Development Associate

Conservation Staff

MT. SHASTA/KLAMATH

Drew Braugh

Regional Director

Phoenix Isler

Project Manager

Tuli Potts

Project Manager

Nicole Dove

Project Coordinator

NORTH COAST

Darren Mierau

Regional Director

Mary Burke

Program Coordinator

Marissa Adams

Project Manager

SIERRA HEADWATERS

Eric Huber, Ph.D.

Regional Director

Janet Hatfield

Project Manager

CENTRAL CALIFORNIA

Jacob Katz, Ph.D.

Senior Scientist

Jacob Montgomery

Project Manager

Jayne Ohlhaber

Project Manager

SOUTHERN CALIFORNIA

Sandra Jacobson, Ph.D.

Regional Director

Russel Marlow

Project Manager

IN THE FIELD

Craig Ballenger

Fly Fishing Ambassador

Mike E. Wier

Field Reporter and Videographer

Academic/Science Partners

UC Davis, Center for Watershed Sciences

Dr. Peter Moyle

Dr. Jeff Mount

Dr. Jay Lund

Dr. Carson Jeffries

Peter B. Moyle and California Trout Endowed

Chair in Coldwater Fishes

Dr. Andrew Rypel

CalTrout/UC Davis Wild Fish Partnership

Dr. Rob Lusardi, Leader

Humboldt State University

Dr. Walt Duffy

Dr. Bill Trush

University Nevada-Reno

Dr. Sudeep Chandra

UC Santa Barbara

Dr. Tom Dudley

Scramento Advocacy Consultants

Environmental and Energy Consulting

Conservation and Natural Resources Group

Strategic/Legal Advisors

Environmental Defense Center

Manatt, Phelps & Phillips

Shute, Mihaly & Weinberger

Water Power & Law Group, Richard Roos Collins



CalTrout staff out in the field. Photo: Mike Wier

Thank You

“My concern about the threats to our fisheries in California has grown over the years and strengthened my commitment to conservation and the critical work being done by CalTrout.”

- Frank Eldredge, Richard May Legacy Circle

We were saddened by the passing of the following individuals who left a legacy gift to CalTrout. The gifts helped strengthen our efforts to ensure wild fish thrive in healthy waters for future generations.

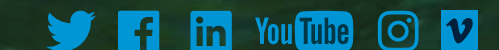
Robert Antonioli
Hamilton W. Budge
James Gerstley
Joseph Geyer
Neil C. Hansen
Jeff Moncur
Kit Crosby Williams

We thank the following members of the **Richard May Legacy Circle** who have so kindly included CalTrout through a bequest in a will or through another type of legacy gift.

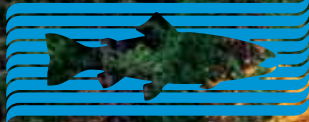
Anonymous (6)
The Brookfield Family
George & Becky Coughlin
Frank Eldredge
Ned Engle
William & Susan Epstein
Dick Galland & Annie Callaway
Bill & Terry Krivan
Richard May
Phil Morris & Judy Jacobs
Richard & Laurie Morrison
Steve Rogers
Jerry Zampino

Contact us, we are always happy to hear from you.

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CALIFORNIA TROUT



FISH · WATER · PEOPLE

California Trout Inc.
360 Pine Street, 4th Floor
San Francisco, CA 94104

Solving complex resource issues while balancing the needs of wild fish and people.

Front cover: California High. Photo: Anthony Jenca. Above: Eastern Sierra Gold. Photo: Phil Reedy.