



RIVER CURRENTS

River Centered: The Evolution of A Watershed Organization

By Rick Lofaro, Executive Director and Heather Lewin, Watershed Action Director

“Any river is really the summation of the whole valley. To think of it as nothing but water is to ignore the greater part.”

- HAL BORLAND

Do you remember where you were in 1996? Some might say that, for better or worse, Colorado and the Roaring Fork Valley was a different place back then. In case you hadn't found your way here yet, let me set the stage. The Av's had just won the Stanley Cup during their first season in Denver. Men were still racing World Cup on Aspen Mountain, and the X Games were still 5 years away. Aspen Highlands had just banned the historic ski patrol deck jump, Aspen Skiing Company's lift ticket prices "boldly passed the \$50 mark" and City Market in El Jebel was relatively new. Meanwhile, the Roaring Fork Club was taking shape, and consequently, so was Roaring Fork Conservancy (RFC). In the beginning, RFC's mission was to protect and enhance riparian areas located throughout the Club's property and develop a plan for the 3 miles of river that flow through Basalt. Soon after the creation of the organization, however, founding board members acknowledged that truly protecting the Roaring Fork River also meant protecting all the water that flows into it. RFC's mission was subsequently expanded to include the entire Roaring Fork Watershed. And so, a watershed organization was born.

Tim O'Keefe, RFC's first education director, provides an introduction and overview before a float through North Star Nature Preserve in 2006. RFC educators still provide this program and it continues to be one of the most popular spring program offerings.



Education and Action: Finding Our Purpose

After RFC established itself as the first group focused solely on river and water issues in the Roaring Fork Watershed, we were ready to spread our wings. Realizing that a critical component of water protection and conservation is fostering the connection between the people of the valley and the rivers, we implemented an education program. By teaching water specific lessons in local schools and taking on 24 local water quality monitoring sites through Colorado River Watch, we found effective ways to begin to reach the community and share the river's story. When we could not take students to the river, we brought the river to the classroom with aquatic macroinvertebrates, water quality samples, and hands-on water-focused lessons. Within a few years, we developed a reputation as a highly effective watershed education organization. As the curriculum expanded to cover a broad range of water related and watershed issues, we realized that education, while essential, was only part of the puzzle.

“If you have a river, then you should share it with everyone.”

- CHEN GUANGBIAO

Sometimes amazing things happen when teaching. Often, the teacher learns as much as or more than the students. While teaching about the watershed, we learned that we needed to

(Continued on page 2)



not only share a message of conservation and protection, but we also needed a more in-depth understanding of the unique challenges that the Roaring Fork River and its tributaries face. Sharon Clarke, the first Watershed Action Director, often reminded us that “the breathtaking beauty of the Roaring Fork Watershed may deflect our attention from critical ecological challenges.” Images of clear running mountain streams with anglers and rafters suggest a healthy and vibrant resource but its sustainability is not guaranteed. We realized that our job was to protect and enhance the invaluable resources here in the Roaring Fork Watershed.

Sharon’s vision and persistence deserve much of the credit as RFC’s focus expanded from education and water quality to include both watershed science and water policy development on a local, regional, and statewide level. We have carried and built upon her legacy in the years since she left. So, what does that mean? It means that RFC leads, participates, and partners in watershed and stream management planning to strategically improve watershed health. We participate in the Colorado Basin Roundtable, and write letters to local, state, and federal entities using science-based facts to support healthy waterways. It means we embarked on studies like the Roaring Fork Watershed and Crystal River Management Plans to engage stakeholders and accomplish on the ground work built on scientific

research. It means we try to take the lead on water issues and bring diverse stakeholders together on projects that benefit the community and the river.

“Boundaries don’t protect rivers, people do.”

– BRAD ARROWSMITH

Collaboration and Community: Finding our Home

Growing from a small organization with one employee narrowly focused on a 3 mile stretch of river, RFC’s current full-time staff of seven now engage in all aspects of watershed protection: education, science, policy, and community. In the summer of 2018, RFC will take its organizational foundation, created through two decades of progress, into a new location, The River Center. There, we will continue to realize new opportunities to enhance and elevate our work on the watershed and our community’s ties to it. With an update to the RFWP and implementation of the CRMP in progress, and more in-school and community programs rolling out every day, we couldn’t be more excited to continue to grow, learn and engage in our new home.



Above left: RFC’s water quality staff and volunteers currently monitor 22 stream sites on a regular basis and submit the data to Colorado River Watch. RFC monitors more sites for River Watch than any other single entity in Colorado. **Above right:** Sharon Clarke, RFC’s first watershed action director, stands on the banks of the Crystal River with representatives from American Rivers, after they named it one of America’s most endangered rivers in 2012. **Right:** A popular part of our education programs for youth and adults alike is identifying and looking at live aquatic macroinvertebrates under a microscope!





2018 RIVER CONSERVATORS:

WOODY CREEK DISTILLERS Mary & Pat Scanlan and Mark Kleckner & Tracey Snow

By Sarah Woods

Roaring Fork Conservancy will honor Mary and Pat Scanlan and Mark Kleckner, founders of Woody Creek Distillers, and Tracey Snow, as our 2018 Robert Billingsley River Conservators at the 19th Annual River Rendezvous on July 11, 2018.

After years of pursuing their own careers, these three longtime friends came together to follow their dream - create a line of spirits whose quality is a lasting legacy for the community, their families and friends. Woody Creek Distillers is proud to use produce grown on their family farm in Woody Creek and neighboring farms.

From seed to bottle, it's all done in the Roaring Fork Watershed.

Pat and Mark feel where they make the spirits is as important as how they make their spirits. They know that growing and sourcing their produce locally not only makes for the best ingredients, it's also good for the environment. The team is dedicated to protecting and enhancing the natural resources of Woody Creek. Their distillery is a low-emissions facility using the most efficient distillation technology available. The waste from their raw products goes back to the Scanlan family farm in Woody Creek as compost, or to local ranches as livestock feed.

When they founded Woody Creek Distillers they knew they wanted to make nothing but the finest craft spirits, each with a unique taste and character that was true to the origins of that spirit. It is a standard they hold themselves to every day. They grow and harvest some of their own

ingredients, like potatoes for their premium vodka. They also only source their grains from trusted Colorado farms, like the rye in their 100% rye mash whiskey.

They distill every spirit they make in their own custom Carl stills. They never use neutral grain spirits, or blend with base spirits from other distillers. Rest assured that every bottle produced by Woody Creek Distillers is truly handcrafted to the highest standards.

Early on, Pat saw the opportunity to use the unique farm land within the Roaring Fork Valley and especially Woody Creek, in a sustainable fashion to grow world-class potatoes to create their award winning vodka. Agricultural property that sat idle since the 1940's was rejuvenated, including the use of legacy irrigation sources like the Salvation Ditch in Woody Creek. Woody Creek Distillers also revived farming on land leased from Pitkin County Open Space and Trails, bringing back agricultural vibrancy to idle valley properties.

The state-of-the-art distillery in Basalt is rife with thoughtful design and engineering. From the beetle-kill pine elements in the tasting room and barrel storage facilities, to fully sustainable production processes, Woody Creek Distillers exemplifies conservational and environmentally sound operations. All heating and cooling is done within closed loop systems, using hot water produced during the distilling process for heating, while using incoming water for cooling prior to production with zero discharge. Finally, 100% of the stillage, the leftover grains and solids from distillation, are used for cattle feed and nutritional enhancement of farm land.

The Woody Creek team are true conservationists and environmentalists and have supported Roaring Fork Conservancy for many years. Congratulations, Woody Creek Team!



Thank You

to ALL the volunteers and sponsors
who made our 20th Annual
Fryingpan River Cleanup a success!



Photos by Dale Armstrong & Christina Medved



2017 Annual Report:

*How Do We Bring
People Together to
Protect Our Rivers?*

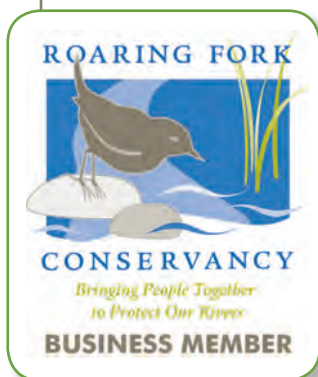
Looking back on 2017, perhaps our biggest milestone was captured in a single shovel full of soil: the monumental groundbreaking of the River Center in Basalt. Though the wait was long, the pouring of the River Center foundation came at the perfect time.



We invite you to read through our 2017 accomplishments in our 2017 Annual Report. Thank you for your continued support that makes our work possible!

View the report at

<http://www.roaringfork.org/about-us/>



2018 BUSINESS MEMBERS: Thank you for supporting essential river research, education, and conservation work!

Aspen Fly Fishing
Barnes, Pearson & Associates, LLC
Berthod Motors
Blazing Adventures
Blue Creek Business Solutions
Blue Sky Adventures
Casey Brewing and Blending

Crystal Fly Shop
Footsteps Marketing
Incline Ski and Board Shop
K&W Concrete
The Romero Group
Trout Bandits
20/20 Eyecare

Watershed Explorations

2018 SUMMER & FALL EVENTS CALENDAR

MAY

- 17 Ruedi Reservoir Tour:
Storing West Slope Water
- 31 Birding Maroon Creek Wetlands

JUNE

- 2 14th Annual River Float
- 6 North Star Preserve
Roaring Fork River Float
- 7 North Star Preserve
Roaring Fork River Float
- 14 Fishing in Schools
Teacher Workshop
- 14 North Star Preserve
Roaring Fork River Float
- 19 North Star Preserve
Roaring Fork River Float
- 20 Lazy Glen Open Space Opening
- 21 Flowers & Filtration:
Rio Grande Wetland Walk
- 26 Deer Hill Early Summer Wildflower Walk
- 27 Family Night at Filoha Meadows:
Fireflies, Bats, and Bugs
- 28 Family Night at Filoha Meadows:
Fireflies, Bats, and Bugs

JULY

- 2 Filoha Meadows:
Firefly & Rare Orchid Walk
- 5 Family Night at Filoha Meadows:
Fireflies, Bats, and Bugs
- 9 Filoha Meadows:
Firefly & Rare Orchid Walk
- 17 Family Night at Filoha Meadows:
Fireflies, Bats, and Bugs
- 18 Filoha Meadows:
Firefly & Rare Orchid Walk
- 24 Filoha Meadows:
Firefly & Rare Orchid Walk
- 25 Water in the Age of Silver:
Touring Aspen's "Holden Works"
- 27 Twin Lakes Tunnel & Diversion Tour

AUGUST

- 8 Family Exploration at Filoha Meadows
- 11 River Center Grand Opening
- 17 Family Exploration at Filoha Meadows

SEPTEMBER

- 7-8 Crooked Creek Wetland Planting
- 8 Family Exploration at Filoha Meadows
- 11 Aspen Tap: Drinking Water Tour
- 19 Filoha Evening Walk: Elk & Bighorn Sheep
- 25 Carbondale Bicycle Ditch Tour

Registration opens 3 weeks prior to program date.

For program information and to register visit: www.roaringfork.org/events



COME FLOAT WITH US!

RFC's Community River Float & Festival
Saturday, June 2, 2018

TICKETS:

Float & Festival: \$50 (\$40 for RFC Members)
Suitable for ages 12+

Festival Only: \$30 (\$25 for RFC Members)
All Ages Welcome

REGISTER BY MAY 30 at

<http://www.roaringfork.org/events>



Roaring Fork Conservancy spent the last 22 years bringing people together to protect our rivers. We are thrilled that as we move into our next 20+ years, the River Center will provide us a home in which to bring together visionaries, researchers, policy-makers, elected officials, and academic researchers to discuss regional, state, and national water issues and share ideas with the broader community. As the demand for our science, policy and education expertise increases, the timing is perfect for growing in our capacity!



Save the Date

FRIDAY, AUGUST 10
RIBBON CUTTING & GRAND OPENING

SATURDAY, AUGUST 11
COMMUNITY OPEN HOUSE



THE RIVER CENTER

GOLD MEDAL PARTNERS

Carter & Dane Brooksher
Barb & Pat McMahon
Randy & Ken Kendrick
Roaring Fork Club Partners

CORNERSTONE PARTNERS

Judy & David Baum · Eleanor & Hal Davis · Mary & Jim Griffith · Janet & Robert Hoffman
Ann & Tom Korologos · Dianne G. & James W. Light · Cornelia & Meredith Long
Clarisa & Tom McMahon · The Roaring Fork Club · Carolyn & Dick Shell
J. Robert Young Foundation/Alpine Bank · David Wilhelm

SILVER MEDAL PARTNERS

Aspen Skiing Company · Family Fund & Environment Foundation · Community Office for Resource Efficiency (CORE)
Judith & Nick Huston · Hyde Family Foundation · Marianne & Dick Kipper · Colleen & Craig Slater
Kay & Robert Watson · Mary Ann & John Virant

BRONZE MEDAL PARTNERS

Janie & Edward Bradley · David Burden · Crown Family Philanthropies · The Forest Fund
Elizabeth McGeachin McKee Foundation · Julie D. Roth Charitable Fund · Bonnie & Harold Kloosterman
Ann Nichols · Anne & William Tobey · Wise Family Foundation · Diane & Rob Schwener

MAJOR PARTNERS

Sue Anschutz-Rodgers · Town of Basalt · Mirta & Ramiro Betancourt · Isabel & Joaquin Blaya
Annatje & Ted Borchelt · Sherry Ann & Edward Dayton · Beaudin-Ganze Consulting Engineers · Bluegreen
DHM Design Corporation · Kristal & Joseph Dockery · Anne & John Doerr · Beth & Tom Eckert
Kathy & David Finholm · Anonymous · Paula & Frederick W. Grover · Bruce T. Halle Family Foundation
Rick, Kelly, Conner & Garrett Hiser · Ruthie & Dave Hoff · Carol & Michael Hundert · Nancy & Don Kempf
Larry Lebarre · Dan Moody · Sara Ransford · Robert & Grace Brod Family Foundation
Robert Pew and Susan Taylor · Maren & Don Schuster · Alison & Carl Strelecki
Carol & John Walter · The Estate of Otto Louis Wille · Phyllis & Larry Yaw

COMMUNITY PARTNERS

Michael & Gail Attas · Ashby Baker · Wendy & Jack Bergstrom · Gay & John K. Binswanger · Charlotte & Dan Blanks
William Browning · Catto Charitable Foundation · Susan & Scott Chism · Brittany & Jeff Conklin
Cottle Carr Yaw Architects Ltd · Johnny Cronin · Cindi & Jack Donovan · Kristen Doyle · Jennifer & Stephen Ellsperman
Lynn Engel · Mary & Craig Fenneman · Sean Fick & Sheryl Sabandal · Nanette Finger · Janet & Robert J. Firth
Sheila & David Fuente · Diane & John Gavin · Jim Gilchrist & Lynn Nichols · Karen Gray · Phoebe & Larry Gruel
Marianne & George Hartnett · Melinda & Jeffery Hildebrand · Jamie & Scott M. Honour · Becky & Sammy Johnson
Ramsey and Steve Kropf · Tommy Latousek & Eva Malanowski · Heather & John Lewin · Christine & Andrew Light
Lodge at River's Edge (Clettenberg) · Lindsay & Rick Lofaro · Christina Medved · Liza Mitchell
Debbie & Bill Montgomery · Rick Neiley & Maria Maniscalchi · Rick Neiley & Maria Maniscalchi
Win & George Norman · Marina & Tim O'Keefe · Gail Orrick · Jan & Pike Peterson · Lynda & Stewart Resnick
Tiffanie & Chad Rudow · Jenny & Todd Sauer · Nancy & John Schneider Foundation · Sopris Engineering
Maria & Jock Stafford · Joseph A Tumminello · Sarah & Robert Woods · Valerie & Fletcher Yaw

Fireflies at Filoha Meadows

Kristen Doyle, Watershed Educator

Last June, I found myself guiding a group across a timeworn bridge, past a seemingly old barn, into a meadow along the Crystal River. I exhausted my botanical knowledge leading a search for rare orchids, and my explanation that the “old barn” was actually a fabricated set from a little-known Disney movie seemed to squash some of the scene’s romanticism. As dusk settled in, I wondered if the show we were all anticipating was about to happen, or if I would need to awkwardly explain that it was too cold, too rainy, or too early in the season for our performers to reveal themselves. Then I saw it – a soft light emanating from just a few feet away. As the group fell silent, another light pulsed in response from across the field. And then another. Before long, Filoha Meadows was alight with the soft green glow of fireflies.

Fireflies, also known as lightning bugs, are neither flies nor true bugs, but beetles (Coleoptera). Hatching from eggs, firefly larvae are voracious predators of slugs, snails, and soft-bodied insects. These larva live underground and are capable of producing a light of their own. In the late spring of their second year the larvae pupate, a process akin to a caterpillar creating its chrysalis, before emerging as the adults we are accustomed to seeing. The dazzling display of light is actually a mating call, signaling to others they are “single and ready to mingle.” These flashing patterns differ between species, and are also used by scientists to identify who is who. However, not all “come hither” flashing patterns end happily ever after – the females of some species mimic the flash patterns of others, and then viciously attack and consume their would-be lovers. After mating, female fireflies gently lay their eggs in soft, damp soil, and the life cycle begins anew.

The presence of these copulating coleopterans at Filoha Meadows and other thermal wetlands is a mystery. Fireflies typically live at lower elevations, and while populations have been found at hot springs throughout Colorado, these populations are isolated with miles of arid mountains between them. One theory is that as homesteaders developed the west, fireflies in the east took advantage of irrigation ditches and canals, expanding their range. Dr. Larry Buschman, an entomology Professor at Kansas State University with over 20 years of firefly experience, finds that explanation lacking. Fireflies only persist near permanent, year-round water sources, with many populations found in remote areas reached only by wilderness backpacking. Buschman suggests in his *Field Guide to Western North American Fireflies* that thousands of years ago, when the climate of the American West was wetter, these burly beetles made their way across the continental divide and dispersed into damp forests and wetlands in the West. As the climate became drier, available habitat shrank leaving pockets of fireflies lingering on in our remaining springs and marshes, isolated from each other and subsequently developing their own local adaptations.



Clockwise from top left: Adult *Photuris* firefly and the light organs of the male, female, and larva. Photos by Dr. Larry Buschman.



Viewing fireflies during a Filoha Meadows program.

Because of this, Buschman believes the population present at Filoha Meadows (currently identified as *Photuris* spp.) may actually be its own sub-species. This uniqueness and isolation also makes the relic population at Filoha meadows vulnerable and vital to protect, as there are no nearby populations possible of reestablishing themselves. While these fireflies may create more questions than answers, one thing is certain: the fireflies at Filoha meadows continue to sparkle for spectators, helping RFC inspire people to explore, value, and protect not just the Roaring Fork watershed, but all creatures big, small, and bright that call it home.

Interested in seeing these fireflies yourself?

Attend one of our July Filoha Meadows programs, FREE thanks to Pitkin County Open Space & Trails. Details, including dates and registration, can be found at www.roaringfork.org/events.

Staff & Board Flows



Matthew Anderson, Watershed Action Intern

Matthew is an Environmental Science and Resource Management major at the University of Washington in Seattle. This is his second summer assisting the RFC Watershed Action team with water

quality and conservation easement monitoring. Matthew was born and raised in Basalt.



Johnny Cronin, Director of Donor Relations

Johnny's experience building relationships with donors and fundraising for conservation programs, including The Nature Conservancy and Houston Wilderness, follows a successful

career as an entrepreneur. Johnny's background dovetails well with RFC's 22-year mission of inspiring people to explore, value and protect the Roaring Fork Watershed. Graduating from Texas Tech with a degree in Public Administration, Johnny appreciates the busy intersection that is conservation, "friendraising" and governing these sometimes complicated issues. Johnny, his wife Vicki, and his entire family are respectfully dedicated supporters of the amazing outdoor opportunities Colorado provides.



George W. Kelly III, RFC Board Member

Born and raised in Canton, Ohio, George W. Kelly III moved to Colorado upon graduating from St. Bonaventure University with a degree in Marketing in 1998. After starting his career with East West Partners in

Vail which eventually took him to Lake Tahoe, George and his wife Stacey were drawn back to Colorado and the Roaring Fork Valley, an area that has become home. After a career in leadership roles with East West Partners and Aspen Skiing Company George decided it was time to start his own business. In 2011 George founded Organic Return, an Award Winning Digital Marketing Agency with local and national clientele. Organic Return is a member of 1% For The Planet and focuses on working with hospitality, real estate and business-to-business companies throughout the United State. George lives in Basalt with his wife Stacey Kelly and two kids; four-year-old George IV and six-year-old Audrey.



April Long, Watershed Plan Coordinator

April is a water resources engineer with 16 years of experience assisting local governments with stormwater management programs. For the last decade, April has served as the Stormwater

Manager and Clean River Program Manager for the City of Aspen. She started this program and has grown it into a nationally recognized program for its progressive and creative approach in regulation and award-winning design, construction, and performance of water quality improvement facilities. While she continues her role with the City of Aspen, April is also the principal of her own private contracting business, Colorado Watermark, LLC, where she specializes in strategic planning for water resources and watershed master planning and implementation. April is working with RFC staff to re-engage stakeholders in the update of the 2012 Roaring Fork Watershed Plan. Originally from Alabama, April has a degree in Biosystems Engineering from Auburn University. She spends her free time near the water, too – hiking, camping, skiing and rafting with her family and friends.

Support Roaring Fork Conservancy: Win a Boulder Boat Works Pro Guide Drift Boat!



**\$100
per
ticket**

**2nd Place: ORVIS Helios 3
3rd Place: YETI Tundra 105**

Get your Raffle Ticket TODAY at

www.RFCRaffle.com

Need not be present to win. All proceeds from raffle ticket purchases directly benefit Roaring Fork Conservancy.

\$100,000+

Barb & Pat McMahon
Clarisa & Tom McMahon
Roaring Fork Club Partners

\$50,000 - \$99,999

Marianne & Dick Kipper
Hyde Family Foundation
Mary & Jim Griffith

\$25,000 - \$49,999

Alpine Bank
Dianne G. & James W. Light
Pitkin County
The Forest Fund

\$15,000 - \$24,999

City of Aspen
T. Danis Charitable
Foundation
Nancy & Rich Kinder
Cornelia & Meredith Long
State of Colorado
Anne & William Tobey

\$10,000 - \$14,999

Aspen Skiing Company
Environment Foundation
Basaltamira, LLC
Janie & Edward Bradley
Carter & Dane Brooksher
Barbara & Franklin Carson
DHM Design Corporation
Eagle County
Anonymous
Garfield County
Joyce & Bill Gruenberg
Melissa & David Hotchkiss
Judith & Nick Huston
Bonnie & Harold Kloosterman
RCG Fund
Maren & Don Schuster
Carolyn & Dick Shell
The Roaring Fork Club
Kay & Robert Watson
William & Marie Wise Family
Foundation
Phyllis & Larry Yaw

\$6,000 - \$9,999

Gail & Michael Attas
Bonner & George Ball
Judy & David Baum
Janice & Philip Beck
Louise & Clay Bennett
Gary Blackie
Eleanor & Hal Davis
Claudia & Fred Lummis
McHugh Gallery
Lee & Lou Schaufele
Christina & Kile Smith

\$3,000 - \$5,999

Teresa & Steven Beal
Bessie Minor Swift
Foundation
Charlotte & Dan Blanks
Ashley & Scott Bohn
William Brandt
Norm Brown
Cedric and Mary Anne
Burgher
Shawn Cheadle
Patsy & George Conrades
Cynthia Grumney Joint Trust
Muffy & Andy DiSabatino
Laura Donnelley
Beth & Tom Eckert
Greenwood Holding LLC
Ruthie & Dave Hoff
Eveline Hoffman & Joel
Strumph
Stacey & George Kelly
Jan & Jim Kingham
Ann & Tom Korologos
Lisa & Kurt Krass
Ann McAlpin
Janis Merrill
Jane & Clarke Nims
Norbert LLC
Pat & Jane Bolin Family
Foundation

Patagonia - Environmental

Programs
Prehm Ranch
Sherry & Brooks Reed
Lynda & Stewart Resnick
Betty & Jan Rietdijk
Diane & Rob Schwener
Wendy & John W. Seiple
The Thrift Shop of Aspen
Timberline Bank
Corinne & Paul Wood
Geny Sanchez and J. Robert
Young

\$1,000 - \$2,999

Kim & Chuck Anderson
Anonymous
Ashley Friedman Advised
Fund at Aspen Community
Foundation
Aspen Skiing Company
Aspen Trail Finder Roaring
Fork Fund
Henry T. Lowe Rev Trust
Bank of America Matching
Gifts
Sheryl & Douglas Bech
Annette & Ted Borchelt
Sue & Mike Bowlin
Gina & Tucker Bridwell
Stephen Britter & Mark Brown
Sarah Broughton & John
Rowland
Debbie Carson
Betsy & Jim Chaffin
Amy Griffith & John Charters
Caryl & David Cherry
Community Office for
Resource Efficiency
Cottle Carr Yaw Architects Ltd
Anne & Les Corbora
I. McA. (Mac) Cunningham
Mara & David Deniger
Greg Didier & Terry Rogers
Mary & Neil Dorflinger
Anonymous
Ernst & Wilma Martens
Foundation
Dafri & Michael Estes
Franklin P. and Arthur W.
Perdue Foundation
Stanley D. Gertzbein &
Marianne Antoniak
Denise & Andy Goldfarb
Chip Griffith
The Grinspoon-Foley
Charitable Foundation Fund
at The Chicago Community
Foundation
Jennifer & Cap Grossman
Paula & Frederick W. Grover
Valerie & Jack Guenther
Frank J. Guyol III
Andrea Rossetti & Eric
Hollerbach
Kay & Ned Holmes
Terry Huffington
Carol & Michael Hundert
Breckie & Matt Hunt
Jack Wilkie Builder, Inc.
Kirsten & Kyle Johnstone
Laura & Mike Kaplan
Lolly Kelly
Nancy & Don Kempf
Ann & Joe Kercheville
Kovler Family Foundation
Amy & Tim Leach
Laura & John Marlow
Ed Mascarin
Laurie & John McBride
Jane & Tim McMahon
Jeanie & John Morris
Ann Mulroy
Barbara & Richard Nelson
Sue & Kirk Patrick
The Pergo Foundation
Karen & Robert Purdy
Sue & Walt Rakowich
Reese Henry & Company, Inc.
Robert Pew and Susan Taylor
Rotary Club - Snowmass
Village

Mary & Pat Scanlan
Katie & H.C. Van Schaack
Lorraine & Mark Schapiro
Nancy & John Schneider
The Beaufort Foundation
Maria & Jock Stafford
Alison & Carl Strelecki
Thendara Foundation
Carol & Mack Trapp
Joseph A. Tumminello
Gayle Waterman
YouthEntity
Judith Zee Steinberg & Paul
Hoenmans

\$500 - \$999

Suzanne & Michael Ainslie
Allison & Dale Armstrong
Susan & Stephen Baird
Bank of Colorado
Elyse Elliott & Jeremy Bernstein
Leslie & Jack Blanton
Blue Tent Marketing
Eileen & Frank Bresnan
Michelle & Ronald Brown
Cinda & Michael Carron
Donna & Steve Chase
Jeff Conklin
Karen & Robert Davis
Pamela & Bruce Earthman
Susan & Don Edmonds
Lassiter Electric Inc.
Jess Ellis
Mary & Paul Fee
Akasha Feeley
Janet & Robert J. Firth
Anonymous
Jack McKay & Leslie Ann
Gallagher
Alfred Gardner
Berthod Motors c/o Don
Gerbaz
Jeanette & Scott Gilbert
Jim Gilchrist & Lynn Nichols
Laura & Javier Gonzalez-
Bringas
Gould Construction
Harry Teague Architects
Sue & Robert Hess
Anita & Donald Ingle
Sandy & Charles Israel
David Johnson
Sally & Jim Klingbeil
Ramsey and Steve Kropf
Mark Lantz
Michael Latousek
Marianne & Bill Lederer
Doug Leibinger
Judith & Amory Lovins
Kim & William Madden
Marcia & Don Flaks
Lynn & Frances Mayhan
Kirsten & Gerald McDaniel
Heidi McGuire
Cynthia Calvin & Mac
McShane
Tom Melberg
Michelle and Geoff Greenfield
Doyen & James Mitchell
Christy & Richard
Montgomery
Jean Moore
Margaret A. Frank Fund at
the Chicago Community
Foundation
Neil-Garing Agency, Inc.
Rick Neiley & Maria
Maniscalchi
Hensley & James Peterson
Kathy & Jerry Pettit
The Arches Foundation
Timbers Resort
Judy & Jim Rifkin
Doug Rohrbaugh
Ruedi Water & Power
Authority
Anita & Merlyn Sampels
Seven Star Rebekah Lodge
No. 91
Sarah & Richard Shaw
Martha & Thomas Singleton
Steve Smith

Sandy & Stephen Stay
Julia Loo & Steve Sutcliffe
Steven B. Swanson
Ellen Temple
The Robert and Margaret
McNamara Foundation #3
Trout Unlimited Ferdinand
Hayden Chapter
Pam & Dan Turley
Suzanne & Michael Vernon
Mary Ann & John Virant
Connie & Jon Warnick
Patricia & Jay Webster
Sarah & Robert Woods
Jean & Bill Wunderlich

\$200 - \$499

Aspen Center for
Environmental Studies
Avalanche Ranch
Daniel & Cindy Adams
Dianne & Jack Adleta
Aspen Kitchen
Becky Ayres
Kathy & Carter Barger
Chuck Bellock & Maggie
Morrison
Lynn & Bruce Bowen
Judy & Ed Brown
William Browning
Aaron Calcott
Marcia Corbin
Susan & John Cottle
Robert Cross
Sherry Ann & Edward Dayton
Nick Chemey and Patricia
Eagling
Phil Eastley
Jennifer & Stephen Ellsperman
Darlynn & Tom Fellman
Patricia & Rolan Ferris
Sheryl Sabandal & Sean Fick
William Fisher
David Fleisher & Gina Berko
Donald J. Fleisher
Lisa & Brian Flynn
Glenwood Hot Springs Pool
Tom Gorman
Gran Famum Printing &
Publishing
Kim Gutner
Gypsum Creek Golf Course
Barbara Hammer
Margot & Dick Hampleman
Kristen Henry
Joan & Jerry Hjelle
Nancy & Peter Hoffmann
Janis and George Huggins
I.D. Interiors
Debbie & Richard Jelinek
John Kuck
Becky & Sammy Johnson
Katharine A. Johnson
Douglas Kenward
Deborah & Darrell Kirch
Cil Klampner
Jonathan Klausner
Elizabeth & Kelly Klein
Daylene & Gary Lichtenwalter
Courtney S. Little
Lindsay & Rick Lofaro
Rich Lofaro
Mehchelle & Tony Lugard
Suzy & Bill McKee
Beth & Kent Meager
Michael Miller & Carol
Murphy
Marcie & Robert Musser
Janet & Robert Olson
Anonymous
Edgell Pyles & Martha Pickett
Jayne & Bill Poss
Tim Racke
Emily & Ken Ransford
Hope & John Reese
Kristen & Troy Rhudy
Anne Rickenbaugh
Ken Riley
River Restoration.org
Roaring Fork Fishing Guide
Alliance
Ronald W. Rouse

Carol & Walter Ruch
Sandy & Ted Newman
The Schindler Family
Jim Schreier
The Susan & Ford Schumann
Foundation
Earlene & Herb Seymour
Ann Smock
Town of Snowmass Village
Sunsense Inc.
Sure Thing Burger
Lucia Swanson
Tony Thelen
AJ & Michael Thompson
Ute Mountaineer
Valley View Hospital
Curtis Vaughn
Cher R, Vincent
Ruth & Bob Wade
Cynthia Wayburn
Molly A. Wheelock
Jacque & Tim Whitsitt
Donna & Roy Wiedinmyer
Lori & Kenneth Williams
Stephanie Williams
Donn Willins
Susan & David Young
Matthew Zuckerman

\$100 - \$199

20/20 Eyecare
Alpine Angling / Roaring Fork
Anglers
Sharon & Bruce Anderson
Kathy Arensdorf
Aspen Trail Finder Roaring
Fork Fund/ROFO Fund
at Aspen Community
Foundation
Barnes, Pearson & Associates,
LLC
H. Michael Behrendt
Tim & Charla Belinski
Blue Sky Adventures
David Behrhorst & Donna
Fisher
Stephanie Bergner
Sallie & Tom Bernard
Stevie & Gregory S. Bovee
Caroline Bradford
Margie & Paul Broome
Darrell Brown & Suzanne
McNitt
Angele & Jim Butchart
Oni Butterfly
Betty Cabral
Cora Carballeira
Robert Cardwell
Casey Brewing
Caroline Cole
Ruth A. Carver
Helen & Roger Carlsen
Lara & Terry Claassen
Michael Collins
Karen & Dan Comings
Chip Comins
Terry Conklin
Paul D'Amato & Beth
Cashdan
Peppy & Wally Dallenbach,
Colorado 500, Inc.
Craig Dawson
David Dowler
Lisa & Philip Drev
Eliza & John Duncan
Cinda & Donnelley Erdman
Sarah Jane & Steven Knous
W. Durand Eppler & Jean
Scandlyn
Mary Ann & Lee A. Erb
Erin Evers
Kathy & Greg Feinsinger
Amy & Robert French
Thomas Frdstein
Charlene & Stan Gardner
Krystina Greenwood
Phoebe & Larry Gruel
Jamin Heady-Smith
Jeff Heidemann
Sherry & Rick Herrington
Mary & Brett Hesse
Tracy Holcombe

Holland Hills Metro District
Elizabeth Hotchkiss
David Houggy
Sandy & Peter Johnson
Denise Jurgens
Amy Kaiser
Karp Neu Hanlon, P.C.
Gideon Kaufman,
Matt Kelsic
Phil Kendall
Tom & Tammy Kenning
Wewer & Steve Keohane
Akajeet Khalsa
Ellen T. Knous, CPA
koru
Ann Koveleski
Peter Kurtz
Mark Lacy & Sharon Clarke
Adelaide Leavens
Marilyn and Henry Lee
Rosella & Dave Leety
Aspen Fly Fishing - Chris
Lemons
Robert C. Light
Carol & Bill Lightstone
Verna Lofaro
April & Brian Long
Incline Ski & Board Shop
Jack Murphy
Mary Jo Murphy
Valerie J. MacDonald
AMI MAES
Maley Building Corporation
Martin Manosevitz
Stephen C. Martin
Gail Mathieson
Michele McClintock & Brad
Osborn
Meredith McKee
Carly & Frosty Merriott
Kirsten & Rob Morey
Bob Millette & Maggie
Pedersen
Susan Philp
Katie Montie
Caroline W. Mulroy
Steve Nast
Emily & Tom Neel
Network for Good
George and Liz Newman
Vince Nichols
Bob Oddo
Terri & Bill Parsons
Lauren Petersen
Chris Peterson
Sondra Pfeffer
Andrea Pazdera
Liz & Bill Phillips
Lauren Pierce
Pinnacol Assurance
Julie Puchkoff
Joyce & Bob Rankin
Donna Riley
Jessica K. Rveira
Gerry Roehm
The Romero Group
Michael G. Rosenberg
Douglas J. Sanders
Scott D. Schreiber
Trish & Mark Seaman
Amanda Simmons
Mary & Charles Sledge
Christopher B. Smith
Sindy V. Smith
Ward W. Smith
Solarflair Thermal Systems,
INC
Erica Sparhawk
Kit Strang
Lauren Street
Dianne & Dale Thiel
Gerard Tomasso & Sherry
Calaia
Trout Bandits - Max Rand &
Jennifer Balmes
Chris W. Vaughan
Darlene & Jerome Walsh
Gayle & Richard Wells
Roger Wilson
Mary & Hugh Wise
Ronald Wolff

\$20-\$99

Denise & Ronald Acee
Ann & Allen Adger
Anita & Paul Adolph
Karen & Enis Alldredge
Anonymous
American Express Company -
Employee Giving Program
Melanie Arnold
Gary Augustson
Lizz Bailey
Omin Baird
Karen Barch
Tony Battaglia
Hannah Beavers
Ginny Beesley
Mary G Berg
Nell & Bill Birk
Cynthia & Christopher Blachly
Becky Blair
Liz & John Bokram
Kip Bossong
Nancy Boyer
David W. Boyle
Carrie Bradford
Betty & Ernie Bradley
Shelly Braudis
Todd Brehe
Jack Brendlinger
Walter & Lida Bross
Andrew Brown
Joe Brown
Seth L. Brown
Julie & Dick Bulkeley
Bill Burge
Shelley Burke & Al Nemoff
Rob Cairncross
James R. Campbell
Helen & Roger Carlson
Lorrie & Rick Carlson
Riki Charles
Linda S. Chi
Molly & Steve Child
Michelle Collins
The Kroger Company
David Conarroe
Sam Cox
Stacey McLendon Craft
Crystal Valley Plumbing &
Heating
Sheila Cunningham-Breed
Leslie Curley
Jeanette Darnauer
Megan & Whitt Dean
Deborah & George Lawrence
Claire & Ray Delacqueaux
Victoria Delf
Cassie Jo Desmone
Nancy Dever
Jean Dodd
Downvalley Tavern
Kristen A. Doyle
Lee Ann Eustis
Sally & Chris Faison
Judy & Mark Feinsinger
Marc Fernandes
Nancy Ferrillo
Phi Filerman
Jeff Finesilver
Suzanne & Ike Fitzgerald
Judy & Dennis Fitzpatrick
Mary Lou & John Flynn
Footsteps Marketing
Anne & Phil Freedman
Mark Fuller & Penny Atzet
Paul Garcia
Hilary H. Garner
Jon Gibans
Mark E. Giesecke
Karen J. Glenn
Julie Goldstein
Julie Gordon
Tracy Grant
Donna & Bernie Grauer
Leslie T. Gray
Shayla & Jason Groves
Jenny Gutt-Ohly
James Haas
Teresa E. Hackbarth
Mary Lou Haflinger
Cynthia Haines
Dustin M. Hall

David Hamilton
Andrea & Clay Hanson
Greg Hardy
Richard Hart
Sarah C. Hart
Carol & Judson Hawk
Wendy Hayden
Paul Hempel
Jennifer Henderson
Charles Hendricks
Lindsay Herlinger
Ilka Hettrich
Geraldine Hickerson
Tawn Hillenbrand
Marcee & Tim Hobbs
Karl Hoff
Linda Hoffman
Samantha Hoffmann
John Hoffmann & Kim Stacey
Gail & Phil Holstein
Holy Cross Energy
Jeb Howard
Robert Huber
Ellen Hunt
Yvonne Hunter
Michael Hutton & PJ Wallace
Christine a Interlante
Richard N. James
Elizabeth Jeffett
Teresa Jennings
Jim Jensen
John Christie
Andy Johnson
George Johnson
Eric O. Johnston
Ryan Kalamaya
Eliza Kane
Dennis Karpuska
Bob Kaster
John Katzenberger & Deb Jones
Ann Keller
Annette Keller
Gregory and Pamela Keran
Nick Kilbourn
Mary & John Killebrew
Nancy & Michael Kish
Mark Kittle
Liz Kolbe
Matthew Kuhn
Erik Kushito
Jodi Lamirault
Barbara & Michael Larime
Jony Larrowe
Ann Larson
Terry Lee
Denison Levy
John R. Lewin Jr. and Heather
Tattersall Lewin
Casey & John Livingston
Jennifer & Greg Long
John B. Loomis
Meaghan Lynch
Michael Manicki
David Marlow
Cindy McAdow
Shiloh McCollum
Chip McCrory & Rachel Dayton
Kris & Bruce McKinnon
Shelly and Jay Merriam
Phebe Meyers
Lee & Paul Michaels
Peggy & Barry Mink
Jerrold Mitchell
Stephen Monroe
Gaard Moses
Terry A. Muldoon
Maite Neiblas
Roaring Fork Nets
Ken Neubecker & Paula
Fothergill
Andrew Nolan
Carol O'Brien
Sarah Oates
Carrie Odom
Jamie & Miranda Odom
Jessica Olson
Jane Orahood
Diana B. Osborn
Richard Parachini
Ginny Parker
Terrie Patterson
Julie and Tom Paxton

Laurie & Daryl Pederson
Matt Peterson
Sam Philben
Megan Phillips
Kyle H. Pieti
Susan H. Planck
Lynn & Kenneth Plank
Sarah Pocker
Missy & Steve Prudden
Ryan Quinn
Ranch at Roaring Fork
Maurie Raphaely
Rachel Richards
Jason Jason Rittmiller
Wendy Roberts
Margaret & Dwayne Romero
Heidi Roupp
Frances & John Rutland
Marty Ryan
Heather & Greg Rydell
Haley Scarpino
Austin Schleppe
Phyllis & Larry Schneider
Elizabeth Scordato
Rebekah Sease
Laura Seay
Patrick Seydel
Sara Shainholtz
Jocelyn & Mark Shelton
Matt Shmigelsky
Leonard M. Simmons
Lisa & Larry Singer
Ann & Greg Smith
Ashley Smith
Smoke Modern Barbeque
Jane Stemsrud
Alan Stengel
Andrea Stewart
John Stickney & Lee Beck
Lisa Stoeffler
Danny Stone
Linda Sullivan
Ned Sullivan
Robert Swanson
Kathleen Sydoryk
Larry Tallmadge
Jodi Tankersley
Charlene Charlene Taylor
Karin Teague
Gary Tenenbaum & Suzanne
Wolff
Marcus Thackston
Kristin Tita
TJ Concrete Construction, Inc.
Becky Trembley
Arin Trook
Ron C. Uecker
Linda Ukraine
Jeff Wadley
Stella A. & Michael Wagner
Hunt Walker
Donna & Tom Ward
Anne Ware
Bruce N. Warren
Julie & Andre Wille
Jan Williams
Heather Wilson
Lee Wilson
Karen Wogsland
Bob Wolff
Mary & Ron Wolff
Stephanie & Horace Work
Vic Zerbi

In Honor of Teri Bruna
Jane Orahood

In Honor of Mark Fuller & Penny Atzet
Kristen Henry

In Honor of Alison & Josh Friedman-Phillips
Samantha Hoffmann

In Honor of Dr. and Mrs. Stanley Gertzbein's anniversary
Donna & Steve Chase

In Honor of Sarah Goss
Hannah Beavers

In Honor of Carolyn & Philip Helman
Ward W. Smith

In Honor of Sue & Bob Hess
Mary Jo Murphy

In Honor of Brett Klahr
Austin Schlepp

In Honor of Heather Lewin
Mark Lacy & Sharon Clarke

In Honor of Diane & Jim Light
Dianne & Jack Adleta
Mac Cunningham
Robert C. Light

In Honor of Rick Lofaro
Bob & Sue Hess

In Honor of Jamie Lofaro
Carrie Odom

In Honor of Cornelia & Meredith Long
Jack Murphy

In Honor of Chris & Jenny McStay
Matthew Zuckerman

In Honor of Christina Medved
Liz & John Bokram

In Honor of Jenny Sauer
Jenny Gutt-Ohly

In Honor of Daniel P. Rosenberg
Michael G. Rosenberg

In Honor of Denise & Tom Tomaskovic
Stacey McLendon Craft

In Honor of Larry Yaw
Terry Huffington

In Memory of Alden Brown
Darrell Brown & Suzanne McNitt

In Memory of Dennis Christie & Carol Christie
John Christie & Family

In Memory of Dr. Louis H. DiSalvo
Lucia Swanson

In Memory of Kea C. Hause
Lani Kitching
Tony Thelen

In Memory of June Kirk
George Johnson

In Memory of Mike McBreen
Todd Brehe

In Memory of Kata Medved
Sean Fick & Sheryl Sabandal

In Memory of Guido Meyer, Jr.
Holland Hills Metro District

In Memory of Jack Hire
Christina & Kile Smith

In Memory of Jean Schreier
Jim Schreier
Wendy Roberts
Mary & Charles Sledge

In Memory of Jean Thompson
Wewer & Steve Keohane

In Memory of Bob Waterman
Jim Jensen

RIVER CURRENTS

is published biannually by Roaring Fork Conservancy. Since 1996, Roaring Fork Conservancy has inspired people to explore, value and protect the Roaring Fork Watershed. We bring people together to protect our rivers and work to keep water in the streams, monitor water quality, and preserve riparian habitat. Roaring Fork Conservancy is an independent 501(c)(3) not-for-profit organization registered in the state of Colorado.

Board of Directors:

Pat McMahon PRESIDENT

Diane Schwener VICE PRESIDENT

Jennifer Sauer TREASURER

Jeff Conklin SECRETARY

Ted Borchelt

Stephen Ellsperman

George W. Kelly III

Dick Kipper

Jim Light

Rick Lofaro EXECUTIVE DIRECTOR

Rick Neiley

Don Schuster

Larry Yaw

Staff:

Rick Lofaro

EXECUTIVE DIRECTOR

Kristen Doyle

WATERSHED EDUCATOR

Heather Lewin

WATERSHED ACTION DIRECTOR

Christina Medved

WATERSHED EDUCATION DIRECTOR

Liza Mitchell

EDUCATION & OUTREACH COORDINATOR

Chad Rudow

WATER QUALITY COORDINATOR

Sheryl Sabandal

DEVELOPMENT MANAGER

Associates:

Johnny Cronin

DIRECTOR OF DONOR RELATIONS

Larry Gruel

CONTROLLER

River Stewards

Steering Committee

Nick Kilbourn CHAIR

Peter Arlein

Dan Berg

Colin Cares

Jordan Curet

Matt Kelsic

Bailey Leppke

Meaghan Lynch

Lauren Pierce

Chris Vaughan

Thanks to our newsletter sponsor:



GRAN FARNUM PRINTING



ROARING FORK CONSERVANCY
P.O. Box 3349 ~ Basalt, Colorado 81621
(970) 927-1290 ~ www.roaringfork.org

NONPROFIT ORG
U.S. POSTAGE PAID
GLENWOOD SPGS, CO
PERMIT NO. 90

save THE date

WEDNESDAY • JULY 11, 2018 • DALLENBACH RANCH

19TH ANNUAL River Rendezvous

ON THE BANKS OF THE FRYINGPAN

protect our rivers



RIVER CURRENTS

An Unforgettable Summer...

By Rick Lofaro, Executive Director

While it could be said about any summer and every summer, the summer of 2018 was truly an unforgettable one in Basalt and the Roaring Fork Valley. A record dry winter devoid of any serious snowfall or honest powder days gave way to a spring with below average runoff across the watershed. In May and June river flows peaked early, absent the roiling torrent we often see and anticipate in late spring - the kind of runoff that sweeps the stream of last year's sediment and algae, and overtops its banks to saturate the riparian habitat, allowing the 'green ribbon of life' to thrive. The kind of winter our mountain ecosystem relies on, one with robust snowfall that remains in a high elevation frozen reservoir and slowly releases over a warming spring, is less and less common.

By late June, river levels were dropping fast, and water temperatures were rising to a concerning level. Enter Hot Spots for Trout, a Roaring Fork Conservancy (RFC) citizen science temperature monitoring program (see related article on page 12). River flow levels throughout the watershed were 1/3 to 1/6 of average, and summer was shaping up to be hot and dry.

Weeks of 90°F plus temperatures in Glenwood Springs, Basalt and even in Aspen, exhausted even the Roaring Fork Valley's tolerance for sunny days. RFC worked closely with the Roaring Fork Fishing Guide Alliance and Colorado Parks and Wildlife by holding weekly conference calls to discuss how to respond to these conditions. As a result, the Hot Spots for Trout program was expanded to a new voluntary closure program from 2 PM to midnight on some area rivers, giving the trout a break during the hottest part of the day. The response from the commercial fishing industry and

the angling public at large was fantastic, and most everyone was reeled in by 2 PM.

On June 29, in the midst of monitoring the already stressed rivers, RFC loaded the final boxes from the old rental office and officially moved into the River Center. Four days later, on the evening of Tuesday, July 3, the Lake Christine fire ignited ¼ mile from the River Center. The fire fighters, the first responders, the community response and all of the events are truly unforgettable.

Words cannot describe it, but if you were here you know, saw and have a unique story of just how heroic the effort was to save our towns. Yet, all the while we kept thinking about the river.



Roaring Fork River behind the River Center on July 20, 2018. The flow was 285cfs whereas one year ago on the same date it flowed at 1,050cfs.



It was very stressful for everyone to see our beloved rivers struggle through summer. Tourism, agriculture, and municipal water supplies, all suffering in a dire time of need. Now that we are into fall and still lacking precipitation, there is talk of a Colorado River Compact Call, the ultimate repercussion of years of drought and water

shortage. The water struggle is real and never so pressing as today. So, start the snow dance and prayers now, and hope for a better snow year, ski season, water year and a rejuvenation of our rivers... so that we can try to forget about this past summer.



What happens after a wildfire?

A LAKE CHRISTINE WILDFIRE UPDATE

*Steve Hunter, Civil Engineer/Hydrologist,
White River National Forest, United States Forest Service*

On the July 4th holiday in 1994, I was a fly fishing guide floating down the Colorado River staring at a small plume of smoke which would become one of the worst tragedies in wildland firefighting. I did not know it then but the South Canyon Fire would have an effect on my life and career. Fast forward 24 years to July 3, 2018, I again found myself staring at a plume of smoke of what would become the Lake Christine fire.

Like most valley residents, I followed the incredible efforts of local, state, and federal firefighters and first responders. I spent the 4th of July watching the aerial assault on the fire from tankers, heavy helicopters and single engine air tankers as the smoke would turn into impressive pyrocumulus clouds in the afternoon.

As the firefighters gained containment on the fire I knew the work of the U.S. Forest Service was far from over. I am the Burned Area Emergency Response (BAER) coordinator and specialist for the White River National Forest. I worked to mobilize a BAER team for the fire when the fire was still actively burning. Due to the busy fire season in the West, several team members were coming off other fires to assist while others were here locally.

A BAER team is composed of scientists, engineers and other specialists whose main objective is to rapidly assess post-fire conditions to determine the level of potential risks to life and safety, property, critical natural and cultural resources. The team conducted analysis in the field and used science-based computer models to rapidly evaluate and access the burned area.

The team uses satellite imagery to create a soil burn severity map which categorizes the burn in areas of unburned, low, moderate, and high. The amount of moderate and high soil burn severity help to determine post-fire hydrologic and geomorphic response.

Debris flow modeling is done by the United States Geological Survey (USGS) to help determine the risk of such events occurring. The BAER team worked with interagency partner's including the Natural Resource Conservation Service (NRCS) who worked with private property owners in preparing for increased runoff and potential flooding.

The BAER team analysis helps determine the appropriate post-fire treatments for the area. Treatments for the Lake Christine fire included noxious weed detection and eradication, seeding and planting, improving drainage features on roads and trails, hazard trees, signage, and storm patrols.

At Left: High soil burn severity on the top of Basalt Mountain with hazard tree. Soil burn severity helps determine post-fire hydrologic and geomorphic response.

Roaring Fork Conservancy is leading the effort on the long-term restoration.



There will be the continued risk of flooding, sediment and debris flows with any significant rain or snow events. The last BAER assessment on the White River National Forest was the Coal Seam fire in 2002. In 2018, there were four BAER assessments on the White River National Forest.

For additional information about the Lake Christine fire and other wildfires, please visit InciWeb which is “an interagency all-risk incident information management system” and can be found at <https://inciweb.nwcg.gov/>. More specifically, the Rocky Mountain Region can be found at <https://inciweb.nwcg.gov/incident/5928/>. Stay tuned to post-Lake Christine fire volunteer efforts in 2019!

There are three phases of wildfire recovery:

1. Fire suppression repair
2. Emergency stabilization – Burned Area Emergency Response (BAER)
3. Long-term recovery and restoration

Fire suppression repairs took place for over a month until fire crews demobilized at the end of September. BAER restoration work has begun as well, and this work will continue through the fall of 2018 and resume in the spring and summer of 2019.

Roaring Fork Conservancy is leading the effort on the long-term restoration. A team of experts from multiple jurisdictions met at the end of September to begin plans for addressing and prioritizing recovery and restoration efforts.

The Lake Christine fire changed the landscape that we were all used to. Portions of the fire that were lightly burned were greening up in August and will recover quickly. Areas that burned the hottest will take decades to recover though ground vegetation should begin to reestablish in one to two years.



Above: US Forest Service BAER team soil scientists and hydrologists analyzing soil burn severity on the Lake Christine fire.

Top Right: Aerial image shows a mosaic of high, moderate, and low/unburned burn severity on Basalt Mountain above Upper Cattle Creek.

Bottom Right: Aerial image of mostly high burn severity. Helicopters help BAER specialists rapidly access the entire fire to verify burn severity. The team then targets specific areas to analyze on the ground.

A COLLABORATIVE CLEAN-UP

Matthew Anderson, Watershed Action Intern

In 2015, RFC embarked on the Cattle Creek Stream Health Evaluation, intended to understand and address impaired conditions on the stream as designated by the State of Colorado. This included significant water quality monitoring, stakeholder outreach, fundraising, and collaborative efforts up and down the stream. That work continued this summer as 23 individuals from RFC, the Bureau of Land Management (BLM), Garfield County, and Rocky Mountain Youth Corps (RMYC) partnered to address concerns on BLM property along Lower Cattle Creek, a tributary to the Roaring Fork River.

The two-day project started with trash removal in a heavily littered riparian area. The enthusiasm and energy of the high school-aged RMYC volunteers kick-started the work, and soon, trash was being found everywhere, including in the trees! The bulk of findings included hundreds of bullet casings and shotgun shells, beverage bottles, and clay pigeons, while more unusual items such as a DVD player, car seat, and leaky oil container were also found. In addition to trash removal, an old fire pit was dismantled, the ash shoveled away, and a large wood pile was removed to discourage future fires. A few lucky RMYC volunteers donned hip waders and searched the stream itself for unwanted trash – which they found! Finally, BLM staff strategically placed boulders to discourage vehicular access to the creek while still allowing walk-in access.

On day two, approximately 450 yards of barbed wire was removed. This fencing was no longer in use and posed a hindrance to wildlife attempting to access the creek. RMYC's previous fencing experience was invaluable at this stage; their record-time removal of the fencing allowed more time for further trash cleanup. In total, 2,260 pounds of trash and debris were removed from Cattle Creek and the surrounding riparian habitat during the two-day work project.

This project was an excellent opportunity for RFC to continue working with Garfield County and the BLM in addressing the health of Cattle Creek. Additionally, the project allowed RFC to provide some knowledge and context about local watersheds to RMYC volunteers. The youth learned about the importance of riparian habitats in Colorado and quickly connected this project to river conservation. Projects such as these foster partnerships and provide meaningful, educational, and fun opportunities for youth from inside and outside the valley to interact with the Roaring Fork watershed.

Top Right: Removing unnecessary barbed wire fencing.

Middle: So many shotgun shells and bullet casings.

Bottom: We found a muffler. Hope the car got out okay!



Not Your Typical Science Class

Liza Mitchell, Education Programs Manager

What were the most memorable moments of your childhood? Surely they weren't sitting in the classroom.

While traditional education might not top the charts of a young person's life, discovery often does. RFC's new Youth River Stewardship Project combines interdisciplinary, place-based lessons about watershed science with a float trip on the river!

RFC's emphasis on field education aligns with a significant body of research showing how effective field-based experiences are in building students' sense-of-place, self-efficacy and environmental literacy. Targeting middle school students, RFC has partnered with several local schools and rafting companies to overcome traditional barriers to getting kids on the river. Once on the river, students work with each other and RFC educators to test the water quality of the river, assess riparian health, and learn to observe the intersecting dynamics of humans and nature.

Research suggests our country's youth spend less time outside, are less interested in natural resource careers, and participate in fewer outdoor recreation activities*. By providing opportunities for students of all backgrounds to connect with nature through a guided, educational rafting experience, RFC educators expose these students to careers in natural resources as well as recreation and establish authentic understanding of how healthy rivers benefit local ecosystems and economies. Water resources in the West are threatened by increasing population, climate change, and development; it is vital we prepare the next generation of citizens with the knowledge needed to make informed environmental decisions and take appropriate action at all levels.

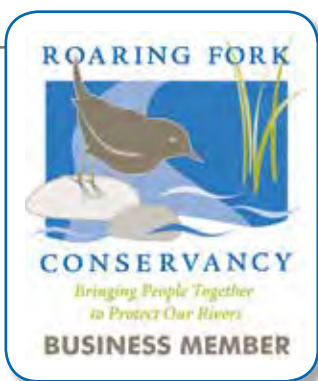
With grant support from Paddle Nation, RFC educators have spent over 31 hours in direct student instruction through the Youth River Stewardship Project, helping over 300 local students get on the river and conduct scientific assessments of river health!

Objectives of RFC's Youth River Stewardship Project

- Ensure youth of diverse backgrounds get to know and experience their local rivers
- Convey the importance of healthy rivers to our environment and economy
- Give students opportunities to do hands-on, field-based science research on the river
- Inspire the next generation of environmental stewards and water professionals

* Hager, S., Straka, T., & Irwin, H. (2007). What do teenagers think of environmental issues and natural resources management careers? *Journal of Forestry*. 105(2), 95-98.

Louv, Richard. (2005). *Last Child In The Woods: Saving Our Children From Nature-deficit Disorder*. Chapel Hill, NC : Algonquin Books of Chapel Hill.



**2018
BUSINESS MEMBERS:**
**Thank you for
supporting
essential river
research, education,
and conservation
work!**

Aspen Fly Fishing
Barnes, Pearson &
Associates, LLC
Berthod Motors
Blazing Adventures
Blue Creek Business
Solutions
Blue Sky Adventures
Casey Brewing and
Blending
Footsteps Marketing
Incline Ski and Board
Shop
K&W Concrete
The Romero Group
Trout Bandits
20/20 Eyecare



PHOTO: ANNA STONEHOUSE, THE ASPEN TIMES

Thank You

Each year, at our annual River Rendezvous fundraiser, a “Paddle Raise” is held to raise funds for specific RFC programs. This year the River Rendezvous planning committee decided to break with tradition and dedicate the paddle raise to the First Responders that kept our community safe during the Lake Christine Wildfire. Starting with \$10,000 from Alpine Bank, over \$120,000 was raised between the River Rendezvous on July 11 and the following weeks. The Lake Christine Wildfire was a difficult time for many in our community and we are all so grateful to the first responders from Aspen to Carbondale for their heroic actions!



Promoting Roaring Fork Watershed Pride!

RFC partnered with local artist, storyteller and environmental advocate, Sarah Uhl, to create a story map of the Roaring Fork Watershed. More accessible than a topographic map, this piece of art is incredibly accurate, thanks in part to aerial tours of the watershed with EcoFlight. It features the “important places” of the Roaring Fork Watershed – the rivers, tributaries, lakes, reservoirs, mountain peaks,

towns, and iconic landmarks that are all inexorably linked within our watershed.

The original story map is on permanent display at the River Center, but if you want to show some pride in the Roaring Fork Watershed, make a donation to RFC and receive one of the maps as a thank you gift.

\$35 donation = 12” x 16” print

\$55 donation = 24” x 36” print

Where the Water Meets the Land: Impacts of Drought on Agriculture

Elizabeth Chandler, Owner/Operator, Golden Eagle Ranch, New Castle, CO

The Lake Christine wildfire, low river flows, stressed fish, and reduced recreation are all well publicized results from the hot and dry summer. Less understood is the effect the hot and dry summer has had on agriculture.

Agriculture depends on water to raise crops and grow livestock. Without water, agriculture cannot survive. Think of what happens when you forget to water your houseplants for a week or two. When given water they just don't come roaring back to life; it takes a while for them to recover and then they are usually not quite as healthy as before. Now think about our pastures and hay fields that haven't received irrigation water or significant rain since early June. These fields didn't produce a very robust hay crop this summer and will not be able to provide fall feed for livestock. The longer term question is what will they produce next year even with good water?

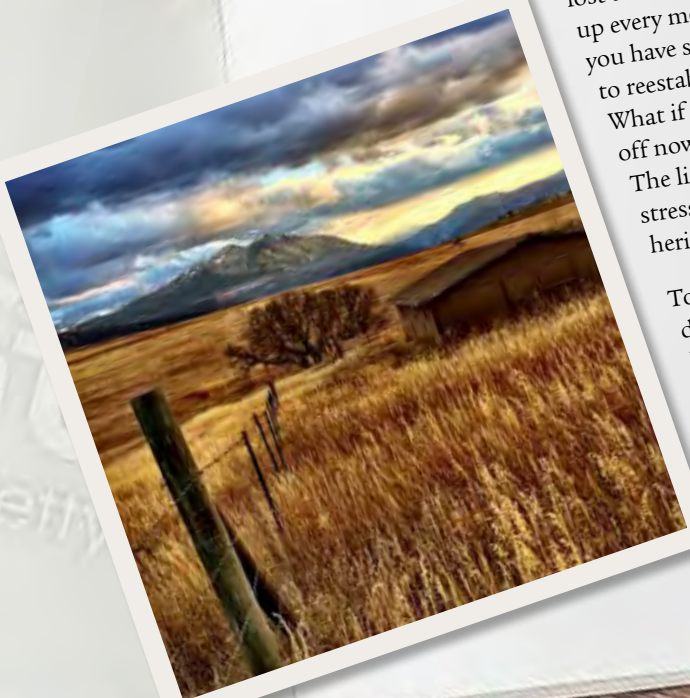
The law of supply and demand holds true for agriculture. The high demand and low supply made hay extremely expensive this year, resulting in early sales of livestock and a deep culling of the mother herd. This increased supply of livestock at the market exceeds the demand and results in lower prices. The secondary issue is the reduced numbers in the mother herd. It will take multiple years for ranchers to build their herds back up to a profitable size. This reduces the buying power of ranchers and causes other businesses to also have reduced profit margins. Farm supply stores, equipment dealers, and trucking businesses will all be impacted, but so will restaurants and recreation businesses.

This is not the first extremely dry year from which agriculture has had to recover, but it is the hottest and driest year ever in our area. The combination of hot and dry magnify the effects of each other. The hot weather increases the evaporation from streams and lakes, increases the water needed by plants to produce, and lengthens the period of time plants need water. The best prediction from climatologists is this weather pattern may be our new normal. The uncertainty adds to the stress: Will rain come and the drought be over, or are the climatologists right that hot and dry weather is our new normal?

The emotional impact of working hard to tend your livestock and land only to have it lost to circumstances beyond your control is difficult to appreciate. It is hard to wake up every morning to dry fields knowing that you will have to sell off livestock that you have spent years raising. You worry about how long it will take for your fields to reestablish themselves - if you get good water next year. Will there be snow? What if next year is as dry as this one? Can we keep the ranch? Should we just sell off now? How much can we sell and still have a chance to survive if we get snow? The list of questions goes on and on, but the real point is that a drought is very stressful. It is about the survival of your livelihood, your way of life, your family's heritage.

Tourism, recreation, wildlife, and agriculture are all interrelated. Wildlife depends on irrigated lands for winter pasture. Recreation and tourism both benefit from the open space and green fields that agriculture provide. Agriculture benefits from the recreational and tourism based economy. The hot and dry year has had a negative impact on all of these areas. A good water year will restore recreation and tourism, but it will take several years for our fields to regain full production and to build the livestock herds back up to current numbers.

At left, photo by Katherine Dessert. At right, photo by Tim O'Keefe





1



2



5



6

1. RFC staff with Governor Hickenlooper. 2. Children use microscopes to get a close up view of the aquatic insects!
 3. Guests tour Old Pond Park. 4. Guests tour the River Center Water Quality Lab. 5. Using the River Center classroom to update guests about the Lake Christine wildfire. 6. RFC Board Members. 7. Celebrating at the donor reception, the Edwin & Jenny Long Murphy family. 8. Former Governor Bill Ritter talks to RFC's Director of Watershed Science & Policy, Heather Lewin, and Director of Community Outreach, Christina Medved. 9. Governor Hickenlooper meets Sarah Uhl, the Roaring Fork watershed map artist, along with RFC Education Programs Manager, Liza Mitchell, and executive director, Rick Lofaro. 10. Governor Hickenlooper is presented a Roaring Fork Watershed Map by executive director, Rick Lofaro, and RFC board president, Pat McMahon. 11. Franklin Carson, RFC board president Pat McMahon, RFC National Council Members Carter Brooksher and Judy Baum, with Governor Hickenlooper. 12. RFC executive director, Rick Lofaro, along with Mr. John Stulp, Special Policy Advisor to the Governor for Water and Chairman of the IBCC at State of Colorado, Vice President of RFC National Council Carter Brooksher, and former Governor Bill Ritter during the Ribbon Cutting. Photos provided by Dale Armstrong, Christina Medved and Diane Schwener.



10

Grand Opening · August 10-11, 2018
The River Center



3



4



7



8



9



11



12

Creative and Cooperative Water Management Benefits the Fryingpan River

Heather Lewin, Director of Watershed Science & Policy

As the 2018 water year comes to a close, there likely won't be too many sad goodbyes. A warm, dry winter gave way to a hot, dry summer - and all that goes along with it from fire to drought. This summer, good news about water seemed about as hard to come by as a rain storm. However, hard times breed cooperation and innovation, particularly in water management. As we have seen throughout this summer, the management of Ruedi Reservoir plays a critical role in not only the Roaring Fork watershed, but the whole Colorado Basin.

Ruedi Reservoir was built as compensatory storage for the Fryingpan-Arkansas Diversion project. Put simply, Ruedi Reservoir holds water dedicated to Western Slope use in order to offset water sent to the Eastern Slope via transmountain diversion from the Fryingpan headwaters. Beyond a certain amount of water being held as "reservoir water" - water which is not released downstream - water in Ruedi is dedicated as either "fish water" or "contract water." Fish water is stored in Ruedi and released throughout the spring and summer to help four threatened or endangered fish species that live in the Colorado River and require additional water in an area near Grand Junction known as the "15-Mile Reach." Contract water was sold by the Bureau of Reclamation (BOR) to recover the costs of building and operating the dam. Contract water is held by a variety of entities from municipalities to HOAs, with the largest shares belonging to Ute Water Conservancy District, Colorado River District, and Exxon Mobil Corporation.* However, for most local residents, Ruedi unlocks the door to Basalt's recreation economy; from flatwater recreation on the reservoir to fishing on the Fryingpan. Those who live in the area are often concerned that these local interests are overlooked in Ruedi management efforts.

While it's true that recreation economy was not the purpose behind Ruedi's creation, there is no denying its value. In 2015, RFC commissioned an economic study with Colorado State University that showed recreation at Ruedi adds \$3.8 million to the local economy. The same study found that keeping winter flows in the Fryingpan

at a minimum of 70cfs, to lessen anchor ice formation and impacts, adds \$1.5 million to the economy. Avoiding anchor ice also has ecological benefits. Anchor ice can freeze and scour macroinvertebrate habitat, having negative effects on not only the insects, but also the fish and birds who eat them. However, without a water right on the Fryingpan or contract water in Ruedi, RFC has

found it challenging to ensure this minimum flow is met in low snow years. Conversations with the BOR have had positive results, where managers work to keep water at environmentally beneficial flows. However, this arrangement comes with no guarantee as many decisions that regulate Ruedi water management involve specific uses and target areas, and are complicated by the utilization of water stored in multiple reservoirs around the state to meet these needs.

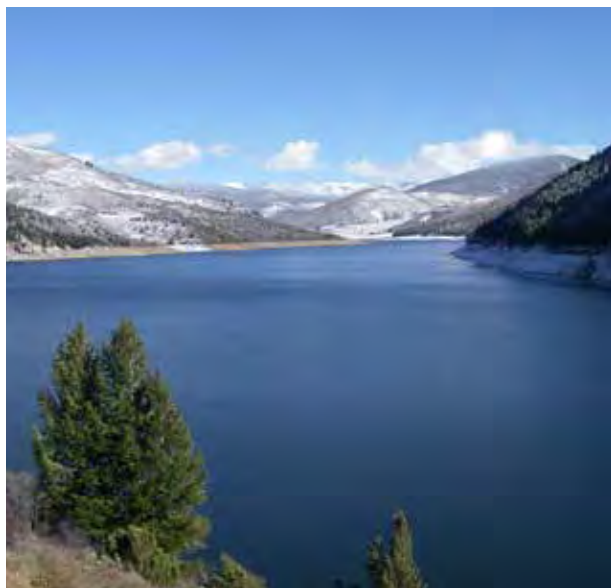


Fryingpan River by Barry Mink

Ensuring winter minimum flows are met consistently requires creativity and cooperation. RFC approached the Colorado River Water Conservation District ("River District") last summer with the possibility of coordinating a lease of some of their contract water for winter flows. Each contract has a specific target water use, and it is difficult to operate outside the uses specified in the contracts. Fortunately, some of the River District's contracts included winter environmental flows as a specified use. However, water is not free, and leasing water comes at a cost. This is the first environmental contract water lease that the River District has ever participated in, requiring staff to ask their governing board to both allow the lease, and price it the same as an agricultural water lease. With River District Board approval, the lease was then brought to the Colorado Water Conservation Board's (CWCB) Stream and Lake Protection Section, who has money available to lease water for environmental benefits. With both boards' approval RFC helped secure 3,500 acre feet of water to supplement winter flows. CWCB staff is now returning to their board to ensure that any of that 3,500 acre feet that is not used during the winter becomes available to the 15-mile reach this summer.

Continued on page 11

RFC continues to work with both the River District and CWCB to discuss creative management options to help meet local needs. For example, the River District re-allocated their reservoir releases for the Grand Valley from other reservoirs and sent additional water down the Fryingpan in July. That release provided flow benefit not only to the Fryingpan, but also the Roaring Fork, where flows were low and temperatures were high. This water, while meeting a downstream use, was able to benefit a local use as well. At a time when water management is as important as ever, we are hopeful that this sort of creative management strategy, designed to meet multiple uses will serve as an example for the future.



*Gardner-Smith, Brent. (2016, April 17) *Who Owns the Water in Ruedi Reservoir?* *Aspen Journalism*, retrieved from <https://www.aspenjournalism.org/2016/04/17/who-owns-the-water-in-ruedi-reservoir/>.



Boulder Boat Works Raffle Winner!

As part of our River Center Grand Opening ceremony on August 10 and 11, RFC raffled off a beautiful Boulder Boat Works Pro Guide drift boat package valued at \$18,000. We were thrilled to pull the winning ticket of Nancy Reinisch and Dr. Paul Salmen of Glenwood Springs. RFC called and emailed Nancy to inform her she had won. This was her email response –

“YAHOOOOOOOO!! Please call me! I bought this ticket for my husband’s 65th birthday and for being the best cancer caregiver ever to me! I am screaming for joy! Oh my gosh, oh my gosh!! Thank you, thank you! Please call me, unless of course, you don’t want to hear screaming!!!”

A perfect ending to a perfect Grand Opening weekend. Nancy, now at age 65 and in the midst of a second battle with metastatic breast cancer, reached a career high by completing her 100th triathlon in 2018. Paul received the kind of birthday present fly anglers dream of. Now he and Nancy can row off into the sunset and enjoy their new Boulder Boat in the same valley where they live, where the boat was made, and where the boat belongs - on the gold medal waters of the Roaring Fork River!

Staff & Board Flows



Matthew Anderson, Watershed Action Intern

Matthew returned to RFC for a second summer to assist our Watershed Science & Policy group. Matthew was born and raised in Basalt and is currently a junior in the Environmental Science and Resource Management program at the

University of Washington in Seattle. Matthew helped conduct water quality field-work, data management, maintained in-stream temperature loggers, and monitored conservation easements throughout the Roaring Fork watershed.



Mercedes Wilson, Executive Assistant/Office Coordinator

As a recent transplant to Basalt, Mercedes welcomes the opportunity to work protecting the Roaring Fork Watershed. Living by the Mississippi and the Indian Rivers forged her passion

for water. Having spent time in Thailand, Italy and Nicaragua served to further her interests in riparian rights, conservation

and wildlife. Mercedes looks forward to supporting RFC’s mission with her management and administrative skills. Mercedes is also Spanish Bilingual with a Master of Science in Disaster, Resilience and Leadership. During her free time, Mercedes enjoys spending time with family, rafting and fishing.



Michelle Schindler, RFC Board Member

Michelle joined the RFC board in 2018. She is an attorney with the Matthew C. Ferguson Law Firm, P.C. in Aspen, Colorado, where she concentrates her practice in real estate and commercial litigation. Michelle grew up in

Madison, Wisconsin and then attended Northwestern University, where she earned her degree in Environmental Sciences. Prior to going to law school, Michelle worked for 5 years in environmental advocacy and the non-profit sector. After attending law school at Loyola University of Chicago, Michelle started her legal career in Chicago, Illinois and several years later moved to the Roaring Fork Valley. Michelle resides in Basalt, Colorado.

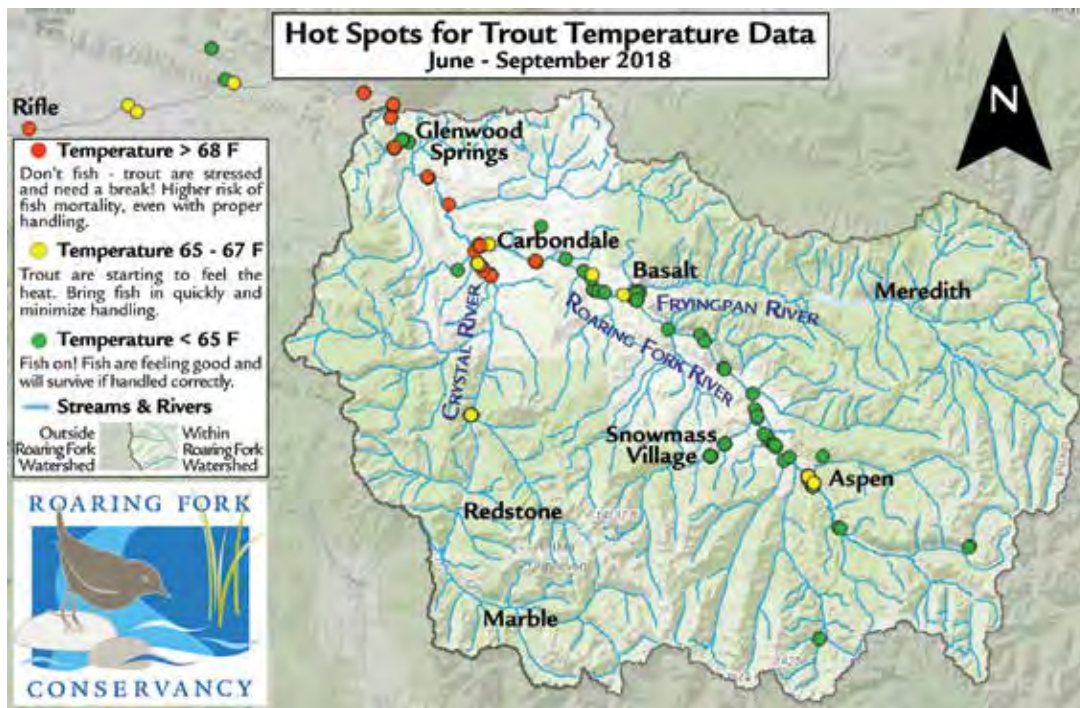
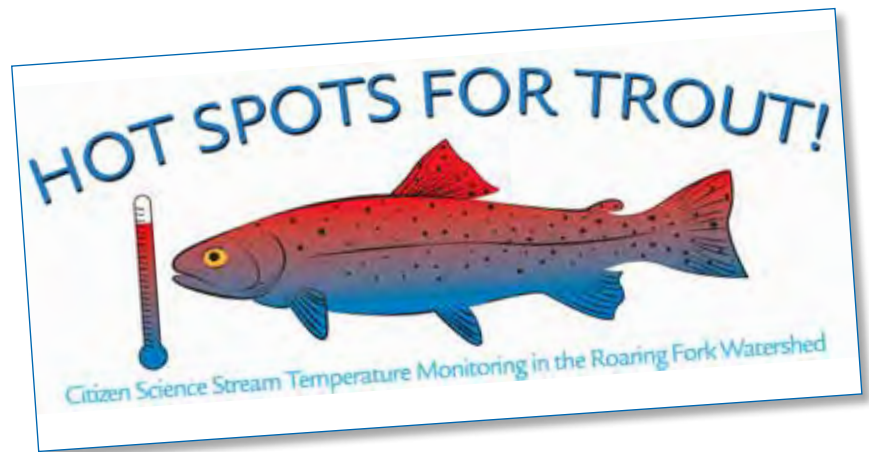
Citizen Scientists Keep a Pulse on River Temperatures!

Kristen Doyle, Watershed Educator

As water temperatures increased and drought persisted this past summer, RFC restarted a citizen science project, Hot Spots for Trout, to monitor local river and stream temperatures.

From June to September, 63 volunteers submitted over 280 observations throughout the Roaring Fork Watershed. That's over 1,000 individual measurements! This information allowed RFC to identify areas of concern and collect additional data where needed. The measurements taken by our Hot Spots for Trout volunteers also helped RFC collaborate with Colorado Parks and Wildlife (CPW), resulting in voluntary fishing closures from 2pm-midnight, giving fish a break in the hottest part of the day.

The data submitted by our volunteers suggests those fishing closures may have prevented a considerable number of trout mortalities. The combined stress of angling and warmer water can be enough to kill, even when anglers follow proper catch-and-release techniques. Stream temperatures were mostly within a healthy range for trout in the Roaring Fork upstream from Basalt (below 65° F). Downstream was a different story. Afternoon water temperatures below Carbondale often crept above 68° F – the temperature at which CPW asks anglers to pack it up and fish another day.



Special thanks to the Roaring Fork Fishing Guide Alliance and the Roaring Fork Valley Fly Fishing Club, whose members stepped up to volunteer and get the word out, CitSci.org, and fishpond, inc. who provided thermometers.

Effects of Water Temperature

Chad Rudow, Water Quality Program Manager

Water temperature can impact both chemical and biological processes in rivers. Chemically, it directly influences pH levels, the speed of chemical reactions, and oxygen levels. In particular, warm water holds less oxygen than cold water, limiting the supply available for aquatic life.

Biologically, higher temperatures increase the rate of energy production and oxygen consumption in fish and aquatic insects. This can cause significant stress on organisms as they require increasing levels of oxygen, which are already limited in warmer water, to maintain body functions.

19TH ANNUAL

River Rendezvous

ON THE BANKS OF THE FRYINGPAN
JULY 11, 2018



2018 River Conservators were Mary & Pat Scanlan and Mark Kleckner & Tracey Snow (pictured here)



Jennifer & Scott Thompson, Basalt & Snowmass Village Fire Chief, with Heather & Greg Knott, Basalt Chief of Police.



Edgell Pyles, Marianne & Dick Kipper, and Marty Pickett enjoy themselves on the banks of the Fryingpan River.



Crosby Vail and Kory Ross attending the trout release tank.



Rick Lofaro, executive director of RFC, with the Boulder Boat Works drift boat raffled off this summer.



Basalt Police Chief Greg Knott and Fire Chief Scott Thompson were honored at this year's River Rendezvous.



Dane Brooksher, Pat McMahon and Judy Baum



Alexandra George, Emily Davis, Sam Broom and Anna Schwinger



Sarah & Robert Woods at their final year of organizing River Rendezvous. RFC will always be grateful for their contributions and service.



Carter Brooksher with Harry and Bonnie Kloosterman and Kathy and Jerry Pettit.

Grantors, Underwriters, & Partners

ACE Hardware of Carbondale
Aspen Center for Environmental Studies
Aspen Skiing Company
Aspen Skiing Company Environment Foundation
Aspen Smile Dentistry
Aspen Trail Finder
Basalt Printing
Bessie Minor Swift Foundation
Boettcher Foundation
Bureau Of Land Management
Chaco
City Market
City of Aspen (Water, Parks and Recreation, & Engineering departments)
City of Aspen Arts & Community Non-Profit Fund
Colby June Jewelry
Colorado Basin Roundtable
Colorado River Watch
Colorado Water Conservation Board
Community Office for Resource Efficiency
Coryell Ranch
Eagle County
EcoProducts
EverGreen ZeroWaste
Frying Pan Canyon Ranch
Garfield County
Gates Family Foundation
Glenwood Springs River Commission
Lodge at Rivers Edge
Mt. Sopris Conservation District
NRS (Northwest River Supply)
Pitkin County Healthy Community Fund
Pitkin County Healthy Rivers and Streams
Pitkin County Open Space & Trails
Roaring Fork Outdoor Volunteers
Ruedi Water & Power Authority
Snowmass Village Rotary Club
Starbucks of Willits
State of Colorado
The Thrift Shop of Aspen
Timberline Bank
Timbo's Pizza
Town of Snowmass Village
Waste Management
White River National Forest
Wilderness Workshop
Willits General Store

\$100,000

Barb & Pat McMahon

\$50,000-\$99,999

Hyde Family Foundation
Marianne & Dick Kipper

\$25,000 - \$49,999

Mary & Jim Griffith
Dianne G. & James W. Light
Jane & Tim McMahon
Roaring Fork Club Partners

\$15,000 - \$24,999

Janie & Edward Bradley
Ruth Fund
Mary & Neil Dorflinger

Nancy & Rich Kinder
Cornelia & Meredith Long

\$10,000 - \$14,999

Carter & Dane Brooksher
Barbara & Franklin Carson
Pat Cooper
Anonymous
Melissa & David Hotchkin
Judith & Nick Huston
Wendy & Bill Kortepeter
Amy & Tim Leach
Clarisa & Tom McMahon
Maren & Don Schuster
Carolyn & Dick Shell
The John Denver Aspenglow Fund
William & Marie Wise Family Foundation
Phyllis & Larry Yaw

\$6,000 - \$9,999

Judy & David Baum
Janice & Philip Beck
Louise & Clay Bennett
Eleanor & Hal Davis
Joyce & Bill Gruenberg
Lester Houtz & Valerie Anderson
Bonnie & Harold Kloosterman

\$3,000 - \$5,999

Peppy & Wally Dallenbach, Colorado 500, Inc.
Richard Arbaney
Teresa & Steven Beal
Gary Blackie
Charlotte & Dan Blanks
Ashley & Scott Bohn
Pat & Jane Bolin Family Foundation
William Brandt
Gina & Tucker Bridwell
Norm Brown
Stan Bunting
Debbie Sands Carson
Shawn Cheadle
Patsy & George Conrades
Muffy & Andy DiSabatino
Elizabeth & Christopher Dorr
Shel & Clayton Erikson
Denise & Andy Goldfarb
Ruthie & Dave Hoff
Stacey & George Kelly
Claudia & Fred Lummis
Ann McAlpin
Natalie & Duwayne Miller
Prehm Ranch
RCG Fund
Betty & Jan Rietdijk
Wendy & John W. Seiple
Judy & Charles Tate
Kay & Robert Watson
Corinne & Paul Wood
Sarah & Robert Woods

\$1,000 - \$2,999

Anheuser-Busch
John Scott Arnoldy
Ashley Friedman Advised Fund at Aspen Community Foundation
Michael & Gail Attas
Henry T. Lowe Rev Trust
Bank of America Matching Gifts
Sheryl & Douglas Bech
Annette & Ted Borchelt
Sarah Broughton & John Rowland

Richard Broussard
Amy Carter
Cather's Home Furnishings
Betsy & Jim Chaffin
John & Amy Griffith Charters
Bob Clark
Tom Clark & Clark's Market
John Cronin
Anne & Les Csorba
T. Danis Charitable Foundation
Mary Charles & Jay Davis
Mara & David Deniger
DHM Design Corporation
Laura Donnelly
Patrick Andrew Dunigan
Anonymous
Beth & Tom Eckert
Ernst & Wilma Martens Foundation
Mary & Paul Fee
Judith Fisher
Franklin P. and Arthur W. Perdue Foundation
Susie & Gary Fisher
Stanley D. Gertzbein & Marianne Antoniak
Jennifer & Cap Grossman
Valerie & Jack Guenther
Frank J. Guyol III
Helen & Charles Burnett
Andrea Rossetti & Eric Hollerbach
Adam Holt
Carol & Michael Hundert
Breckie & Matt Hunt
Kirsten & Kyle Johnstone
Laura & Mike Kaplan
Lolly Kelly
Jan & Jim Kingham
Ann & Tom Korologos
Kovler Family Foundation
Michael Latousek
Laura & John Marlow
Laurie & John McBride
Janis Merrill
Jeanie & John Morris
Ann Mulroy
Jane & Clarke Nims
Sue & Kirk Patrick
Sue & Walt Rakowich
Sherry & Brooks Reed
Reese Henry & Company, Inc.
Robert Pew and Susan Taylor
Rotary Club - Snowmass Village
Mary & Pat Scanlan
Nancy & John Schneider
Holli Shuck
The Beaufort Foundation
Thendara Foundation
Anne & William Tobey
Betsy & Charlie Townsend
Carol & Mack Trapp
Gayle Waterman
Pat D. Whitaker
Judith Zee Steinberg & Paul Hoenmans

\$500 - \$999

Suzanne & Michael Ainslie
Allison & Dale Armstrong
Gayle & Jonathan Armytage
Employees of Morgan Stanley
Elyse Elliott & Jeremy Bernstein
Molly M. Brooks
Cinda & Michael Carron
Lise & Howard Cohen
Carolyn & Dr. Nick Cole
Jeff Conklin

I. McA. (Mac) Cunningham
Karen & Robert Davis
Sherry Ann & Edward Dayton
Susan & Don Edmonds
Dafri & Michael Estes
Janet & Robert J. Firth
Anonymous
Laney Wunderlich Fries
Jack McKay & Leslie Ann Gallagher
Alfred Gardner
Berthod Motors
Jeanette & Scott Gilbert
Jim Gilchrist & Lynn Nichols
Laura & Javier Gonzalez-Bringas
Gould Construction
Barbara Hammer
Cindy & Arthur Harding, Jr
Sue & Robert Hess
Marnie & Lee Hogan
John Kuck
Ramsey and Steve Kropf
Mark Lantz
Marianne & Bill Lederer
Doug Leibinger
Judith & Amory Lovins
Kim & William Madden
Debra & Reagan Majoria
Marcia & Don Flaks
Kirsten & Gerald McDaniel
Heidi McGuire
Sally & Mike McLarry
Cynthia Calvin & Mac McShane
Tom Melberg
Fran & Jack Mikaloff
Michael Miller & Carol Murphy
Doyen & James Mitchell
Genna & Jakob Moe
Christy & Richard Montgomery
Jean Moore
Margaret A. Frank Fund at the Chicago Community Foundation
Hensley & James Peterson
Libby Pettit
Edgell Pyles & Martha Pickett
The Arches Foundation
Judy & Jim Rifkin
Donna & Gino Rossetti
Ruth & Dan Floumoy
Anita & Merlyn Sampels
Katie & H.C. Van Schaack
Michelle & Dieter Schindler
Schmueser Gordon Meyer
Diane & Rob Schwener
Trish & Mark Seaman
Seven Star Rebekah Lodge No. 91
Sarah & Richard Shaw
Sien Energy Company
Martha & Thomas Singleton
Shirley Sloan
Maria & Jock Stafford
Sandy & Stephen Stay
Julia Loo & Steve Sutcliffe
John Swomley & Jennifer Roberts
Ellen Temple
The Robert and Margaret McNamara Foundation #3
Suzanne & Michael Vernon
Mary Ann & John Virant
Connie & Jon Warnick
Allyson & Walter Weathers
Patricia & Jay Webster
Sherry & Brit White

Donn Willins
Jean & Bill Wunderlich

\$200 - \$499

Cindy & Daniel Adams
Sharon & Bruce Anderson
Ann Korologos Gallery
Aspen Kitchen
Becky Ayres
Kathy & Carter Barger
Chuck Bellock & Maggie Morrison
Lynn & Bruce Bowen
William Browning
Marcia Corbin
Susan & John Cottle
Nancy & Robert Cross
Caroline W. Duell
Phil Eastley
Cinda & Donnelly Erdman
Sheryl Sabandal & Sean Fick
William A. Fisher
David Fleisher & Gina Berko
Donald J. Fleisher
Wes Fleming
Lisa & Brian Flynn
Glenwood Hot Springs Pool
Chip Griffith
Matthew Hamilton
Margot & Dick Hampleman
Matt Armentrout c/o HTA
Nancy & Peter Hoffmann
Kay & Ned Holmes
Katie & Rob Holton
Janis and George Huggins
I.D. Interiors
John Christie
Becky & Sammy Johnson
Sandy & Peter Johnson
Chris Keller
Deborah & Darrell Kirch
Cil Klumper
Elizabeth & Kelly Klein
Sara Kurz
Daylene & Gary Lichtenwalter
Casey & John Livingston
Lindsay & Rick Lofaro
Rich Lofaro
Mechelle & Tony Lugard
Michael Manicki
Martin Manosevitz
Suzy & Bill McKee
Beth & Kent Meager
Rick Morrison
Rick Neiley & Maria Maniscalchi
Bill Neveu
Leslie P. Neveu
Bob Oddo
Janet & Robert Olson
Winston Padgett
Ginny Parker
Anonymous
Jayne & Bill Poss
Julie Puchkoff
Tim Racke
Hope & John Reese
Kristen & Troy Rhudy
River Restoration.org
Ronald W. Rouse
Sandy & Ted Newman
The Schindler Family
The Susan & Ford Schumann Foundation
Lawrence J. Slater
Ann Smock
Sunsense Inc.
Trout Bandits - Max Rand & Jennifer Balmes
Trout Unlimited Ferdinand

Hayden Chapter
Pam & Dan Turley
Ute Mountaineer
Valley View Hospital Foundation
Chris Vaughan
Cher Vincent
Stella & Michael Wagner
Cynthia Wayburn
Margie Weber
Jacque & Tim Whitsitt
Stephanie Williams
Susan & David Young

\$100 - \$199

American Express Company - Employee Giving Program
Brian Anacker
Angela & Gary Evans
Barnes, Pearson & Associates, LLC
Darlene Barrailler
David Behrhorst & Donna Fisher
Charla & Tim Belinski
Caroline Bradford
Robert Cardwell
Colin Cares
Caroline Cole
Courtlyn Carpenter
Troy Casey
Lara & Terry Claassen
Christy & Steve Clattenberg
Michael Collins
Karen & Dan Comings
Terry Conklin
Pamela M. Cunningham
Paul D'Amato & Beth Cashdan
Mia F. D'Angelo
Blue Sky Adventures
Janis Dybdahl
Mary Dybic
Ellen T. Knous, CPA
Mary Ann & Lee Erb
Erin Tiffany Erickson
Chriss Flynn
Mary Lou & John Flynn
Shawn Gleason
Tom Gorman
Phoebe & Larry Gruel
Andrea & Clay Hanson
Ruth Harrison
Cindy Hirschfeld
Yvonne Hunter
David Johnson
Nancy Johnson
Denise Jurgens
Amy Kaiser
Matt Kelsic
Meg Kendall
Tammy & Tom Kenning
Jeff Kerber
Ann & Joe Kercheville
Sarah & Steve Knous
Ann Koveleski
Mary & Peter Kurtz
Meta Alice Keith Bratten Foundation
Marilyn & Henry Lee
Rosella & Dave Leety
Chris Lemons
Bailey Leppke
John & Heather Lewin
Carol & Bill Lightstone
Verna Lofaro
Meaghan Lynch
Valerie MacDonald
Maley Building Corporation
Dave Mayer

Anonymous
Michele McClinton & Brad Osborn
Dan McMahon
Christina Medved
Shelly & Jay Merriam
Bob Millette & Maggie Pedersen
Rob Morey & Kirsten Dibble-Morey
Emily & Tom Neel
Network for Good
Liz & George Newman
Vince Nichols
David Notor
Dede Osborn
Gail Owens
Terri & Bill Parsons
20/20 Eyecare
Julie & Tom Paxton
Andrea Pazdera
John J. Phillips
Susan Philp
Pinnacol Assurance
Emily & Ken Ransford
Mark R. Raskis
Rory Rehbeck
Ken Riley
Ian E. Roberts
Gerry Roehm
Heather & Greg Rydell
Douglas J. Sanders
Earlene & Herb Seymour
Christopher Smith
Paul Squadrito
Debbie Stoncipher
Kit Strang
Lauren Street
Mike Turner
Gerard VanderBeek
Melissa Waters
John Weisbart
Gayle & Richard Wells
Phillippa & Richard Whitcomb
Andy Wiessner
Roger Wilson
Mary & Hugh Wise
Ronald Wolff

\$20 - \$99

Lamar Abney
Matt Aboussie
Denise & Ronald Acee
Anita & Paul Adolph
Justin Alderfer
Melanie Arnold
Anne Austin-Clapper
Omin Baird
Cynthia Beck
Mary G Berg
Sallie & Tom Bernard
Eric Bindseil
Nell & Bill Birk
Liz & John Bokram
Kip Bossong
Carrie Bradford
Betty & Ernie Bradley
Jack Brendlinger
Andrew Brown
Joe Brown
Seth L. Brown
Cindy & Hap Bruce
Julie & Dick Bulkeley
Bill Burge
Oni Butterfly
Betty Cabral
Rob Cairncross
James R. Campbell
Helen & Roger Carlsen
Lorrie & Rick Carlson

Sue Anne Camahan
Molly & Steven Child
Clifton Colia
Michelle Collins
The Kroger Company
Leslie Curley
Megan & Whitt Dean
Natachs Denis
Nancy Dever
Jean Dodd
Randy Dole
Dyana & Bert Furmansky
Susy Ellison
Catherine Ennis
Lee Ann Eustis
Sally & Chris Faison
Judy & Mark Feinsinger
Jeff Finesilver
Suzanne & Ike Fitzgerald
Anne & Phil Freedman
Amy & Robert French
Mark Fuller & Penny Atzet
Jon Gibans
Peter Golden
Donna & Bernie Grauer
Leslie Gray
Kirk Gregory
Saundra & Darryl Grosjean
Teresa Hackbarth
David Hamilton
Richard Hart
Carol & Judson Hawk
Thomas Headlee
Jamin Heady-Smith
Luke Hecht
Paul Hempel
Sherry & Rick Hemington
Marcee & Tim Hobbs
John Hoffmann & Kim Stacey
Holy Cross Energy
Ann Hopkinson
Michael Hutton & P.J. Wallace
Christine Interlante
Jo & Wayne Ives
Tom Jankovsky
Andy Johnson
George Johnson
Sarah Johnson
Ruth Johnston & O.B. Johnston III
Ryan Kalamaya
John Katzenberger & Deb Jones
Joni Keefe
Ann Keller
Annette Keller
Nick Kilbourn
Mary & John Killebrew
David Knight
Erik Kushto
Barbara & Michael Larime
Ann Larson
Katie Laven
Terry Lee
Camille Lione
Margaret & Donald LoFaro
Jenny Long Murphy & Edwin Murphy
Jennifer & Greg Long
Chip McCrory & Rachel Dayton
Tim McNulty & Mary Lou Haflinger
Phebe Meyers
Jerrold Mitchell
Ordina Moehl
Stephen Monroe
Lesley & Bob Morse
Ben Nelson
Carol O'Brien
Sarah Oates

Jamie and Miranda Odom
Jessica Olson
Richard Parachini
Sarah E. Pickard
Kyle H. Pieti
Susan H. Planck
Lynn & Kenneth Plank
Dana Reynolds
Rachel Richards
Angie M. Riley
Margaret & Dwayne Romero
Michael G. Rosenberg
Tiffanie & Chad Rudow
Trudy & Fritz Rudow
Haley Scarpino
FootSteps Marketing
Scott Schreiber
Jocelyn & Mark Shelton
Andy Siefkes
Nancy & Mark Silverman
Leonard M. Simmons
Andrea Stewart
John Stickney & Lee Beck
Marcy Stumpf
Kathleen Sydoryk
Karin Teague
Dianne & Dale Thiel
Kristin Tita
Becky Trembley
Arian Trook
Jeff Wadley
Donna & Tom Ward
Anne Ware
Gretchen Weber
Ashley Wiles
Jan Williams
Lori & Kenneth Williams
Lee Wilson
Karen Wogsland
Bob Wolff
Suzanne Wolff & Gary Tennenbaum

In Memory of Carol Christie & Dennis Christie

John Christie & Family

In Memory of Louis DiSalvo

Lucia Swanson

In Memory of Jack Hire

Christina & Kile Smith

In Memory of Eveline Hoffman

Nancy Ferillo
Pat Whitaker

In Mike McBreen

Todd Brehe

In Memory of Kata Medved

Christina Medved & Dennis Medved

In Memory of Bill Moran

Delores & Ray Lowe
Jeffrey W. Keller
Kathy Moran
Kelly Atteridg
Shana, Jack, and Garrett LeNeveu
Ronene Kehoe
Nancy and Mike Dean
Nathan Childs

In Memory of Jean Schreier

Jim Schreier

In Memory of Jon St. Andre

Ruth Johnston & O.B. Johnston III

In Memory of Jean Thompson

Wewer & Steve Keohane

In Memory of Bob Waterman

Jim Jensen

In Honor of Teri Bruna

Jane Orahood

In Honor of Mark Fuller and Penny Atzet

Kristen Henry

In Honor of Dr. and Mrs. Stanley Gertzbein's anniversary

Donna & Steve Chase

In Honor of Frank Guyol

Greg Didier & Terry Rogers

In Honor of William & Carol Helman

Ward Smith

In Honor of Brett Klahr

Austin Schlepp

In Honor of Mark Kleckner and Tracey Snow

Gabrielle Greeves

In Honor of Heather Lewin

Mark Lacy & Sharon Clarke

In Honor of Jamie Lofaro

Carrie Odom

In Honor of Meredith Long

Jack Murphy

In Honor of Bernard Margaretten

Peter Bisset

In Honor of Chris & Jenny McStay

Matthew Zuckerman

In Honor of Piper

Liza Mitchell

In Honor of Jenny Sauer

Jenny Gutt-Ohly

In Honor of Dr. and Mrs. David Swersky

Donna & Steve Chase

In Honor of Denise & Tom Tomaskovic

Stacey McLendon Craft

In Honor of Denise & Karen Wells, & Gary Beach

Rick Smidt

In Honor of Sarah Woods

Pat Cooper & Family
Randy & Ken Kendrick

In Honor of Larry Yaw

Terry Huffington

RIVER CURRENTS

is published biannually by Roaring Fork Conservancy. Since 1996, Roaring Fork Conservancy has inspired people to explore, value and protect the Roaring Fork Watershed. We bring people together to protect our rivers and work to keep water in the streams, monitor water quality, and preserve riparian habitat. Roaring Fork Conservancy is an independent 501(c)(3) not-for-profit organization registered in the state of Colorado.

Board of Directors:

Pat McMahon PRESIDENT
Diane Schwener VICE PRESIDENT
Jennifer Sauer TREASURER
Jeff Conklin SECRETARY
Ted Borchelt
Stephen Ellsperman
George W. Kelly III
Dick Kipper
Jim Light
Rick Lofaro EXECUTIVE DIRECTOR
Rick Neiley
Michelle Schindler
Don Schuster
Larry Yaw

Staff:

Rick Lofaro
EXECUTIVE DIRECTOR
Kristen Doyle
WATERSHED EDUCATOR
Heather Lewin
DIRECTOR OF WATERSHED SCIENCE & POLICY
Christina Medved
DIRECTOR OF COMMUNITY OUTREACH
Liza Mitchell
EDUCATION PROGRAMS MANAGER
Chad Rudow
WATER QUALITY PROGRAM MANAGER
Michael Schuster
PROGRAM ASSISTANT
Sheryl Sabandal
DEVELOPMENT MANAGER
Mercedes Wilson
EXECUTIVE ASSISTANT/OFFICE COORDINATOR

Associates:

Johnny Cronin
SENIOR DIRECTOR OF DONOR RELATIONS
Larry Gruel
CONTROLLER

River Stewards Steering Committee

Nick Kilbourn CHAIR
Dan Berg
Colin Cares
Jordan Curet
Matt Kelsic
Bailey Leppke
Meaghan Lynch
Lauren Pierce
Chris Vaughan

Thanks to our newsletter sponsor:



GRAN FARNUM PRINTING



ROARING FORK CONSERVANCY
P.O. Box 3349 ~ Basalt, Colorado 81621
(970) 927-1290 ~ www.roaringfork.org

NONPROFIT ORG
U.S. POSTAGE PAID
GLENWOOD SPGS, CO
PERMIT NO. 90



GIVE
where you
LIVE
DEC. 4



GIVE WHERE YOU LIVE, DONATE ONLINE

Visit ColoradoGives.org/RoaringForkConservancy.
When you donate to Roaring Fork Conservancy at ColoradoGives.org, you help us bring people together to protect our rivers, monitor water quality, preserve riparian habitat, and educate the next generation of river stewards.

**From all of us at Roaring Fork Conservancy,
thank you for your support!**

ColoradoGives.org is made possible by Community First Foundation and FirstBank.



*Dee Dee
the Fryngpan River
Dipper*
makes a perfect gift
this holiday season!

Get your copy at
www.roaringfork.org/education-and-outreach
or call (970) 927-1290

amazon smile



When you shop online, log in
to www.smile.amazon.com
to support RFC!

Once you choose RFC as your
designated charity, Amazon will
donate 0.5% of your eligible
purchases to RFC's Watershed
Education, Science and Policy
Programs.



RIVER CURRENTS

The Winter We So Desperately Needed

by Rick Lofaro, Executive Director

The summer of 2018 left a wake of dismal river flows and reservoir levels, unrelenting hot temperatures, fires close to home and throughout the Mountain West, and serious concern for what winter may or may not bring in the aftermath of the fourth worst drought year on record. Collectively, the watershed community performed our best snow dances in hopes that mother nature would deliver the winter we so desperately needed. The dances worked, the prayers were answered and the jet stream relocated with Colorado right in the bullseye.

A cool and calming fall settled in and school groups arrived at The River Center daily. The ideal trifecta for watershed education had emerged in Old Pond Park, the Roaring Fork River and The River Center. Ample indoor and outdoor learning space surrounded by opportunities to interact with the riverine ecosystem have allowed our education programs to excel. Whether utilizing the outdoor courtyard to model the watershed with climbing ropes (see photo) or dipping a kick-net in the Roaring Fork River to capturing insects, our educators and visiting students are equally enthusiastic about the place and the subject matter.

The snow started falling sometime in mid-October and continued as the return of a "real" (and quite cold) winter became official, and was welcomed with resounding joy. Epic powder days returned, plows ran around the clock some days, schools had snow days and, as I had hoped would be the case, I was thankful but sick of shoveling by March 1. To the delight of the watershed, and dismay of my back, March delivered plenty of additional snow throughout Colorado to help alleviate the drought - at least for the time being.

The abundant snow and cold this winter was a welcome change. Winter gave the RFC staff time to settle into The River Center after a busy and hectic summer, and a front row seat to some of the most epic displays of winter on the river. As winter's grip tightened, temperatures dropped allowing significant amounts of ice to form in and around low flowing streams. Periodic warming spells released ice jams in the Roaring Fork River in stellar fashion, and RFC was able to document nine

separate events between December and February. This natural phenomenon provided a notable learning opportunity for RFC and the community at large. Community alerts preceding ice jam breaks helped keep people safe and out of the river, and also brought the community together along the riverbanks and bridges to watch the ice roar through.

Shortly after a rare double-header ice jam break on January 4, I decided to see how the trout fared. My first outing from The River Center reacquainted me with the Fork I'd fallen in love with so many years ago when I first moved to Basalt. I made it out weekly between January

and mid-March, beginning every adventure from the beloved River Center mudroom where my waders and rods now hang. I went out the back door and pat the cutthroat trout bike rack for good luck, and within minutes I was reinvigorated and reminded how fortunate we are to have and protect the river in our backyard.

I'm grateful for the snow this winter bestowed upon us, but remain aware that one good year, while it relieves some pressure, does not solve the long term water shortages that exist in the West. However, today, I am thankful the outlook for this summer looks favorable. See you on the river!



ONLY RAIN DOWN THE DRAIN!

Storm drains and rivers lead downstream to someone's drinking water supply!

by Christina Medved, Director of Community Outreach

When rain falls onto hard surfaces like paved roads and parking lots, that water runs off into storm drains. Most storm drains empty directly into the nearest stream without filtering debris or pollutants. Often these streams are the sources of someone's drinking water. How do we educate residents and visitors about protecting these sensitive areas?

RFC partnered with Colorado Rural Water, Eagle River Watershed Council, Middle Colorado Watershed Council and most municipal water suppliers in the Roaring Fork Valley – and beyond – to address this need. Starting this



summer, you will see signs along roadways and streams, reminding us all to “Keep It Clean ‘Cause We’re All Downstream!”

View tips and access resources on ways you can help keep our streams and drinking water supply healthy by visiting www.roaringfork.org/KeepItClean.

Throughout Colorado many water providers created plans to protect their drinking water sources. Learn how by reviewing your community's “Source Water Protection Plan” at www.crwa.net.

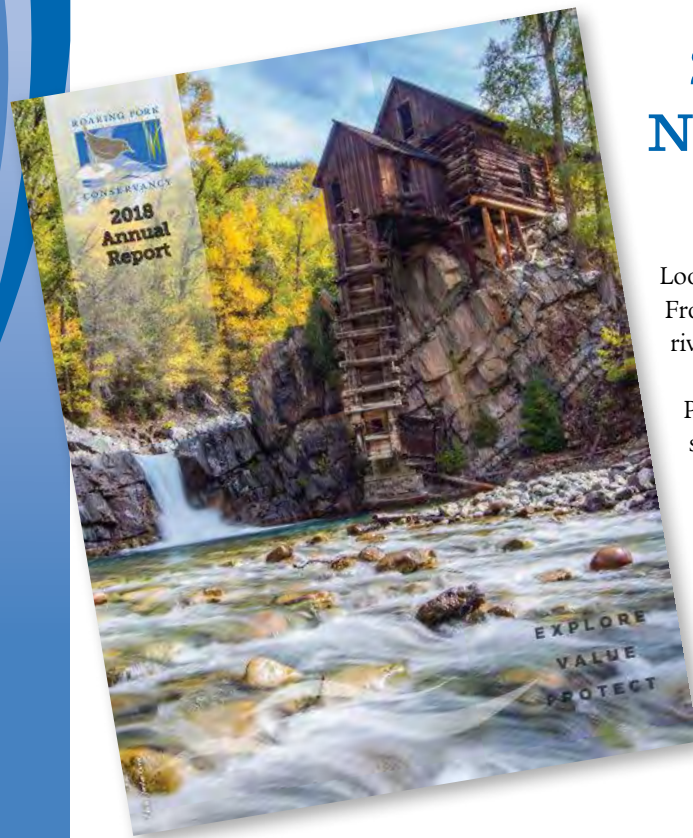
2018 ANNUAL REPORT: New Home, New Challenges, Ongoing Successes

Looking back, 2018 may have been the most memorable in RFC's history. From moving into The River Center, to the extremely low snowpack and river flows, and the Lake Christine wildfire just outside our new front door.

Paulo Coelho said, “You drown not by falling into a river, but by staying submerged in it.” We spent 2018 fighting our way to the surface, taking a deep breath and enacting programs to raise awareness and support stressed river ecosystems.

We invite you to read through our 2018 Annual Report to learn how we handled challenges and grew into our new home. We also invite you to share in our successes, as your continued support makes our work possible. Thank you!

Read the 2018 Annual report at www.roaringfork.org/about-us/



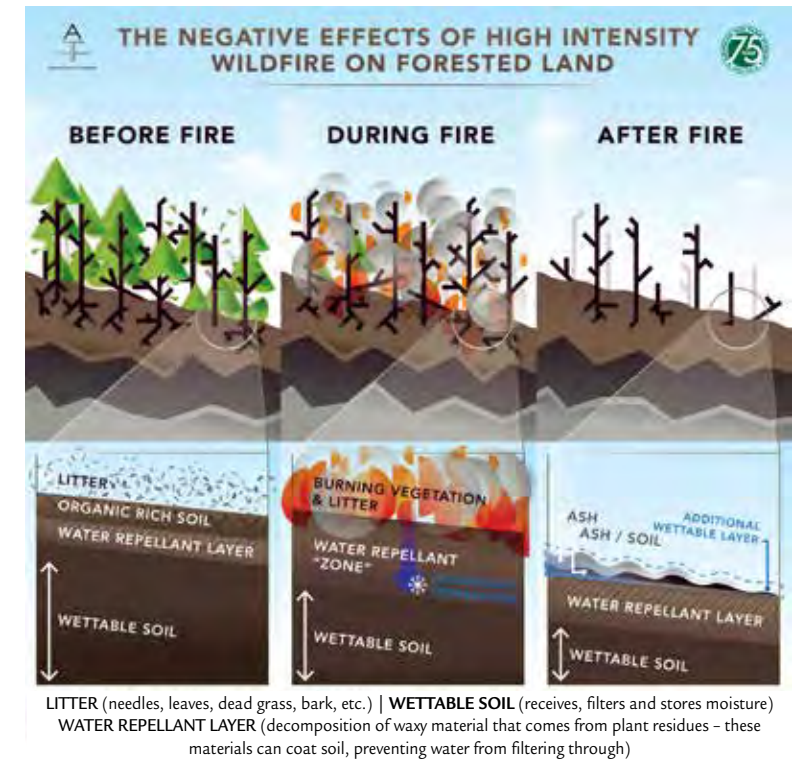
The Good, The Bad, and the Fire

by Heather Lewin, Watershed Science & Policy Director

As an abundant snowpack receded from Basalt Mountain in April, the darkened landscape reminded us of a summer that seemed long left behind. Hot, dry days in smoke-filled skies were replaced by the seemingly endless bluebird powder days this winter. While optimism abounds for a robust runoff that leaves the drought behind us, the short- and long-term changes from the fire remain in the community and on the landscape.

The good news: There's significant moisture from the winter, which gives plant communities a better chance to begin to regenerate, bringing back the green landscapes and all the associated benefits including wildlife habitat, erosion control and scenic vistas we've become accustom to enjoying.

The bad news: High-intensity fires can increase flood risks, erosion rates and vegetative recovery, jeopardizing downstream values, from homes and businesses to streams and habitat. Debris and sediment flows can be several orders of



magnitude larger than flows that historically exist in a given area, creating concerns for private property and ecological impacts, particularly in-stream.

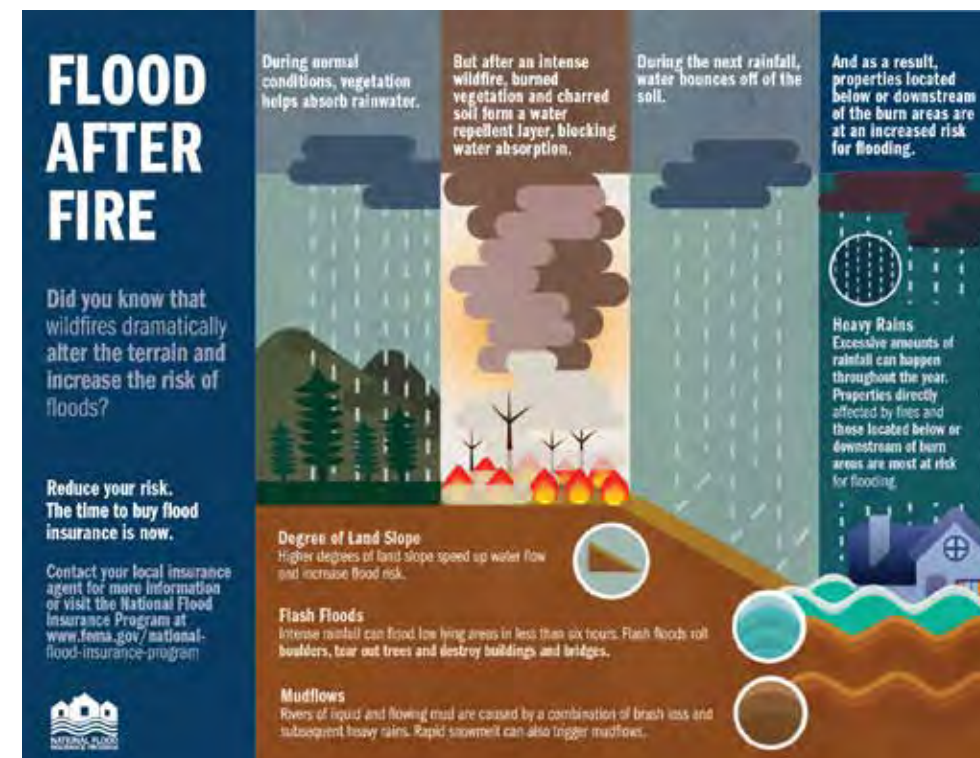
Refer to the graphic below to learn how you can protect your home and the stream.

The good news: The U.S. Forest Service, Colorado Parks and Wildlife, Bureau of Land Management and Natural Resource Conservation Service all have projects underway to protect private property, revegetate public lands and mitigate debris flows.

The bad news: There will probably be some sediment or debris flows this summer, most likely during the runoff or monsoon season.

The good news: High-intensity burns only account for about 12% of the total area of the Lake Christine wildfire, meaning that much of the beloved Basalt Mountain will come back stronger and more resilient, much like the community has done.

We're looking for volunteers to help with the Lake Christine wildfire restoration project on June 12. Find details at www.roaringfork.org/events



Training Citizen Scientists

by Chad Rudow, Water Quality Program Manager

Volunteer Stream Teams contribute significantly to one of RFC's longest-running programs: baseline water quality monitoring. These incredibly dedicated citizen scientists assist with monitoring across the Roaring Fork Watershed, from Aspen to Glenwood Springs. The teams vary in size, age, location and longevity, but they all share a passion for hands-on science and a desire to help protect local streams and rivers.



conducting precise and accurate water quality monitoring. The first evening was spent at a stream near The River Center, learning proper protocols for recording measurements and collecting various water samples. The second evening involved learning how to analyze those samples through chemical titrations and scientific meters. Participants learned how additional samples are collected, processed and shipped to a lab for in-depth

analysis, and how data is compiled through the Colorado River Watch program and used by RFC and state agencies to assess the health of local streams and rivers. Recently, a number of stream teams "retired" from monitoring, providing opportunities for new volunteer recruitment and engagement. To ensure these volunteers had the necessary tools for their new "job," RFC hosted a training at The River Center, generously funded by Aspen Skiing Company's Environment Foundation. A number of existing Stream Team members also participated for "refresher training" allowing new and existing groups to meet and share their experiences.

Over the course of two evenings, participants learned the intricacies of

By the end of the training, new groups of citizen scientists had the tools and knowledge necessary to begin their important work. They join the existing Stream Team members – some of whom have volunteered for more than 15 years – to form a network of 20 volunteers integral in measuring and documenting the health of local streams and rivers.

MEET OUR STREAM TEAM MEMBERS

RFC sincerely thanks the following individuals for their dedication to monitoring the health of local streams and rivers. Their help is invaluable!

Joanie Anderson
Jeannette Cohen
Matthew Hamilton
Dick Helmke
George Johnson
David King
Lacy King
Jim Kirschvink
Patty Lecht
Leigh Louis
Charlie Lueders
Jennifer Long
Buzz McArthur
Martha Moran
Bob Morse
Lesley Morse
Shannan Osburn
Aimee Ruddell
Laura Taylor
George Wear



WATERSHED EXPLORATIONS

2019 Summer & Fall Events Calendar*

JUNE

- 8 15th Annual River Float
- 12 North Star Preserve Roaring Fork River Float
- 13 North Star Preserve Roaring Fork River Float
- 19 North Star Preserve Roaring Fork River Float
- 26 Family Night at Filoha Meadows: Fireflies, Bats, and Bugs
- 27 Family Night at Filoha Meadows: Fireflies, Bats, and Bugs

JULY

- 1 Filoha Meadows: Firefly & Rare Orchid Walk
- 2 Filoha Meadows: Firefly & Rare Orchid Walk
- 8 Filoha Meadows: Firefly & Rare Orchid Walk
- 11 Family Night at Filoha Meadows: Fireflies, Bats, and Bugs
- 16 Family Night at Filoha Meadows: Fireflies, Bats, and Bugs
- 18 Filoha Meadows: Firefly & Rare Orchid Walk
- 19 Twin Lakes Tunnel & Diversion Tour
- 23 Herron Park – Insects of the Roaring Fork River
- 24 Water in the Age of Silver: Touring Aspen's "Holden Works"

AUGUST

- 6 Fishing in Schools Teacher Workshop (Basalt)
- 8 Family Exploration at Filoha Meadows
- 8 Fishing in Schools Teacher Workshop (Salida)
- 14 Family Exploration at Filoha Meadows
- 21 Get the Inside Scoop at Cozy Point

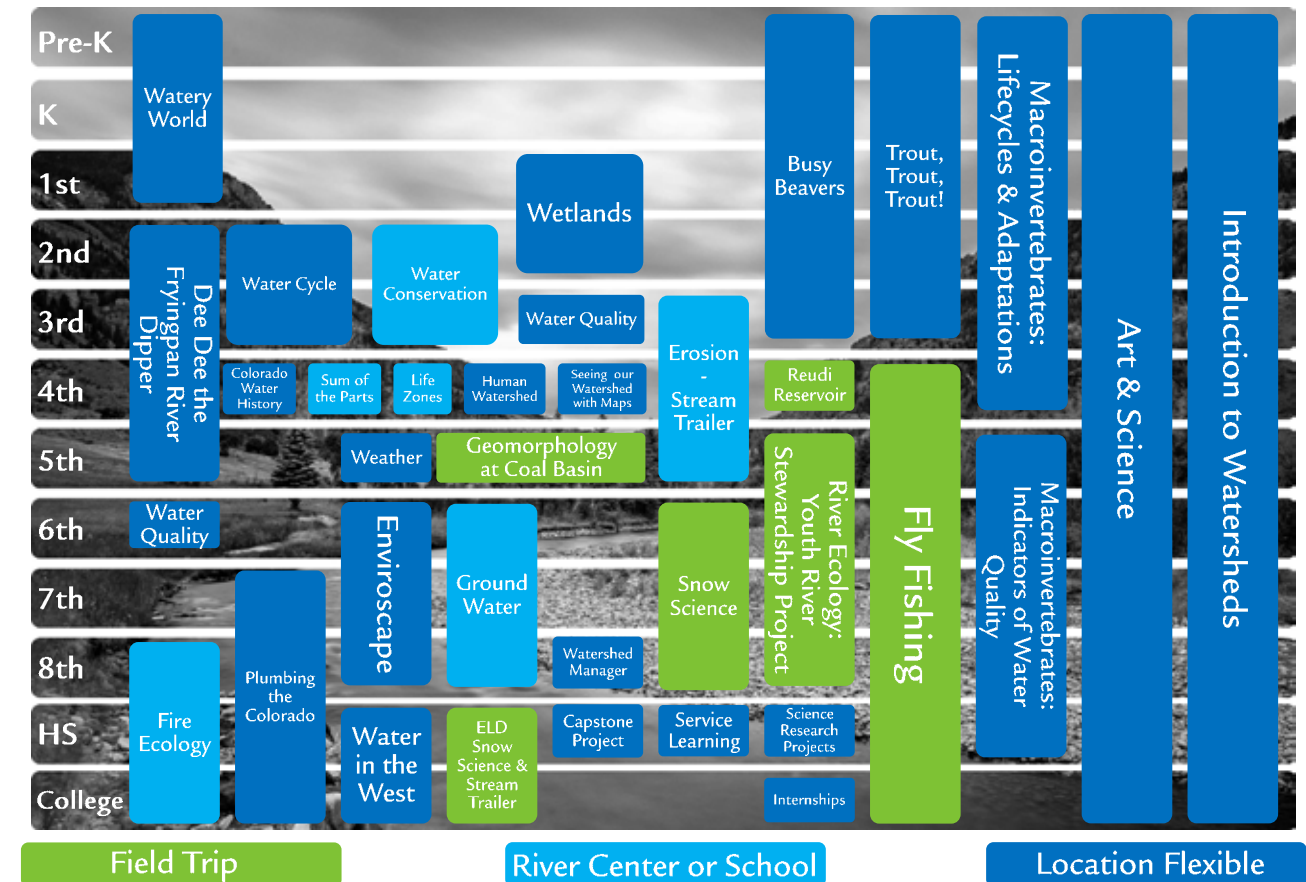
SEPTEMBER

- 14 Family Exploration at Filoha Meadows
- 18 Filoha Evening Walk: Elk & Bighorn Sheep

*Registration opens 3 weeks prior to program date.

For more information and to register visit: www.roaringfork.org/events

Roaring Fork Conservancy Water Education Programs by Grade



To schedule an education program contact Watershed Educator Kristen Doyle by emailing kristen@roaringfork.org
To learn more about Roaring Fork Conservancy, visit www.roaringfork.org



River Rules for Fun & Safety!

Floating Etiquette (rafts, kayaks, SUPs)

- Wear a lifejacket. Always. Things can happen quickly on a cold, fast moving river.
- Be equipped with safety knife and whistle.
- Carry a First-Aid Kit.
- Respect private property.
- Know the river, have a map, talk to local outfitters for guidance and daily conditions.
- Pick up and pack out all trash.
- Don't crowd other river users.
- Wade anglers downstream have the right of way. Quietly move around them or communicate otherwise.
- Be organized, fast and efficient on the boat ramp when putting in and taking out. Be courteous to other river users and limit ramp time to 5-10 minutes.
- Follow the golden rule – treat others as you would like to be treated – both on the boat ramp and on the water.

Fishing Etiquette

In addition to Floating Etiquette:

- Obtain a valid Colorado Fishing License.
- Learn and follow local fishing regulations.
- Land fish quickly, do not play them to exhaustion.
- Keep fish wet and in the water. Minimize fish handling.
- Release fish gently in clear water, allowing fish to swim away after recovery.
- Barbless hooks - all the time.
- Anglers give other anglers plenty of room.

Stop by
THE RIVER CENTER
IN BASALT FOR
YOUR RIVER
STEWARD
STICKER.

Safety First!

- ☐ life jacket
- ☐ whistle
- ☐ safety knife
- ☐ first aid kit
- ☐ medications
- ☐ patch kit
- ☐ plan
- ☐ phone

Before you get on the water, ask yourself:

- Am I capable of navigating the river in its current state?
- Is the river at a safe level for me and my guests?
- Do I have a plan?
- Does someone know where I am floating and when I plan to be back? (*Remember to make contact when float is finished and take-out is reached safely.*)

Be a STEWARD of the River

- S**hare the river - with everyone
- T**read lightly and leave no trace
- E**tiquette is for ALL river users
- W**ait your turn and be patient
- A**dhere to closures & regulations
- R**espect all life - wild and human
- D**o your part to protect the river



Explore
Value
Protect

www.roaringfork.org

2019 River Conservator: RICK NEILEY



Roaring Fork Conservancy will honor Rick Neiley as our 2019 Robert Billingsley River Conservator at the 20th Annual River Rendezvous on July 10, 2019. Rick joined RFC's Board in 2000 and after 18 active years retired at the end of 2018. His expertise around river issues, conservation easements and vast experience serving on other boards throughout the Roaring Fork Valley helped shape the direction of RFC in its first decade. Rick was also instrumental in the direction and eventual completion and opening of The River Center. As an attorney with Neiley Law Firm, LLC, Rick's expertise in legal and financial matters was particularly valuable over his long tenure with RFC. We wish him tight lines and best fishes!



Thursday, JULY 18 • 1pm

50 Years of River Protection

NICOLE SILK

Executive Director, River Network

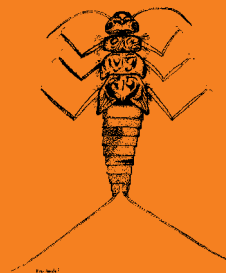
As water champions celebrate the 50th anniversary of the burning of the Cuyahoga River in northeastern Ohio, Nicole will share what river protections have emerged since that infamous day, and shed light on what the next 50 years of water protection will bring.

Roaring Fork Conservancy invites you to The Brooksher Watershed Institute at The River Center for presentations that address our most precious resource, water. We'll discuss the most current water-related issues at the local, state and regional level, and provide opportunities for one-on-one dialogue with these water leaders. Light refreshments will be served.

SEATING IS LIMITED. Register at www.roaringfork.org/events.



COME VISIT THE RIVER CENTER
and check out a fly rod or our new River Discovery Kits.



Staff & Board Flows



Elliott Audette,
Business Manager

Originally from Saratoga Springs, New York, Elliott moved to the Roaring Fork Valley in 2011 to work for the Aspen Skiing Company. During his time with them he grew a passion for winter and summer sports, the great outdoors, and the Roaring Fork Valley community. Elliott has enjoyed volunteering for RFC since the spring of 2016. His favorite events are the Fryingpan River Cleanup and River Rendezvous. Elliott is looking forward to expanding his impact on the community by working with RFC year-round!



Megan Dean,
Education Program Coordinator

Megan's love of rivers began on the mighty Mississippi where she worked as a water patrol officer for the Iowa Department of Natural Resources. Wanting to focus on education instead of law enforcement, she graduated from the University of Iowa with a B.S. in Education with a Specialization in Sciences. She moved to Colorado to pursue her passion for education as a teacher in the Roaring Fork Valley. After gaining some amazing teaching experience in the classroom, Megan opened Unlimited Horizons Tutoring and Enrichment, enabling her to build and offer after-school environmental education programs to valley students. With a dedication to watershed education, she became a part-time educator for RFC in 2015, then returned to the classroom for a short time, and finally rejoined RFC full-time in June as the Education Program Coordinator. Megan can often be found playing on her paddleboard and enjoying other watersports with her family.

Thank you!

After serving a combined 41 years on the RFC board, Stephen Ellsperman, Dick Kipper, Rick Neiley and Don Schuster stepped down this past spring. Thank you for your many contributions to RFC!



Stephen Ellsperman



Dick Kipper



Rick Neiley



Don Schuster



CONSERVANCY

*Bringing People Together
to Protect Our Rivers®*

BUSINESS MEMBER

2019 PREMIER BUSINESS MEMBERS

Aspen Flyfishing/
Chris Lemons
Aspen Whitewater LLC
Barnes, Pearson
& Associates LLC
Bob Harris
Casey Brewing
Cottle Carr Yaw Architects Ltd
Crystal Fly Shop
FootSteps Marketing
Proudline Guided Fly-Fishing
The Romero Group, LLC
The Rulon Kelly Team at
Douglas Elliman Real Estate
SGM
Ute Mountaineer

STANDARD BUSINESS MEMBERS

M.G. REALTY CO., INC
Dunlop Environmental Consulting
Harry Teague Architects
mountainFLOW eco-wax

**Thank you for
supporting essential river
research, education, and
conservation work!**

Grantors, Underwriters, & Partners
ACE Hardware of
Carbondale
Aspen Center for
Environmental Studies
Aspen Skiing Company
Aspen Skiing Company
Aspen Skiing Company
Environment
Foundation
Aspen Smile Dentistry
Aspen Trail Finder
Basalt Printing
Bessie Minor Swift
Foundation
Boettcher Foundation
Bureau Of Land
Management
Chaco
City Market
City of Aspen (Water,
Parks and Recreation,
& Engineering
departments)
City of Aspen Arts &
Community Non-Profit
Fund
Colorado Basin
Roundtable
Colorado River Watch
Colorado Water
Conservation Board
Community Office for
Resource Efficiency
Coryell Ranch
Eagle County
EcoProducts
El Jebeverage
EverGreen ZeroWaste
Garfield County
Gates Family Foundation
Glenwood Springs River
Commission
Lodge at Rivers Edge
Mt. Sopris Conservation
District
Pitkin County Healthy
Community Fund
Pitkin County Healthy
Rivers and Streams
Pitkin County Open
Space & Trails
Roaring Fork Outdoor
Volunteers
Ruedi Water & Power
Authority
Snowmass Village Rotary
Club
Starbucks of Willits
State of Colorado
The Thrift Shop of Aspen
Timberline Bank
Timbo's Pizza
Town of Snowmass
Village
Waste Management
White River National
Forest
Wilderness Workshop
Willits General Store
Woody Creek Distillery

\$100,000
Carter & Dane Brookshier

\$50,000 - \$99,999
Barb & Pat McMahon

\$25,000 - \$49,999
Judy & David Baum
Rich & Nancy Kinder
Comelia & Meredith Long
Jane & Tim McMahon

\$15,000 - \$24,999
Alpine Bank
Janie & Edward Bradley
Ruth Fund
Mary & Neil Dorflinger
Elizabeth McGeachin
McKee Foundation
William & Marie Wise
Family Foundation

\$10,000 - \$14,999
Teresa & Steven Beal
Gina & Tucker Bridwell
Barbara & Franklin
Carson
Pat Cooper
Karen Degerberg AGF
Jim Finch
Anonymous
Melissa & David Hotchklin
Stacey & George Kelly
Randy & Ken Kendrick
Amy & Tim Leach
Claudia & Fred Lummis
Carolyn & Dick Shell
The John Denver
Aspenglow Fund

\$6,000 - \$9,999
Janice & Philip Beck
Louise & Clay Bennett
Charlotte & Dan Blanks
Pat & Jane Bolin Family
Foundation
Eleanor Davis
Ruthie & Dave Hoff
Lester Houtz & Valerie
Anderson
Judith & Nick Huston
Marianne & Dick Kipper
Bonnie & Harold
Kloosterman
Wild Waters Foundation
Wendy & John W. Seiple
RCG Fund
Judy & Charles Tate
Kay & Robert Watson
Corinne & Paul Wood

\$3,000 - \$5,999
Peppy & Wally Dallenbach,
Colorado 500, Inc.
Richard Arbaney
Gail & Michael Attas
Gary Blackie
Ashley & Scott Bohn
Jane A. Lehman & Alan G.
Lehman Foundation
Stephani & Stan Bunting
Debbie Sands Carson
Shawn Cheadle
Patsy & George Conrades
Tim & Jackie Danis
Muffy & Andy DiSabatino
Elizabeth & Christopher
Dorr
Shel & Clayton Erikson
Anonymous
Denise & Andy Goldfarb
Mary & Jim Griffith
Jennifer & Cap Grossman
Hildebrand Fund at
the Greater Houston
Community Foundation
The Horizon Foundation
Ann & Tom Korologos
Janis Merrill
Natalie & Duwayne Miller
Robert Pew & Susan
Taylor
Reese Henry & Company,
Inc.

Betty & Jan Rietdijk
Michelle & Dieter
Schindler
Maren & Don Schuster
Thendara Foundation
Sarah & Robert Woods

\$1,000 - \$2,999
Anheuser-Busch
John Scott Arnoldy
Ashley Friedman
Advised Fund at Aspen
Community Foundation
Bonner & George Ball
Annette & Ted Borchelt
Sue & Mike Bowlin
Sarah Broughton & John
Rowland
Richard Broussard
Amy Carter
Cather's Home
Furnishings

Betsy & Jim Chaffin
Jane & Bob Clark
Tom Clark & Clark's
Market
Cottle Carr-Yaw
Architects Ltd
Crawford Properties, LLC
Vicki & Johnny Cronin
T Danis Charitable
Foundation
Mary Charles & Jay Davis
Mara & David Deniger
DHM Design
Corporation
Laura Donnelley
Patrick Andrew Dunigan
Anonymous
Beth & Tom Eckert
Ernst & Wilma Martens
Foundation
F&M Architects, LLC
Mary & Paul Fee
Susie & Gary Fisher
Judith Fisher
Forever Our Rivers
Foundation
Harry Frampton
Frying Pan Canyon Ranch
Alfred Gardner
Stanley D. Gertzbein &
Marianne Antoniak
Jim Gilchrist & Lynn
Nichols
Karen Gray-Krehbiel &
John Krehbiel, Jr.
Gabrielle Greeves
Andy Union
Frank J. Guyol III
Charitable Fund of the
St. Louis Community
Foundation
Helen & Charles Burnett
Pati Hensley
Marnie & Lee Hogan
Andrea Rossetti & Eric
Hollerbach
Adam Holt
William Ewing
Foundation
Carol & Michael Hundert
Matt & Breckie Hunt
Beardsley Family Fund
Kyrle Elation
Mike and Laura Kaplan
Advised Fund at Aspen
Community Foundation
Lolly Kelly
Jan & Jim Klingbeil
Wendy & Bill Kortepeter
Kovler Family Foundation
Mark Lacy & Sharon
Clarke
Michael Latousek
Erika & Rob Leavitt
James & Dianne Light
Laura & John Marlow
Laurie & John McBride
Jennie & John Morris
Margaret A Frank
Fund at The Chicago
Community Foundation
Ann Mulroy
Becky & Michael Murray
Jane & Clarke Nims
Sue & Kirk Patrick
Pehm Ranch
Sue & Walt Rakowich
Bill Riffle & Ruann Ernst
Rotary Club - Snowmass
Village
Paul Salmen, M.D., &
Nancy R. Reinisch
Mary & Pat Scanlan
Lorraine & Mark Schapiro
Nancy & John Schneider
Jim Schreier
Holli Shuck
AJ & Michael Thompson
Anne Tobey
Betsy & Charlie Townsend
Carol & Mack Trapp
Joseph Tumminello
Mary Ann & John Virant
Beaufort Foundation
Pat Whitaker

Sherry & Brit White
Paul J. Hoenmans &
Judith Zee Steinberg
Advised Fund at Aspen
Community Foundation

\$500 - \$999
Gayle & Jonathan
Armytage
Stephen & Susan Baird
Employees of Morgan
Stanley
Elyse Elliott & Jeremy
Bernstein
Molly Brooks
Cinda & Michael Carron
Anonymous Employee
Matching Funds
Lise & Howard Cohen
Carolyn & Dr. Nick Cole
Brittany & Jeff Conklin
Robert Cross
Anne & Les Csorba
I. McA. (Mac)
Cunningham
Karen & Robert Davis
Sherry Ann & Edward
Dayton
Greg Didier & Terry
Rogers
Caroline W. Duell
Janice & Leroy Duroux
Janet & Robert J. Firth
Marcia & Don Flaks
Ruth & Dan Flounoy
Anonymous
Laney Wunderlich Fries
Jack McKay & Leslie Ann
Gallagher
Berthod Motors c/o Don
Gerbaz
Jeanette & Scott Gilbert
Laura & Javier Gonzalez-
Bringas
Barbara Hammer
Cindy & Arthur Harding,
Jr.
Sue & Robert Hess
Julia and Ken Hirsch
Kay & Ned Holmes
Hyde Family Foundation
Margaret Idema
Joyce Illian
Gretchen & Peter
Jameson
Monica & Richard
Jefferies
Jan & Jim Kingham
Nancy & Michael Kish
Ramsey and Steve Kropf
John Kuck
Marianne & Bill Lederer
Judith & Amory Lovins
Kim & William Madden
Debra & Reagan Majoria
Kirsten & Gerald
McDaniel
Sally & Mike McLarry
Cynthia Calvin & Mac
McShane
Fran & Jack Mikaloff
Michael Miller & Carol
Murphy
Doyen & James Mitchell
Genna & Jakob Moe
Christy & Richard
Montgomery
Jean Moore
Michael B. Nathanson
Andrew Nolan
Marian & Ronald
Norman
Wendy & Roy Nunn
Hensley & James Peterson
Libby Pettit
Edgell Pyles & Martha
Pickett
Tim Racke
The Arches Foundation
Hope & John Reese
Carol & Troy Rhudy
Judy & Jim Rifkin
Donna & Gino Rossetti
Cindy & Andy Russell

Anita & Merlyn Sampels
Sarah & H.C. Van Schaack
Diane & Rob Schwener
Trish & Mark Seaman
SGM, Engineering,
Consulting & Surveying
Sarah & Richard Shaw
Sien Energy Company
Talbot Simonds
Martha & Thomas
Singleton
Shirley Sloan
Maria & Jock Stafford
Sandy & Stephen Stay
John Swomley & Jennifer
Roberts
Ellen Temple
The Robert and Margaret
McNamara Foundation
#3
Pam & Dan Turley
Suzanne & Michael
Vernon
Connie & Jon Warnick
Allyson & Walter
Weathers
Patricia & Jay Webster
Letitia Wenisch
Dee Wilkins
Donn Willins
Jean & Bill Wunderlich
Susan & David Young

\$200 - \$499
Cindy & Daniel Adams
Suzanne & Michael
Ainslie
Sharon & Bruce Anderson
Ann Korologos Gallery
Aspen Community
School
Aspen Whitewater LLC
Laura & Javier Gonzalez-
Bringas
Kathy & Carter Barger
Barnes, Pearson &
Associates, LLC
Amy Barrow
Chuck Bellock & Maggie
Morrison
Lynn & Bruce Bowen
William Browning
Donna & Steve Chase
Anonymous
Terry Conklin
Marcia Corbin
Crossville Tile & Stone
Nancy & Mike Dean
Leigh Edlin
Jennifer & Stephen
Ellsperman
Nancy Ferrillo
Sheryl & Sean Fick
William Fisher
David Fleisher & Gina
Berko
Wes Fleming
Jane & Bill Frazer
Amy & Robert French
Donna & Jim Fritz
Charlene & Stan Gardner
Lindsay & Tom Gorman
Chip Griffith
Jennifer & Matthew
Hamilton
Margot & Dick
Hampleman
Debra Hanson
Kristen Henry
Nancy & Peter Hoffmann
Katie & Rob Holton
Janis and George Huggins
Mandy Hughes
Benjamin Huneke
John Christie
Nancy Johnson
Sandy & Peter Johnson
Nanci Kalamaya
CP & Stephen Kanipe
Chris Keller
Jeffrey W Keller
Tom and Tammy Kenning
Cil Klamper
Sara Kurz
Chris Lemons

\$100 - \$199
Russell Adkisson
Aleece Alexander
Brian Anacker
Angela & Gary Evans
Anonymous Colorado
Gives Donors
Kelly Atteridge
Gary Augustson
Karen Barch
Justin Barker
Darlene Barrailler
Heidi Sue Beale
Charla & Tim Belinski
Caroline Bradford
Carrie Bradford
Jill & Michael Briggs
Catherine N. Brons
Margie & Paul Broome
Darrell Brown & Suzanne
McNitt
Shelley Burke & Al
Nemoff
Betty Cabral
Susan Capitelli
Robert Cardwell
Colin Cares
Courtlyn Carpenter
Troy Casey
Iris & Kevin Cassidy
Wendy Casson
Lindy Clarke

Bailey R. Leppek
Casey & John Livingston
Rich Lofaro
Jack Murphy
Mechelle & Tony Lugard
Michael Manick
Suzy & Bill McKee
Beth & Kent Meager
Lindy & Tom Melberg
Pam E Moore
Rick Morrison
Emily & Tom Neel
Rick Neiley & Maria
Maniscalchi
Bill Neveu
Leslie P. Neveu
Vince Nichols
Janet & Robert Olson
Gail & Jim Owens
Winston Padgett
Ginny Parker
Anonymous
Frank S. Peters & Marjory
M. Musgrave
Brooke A. Peterson
Advised Fund at Aspen
Community Foundation
Jayne & Bill Poss
Julie Puchkoff
Louisa & John Ritsick
Mark Rozeboom
Sydney & Robert Rupar
Lois & Tom Sando
Wright Water Engineers
Andy Siefkes - Get Busy
Liv'n
Lawrence J. Slater
Ann Smock
Lettice & Walter Stuart
Lucia Swanson
Sharon & Frank Taverna
Timberline Bank
Trout Unlimited
Ferdinand Hayden
Chapier
Mike Turner
Ute Mountaineer
Valley View Hospital
Foundation
Chris Vaughan
Cher R. Vincent
Stella & Michael Wagner
Jane & Bruce Warren
Gayle Waterman
Cynthia Wayburn
Margie Weber
Donna & Roy
Wiedinmyer
Stephanie Williams
Susan D. and David B.
Young Charitable Trust

\$100 - \$199
Russell Adkisson
Aleece Alexander
Brian Anacker
Angela & Gary Evans
Anonymous Colorado
Gives Donors
Kelly Atteridge
Gary Augustson
Karen Barch
Justin Barker
Darlene Barrailler
Heidi Sue Beale
Charla & Tim Belinski
Caroline Bradford
Carrie Bradford
Jill & Michael Briggs
Catherine N. Brons
Margie & Paul Broome
Darrell Brown & Suzanne
McNitt
Shelley Burke & Al
Nemoff
Betty Cabral
Susan Capitelli
Robert Cardwell
Colin Cares
Courtlyn Carpenter
Troy Casey
Iris & Kevin Cassidy
Wendy Casson
Lindy Clarke

Christy & Steve
Clettenberg
Iris Lee Clotfelter
Michael Collins
David Corbin
Cornerstone Classical
School
Susan & John Cottle
Pamela M. Cunningham
Cynthia & Fisher Trigg
Paul D'Amato & Beth
Cashdan
Mia F D'Angelo
Ryan Daniel
Sami Dinar
Carly Dominick-Sobol
Kristen A. Doyle
Janis Dybdahl
Mary Dybic
Patricia Eagling
Robert Edelmann
Anna Edgerly
Don & Susan Edmonds
Ellen T. Knous, CPA
Erin Tiffany Erickson
Sandra Eskin
Lee Ann Eustis
Sarah Fachs
Bill Fales & Marj Perry
Kathy & Greg Feinsinger
Kelly Field
Chriss Flynn
Mary Lou & John Flynn
Elk Mountain Expeditions
Nina Gabianelli
Mark E. Giesecke
Jean & David Goldstein
Kersten Gwost
Teresa E. Hackbarth
Clay & Andrea Hanson
Quinn Hammett
Bob Harris
Ruth Harrison
Emily Henderson
Kate Henion
Casady M Henry
Cindy Hirschfeld
Dan & Judy Hobby
Yvonne Hunter
David Hyman & Barbara
Reid
Keith Ikeda
Christine a Interlante
David Johnson
Nancy & Robert Johnson
Denise Jurgens
Ryan Kalamaya
John Katzenberger & Deb
Jones
Ronene Kehoe
Matt Kelsic
Meg G. Kendall
Jeff Kerber
Ann & Joe Kercheville
Akaljeet Khalsa
Nick Kilbourn
Lani Kitching
Yvonne Klausmann
Sarah & Steve Knous
Mary & Peter Kurtz
Megan Lamb
Meta Alice Keith Bratten
Foundation
Thomas and Scottie
Leddly
Marlyn and Henry Lee
Jean & Richard Leety
John R. Lewin, Jr. and
Heather Tattersall Lewin
Francine & Tag Liebel
Christine & Andrew Light
Carol & Bill Lightstone
Linda Lofaro
Judi & Bob Loubier
Meaghan Lynch
Valerie J MacDonald
Maley Building
Corporation
Martin Manosevitz
Stephen C. Martin
Nancy Massey
Dave Mayer
Dottie & Buzz McArthur
Michele McClinton &

\$20 - \$99
Lamar Abney
Matt Aboussie
Ronald & Denise Acee
Allen H. Adger

Brad Osborn
Claire R McDougall
Christina Medved
Shelly and Jay Merriam
Nathan Miller
Janet & Bob Mineo
Mary Beth and Gregg
Minion
Jane & Bill Mitchell
Carolyn & Tom Moore
Kathy Moran
Kirsten & Rob Morey
Mary Jo Murphy
Frank Nadell
Peter Bisset
Bill Blanton
Liz & John Bokram
Kip Bossong
Jack Brendlinger
Christina Briseno
Bruce Brown
Joe Brown
Cindy & Hap Bruce
Margaretta Bruegger
Kesse Buchanan
Carl Miranda & Brenda
Burkholder
Oni Butterfly
Helen & Roger Carlsen
Sue Anne Carnahan
Tyler Cathcart
Toni Cerise
Molly & Steven Child
Nathan Childs
Tania Clark
Clifton Colia
Barbara Collins
Community First
Foundation
The Kroger Company
Peter Coppolillo
Janet Coursey
Sam Cox
Leslie Curley
Karen Current
Lisa Dancing-Light
Helen Davis
Angie Dawlyn
Claire & Ray
Delacqueux
Delores & Ray Lowe
Natachs Denis
Nancy Dever
Dominic Dezzutti
Anna Dick
Ashley Dole
Ashley Dopf
Doris & Chuck Downey
Dan Downs
Suzanne Driggers
Dunlop Environmental
Consulting Inc.
Dyana & Bert Fumansky
Susy Ellison & Marty
Schlein
Catherine Ennis
Sherrie & Joel Evans
Diana & Dave Flett
Raquel Flinker
Jane Floyd
Ellen & David Forsman
Bruce & Greer Litton Fox
Anne & Phil Freedman
Erin N. Gallimore
Chris & Connie Geiman
Jon Gibbans
Erin Gibbs
Peter Golden
Frank Goldsmith
Donna & Bernie Grauer
Leslie Gray
Kirk Gregory
Cheri Grinnell
Saundra & Darryl
Grosjean
Hailey Guglielmo
Cynthia Haines
David Hamilton
Bill & Leelea Harriman
Mary, Shep & Nick Harris
Richard Hart
Carol & Judson Hawk
Thomas Headlee
Tiffanie & Chad Rudow
Trudy & Fritz Rudow
Suzanne Scheet

\$20 - \$99
Lamar Abney
Matt Aboussie
Ronald & Denise Acee
Allen H. Adger

Professional
Corporation
Anita & Paul Adolph
Justin Alderfer
Bridgette & Ryan Anslyn
Anne Austin-Clapper
Cheryl & Orrin Baird
Ruth & Jim Barnes
Cynthia Beck
Sallie & Tom Bernard
Jeff Bestic
Eric Bindseil
Nell & Bill Birk
Peter Bisset
Bill Blanton
Liz & John Bokram
Kip Bossong
Jack Brendlinger
Christina Briseno
Bruce Brown
Joe Brown
Cindy & Hap Bruce
Margaretta Bruegger
Kesse Buchanan
Carl Miranda & Brenda
Burkholder
Oni Butterfly
Helen & Roger Carlsen
Sue Anne Carnahan
Tyler Cathcart
Toni Cerise
Molly & Steven Child
Nathan Childs
Tania Clark
Clifton Colia
Barbara Collins
Community First
Foundation
The Kroger Company
Peter Coppolillo
Janet Coursey
Sam Cox
Leslie Curley
Karen Current
Lisa Dancing-Light
Helen Davis
Angie Dawlyn
Claire & Ray
Delacqueux
Delores & Ray Lowe
Natachs Denis
Nancy Dever
Dominic Dezzutti
Anna Dick
Ashley Dole
Ashley Dopf
Doris & Chuck Downey
Dan Downs
Suzanne Driggers
Dunlop Environmental
Consulting Inc.
Dyana & Bert Fumansky
Susy Ellison & Marty
Schlein
Catherine Ennis
Sherrie & Joel Evans
Diana & Dave Flett
Raquel Flinker
Jane Floyd
Ellen & David Forsman
Bruce & Greer Litton Fox
Anne & Phil Freedman
Erin N. Gallimore
Chris & Connie Geiman
Jon Gibbans
Erin Gibbs
Peter Golden
Frank Goldsmith
Donna & Bernie Grauer
Leslie Gray
Kirk Gregory
Cheri Grinnell
Saundra & Darryl
Grosjean
Hailey Guglielmo
Cynthia Haines
David Hamilton
Bill & Leelea Harriman
Mary, Shep & Nick Harris
Richard Hart
Carol & Judson Hawk
Thomas Headlee
Tiffanie & Chad Rudow
Trudy & Fritz Rudow
Suzanne Scheet

Luke Hecht
Dick Helmke & Marice
Doll
Sherry & Rick Herrington
Tat & Bobbie Hillman
Ann Hodges
Phillip W Shannon
Samantha Hoffmann
Ed Holub
Ann Hopkinson
Michael Horvath
Ryder Hutchinson
Anonymous
Jo & Wayne Ives
Tom Jankovsky
Ryan Jarvis
Jim & Jeannie Jensen
Amy Johnson
Andy Johnson
Tatiana Stevens
Eric O. Johnston
Ruth Johnston & O.B.
Johnston III
Joni Keefe
Ann Keller
Tammy & Tom Kenning
Mary & John Killebrew
Carol & Peter King
RMI's Business
Renewables Center
David Knight
Judy Kolberg
Emily Kushto
Erik Kushto
Becky & Jack LaCroix
Barbara & Michael
Larime
Ann Larson
Brandi Parsley & Andrew
Larson
Katie Laven
Chris Lawrence
Shana, Jack, and Garrett
LeNeveu
Heidi Levey
Ben Levy
Camille Lione
Donald LoFaro
Carla Joy Lona
Jenny Long Murphy &
Edwin Murphy
John Loomis
Joseph Luebbe
Sara Luongo
Grayson Luther
Anonymous
Anonymous
Kort Marques
Becky Matsen
Francine & Steven
McFadden
Tim McNulty &
Mary Lou Haflinger
Robert Meritt & Jeanette
Damauer
Phebe Meyers
Ondina Moehl
Lesley & Bob Morse
Lee & Sandy Mulcahy
Ann Mullins
Mark Munger & Lauren
Hirsch Munger
Ben Nelson
Sarah Oates
Jane Orahood
Richard Parachini
Scott Perry
mountainFLOW eco-wax
Nancy Peterson
Kim & Mike Petrie
Sarah E Pickard
Susan Planck
Kathryn Powell
James Pustizzi
Joanne Pustizzi
Dana Reynolds
Rachel Richards
Holly & Dan Richardson
Lynette Richardson
Angie Riley
Dana Robinson
Michael Rosenberg
Tiffanie & Chad Rudow
Trudy & Fritz Rudow
Suzanne Scheet

Rachel Schlepp
Lance Schoenwald
Judith Schramm
Patrick Seydel & Susan
Cashel
Sara Shainholtz
Phillip W Shannon
Sancy Shaw
Sean D Shepherd
Karen Sherriff
Carolyn & Dan Shipp
Nancy & Mark Silverman
David Silverstein
Shawn Simpson
Scott Sinta
Kim Skerda
Mark Skinner
Anda & Ryan Smalls
Joshua Smit
Tatiana Stevens
Marcy Stumpf
Patti & Steve Sundermann
Kathleen Sydonyk
Harry Teague Architects
Kristin Tita
Christopher A Trautner
Tam Udall
Carrie & Matt Vickers
Monique Vidal
Jeff Wadley
Lisa Waldman & Tom
Stiles
Coleman Walker
Ross Walker
Brett Wamsley
Austin Wand
Donna & Tom Ward
Gretchen Weber
Chip & Mike Wells
Marnie White
Lexi Widman
Ashley Wiles
Julie & Andre Wille
Jonathan Williams
Nancy & Peter Hoffmann
Lee Wilson
Steve & Mia Wilson
Jake Wirkler
Karen Wogsland & Linda
Pratt
Dottie Wolcott
Suzanne Wolff & Gary
Tennenbaum
Elizabeth Wyson
Thelma & Garry Zabel
Josh Zeeb

In Memory of Dale & Jean Christensen
Diana & Dave Flett

In Memory of Carol Christie & Dennis Christie
John Christie & Family

In Memory of Nancy Cross
Robert Cross

In Memory of E.T. and June Evans
Sherrie & Joel Evans

In Memory of Eveline Hoffman
Pat D Whitaker
Nancy Ferrillo

In Memory of Luna
Nancy Peterson

In Memory of Kata Medved
Christina Medved &
Dennis Medved

In Memory of Ronald J Miller
Joyce Illian

In Memory of Bill Moran
Susan Capitelli
Nathan Childs
Francine & Steven

McFadden
Delores & Ray Lowe
Kathy Moran
Jeffrey W Keller
Shana, Jack, and Garrett
LeNeveu
Kelly S Atteridge
Ronene Kehoe
Nancy & Mike Dean

In Memory of Edward Lee Bud Mulcahy
Lee & Sandy S. Mulcahy

In Memory of Jean Turner Schreier
Jim Schreier
Mike Turner

In Memory of Jon St. Andre
Ruth Johnston & O.B.
Johnston III

In Memory of Joseph Tita
Kristin Tita

In Memory of Bob Waterman
Monica & Richard
Jefferies
Jeannie & Jim Jensen

In Memory of LeRoy & Martha Waterman
Judith & Nick Huston

In Memory of John Whiting
Iris & Kevin Cassidy

In Honor of Rick Lofaro
Helen & Roger Carlsen
Nancy & Peter Hoffmann
Paul A. Salmen, M.D., &
Nancy R. Reinisch

In Honor of Meredith Long
Jack Murphy

In Honor of Bernard Margaretten
Peter Bisset

In Honor of Alex Martins
Donna & Jim Fritz

In Honor of Barb & Pat McMahon
Mary & Neil Dorflinger

In Honor of Liza Mitchell
Tarn Udall

In Honor of Tim O'Keefe
CP & Stephen Kanipe

In Honor of Trevor Schlepp
Rachel M. Schlepp

In Honor of Dr. and Mrs. David Swersky
Donna & Steve Chase

In Honor of Denise & Karen Wells, & Gary Beach
Rick Smidt

In Honor of Sarah Woods
Pat Cooper
Sheryl & Sean Fick
Randy & Ken Kendrick

RIVER CURRENTS
is published biannually by Roaring
Fork Conservancy. Since 1996,
Roaring Fork Conservancy has
inspired people to explore, value
and protect the Roaring Fork
Watershed. We bring people
together to protect our rivers
and work to keep water in the
streams, monitor water quality,
and preserve riparian habitat.
Roaring Fork Conservancy is an
independent 501(c)(3) not-for-
profit organization registered in
the state of Colorado.

Board of Directors:
Pat McMahon PRESIDENT
Diane Schwener VICE PRESIDENT
Jennifer Sauer TREASURER
Jeff Conklin SECRETARY
Ted Borchelt
George W. Kelly III
Jim Light
Rick Lofaro EXECUTIVE DIRECTOR
Michelle Schindler
Larry Yaw

Staff:
Rick Lofaro
EXECUTIVE DIRECTOR
Elliott Audette
BUSINESS MANAGER
Megan Dean
EDUCATION PROGRAM COORDINATOR
Kristen Doyle
WATERSHED EDUCATOR
Heather Lewin
DIRECTOR OF WATERSHED SCIENCE
& POLICY
Christina Medved
DIRECTOR OF COMMUNITY OUTREACH
Chad Rudow
WATER QUALITY PROGRAM MANAGER
Michael Schuster
PROGRAM ASSISTANT
Sheryl Sabandal
DEVELOPMENT MANAGER

Associates:
Larry Gruel
CONTROLLER
River Stewards
Steering Committee
Nick Kilbourn CHAIR
Dan Berg
Colin Cares
Jordan Curet
Claudia Heath
Matt Kelsic
Bailey Leppek
Meaghan Lynch
Lauren Pierce
Anna Stonehouse
Chris Vaughan

Thanks to our newsletter sponsor:

GRAN FARNUM PRINTING



ROARING FORK CONSERVANCY
P.O. Box 3349 ~ Basalt, Colorado 81621
(970) 927-1290 ~ www.roaringfork.org

NONPROFIT ORG
U.S. POSTAGE PAID
GLENWOOD SPGS, CO
PERMIT NO. 90

20TH
ANNUAL

River Rendezvous

ON THE BANKS OF THE FRYINGPAN RIVER

JULY 10, 2019

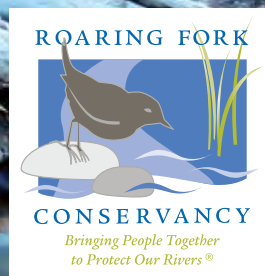


PHOTO: PAUL HILTS

Reading the River

by Rick Lofaro, Executive Director & Heather Lewin, Director of Science & Policy

Every river has a story to tell. The story may be written in the rocks or the banks, the rapids or the eddies, the fish or the insects. As we interact with the river, we learn to read the story the river is telling through observation, experience and tradition. For many, the perspective from which we read the river relates directly to one's preferred forms of recreation. For the seasoned river enthusiast, knowing how to read the rocks and rapids to ensure safe boat passage or honing in on that really BIG trout's hiding spot is second nature. For others, it may be knowing where a particular sediment deposit might reveal gold, or the way that a river moves over time to benefit a larger ecosystem.

In Mark Twain's *A River Pilot Looks At The Mississippi* he compares river boating and reading the river to critically examining literature, registering how perspectives change with experience and knowledge. With time spent on and around the river, one's perception evolves as a deeper understanding of what we are truly observing is unveiled. It is often through this understanding that we develop a greater connection to the river and discover that even the most experienced river reader – whether angler or boater – is still humbled by the river, knowing that there is always more to learn. This, perhaps, is what draws so many to the river. It's not a book to read once and forever know how it will end. It is reading that holds eternal secrets, and unveiling one leads only to the desire to

learn and understand more. Through this exploration, one begins to internalize the value of the river; and the need to protect and care for it becomes a mission, because the story is so compelling and too valuable to be lost.

Learning to read the river creates new opportunities to explore, study or simply enjoy them. With so many different perspectives, professions and passions, the river speaks to its readers in many different languages. Some read the river to help plan – for trips or activities, floods or droughts. Other read the river in data points, sample collections or hydrographs. As river professionals, we at Roaring Fork Conservancy (RFC) must become fluent in reading rivers in a variety of ways – and the necessary river-reading skills can vary day to day. A thorough and thoughtful read can result in an accurate weekly river report, a fun day of floating or the perfect cast. In some form or another, we are all continuing to learn to read the river each time we interact with it. That is part of the fun, magic and passion.

This newsletter looks at how we can read rivers and landscapes to help inform and shape the work we do in the watershed and beyond. I encourage each of you to take a stroll or a wade or a float along your favorite river and start your own reading list – be it books, rapids, or rocks – to further your knowledge and passion. Most importantly, take a moment to enjoy a unique reading of the river every time you visit its banks.

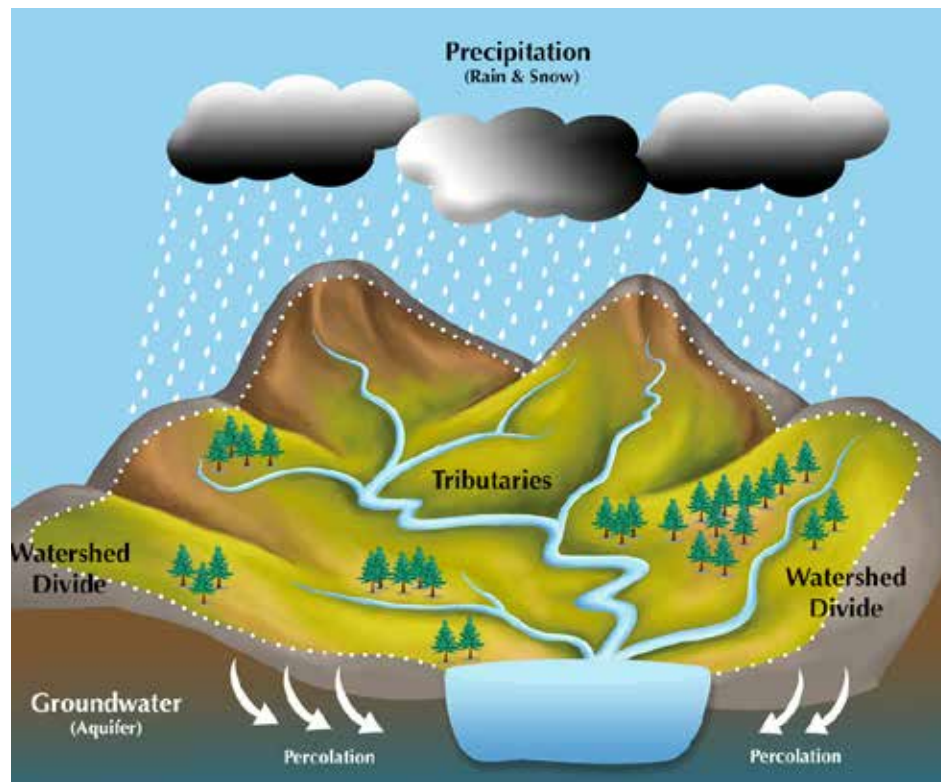
Watershed: an area of land where all the water drains to one place (a.k.a. drainage basin, catchment area)

by Christina Medved, Director of Community Outreach

Watersheds are delineated by topography; ridges are the high points (watershed divide) and streams or lakes are the low points. As it rains and snows on natural groundcover, the water travels through soil (percolation) which acts as a sponge. When underground, it is used up by plant roots or travels into the groundwater supply and eventually makes its way to a waterway at the bottom of the watershed. Precipitation that lands on hard, impervious surfaces like roads and parking lots runs off into a storm drain and into the local waterway.

Anytime you are standing on land, anywhere in the world, you are in a watershed. Get to know your local watershed, because what is on the land is either going to have a positive or negative impact on your local waterway. Keep in mind that vegetated riparian areas and natural groundcover allow precipitation to slow down, be spread out and absorbed into the ground, where plant roots will actually clean and filter pollutants before entering waterways.

The Roaring Fork Watershed is 1,420 square miles, roughly the size of the state of Rhode Island. The headwaters of its three major rivers – Crystal, Fryngpan and Roaring Fork – all begin in



Center for Watershed Protection

designated wilderness areas. What's on the land in these areas? Trees and a diversity of plants with deep roots that help keep our rivers healthy.

Want to “read” your local watershed?

Think about where you are right now and ask yourself the following questions:

- Is there a river nearby and, if so, what's it called?
- Where does it begin?
- What's on the land upstream from you?
- What do you know about the health of this river?

Generally, the health (or impairment) of a river can be determined by what is on the land upstream and adjacent to it. Get to know your watershed and remember, everyone lives downstream. That is why each of us has a responsibility to help keep them clean!

The Keep It Clean West Slope Partners remind you

ONLY RAIN DOWN THE STORM DRAIN!



This beautiful area where we live, play and work are headwaters to rivers AND sources of someone's drinking water.

Find these signs along local rivers reminding us to **KEEP THEM CLEAN** because many downstream depend on it!

For more information visit www.roaringfork.org/KeepItClean

Below the Surface . . . Stream Health from a Different Perspective

by Chad Rudow, Water Quality Program Manager

When it comes to studying stream health, many people naturally think of studying the water itself. Others might remember that stream banks, called the riparian area, are also important. But how many people consider studying the bottom of a river?

The river bottom, called the stream bed or benthic zone, is inextricably linked with stream health, affecting water movement, water quality, groundwater interactions and even which organisms live in a body of water. Studying these components can provide important insights into the overall condition of a stream.

Physically, the stream bed contains rocks and organic material called substrate. The size and makeup of substrate can be studied to determine stream classification, effects on water movement and influences on aquatic life. In addition, some pollutants bind with sediment and thus can be sampled for water quality concerns.

Biologically, the stream bed is home to many aquatic organisms and studying them gives important insights into stream health. Aquatic insects, called benthic macroinvertebrates (macros), are typically found amongst the substrate and can be sample to provide information on nutrient sources, water quality and habitat. They are also a critical link in the food chain. Aquatic plants serve as indicators of stream health, particularly when they are noticeably scarce or overabundant.

Numerous factors can influence the physical, chemical and biological characteristics of a stream bed. Large algal blooms can form due to excessive nutrient loads and coat the stream bed, impacting habitat and depleting oxygen levels critical to aquatic life. Sediment from human or natural causes can settle on the stream bed, smothering habitat and transporting pollutants. In winter, anchor ice can form on stream beds with low flows and negatively impact aquatic life. On the positive side, spring runoff can improve stream health by flushing sediment and pollutants downstream, scouring algae and creating new habitat for aquatic life.

So, what does a healthy mountain stream bed look like from



This simple tool — a 5 gallon bucket with plexiglass bottom — allows researchers to study stream beds (without sticking their heads underwater!).

below? In general, it contains a diverse mix of substrate, aquatic plants and macros, and lacks excessive levels of sediment and algae. Next time you're at the river, study the stream bed or pick up a rock and see what it tells you.



This algae, part of a 2016 bloom in the Roaring Fork River, is *Cladophora Glomerata* commonly known as “cotton mat” or “blanket weed.”

The Three C's of Fish Habitat

by John P. Newbury, Owner at newburyanglingarts.com

Our summer-long runoff has drawn to a close with the rivers and streams of the Roaring Fork Valley dropping to seasonal flows. Lower autumn and winter stream flows allow the wading angler a better opportunity to fish a stretch of the river more intimately than when floating. Whether you float or wade a river, having the skill to "read the water" will put you in front of more fish more frequently.

Learning to recognize where and how fish exploit their habitat will improve your fishing skill set.

"...having the skill to 'read the water' will put you in front of more fish more frequently."

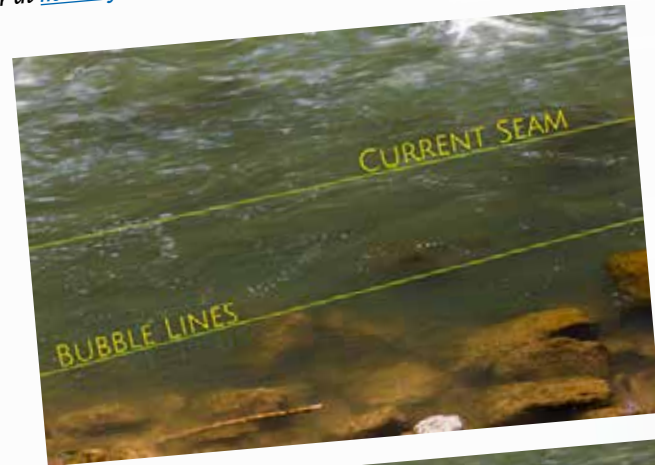
Reading the water is not complicated if you take into consideration that fish need three things for primary survival: a respite from the **current**, **cover** from above and a **conveyor belt** (current that delivers an abundant food source to trout). These three factors can give you several stream-channel features at which to look. When you find a place with all three elements, you have water worthy of fishing.

Respite from the current can come in a couple of forms — physical obstructions and hydraulic dynamics. Trout prefer a current speed in which they can comfortably hold steady while expending the least amount of energy. Look for current rate from a stroll to a brisk walk and a depth of one



to four feet. Fish will hold in much stronger or shallower currents if the bottom rubble is softball to bowling ball-sized. Low-pressure gradients occur on the downstream side of rocks — much like how an airplane wing works — which allows the fish to hold with minimal effort.

When looking for fishable water, look for hydraulic features that funnel drifting material into bubble lanes. The best way to find these bubble lanes or current seams is to look for lines of bubbles drifting in single-file lines.



Photos: John P. Newbury

Observe how the bubbles and foam always seem to take the same path as they get caught into micro-vortices. That is your indication that the currents are also gathering drifting food into a defined path akin to a conveyor belt.

Adding all three elements together is not hard to do. As you move from pool to pool, look for walking-speed currents flowing over softball to bowling ball-sized cobbles that has observable bubble lanes. Then look for other clues as to where the fish might hold nearby while waiting to ambush drifting insects.

Roaring Fork Conservancy promotes stewardship of our rivers through watershed level education, with a mission that inspires us to explore, value and protect the rivers and streams of the Roaring Fork Watershed. Understanding how fish exploit their habitat will help guide you in finding fish and protecting habitats. Keeping the three C's — **current** - **cover**, and a **conveyor belt** — in mind while enjoying your day on the water will make you a better angler and observer, and in turn a better river steward.



Photo: Steve Goff



The Brookshier
Watershed Institute

2019 Fall & 2020 Winter Speaker Series

October 16, 2019

1,000 miles into the future: 150 years after John Wesley Powell's journey into the arid West

A presentation by:

Tom Minckley, Ph.D., Professor of Geology, University of Wyoming

This summer, 63 scientists, artists, authors, journalists, academics and graduate students spent 70 days retracing John Wesley Powell's 1,000 mile journey on the Colorado River. Expedition leader, Dr. Tom Minckley, will share personal stories about this adventure, what stayed the same or changed since Powell was there 150 years ago, and what the next 150 years will hold for the Colorado River basin if we don't heed his and Powell's on-the-ground observations.

November 12, 2019

Science Be Dammed; How ignoring inconvenient science drained the Colorado, and its relevance to the future of the Colorado River

A presentation by:

Eric Kuhn, Retired General Manager of the Colorado River Water Conservation District and coauthor, with John Fleck, of *Science Be Dammed: How Ignoring Inconvenient Science Drained the Colorado River*

In 2018, Eric Kuhn partnered with John Fleck, author of *Water is for Fighting Over and Other Myths about Water in the West*, to write a book about our understanding of Colorado River hydrology. Conventional wisdom is that the compact negotiators did the best they could with a limited gage record that happened to be during a very wet period. Kuhn and Fleck show that contrary to this myth, the politicians, states, and water agencies that shaped the development of the river had the science available to them to make better decisions, but political expedience prevailed and the science was ignored. Today, the Colorado River is overused and facing a future where climate change is reducing its flows. As we shape the future of the Colorado River, will we learn from our past mistakes or will we continue to ignore inconvenient science?

December 12, 2019

Predicting Powder and the Science of Snow with meteorologist Joel Gratz

A presentation by:

Joel Gratz, Founding Meteorologist, Open Snow

Join Joel for a fun and entertaining evening full of snow and science! Joel will present what the latest research says about how far in advance we can predict powder, he'll pinpoint which weather patterns bring the most snow to central Colorado, and he will also take you through a live forecast by showing the same satellite, radar, and weather model maps that he uses to make his daily predictions.

February 13, 2020

Anchor Ice in Mountain Rivers

A presentation by:

Edward Kempema, Ph.D., Senior Research Scientist, University of Wyoming

Anchor ice forms underwater and attaches to the beds of rivers, lakes, and seas in cold regions. It is a fascinating and poorly understood phenomenon. Dr. Kempema, who has studied ice for 40 years, will discuss the conditions leading to anchor ice formation, distribution in small mountain rivers, and impacts on mountain river systems - including winter flooding - and what potential management practices are available.

March 11, 2020

The Amazon River: Facing fears, chasing dreams, and a quest to kayak the largest river from source to sea

A presentation by:

Darcy Gaechter, World Kayaker & Owner/Operator of Small World Adventures in Ecuador

Darcy is the first woman to kayak the Amazon River from source to sea! What did it take for her to make her dream come true? Among stunning scenery and Class V rapids, she also encountered ruthless poachers and narco-traffickers, pled for mercy at the hands of one of the tribe's, and cut her hair to pass as a boy in hopes of saving her life. Darcy will share these stories and more about her 148-day journey down the Amazon River. Her book *Amazon Woman: Facing Fears, Chasing Dreams, and My Quest to Kayak the Largest River from Source to Sea* will also be available for purchase.

Additional details and registration can be found at www.roaringfork.org/events.

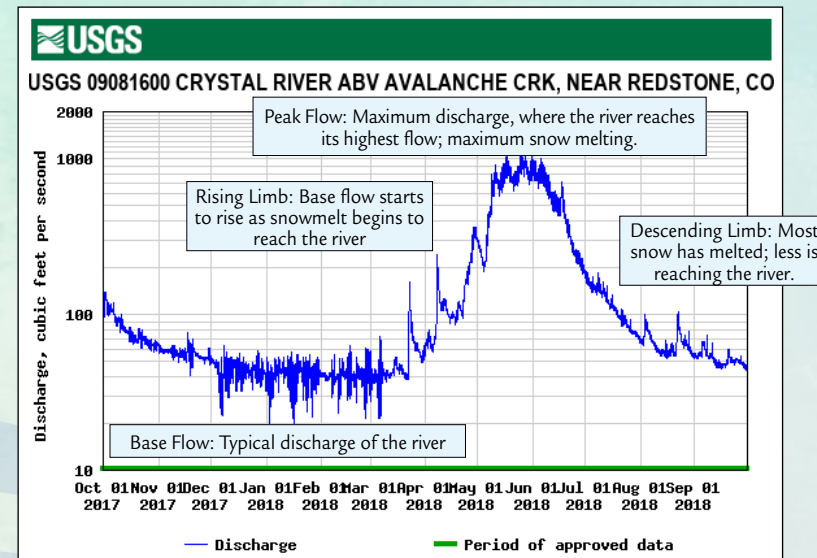
Making the Hydrograph Your Favorite Graph

by Heather Lewin, Director of Watershed Science & Policy

I've been told before that not everyone has a favorite graph, so if you are one of those people still dabbling in pie charts and scatter plots, do I have the graph for you!? The hydrograph will tell you just about everything (ok, maybe not EVERYTHING) you want to know about your favorite river. What is the flow today? Check the hydrograph! What is the base flow? Check the hydrograph! When does the river usually peak? Check the hydrograph! Still seems complicated? Let's break it down.

A “typical” hydrograph in a “typical” water year

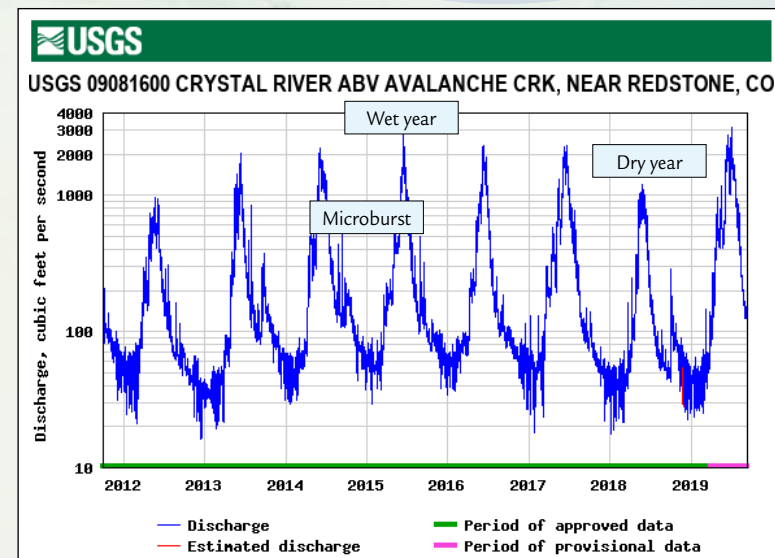
Notice that the river rings in the New Year not on January 1, but October 1. Good idea, river - way to avoid the crowds and cold weather! Well, there may be more to it than that. A water year measures a full year of precipitation, but because most precipitation falls in the winter and melts through the spring and summer, following the Gregorian calendar doesn't make sense. Besides, rivers like to function a bit outside the box. They don't always conform well, no matter how much we continue to try!



Same location, multi-year view

At RFC, we use past and current hydrograph information to assess daily flows for safety and ecological needs, and to compare current to past conditions. Looking at several years worth of data at the same place can tell the story of wet and dry years, fast and slow runoff, and patterns over time, such as shifting peak timing or declining base flows. Hydrographs can also show abnormally high or low flow events, such as microburst or monsoon storms, or ice jam breaks through irregular spikes.

The Crystal River above Redstone is one of the best places in the valley to depict a “typical” hydrograph because it is one of the few places where little water management affects the hydrograph. There are no dams or diversions above this point. The graph typically moves in a smooth curve as snow falls, melts and falls again. But, as many of you know, very little water in the west remains unmanaged. Through reservoirs and diversions, water is put to beneficial use to serve a variety of needs. A managed hydrograph can look quite different.

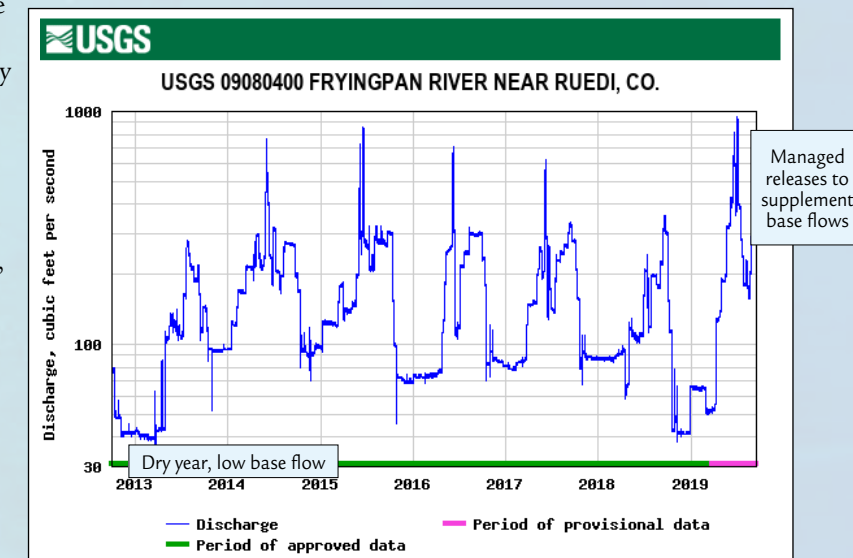
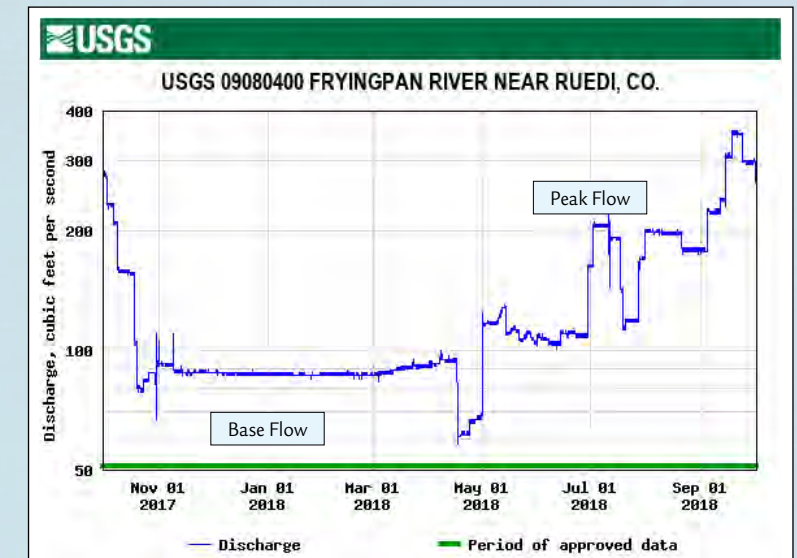


A managed waterway

If we consider a “typical” water year for the Fryingpan River below Ruedi Reservoir, it bares little to no resemblance to the unmanaged hydrograph. The curve depicted at Redstone is replaced by the angular movements of water out of the reservoir. Baseflow remains flat from about November 1 to mid-April. At that point, releases decline – perhaps to match inflow to Ruedi, which is the legal minimum release, or perhaps for human activity such as fish counts or other studies. Flows rise again, and a spring flushing flow takes place in early July. Managing reservoirs with higher flows to mimic the natural hydrograph is important to clean sediments and algae that grow over the winter, and the process benefits the natural geomorphology of the stream. Flows fluctuate through the late summer and fall based on how contract water is allocated – for endangered fish in the “15-Mile Reach,” for irrigation in the Grand Valley, or for other uses before returning to base flows in November. Notice the greatest peak on the Fryingpan often occurs in the fall, based on managed flows, rather than in the late spring or early summer when the “typical” hydrograph peaks.

Managed systems in some ways mimic natural systems, and in some ways look quite different. Considering a managed system hydrograph over several years shows management trends over time. Coupled with anecdotal and biological data, lessons of management impacts and benefits are learned.

Sign up for our weekly river and snowpack reports at www.roaringfork.org/your-watershed/river-flows/



Hydrographs, whether natural or managed, tell a story about the river. From wet years to dry years, there is much to learn from flows and timing. Following trends from year to year, and month to month show cumulative impacts of climate change, and even land use and development.

So now that the hydrograph is firmly established as your favorite graph, visit www.roaringfork.org/your-watershed/river-flows/ and historical hydrographs throughout the watershed!

Students Develop Sense of Place & Connection by Reading Rivers and Watershed Maps

by Megan Dean, Director of Education

We are told in school that life is a reading test. In our watershed education programs, we teach students to explore and understand information illuminated in nature, by discovering how to “see” and “read” the patterns that are embedded in our natural surroundings.

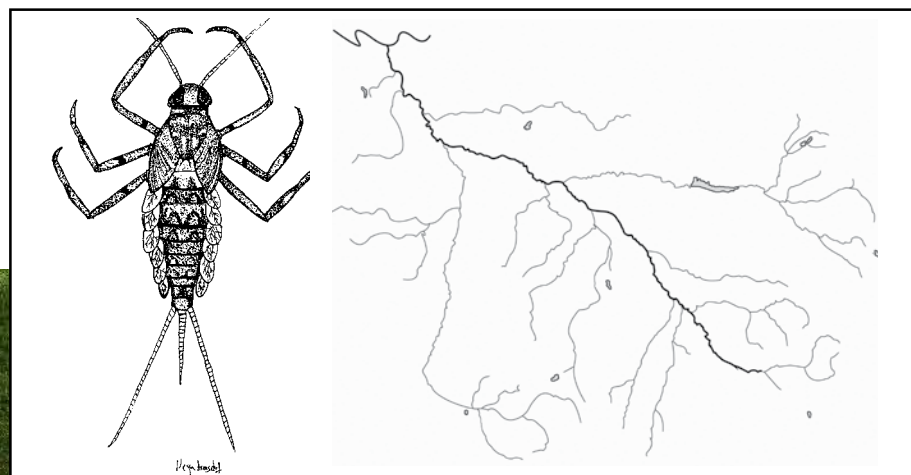
One of the ways we teach students to see patterns is by introducing them to a map of the Roaring Fork Watershed. Students learn to see a similar design and pattern between the physical map of our watershed and the gill structure of a macroinvertebrate. Guiding students to observe and read the patterns of nature allows them to understand the interconnectedness between the systems that construct and define our world.

Students learn to read outside the pages of a book when they are identifying

anatomic structures in riparian animals then comparing that to a dichotomas key that outlines how those species indicate a river’s health. It is incredibly exciting to watch students of all



Students gather knowledge by comparing the geomorphology on Coal Creek to that on the Crystal River. Photo: McKenna Miller



Our 5th grade geomorphology program teaches students to read the path of a river based on its geology, gradient and sinuosity.

(continued)

ages delight in the ability to observe a macroinvertebrate breathing through fluttering gills under a brock scope.

Students also learn to read their surroundings in our geomorphology programs which guide them through assessing the biological, chemical and physical health of our rivers and streams.

Our 5th grade geomorphology program teaches students to read the path of a river based on its geology, gradient and sinuosity.

Students gather knowledge by comparing the geomorphology on Coal Creek to that on the Crystal River.

In order to read the layers of our watershed, students often start with activities that allow them to create and explore their own maps.

For example, a fun activity is to crumple a piece of paper then slowly spread it out allowing the new wrinkles to become mountain ridges and valleys. Coloring the ridges with markers allow them to be more visible. Use a water bottle to make it rain and the marker will bleed and flow down into the valleys of the paper map, simulating a real working watershed!

Once students understand the basic components of how watersheds work, they can move onto more complex maps and models taking



Guiding students to learn about river systems through uncovering the biology, geology and chemistry, layer by layer is like creating a book, chapter by chapter. As students progress through grade levels in school, we are there with programs that build and deepen their river knowledge.

their understanding even deeper. The Enviroscope model allows students to become entities of a community, creating both positive and negative effects. They use the model to

simulate how nonpoint pollution flows through a watershed learning how to create landscaping and structural changes to decrease or eliminate pollutants from entering the watershed.

Looking for a good book to read?

How about one of these, written by two of our upcoming Brooksher Watershed Institute presenters!



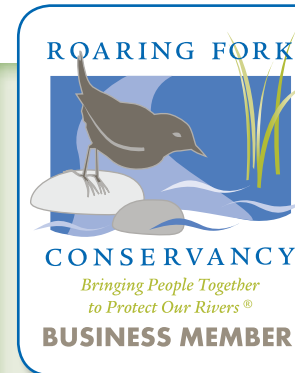
Science Be Dammed: How Ignoring Inconvenient Science Drained the Colorado River by Eric Kuhn and John Fleck

Available at University of Arizona Press



Amazon Woman: Facing Fears, Chasing Dreams, and My Quest to Kayak the Largest River from Source to Sea by Darcy Gaechter

Pre-order now on Amazon.com



2019 PREMIER BUSINESS MEMBERS

Aspen Flyfishing/
Chris Lemons
Aspen Whitewater LLC
Barnes, Pearson &
Associates LLC
Bob Harris
Casey Brewing
Cottle Carr Yaw
Architects Ltd
Crystal Fly Shop
EcoFocused Mobile
Detailing
Elk Mountain
Expeditions
FootSteps Marketing
Proudline Guided
Fly-Fishing
The Romero Group, LLC
The Rulon Kelly Team at
Douglas Elliman
Real Estate
SGM
Ute Mountaineer

STANDARD BUSINESS MEMBERS

M.G. REALTY CO., INC
Dunlop Environmental
Consulting
Harry Teague Architects
mountainFLOW eco-wax
Coldwell Banker Mason
Morse
Blue Sky Woodcraft
Ameristar Parking
Solutions

Thank you for supporting essential river research, education and conservation work!

Staff Flows

Thank you!



Liza Mitchell served as RFC's education program manager since 2015. She combined her education, research and outdoor experiences to create unique, hands-on programs for thousands of students and created partnerships with agencies and organizations that will remain long into the future. Earlier this year, Liza accepted a Natural Resource Planner and Ecologist position with Pitkin County Open Space and Trails. Thank you, Liza, for your hard work and contributions to RFC. We wish you the best in your new position and look forward to continuing to work with you!



Kristen Doyle has served as RFC's watershed educator since 2017. Among her many talents, Kristen brought her research in fisheries to the education programs and to reigniting a citizen science initiative *Hot Spots for Trout* last summer. She is also an incredible artist and used her talents to further evolve RFC's art and science education programs both at The River Center and with partners across the Roaring Fork Valley. Kristen recently accepted a position as the Teen Services Librarian at Basalt Regional Library. We wish you the best in your new position and look forward to working with you in your new role!



Michael Schuster joined RFC in 2015 and worked seasonally through May 2019 as a water quality program associate. During this time he earned a Masters in Environmental Management through Western Colorado University and earlier this summer started a full-time position with the City of Glenwood Springs. Thanks to Mike for 4 years of dedicated service and we wish him the best moving forward!



Matthew Anderson returned to RFC for a third summer to assist our watershed science team as a water quality program associate. Matthew is finishing his senior year in the Environmental Science and Resource Management program at the University of Washington in Seattle. Matthew helped conduct water quality program administration, field-work, data management, and conservation easement monitoring throughout the Roaring Fork watershed. Best of luck on your road to graduation!

What's with the Gray Bird?

The little gray bird in the RFC logo is called an American dipper (*Cinclus mexicanus*), also known as a water ouzel. It lives along healthy mountain streams which provide abundant macroinvertebrates (e.g., aquatic insects) for them to eat, along with diverse, undisturbed riparian habitat.

Look for a dipper the next time you are out on the river. Often found in the fastest-moving section of the river, you can see them standing and "dipping" on a rock, and then suddenly they dive into the water! They swim for short segments in search of the aquatic insects they find so delicious.

Seeing dippers in our local streams lets us know in a quick snapshot that the stream food web is healthy, as the macroinvertebrates they eat are also indicators of healthy streams.



ROARING FORK
CONSERVANCY

*Bringing People Together
to Protect Our Rivers®*

The American dipper continues to remain the perfect "mascot" for RFC – a champion of, and constant presence in, healthy streams of the Roaring Fork Watershed.

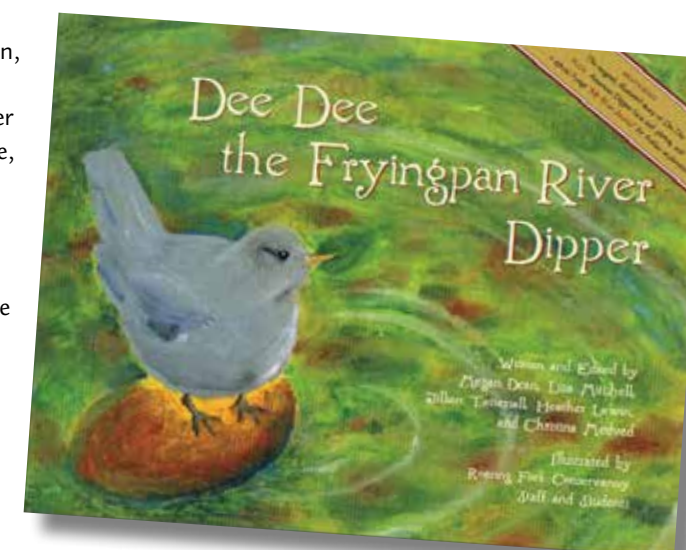
Teach Your Children to Read the River with Dee Dee the Fryingpan River Dipper

You can help teach your children, grandchildren, nieces, nephews and friends how to read the river by introducing them to Dee Dee, an American dipper!

Follow Dee Dee's adventures in the Fryingpan River, then use the five-page River Journal in the back of the book for your own exploring.

Illustrated by 4th graders at Basalt Elementary and written by RFC staff, children and adults of all ages will enjoy and learn from this book (though it is primarily intended for elementary-aged students). *Dee Dee the Fryingpan River Dipper* may be purchased at The River Center in Basalt.

Learn more at www.roaringfork.org/education-and-outreach/american-dipper-childrens-book/



RIVER CURRENTS

is published biannually by Roaring Fork Conservancy. Since 1996, Roaring Fork Conservancy has inspired people to explore, value and protect the Roaring Fork Watershed. We bring people together to protect our rivers and work to keep water in the streams, monitor water quality, and preserve riparian habitat. Roaring Fork Conservancy is an independent 501(c)(3) not-for-profit organization registered in the state of Colorado.

Board of Directors:

Pat McMahon PRESIDENT
George W. Kelly III VICE PRESIDENT
Jennifer Sauer TREASURER
Michelle Schindler SECRETARY
Ted Borchelt
Jeff Conklin
Jim Light
Rick Lofaro EXECUTIVE DIRECTOR
Diane Schwener
Larry Yaw

Staff:

Rick Lofaro
EXECUTIVE DIRECTOR
Elliott Audette
BUSINESS MANAGER
Megan Dean
DIRECTOR OF EDUCATION
Larry Gruel
FINANCE DIRECTOR
Heather Lewin
DIRECTOR OF SCIENCE & POLICY
Christina Medved
DIRECTOR OF COMMUNITY OUTREACH
Chad Rudow
WATER QUALITY PROGRAM MANAGER
Sheryl Sabandal
DEVELOPMENT MANAGER

River Stewards Steering Committee

Nick Kilbourn CHAIR
Colin Cares
Jordan Curet
Claudia Heath
Matt Kelsic
Meaghan Lynch
Leah Mancabelli
Lauren Pierce
Anna Stonehouse
Chris Vaughan

Thanks to our newsletter sponsor:



GRAN FARNUM PRINTING

5TH ANNUAL FLY TYING COMPETITION

FEBRUARY 1, 2020 * 4 - 10 PM

The Topsy Trout, Basalt, CO



Details can be found at roaringfork.org/events

Save the Date

22nd Annual

FRYINGPAN RIVER CLEANUP

April 25, 2020 8:30-11:30am



*A perfect way to celebrate the
50TH ANNIVERSARY
OF EARTH DAY
1970-2020*



ROARING FORK CONSERVANCY
P.O. Box 3349 ~ Basalt, Colorado 81621
(970) 927-1290 ~ www.roaringfork.org

NONPROFIT ORG
U.S. POSTAGE PAID
GLENWOOD SPGS, CO
PERMIT NO. 90

Looking for a unique holiday gift?



Stop by The River Center in Basalt to purchase one-of-a-kind items allowing you to show your RFC support!

Shipping is not available. Limited styles and sizes. Stop in soon!

amazonsmile



When you shop online, log in to www.smile.amazon.com to support RFC!

Once you choose RFC as your designated charity, Amazon will donate 0.5% of your eligible purchases to RFC's Watershed Education, Science and Policy Programs.

GIVE WHERE YOU LIVE, DONATE ONLINE

Visit ColoradoGives.org/RoaringForkConservancy.

When you donate to Roaring Fork Conservancy at ColoradoGives.org, you help us bring people together to protect our rivers, monitor water quality, preserve riparian habitat, and educate the next generation of river stewards.

From all of us at Roaring Fork Conservancy, thank you for your support!

ColoradoGives.org is made possible by Community First Foundation and FirstBank.



Christina Medved

From: christina@roaringfork.org
Sent: Friday, March 27, 2020 6:40 PM
To: Christina Medved
Subject: SPAM - March River Notes | Meet The Feather Thief author, Snowshoe Capitol Creek Ranch, Learn to Fly Fish



March 2020



Snowshoe Capitol Creek Ranch

Monday, March 9

Join Pitkin County Commissioner Steve Child and staff from Pitkin County Open Space and Trails and RFC, on snowshoes through the Capitol Creek Ranch riparian area. We'll wander past beaver ponds and through aspen forests while exploring the history of the property.

Capitol Creek Ranch, an iconic property that is protected by conservation easement within the Pitkin County Open Space and Trails program, was originally owned by the late Bob Child who was integral in many significant conservation efforts in the Roaring Fork Valley starting as early as the 1960s.



This FREE program requires [REGISTRATION](#) before 12pm on Monday, March 9.

This FREE program is brought to you by Pitkin County Open Space and Trails.



Wednesday, March 11, 2020 - 5:30-7:30pm

The Amazon River: Facing fears, chasing dreams and a quest to kayak the largest river from source to sea

A presentation by:

Darcy Gaechter, World Kayaker, Owner/Operator of Small World Adventures in Ecuador, and Author

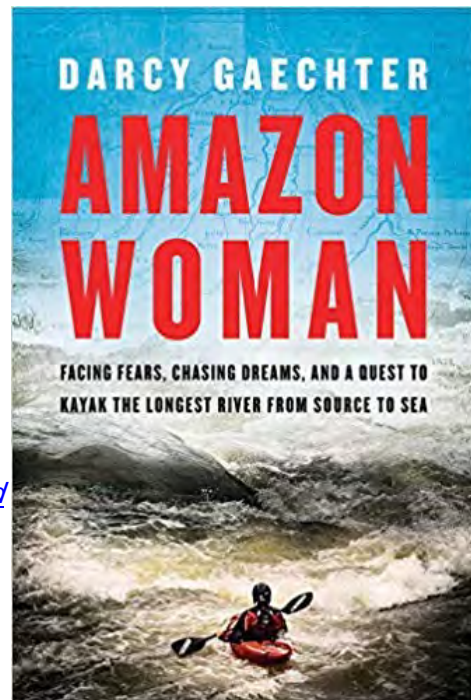
Darcy is the first woman to kayak the Amazon River from source to sea!

What did it take for her to make her dream come true? Among stunning scenery and Class V rapids, she also encountered ruthless poachers and narco-traffickers, pled for mercy at the hands of one of the tribe's, and cut her hair to pass as a boy in hopes of saving her life.

Darcy will share these stories and more about her 148-day journey down the Amazon River. Her book [*Amazon Woman: Facing Fears, Chasing Dreams, and My Quest to Kayak the Largest River from Source to Sea*](#) will also be available for purchase.

This program is FULL!

Join the wait list at www.roaringfork.org/events/



Save the date for this upcoming Brooksher Watershed Institute:

April 9 - *The Feather Thief* author Kirk W. Johnson (details at roaringfork.org/events)

Pitkin County Seeking Comments

North Star Management Plan Open to Public Comment

The 2015 North Star Nature Preserve Management Plan is the focus of an update in 2020. The draft update is open to public comment through April 1. Find links to the draft plan, an executive summary of the plan and a survey to collect public feedback at <https://www.pitkinostprojects.com/north-star-management-plan.html>



Adults: Learn to Fly Fish!

Register NOW for 1-day Clinics

Learn to fly fish from the river experts! Spend a day with RFC staff and certified fly fishing instructors to learn the secrets of the river. We'll observe fish habitats, identify aquatic insects and trout species, demystify artificial fly patterns and which fly to use, learn to cast, and then... fish all afternoon! We'll even provide breakfast refreshments and lunch.

May 2: Women's Only Fly Fishing Clinic
May 9: Beginner Fly Fishing Clinic (co-ed)

Register soon as these clinics fill quickly (and space is limited)!

Registration and additional details can be found at <http://www.roaringfork.org/events/>.



Education Update:

Snow Science Programs

RFC educators have been deeply entrenched in Snow Science programs since the beginning of this year. Students ranging from 4th graders to adults have enjoyed learning and playing in the beautiful snow that contributes 80% of the water feeding our rivers.

Our *Snow to Flow* program on McClure Pass, in partnership with [Natural Resources Conservation Service](#) and hosted by [The Marble Hub](#), guided participants through the science behind studying snow pack. We helped unlock the mystery of how to measure the amount of water snow holds and how water managers use this information to make crucial decisions on water use.



Both adults and school age students enjoy digging snow pits and learning about snow water equivalent with hands-on activities. Students tell us one of the favorite activities is sculpting our watershed in the snow!

Learn more about our Snow Science programs or schedule one with Megan Dean, director of education, at megan@roaringfork.org.

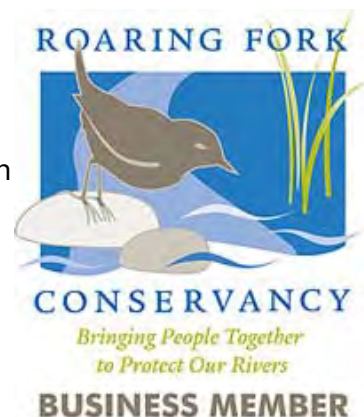
Attention Business Owners!

Clean, reliable water keeps business booming!

Did you know anglers, hunters, and wildlife watchers spent **\$144.7 billion** on activities nationwide in 2011?*

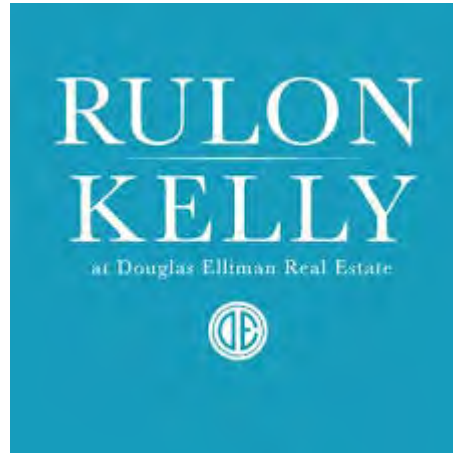
In the Roaring Fork Valley, the economic impact of angling on the Lower Fryingpan River alone is **\$3.8 million annually**, according to a 2014 economic study.**

Show your clients and customers that you support essential river research, education, and conservation work.



[Click HERE to become a 2020 Business Member TODAY!](#)

March's Spotlight Business Member:



The Rulon Kelly Team

at Douglas Elliman Real Estate

The Rulon Kelly Team brings together four full-time Aspen Snowmass Realtors in a unique blend of talent that works under the belief that a team always outperforms an individual effort. Sharing collective ethical standards, operating with honest communication, and working with a collaborative approach, each member brings their individual expertise to the table to create better solutions as a team.

[Contact Us](#) | [Property Search](#) | [Testimonials](#)

[instagram](#) -- [facebook](#) -- [twitter](#)

Thank you
for helping protect our rivers and streams!

ROARING FORK CONSERVANCY

Bringing people together to protect our rivers

P.O. Box 3349, Basalt, Colorado 81621
(970) 927-1290
www.roaringfork.org

*Roaring Fork Conservancy is a 501(c)(3) not-for-profit organization.
Our tax identification number is 84-1375379.*

Donate online by clicking [here](#).



ROARING FORK CONSERVANCY

Snowpack & River Report

Date: March 26, 2020

Time: 9:30am

Summary: Snowpack in the Roaring Fork watershed is at 113% of normal for this time of year. The wet, spring snow we received over the last week increased the snow water equivalent (SWE) at all SNOTEL sites over the last week, with Schofield Pass reporting the greatest increase of 2.3 inches. Cold overnight temperatures especially in the high country are keeping the water frozen as snow so we are not seeing higher stream flows due to melting, just yet, but it will hopefully translate to good flows this spring and summer. According to the Bureau of Reclamation, Ruedi Reservoir releases will increase by 50 cfs today, bringing flows on the Fryingpan River to 185 cfs where it will remain for the near future.

Statewide Snow Water Equivalent (% of Normal)



Roaring Fork Watershed



Station information for each stream gage and SNOTEL site can be found at <http://www.roaringfork.org/your-watershed/river-flow/>. Snowpack data acquired from NRCS. Stream flow data acquired from USGS.

Legend

• Streamflow Gage

❄ SNOTEL Site

SWE = Snow Water Equivalent (inches)
median = median SWE for this date (%)
cfs = cubic feet per second
mean = mean (average) cfs for this date
HF = CWCBS 1st/2nd/3rd Flow water right (4/6)

Flow & Snowpack Colors (% of median or mean)

Blue = above 150%

Teal = 130-149%

Light Green = 110-129%

Green = 90-109%

Yellow = 70-89%

Orange = 50-69%

Red = below 50%

Gray = insufficient data



2018 Annual Report

**EXPLORE
VALUE
PROTECT**

Message from Board President and Executive Director

Looking back, 2018 may have been the most memorable in Roaring Fork Conservancy's (RFC) 22-year history. This year brought so many changes for our organization. Some were positive and exciting, while others were stressful and challenging.

The biggest change was our move from a small corner office to The River Center. The River Center empowers us to fulfill our mission at a higher level, with education programs in the classroom and at the river, water quality testing in our laboratory, and more space to collaborate with our partners – always with a view of the river that brings us together. At the grand opening reception in August - as Governor Hickenlooper and his staff addressed the community and celebrated the Colorado Water Plan and its impacts in the Roaring Fork Valley - we were still in awe that the vision of The River Center was truly a reality.

Now, we are seeing that vision come to fruition beyond the physical building, as we embrace and grow into the endless potential of our new home.

On the other hand, a near-record low snowpack was followed by a hot, dry summer, leading to extremely low river flows and elevated river temperatures. A week after moving into The River Center, the Lake Christine wildfire started less than a quarter mile from our front door. But as Paulo Coelho said, "You drown not by falling into a river, but by staying submerged in it." So we fought our way to the surface, took a big breath, and enacted programs to raise awareness and support stressed river ecosystems. Our most successful program, the *Hot Spots for Trout* voluntary fishing closure, gave fish a break during the hottest part of the day by encouraging anglers to hang up the rod and waders from 2pm to midnight.

RFC has spent the past 22 years *bringing people together to protect our rivers*. As we move into our next 20+ years, we are inspired to continue and grow this mission. The River Center enables us to bring visionaries, researchers, policy-makers, elected officials, and community members together to discuss water issues and share ideas from the local to national level.

We hope you are excited and encouraged as you read through our 2018 accomplishments. If you have not had a chance to visit The River Center, we invite you to stop by for a tour.

Your ongoing support and engagement makes all our work possible. Thank you!



Pat McMahon

Pat McMahon
President,
Board of Directors



Rick Lofaro

Rick Lofaro
Executive Director

How We Bring People Together To Protect Rivers

On June 29, Roaring Fork Conservancy (RFC) staff officially moved into The River Center. This long awaited event was surrounded by excitement, anticipation and boxes. Lots of boxes. However, just four days later the excitement gave way to apprehension, as we evacuated The River Center when the Lake Christine wildfire ignited less than a mile away. When we were allowed to cross the evacuation barriers a few days later and return to the office, the tone, energy and focus of the summer was very different.

Subsequently, RFC received a call from Scott Fitzwilliams, U.S. Forest Service (USFS) Forest Supervisor, asking if RFC would take on the coordination of long-term post-fire restoration and fundraising. Fitzwilliams explained that he and Perry Will, Colorado Parks and Wildlife (CPW) Area Wildlife Manager, had identified RFC as a trusted organization with good-standing relationships among the varied jurisdictions whose scope overlapped the full burn area. RFC was honored to be chosen to fill this role and has since hosted a series of meetings, bringing together officials including USFS, CPW, Natural Resource Conservation Service (NRCS), Town of Basalt, Eagle County and Garfield County. The inaugural meeting was the first opportunity for representatives of these varied groups to gather in one place to discuss their long term roles in the post-fire restoration.

As demonstrated by the Lake Christine wildfire, RFC’s tagline of “bringing people together to protect our rivers,” is more applicable now than ever. In addition to uniting leadership from affected communities, RFC has also broadened the scope of our Science & Policy Program and now serves as a hub and coordinating entity for a variety of watershed projects.

On the Crystal River, we continue to work towards implementation of the Crystal River Management Plan, partnering with the Town of Carbondale, American Rivers, Aspen Valley Land Trust and others to pilot restoration projects at Riverfront Park and ditch efficiencies on the Weaver Ditch.

On the Fryingpan River, we were able to work with the Colorado Water Conservation Board, Colorado River Water Conservation District (River District) and Ruedi Water and Power Authority to help manage reservoir releases to increase benefits to local streams. This summer, when the Roaring Fork River was running low with precariously high temperatures (see *Hot Spots for Trout* on page 14), the River District was able to coordinate reservoir releases so that water continued to flow from the Fryingpan into the Lower Roaring Fork, reducing stream temperatures and elevating base flows to help flush any potential sediment pulses from the Lake Christine wildfire. RFC also worked to orchestrate a lease of 3,500 acre feet of River District contract water, stored in Ruedi Reservoir, to benefit winter base flows. The intent is to minimize anchor ice formation and impacts to benefit aquatic life. Releases began December 29, 2018.

Using the River Center as an anchor and a catalyst, the Science and Policy team will continue to nurture relationships, bring people together and think ahead so that when future environmental challenges occur in the Roaring Fork Valley, affected communities can continue to rely on RFC’s expertise and established partnership infrastructure.

“The White River National Forest has had a long relationship with Roaring Fork Conservancy working on a range of watershed projects. As the leader in watershed science and education in the Valley, Roaring Fork Conservancy once again stepped up when needed in order to assist with the Lake Christine wildfire restoration efforts. I could think of no better organization to help facilitate the continuing efforts of numerous agencies to address the impacts of the Lake Christine wildfire while engaging and educating the public.”

— Steve Hunter, PE,
Burned Area Emergency Response (BAER) Specialist, U.S. Forest Service





Photo: Douglas Pratte

Watershed Science & Policy

RFC's Science and Policy program addresses water issues, river health, and related land management through participation in public processes. In 2018, RFC took the opportunity to influence and advise agencies at the local, state and federal levels on a variety of important watershed issues.

BLM Property

RFC identified a water quality and riparian habitat concern on Bureau of Land Management (BLM) property along Cattle Creek. After submitting a letter of concern to BLM proposing a site cleanup and protection from future degradation, the action was approved and implemented.

Fryingpan River

Worked with Colorado River Water Conservation District's coordination of reservoir releases to increase the flows into the Fryingpan River mid-summer to benefit Roaring Fork River temperatures and base flows.

City of Glenwood Springs

Reviewed plans and submitted comments to inform elected officials on potential impacts to rivers, riparian areas and stormwater management for the City of Glenwood Springs proposed redevelopment of a brownfield site within City limits near the confluence of the Roaring Fork and Colorado Rivers.

In addition, Glenwood Springs River Commission and RFC developed and proposed Riparian Setback Regulations to Glenwood Springs City Council. RFC submitted comments and attended a work session to support the regulations, explain the importance of riparian areas and provide the science behind the proposed regulations.

County Line Project

Submitted a comment letter to the U.S. Forest Service regarding the proposed County Line Project in the Fourmile Creek, Thompson Creek and Crystal River watersheds. Primary goals of the project are to improve forest health and recreation opportunity. RFC's comment letter encouraged protection of stream and riparian health and related use of best management practices throughout the project.

Ruedi Reservoir

Coordinated the lease of 3,500 acre feet of Colorado River Water Conservation District contract water stored in Ruedi Reservoir to enhance winter base flows on the Fryingpan River and benefit aquatic life. The lease was funded by the Colorado Water Conservation Board's Stream and Lake Protection Program.

Roaring Fork Watershed Plan

Re-engaged numerous public, private and non-profit entities in the update of the Roaring Fork Watershed Plan through the first Roaring Fork Watershed Summit. The goal of the revision is to track progress, streamline, provide clarity, improve accessibility and update any information that is no longer relevant.

Crystal River

RFC hosted a Restoration Workshop on the Crystal River, and from that created a working group to analyze and prioritize restoration potential, feasibility and benefit.

Lake Christine Wildfire

Assembled and led meetings with the Lake Christine Technical Advisory Group to support communication between active agencies and facilitate long term restoration planning and projects.

The River Center: A Great Field Trip Destination

The River Center officially opened on August 10, 2018, and that very same week dozens of youngsters entered its doors for the first time to participate in RFC's Water Education programs. We didn't stay inside for long! The beautiful summer weather and the nearby Roaring Fork River beckoned us outside to explore, discover and learn together. In the first five months, The River Center welcomed over 700 youths from schools, clubs and camps to our stunning new facility. Nestled between the Lake Christine State Wildlife Area, the Roaring Fork River, Old Pond Park, and downtown Basalt, the setting facilitates authentic learning. It's the perfect place for a fun-filled, educational field trip!

There are endless opportunities for hosting groups of all ages and levels of curiosity here. The indoor classroom space provides flexibility and options when the weather prevents outdoor exploration; it can also be used as an area to discuss scientific protocols before taking our water quality or macroinvertebrate equipment outdoors for some riverside lab work. On a tour around the pond and to the river we can

provide positive outdoor experiences that connect people to their environment as we explore healthy riparian habitat, watch the river flow and see signs of wildlife all around. We use the surrounding topography and the basin-like shape of The River Center's roof to help define and teach about watersheds. And, by pointing to nearby hillside that was burned in the Lake Christine wildfire, we can begin a discussion on RFC's holistic approach to protecting rivers—whatever happens on land has the potential to impact rivers.

The energy and enthusiasm continues to grow around the education programs at The River Center. We are reaching new audiences, developing new partnerships and revamping our curriculum throughout this first year in our new home. We strive to enhance our water education while continuing to provide relevant, engaging programs. Our best inspiration comes unsolicited, directly from the mouths of our students. One student on a field trip to The River Center this fall was overheard shouting to his classmates that this was "way better than science class!"

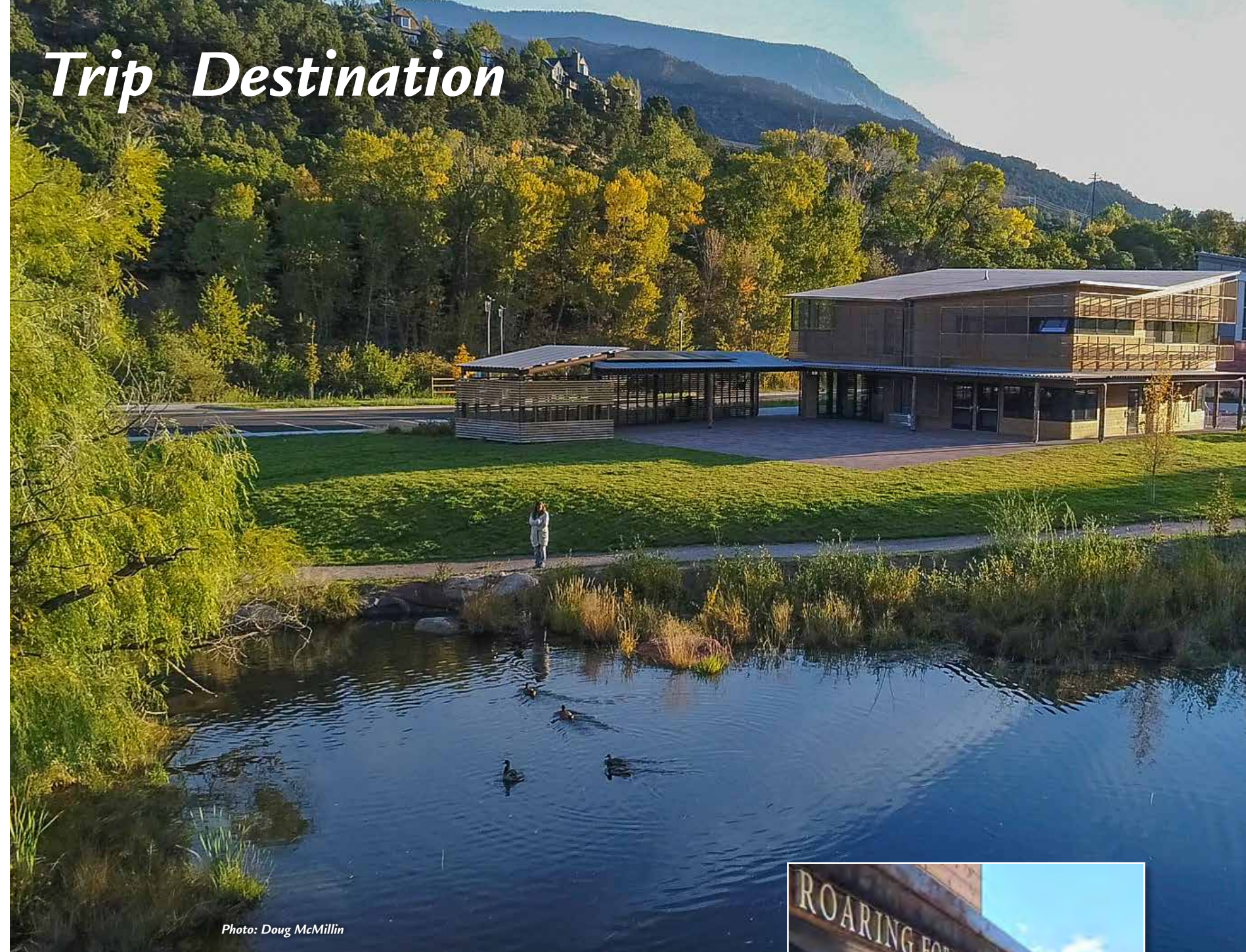


Photo: Doug McMillin

"I wanted to thank you for being such an amazingly fantastic resource for SO many students for these several years! I have cultivated a fine appreciation of the efforts of RFC towards the understanding of water issues locally and globally. I am honored to have had the opportunity to work and learn from and with you. Keep up the great work!"

— Chris Wheatley,
Teacher, Aspen High School





EDUCATION IMPACTS

Roaring Fork Conservancy educators taught **276** education programs making over **6,250** contacts in 2018!

COMMUNITY EDUCATION

24 Watershed Exploration opportunities were offered in 2018, including river floats, hikes through riparian habitats, water diversion project tours, snowshoe hikes, and excursions to view fireflies in rare thermal wetlands.

421 Participants in 2018 Watershed Explorations.



SCHOOL PROGRAMS

Roaring Fork Conservancy educators taught **213** river and watershed related school programs reaching

4,249 STUDENTS

2,930 Elementary School students

989 Middle School students

261 High School students

69 College students

NEW IN 2018

303 students were read RFC's first children's book *Dee Dee the Fryingpan River Dipper* and participated in a corresponding art and science program.

362 local middle school students learned about watersheds and then floated on our local rivers, for the first time, through RFC's Youth River Stewardship Project.

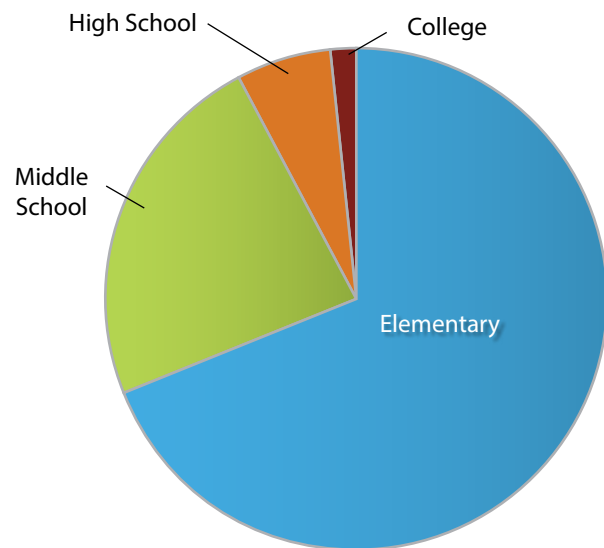


Photo: Cathy Miller



TEACHER & COMMUNITY PROFESSIONAL DEVELOPMENT

28 Teachers and volunteers trained in the National Fishing in Schools Program.

25 Participants in our 1-day Women's Fly Fishing Clinic and 1-day Adult Beginner Fly Fishing Clinic.

55 1st year raft guides received River Ecology Interpretation training.

Community Outreach and Engagement



Fryingpan River Cleanup

The 20th Annual Fryingpan River Cleanup drew over 160 residents and visitors to pick up trash along 14 miles of road adjacent to the Fryingpan River, the Roaring Fork River through Basalt, and Lake Christine. These committed, hard-working volunteers showed up in frigid temperatures after a fresh snowfall, helping ensure healthy Gold Medal waters in Basalt.

Annual River Float

The best way to learn about the river, is to get on it! Since 2004, RFC has hosted an annual river float to teach participants about the local wildlife, water issues, riparian habitat, and point out a few of our conservation easements along the way. This year we had over 150 people participate in the float, BBQ lunch and festivities.

Western Colorado Outdoor & Sportsman Expo, Fly Fishers International Fly Fishing Show

Over 100 people learned first-hand about RFC's science, policy and education programs when they stopped by our booth at the first Western Colorado Outdoor and Sportsman Expo in Eagle and Fly Fishers International Fly Fishing Show in Montrose. These new venues gave us an opportunity to share ways outdoor recreationists can protect rivers, and recruit new RFC members and Watershed Exploration participants.

River Center Grand Opening

Over 300 people from across Colorado attended The River Center Ribbon Cutting Ceremony and Grand Opening Festivities in August. Friends, family, donors, local elected officials, Governor Hickenlooper, Former Governor Ritter and Chairman of Colorado's Interbasin Compact Committee John Stulp were among those who celebrated with us.

Crooked Creek Volunteer Wetland Restoration Project

RFC partnered with Roaring Fork Outdoor Volunteers, Wilderness Workshop, and the United States Forest Service on the 2018 Crooked Creek Volunteer Wetland Project. This was the third and final phase of a wetland restoration project in the headwaters of the Fryingpan River Valley near Crooked Creek Reservoir. Approximately 45 staff and volunteers planted hundreds of wetland plants, spread native seed, and hauled rock over a work weekend.

Russian Olive Removal

For the second consecutive year, RFC worked with students and staff from Colorado Rocky Mountain School to identify and remove Russian Olive trees (an invasive species) from the campus, riparian areas and agricultural fields. The removal of these trees will help improve riparian habitat and diversity.

Rain Barrel Workshop

With collaboration and sponsorship from the City of Aspen, RFC taught 13 Pitkin County residents about rainwater harvesting, rain barrel installation and maintenance, rain barrel regulations in accordance with Colorado Water Law, and went home with an installation-ready rain barrel.

Qualified Water Efficient Landscaper Certification

RFC partnered with the City of Aspen to develop and teach Colorado's first Qualified Water Efficient Landscaper (QWEL) training. QWEL is an Environmental Protection Agency WaterSense professional certification program teaching participants about water efficient and sustainable landscapes, especially in the arid west.

River Stewards

RFC's River Stewards, a volunteer group of young professionals, spearhead community engagement events to inspire young river enthusiasts to explore, value and protect the Roaring Fork Watershed. Events in 2018 included:

- Engaging diners with fly casting demonstrations and tips at Aspen Skiing Company's Farm to Table Dinners at Elk Camp in Snowmass
- Hosting the RFC display and Water Wheel of Trivia at the Fly Fishing Film Tour in Aspen
- Supporting RFC's Annual River Float

Hot Spots for Trout:

The year 2018 may be remembered as one of the most intense drought years in over a decade, characterized by minimal snowpack and precipitation, hot temperatures, low stream flows and the Lake Christine wildfire. These conditions affect water quality of streams, including significant and reverberating impacts from increased water temperatures. As flows decrease, water temperatures rise, a trend which becomes more dramatic as flows drop lower and lower.

Warm temperatures can cause significant stress on aquatic organisms such as fish and insects. Rising stream temperatures decrease the amount of oxygen water can hold, but increase the oxygen required by aquatic species to maintain bodily functions.

In response to these concerns, RFC revamped a citizen science project originally introduced in 2012— *Hot Spots for Trout* — to monitor local stream temperatures. Between June and September, 63 volunteers collected 280 temperature measurements on streams and rivers throughout the Roaring Fork Watershed! Data was submitted via cell phone app or online at CitSci.org, a citizen science platform created by Colorado State University. This information allowed RFC to gather watershed-wide data and identify areas of concern. RFC water quality staff then installed temperature loggers at four of these areas along the lower Roaring Fork and Crystal Rivers. These loggers collected and stored stream temperature measurements every half hour, 24 hours a day, throughout the summer. Staff downloaded data weekly to monitor temperature levels and shared this data with Colorado Parks and Wildlife (CPW).

Measurements submitted by *Hot Spots for Trout* volunteers, combined with RFC's rigorous temperature logger data, helped develop a detailed picture of temperature levels and fluctuations throughout the watershed – air temperatures of 90°+ from Glenwood Springs to Aspen and river flows at 1/3 to 1/6 of average combined to elevate water temperatures to a concerning level. RFC worked closely with the Roaring Fork Fishing Guide Alliance and CPW hosting weekly conference calls discussing responses to these conditions. As a result, a new voluntary fishing closure from 2 PM to midnight was initiated, giving the trout a break during the hottest part of the day. Support and participation from the commercial fishing industry and the angling public at large was integral to the program's success.

This project highlights how data can drive action and collaboration, leading to meaningful protection for local streams and the lives that depend on them.

Connecting Data to Action



“Roaring Fork Conservancy is an excellent partner in raising awareness around the health of our local rivers and fisheries. In a challenging low water year like the summer of 2018, RFC helped get the word out that anglers had the ability to lessen the impacts of a hot, dry summer on our renowned fisheries. They gave the community an excellent tool (*Hot Spots for Trout*) to stay mindful on what conditions were in the rivers and cultivated support for the conscientious practices identified in CPW's Voluntary Fishing Closures that gave our local trout a break during a stressful time.”

— Kendall Bakich,
Aquatic Biologist, Colorado Parks and Wildlife

Photo: Jordan Curet

Water Quality Projects



Cattle Creek

This was the fourth consecutive year RFC conducted targeted biological and chemical water quality monitoring on Cattle Creek. This data has new importance, documenting baseline conditions prior to possible Lake Christine wildfire impacts, which burned in Cattle Creek headwaters.

In 2018, RFC continued to address the health of Cattle Creek with funding from Garfield and Eagle Counties. Water quality and stream flows were measured throughout the year at three sites, documenting the lowest flow conditions since the study began. Macroinvertebrate samples were collected above and below a newly installed diversion

structure on Lower Cattle Creek to help understand its impacts on macroinvertebrate populations.

In effort to continue to engage the community and improve creek health, RFC and Garfield County hosted a stakeholder meeting to present study updates and provide riparian and septic system best management practices. RFC also partnered with the Bureau of Land Management (BLM), Garfield County, and Rocky Mountain Youth Corps to conduct a trash cleanup and fence pull on BLM property along Middle Cattle Creek. In total, 2,260 pounds of trash, debris, and fencing were removed from the property!

Fryingpan River

For the fifth consecutive year, RFC surveyed the levels of the algae *Didymosphenia geminata* (a.k.a. didymo and rock snot) levels in the Fryingpan River. Surveys of Didymo stream bed coverage and basic water quality monitoring were conducted at 7 locations in the spring, summer and fall.

RFC maintained temperature loggers at 3 sites along the Fryingpan River. These loggers have operated year-round since 2013, providing 5 years of continuous water temperature data.

Water Quality Accomplishments

Partnered with volunteer Stream Teams to conduct regular water quality monitoring at 22 Roaring Fork Watershed sites, which included 106 sampling events and 15 volunteers working a combined 148 hours.

Upgraded to a new multi-parameter sampling instrument, with funding from Aspen Skiing Company's Environment Foundation, to enhance RFC's continuing efforts to monitor the health of streams and rivers throughout the Roaring Fork Watershed.

Assisted with the annual statewide training of over 60 new Colorado River Watch participants in water quality monitoring protocols and measuring in-stream properties.

Moved into the new Water Quality Lab in The River Center. This significant upgrade to RFC's water quality program is utilized as a staging area for field work, classroom for water quality lessons, and laboratory for processing and analyzing samples by staff and Stream Team volunteers.



Water temperature logger



Gifts and Contributions

Roaring Fork Conservancy acknowledges our generous donors and program sponsors. Your contributions enable us to continue our watershed education programs, science and policy work. Thank you for ensuring our work will continue for many years.

\$100,000+	Charlotte & Dan Blanks Gina & Tucker Bridwell Eleanor & Hal Davis Lester Houtz & Valerie Anderson Judith & Nick Huston Ann & Joe Kercheville Bonnie & Harold Kloosterman Claudia & Fred Lummis Wild Waters Foundation
\$50,000 - \$99,999	Peppy & Wally Dallenbach, Colorado 500, Inc. Richard Arbaney Michael & Gail Attas Gary Blackie Ashley & Scott Bohn Pat & Jane Bolin Family Foundation Jane A. Lehman and Alan G. Lehman Foundation Norm Brown Stephani & Stan Bunting Debbie Sands Carson Shawn Cheadle Muffy & Andy DiSabatino Elizabeth & Christopher Dorr Shel & Clayton Erikson Anonymus Stanley D. Gertzbein & Marianne Antoniak Denise & Andy Goldfarb Hildebrand Fund at the Greater Houston Community Foundation Ruthie & Dave Hoff The Horizon Foundation Natalie & Duwayne Miller Robert Pew & Susan Taylor RCG Fund Betty & Jan Rietdijk Michelle & Dieter Schindler Maren & Don Schuster Wendy & John W. Seiple Judy & Charles Tate Thendara Foundation Kay & Robert Watson Corinne & Paul Wood
\$25,000- \$49,999	\$3,000-\$5,999 Judy & David Baum Boettcher Foundation Mary & Jim Griffith Jane & Tim McMahon
\$15,000-\$24,999	\$1,000-\$2,999 Anheuser-Busch John Scott Arnoldy Ashley Friedman Advised Fund at
\$10,000 - \$14,999	
Teresa & Steven Beal Barbara & Franklin Carson Pat Cooper Jim Finch Anonymous Melissa & David Hotchkin Stacey & George Kelly Randy & Ken Kendrick Amy & Tim Leach Clarisa & Tom McMahon Carolyn & Dick Shell The John Denver Aspenglow Fund William & Marie Wise Family Foundation City of Aspen	
\$6,000 - \$9,999	
Janice & Philip Beck Louise & Clay Bennett	

Aspen Community Foundation Aspen Trail Finder Roaring Fork Fund/ROFO Fund at Aspen Community Foundation Bonner & George Ball Annette & Ted Borchelt Sue & Mike Bowlin Sarah Broughton and John Rowland Richard Broussard Amy Carter Cather’s Home Furnishings Betsy & Jim Chaffin John & Amy Griffith Charters Jane & Bob Clark Tom Clark & Clark’s Market Patsy & George Conrades Cottle Carr Yaw Architects Ltd Anne & Les Csorba T. Danis Charitable Foundation Mary Charles & Jay Davis Mara & David Deniger DHM Design Corporation Laura Donnelley Patrick Andrew Dunigan Anonymous Beth & Tom Eckert Ernst & Wilma Martens Foundation Mary & Paul Fee Gary & Susie Fisher Judith Fisher Forever Our Rivers Foundation Harry Frampton Frying Pan Canyon Ranch Alfred Gardner Karen Gray-Krehbiel & John Krehbiel Jr. Gabrielle Greeves Jennifer & Cap Grossman Andy Gunion Frank J. Guyol III Charitable Fund of the St Louis Community Foundation Helen & Charles Burnett Pati Hensley Andrea Rossetti & Eric Hollerbach Adam Holt William Ewing Foundation Carol & Michael Hundert Beardsley Family Fund Kiryle Foundation	Mike and Laura Kaplan Advised Fund at Aspen Community Foundation Lolly Kelly Sally & Jim Klingbeil Ann & Tom Korologos Kovler Family Foundation Mark Lacy & Sharon Clarke Michael Latousek Erika & Rob Leavitt Dianne & James Light Laura & John Marlow Laurie & John McBride Jeanie & John Morris Margaret A. Frank Fund at The Chicago Community Foundation Ann Mulroy Becky & Michael Murray Jane & Clarke Nims Sue & Kirk Patrick Prehm Ranch Sue & Walt Rakowich Reese Henry & Company, Inc. Bill Riffle & Ruann Ernst Rotary Club - Snowmass Village Paul A. Salmen, M.D, & Nancy R. Reinisch Mary & Pat Scanlan Lorraine & Mark Schapiro Nancy & John Schneider AJ & Michael Thompson Anne & William Tobey Betsy & Charlie Townsend Carol & Mack Trapp Joseph A. Tumminello Mary Ann & John Virant Gayle Waterman Beaufort Foundation Pat Whitaker & Richard Miles Sarah & Robert Woods Paul J. Hoenmans & Judith Zee Steinberg Advised Fund at Aspen Community Foundation
\$500-\$999	
Gayle & Jonathan Armytage Stephen & Susan Baird Employees of Morgan Stanley Elyse Elliott & Jeremy Bernstein Molly M. Brooks Cinda & Michael Carron Lise & Howard Cohen	

Carolyn & Dr. Nick Cole Brittany & Jeff Conklin Vicki & Johnny Cronin Robert Cross Mac Cunningham Karen & Robert Davis Sherry Ann & Edward Dayton Greg Didier & Terry Rogers Caroline W. Duell Janice & Leroy Duroux Janet & Robert J. Firth Anonymous Laney Wunderlich Fries Jack McKay & Leslie Ann Gallagher Berthod Motors c/o Don Gerbaz Jeanette & Scott Gilbert Jim Gilchrist & Lynn Nichols Barbara Hammer Cindy & Arthur Harding, Jr. Sue & Robert Hess Julia & Ken Hirsch Marnie & Lee Hogan Kay & Ned Holmes Margaret Idema Gretchen & Peter Jameson Monica & Richard Jefferies John Kuck Jan & Jim Kingham Nancy & Michael Kish Ramsey & Steve Kropf Marianne & Bill Lederer Judith & Amory Lovins Kim & William Madden Debra & Reagan Majoria Marcia & Don Flaks Kirsten & Gerald McDaniel Sally & Mike McLarry Cynthia Calvin & Mac McShane Beth & Kent Meager Fran & Jack Mikaloff Michael Miller & Carol Murphy Doyen & James Mitchell Jakob & Genna Moe Christy & Richard Montgomery Jean Moore Mount Sopris Conservation District Michael B. Nathanson Andrew Nolan Wendy & Roy Nunn Hensley & James Peterson Libby Pettit Edgell Pyles & Martha Pickett Tim Racke The Arches Foundation Hope & John Reese
--

Kristen & Troy Rhudy Judy & Jim Rifkin Donna & Gino Rossetti Ruth & Dan Flournoy Anita & Merlyn Sampels Katie & H.C. Van Schaack Schmueser Gordon Meyer Jim Schreier Diane & Rob Schwener Trish & Mark Seaman Sarah & Richard Shaw Sien Energy Company Talbott Simonds Martha & Thomas Singleton Shirley Sloan Maria & Jock Stafford Sandy & Stephen Stay John Swomley & Jennifer Roberts The Robert and Margaret McNamara Foundation #3 Suzanne & Michael Vernon Connie & Jon Warnick Cynthia Wayburn Allyson & Walter Weathers Patricia & Jay Webster Letitia Wenisch Sherry & Brit White Dee Wilkins Donn Willins Jean & Bill Wunderlich
\$200-\$499
Cindy & Daniel Adams Suzanne & Michael Ainslie Sharon & Bruce Anderson Ann Korologos Gallery Aspen Community School Students Aspen Whitewater, LLC Becky Ayres Kathy & Carter Barger Barnes, Pearson & Associates, LLC Amy Barrow Chuck Bellock & Maggie Morrison Lynn & Bruce Bowen William Browning Troy Casey Donna & Steve Chase Anonymous Marcia Corbin Nancy & Mike Dean Eco-Products Jennifer & Stephen Ellsperman Cinda & Donnelley Erdman Nancy Ferrillo

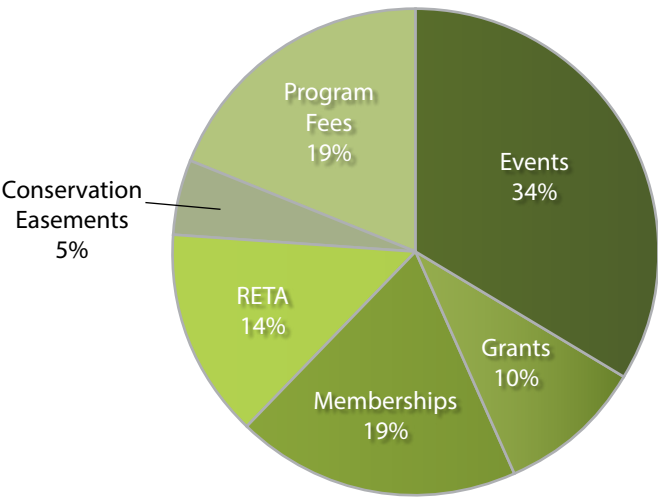
William A. Fisher David Fleisher & Gina Berko Wes Fleming Jane & Bill Frazer Amy & Robert French Donna & Jim Fritz Charlene & Stan Gardner Gina L Giuliani Laura & Javier Gonzalez-Bringas Chip Griffith Jen & Matt Hamilton Margot & Dick Hampleman Matt Armentrout c/o HTA Kristen Henry Nancy & Peter Hoffmann Katie & Rob Holton Janis & George Huggins Mandy Hughes Benjamin C. Huneke John Christie Nancy Johnson Sandy & Peter Johnson CP & Stephen Kanipe Chris Keller Jeffrey W Keller Tammy & Tom Kenning Cil Klamper Sara Kurz Chris Lemons Bailey R. Leppek Daylene & Gary Lichtenwalter Casey & John Livingston Rich Lofaro Jack Murphy Mechelle & Tony Lugard Maley Building Corporation Michael Manicki Suzy & Bill McKee Lindy & Tom Melberg Pam E. Moore Rick Morrison Emily & Tom Neel Rick Neiley & Maria Maniscalchi Bill Neveu Leslie P. Neveu Vince Nichols Janet & Robert Olson Winston Padgett Ginny Parker Anonymous Frank S. Peters & Marjory M. Musgrave Jayne & Bill Poss Louisa & John Ritsick Mark Rozeboom

Sydney & Robert Rupar Lois & Tom Sando Andy Siefkes Lawrence J. Slater Ann Smock Lettice & Walter Stuart Sunsense Inc. Lucia Swanson Sharon & Frank Taverna Timberline Bank Trout Bandits - Max Rand & Jennifer Balmes Trout Unlimited Ferdinand Hayden Chapter Pam & Dan Turley Mike Turner Ute Mountaineer Valley View Hospital Foundation Cher R. Vincent Stella A. & Michael Wagner Jane & Bruce Warren Margie Weber Jacque & Tim Whatsitt Donna & Roy Wiedinmyer Stephanie Williams Susan & David Young Susan D. and David B. Young Charitable Trust
\$100-\$199
Anita & Paul Adolph American Express Company - Employee Giving Program Brian Anacker Angela & Gary Evans Kelly S. Atteridg Gary Augustson Justin Barker Darlene Barrailier Amy Behrhorst David Behrhorst & Donna Fisher Tim & Charla Belinski Sallie & Tom Bernard Joy Blong Caroline Bradford Carrie Bradford Jill & Michael Briggs Margie & Paul Broome Darrell Brown & Suzanne McNitt Shelley Burke & Al Nemoff Susan Capitelli Robert Cardwell Colin Cares Courtlyn Carpenter Caroline Cole

Christy & Steve Clettenberg	Ann Koveleski	Heather & Greg Rydell	Oni Butterfly	David Hamilton	Becky & Jack LaCroix	Craig Newkirk	Anda & Ryan Smalls
Terry Conklin	Mary & Peter Kurtz	Lee & Lou Schaufele	Betty Cabral	Richard Hart	Barbara & Michael Larime	Sarah Oates	Joshua Smit
David Corbin	Meta Alice Keith Bratten	Scott Schreiber	Rob Cairncross	Carol & Judson Hawk	Ann Larson	Richard Parachini	Tatyana Stevens
Susan & John Cottle	Foundation	Seven Star Rebekah Lodge No. 91	James R Campbell	Thomas Headlee	Brandi Parsley & Andrew Larson	Scott Perry	Marcy Stumpf
Pamela M. Cunningham	Thomas & Scottie Leddy	Earlene & Herb Seymour	Helen & Roger Carlsen	Caitlin & Jamin Heady-Smith	Katie Laven	Nancy Peterson	Patti & Steve Sundermann
Cynthia & Fisher Trigg	Marilyn & Henry Lee	Rick Smidt	Sue Anne Carnahan	Claudia Heath	Chris Lawrence	Kim & Mike Petrie	Kathleen Sydoryk
Paul D’Amato & Beth Cashdan	Jean & Richard Leety	Ashley Smith	Tyler Cathcart	Luke Hecht	Shana, Jack, and Garrett LeNeveu	Sarah E. Pickard	Dianne & Dale Thiel
Mia F. D’Angelo	John R. Lewin, Jr. & Heather	Aspen Snowmass Sotheby’s	Toni Cerise	Dick Helmke & Marice Doll	Ben Levy	Kyle H. Pieti	Kristin Tita
Kristen A. Doyle	Tattersall Lewin	International Realty	Molly & Steven Child	Tat & Bobbie Hillman	Margaret & Donald LoFaro	Susan H. Planck	Christopher A Trautner
Blue Sky Adventures	Christine & Andrew Light	Lorraine & Pat Spector	Nathan Childs	Ann Hodges	Carla Joy Lona	James L. Pustizzi	Tarn Udall
Janis Dybdahl	Carol & Bill Lightstone	Paul Squadrito	Tania Clark	Linda Hoffman	Jenny Long Murphy & Edwin	Joanne Pustizzi	Carrie & Matt Vickers
Mary Dybicz	Lindsay & Rick Lofaro	John Stickney & Lee Beck	Clifton Colia	Samantha Hoffmann	Murphy	Dana Reynolds	Jeff Wadley
Patricia Eagling	Verna Lofaro	Lisa Stoeffler	Barbara Collins	Ed Holub	John B. Loomis	Rachel Richards	Lisa Waldman & Tom Stiles
Don & Susan Edmonds	Judi & Bob Loubier	Debbie Stonecipher	Michelle Collins	Ann Hopkinson	Sara Luongo	Lynette Richardson	Coleman P. Walker
Ellen T. Knous, CPA	Meaghan Lynch	Lauren Street	Community First Foundation	Michael Horvath	Grayson S Luther	Angie M. Riley	Ross Walker
Mary Ann & Lee A. Erb	Valerie J. MacDonald	Shelle DeBeque & Hank van Berlo	The Kroger Company	Ryder N. Hutchinson	Anonymous	Michael G. Rosenberg	Brett Wamsley
Erin Tiffany Erickson	Megan C. Malone	Gerard VanderBeek	Peter Coppolillo	Anonymous	Anonymous	Tiffanie & Chad Rudow	Austin Wand
Sandra Eskin	Martin Manosevitz	Jorge E. Vargas	Janet Coursey	Jo & Wayne Ives	Kort Marques	Trudy & Fritz Rudow	Donna & Tom Ward
Lee Ann Eustis	Stephen C. Martin	Chris W. Vaughan	Sam Cox	Tom Jankovsky	Becky Matsen	FootSteps Marketing	Anne Ware
Sarah Fachs	Dave Mayer	Chris Vaughn	Leslie Curley	Ryan Jarvis	Chip McCrory & Rachel Dayton	Suzanne Scheet	Gretchen Weber
Bill Fales & Marj Perry	Dottie & Buzz McArthur	Melissa Waters	Lisa Dancing-Light	Jim & Jeannie Jensen	Francine & Steven McFadden	Rachel M. Schlepp	Chip & Mike Wells
Kathy & Greg Feinsinger	Michele McClinton & Brad Osborn	John Weisbart	Helen Davis	Amy Johnson	Colin McFee	Lance Schoenwald	Marnie White
Sheryl & Sean Fick	Dan McMahan	Fred Weitz	Angie Davlyn	Andy Johnson	Tim McNulty &	Judith J. Schramm	Lexi Widman
Chriss Flynn	Shelly & Jay Merriam	Gayle & Richard Wells	Claire & Ray Delacqueseaux	Sarah Johnson	Mary Lou Haflinger	Patrick Seydel & Susan Cashel	Ashley Wiles
Mary Lou & John Flynn	Nathan Miller	Kathryn Wentzel	Delores & Ray Lowe	Eric O. Johnston	Christina Medved	Sara Shainholtz	Julie & Andre Wille
Nina Gabianelli	Bob Millette & Maggie Pedersen	Phillippa & Richard Whitcomb	Natachs Denis	Ruth Johnston & O.B. Johnston III	Robert Merritt & Jeanette	Sancy Shaw	Lori & Kenneth Williams
Mark E Giesecke	Janet & Bob Mineo	Everett J. Wiehe	Nancy Dever	Becca Katz	Darnauer	Jocelyn & Mark Shelton	Lee Wilson
Shawn Gleason	Mary Beth & Gregg Minion	Andy Wiessner	Dominic Dezzutti	Joni Keefe	Phebe Meyers	Sean D. Shepherd	Mia & Steve Wilson
Jean & David Goldstein	Jane & Bill Mitchell	Mary & Hugh Wise	Anna Dick	Ann Keller	Ondina Moehl	Carolyn & Dan Shipp	Jake Wirkler
Lindsay & Tom Gorman	Carolyn & Tom Moore	Karen Wogsland & Linda Pratt	Randy Dole	Tammy & Tom Kenning	Stephen Monroe	Nancy & Mark Silverman	Dottie Wolcott
Phoebe & Larry Gruel	Kathy Moran	Mary Logan Wolf	Ashley Dopf	Mary & John Killebrew	Lesley & Bob Morse	David Silverstein	Suzanne Wolff &
Teresa E. Hackbarth	Kirsten & Rob Morey	Mary & Ron Wolff	Doris & Chuck Downey	Carol & Peter King	Ann Mullins	Shawn Simpson	Gary Tennenbaum
Cathleen Hall	Frank Nadell	Shauna & Raymond Young	Dan Downs	David Knight	Mark Munger &	Scott Sinta	Elizabeth Wysong
Clay & Andrea Hanson	Network for Good		Suzanne Driggers	Judy Kolberg	Lauren Hirsch Munger	Kim Skerda	Thelma & Garry Zabel
Bob Harris	David Notor	\$20 - \$99	Dunlop Environmental	Erik Kushto	Ben Nelson	Mark F. Skinner	
Ruth Harrison	Carolyn & James O’Donnell	Lamar Abney	Consulting Inc.				
Emily Henderson	Bob Oddo	Matt Aboussie	Dyana & Bert Furmansky				
Kate Henion	Jane Orahood	Ronald & Denise Acee	Leigh Edlind				
Casady M. Henry	Dede B. Osborn	Allen H. Adger	Susy Ellison & Marty Schlein				
Sherry & Rick Herrington	Gail A. Owens	Professional Corporation	Catherine Ennis				
Cindy Hirschfeld	20/20 Eyecare		Sherrie & Joel Evans				
Yvonne Hunter	Bob & Marci Pattillo		Sally & Chris Faison				
David Hyman & Barbara Reid	Julie & Tom Paxton		Michele K. Dewine				
Keith Ikeda	Melinda & Norman Payson		Kelly Field				
Christine A. Interlante	Andrea Pazdera		Diana & Dave Flett				
Denise Jurgens	John J. Phillips		Jane Floyd				
Ryan Kalamaya	Susan Philp		Anne & Phil Freedman				
John Katzenberger & Deb Jones	Lauren M. Pierce		Erin N. Gallimore				
Ronene Kehoe	Pinnacol Assurance		Chris & Connie Geiman				
The Rulon Kelly Team at Douglas	Cyrena & Lee Pondrom		Jon Gibans				
Elliman Real Estate	Julie Puchkoff		Erin Gibbs				
Matt Kelsic	Emily & Ken Ransford		Peter Golden				
Meg G. Kendall	Mark R. Raskis		Frank Goldsmith				
Jeff Kerber	Rory Rehbeck		Donna & Bernie Grauer				
Akaljeet Khalsa	Ken Riley		Leslie T. Gray				
Nick Kilbourn	Ian E. Roberts		Kirk Gregory				
Lani Kitching	Gerry Roehm		Saundra & Darryl Grosjean				
Yvonne Klausmann	Lisa Rogers		Hailey Guglielmo				
Elizabeth & Kelly Klein	Jean Russell		Jenny Gutt-Ohly				
Sarah & Steve Knous	Susan Ryan		Cynthia Haines				
					In Memory of Dale & Jean Christensen	In Memory of Luna	In Memory of Jean Turner Schreier
					Diana & Dave Flett	Nancy Peterson	Jim Schreier
							Mike Turner
					In Memory of Carol Christie & Dennis Christie	In Memory of Kata Medved	In Memory of Jon St. Andre
					John Christie & Family	Christina Medved & Dennis Medved	Ruth Johnston & O.B. Johnston III
					In Memory of Nancy Cross	In Memory of Bill Moran	In Memory of Joseph Tita
					Robert Cross	Kelly S. Atteridg	Kristin Tita
						Susan Capitelli	
						Nathan Childs	
						Nancy & Mike Dean	In Memory of Bob Waterman
						Ronene Kehoe	Monica & Richard Jefferies
						Jeffrey W. Keller	Jim & Jeannie Jensen
						Shana, Jack, & Garrett LeNeveu	
						Delores & Ray Lowe	In Memory of LeRoy & Martha Waterman
						Francine & Steven McFadden	Judith & Nick Huston
						Kathy Moran	

To make a tax-deductible contribution please visit www.roaringfork.org/donate or contact Sheryl Sabandal, Development Manager at (970) 927-1290 or sheryl@roaringfork.org.

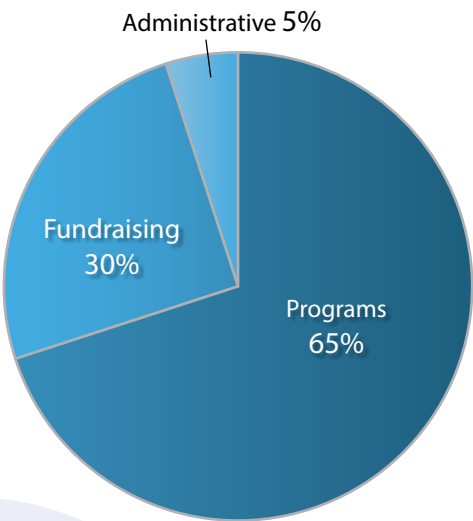
2018 OPERATING REVENUES



2018 Revenues	
Events	\$369,796
Grants	109,300
Memberships	212,760
RETA	155,018
Conservation Easements	52,414
Program Fees	204,170
Total	\$1,103,458

2018 OPERATING EXPENSES

2018 Expenses	
Programs	\$668,037
Fundraising	308,325
Administrative	51,387
Total	\$1,027,749



Roaring Fork Conservancy is an independent 501(c)(3) not-for-profit organization registered in the state of Colorado. Roaring Fork Conservancy donor records are not sold, exchanged, or provided to any outside organization in any way.

Board of Directors

- Pat McMahon, *President*

George W. Kelly III, *Vice President*

Michelle Schindler, *Secretary*

Jennifer Sauer, *Treasurer*

Jeff Conklin

Stephen Ellsperman

Dick Kipper
- Jim Light

Rick Lofaro, *Executive Director*

Rick Neiley

Don Schuster

Diane Schwener

Larry Yaw

National Council Executive Committee

- Dick Kipper, *President*

Carter Brooksher, *Vice President*

Judy Baum, *Secretary*

Bill Gruenberg, *Treasurer*

Barb McMahon, *Event Co-Chair*

Sarah Woods, *Event Co-Chair*

Marianne Antoniak

Janice Beck
- Christy Clettenberg

Joyce Gruenberg

Nancy Kempf

Ken Kendrick

Jean Moore

Jan Petersen

Robert Woods

Staff

- Rick Lofaro,

Executive Director

Heather Lewin,

Director of Watershed Science & Policy

Christina Medved,

Director of Community Outreach

Kristen Doyle, *Watershed Educator*

Larry Gruel, *Controller*

Liza Mitchell,

Education Programs Manager

Chad Rudow,

Water Quality Program Manager

Sheryl Sabandal, *Development Manager*

Michael Schuster, *Program Associate*

Program Associates

- Chelsea Brundige,

Public Counsel of the Rockies

Sharon Clarke

Johnny Cronin,

Director of Donor Relations

April Long,

Colorado Watermark, LLC

Seth Mason,

Lotic Hydrological, LLC

Rose Ann Sullivan,

Kootenay Resources, LLC

Andrea Tupy,

Pine Brook Ecological

Sarah Woods, *Special Events*

River Stewards Steering Committee

- Nick Kilbourn, *Chair*

Peter Arlein

Dan Berg

Colin Cares

Jordan Curet

Matt Kelsic

Bailey Leppek

Meaghan Lynch

Lauren Pierce

Anna Stonehouse

Chris Vaughn

Volunteers:

- Betty Cabral

Sheldon Doolan

Karin Sheriff

Tom Skutley

Dee Wilkerson



Uncredited photographs provided by Kristen Doyle, Christina Medved, Liza Mitchell, Chad Rudow and Michael Schuster.

In honor of our 2018 River Center Grand Opening, RFC partnered with local artist, storyteller and environmental advocate, Sarah Uhl, to create a story map of the Roaring Fork Watershed. More accessible than a topographic map, this piece of art is incredibly accurate, thanks in part to aerial tours of the watershed with EcoFlight. It features the “important places” of the Roaring Fork Watershed – the rivers, tributaries, lakes, reservoirs, mountain peaks, towns, and iconic landmarks that are all inexorably linked within our watershed.

The original story map is on permanent display at The River Center, but if you want to show some pride in the Roaring Fork Watershed, make a \$35 donation to RFC and receive a 12” x 16” print as a thank you gift.



ROARING FORK CONSERVANCY

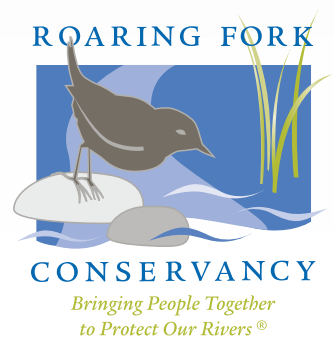
The River Center • 22800 Two Rivers Road • Basalt, CO 81621

NONPROFIT ORG
U.S. POSTAGE PAID
GLENWOOD SPGS, CO
PERMIT NO. 90



Since 1996, Roaring Fork Conservancy has inspired people to explore, value, and protect the Roaring Fork Watershed. We bring people together to protect our rivers and work to keep water in the streams, monitor water quality, and preserve riparian habitat.

As one of the largest watershed organizations in Colorado, Roaring Fork Conservancy serves residents and visitors throughout the Roaring Fork Valley through school and community-based Watershed Education programs and Watershed Action projects, including regional watershed planning, water resource policy, and stream management and restoration initiatives.



www.roaringfork.org
970.927.1290



2019 Annual Report



EXPLORE | VALUE | PROTECT



Message from Board President and Executive Director

The year 2019 was one of rejuvenation and celebration in the mountains, rivers and streams of the Roaring Fork Watershed. Following a record drought year in 2018 the winter of 2018/2019 was really winter, with abundant snowfall and sub-freezing temperatures enduring for weeks. The freeze/thaw cycle in late December and early January was active and ice jam releases were dramatic and frequent on the Roaring Fork River. On January 4, two separate ice jam releases roared through Basalt. The Fork surged and increased for a short time by nearly 700% (from approximately 200 cfs to 1,400 cfs) as a torrent of ice, wood and debris filled the river channel. The community rallied around this incredible natural occurrence, lining the bridges and high banks to watch the ice roll through. Roaring Fork Conservancy (RFC) rallied around the science, education and safety concerns with ice jam releases. In collaboration with local emergency management agencies and the National Weather Service, a system was developed to predict releases, inform the public and send text and email alerts when ice jam releases were expected. One week later, a group of anglers reported receiving a text alert and exiting the river safely prior to an ice jam release.

Winter held on; the snow kept coming. Skiing was phenomenal, persisting well beyond expectation and the season

extended into June. Avalanches let loose throughout the Western slope in record numbers, several of which closed mountain highways for days and even weeks. The much-anticipated runoff arrived a few weeks later than expected but lasted for many weeks. The river was full, the Lake Christine burn scar and surrounding landscape was as green as Ireland, and water was abundant. Big whitewater was celebrated by boaters into the summer, and by mid-summer floating and fishing was as good as ever. The watershed rebounded robustly in this time of plenty and the river demonstrated its resilience.

The river's resilience and longevity no longer occur by chance, solely based on natural phenomenon and cycles. The endurance of the river requires a community who is vigilant - watching, listening, and acting with the river in mind.

In time, we hope RFC will continue to show the same resilience and longevity as the river. As we enter our third decade firmly established in The River Center, we continue to be the voice for the river and an asset to the community by continuing our outstanding educational programs, growing our science and policy work, and steadily monitoring the health of our rivers year in and year out. We're here to stay - and we hope you are too.

Your ongoing support and engagement make all our work possible. Thank you!



Pat McMahon

Pat McMahon
President,
Board of Directors



Rick Lofaro

Rick Lofaro
Executive Director

Photo: Mark Fuller

A Thousand Tiny Ways to Study Stream Health

There are three main categories for studying stream health: water chemistry, physical habitat, and biology. Within those categories many parameters can be measured, and the best overall picture of stream health comes from analyzing components of all three. One way to assess the biology of streams is by studying aquatic insects, worms, and crustaceans, known as macroinvertebrates (macros). These small organisms serve as valuable indicator species because they have long aquatic life stages where they are continually exposed to many components of stream health (such as temperature changes, dissolved oxygen levels and pollutants). The presence, absence, and diversity of macros provide important insights to stream health over time.

Macro samples are collected from the streambed, preserved, and sent to a laboratory where they are counted and identified. In many cases, samples contain hundreds or even a thousand specimens. This data reveals diversity and density of macro communities and a reflection of water quality.

RFC makes use of macro data in a variety of ways: they are periodically collected watershed-wide as an overall indicator of stream health and utilized in targeted studies to examine changing health along a stream or in response to changing conditions. Often, RFC's macro data is also submitted to the Colorado Water Quality Control Division for their statewide assessments of stream health.

This fall, RFC staff collected macro samples from the Fryingpan River as part of RFC's ongoing Comprehensive Fryingpan River Assessment. Learn more about this study at www.roaringfork.org/your-watershed/fryingpan-river.

Given the valuable data gained from examining macro communities, RFC will continue to utilize macro sampling as an important tool for studying long-term stream health.

Mayflies, like the one seen here (*Epeorus longimanus*), are indicators of healthy streams. Photo: David H. Funk

Water Quality



Cattle Creek

This marks RFC's fifth year of conducting targeted biological and chemical monitoring on Cattle Creek with funding from Garfield and Eagle Counties. Water quality and stream flows were measured throughout the year at three sites, documenting this year's above average snowpack and stream flow conditions.

In addition, at the request of Garfield County, RFC served as a technical advisor for a Colorado Department of Transportation project to modify the culvert structure where Cattle Creek flows under Highway 82.

Fryingpan River

For the sixth consecutive year, RFC surveyed *Didymosphenia geminata* (didymo) levels in the Fryingpan River. Surveys of didymo stream bed coverage and basic water quality monitoring were conducted at 7 locations in the summer and fall.

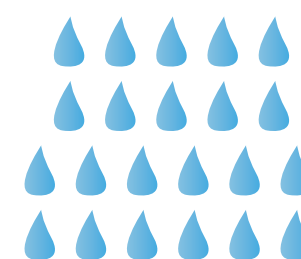
RFC maintained temperature loggers at 3 sites along the Fryingpan River. These loggers have operated year-round since 2013, providing 6 years of continuous water temperature data.

RFC's River Watch Program

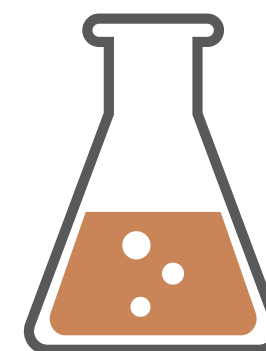
- Conducted a 7-hour water quality training for RFC's citizen science Stream Team volunteers, funded by the Aspen Skiing Company's Environment Foundation. Participants included new and existing volunteers who learned the intricacies of conducting precise and accurate water quality monitoring. The data collection by Stream Teams and RFC staff, is conducted in collaboration with River Watch of Colorado (River Watch), a state-wide water quality program.
- RFC and River Watch hosted their first Meet and Greet for local teachers and volunteers participating in the River Watch program. Attendees from Aspen to Silt connected with each other, met River Watch staff, and listened to Barb Horn, River Watch founder, speak about how their data is utilized throughout the state.
- Partnered with volunteer Stream Teams to conduct regular water quality monitoring at 22 Roaring Fork Watershed sites, including 106 sample events, and 18 volunteers working a combined 158 hours.



18
Volunteers



22
Watershed
Sites



106
Sample
Events



158
Volunteer
Hours
Worked

Long-term Planning for the Roaring Fork Watershed

Roaring Fork Watershed Plan Purpose:

To plan for and work toward an environmentally and economically healthy watershed that benefits all who have a stake in it.

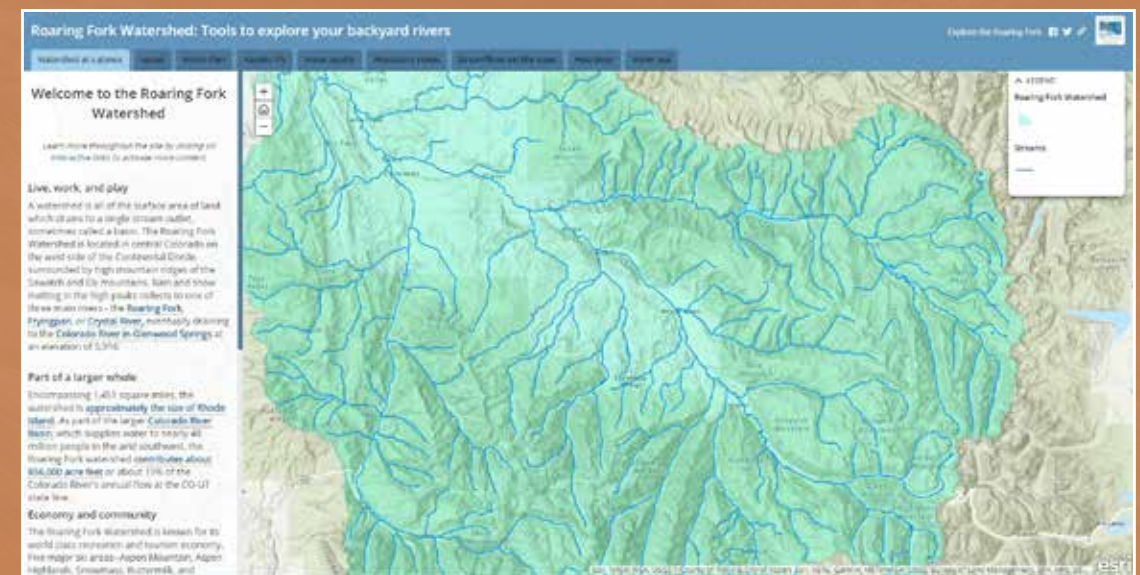
The Roaring Fork Watershed Plan, originally published in 2012, is the product of over four years of collaboration and effort by more than 100 people, representing dozens of agencies, governments, and interests throughout the Roaring Fork Valley. It is a compendium of proposals and recommendations developed by both experts and interested citizens, meant to be implemented by a variety of agencies, governments, and other entities, as resources allow. It details more than 250 action items, intended to provide guidance and direction on how best to cooperatively improve and protect the water resources of the Roaring Fork Valley ranging from identifying and protecting major wetlands to pursuing opportunities for improving natural and artificial water storage.

Throughout 2017 and 2018, with funding from Pitkin County Healthy Rivers Board, RFC met with and interviewed numerous coordinating entities to determine and document projects or actions completed

that achieved Plan goals. Significant accomplishments in the past six years show measurable benefits to the watershed, valuable collaboration, and widespread dedication to the resource. This process led to the creation of the Roaring Fork Watershed Interactive Information System. Housed in the RFC website, the interactive tool hosts easily accessible information about the Roaring Fork Watershed so that every user, from grade school students to the seasoned scientist, can peruse research projects and recommended actions regarding a particular stretch of river, sub-basin, or the entire watershed.

As was originally intended, the Plan is a dynamic and flexible document to be periodically updated as projects are completed, new information is gathered, and priorities and plans change. Dedicated to fostering implementation, RFC and Ruedi Water and Power Authority will continue to serve as resources to participating entities, and check in with stakeholders to promote priority projects, connecting potential partners in action or funding, and celebrate accomplishments.

Read the Roaring Fork Watershed Plan at www.roaringfork.org/your-watershed/roaring-fork-watershed-plan/.



Watershed Science & Policy

Addressing water issues, river health, and related land management through participation in public processes.

City of Glenwood Springs

RFC continues to serve as a technical advisor for the City of Glenwood Springs and the Glenwood Springs River Commission on stream health and policy projects.

RFC is providing consultation for Glenwood's Three Mile Creek Confluence Comprehensive Planning and Design Project. This project includes erosion control, stream bank improvements, recreation access, and riparian restoration.

RFC continues to support the proposed Riparian Setback Regulations currently being reviewed by the Glenwood Springs Planning and Zoning commission. RFC staff regularly attends meetings and submits comments explaining the importance of riparian areas and providing the science behind the proposed regulations.

White River National Forest Fuel Management Plan

Submitted a comment letter to the U.S. Forest Service regarding the proposed Forest Health and Fuels Management Project. Primary goals of the project are to improve forest health, manage live and down fuels, and enhance tree diversity. RFC's comment letter encouraged protection of water resources, minimization of potential impacts, and related use of best management practices throughout project implementation.

Fryingpan River

The winter of 2019 was marked by extreme snowfall and intense cold. Coming out of the 2018 drought, releases in Ruedi Reservoir were scheduled to run at the minimum, 39cfs or inflow. Because of the concern for aquatic life and anchor ice formation, RFC worked with the Colorado Water Conservation Board and the Colorado River Water Conservation District to procure a 3,500 acre-foot lease of water to be released as supplemental flow throughout the winter to benefit the Fryingpan ecosystem. Releases were held to around 65cfs, which is within the range found beneficial to macroinvertebrate life in a 2006 study.

Lake Christine Wildfire

The Lake Christine wildfire left behind a charred landscape, threatening water quality in the Roaring Fork Valley. RFC was approached by Colorado Parks and Wildlife and U.S. Forest Service as a regional entity to lead the local, long-term restoration effort. Since that time RFC has hosted several meetings with all jurisdictions involved to discuss individual and coordinated efforts, which continued through the spring and summer. RFC also worked with Roaring Fork Outdoor Volunteers and Colorado Parks and Wildlife to coordinate a volunteer replanting effort that drew over 300 people. In addition, RFC initiated conversations with Ruedi Reservoir contract water holders to enable a flushing flow in the case of mud or sediment reaching the stream.

Crystal River

RFC, with the Town of Carbondale, and partners Aspen Valley Land Trust, American Rivers, and Public Counsel of the Rockies, completed the planning phase for restoration and enhancement of a one-half mile, 18-acre reach of the Crystal River as it flows through the town of Carbondale. The goal is to improve the efficiency of the town owned Weaver Ditch headgate and diversion. The project involves planning and design for: restoration of the riparian area along the west side of the river, in-river work for the Weaver Ditch diversion structure and in-river habitat and bank improvements. It also calls for enhanced user experience and passive educational opportunities.

With contractors DHM Design, River Restoration, and Lotic Hydrological, RFC and partners worked through several phases of site evaluation and design process. Extensive public comment was documented and used to shape the final design, which was approved by the Town of Carbondale Board of Trustees.

With 60% design complete, the project is moving the approved design forward and is currently in the fundraising phase to implement the design plan, which carefully balances the educational opportunities and accessibility with avian habitat and wildland environment preservation. With ADA accessibility and a gathering space near River Valley Ranch's South Bridge, this property will serve as an educational resource for the five Carbondale schools located within walking distance of the site as well as the community at large. Through thoughtful restoration, that preserves existing habitat, enhances areas of concern, and creates new habitat where it was lost due to human impacts, this project serves as an example to property owners looking to invest in riparian habitat. In addition, the in-channel work, particularly in the areas impacted by the Weaver Ditch diversion structure, both at the structure and downstream, will be a powerful demonstration of how rebuilding dated infrastructure can benefit both the water rights holder and the river.

Getting students *ON* the river

It's an amazing experience to watch a student's connection to the river grow with each set of rapids, each overturned rock, watching nature showcase other worlds through real-life adventures. Over the last two years, RFC was able to dive deep into watershed education with Glenwood Springs Middle School students. Through a semester-long program, students' basic, sometimes even fearful, perspective of our rivers was transformed. These middle school learners became stewards of the rivers, deeply entrenched in their protection.

For about 65% of the students, this would be their first time *on* a river. The excitement, nerves, and even a smidgen of fear, created an energy that could barely be contained by the school bus while traveling to the launch. Glenwood Adventure Company provided the rafts and guides allowing us to deliver this experience to 150, 6th grade students.

To start off, the River Adventure Week plunged students into watershed education by giving them authentic experiences on and sometimes in the water. Before getting on the rafts, students gathered around a Roaring Fork Watershed map to get a bird's eye view of the rivers that are the lifeblood of this valley. Once they were on the river, RFC educators guided students through chemical and physical water quality testing while rafting.

On the land, students used sand on the riverbanks to create the Roaring Fork Watershed. Students learned how to trace rivers back to their sources, high on the ridges that cradle our valley. Understanding how water travels helps students learn that we are all connected and every action we take, good or bad, floats downstream. Following the kick-off week, additional lessons and activities exploring even deeper into the complex issues that frame water in the west, were continued in the classroom.

After learning about our rivers, one student quietly whispered, "Before, I would just throw my trash on the ground, but now I think about what I've learned, and put the trash in my pocket because I don't want to hurt the river."

Groups of students turned their knowledge into action. One group designed a rain garden to absorb pollution from the middle school's parking lot. Another group created a design for an in-home gray water treatment system to help reduce the amount of water used. Students also illustrated macroinvertebrates and turned their creations into products that they sold, raising money for local, water-focused nonprofit organizations.

RFC is leading students through these impactful learning experiences because as our rivers are the lifeblood of the west, our children will be the guides of the future.

“Partnering with Roaring Fork Conservancy really helped to elevate student learning. It's one thing to read about something in a textbook, it's even more powerful if students can experience it firsthand. RFC made those experiences possible and we are so grateful for them.”

— Autumn Rivera, 6th Grade Science Teacher,
Glenwood Springs Middle School



“To learn about non-point source pollution, we had an expert speaker from Roaring Fork Conservancy come in and show us a plastic model called an Enviroscope. Our teacher poured water on it to show how the water flows through the model and where the headwaters (beginning of the river) started, where non-source point pollution (pollution that eventually makes it into the river) comes into the river and where that pollution might come from, for example, parking lots, gas stations, oil from cars and trucks, etc.”

— Finn S., 6th Grade Student at Glenwood Springs Middle School

EDUCATION IMPACTS

Roaring Fork Conservancy taught **259** education programs making over **7,000** contacts in 2019!

COMMUNITY EDUCATION

17 Watershed Explorations were offered in 2019, including river floats, hikes through riparian habitats, water diversion project tours, snowshoe hikes, and excursions to view fireflies in rare thermal wetlands.

307 Participants in 2019 Watershed Explorations.



TEACHER & COMMUNITY PROFESSIONAL DEVELOPMENT

22 Teachers and volunteers trained in the National Fishing in Schools Program.

26 Participants in our Women's Only and Adult Beginner Fly Fishing Clinics.

61 1st year raft guides received River Ecology Interpretation training.

5 presentations at state-wide professional conferences.



SCHOOL PROGRAMS

Roaring Fork Conservancy educators taught **174** river and watershed related school programs reaching

4,600 STUDENTS

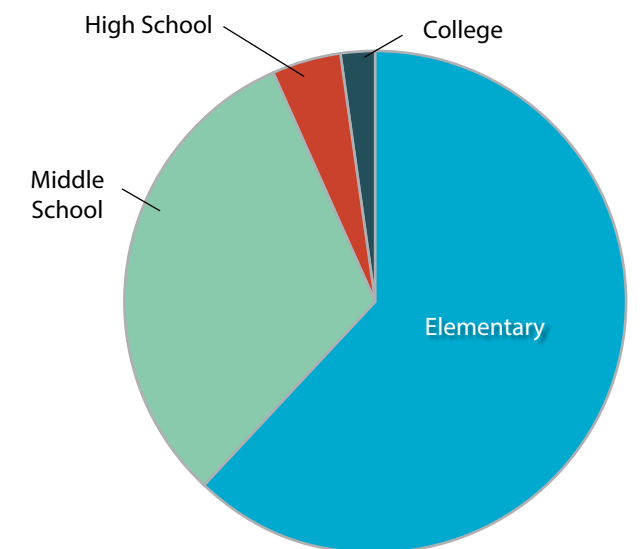
2,861 Elementary School students

1,445 Middle School students

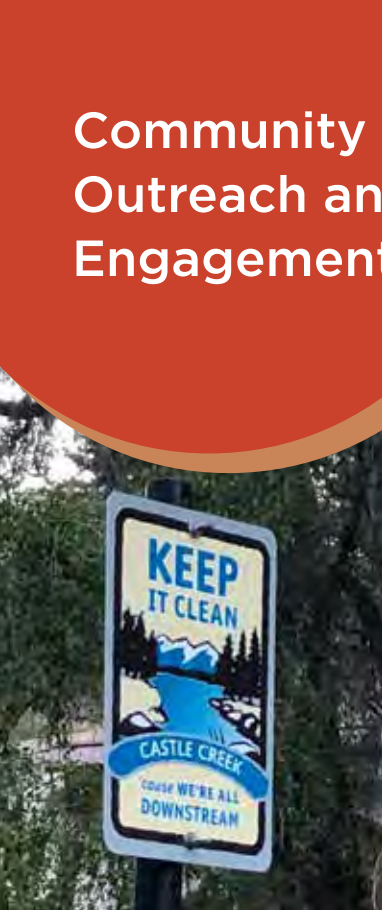
198 High School students

96 College students

30% of school programs took place at The River Center.



Community Outreach and Engagement



Keep it Clean West Slope Partnership

Throughout Colorado, water providers developed Source Water Protection Plans to protect their drinking water sources with education being a major part of plan implementation. In the Eagle, Roaring Fork and Colorado River Valleys three watershed groups, seven water providers, three counties and the U.S. Forest Service formed the Keep it Clean West Slope Partnership to promote increased awareness and protection of our drinking water supplies. In an effort to get the word out on how to protect this vital resource, road signs reading “Keep it Clean ‘cause we all live downstream,” were placed alongside rivers on the western slope. In addition, bilingual brochures and coloring books for children are available to inform residents of ways they can protect water at their homes and at work.

Learn more at www.roaringfork.org/KeepItClean

Fryingpan River Cleanup

The 21st Annual Fryingpan River Cleanup drew over 230 residents and visitors to pick up trash along 14 miles of road adjacent to the Fryingpan River, the Roaring Fork River and through Basalt. Volunteers even cleaned up a few boat ramps throughout the Roaring Fork Watershed.

Annual River Float

We believe the best way to learn about the river, is to get on it! Since 2004, RFC has hosted an annual river float to teach participants about the local wildlife, water issues, riparian habitat, and a few of our conservation easements located along the way. Due to very high river flows from a delayed spring melt, the float was cancelled in 2019 (only the 3rd float cancellation in 15 years!). Never-the-less, about 100 people enjoyed the BBQ lunch and festival at Coryell Ranch.

Lake Christine Restoration Project

RFC partnered with Roaring Fork Outdoor Volunteers and Colorado Parks and Wildlife in the first public restoration project to help heal the Lake Christine burn scar. Over 300 volunteers, ranging in age from 4 to over 70, hiked steep slopes to hand-seed thousands of native plants and create rock check dams on over 500 acres.

Lake Christine Wildfire Panel

RFC hosted a panel discussion to describe how the Lake Christine Wildfire changed the local landscape and share completed, ongoing, and future restoration work. The panel was comprised of representatives from U.S. Forest Service, Natural Resources Conservation Service, Basalt Police, National Flood Insurance Program, Eagle County Sheriff's Office, Roaring Fork Fire and Rescue, and Colorado Parks and Wildlife. About 100 attendees learned how to be prepared for post fire events and get involved in upcoming projects.

Rain Barrel Workshop

With support from Valley Gardeners, RFC taught 20 local residents about rainwater harvesting, rain barrel installation and maintenance, and rain barrel regulations in accordance with Colorado Water Law. One lucky attendee went home with an installation-ready rain barrel.

Qualified Water Efficient Landscaper

For the second year in a row, RFC partnered with the City of Aspen to present Colorado's second Qualified Water Efficient Landscaper (QWEL) workshop. QWEL is an Environmental Protection Agency WaterSense professional certification program teaching landscape and irrigation professionals about water efficient and sustainable landscapes, especially in the arid west.

City of Glenwood Springs

RFC partnered with Glenwood Springs River Commission on community outreach and education projects:

- 💧 Helped develop an interpretive sign highlighting streambank restoration and riparian work recently conducted in Veltus Park, along the Roaring Fork River.
- 💧 Joined the Glenwood Springs RiverFEST, a river cleanup and festival where over 100 participants walked along streams and floated on rivers throughout the city, collecting hundreds of pounds of trash.
- 💧 Participated in a riparian planting project, helping plant 80 riparian trees and shrubs along the Roaring Fork River on the city-owned Raymond Property.

River Stewards

RFC's River Stewards, a volunteer group of young professionals, spearhead community engagement events to inspire young river enthusiasts to explore, value and protect the Roaring Fork Watershed. This dedicated group helps RFC staff plan and execute our two largest annual community events, the Fryingpan Cleanup and River Float. In addition, they represent RFC at local films and festivals such as the Fly Fishing Film Tour in Aspen and 5Point Film Festival in Carbondale. The Stewards also share their time and expertise with RFC, helping with fishing clinics and school fishing programs, photographing events and programs, or joining the staff for a day of field work. This fun, multi-talented group meets monthly.



Carter and Dane Brooksher have been an integral part of RFC's 23-year history. The Brookshers' experience with numerous nonprofit organizations combined with a passion for rivers and an undying devotion to RFC, provided vital support for this organization over the years. During Carter's 16-year tenure on the board she co-founded the National Council (formerly Rivers Council) and was instrumental in the creation of RFC's annual River Rendezvous fundraiser. After stepping off the board, she continued to serve on The River Center Steering Committee and, along with her husband, provide invaluable support to RFC fundraising, staff and events.

It was back in 1998 that Carter suggested RFC create a Watershed Institute – a series of presentations with water leaders that would discuss water at the regional, state, national and international levels. It was this vision, timed with moving into The River Center, that catapulted her dream into reality. Thus, in 2019 The Brooksher Watershed Institute was born.

RFC hosted seven speakers as part of The Brooksher Watershed Institute, engaging over 350 people in local, state and national water issues and providing opportunities for one-on-one dialogue with water leaders.



2019 Brooksher Watershed Institute Speakers

How to Manage the Colorado River for the New Normal (Drought)

Chris Treese, External Affairs Manager, Colorado River Water Conservation District

Plant a Seed, Grow a Snowpack: A discussion of cloud seeding in the Upper Colorado River Basin

Dave Kanzer, Deputy Chief Engineer, Colorado River Water Conservation District

Restoring Critical Riparian Habitat in the Age of Invasives

Cara Kukuraitis, Outreach & Education Coordinator, RiversEdge West

50 Years of River Protection

Nicole Silk, Executive Director, River Network

1,000 Miles Into the Future: 150 years after John Wesley Powell's journey into the arid West

Tom Minckley, Ph.D., Professor of Geology, University of Wyoming

Science Be Dammed; How ignoring inconvenient science drained the Colorado, and its relevance to the future of the Colorado River

Eric Kuhn, Retired General Manager of the Colorado River Water Conservation District and coauthor, with John Fleck, of *Science Be Dammed: How Ignoring Inconvenient Science Drained the Colorado River*

Predicting Powder and the Science of Snow

Joel Gratz, Founding Meteorologist, Open Snow



Gifts and Contributions – *Roaring Fork Conservancy acknowledges our generous donors and program sponsors.*

\$100,000+
Carter & Dane Brooksher

\$50,000 - \$99,999
Barb & Pat McMahon

\$25,000 - \$49,999
Judy & David Baum
James Keach
Cornelia & Meredith Long
Elizabeth McGeachin
McKee Foundation
Pitkin County

\$15,000 - \$24,999
City of Aspen
Colorado Basin Roundtable
Eagle County
Rich & Nancy Kinder
Miriam & Timothy Relyea

\$10,000 - \$14,999
Amy & Gary Blackie
Barbara & Franklin Carson
Karen Degerberg
Mara & David Deniger
Jim Finch
Garfield County
Melissa & David Hotchkin
Jane & Tim McMahon
Clarisa & Tom McMahon
Mary & Pat Scanlan
Carolyn & Dick Shell
The Roaring Fork Club
Marie & Bill Wise

\$6,000 - \$9,999
Alpine Bank
Charlotte & Dan Blanks
Shawn Cheadle
Eleanor Davis
Roger & Katherine Hinds
Matt & Breckie Hunt
Marianne & Dick Kipper
Bonnie & Harold Kloosterman
Claudia & Fred Lummis

\$3,000 - \$5,999
Michael & Gail Attas
Bonner & George Ball
Pat & Jane Bolin Family
Foundation
Sue & Mike Bowlin

Janie & Edward Bradley
Gina & Tucker Bridwell
Norm Brown
Debbie Sands Carson
Colorado Water
Conservation Board
Patsy & George Conrades
T Danis Charitable Foundation
Tim & Jackie Danis
Muffy & Andy DiSabatino
Mary & Neil Dorflinger
Joy L. & James S. DuBose
Beth & Tom Eckert
Mary & Paul Fee
Ruth & Dan Flournoy
Anonymous
Jeanette & Scott Gilbert
Denise & Andy Goldfarb
Cindy & Arthur Harding, Jr.
Toni & Stephen Haselton
Ruthie & Dave Hoff
Marnie & Lee Hogan
Adam Holt
Dan & Mary Horn
Judith Huston
Hyde Family Foundation
Sally & Jim Klingbeil
Ann & Tom Korologos
Wendy & Bill Kortepeter
Brennan & Carl Linnecke
Ann McAlpin
Katie McLellan
Janis Merrill
Sue & Kirk Patrick
Anonymous
Sherry & Brooks Reed
Reese Henry & Company, Inc.
Lynda & Stewart Resnick
Betty & Jan Rietdijk
Roaring Fork Club
Lorraine & Mark Schapiro
Michelle & Dieter Schindler
Wendy & John W. Seiple
Catherine & Glenn Sliva
Maria & Jock Stafford
Judy & Charles Tate
The Thrift Shop of Aspen
Carol & Mack Trapp
Kelly & Curtis Vaughn
Kay & Robert Watson
Margie Weber
Corinne & Paul Wood

\$1,000 - \$2,999
Shawn & Charlie Anderson
Harry Andrews
Ashley Friedman Fund
at The Denver Foundation
Katie & O’Connor Bailey
Sheryl & Douglas Bech
Ashley & Scott Bohn
Annette & Ted Borchelt
Breakthru Beverage Colorado
Michal Ann Brimm
& Michael McVoy
Sarah Broughton & John Rowland
Carolyn & Dr. Nick Cole
Pam & Don Conover
Pat Cooper
Crawford Properties, LLC
Ants Cullwick
Anonymous
F&M Architects, LLC
FirstBank
Janet & Bob Firth
Gary & Susie Fisher
Frying Pan Canyon Ranch
Frying Pan Valley Caucus
Stanley D. Gertzbein
& Marianne Antoniak
Laura & Javier Gonzalez-Bringas
Karen Gray-Krehbiel
& John Krehbiel, Jr.
Jennifer & Cap Grossman
Frank J. Guyol III Charitable Fund
of the St. Louis Community
Foundation

Town of Gypsum
Nancy & Charlie Hess
Andrea Rossetti & Eric Hollerbach
Kay & Ned Holmes
Katie & Rob Holton
Marilyn & John Hubble
Carol & Michael Hundert
Nina Beardsley Itin & Tim Itin
Kirsten & Kyle Johnstone
Mike and Laura Kaplan
Advised Fund at Aspen
Community Foundation
Stacey & George Kelly
Melissa Knutson
Denise & Michael Latousek
Laura & Brian Guilander
Erika & Rob Leavitt
Jim & Dianne Light
Kristi & David Lumpkins

Laura & John Marlow
Laurie & John McBride
Mia & Dan McMahon
Christy & Richard Montgomery
Jean Moore
Jeanie & John Morris
Ann Mulroy
Rick Neiley & Maria Maniscalchi
John Neiley
Jane & Clarke Nims
Kathy & Jerry Pettitt
Prehm Ranch
Bill Riffle & Ruann Ernst
Rotary Club - Snowmass Village
Nancy & John Schneider
Schoonenberg Family
Foundation Fund
Maren & Don Schuster
Christina & Kile Smith
Snowmass Club
Thendara Foundation
AJ & Michael Thompson
Joseph and Anna Tumminello
United Way Battlement
to the Bells
Mary Ann & John Virant
Becky & Doug Walker
Gayle Waterman
The Beaufort Foundation
Sherry & Brit White
Donn Willins
Phyllis & Larry Yaw

\$500 - \$999
Stephen & Susan Baird
Town of Basalt
Elyse Elliott & Jeremy Bernstein
Bohmfolk Family Charitable Fund
Eileen & Frank Bresnan
Lindsay & Shaun Cagley
Cinda & Michael Carron
Ruth A. Carver
Chevron Employee
Matching Funds
Larry Cohen
Brittany & Jeff Conklin
Cottle Carr Yaw Architects Ltd.
Robert Cross
Mac Cunningham
Raffaella De Laurentis
Dafri & Michael Estes
Anonymous
Laney & Jim Fries

Alfred Gardner
Diane & John Gavin
Jim Gilchrist & Lynn Nichols
Margot & Dick Hampleman
Julia & Ken Hirsch and Family
Joyce Illian
Betina & Bill Infante
Lolly Kelly
Deborah & Darrell Kirch
Ramsey and Steve Kropf
Linda & James Landers
Tommy Latousek
& Eva Malanowski
Marianne & Bill Lederer
Nancy & Barton Levin
Darlene Liss
Judith & Amory Lovins
Kim & William Madden
Cynthia Calvin & Mac McShane
Mount Sopris
Conservation District
Michael B. Nathanson
John Nicholson
Andrew Nolan
Marian & Ronald Norman
Lorna & Bert Petersen
Hensley & James Peterson
Patrick Phair
Tim Racke
The Arches Foundation
Kristen & Troy Rhudy
Judy & Jim Rifkin
Donna & Gino Rossetti
Cindy & Andy Russell
Diane & Tony Rutgers
Katie & H.C. Van Schaack
Jim Schreier
Sarah & Richard Shaw
Martha & Thomas Singleton
Aspen Snowmass Sotheby’s
International Realty
Sandy & Stephen Stay
Barbara & Thomas Stewart
Sara & Chris Striefel
Ellen Temple
The Robert and Margaret
McNamara Foundation #3
Allyson & Walter Weathers
Patricia & Jay Webster
Jean & Bill Wunderlich
Susan D. and David B. Young
Charitable Trust Fund
Zag Built LLC

\$200 - \$499
Suzanne & Michael Ainslie
The Art Base
Anne Austin-Clapper
Rebecca Ayers
Gerry & Bruce Barker
Basalt Regional Library
Brian Beazley
Chuck Bellock & Maggie Morrison
Lynn & Bruce Bowen
Richard Broussard
Rebecca Brown
Community First Foundation
Terry & Karen Conklin
Susan & John Cottle
Crossville Tile & Stone
Ellen & Gary Davis
Caroline & Ryan Dougherty
Leigh Edlind
Montana Fishing Film Festival
David Fleisher & Gina Berko
Amy & Robert French
Donna & Jim Fritz
Anne Goldberg
Cindy & Nelson Grumney
Debra Hanson
Sue & Robert Hess
Joan & Jerry Hjelle
Nancy & Peter Hoffmann
Linda Hollomon
Steven & Wendy Huber
Janis and George Huggins
Benjamin Huneke
Alan M. Jacobson
Lynn & Glen Jammaron
David Johnson
Nanci & Rick Kalamaya
Carolyn & Bill Kane
Ann & Joe Kercheville
Nick Kilbourn
Nancy & Michael Kish
Francine & Tag Liebel
Christine & Andrew Light
Lindsay & Rick Lofaro
Rich Lofaro
Martin Manosevitz
Suzy & Bill McKee
Doyen & James Mitchell
Jack Murphy
Leslie Neveu
Janet & Robert Olson
Diane Oshin
Gail & Jim Owens
Frank S. Peters &
Marjory M. Musgrave

Brooke A. Peterson
Advised Fund at Aspen
Community Foundation
Christy Pope
Jayne & Bill Poss
Tracy Predmore
Hope & John Reese
Fran & Chris Reither
The Ritsick Family
Rob Ross
Wright Water Engineers
Lettice & Walter Stuart
Harry Teague
The Forest Conservancy
Pam & Dan Turley
Sarah Uhl
Chris Vaughan
Suzanne & Michael Vernon
Ruth & Bob Wade
Kris & Sam Weller
Donna & Roy Wiedenmyer
Alexandra Yajko
Helen Yanaki
Alix Zangrilli

\$100 - \$199
Peppy & Wally Dallenbach,
Colorado 500, Inc.
Russell Adkisson
Anita & Paul Adolph
Aleece Alexander
Sharon & Bruce Anderson
Sezee Arlitt
Dean Armstrong
Gary Augustson
Karen Barch
Amy Barrow
Heidi Sue Beale
Kip Bossong
Catherine Brons
Sam Broome
Heather & Greg Bryan
Markey Butler
Betty Cabral
Carbondale Chamber
of Commerce
Colin Cares
Susan Rhea & David Carver
Troy Casey
Iris & Kevin Cassidy
Wendy Casson
Amanda Castillo M.
Lindy Clarke
Iris Lee Clotfelter
Michael Collins

Edward Crotty & Julie Bechant
Jordan Curet
Paul D’Amato & Beth Cashdan
Ryan Daniel
Emily Davis
DHM Design Corporation
Sami Dinar
Carly Dominick-Sobol
Janice & Leroy Duroux
Janis Dybdahl
Robert Edelmann
Anna Edgerly
Don & Susan Edmonds
Ellen T. Knous, CPA
Jennifer & Stephen Ellsperman
W. Durand Eppler & Jean Scandlyn
Sandra Eskin
Angela & Gary Evans
Bill Fales & Marj Perry
Marylou Felton
Adrian Fielder
Footsteps Marketing
Elk Mountain Expeditions
Anne & Phil Freedman
Charlene & Stan Gardner
Mark Giesecke
David and Jean Goldstein
Charitable Fund
Lindsay & Tom Gorman
Krystina Greenwood
Kersten Gwost
Quinn Harnett
Jane & Dick Hart
Casady Henry
Marcee & Tim Hobbs
David Hyman & Barbara Reid
Sandy & Charles Israel
Sandy Jackson
Suzanne Jackson
Nancy & Robert Johnson
Sandy & Peter Johnson
Denise Jurgens
Ryan Kalamaya
Marianne & Mark Keating
Michael Kennedy
Carol & Peter King
Barbara Klein
Sarah & Steve Knous
Karen Kribs
The Kroger Company
Mary & Peter Kurtz
Sandy & Mike LaBauve
Megan Lamb
Jean & Richard Leety
Rosella & Dave Leety

Gifts and Contributions

Daylene & Gary Lichtenwalter	Cindy Shirk	Marian Brown	Donna & Bernie Grauer	Sue & Bill Mason	Richard Parachini	George Shaver	Ryan Tews
Carol & Bill Lightstone	Ann Smock	Joe Brown	Greg Mozian and Associates LLC	Olivia Massie	mountainFLOW eco-wax	Karen Sherriff	Lauren Thomas
Bree Lipman	Julia Spencer	Cindy & Hap Bruce	Rob Gregor	Michele McClinton & Brad Osborn	Chris Peterson	Samhita Shiledar	Kristin Tita
Casey & John Livingston	John Stickney & Lee Beck	Margaretta & John Bruegger	Cheri Grinnell	Elli McKinley	Kim & Mike Petrie	Lindsey Sidener	Denise & Tom Tomaskovic
Verna Lofaro	Lauren Street	Ashley Buckberg	Liz & Tim Gustafson	Jared McNally	Sue & Robert Pietrzak	Nancy & Mark Silverman	Amy & Chris Treese
April Long	Jillian Sutherland	Oni Butterfly	Cynthia Haines	Tim McNulty & Mary Lou	Jeff Portwood	Scott Sinta	Craig Van Orden
Meaghan Lynch	Lucia Swanson	Julie Byle	David Hamilton	Haflinger	Kathryn Powell	Gail Smith	Sophia Varga
Valerie MacDonald	Tori & Tony Thompson	Jorine & Marc Campopiano	Bill & Leelee Harriman	Christina Medved	Karen Price	Katie Soden	Gerald Vaughan
Stephen Martin	Gerard Tomasso & Sherry Caloia	Ben Canady	Mary, Shep & Nick Harris	David Miller	Missy & Steve Prudden	David Spies	Peggy Vickey
Nancy Massey	Carrie Trimble	Helen & Roger Carlsen	Harry Teague Architects	Gonzo Mirich	John Francis Przonek	Nicholas Springstead	Monique Vidal
Dottie & Buzz McArthur	Trish & Henry Coffeen	Molly & Steven Child	Anonymous	Jane & Bill Mitchell	Kathy Purcell	Gail Stanger	Maddison Voshell
Meredith McKee	Gerard VanderBeek	Emil Cima	Carol & Judson Hawk	Ashley Moffatt	Meredith Raarup	Tatyana Stevens	Hunt Walker
Heidi McGuire	Chris W. Vaughan	Tania Clark	Thomas Headlee	Jane Moy	Rebecca Ragan	Ann Stewart	Kay Ware
EcoFocused Mobile Detailing	Linda Vidal	Coldwell Banker Mason Morse	Caitlin & Jamin Heady-Smith	Sue & Gregory Mozian	Heather Ramsey	Walter Stoeckl	John Werning
Renee A. Miller	Robin Waters	Andrew P Colgate	Luke Hecht	Mary Pat Mueller	Holly & Dan Richardson	Heather Stoltz	Phillippa & Richard Whitcomb
Bob Millette & Maggie Pedersen	David Wall	Barbara Collins	Dick Helmke & Marice Doll	Lee & Sandy Mulcahy	Nancy Roberts	Anna Stonehouse	Julie & Andre Wille
Janet & Bob Mineo	Julie & Joe Wayman	Karen & Dan Comings	Carolyn Hennefeld	Crystal Murphy	Roger Roberts	Jessica Stuart	Jonathan Williams
Mary Beth and Gregg Minion	Teresa Weinstein	Ellen Conry	Morgan Hill	Mark Murray	Dana Robinson	Kathleen Sullivan	Pam Williams
Richard Minkoff	Fred Weitz	Pete Coppolillo	Julia and Ken Hirsch	Ken Neubecker & Paula Fothergill	Tiffanie & Chad Rudow	Kathleen Sydoryk	Lee Wilson
Shirley & Gregory Mirow	Gayle & Richard Wells	Janet Coursey	Ann Hodges	Scott Nichols	Heather & Greg Rydell	Jenna Syrdahl	Mark Wolfe Webber
Kirsten & Rob Morey	Nancy & Ted White	Cruz Family	John Hoffmann & Kim Stacey	Josh Oberleas	Suzanne Scheer	Ben Taber	Thelma & Garry Zabel
Mary Jo Murphy	Everett J. Wiehe	Karen Current	Gail & Phil Holstein	Siri Olsen	Judith J. Schramm	Joanna Tenbrook	Josh Zeeb
David Myler	Lori & Kenneth Williams	Lisa Dancing-Light	Ann Hopkinson	Jessie Olson	Melaney F Seacat	David A. Tetley	
Sean Nesbitt	Mary & Hugh Wise	Helen Davis	Michael Hutton & PJ Wallace				
Peter Nichols	Mary Logan Wolf	Megan & Whitt Dean	Mary Ann Inouye				
Carolyn & James O'Donnell	Mary & Ron Wolff	Kim Defries	Cynthia A Jacobson				
Meredith & Charles Ogilby	Suzanne Wolff & Gary	Claire & Ray Delacqueseaux	Ed Jennings				
Terri & Bill Parsons	Tennenbaum	Steven Deliyianis	Jim Jensen & Jeannie Russell				
Bob and Marci Pattillo	Stephanie & Horace Work	Nico Dellacroe	Andy Johnson				
Libby Pettit	YouthEntity	Nancy Dever	Eric O. Johnston				
Steve Pfeiffer & Anne S. Cooke		Lavonne & Floyd Diemoz	Richard Kalamaya				
Helen Pferdehirt		James Dilzell	CP & Stephen Kanipe				
Susan Philp		David Dowler	Stacy & Gordon Keating				
Lauren Pierce		Doris & Chuck Downey	Joni Keefe				
Lynn & Kenneth Plank		Kristen A Doyle	Mary & John Killebrew				
Cyrena & Lee Pondrom		Christy Doyon	Lisa Kinsey				
Susan Proctor		John Driggers	RMI's Business Renewables Center				
Emily & Ken Ransford		Mary Dybicz	Emily Kushto				
Mark Raskis		Blue Sky Woodcraft	Barbara & Michael Larime				
Myra & Robert Rich		Suzanne Evanoff	Ann Larson				
Ken Riley		Dave Everett	Terry Lee				
Farrah Roberts		Kelly Field	Mary Leslie				
Pam Robinson		Richard Fisher	Heidi Levey				
The Romero Group		Judy & Dennis Fitzpatrick	Penny & Don LoFaro				
Barnes, Pearson & Associates, LLC		Raquel Flinker	Jamie Lofaro				
Trudy & Fritz Rudow		Mary Lou & John Flynn	Jennifer & Greg Long				
Randy Ruhland		James M Fordyce	John Loomis				
Yuani Ruiz		Bruce & Greer Litton Fox	Kyle Lord				
The Rulon Kelly Team at Douglas		Mark Fuller & Penny Atzet	Joseph Luebbe				
Elliman Real Estate		Emmy Garrigus	Andrea Luplow				
Mary & Loren Ryerson		Chris & Connie Geiman	Grayson Luther				
Will Sands		Jon Gibans	Beth Madsen				
Schreiber Family		Paul Gibb	Kristen & Patrick Maley				
Shelly Searles		The Gorrell Family	Jenny G. Marvin				
SGM		Jessie Graski	Seth K. Mason				

IN MEMORY OF

In Memory of Father Joseph Boyle

Carolyn & Dr. Nick Cole

In Memory of Nick Huston

Gayle Waterman

In Memory of Nancy Oakes Hall

Lorna & Bert Petersen

In Memory of Ronald J Miller

Joyce Illian

In Memory of Edward Lee “Bud” Mulcahy

Lee Mulcahy & Sandy Mulcahy

In Memory of Tim Ricketts

Janice & Leroy Duroux

In Memory of Joe Tita

Kristin Tita

In Memory of Jean Turner Schreier

Jim Schreier

In Memory of Martha & LeRoy Waterman

Judith Huston

In Memory of John Whiting

Aspen PEO

Iris & Kevin Cassidy

IN HONOR OF

In Honor of Carter and Dane Brooksher

Julie & Joe Wayman

In Honor of Madeline and Elora Dean

Kathy Arensdorf

In Honor of Wayne Floyd

Liz & Tim Gustafson

In Honor of Rob French

Lindsay & Rick Lofaro

In Honor of Colby and Jackson Kalamaya

Nanci & Rick Kalamaya

In Honor of Patrick Leonard

RMI’s Business Renewables Center

In Honor of Rick Lofaro

Katie & Rob Holton

Nancy & Peter Hoffman

In Honor of Meredith Long

Jack Murphy

In Honor of Jim Chaffin and Jim Light

The Cunningham Companies

In Honor of Barb McMahon

Donna & Gino Rossetti

In Honor of Alex Martins

Donna & Jim Fritz

In Honor of Otis

Pete Coppolillo

In Honor of Norman Unrau

Shirley & Gregory Mirow

In Honor of Larry Yaw

Margot & Dick Hampleman

To make a tax-deductible contribution please visit www.roaringfork.org/donate or contact Sheryl Sabandal, Development Director at (970) 927-1290 or sheryl@roaringfork.org.



Roaring Fork Conservancy's National Council

National Council members are the backbone of our support, fulfilling an integral role in our efforts to protect and enhance the Roaring Fork Watershed. Representing all parts of the United States, these dedicated supporters recognize the importance of the wetlands and river corridors that make our watershed a special place. Their generous contributions enable us to serve as a voice for the rivers, execute sound river science, inform decision-makers, and educate the next generation of river stewards. *2019 National Council members made specific membership contributions of \$1,500+ OR served as River Rendezvous sponsors at the \$6,000+ level.*



to our 2019 National Council Members!

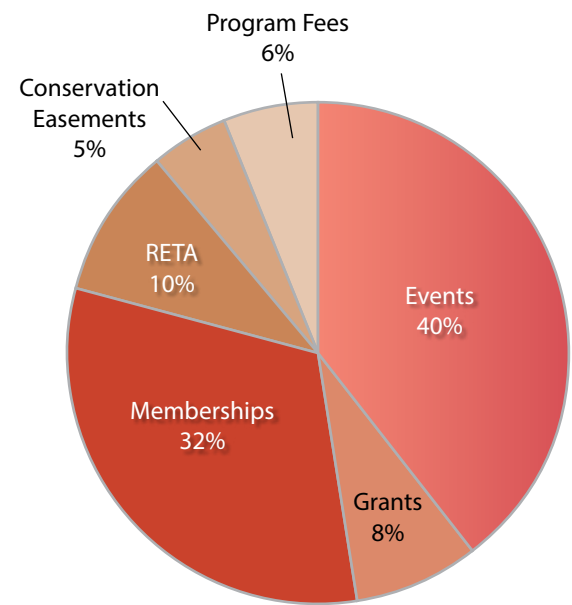
Michael & Gail Attas
Bonner & George Ball
Judy & David Baum
Teresa & Steven Beal
Charlotte & Dan Blanks
Ashley & Scott Bohn
Sue & Mike Bowlin
Gina & Tucker Bridwell
Michal Ann Brimm & Michael McVoy
Carter & Dane Brooksher
Sarah Broughton & John Rowland
Norm Brown
Barbara & Franklin Carson
Debbie Sands Carson
Shawn Cheadle
Eleanor Davis
Mara & David Deniger
Mary & Neil Dorflinger
Beth & Tom Eckert
Gary & Susie Fisher
Stanley D. Gertzbein & Marianne Antoniak
Denise & Andy Goldfarb
Karen Gray-Krehbiel & John Krehbiel, Jr.
Mary & Jim Griffith
Jennifer & Cap Grossman
Andy Gunion
Pati Hensley
Ruthie & Dave Hoff
Andrea Rossetti & Eric Hollerbach

Susanna & Adam Holt
Melissa & David Hotchkin
Matt & Breckie Hunt
Judith Huston
Lolly Kelly
Stacey & George Kelly
Rich & Nancy Kinder
Marianne & Dick Kipper
Sally & Jim Klingbeil
Bonnie & Harold Kloosterman
Wendy & Bill Kortepeter
Dianne & Jim Light
Cornelia & Meredith Long
Claudia & Fred Lummis
Barb & Pat McMahon
Clarisa & Tom McMahon
Jean Moore
Jane & Clarke Nims
Sue & Kirk Patrick
Robert Pew & Susan Taylor
Sherry & Brooks Reed
Mary & Pat Scanlan
Lorraine & Mark Schapiro
Maren & Don Schuster
AJ & Michael Thompson
Joseph and Anna Tumminello
Mary Ann & John Virant
Sherry & Brit White
Marie & Bill Wise



NEW for 2020 – all supporters that annually contribute at the \$1,500 level or above will qualify for National Council recognition. Additional opportunities and benefits begin at the \$3,000 level. For more information please contact, Sheryl Sabandal at sheryl@roaringfork.org.

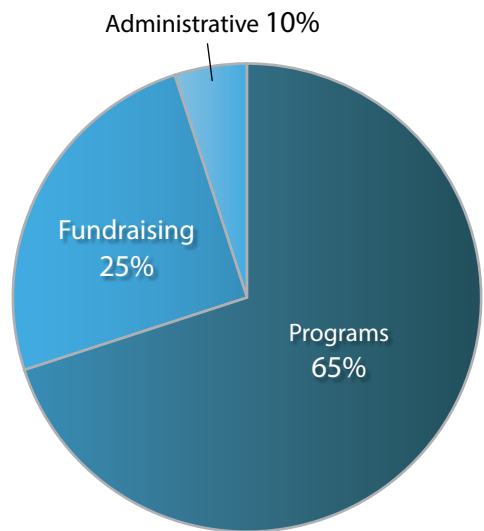
2019 OPERATING REVENUES



2019 Revenues	
Events	\$443,177
Grants	87,792
Memberships	360,299
RETA	106,840
Conservation Easements	53,360
Program Fees	65,032
Total	\$1,116,500

2019 OPERATING EXPENSES

2019 Expenses	
Programs	\$625,078
Fundraising	240,415
Administrative	96,166
Total	\$961,659



Roaring Fork Conservancy is an independent 501(c)(3) not-for-profit organization registered in the state of Colorado. Roaring Fork Conservancy donor records are not sold, exchanged, or provided to any outside organization in any way.



Photo: Sami Dinar

Uncredited photographs provided by Matthew Anderson, Elliott Audette, Sharon Clarke, Jordan Curet, Megan Dean, Kristen Doyle, April Long, Christina Medved, Liza Mitchell, Chad Rudow and Anna Stonehouse.

Staff

- Rick Lofaro
Executive Director
- Heather Lewin
Director of Science & Policy
- Christina Medved
Director of Community Outreach
- Sheryl Sabandal
Development Director
- Megan Dean
Director of Education
- Chad Rudow
Water Quality Program Manager
- Larry Gruel
Finance Director
- Elliott Audette
Business Manager
- Liza Mitchell
Education Programs Manager
- Kristen Doyle
Watershed Educator
- Michael Schuster
Water Quality Program Associate
- Matthew Anderson
Water Quality Program Associate

Board of Directors

- Pat McMahon
President
- George W. Kelly III
Vice President
- Michelle Schindler
Secretary
- Jennifer Sauer
Treasurer
- Ted Borchelt
- Jeff Conklin
- Jim Light
- Rick Lofaro
Executive Director
- Diane Schwener
- Larry Yaw

River Rendezvous Committee

- Judy Baum
Event Co-Chair
- Barb McMahon
Event Co-Chair

Volunteers

- Ron Acee
- Joanie Anderson
- Betty Cabral
- Jeannette Cohen
- Sheldon Doolan
- Karin Gamba
- Matthew Hamilton
- Dick Helmke
- Adam Holt
- George Johnson
- David King
- Lacy King
- Jim Kirschvink
- Patty Lecht
- Leigh Louis
- Natasha Lucero-Conklin
- Charlie Lueders
- Jennifer Long
- Buzz McArthur
- Martha Moran
- Bob Morse
- Lesley Morse
- Shannan Osburn
- Aimee Ruddell
- Karin Sheriff
- Tom Skutley
- Laura Taylor
- George Wear
- Dee Wilkerson

Program Consultants

- Chelsea Brundige
Public Counsel of the Rockies
- Sharon Clarke
- Bill Hoblitzel
Lotic Hydrological, LLC
- April Long
Colorado Watermark, LLC
- Seth Kurt Mason
Lotic Hydrological, LLC
- Andrea Tupy
Pine Brook Ecological

River Stewards Steering Committee

- Nick Kilbourn, *Chair*
- Colin Cares
- Jordan Curet
- Lauren Forman
- Claudia Heath
- Bailey Leppek
- Meaghan Lynch
- Anna Stonehouse
- Chris Vaughan



ROARING FORK CONSERVANCY

The River Center • 22800 Two Rivers Road • Basalt, CO 81621

NONPROFIT ORG
U.S. POSTAGE PAID
GLENWOOD SPGS, CO
PERMIT NO. 90

Since 1996, Roaring Fork Conservancy has inspired people to explore, value, and protect the Roaring Fork Watershed. We bring people together to protect our rivers and work hard to keep water in local streams, monitor water quality, and preserve riparian habitat.

As one of the largest watershed organizations in Colorado, Roaring Fork Conservancy serves residents and visitors throughout the Roaring Fork Valley through school and community-based Watershed Education programs and Watershed Science and Policy Projects including regional watershed planning, water resource policy initiatives, stream management, and restoration.



*Bringing People Together
to Protect Our Rivers®*

www.roaringfork.org
970.927.1290





Roaring Fork Conservancy's K-12 Programs





Roaring Fork Conservancy's K-12 Programs





2019 Rain Barrel Workshop

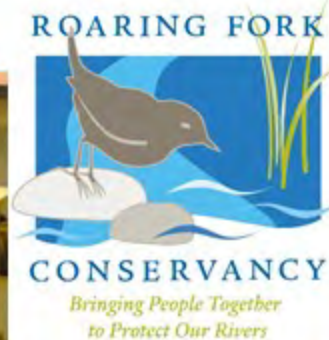


2018 Fly Fishing Workshop, macroinvertebrate identification



March 2018 CAEE Conference

Roaring Fork Conservancy's Community Outreach



October 2019 Watershed Institute



1st year Raft Guide Training



North Star Preserve Float

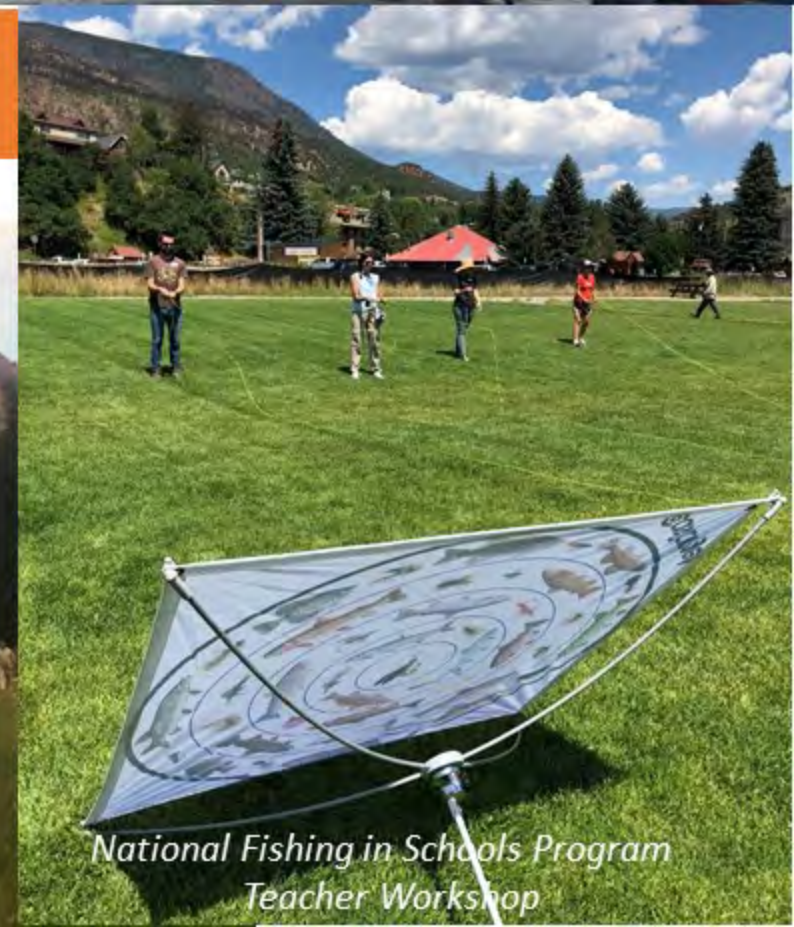
Roaring Fork Conservancy's Community Outreach



Ruedi Reservoir Tour



Filoha Meadows



*National Fishing in Schools Program
Teacher Workshop*