Many of you love to spend time in, on, and around the rivers of the Roaring Fork Valley. Take a moment to close your eyes and visit your favorite river spot in your mind. Listen to the river flowing by, the wind rustling the trees, the symphony of songbirds. Feel the cool breeze on your face, and enjoy the shade of cottonwoods on a hot afternoon. So much of what we love about the river exists not in the water, but around it. This gift of lush green vegetation that surrounds the river is home to a great diversity of plants and wildlife and contains so much of what we all love about the river.

This ‘green ribbon of life,’ formally known as the riparian corridor, exists only on the land adjacent to creeks, streams, brooks, wetlands, and rivers. In the Mountain West, this habitat is lush, green, and vibrant in an otherwise arid landscape. It is the lifeline for a host of plant and wildlife species; from stoneflies and American dippers to deer and elk, an overwhelming number of species rely on quality riparian habitat. Riparian areas comprise less than 1% of Colorado’s entire landmass, yet over 85% of all wildlife uses this critical habitat at some life stage. This land is valuable to not only the natural communities, but human communities as well. It is our responsibility to preserve these special places.

However, few people realize the value of riparian habitat, or how to protect it. Often times, the best action is no action. If riparian vegetation is present and healthy, leave it intact. While a view of the river and manicured landscaping may be appealing, it comes at great cost to the natural ecosystem. Leaving vegetation intact and maintaining the “messy vitality” allows the system to thrive. Large trees help to shade the river and keep the coldwater ecosystem cold. This, in turn, helps trout and insect populations thrive. Studies show a dramatic increase in water temperatures and a decline of the in-stream ecosystem in sections of local rivers devoid of vegetation. In addition to helping the natural ecology, riparian vegetation actually protects a property owner’s investment by mitigating erosion. By leaving extensive root systems intact, soil is held together and remains in place during high spring flows and late summer monsoon rains. Erosion is a major concern in our watershed and currently sedimentation (particles of soil and debris) is the single largest threat to water quality throughout the country, including Colorado.

The secret is out: Colorado and the Roaring Fork Valley are among the best places to live in the country. As more riverfront property is developed, the need to preserve and enhance streamside habitat is critical. With development ramping up again, Roaring Fork Conservancy responds to more riparian land use violations each year. This may be due to increased development along the rivers, or perhaps the result of a more educated public. Whatever the reason, the loss of this critical habitat requires large amounts of time and money to regain. A community approach is necessary to restore each and every project with native vegetation and erosion control in an effort to get back what we unnecessarily lost. So next time you visit your special river spot, whether on the ground or in your mind, think outside the banks, and remember how much that special place relies on a healthy riparian area.

Please contact Roaring Fork Conservancy with any questions regarding riverfront property or to schedule a FREE assessment of your riparian habitat.
Have you ever seen a stream built from scratch? That’s just what the United States Forest Service (USFS) set out to do with Little Lime Creek, near Crooked Creek Reservoir, in the upper reaches of the Fryingpan River Watershed. Once a meandering stream through natural wetlands, Little Lime Creek was dammed by private ranch owners in the 1970s. The ranchers created a small fishing retreat complete with fishing ponds and cabins, which remain standing today. The USFS acquired this private inholding in the mid-1990’s. With the ponds in various stages of decay, they set out to return Little Lime Creek to its previous condition, and restore the associated wetlands.

Reconstructing a Stream
By Chad Rudow, Water Quality Coordinator

The restoration project began in the summer of 2014 with the removal of the two largest upstream ponds and reconstruction of approximately 800 feet of stream channel. First, dam embankments were removed and the material was used to fill the ponds. Next, a naturally winding stream channel was constructed through the former ponds and natural features such as boulders, logs, trees, and shrubs were incorporated into the landscape. This helped restore the hydrology and topography to its original state, paving the way for the establishment of new wetland areas. Finally, in June 2015, the USFS collaborated with Roaring Fork Conservancy, Roaring Fork Outdoor Volunteers, and Wilderness Workshop to conduct a large-scale volunteer project to replant these new wetlands. Over thirty people, a combination of staff and volunteers, camped along the creek and spent two days revegetating the area. They worked tirelessly, transplanting locally sourced sedges and willows and planting nursery stock grown from locally collected seeds. Now, a pair of unmaintained ponds have been transformed into a natural stream channel surrounded by a budding wetland.

Watershed Action

2015 North Star Preserve Bank Restoration Project
By Chad Rudow, Water Quality Coordinator

East of Aspen, the Roaring Fork River slows its pace and meanders through the North Star Preserve, a wetland complex and wildlife sanctuary. Once a working ranchland, this preserve still exhibits human and livestock impacts such as eroded river banks, degraded riparian areas, and non-native plants.

The project involved re-grading an erosional section of riverbank which threatened a mature stand of cottonwood trees near a Great Blue Heron colony. The earthwork was conducted in the summer of 2015 and by early fall, it was time for another project: the establishment of new wetland areas. Finally, in June 2015, the USFS collaborated with Roaring Fork Conservancy, Roaring Fork Outdoor Volunteers, and Wilderness Workshop to conduct a large-scale volunteer project to replant these new wetlands. Over thirty people, a combination of staff and volunteers, camped along the creek and spent two days revegetating the area. They worked tirelessly, transplanting locally sourced sedges and willows and planting nursery stock grown from locally collected seeds. Now, a pair of unmaintained ponds have been transformed into a natural stream channel surrounded by a budding wetland.

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The Solution to Pollution: Use a Park to Clean the River
By April Long, P.E., Stormwater Manager for the City of Aspen

Río Grande Park is the City of Aspen’s largest park within city limits. Perhaps you have been there to watch a Rugby game, test your skills in the skate park, enjoy a performance at Theatre Aspen, or escape to the solitude of the John Denver Sanctuary. Along with these amenities, Río Grande Park offers much more to the City of Aspen and the Roaring Fork River. Beneath the surface and hidden amongst native plants is a state of the art stormwater treatment facility.

This innovative facility uses a combination of pipes, tanks, and native vegetation to remove pollutants from rain water and snowmelt before they reach the Roaring Fork River. According to the U.S. Environmental Protection Agency, traditional stormwater management focuses on collecting stormwater in piped structures and transporting it off site, often to a wastewater treatment facility, or to a combined sewer system flowing to a wastewater treatment plant. The Río Grande Stormwater Treatment Facility uses “Low Impact Development” (LID), which includes green infrastructure, to mitigate impacts to the river. LID aims to restore natural watershed functions through small-scale treatment. The goal at Río Grande Park is to design a hydrologically functional site that mimics pre-development conditions.

Río Grande Park, centrally located in the City of Aspen along the banks of the Roaring Fork River, is the perfect location for treating the City’s stormwater before it reaches the Roaring Fork River. The creation of this facility also allowed for the opportunity to restore a degraded riparian corridor and showcase how riparian areas function as “Mother Nature’s Filter.” The facility models Mother Nature’s ability to “clean” by using proper soil and vegetation, by sending more than 30% of the City of Aspen’s stormwater runoff, which carries urban pollutants like motor oil and sediment, through this area for treatment. As much of Mother Nature’s toolkit, one might never know how much work is been done because it is hidden amongst the beauty of flowers and tall grasses.

Treatment occurs through engineered landscapes that are designed to use natural materials, such as large boulders and fallen logs of earth and concrete pipes (a more traditional engineering solution), to mimic the many functions of natural riparian areas. There are wetlands, sand bars, shallow ponds, and biofiltration swales that all function to slow down the stormwater runoff by allowing pollutants to drop out of suspension and either infiltrate into the soil or become absorbed by the abundant plant life. The facility regularly removes 96% of pollutants carried in the City’s stormwater runoff (that’s the equivalent of about 15 dump trucks of materials each year!) delivering near pristine water back into the Roaring Fork River. There are not many other cities in the nation that are fortunate enough to have a park dedicated to protecting and improving the environment.

I invite you to take a walk around the Río Grande Park the next time you are in Aspen. You’ll see its beauty, but know it is also working hard to keep the Roaring Fork River clean.

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Watershed Action

Watershed Action
Conservation Easement Profile: Burry Ranch, Carbondale
Roaring Fork Conservancy acts as a land trust, holding 16 Conservation Easements, and protecting over 280 acres of riparian habitat in the Roaring Fork Watershed. Each issue of River Currents highlights one of these easements.

The Burry Conservation Easement protects important riparian habitat along the Roaring Fork River below Carbondale, across the river from RFC’s Cattle Creek and Heron Point Conservation Easements. Stands of narrow-leaf cottonwood provide a canopy for a thriving community of riverside plants, small mammals and over 110 bird species, as well as serving as winter habitat for migrating deer and elk populations. Fishing abounds along the beautiful vegetated banks, with Gold Medal access from the river or maintained path bordering the easement.

Watershed Action Study Updates:

FRYINGPAN RIVER AND RUEDI RESERVOIR ECONOMIC IMPACT STUDY
Start Date: March 2014
Components: Survey of Lower Fryingpan River and Ruedi Reservoir anglers
Results: Survey analysis by Colorado State University shows the economic impact of fishing on the Lower Fryingpan River is $3.8 million annually, with the combined impact of recreational fishing on both the Lower Fryingpan River and Ruedi Reservoir reaching nearly $4 million. On average, 44% of expenditures associated with fishing on the Fryingpan River occur in downtown Basalt, with almost half of all expenditures occurring in June, July, and August. Water management to mitigate anchor ice in the winter and for increased wadeability in the summer can each have over $1 million in economic impact.

CATTLE CREEK WATER QUALITY EVALUATION
Start Date: April 2015
Components: Macroinvertebrate Analysis, Water Quality Sampling, Land Use Evaluation
Status/Results: Four rounds of water quality data, along with macroinvertebrates, were collected at seven locations on Cattle Creek. We expect preliminary results in early 2016 after all samples are analyzed and macroinvertebrates are identified, counted and sorted.

FRYINGPAN RIVER SUPPLEMENTAL DIDYMO STUDY
Start Date: April 2015
Components: Repeat essential components of the 2014 Didymo Study to compare results and create baseline data.
Status/Results: Two of the three planned sampling events are complete, with the final scheduled for this fall. Overall results will be compared to last year’s study to look for trends. Findings will help us understand why Didymo is blooming on the Lower Fryingpan and what, if anything, can be done to mitigate the problem.

CRYSTAL RIVER STREAM MANAGEMENT PLAN
Start Date: June 2014
Components: Ecological Decision Support System models natural and anthropogenic scenarios to determine their affect on the Crystal River, Ecological Functional Assessment to evaluate resource management and prioritize intervention strategies, and Stakeholder Engagement to understand community needs and build support for upcoming projects.
Status/Results: The Crystal River study is entering the final phases. Staff at our project partner, Lotic Hydrological, conducted a functional capacity assessment of the entire Crystal River and are testing different management scenarios. The functional assessment highlights the type and geographic location of the Crystal’s key issues of concern, while scenario testing demonstrates how various water management strategies affect these aspects of stream health. In the coming months the full results of each scenario analysis will be presented at a series of meetings such that we may facilitate the larger conversation with stakeholders about how we can collectively move forward for a healthier Crystal River.

River Stewards Update – Fall 2015
By Kara Armano, River Stewards Chair

The River Stewards kicked off the year in February with “Snow to Flow” Jeopardy at Carbondale Beer Works and Snow Science Day on McClure Pass. Then we hosted a women’s only fly fishing clinic, the Red Paddling Film Festival, followed by the annual RFC River Float and gathering. What a great run into early June.

In August, the Stewards partnered with Mountain Summit Film Festival for a free showing of “Les Voyageurs San Trace” at the Third Street Center. In addition, we assisted with the Friday Afternoon Conversation with well-known author Craig Childs. The year will conclude with an annual float/retreat for River Steward committee members.

We said goodbye to five members this year. There must be something in the water because April and Brian Long had twins in April and Monica and Cal Vail are due with twins in October. Jeff Corcklin is also leaving the group this fall. As we thank them for their years of dedication to the River Stewards Committee, we are aware of our need for new members. So, if you are a passionate river person with a desire to host fun events that engage young people about important local conservation issues, join us! Please send inquiries to kara.armano@backbonemedia.net.

To learn more about your riparian habitat, or for a free riparian assessment, call Roaring Fork Conservancy at 970-927-1290.
Thank you for supporting RFC!

The 2015 New Business Members include:

Aspen Flyfishing
Guide Service, Inc.
Basalt Realty
Blue Creek Business Solutions
Bluegreen
Crystal Valley
Plumbing & Heating
Sandia & Darryl Grosjean
Harry Teague Architects
Patrick, Miller & Noto, P.C.

Proposaline Guided Fly Fishing, LLC
R.A. Nelson Construction
TJ Concrete Construction, Inc.
Ruth & Bob Wade

Roaring Fork Conservancy’s Aquatic Macroinvertebrate program, which we affectionately call Bug-O-Rama, was so much fun that our campers demanded an encore presentation with RFC presenting the program not once, but twice this summer! The program began with some learning and a sing-a-long that helped us understand the lifecycle of the macroinvertebrates and the different parts of their bodies. Then we were down on our bellies to play ‘I Spy’ in the water world of a tray with live aquatic invertebrates crawling and squirming around.

Above the roar of excitement, I heard children gasping in wonder: “That one looks like a lobster!”, “I found a worm.”, and “Come see, this looks like a reins, but then watch its head pop out!” We each scooped up a creature and looked at it under magnification, then shared our discoveries with each other. “Wow!” one camper exclaimed, “I thought that was just a dirt speck, but it’s alive!” Another marveled “Now mine looks like a monster with big claws!”

The diversity of the underwater world never ceases to amaze! From 5-year olds to pre-teens, they were ALL mesmerized. They didn’t want to stop, even for lunch! To me, THIS is teaching and life experience at its best!
Stream Team Highlight: Fourmile Stream Team

By Chad Rudow, Water Quality Coordinator

Roaring Fork Conservancy wishes to highlight and thank the outgoing Fourmile Stream Team. This dedicated group, many of whom live along Fourmile Creek, long paid attention to its health and decided to take action by forming a stream team. They began monitoring water quality in January of 2007, and for much of their tenure, monitored three sites along the creek. They were also one of RFC’s larger stream teams, consisting of three core members - Maggie Pedersen, Sharill Hawkins, and Barbara Larime - who were joined by others from time to time including Bob Millette, Jim Hawkins, Clay Hawkins and Lynette O’Kane. Thank you Fourmile Stream Team for over eight years of dedicated service to RFC and Fourmile Creek!

Liza Mitchell, Education & Outreach Coordinator

Liza enjoys exploring the natural world through outdoor recreational activities and science. Healthy streams and high mountain peaks are her passions. She received her B.A. in Environmental Science from Colorado College in 2008, where she led backcountry skiing and hiking trips, worked on ecological restoration projects, and traveled throughout Thailand, Senegal, British Columbia, and Chile. After graduation, Liza spent two years working in Alaska, on watershed conservation, and at a wilderness therapy field guide on extended canoeing and mountaineering expeditions. In 2014, she received her M.S. in Water Resources, Science and Management from University of Idaho, where she conducted interdisciplinary stream ecology research from a remote field station in the central Idaho wilderness and was a National Science Foundation Teaching Fellow in K-12 Education.

Roaring Fork Conservancy wishes to highlight and thank the outgoing Fourmile Stream Team. This dedicated group, many of whom live along Fourmile Creek, long paid attention to its health and decided to take action by forming a stream team. They began monitoring water quality in January of 2007, and for much of their tenure, monitored three sites along the creek. They were also one of RFC’s larger stream teams, consisting of three core members - Maggie Pedersen, Sharill Hawkins, and Barbara Larime - who were joined by others from time to time including Bob Millette, Jim Hawkins, Clay Hawkins and Lynette O’Kane. Thank you Fourmile Stream Team for over eight years of dedicated service to RFC and Fourmile Creek!

Michael Schuster, Program Assistant

Mike joined RFC in May of 2015. Mike was born in Florida but has been in the Roaring Fork Valley since 1995. In 2010, he graduated from the University of Colorado - Boulder with a B.S. in Water Science and a minor in Ecology. After working two summers as a dockhand on Lake Powell, Mike returned to the Roaring Fork Valley full-time. In addition to assisting with river sampling, Mike led educational outreach programs focused on the local farmers market. Mike is an avid outdoorsman, fisherman, skier/snowboarder, and mountain climber. He is also a certified ski technician, lifeguard, and Eagle Scout.

Carlson Schworer, Watershed Action Intern

Carlson is an undergraduate student in Environmental Management and Policy at California Polytechnic State University in San Luis Obispo. He joined RFC this summer and assisted the watershed action team in conducting surveys of streams to RFC conservation easements, collecting water quality samples, and assisting the education team at local farmers markets. We are grateful for Carlson’s ‘can do’ spirit as he helped with several different projects and events throughout the summer. “We wish him the best on the homestretch toward graduation!”

Planned Giving

Did you know...

• RFC accepts donations of your stocks, bonds, mutual funds and other investments?

• You can name RFC as a beneficiary on your life insurance and/or retirement accounts?

• Gifting your assets to RFC may provide you with substantial tax benefits?*

Yes, it’s true! Investment donations are easy, fast and efficient ways to donate to Roaring Fork Conservancy.

For more information on how to make investment donations call:

– Rick Smidt, Financial Advisor at Edward Jones, at (970) 379-3808

– Rick Lofaro, Executive Director at RFC, at (970) 927-1290

Your kindness and generosity are what matter most, now you have more ways to show it. Thank you!

Be sure to consult your tax advisor.*
1st Annual Roaring Fork Conservancy Golf Classic held at Aspen Glen on August 31, 2015.

Perfect venue, great sponsors, terrific prizes and tons of fun.

First Place: Jack Mikaloff, Ron Rouse, Adam Desmond, Brian Leasure

Second Place: Bobby McLelland, Kimberly Rauman, Jennifer Van Dyke, Tony Scheer

Third Place: Charles Fetzer, Ken Kendrick (team sponsor) Dru Lucchesi, Peter Harriman, Jeremy Mirfield (not pictured)