

The Nature
Conservancy



BASIN RANGE & RIMROCK

SPRING 2020 NEWSLETTER ■ UTAH CHAPTER

IN THIS ISSUE



- Sheep Bridge Protected ■ page 5
- Pasta Machines & Sagebrush ■ page 7
- Water Sharing on the Price River ■ page 9

Conservation Corner



Partners achieved a major restoration milestone on the Escalante River. © Chris Crisman

Celebrating Success on the Escalante

March 3rd was a big day for the Escalante River and the people who love it. Members and supporters of the Escalante River Watershed Partnership (ERWP) gathered in Boulder, Utah, to celebrate an epic milestone: 90 river miles of Russian olive removed—encompassing the entire main stem as well as tributaries to the river. The inspiring success of this community-driven conservation project involved over a decade of teamwork, sound science and hard labor.

Linda Whitham, TNC’s Central Canyonlands Program Manager, helped found and lead the ERWP. “I could not have imagined a better outcome. TNC is so proud to be part of the ERWP and to realize our vision for a sustainable watershed.”

Flowing through south central Utah, the Escalante was threatened by rampant invasive species. In 2008, the river’s plight united conservation groups, government agencies, local residents and supporters—and the ERWP was

born. For more than a decade, this diverse group has stayed the course. Today, the results go far beyond the Russian olive removal. The ERWP has restored native fish species to over 30 miles of historic habitat, reconnected or improved 80 miles of fish habitat, and engaged more than 400 youth corps volunteers. Together, these partners made a powerful impact on one of the last free-flowing rivers in the American southwest. **Learn more: nature.org/escalante.**

Good News from the Capitol

In February, the Utah State Legislature delivered some significant advances for our natural world. Here are the highlights:

- **Water Banking and Split Season Leasing passed.** Water banking is a market tool to facilitate local, voluntary and temporary transactions that generate income for water right owners and increase access to water. Water banking will help meet the needs of agriculture, communities and the environment in Utah. Split season leasing complements water banking, providing more flexibility and options for keeping rivers flowing.
- **LeRay McAllister Program funded.** Utah’s only source of state funding for critical lands protection received \$2 million.
- **Great Salt Lake Coordinator position created.** A new position in Utah’s Division of Forestry, Fire and State Lands will serve as the liaison for all Great Salt Lake issues and provide staff support for the Great Salt Lake Advisory Council.

Board of Trustees

<i>Chair:</i>	Richard Denman
Jennifer Speers	Jeff Edison
	Don Garner
<i>Vice Chair:</i>	Mary Garner
Christopher Robinson	George Handley
	Hank Hemingway
<i>Honorary Co-Chairs:</i>	Hank Lamb
Spencer Eccles	Linda Leckman
David Gardner	Kathryn Lindquist
Jake Garn	Nalini Nadkarni
Carolyn Tanner Irish	Jonathan Nielsen
Walker Wallace	Maunsel Pearce
	Ellen Rossi
<i>Trustees:</i>	Miguel Rovira
Fanny Blauer	Kevin Steiner
Jim Clark	Geoff Swindle
Kristine Crandall	LaVarr Webb
John D’Arcy	Katy Welkie
Tim Dee	Rachel Whipple
Stephen E. Denkers	

Lasting Results

Utah Private Lands Protection

Number of Projects. 190
Acres Protected. 926,862

Utah Public Lands Protection

Number of Projects. 40
Acres Protected. 130,063

Total Acres Protected 1,056,925
Total Utah Membership 8,660

Cover: TNC and its partners protect Sheep Bridge, a key property along the Virgin River. © Stuart Ruckman

Thoughts on These Perilous Times

Coping with the Global Pandemic

By Dave Livermore, Utah State Director



© Kevin Spencer/Flickr

“Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next. We can choose to walk through it, dragging our prejudice, our avarice, our dead rivers and smoky skies. Or we can walk through lightly with little luggage, ready to imagine another world.”

— Arundhati Roy

WHO WOULD HAVE THOUGHT A FEW months ago that this spring’s blossoms would usher in a global pandemic, the likes of which we have never seen? Hoping to learn how to cope, we search Google for the history of the 1918 Spanish Flu. My father was 7 years old that year. His family’s quarantine formed some of his earliest memories. Our memories are of many weeks working from home so far—with more to come. I can recall life before face masks and Zoom, but these images are starting to fade a bit as our new normal takes hold.

At this time, we send our well wishes to all of you—our supporters, members and friends. We hope you and your families are safe. We salute the brave essential service providers and health care workers who are on the front lines of this critical fight against COVID-19.

It’s troubling to think it’s taken a pandemic to help us fully appreciate the power and importance of nature, but in a sense this is true. The cleaner air we are breathing, the quiet neighborhoods and the absence of traffic give us pause. Is this what it would be like if we all drove electric cars? Perhaps someday we will.

In the meantime, there are some points of light. We are still working hard at the local

level to achieve tangible conservation results. This newsletter describes how a remarkable coalition of local citizens, public agencies and private donors came together to protect Sheep Bridge, a very special two-mile section of the the Virgin River. Despite all odds, even now, good things can still happen.

The other night, I was out walking our dog and there was a beautiful full moon. There is nothing like a full moon to fill us with awe and remind us that “this too shall pass.” I thought then of an editorial in the *New York Times* on the 40th anniversary of Apollo 8: “The Earth seen from the moon is surely as lovely as ever, even with thinner ice caps, smaller forests, fewer gorillas and tigers and a few billion more people. We are still brothers and sisters in the eternal cold, but increasingly able to see, hear and understand one another as never before. This is reason for optimism.” During this challenging time, as we pass through the portal described by Arundhati Roy (see quote at left), there is reason for hope. Rather than counting the days, we can make each day count. There will be more beautiful moons and an even healthier planet when we reach the other side. It is too early to say when this will be, but it can’t come soon enough.

Sheep Bridge contains a pristine segment of the Virgin River—vital to fish, wildlife and people.



Protecting Sheep Bridge

Purchase Preserves Critical Stretch of the Virgin River

IMAGINE YOUR FEET ARE SINKING INTO warm sand by the edge of the Virgin River near the gateway to Zion National Park. It's morning but you can already feel heat baking off the sandstone around you. The lush river corridor unspools at your feet, thick with cottonwoods and willows. This is the same river bank a Paiute woman might have walked along to gather seeds in the 1600s. It's the same spot a sheep rancher in the 1850s might have stopped to dip his hat in cool waters. Today you can spot a family hiking above the canyon walls. The river and the land here have long been a source of sustenance and beauty. For fish and wildlife—many at-risk or endangered—this area is also a haven and a last hope. Now, this special place, known as Sheep Bridge, will remain protected.

This month, TNC is finalizing its purchase of the 419-acre Sheep Bridge parcel, situated near the town of Virgin in southwest Utah. This spectacular property supports two miles

of the Virgin River along a reach that the Utah Division of Wildlife Resources has named as one of the most pristine in the American Southwest.

The protection of Sheep Bridge was made possible by a range of supporters and partners, including the U.S. Fish and Wildlife Service (USFWS), the State of Utah, the Virgin River Program and the Virgin River Land Preservation Association, as well as many TNC contributors and the landowners themselves.

“It's a critical acquisition,” explains Laura Romin, Acting Utah Field Supervisor with USFWS, “It has important habitat values for native fish species and maintains connectivity of important and rare riparian habitat for the southwestern willow flycatcher.”

The river waters at Sheep Bridge support four of the Virgin's six native fish, and the property boasts a healthy river corridor, a floodplain and striking arroyos and uplands. The diverse habitat harbors a range of migratory birds, amphibians and reptiles.

For TNC and other entities trying to protect the Virgin River corridor, the purchase of Sheep Bridge is a valuable win at a crucial time. “We've been working in this region with many partners

for years,” says Elaine York, TNC's West Desert Regional Director. “As development pressures mount, this is a rare opportunity to safeguard healthy river habitat.” Carving through Zion National Park, the Virgin is responsible for some of the most scenic natural attractions in the United States. Downstream, though, the human demands on this river are growing. Washington County has one of the fastest growing populations in the country. For nature and people, work to sustain the Virgin River is urgent.

With TNC's purchase, Sheep Bridge's wildlife habitat and waters will be preserved and maintained. TNC is developing a management plan for the property, which may include appropriate recreation opportunities on certain portions of the land adjacent to existing public recreation areas. “Scenic grandeur and unparalleled recreation opportunities are Utah's brand,” says Lori Rose, Project Director for the Virgin River Land Preservation Association. “Balancing economy with ecology is of growing importance as our communities look ahead to the challenges of a changing climate, changing priorities and changing economies.”

Specially-coated seed pods could help restore sagebrush and protect at-risk wildlife like the greater sage-grouse.



Pasta Machines & Seed Pods

Scientists Get Creative to Restore Sagebrush

IT WAS HALLOWEEN, AND ELAINE YORK was on her hands and knees in the sagebrush country of northwest Utah. “I quickly remembered why young people do this part of the work,” York laughs. She is TNC’s West Desert Regional Director, and last fall she was painstakingly planting sagebrush and other native seeds in a grid on property owned by the Utah Division of Wildlife Resources. The seeds York planted were special. They were brought to Utah by Maggie Eshleman, a restoration scientist from TNC’s sagebrush seed pod lab in Lander, Wyoming.

Eshleman is part of a team working with Agricultural Research Service (ARS) on innovative efforts to encase sagebrush seeds in a special “dough” to increase their survival rates. The dough is created using an unusual scientific

tool—an industrial pasta machine from Italy. Eshleman found the pasta machine is perfect for making “seed pods.”

“We are trying to use seed technologies in order to improve restoration,” explains Eshleman, “and one of those technologies is seed pods. It’s a way to package a seed in order to give it some advantages in overcoming barriers to growth and establishment.”

In Utah and Wyoming, Eshleman is testing herbicide protection pods, which scientists hope will keep the sagebrush seed safe from the herbicide they use to kill invasive cheatgrass. Invasive plants are a major threat to sagebrush health, increasing the size and frequency of wildfires and threatening hundreds of sagebrush-dependent animals, including the iconic greater sage-grouse.

“We need scientific solutions and large-scale collaboration to reverse the trend in sagebrush,” explains York. “It’s exciting for Utah to be a testing ground for cutting-edge ideas like the seed pods.” York has led many of the Utah chapter’s sagebrush protection projects, including easements on properties

encompassing nearly 10,000 acres of key habitat in western Box Elder County.

The sagebrush ecosystem—once spanning more than 500,000 square miles across North America—is now threatened at an unparalleled pace and scale. More than 50 percent of the continent’s sagebrush sea has already been lost, and each year approximately 1 million more acres succumb to conversion, overgrazing, drought, energy development, fire and invasive species.

TNC’s and ARS’s science innovations, which are being tested in Utah, Idaho, Oregon, Wyoming and Nevada, are part of TNC’s comprehensive regional Sagebrush Sea Initiative to protect sagebrush at a large scale. Across the western United States, TNC is pursuing policy, mitigation and restoration tactics in collaboration with a range of local partners.

The seeds that York and Eshelman’s team pressed into the ground in October will be monitored closely for signs of growth and success. Still in the early stages, the results of the seed pod science will take time to evaluate. But, as York points out, the prospect of finding a new tool to bolster this vital ecosystem is inspiring.

Kevin Cotner, President of Carbon Canal Company, is excited by this Price River project that is designed to meet agricultural needs and support the environment.



Flows, Fish & Farms

Improving the Lower Price River

“THERE IS TREMENDOUS SUPPORT FOR this effort,” says Sue Bellagamba. “Our hope is that we’re actually going to re-create a functioning river system with flows year-round.” Bellagamba, TNC’s Canyonlands Regional Director, is talking about a new project on the Price River fueled by TNC, the Division of Wildlife Resources, the Carbon Canal Company (CCC), the Natural Resources Conservation Service and the Bureau of Land Management.

Bellagamba is right. People are excited, including the river’s key stakeholders: farmers and ranchers. That’s because the project aims to improve canal infrastructure so that farmers will have the water they need while managing the flows in a way that supports fish and wildlife.

The CCC delivers water to approximately 11,000 acres of irrigated farmland in Carbon and Emery counties. A certain amount of “carry water” is required to push water through the

canal to reach farmers. This “carry water” is often unused at the end of the canal system. In an innovative water management agreement with TNC, CCC’s excess carry water will temporarily be stored in Olsen Reservoir, an off-river reservoir, and then strategically released back into the lower Price River during seasons when flow levels drop. The project team will also enlarge Olsen Reservoir to provide ample water storage.

“Farmers play an integral role in finding solutions,” said Kevin Cotner, a third-generation farmer and the President of CCC. “This is a great example of how we can work together to ensure there’s enough water for food production and nature.”

Located in the Upper Colorado River Basin, the Price River flows 137 miles from Utah’s Wasatch Plateau to the Green River. Along its journey, it provides water to rich agricultural lands, municipalities and six rare fish species, including the endangered Colorado pikeminnow.

But in arid central Utah, farmers and fish know the Price is in jeopardy. “We’re the second driest state,” notes Price River rancher Rex Sacco. “We need to take care and use our water in the best way we can.” More than 70 percent

of the Price is diverted for agriculture and municipal use. In the late summer, the lower Price can reach severely low levels or even see stretches without any water. As climate change unfolds, scientists predict increasing heat and drought for this region, further drying the river.

If successful in delivering sustainable flows year-round, this project will be a major win for at-risk fish and wildlife. For CCC’s shareholders, it will mean increased efficiency in water management. The project will help fund canal improvements, such as a new flood control gate, and TNC will pay CCC a per acre foot fee for delivering carry water to Olsen Reservoir.

At Olsen Reservoir itself, the benefits will be striking. The project will restore and enhance wetland habitat important for migrating birds in the arid region, as well as revive a public recreation resource. “It will look more like it did when I grew up,” adds Cotner. “The water being stored will bring the area back to life.”

Bellagamba hopes the Price project might be replicated elsewhere in the drought-threatened Colorado River Basin. “We’re getting enough water in the right places at the right times. It’s truly innovative.”

Conservancy Voices



Courtesy Peter Skidmore

Peter Skidmore

Program Officer, Environment Program,
The Walton Family Foundation

Over the past decade, the Escalante River Watershed Partnership has restored more than 90 river miles, reversing the scourge of invasive species and securing a new future for this special watershed. From the beginning, the Walton Family Foundation has been a vital source of vision and support.

What's exciting on the Escalante is that we can be pretty confident that by tackling invasive plants we can regain ecosystem functions and values on par with pre-settlement conditions. Beyond the obvious values for habitat, recreation and refuge, the Escalante serves as a living monument to nature at its best. The ERWP also demonstrates the power of collaboration. This partnership model is getting traction in other systems so that over time, river by river, we can restore healthy river ecosystems throughout the basin for local communities and their visitors.



Courtesy Kristine Crandall

Kristine Crandall

TNC Utah Trustee

For the last four years, TNC Utah trustee Kristine Crandall has been our “eyes and ears” in the field at TNC’s White Dome Nature Preserve near St. George. As a volunteer monitor, she visits the preserve monthly, checking the parking lot, signs, trails and habitat conditions. She also picks up trash, visits with hikers and makes wildlife observations.

The endangered dwarf bear poppy provides glints of scattered hope, especially for us to appreciate during April and May when the dense flower clusters burst forth like glowing white half-globes. To have a place where visitors can experience the humility of seeing this endangered plant, learning that its survival hangs in the balance of our decisions, and also a place to show off the functional beauty of the biocrust, is really sweet.



© Elizabeth Bracken

Nathan Bracken

Water Law Attorney, Smith Hartvigsen

This February, the Utah Legislature passed landmark legislation authorizing water banking—a voluntary, market-based tool to facilitate water transactions between willing sellers and buyers. Water banking provides a new tool for more flexible water management to benefit people and nature. Nathan Bracken drafted much of the legislation, led negotiations and travelled statewide to get input from stakeholders.

Utah’s system of water management has been working well for 3 million people. But how will it work for 6 million people? I think everyone is trying to account for the growing demands and move forward in a way that works. This is an important first step. We worked hard to ensure this tool benefits farmers. Many folks see agricultural water use at odds with environmental values. I think water banking creates the potential for a win-win.

STAY CONNECTED



 Printed on recycled paper.

Guess this Colorado River Native



Who Am I? © U.S. Fish and Wildlife Service

I AM ENDANGERED. I LIVE IN THE Colorado River and nowhere else on Earth. Three million years ago, I evolved as the largest minnow in North America. My body is shaped like a torpedo and I have a large, toothless, mouth. I used to live as long as 40 years, grow up to six feet in length and reach 80 pounds. I would migrate hundreds of miles from Wyoming to Mexico in the flows of the Colorado and its tributaries. But that was years ago.

Today you would be lucky to spot one of my species that grows longer than 31 inches. We simply do not live long enough to get any bigger. My home – the Colorado River system – is threatened by diversions. I need a lot of water at key times of the year, so the levels in the Colorado

River are vital. Dams now block my migratory paths and non-native fish consume my food and my young.

Scientists see me as “the canary in the coal mine” for the Colorado. My fate is an indicator of the overall health of this mighty river system.

Have you guessed yet? I am the Colorado pikeminnow.

The Colorado River Basin once supported 30 endemic fish species. Today, four of these 30 species are already extinct and 16 are listed as threatened or endangered. Water-sharing projects like the one TNC is pursuing on the lower Price River (see page 9) are vital to the fate of the Colorado pikeminnow and other native fish.