



Stockwater contractor Brett Luthy at work.

CHESTERFIELD LAND & LIVESTOCK GRAZING ASSOCIATION EXPANDS RANGE WITH STOCKWATER DEVELOPMENTS

By Steve Stuebner

If you need to develop a stockwater project in Eastern Idaho, who ya gonna call? Brett Luthy is the go-to contractor that many people call for their stockwater projects.

Luthy and his brother, Roger, who also run a cattle ranch in Bone, are super busy during the summer, developing stockwater projects in the region.

Luthy recently developed a number of untapped springs into stockwater sites for cattle grazing in the remote Grizzly Creek Valley. It's a partnership project between the Chesterfield Land & Livestock Grazing Association, Caribou Soil and Water Conservation District, Conservation Basics

and the Idaho Soil and Water Conservation Commission.

The project was financed by a Section 319 grant from the Idaho Department of Environmental Quality and Environmental Protection Agency. The total cost of the project for the 5 spring developments was \$19,916.40. The 319 Grant will cover 60% of that cost or \$11,949.84, and the Grazing Association will pay the rest, or 40%, totaling \$7,966.56.

"Brett Luthy is kind of a magician when it comes to developing these springs into stockwater sites," said Allan Johnson, an engineer for the Idaho Soil and Water Conservation Commission who serves the Eastern Idaho region.

Contractors have to be knowledgeable and experienced about tapping springs for stockwater when they're digging the sites, Johnson said.

"There's kind of a fine line on how deep you dig to develop the spring," he says. "If you dig too deep, the water can sink back into the cracks in the ground, and you've lost your water source."

"We really value the work Brett and others in the field do," added Cameron Williams, soil conservationist for the Natural Resources Conservation Service (NRCS) in Soda Springs. "They do the on-the-ground work to develop springs, and put in wells and water troughs, which helps our producers address their natural resource concerns."

Luthy developed several springs into stockwater sites this summer on lands managed by the Idaho Department of Lands for Chesterfield Land & Livestock Grazing Association in the Grizzly Creek Valley. Johnson provided a tour of the newly developed stockwater sites in the remote valley northwest of Soda Springs.

We pulled up to the first spring development, and there were a number of angus cattle hanging out by the stockwater tank.

"That's a beautiful sight to see," Johnson said, driving up a sagebrush draw to the stockwater tank. "It's good to see the cows up here by the trough. Cows do better drinking clean water from these troughs. The water is cleaner, and the calves gain better."

That's the whole idea behind the stockwater developments – drawing cattle away from the stream-bottom, in this case, Grizzly Creek, to reduce potential cattle impacts to the stream. That was the primary component of the project that made it eligible for a 319 grant.

Ralph Wheatley, a rancher and president of the Chesterfield Land & Livestock Grazing Association, said his organization is very supportive of developing more stockwater sites on an ongoing basis to help distribute the cattle across 80,000 acres of rangelands grazed by the association between points north of Soda Springs, Blackfoot Reservoir and the Blackfoot River. They've been adding off-stream stockwater developments throughout their range for 25 years.

"Anytime you can get your cattle to distribute more widely on the range, it's good for the streams and there's more feed in the uplands for the cattle," Wheatley says. "It's a win-win for both."

"If the cattle have a choice, they'll often drink from the stockwater tank because it's colder and cleaner water than they might find in the stream."

The Chesterfield Land & Livestock Grazing Association has a long-standing contract with Luthy to develop stockwater sites every year, Wheatley says. Sometimes the projects are cost-shared with the Caribou SWCD, NRCS and the Conservation Commission, and sometimes they are funded directly by the grazing association, he said.



Luthy works on filling in a ditch after laying in the water pipe.

"We're trying to keep the foresight going and continue good stewardship of the land," Wheatley said. "Our previous generations did that for us, and we're continuing to make investments for the benefit of future generations."

"If we don't take care of the land, we're out of business. We've got to be good care-takers, good stewards of the land."

Brett Luthy said he learned how to create stockwater projects on his own ranch in Bone 25 years ago. He had applied for an Environmental Quality Incentives Program grant from NRCS, and he developed a stockwater project in a pretty spot in a stand of quaking aspen.

"I had to build a road to the site with my dozer, and little did I know, my neighbor was watching me. He was curious," Luthy says.

The neighbor asked to see the stockwater project, and "when he saw the tank sitting there amid the quakes, he said, 'I've got to have one of them.'"

It took two years for Luthy and his neighbor to reach agreement – "I was busy farming and ranching" – but the deal provided enough cash for Luthy to purchase a new backhoe. "I told him, if his project could cover half the cost of a new backhoe, I'd do it."

That was about 25 years ago. As time went on, Luthy started to spend more and more time in the summer on developing stockwater sites for ranchers and farmers in Eastern Idaho. Nowadays, he can barely meet the demand for his services. He also runs a trucking business on the side, and his brother Roger runs their family ranch while Brett is doing water projects.

"I enjoy it – it's kind of like tilling the soil. You're taking a mud hole and a mess, cleaning it all up, and creating a nice clean place for the cows to drink," he says.

"But it'd be more enjoyable if I didn't feel so much pressure from the projects that I need to get done. For a lot of years, I've been running about three years behind schedule."

In the Grizzly Creek Valley, Luthy created five stockwater sites from natural springs in three side draws above the valley in the summer of 2020.

The hidden natural springs in the gulches above the valley seemed very small and subtle to the naked eye. There might be a few willows growing around the spring and putting-green like verdant grass near the source. Luthy carefully approaches those sites with his backhoe to find the source of the water.

"Digging a spring in a rocky site is real easy, but the clay-based ones are a little trickier," he says. "I hunt for a soft spot, and pay attention to the color of the soil and the texture when I'm digging."

When he exposes the spring, he puts in a 6-inch diameter PVC pipe-casing around it, places clean rock over and around the spring pipe, and then a layer of plastic or fabric over the top of the rock to keep dirt out of the water.

Next, he develops a level piece of ground for placing the stock tank and builds a platform with crushed rock for the tank foundation. He digs a 2-inch trench using a special custom trencher that he built into his dozer for laying 1 ¼ or 1 ½ inch plastic pipe in the ground to run downhill from the spring to the stock tank.

Luthy uses giant, 8- to 10-foot diameter mining truck tires, laid flat on their side, for the stock tanks themselves. The 8-foot tires can hold 750 gallons of water. He's got neighbor kids that cut out the side-walls of those giant, thick steel-belted tires so the cows can easily access the water from the sides of the tank.

"Those tires are 4 inches thick, so it's really hard to cut through the tire sidewall. It takes special knives to do it. And then you have to cut through a band of steel as well," he says. "It's really tough to do. But I showed my neighbor kids how to do it. Now, they can cut out the sidewalls in 7 or 8 of those tires in a day."

Once they have the stock tank tire set on



Luthy and a helper add a section of galvanized pipe to a water line.



Allan Johnson, ISWCC engineer who leaves the Commission this month for a new position with DEQ, checks the water temperature in one of the new stockwater tanks in the Grizzly Creek Valley. He'll be missed.

the pad, they connect the buried water line to sturdy galvanized pipe inside the tank and set up the gravity-flow system to keep the water trough full to the brim. Luthy cuts the PVC and galvanized pipe to size on-site; and he even threads the galvanized pipe on-site as well. Then, they seal the tank with concrete in the bottom.

Johnson says it's pretty neat how Luthy brings all the heavy equipment and pipe, everything needed for developing the stockwater systems in very remote areas. He and his brother often bring a camp trailer with them so they can stay overnight to complete a job for multiple days in the field.

"You really have to bring all of the pieces and parts with you because it's a long ways to the nearest town," Luthy says. "We like to be efficient with our time and put in those projects as fast as we can. But you have to do it right, so they work and don't have any problems."

One issue that can come up is air bubbles in the spring water, Luthy says. So he builds in air vents to ensure that air bubbles don't plug the system. There's also a water-overflow pipe placed downstream from the stock tanks for bleeding off surplus water.

The 750-gallon tanks can serve about

37.5 head of cattle per day, figuring each cow-calf pair might drink 20 gallons per day, Johnson says. Luthy adds that the amount of water provided is ultimately determined by the natural flow of the spring.

When we visited the tanks, the water was cold and clear, and the vegetation had grown back around the spring itself. Cattle

Ask us! We fund...

Sprinkler irrigation, no-till drills
livestock feeding operations, fences
solar stock water, pump systems,
and more!

LOW INTEREST CONSERVATION LOANS

**Interest rates as low as 2.5%
Terms 7 to 15 Years**



**IDAHO SOIL & WATER
CONSERVATION COMMISSION**

were using the stockwater, and more cattle in the area were grazing by Grizzly Creek as well.

In the last year, Luthy said he's installed stockwater systems in the Arco area, Montview, Gentile Valley, Horse Creek and Bull's Fork areas. "I typically do about 7-10 projects a year with multiple stock tanks involved in each project," he says. "The Arco project involved 20 troughs just by itself."

Williams said there is always room on the range to build in more stockwater systems to keep cattle away from live water, improve water quality and reduce stream-bank impacts and water-quality impacts.

"There's still a lot of opportunity out there to put in more stockwater systems," Williams says. "Cost-sharing funding is available through EQIP and NRCS."

The Conservation Commission also has a low-interest loan program to finance stockwater systems, and, in some instances, DEQ's 319 grant program can provide cost-sharing funding as well.

In the case of the Grizzly Creek system, Chris Banks, a professional conservation contractor, applied for the 319 grant, Pauline Bassett with the Caribou SWCD went



Happy cows drinking clean water from a new stockwater tank in the Grizzly Creek Valley.

to the local Basin Advisory Group meeting to lobby for the project and administer the project, Johnson engineered the stockwater systems, and Luthy installed the projects per Johnson's plans.

"We are in charge of monitoring and following up with the contractor in the field to make sure they're done correctly," Johnson says. "With Brett Luthy, you know they're going to be done right."

Solar systems are getting more and more affordable in remote locations, so conservation professionals are looking at that technology for water systems that need to pump from a stream or a well, as opposed to propane-powered systems, Johnson and Williams said.

We drove by a recent solar stockwater system that Chesterfield Land & Livestock Grazing Association had worked on in partnership with Johnson, where the solar-powered pump lifted water several

hundred feet to a stockwater tank at the top of a hill, and then the water line fed more troughs down the slope.

By distributing cattle more in the uplands on the Chesterfield range, the stockwater systems will allow the permittees to graze more AUMs for a longer period of time, Johnson said. IDL grazing managers will monitor the range, and they could increase AUMs if the cows are well-distributed.

"The grazers are incentivized to spread out the cattle on the range, and the stockwater systems are a great way to do that," he said.

If landowners in the area are interested in contacting Brett Luthy for a stockwater project, he can be reached at 208-709-6470.

Steve Stuebner is a regular contributor to Conservation the Idaho Way.



Solar-powered water systems are becoming more popular and affordable for remote systems that would otherwise need to be powered by propane.

COMMISSION

H. Norman Wright, Chairman
Cathy Roemer, Vice Chairman
Erik Olson, Secretary
Gerald Trebesch, Commissioner
Wendy Pratt, Commissioner
Teri Murrison, Administrator



SOIL & WATER CONSERVATION COMMISSION

322 East Front Street, Suite 560 Boise Idaho 83702
P: 208-332-1790 • F: 208-332-1799
info@swc.idaho.gov • www.swc.idaho.gov

Conservation the Idaho Way: Sowing Seeds of Stewardship