



Cattle graze cover crops on the Drew Leitch farm near Craigmont. Three landowners, including Leitch, have completed 10 conservation projects recently in partnership with the Lewis Soil Conservation District. (photo by Mart Thompson)

LEWIS DISTRICT FUNDS 10 CONSERVATION PROJECTS WITH DEQ 319 AND WQPA GRANTS TO IMPROVE WATER QUALITY

By Steve Stuebner

The Lewis Soil Conservation District recently held a tour of 10 conservation projects in the Big Canyon Area of north-central Idaho near Craigmont.

The projects are all completed, benefitting water quality, winter livestock operations, watershed integrity, soil health and more.

Three landowners participated in the conservation projects – Drew Leitch, a Lewis District supervisor, Tom Mosman and Neil Uptmor. All of them have wheat farms and cow-calf operations. They are happy with the results.

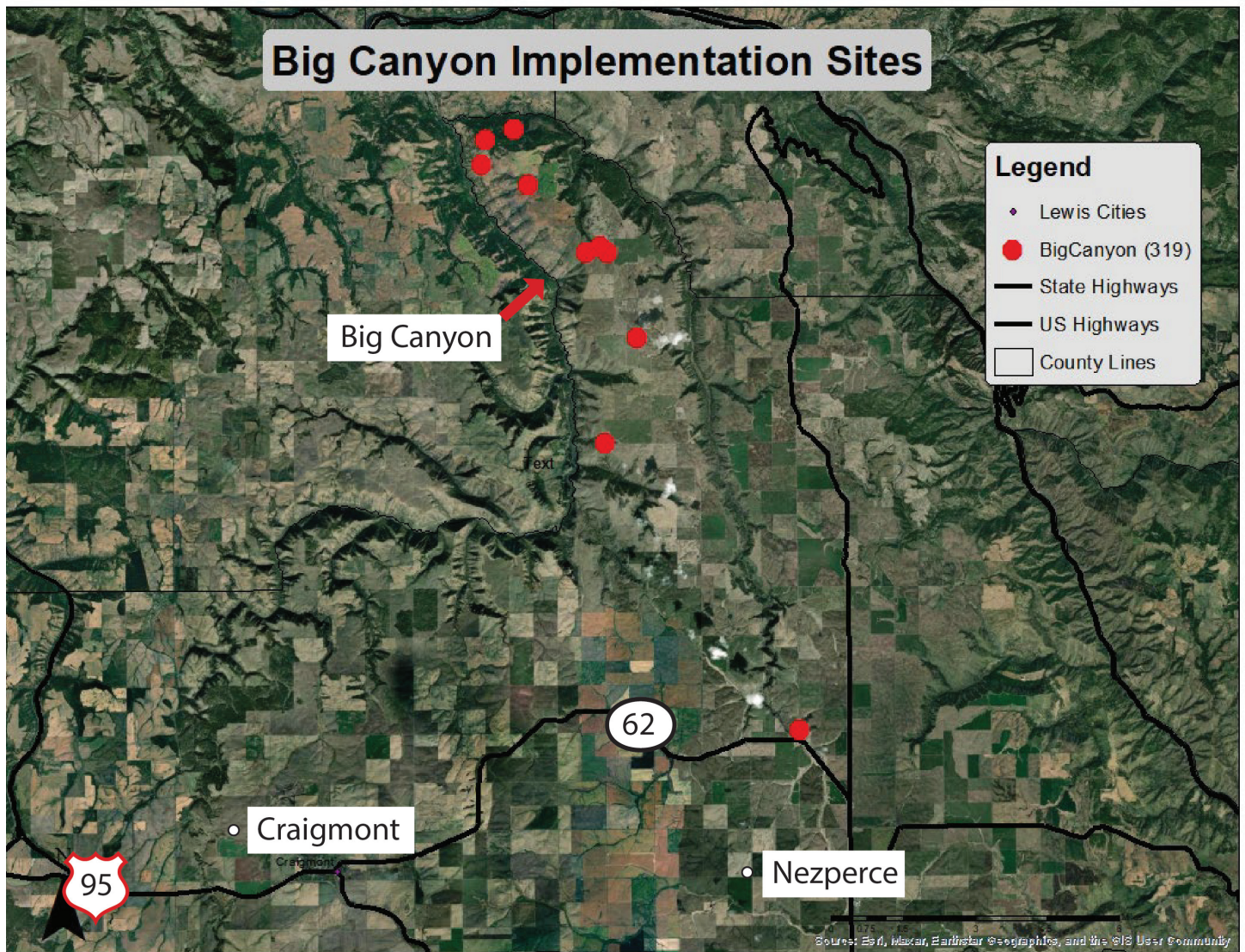
“I think things turned out really well,” Mosman said. “These projects were all things that I wanted to get done, but I needed a timeline to get them completed. Eileen helped me develop the timeline, and that pushed me more to get it all done.”

Mosman referred to Eileen Rowan, a natural resources conservationist for the Idaho Soil and Water Conservation Commission, based in Nezperce, who led the conservation tour. Rowan worked with the landowners to identify the projects, and she partnered with the Lewis District to obtain a \$250,000 §319 grant from the Environmental Protection Agency/

Idaho Department of Environmental Quality for many of the projects. The total project cost was \$420,000, including \$199,000 in matching funds provided by the landowners.

A \$105,000 Water Quality Program for Agriculture (WQPA) grant from the Idaho Soil and Water Conservation Commission paid for 7 concrete pads for livestock wintering operations and gravel-surfacing for a 300-foot access road to winter feeding operations to reduce sediment runoff.

The §319 projects covered the installation of nearly 3 miles of livestock fencing to protect streams and riparian areas, creating a water



Locator map of Big Canyon and the 10 conservation project accomplished by the Lewis SCD.

and sediment basin to reduce gully-erosion, planting 30,000 trees on 100 acres of burned-over land to stabilize the slopes and streambanks, cover crops, and more.

“I am super happy – everything turned out great,” said Neil Uptmor, who installed the fencing and the water and sediment basin. “The Lewis District and Eileen were very helpful.”

The Big Canyon projects had a high-priority to reduce nitrates in the Clearwater Plateau Nitrate Groundwater Priority Area and improve water quality in TMDL-listed watersheds in the area, the \$319 grant final report said.

“The objective of this project was

to implement BMPs on up to 10 different worksites in the Lewis County portion of the Big Canyon Watershed to reduce sediment and nutrient transport to streams and provide shade to the stream,” the grant report said.

“These improvements will reduce the sediment and nutrients directly. In time, the temperature will be reduced through added shade. This project is a small portion of a larger effort to decrease pollutants in the Big Canyon Creek watershed. Other efforts are focusing closely on cover crops, flooding and the impacts from city storm water systems.”

Neil Uptmor conservation projects

Uptmor’s cattle graze year-round

on his farm and ranch. There are some benches in the Big Canyon area where there had been years of livestock overgrazing in areas

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New 4-strand barbed-wire fencing on Neil Uptmor's farm and ranch. (photo by Eileen Rowan/SWC)

without fencing, he said. The plant community had degraded to mostly annual grasses and brush.

"I'm going to be seeding those benches back to improved grass, and with the fencing, we'll keep the cows out of the creeks," he said.

The water and sediment basin was created below a steep area in one of his crop fields where he had issues with gully erosion. Now there is a drain and pipeline that sends the water runoff into a holding pond.

"That will fix that wet spot in the field," he said.

Mosman also has been making water improvements on his farm and ranch – some with private money – to develop new, clean well water for his livestock that is piped

to off-stream water troughs.

"We wanted to do more off-stream watering so the cattle aren't grazing in the draws," he said. "I know the quality of the water is better now, and I like having clean water for my cattle in those off-stream cattle troughs."

Drew Leitch conservation projects

Drew Leitch had wanted to plant trees on his property following the damage caused by the Fisher Fire in 2015. Salvage logging had removed a lot of the red fir in Big Canyon, so he worked with Tyler Nelson, a forester with the Idaho Department of Lands, and a supervisor on the Lewis District, to obtain 30,000 red fir seedlings from a nursery in Coeur d'Alene.

"You don't just go to Home Depot and buy 30,000 trees," Leitch noted.

Nelson also helped line up some crews to help plant the trees along with the Leitch family and friends.

The concrete livestock pads will be a big help with collecting cattle manure from confined winter feeding operations, he said.

"That's a huge benefit to start the year with a nice clean pad for the livestock," he said.

The manure, which is saved and stockpiled for fertilizing cover crops after wheat harvest, "is hugely beneficial" to adding organic matter to the soil and fertilizing cover crops, Leitch said. He has been no-till, direct-seed farming for 30 years. In two of his fields, he plants



Below, newly graveled road on the Drew Leitch farm (photo by Janette Mendenhall, Lewis SCD); Above, tree planting crew gets to work planting red fir seedlings on the Leitch property (photo by Tyler Nelson).



cover crops following wheat harvest to enrich the soil and invigorate microbial activity below the earth's surface.

"It takes a long time to build that organic matter in the soil," he said. He digs soil pits on a regular basis to check on the organic matter over time.

The WQPA grant also covered the cost of adding a graveled surface to a rutted dirt road that led to the

winter cattle-feeding areas. They graveled 1,500 feet of the road, which will hold up well during the wet winter months. "That should cut the muddy erosion by 90 percent," Leitch said.

Mosman also is direct-seed farming on some of his farm. Part of his grant project will pay for cover crop mixes to plant in his wheat fields post-harvest and provide feed for his cattle as well. He also has noticed how helpful it is to add manure to the cover crop fields.

"That really helps our dirt," he said. According to the final grant report, the following conservation benefits will occur annually on the three properties:

- 342 tons of sediment reduction
- 918 pounds of nitrogen reduction

- 1,203 pounds of phosphorous reduction

"We were pleased to get the grant funds from DEQ and the Commission, and get these projects accomplished in partnership with the landowners and the Lewis District," Rowan said.

"All of these projects are going to benefit the Big Canyon watershed and the Clearwater River over time. That's what we were aiming for – improving water quality, installing cattle BMPs and reducing sediment flows into the streams and the river, while also improving the environmental sustainability of the ranches and farms in our area."

Steve Stuebner writes for Conservation the Idaho Way on a regular basis.

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