



*“Before” pic, left, shows the need for tree-thinning and fuels-reduction projects in the Lewis District. Six landowners participated and 343 acres of private land were treated. (photos courtesy Lewis District)*

## LEWIS DISTRICT WORKS ON FUELS-REDUCTION, WATER QUALITY, EDUCATION AND SOIL HEALTH

By Steve Stuebner

The Lewis Soil Conservation District has been busy working on water-quality conservation projects to reduce sediment runoff into streams, education projects with local students, timber fuels-reduction projects on private lands, and soil health education outreach with local farmers in Northern Idaho’s Camas Prairie.

The Lewis District is located in Nezperce, Idaho, on the south side of the Clearwater River. The District serves grain farmers and rural landowners with timber and cattle pasture in nearby communities of Winchester and Craigmont.

All of the projects have been popular, says Lewis District Chairman Eric Hasselstrom, a grain farmer and soil health practitioner. The timber fuels-reduction project, for example, “had people in line to do it before we applied for grant funding,” he said.

Conservation Commission staffer Eileen Rowan helped the District secure a \$240,000 grant from the Idaho Department of Lands for the timber fuels-reduction project. Six landowners participated to reduce tree density, remove ladder fuels, and reduce the threat for a crown fires on about 343 acres.

The landowners grazed livestock to reduce fuels, applied herbicide treatments and seeded lands post-fire with native grass seed mixes to reduce the chance of noxious weed invasions as part of the treatments, officials said.

Janette Mendenhall, administrative assistant for the Lewis District, explained that landowners are concerned about the potential for wildfires in the steep, forested canyons that lie adjacent to farmlands, rolling hills and mountains in the Camas Prairie.

“The greatest fire threat in this area

is from human starts, accounting for over 90 percent of the fires that have occurred,” Mendenhall said, “Some of the fires have escaped agricultural field stubble burns that were intended to remove crop residue. When fires align with the wind, they are nearly impossible to control and can burn hundreds of acres in a day, destroying homes, watersheds, and crops in their path.”

With nearby Winchester State Park, which can see about 350 recreationists and campers per day, and the current trend of human-caused fires in the area, landowners are concerned about campers who may not be “fire savvy,” she said.

“This project focused on thinning forests to increase crown canopy distances while simultaneously removing ladder fuels within the stands to substantially reduce the potential for crown dominated fire, while also improving fire response effectiveness and safety for public and



fire service alike,” Rowan said.

Hasselstrom said he participated in the fuels-reduction project and treated 40 acres of timberland on his land. “All of that work is really helpful,” he said. “It turned out nice.”

The primary goal of this project was to increase vegetation diversity and resiliency while reducing fuels to reduce the spread of root disease and noxious weeds, officials said.

### Education projects

The Lewis District organized and hosted the annual 6th Grade Conservation Field Day on May 13.

“Teaching outdoors is natural for the Lewis Soil Conservation District (LSCD),” Mendenhall said. “Getting students outdoors and teaching them about conservation and natural resources is something they have been doing for 48 years.

“It was a beautiful, sunny, fun-filled, day of learning. Everyone had a great time!”

This year, the event was enjoyed by 6th graders from Prairie, Kamiah, and Highland school districts.

The students rotated through eight educational stations every 20 minutes:

- Eileen Rowan of the Conservation Commission led a session on “Soils and Geology.”
- Robert Johnson of the Idaho Department of Fish and Game brought a trailer full of fishing poles and tackle to provide instruction on “Take me Fishing.”
- “Fire Control” was led by Jed Pentzer from the Idaho Department of Lands.
- Chris Gerhart, Dave Luther, and Jeremy Isabelle from IDL presented education about “Forestry.”
- Johna Boulafentis from the Nez Perce Tribe Air Quality Program taught kids about “Air Quality.”
- Tyler Nelson of IDL and a Lewis District Supervisor, took the students



*Canoeing and fishing were among the most popular activities during the 6th Grade Conservation Field Day at Winchester Lake State Park.*

for an educational hike on a “Nature Trail.”

• Ken Hart of University of Idaho Extension and Eric Hasselstrom, Chairman of the Lewis District, provided instruction on canoe use and safety, including the importance of wearing lifejackets.

“The canoeing station was by far the most popular,” Mendenhall said.

### Noxious Weed Awareness Poster Contest

The Lewis District and the Lewis County Weed Department sponsored a “Noxious Weeds in Lewis County” poster contest with 3rd grade students from Highland, Nezperce, and Kamiah Elementary Schools this year. The contest provided education about local noxious weeds found in Lewis County. Each student was given a noxious weed to research and a poster to design, Mendenhall said.


The posters were judged by the Lewis District and Lewis County Weed Department staff.

The winners from each class that participated were Leona Guffey and

Camassia Penney of Kamiah, Ailie Campbell of Nezperce, and Jazmyn Cox of Highland. The winners received a T-shirt, and all the students were given a frisbee for participating.

“We also want to thank teachers Ms. Brown and Ms. Winterringer from Kamiah, Ms. Meachum from Nezperce, and Ms. Anderson from Highland Elementary School for participating in the contest,” Mendenhall said.

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*Two examples of the Lawyer Creek 319 project - riparian fencing, left, and concrete heavy-use pads for livestock.*

### **Lawyer Creek 319 project**

The Lewis District has been working on a number of livestock projects to reduce sediment flows into Lawyer Creek as well as address other issues like bacteria, organic enrichment, nutrients, oil and grease, and elevated temperatures.

District officials partnered with a landowner to install 1,000 feet of corral fencing with a 25-foot buffer from the creek, treat erosion issues and resurface 2,090 feet of an access road, and install a three concrete livestock feeding pads, also known as “heavy use” pads.

The project is expected to have the following annual water-quality benefits:

- 7.5 ton reduction in sediment
- 6.7 pounds of phosphorous
- 13.4 pounds of nitrogen
- 99 percent reduction in bacteria in the location of the corral fencing.

Lawyer Creek is a prominent location in the Camas Prairie area for motorists who travel along State Highway 62 in Lewis County. The cattle ranch where best management practices were installed “is very visible, right along

the highway,” Hasselstrom said. “The improvements they’ve made there will be a big help to the water quality in Lawyer Creek.”

District officials credited Rowan with developing a relationship with the landowner to open the possibility of doing a BMP project on his property. Rowan and the Lewis District applied for 319 grant funds to cover a portion of the conservation project.

A total budget of \$104,100 was provided for the project, while the landowner contributed \$22,800 and District and Conservation Commission in-kind support was \$17,790, officials said. More conservation work is planned in the Lawyer Creek watershed to continue to work on water-quality issues in the future.

### **Alpine Road Mitigation Project**

The Lewis District also applied for and received a grant from the Idaho Water Resource Board to address flooding issues at the junction of Alpine Road and Powerline Road 1.25 miles northeast of Nezperce, near Idaho Highway 64.

Rowan wrote the grant and the Lewis District administered the project, officials said.

“Eileen has been key in getting projects moving and funded for the district,” Mendenhall said. “Big kudos go to her for making this project possible.”

In the spring, heavy runoff can cause waters to overtop Highway 64 as well as Alpine and Powerline roads, the grant application said. The Prairie Highway District and the Idaho Transportation Department partnered with the Lewis District to resize culverts and align them to pass flood waters without overtopping roads or ditch banks.

The project budget request was \$46,709, with the state covering \$18,425 and local match was \$28,284.

Three larger culverts were installed to address the roadway-flooding issues. The culverts have 12” to 18” of fill over them to provide enough freeboard to prevent overtopping during the anticipated 50-year flood event, officials said.

The road ditch was shaped and graded to allow water to efficiently enter the culverts. Six-inch rock was added to the inlets and outlets for erosion control and to prevent undermining of the culverts. The culvert ends will be protected by a series of big post

delineators around the radius of the corners to detour people from cutting the corners and crushing the culverts. ITD completed the work in May 2021.

### Sediment Control Project

In 2020, the Lewis District received a Section 319 grant for \$74,178 from the Idaho Department of Environmental Quality/Environmental Protection Agency to reduce gully/rill erosion from farm fields on the bench above the Clearwater River while reducing phosphorus, nitrogen and sediment flows into the river below.

The total project cost was approximately \$109,615, and participating landowners provided a

match of about \$35,434.

Fourteen sediment basins were installed on two farms and three undersized culverts were removed and replaced with larger culverts on public roads in Lewis County to accomplish the project objectives.

Water and sediment control basins trap sediment and water running off farmland above the structure, preventing it from reaching farmland and water bodies below, officials said.

Conservation benefits of the projects included:

- Sediment reduction of 1,070 tons/year or 4.1 tons/acre/year from the 263-acre fields.

- Nitrate reduction estimated to be 7 pounds/year from the same field.

- Pre-project, erosion from the fields into rills and gullies was 787.4 tons per year. After implementation, the sediment flows will be reduced to 3.2 tons/acre/year. Nitrate reduction was estimated at 6 pounds/year from the fields.

- Culvert work was expected to reduce sediment flow by 3,855 tons.

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

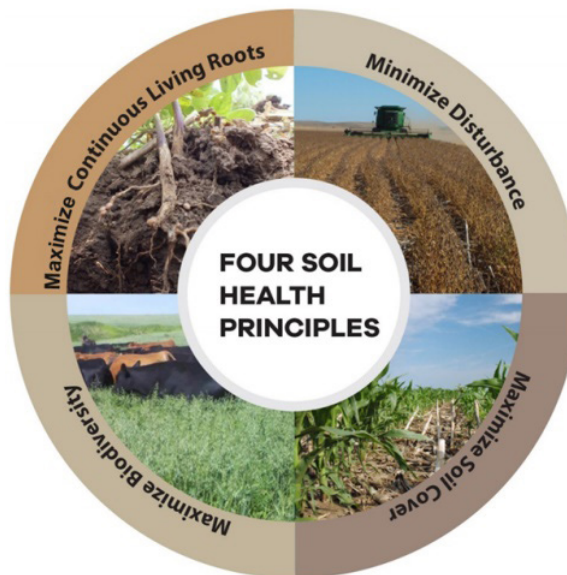
## LEWIS DISTRICT TO HOST SOIL HEALTH WORKSHOP FEB. 17

The Lewis Soil Conservation District will host a Soil Health Workshop on Feb. 17 at the Community Hall in Greencreek. This year's theme is **"Strategies for Reducing Synthetic Inputs."**

The District typically hosts a soil health workshop each year. District Chairman Eric Hasselstrom said about 75 to 80 percent of the farmers in the district are using no-till, direct-seed farming techniques to increase the productivity of the soil, reduce erosion, hold more moisture in the soil, and stimulate microbial activity in the soil.

He has been practicing soil health techniques on his farm since the late 1980s, he said.

The District will be happy to provide



a workshop in February after having to cancel last year's event due to the coronavirus pandemic, officials said.

The workshop provides a time for producers to share information about soil health practices that they're trying on their farms and the results.

Registration will begin at 8:30 am with the program following at 9 am. Cost for the workshop is \$10.00, which includes lunch served at noon. Pesticide and CCA credits may be available.

To sign up for the workshop, contact Janette Mendenhall at the Lewis District at [lewisscd@outlook.com](mailto:lewisscd@outlook.com) or 208-217-0098.

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