



Beyond the field: BWSR-NRCS initiative extends conservation to forest, streams



Winona County landowner Jim Christenson is removing invasive buckthorn from his land within the Money Creek watershed with assistance from NRCS. The dead buckthorn shrubs at the center were previously sprayed.

Photo Credit: Minnesota DNR

In the Root River watershed, the Watershed Conservation Planning Initiative is resulting in more streambank and forest stand improvements that benefit wildlife and water quality

WINONA — Jim Christenson was looking for more ways to improve the bluff-and-bottomlands property he managed for wildlife when Dan Wermager contacted him about a big-picture approach to conservation in the Root River watershed.

Wermager is one of seven conservation planners across Minnesota hired through the Watershed Conservation Planning Initiative. He’s based at Houston County’s Root River Soil & Water Conservation District, where much of the work in his previous SWCD role centered on cropland.

“We’re reaching out to a new demographic of

landowners and getting more people involved in conservation,” Wermager said.

He still works with farmers on erosion control and other agriculture-related projects and practices. But the WCPI’s comprehensive approach also considers conservation measures such as streambank stabilizations and forest stand improvements within targeted, prioritized subwatersheds.

Christenson focused on removing buckthorn from his land. The invasive buckthorn chokes out native species that feed and shelter wildlife.

“I want to maintain it for

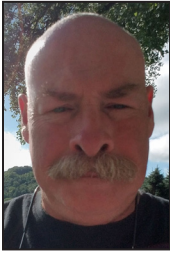
wildlife, so we’ll always have a place to go and hunt or even to camp,” said Christenson, 64, of Lakeville, a manager at the St. Paul branch of the trucking company Braun’s Express.

Since 2001 he and his family have hunted deer and wild turkeys, fished and camped on the land bordered by Money Creek, a trout stream. The 127-acre property in Winona County’s Wiscoy Valley lies within the Money Creek watershed — which a local work group previously determined to be a priority within the Root River watershed.

Winona County-based Natural Resources



Glende



O'Brien



Wermager

Conservation Service District Conservationist Sue Glende explained why Money Creek was a priority subwatershed:

The creek itself is impaired for turbidity. It contributes sediment to trout streams, which require clear and cold conditions to support fish. It lies within a karst area, which is more vulnerable to groundwater pollution. Conservation work here focuses on preserving groundwater and surface water quality.

Wermager brought in Kevin O'Brien, a Lewiston-based Minnesota Department of Natural Resources silviculturalist, to work with Christenson. The resulting three-year forest stand improvement plan calls for buckthorn removal on three sites totaling about 20 acres.

"In the areas we were treating, it was doghair-thick, where a lot of the buckthorn was, on average, 2 inches in diameter and there was probably a buckthorn every 3 feet square. It was very difficult to walk through," O'Brien said. "Buckthorn makes it almost impossible to hunt. It just gets so thick that the deer can hide, and you can't walk through it."

Since they started work on the plan in 2019, Christenson and his family have treated 2-acre and 7.6-acre plots with herbicide using backpack sprayers. Next, they'll tackle the remaining 9.3 acres. At that rate, they'll finish well before the three-year plan expires.

About \$8,100 in NRCS assistance will help to offset costs.

"I had already been working myself trying to thin some of the buckthorn," Christenson said. "This was a great thing



A designated trout stream, Campbell Creek is a direct tributary of Money Creek, which will benefit from forest stand improvement within the watershed. Photo Credit: Dan Wermager, Root River SWCD

to get some assistance to eradicate it."

Keeping the buckthorn under control will require follow-up for 10 years or longer.

Part of the plan encourages growth of up to 150 desirable nut-producing specimens per acre by clearing the competing trees that surround them. That, too, will benefit wildlife.

The ideal hardwood mix would include red oak, white oak, shagbark hickory, birch and aspen. Nannyberry, chokecherry, hawthorn and gooseberry would grow in

the understory. By opening the canopy, native forbs and sedges such as Pennsylvania sedge, wild geranium, pointed-leaf tick trefoil, Jacob's ladder and Jack-in-the-pulpit would re-establish themselves.

"By encouraging diversity, it always helps the wildlife," Glende said.

Deer and turkeys eat the acorns and other nuts. Berries feed birds and other wildlife. Wildflowers attract pollinators.

"Part of this project was for native pollinators," O'Brien said. "You'd be surprised at how many bumblebees

About WCPI

Dan Wermager is one of seven conservation planners working in watersheds across Minnesota as part of a collaboration among BWSR, NRCS and soil and water conservation districts. The [Watershed Conservation Planning Initiative](#) was designed to help producers gain a comprehensive view of their land and the resource concerns they might have. Planners work with producers to develop a whole-farm assessment. Implementation is voluntary. Plans are meant to increase landowners' readiness to implement conservation practices.

you'll see out in the woods. You would think they would be only in native prairie, but they're out in the woods, too."

Christenson has noticed the canopy has opened up quite a bit in the treated areas. He hasn't tallied how many hours he's spent on buckthorn eradication, which he plans for November weekends after the firearms deer season.

"I go down there. I enjoy the land. I like walking around. I kind of do it as a way to get out and relax and enjoy the outdoors and get rid of the buckthorn at the same time," Christenson said. "I anticipate it being something that's going to go on for a number of years."

Since July 2018, Wermager has contacted 511 landowners in the Root River watershed and written 85 conservation plans, many of them comprehensive, whole-farm management plans, resulting in 56 landowners establishing about 65 practices.



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