The River Runs Through

Unique Oregon river restoration project demonstrates that volunteer efforts can result in major gains for both ranchers and the environment.

Story & photos by
ED HAAG

Mike Widman, of Baker City, Ore., has always had a special relationship with the Powder River, a Snake River tributary that runs through the commercial cattle ranch his grandfather founded at the turn of the last century.

"I took over the ranch from my father in 1979," he says. "I have always wanted to do something to improve the quality of the water in that river."

In addition, Widman found that the river was far from being the ideal watering site for his cattle, especially in the winter when ice formed on its surface and they had to risk injury in order to access an open area from which to drink.

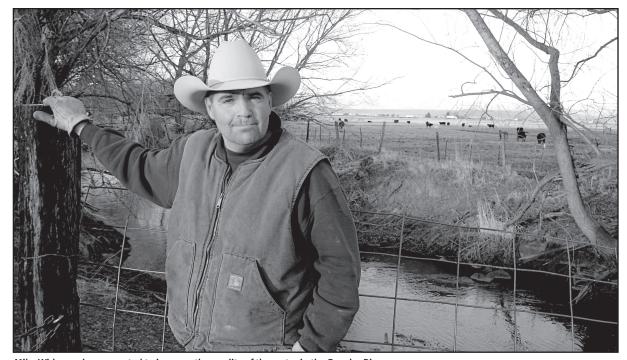
"When they got out on that ice, anything could happen," he recalls. "They could break through, or fall and break a leg or hip."

Like the other commercial ranch operations in the vicinity, Widman's 800-head Angus herd is wintered on the pastures adjacent to the river. In the spring, after calving, the pairs were moved to their summer range on the hills above.

Doni Clair, now the regional water quality specialist with the Oregon State Department of Agriculture (OSDA), was well aware of the Widman's desire to improve water quality on the Powder River. As conservation district manager prior to joining OSDA, Clair had helped Widman secure matching conservation funds to lay a ¾-milelong irrigation line designed to improve the efficiency of his system while reducing its effect on the river. The process brought together several agricultural entities, including the conservation district, the Baker

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 $\label{thm:mike-wide-water} \mbox{Mike Widman always wanted to improve the quality of the water in the Powder River.}$

Valley Irrigation District (BVID) and the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS).

For Clair, the initial irrigation project was money well-spent. She and others involved in local water quality issues recognized that the Powder River and its riparian shoreline required some major restoration work.

"The river has been used intensively since agriculture began in the Baker Valley over a century ago," she says. "Cattle did have an impact on its banks, its vegetation and the water quality itself."

She notes that the Powder River has had the dubious distinction of being placed on the Oregon Department of Environmental Quality's (DEQ's) 303 D list. "That is DEQ's water body impaired list," Clair says. "The Powder was on it for higher-than-normal water temperature and high levels of fecal coliform."

The elevated water temperature was directly linked to an absence of shade vegetation along much of the river's shore, while the fecal coliform was the result of uncontrolled cattle access.

This came as no surprise to Clair and her colleagues. In addition to Widman's herd, 20 other ranches used the 10-mile stretch of river for seasonal watering. This represented

more than 7,000 head with access to the river in the winter months, when the flow was at its lowest and palatable riparian vegetation was at its scarcest.

An idea is born

Encouraged by his success in acquiring the approval and resources for his irrigation upgrade, Whitman and fellow Angus rancher and neighbor Rob Thomas approached those involved in his initial project with an even more ambitious plan — one that would fundamentally change how 10 miles of the Powder River was used by ranchers in the area.

What was proposed was a voluntary program to gravity-feed water via pipelines from the river to satellite cattle troughs in adjacent fields, thus eliminating the need for animals to have direct access to the river when it was most vulnerable to environmental damage.

"We knew that the only way we could clean up the river was to keep the cattle out of there in the winter months," Widman says. "Considering the problems we had when we did let our animals water out of the river, it seemed like a winwin situation."

From the outset, the enormity of what Widman and Thomas were proposing for the 10-mile stretch of the Powder River was evident. With the kind of participation

they anticipated, the costs for lines, concrete troughs, fencing and plant restoration would exceed \$2 million. Even as a cost-sharing program broken into three phases, the financial commitment from all parties was unprecedented in the region.

"It really was unheard of to ask the Oregon Watershed Board for that amount of money," Clair says. "It was a first for eastern Oregon."

Projections showed that by the time of its completion, the Powder River Restoration would have a direct effect on close to 4,000 acres and involve stringing 5 miles of crossfencing and more than 15 miles of riparian fencing, laying 18.9 miles of 10- to 12-inch (in.) mainline and 31.78 miles of supply/return lateral lines, building 100 concrete watering troughs and planting 65,960 riparian plants.

But in spite of the size of the project being proposed, Clair was optimistic.

"When projects are developed by landowners there is a better chance of acceptance because they know what they are doing and they have a vested interest in its success," she says, adding that if there was a group of ranchers who could make it happen, it was the ones from Baker

Clair notes that a positive development early in the process



New watering troughs are conveniently located in fenced pasture.

was the agreement by the BVID board and its manager, Jim Colton, to act as the lead agency for the new project. Travis Bloomer, a Baker County NRCS district conservationist and participant in the Powder River restoration project, believes that without BVID's leadership, the likelihood of a positive outcome would have been more in question.

"Those guys put in a tremendous amount of effort into making it all happen," he says. "They staked their reputations on it being a win-win situation for everyone."

Bloomer adds that the role Jim Colton and his son Jeff played in recruiting landowners to the project was critical to its eventual success.

"Both Jim and Jeff are in the unique position in this valley of having the respect of all these landowners," he says. "We heard time after time from landowners that 'If Jim and Jeff are OK with it, then we are OK with it."

Different goals, common objectives

For Clair, one of the real positive aspects of the project was how well everyone worked together toward a common objective. She points out that 17 different landowners and six government agencies were involved directly in the project. The landowners were responsible for 20%-25% of the total project cost, while the Oregon Water Enhancement Board contributed \$1.7 million. USDA, through NRCS's **Environmental Quality Incentives** Program (EQIP), contributed \$415,000; and the U.S. Fish and Wildlife Service, through its Private Stewardship Grants Program, added \$160,000.

In addition to providing financial support, the BVID assumed the role of lead agency while the local Soil and Water Conservation District accepted responsibility for coordinating the grant requests and developing proposals.

Once the feasibility of the project was determined, it quickly became evident to all parties involved that the benefits would be wide-ranging and diverse.

For those who wanted to improve water quality on the Powder River, the project held the promise of finally controlling cattle access to the waterway and its adjacent riparian areas. Under the proposed project agreement, livestock entry was limited to the early spring months, when cool-season grasses along the river were abundant and the cattle were less likely to browse on remaining native plants.

In areas where the vegetation had already been stripped away by earlier

(Continued on page 56)

The River Runs Through (from page 55)

grazing activity, native willows and dogwoods would be planted to provide shade and habitat for fish and other wildlife

Under the terms in the project agreement, cattle would not have access to the river during the winter months, when the threat of bank erosion and overgrazing was at its highest. Instead, ranchers would water their animals out of a series of newly built concrete livestock troughs —100 in all — located some distance from the river in fenced pastures. These troughs would receive their water through a series of supply lines that originated at the river.

"I don't think it was difficult for the landowners to see the economic advantages of proceeding with the project," Claire says. "It was a win-win situation for both improving their land values and their cattle operations."

She notes that now that the water lines have been laid and troughs are operational,

the participating ranchers are seeing firsthand the advantages of the new system.

"Not only is the water cleaner than it would be if the cattle drank directly from the river, but it is considerably warmer from traveling underground in the pipes," she says, adding these factors contribute to higher water consumption, increased milk production and better weight gain in the calves.

Because calving now takes place in controlled pasture environments, ranchers have the ability to segregate young animals by age — a practice proven to reduce the incidence of scours and other communicable calf diseases.

Template for the region

One aspect of the Powder River Project Clair is particularly proud of is that it has inspired others in the region to move forward with similar undertakings.

"This project has generated others of its kind," she says. "Agencies and livestock groups from all over the state of Oregon are closely watching it."

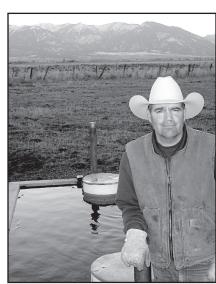
In Baker County alone, there are a number of projects of various sizes in various stages of completion, she says. "We have had some that are very small, with single landowners and one or two troughs. We have had others that are into development or are ready to seek funding that are larger than this project but are virtually the same thing."

Clair believes that it is the inclusiveness of the Powder River restoration that has made it the project to emulate.

"This has been a perfect solution for everyone involved," she says. "It works from both an economic and an environmental perspective."

During the next couple of years, the agencies involved in the original Powder River project will proceed with a similar one that will include ranches upstream from the original site. "We are looking at another 7 miles of river," she says. "If it works out as well as the first project, we will all be very happy."





► Drinking out of the trough is safer for Widman's cattle than drinking out of the river.