

Yakima irrigators reduce sediment

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After five years, more than \$5 million and a bit of government pressure, Lower Yakima Valley farmers have transformed their once-criticized irrigation system into a model project.

Along the way they have improved their ability to survive droughts because of a mass conversion to high-efficiency sprinkler systems and gained friends they never thought they'd have.

"What has been accomplished here ... is being talked about," said Doug Simpson, a grower and chairman of the board of the Sunnyside Valley Irrigation District. "I think it's bought us a lot of credibility."

The Lower Yakima River is one of the few places in the region to show such positive results, according to the state Department of Ecology, which monitors river pollution in Washington.

Since 1997, sediments in the Granger Drain have been reduced 95 percent and sediments in Sulphur Creek Wasteway have been slashed 98 percent.

"Everywhere else it seems people are just fighting over the fence, whereas here they have decided they can do something and they have gone and done it," said Ryan Anderson, environmental specialist with the Ecology Department. "It's been almost a pleasure working in this basin, getting these kind of results."

That's not to say the irrigation system is trouble-free. Fecal contamination remains a concern, and the river is hot and shallow during the summer, partly from irrigation withdrawals.

But five years after the state ordered drastic reductions in the amount of sediment running off farms and into the Yakima River, irrigators nearly have matched state demands and have one more season to go before their first cleanup deadline.

Now they have a request: Don't slow down efforts to build another storage reservoir in the Yakima Valley.

"It's time to get behind something and stop saying we can't do it," said Tom Carpenter, a longtime Sunnyside-area irrigator and storage proponent.

Such words carry more weight today than they have in recent years, now that irrigators are close to making good on their part of an informal deal they proposed to the Yakama Nation and environmental groups that could stop a storage project.

"We've lived up to our end of the bargain," Simpson said.

In 1997, state officials ordered irrigators on approximately 175,000 acres in the Lower Yakima Valley to clean up irrigation water returned to the river.

The reason was clear: The Clean Water Act and the Endangered Species Act demanded better conditions and agencies were increasingly willing to use penalties to force improvements.

It came as no surprise that the Yakima River - regarded as one of the most polluted waterways in the country - was a top target.

Tens of thousands of tons of top soil were being eroded from Valley farms each year, in many cases because farmers still were relying on rill irrigation that flooded fields with water and let it drain through a

system of canals back to the river. To complicate matters, the runoff carried long-lasting and dangerous pesticides such as DDT.

"That's bad for agriculture, and it's bad for the fishery we're trying to restore," Chris Coffin, Yakima River water quality project coordinator for the Ecology Department, said in 1997. "There are irrigation practices being used that need to be seriously looked at. The farmer is throwing money down the drain, almost literally."

Nervous directors of the Roza and Sunnyside irrigation districts feared that thumbing their noses at state and federal regulators would end up reducing their water supply by whatever it took to meet sediment-reduction goals, a devastating possibility.

"It was pretty universally accepted within the districts that rather than have (an agency) coming in and saying this is how it's going to happen, we ought to take it upon ourselves," Simpson said. "We like to pride ourselves on being the true environmentalists, and if we are going to talk that talk, we better walk it."

At the time, three of four major drains were substantially above the approaching 2002 standard. Two essentially were spilling mud into the Yakima River. Sulphur Creek, for example, shot 152 tons of sediment a day into the river. Granger Drain was marginally better at 100 tons a day.

That's like dumping a one-ton truckload of dirt into the river every 10 minutes. The impact was stunning. Photographs of Sulphur Creek from 1997 show a dingy brown plume spewing into the Yakima.

Meeting cleanup standards seemed impossible. "The goal was unreachable," said Jim Trull, manager of the Sunnyside Valley Irrigation District. "But you are not in a good position before you do anything to say, 'No, we can't do this.'"

So the Roza-Sunnyside Board of Joint Control took on a new task. It educated growers about the dismal possibilities of a state crackdown. It told water users to clean up their water or face reduced supplies, a promise it has made good on.

"When the irrigation districts came on board, things started falling into place," Coffin said. "They just did an outstanding job of putting (a plan) together. They pretty much did on their own."

The joint board also invited Anderson to share an office at the Sunnyside district. "It was quite novel for an irrigation district to have a state environmental (agent) in the office," said Anderson, who worked on farms to reduce runoff.

Among the options are upgrading irrigation systems, adding settling ponds to remove sediment from water, closely monitoring ground moisture to ensure precise water applications and using an agent called PAM to form a crust on the soil that reduces erosion.

"All the fixes aren't hard," said Anderson, who has since returned to his Yakima office. "But it was a new idea for a lot of people to have a water quality policy on the farm."

The joint board also helped secure \$10 million for low-interest loans to help irrigators upgrade irrigation systems. A healthy chunk of that has been spent, and though applications have slowed with the stumbling economy, nearly 7,000 acres have been upgraded from rill irrigation to more efficient sprinklers and drip systems.

That's the single biggest reason for improved water quality, according to a report on Sulphur Creek issued in July by the South Yakima Conservation District.

New numbers for the early part of the 2001 season show that Granger Drain was carrying just 5 tons a day of sediment to the river, while Sulphur Creek was at 4 tons. Even compared to 1994, another low-water year, 2001 results show vast improvement.

"The farmers are the ones who achieved this," Simpson said. "It wasn't the management. It wasn't the directors."

Coffin, now in a different role at the Ecology Department, still flies over the Yakima River occasionally and has monitored irrigators' success. "I thought it was possible to do it, but whether it would be done, I didn't know," he said. "I was skeptical that partnerships would actually come together."

For all the progress, however, Simpson realizes irrigators must continue improving environmental efforts. "The (sediment goal) is not going to be the end," he said. "We have other things coming down the line."