

## Practices

# Irrigators redesign operation

*Group patents new horizontal fish screen technology*

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HOOD RIVER, Ore. — Hood River pear grower Fritz Von Lubken and his son used to drive two and three miles several times a week to clean dead fish, sticks, leaves, pine needles and other debris out of their old vertical diversion screens.

They don't have to do that anymore.

When the floods of 1996 took out their old vertical system, the farmers and the staff of the Farmers Irrigation District got together and created a new horizontal one. This time they got a system that works.

"The fish are where they belong now, so I shouldn't ever have to dislodge another 8-pound steelhead from my irrigation pipe," Fritz said. "Also, we won't be having to start the irrigation all over again because we didn't know how long it ran before it clogged up and quit working. The old state-mandated systems never did work for us, but the new one does."

It was a series of problems that caused the Farmers Irrigation District to totally redesign its entire operation, but the final push was the February 1996 rain-on-snow-induced floods that annihilated both the screen facilities and most of the major conveyance canals. These worst of times (which turned out to be the best of times, although the district didn't know it yet) left the district nearly bankrupt because of the money it still owed from a project trying to correct diversion



Standing atop the 85-cubic-foot-per-second Diversion Farmers Screen systems test site on the Hood River, Jerry Bryan, manager of the Farmers Irrigation District, describes how the flat screen system stops debris but allows safe passage for fish.

Jan Jackson  
For the Capital Press

### Information

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problems it faced before the flood.

In an unprecedented series of meetings among the farmers, natural resource agencies and end-users, the Farmers Irrigation District researched, designed, tested and now ensures safe fish passage and efficient debris management, provides an affordable screen with minimal operation and maintenance cost, and allows increased water flow.

The system complies with state and federal laws and has been approved by both National Marine Fisheries Service and Oregon Department of Fish and Wildlife. To make sure the profits would always be used for the benefit of fish, farms and families, the FID then licensed the technology to the Farmers Conservation Alliance, a non-profit group that works to de-

velop resource solutions for rural communities.

"Water diversion screens create one of the greatest opportunities to protect fish and ensure cost-efficient, consistent water flow to diverters for power generation and irrigation," FCA spokesman Les Perkins said. "The opportunities are immense. A survey of both the Oregon state and Washington state screen shops found that only 81 screens are being installed annually, even though there are an estimated 111,000 diversions needing screens.

"While there are current laws that require screens, it is near-

ly impossible to comply because of limited design options, minimal funding for innovation and construction and a complicated permitting process. The Farmers Conservation Alliance is helping to solve the problem by building their more cost-efficient screens in bulk and developing a simple natural resource agency permitting process," Perkins said.

"The best part is that once the Farmers Screen is in the ground, operation and maintenance costs are minimal."