

Farmer's Screen Helps Producers Save Fish, Keep Streams Clean



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Farmers, irrigation district personnel and government agents pooling their research resources over a decade made the difference.

The result of their work is the Farmers Screen, a unique fish screen with no moving parts which sits horizontally in the water. Most screens run vertical to the water flow.

The product of the Farmers Irrigation District near Hood River, Ore., is also self cleaning, another plus that nudges the product into its own niche, says Les Perkins, Farmers Conservation Alliance business development director.

"Mechanical cleaner breakdowns and debris overloads are the primary reasons other systems fail," says Perkins, who is marketing the systems patented by the FID.

"With the Farmers Screen, the physics of water movement does the job (reducing debris)."

While horizontal screens are nothing new – designs have been tried for at least a century – "this is the first one that actually effectively manages debris and protects fish," proclaims Perkins.

That's because the water moves very slowly through the screen while moving very quickly across the screen, he explains. That, Perkins says, means there is less chance of fish or debris becoming trapped on the screen surface.

One of the primary hurdles FCA faced with launching its marketing campaign was how to price the screen installations, which could vary widely in expense depending on individual sites.

Still, farmers and others in water markets wanted a ball park idea of what a screen would mean in dollars.

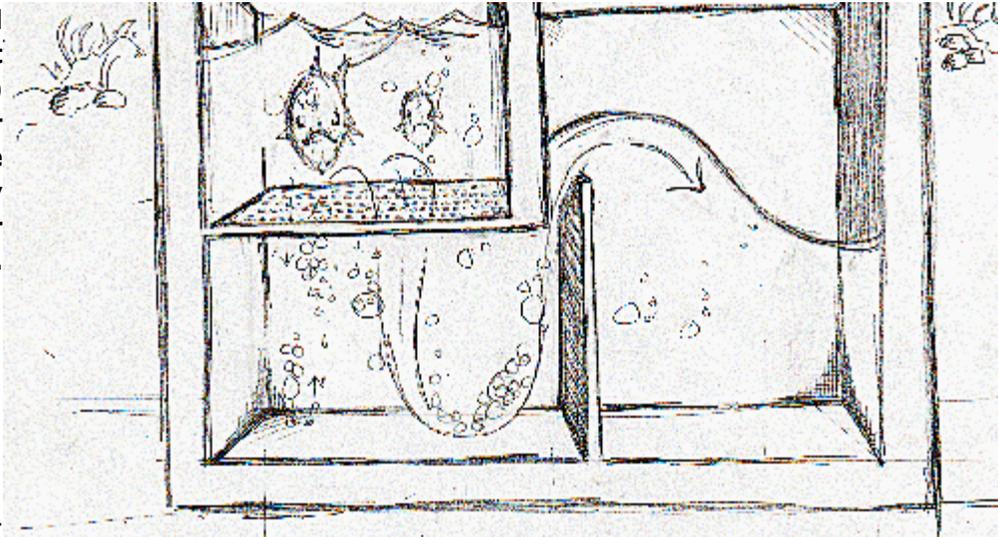
So, FCA developed the modular system (see cover story) that makes it easier to estimate costs, but the bottom line may be a concern to some, he admits. But, he feels FCA can do the job cheaper.

"A typical screen can range in cost from \$5,000 to \$10,000 per cubic foot per second (cfs) of flow, but Farmers Screen designs can do the job for from \$3,000 to \$3,500," he says. Still, on difficult sites that can rise into the \$10,000 cfs range, he adds.

HORIZONTAL LAYOUT: The Farmers Screen design is depicted in this cross section illustration from FCA showing the fish movement through cleaning water, top left, above the screen. A weir



wall (vertical structure at bottom, center) controls water flow from the attenuation bay (large chamber at right).



About 75% of the screen market today involves users with five cfs or less diversion, says FCA

Executive Director

Julie Davies O'Shea. "But, with the various tax credits and funding programs in Oregon, payback on a screen system is about two to five years," she adds.

The Oregon Department of Fish and Wildlife conducts a cost-sharing program that will pay for 60% of such installation expenses, and federal programs under the Natural Resource Conservation Service offer help as well.

For more information, see the Western Farmer-Stockman October cover story. You can also check FCA's Web site at www.farmerscreen.org, or call their office at (541) 716-6085.