



USDA NRCS

The sediment basin under construction about 2 miles north of Parma, Idaho.

Parma basin will reduce sediment in irrigation water

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Capital Press

Getting dirt out of the water from upstream will help irrigators and river cleanliness downstream, farmers and canal company representatives said as work on a custom-designed sediment basin began April 6 north of Parma, Idaho.

Irrigation water flowing down the Farmers Cooperative Ditch Co. canal will enter the basin at an inlet at the start of an oxbow-like curve in the canal. It will flow through the basin for about 2,000 feet and allow the sediment to settle, according to the USDA Natural Resources Conservation Service.

The sediment-free water will re-enter the canal through an outlet well below the oxbow. Inside the basin, a half dozen raised pads, each 60 feet wide on top and of varying lengths, will remove sediment.

The basin's benefits outweigh the additional maintenance responsibility the finished project will create, said Clint Eells, who manages Parma-based Farmers Cooperative Ditch Co. Member irrigators now get significant return

flow and sediment from the Black Canyon Irrigation District upstream. Return flow is water that leaves a field following irrigation.

Eells said the sediment-laden water from upstream eventually affects Farmers Cooperative members' equipment such as drip irrigation filters and other system components and sprinklers. The basin will make the water much cleaner for the approximately 4,000 member-irrigated acres, and when it empties into the Boise and Snake rivers, he said.

Bill Hartman, who farms east of Parma and is the Farmers Cooperative board vice president, said one-third or more of the water the company delivers is return flow from water users upstream. The sediment in it eventually fouls irrigation equipment and settles in farmers' ditches.

The basin, about halfway down the cooperative's 33-mile canal system, will make it easier for farmers below it to manage their systems. "These 4,000 acres will now be able to use drip-irrigation technologies," Hartman said.

Costs include \$356,000 for construction of the basin,

maintenance pads, and in-flow and outflow structures; about \$300,000 in voluntary contributions for best management practices involving NRCS guidance; and another \$300,000 in in-kind contributions for long-term maintenance, he said.

Funding sources include \$500,000 in matching funds from NRCS, and contributions from Farmers Cooperative and Black Canyon irrigation districts; Southwest Idaho Resource and Development Council, the City of Parma; the Canyon County Board of Commissioners; the Lower Boise Watershed Council; the Canyon County Soil Conservation District; and NRCS in-kind contributions for best management practices.

Completion of the 8.8-acre basin is targeted for this fall on leased farmland. Hartman said similar projects may be built later, based on independent sediment analysis and the basin's success.

NRCS and Farmers Cooperative Ditch Co. developed a water quality monitoring plan as part of a five-year total timeline for the basin project, NRCS said.