

# O · R · E · G · O · N *Conservation* SHOWCASE



*Steve and Kathy Simpson: The Simpsons survey their ranch where they raise hay and domestic elk.*

*Farmers,  
fish and  
Community  
benefit from more  
economical and  
reliable  
water supply.*

*Terrebonne, Ore. —*

**M**cKenzie Canyon farmers Kathy and Steve Simpson will be sleeping a lot better this summer. A newly-completed irrigation pipeline to their farm will eliminate the need for round-the-clock checks of their irrigation pond level. The Simpsons and 30 other landowners are benefiting from a USDA Natural Resources Conservation Service (NRCS) Agricultural Water Enhancement Program (AWEP) project that replaces open irrigation canals and ditches with 10.3 miles of 36" High-density Polyethylene (HDPE) pressurized pipeline, and provides turnouts and lateral

pipeline connections on 1,976 acres of Central Oregon farmland.

"We won't have to get up in the middle of the night to check the pond and make sure the right flow is going in or out," says Steve with a smile. If the water level isn't fluctuated correctly, the pond would overflow. Kathy adds, "We can go out to dinner without worrying!"

For five years, farmers and ranchers in the Lower Bridge Sub District of the Three Sisters Irrigation District (TSID), NRCS, OWEB Confederated Tribes and a number of other natural resource partners have focused on the design and completion of the McKenzie Canyon project. According to Kathy Simpson, who serves as president of the Lower Bridge TSID Sub-District board, the water conservation effort will improve instream flows and water quality in Whychus Creek—formerly Squaw Creek—for salmon, steelhead and bull trout recovery and provide farmers with a more economical and reliable supply of irrigation water.

The pipeline cuts transmission losses of 40 to 75 percent previously caused by canal and ditch seepage. NRCS District Conservationist Tom Bennett predicts, "The more efficient delivery system will increase instream flows in Whychus Creek, saving 10 cubic feet per second (cfs) water over the entire irrigation season." When the



*Pipeline: 10.3 miles of HDPE pipeline was designed, welded and installed over four years.*

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*— Tom Bennett  
(NRCS District Conservationist)*

new pipeline system was charged, it exceeded Tom’s expectations for efficiency, generating 5 percent more pressure than had been previously calculated.

In addition to better sleep, the Simpsons will enjoy significantly lower energy bills. Steve estimates the annual savings on his electricity bill may reach \$35,000. “We took out five pumps, saving us \$5,000 to \$7,000 per month for five months.” Steve adds with a twinkle in his eye, “That may make the farm profitable!” The pressure that builds in the pipes as water drops in elevation creates the inertia necessary to move the water to farms along the system with infrequent need of a boost from pumps.

Tom Bennett explains how the AWEP project helps people help the land: “The profitability of farming in McKenzie Canyon was jeopardized because of the high cost of electricity. With the completion of this project, farming is more stable and the power that

was consumed for decades by pumps will now be used by society in other ways.” Marc Thalacker, manager of TSID, estimates 3 million kWh of energy was used by pumps each year before the pipeline project was completed.

According to Marc, “Current limitations for fish in Whychus Creek include low stream flows, high temperatures and passage barriers. Improved flow will provide fish access to more suitable habitat and lower stream temperatures.” TSID serves as the project administrator and is the primary NRCS partner for the effort.

Marc explains, “The Lower TSID District is one of the last remaining areas of commercial agriculture in Deschutes County.” High energy costs and lack of reliable late season water has seriously jeopardized agricultural profitability in the Lower District making farmland susceptible to non-farm development.

Whychus Creek is on the 303(d) list for temperature under the Clean

Water Act (CWA). Fishery agencies and the Confederated Tribes of the Warm Springs are counting on improving conditions in Whychus Creek to support spawning and rearing for threatened fish. Efforts to reintroduce anadromous fish started in 2007 as part of the Federal Energy Regulatory Commission (FERC) re-licensing requirements. Anadromous fish swim up rivers from the sea for breeding.

The significant project was made possible by a partnership of many natural resource entities. The McKenzie Canyon Irrigation Project was designed and engineered by NRCS in collaboration with Oregon Watershed Enhancement Board, the Bureau of Reclamation and Portland General Electric/ Confederated Tribes of Warm Springs through their Pelton Fund. NRCS worked collectively with partners on NEPA and cultural resources. Individual landowner and stakeholder participation was an integral part of all phases of the development of the project. Since the first irrigation water conservation projects began, TSID and NRCS worked with the public and private landowners to implement water-saving measures.

According to Marc, “TSID agricultural irrigators are motivated to conserve irrigation water and do what is necessary so that both fish and farms can thrive for future generations.”

Kathy and Steve Simpson have raised Kristi (19), Kari (18) and Garrett (15) on Cross Anchor S Ranch, moving to their current residence before Garrett was born. Kathy and Steve love the land and farming. “We were raised in a farm life and that is

why we bought this ranch,” explains Kathy.

Will the next generation of Simpsons keep up the legacy of farming? “It’s up to them if they want to continue,” admits Kathy. While the trend is for members of the younger generation to move away from the farm because of the hard work and low profitability their parents experienced, the recent improvements may be enough to convince the younger Simpsons to stay. Steve reasons, “This pipeline project may make them decide they want to stay on the ranch now. The workload is so much better, and from here on out this place will be profitable.”

## NRCS

### *Helping People Help the Land*



**Pipeline:** NRCS Engineer Greg Card checks 50' pipe lengths before welding.