

CWF Project Profile

Sam Sanders

Reno County
North Fork Ninnescah
Watershed, Red Rock Creek

Reno County Rancher **Implements Clean Water** **Farm Action Plan**

by Jim French



Farm tour participants view the industrial tire cut in half to serve as a watering tank at the Sanders' farm.

Hutchinson, Ks. - After spending two evenings working through the River Friendly Farm Environmental Assessment Notebook, Sam Sanders admitted that he “learned a lot about myself and my operation.” Sam Sanders and his family completed the assessment in the winter of 2003, and developed an action plan. Sanders’ action plan included construction of a fuel containment facility and development of an alternate water source and cross-fence development in a pasture.

Water Quality Concerns:

- * Livestock access to creek and pond, and waste runoff;
- * Potential contamination of groundwater from fuel tank spillage or leakage.

Best Management Practices Implemented:

- * Fenced the pond and developed two alternative livestock watering points.
- * Constructed a concrete fuel tank containment structure.

Because he had completed the assessment and plan, Sanders qualified to apply for cost-share funds through the Kansas Rural Center’s Clean Water Farm Project (CWFP). According to Mary Fund, project coordinator, the River Friendly Farm assessment helps producers identify the critical areas on a farm where the most effective action to protect water quality might be implemented.

Dale Kirkham, KRC field technician who worked with Sanders, said that the assessment tool helps producers determine “where they are, and where they want to go.” In Sanders case, the action plan he developed was submitted to the CWFP Advisory Committee in the spring of 2003. That committee is made up of state university, agency personnel, and farmers who have expertise in water quality and practical experience in farming. They approved Sander’s proposal and he proceeded to implement his practices

Farm fuel containment. Like most farmers, Sanders had fuel bulk tanks on his farmstead for diesel, gasoline and oil. Other than being a potential threat to

ground and surface water, Sanders learned from the local fire marshal's office that any farm storing over 1100 gallons of fuel or oil needed a containment structure.

The fuel containment structure consists of a sixteen by sixteen foot concrete structure with sidewalls tall enough to hold 110% of the fuel located there in case of a spill. After completing the concrete work, Sanders painted the containment area with acrylic-enamel paint.

When Sanders had the sidewalls poured he placed pole mounts in the concrete so that he could put a roof on the structure at a future date. Shade not only protects the tanks, but will decrease fuel volatilization. Currently Sanders plans to erect the roof in the winter of 2004.

Alternate water development and cross fencing. The action plan on the Sanders' operation also called for excluding cattle from a pasture pond and establishing an alternate water source.

After fencing the pond, Sam put in a solar pump and developed two watering points away from the fenced pond. Cattle have access to these water points from more than one paddock established in the pasture.

"I have already seen that my cattle prefer the clean water that comes in the tank over standing water," said Sanders. He also said that he had heard that recent research shows that cattle performance also improves with better

water quality. "This will more than offset any loss of pasture I might have had with fencing off the pond," he said.

For one watering point, Sanders purchased a tire tank made from an industrial-sized tire cut flat on one side. The tank is 11 feet in diameter and approximately two feet high and holds 1500 gallons of water. After setting the tank in place, he poured three to four inches of concrete in the base and sealed it with bentonite. "This is definitely a lifetime tank," said Sanders. However, he had some concerns about using this type of tank again. "It weighs over a ton, and wasn't the easiest to work with," he said.

However, Sam Sanders likes what he sees after a season with his watering system and divided pasture. "With some management, I can see where this arrangement will benefit me and the productivity of my pasture," concluded Sanders.



Above photo shows the Sanders fuel containment before the cement forms are removed. The fuel containment structure is a sixteen by sixteen foot concrete structure with sidewalls tall enough to hold 110% of the fuel located there in case of a spill.