



Franklin County Conservation District Newsletter



VOL. 28 NO 4

WINTER 2014

CONCRETE OUTLET SAVES SOIL

by Stephen Sparks

This fall we were contacted by a landowner that had a large erosion site between his crop and pasture fields. The erosion site had gullies with an average 12 foot top width and 3 foot bottom width and a depth of 3 feet for a total length of 360 feet over the course 10-20 years. Our calculation showed a drainage area of 88 acres and the soil loss per year was losing roughly 25 tons of soils.

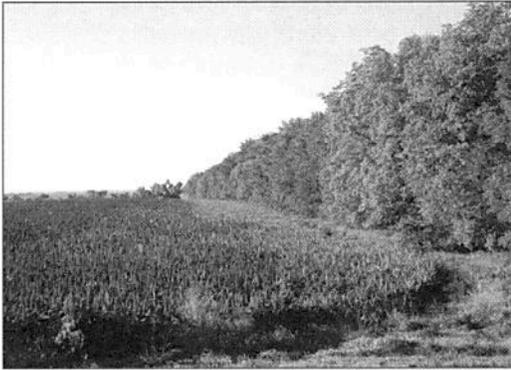
We were able to survey and design a waterway that was 650 feet long and had a 32 foot bottom width. At the end of the waterway a stable outlet was needed, with the large drainage acres we were able to design a 10x8x4 concrete drop box with 12 foot wing walls.

The landowner was able to install both practices in September and received state cost-share for the construction, seeding, & mulch of the waterway and for the construction of the concrete structure and the rock.



**SECTION
OMITTED**

What to do with those unproductive field edges...



Every acre of every field is not created equally! Some areas of every field carry the weight of the production, and others consistently drag it down. For those that have the equipment to track their yields as they combine, you know this happens, and you can usually see a pattern year after year of certain areas that have consistently low yields. In this part of the world, the biggest culprit of these low yield areas is often our field edges; to be more specific, the wooded field edges. Where crop fields meet trees, whether it is a forested area or even just a tree line, there is a dramatic drop in production. This reduction in yield can extend as far as 150 feet into the field, with the most dramatic losses in the first 75-100 feet. Tree roots readily uptake water and nutrients from the soil, making it

unavailable for the crops near that edge. The shade factor from the trees also has an impact on those areas nearest the edge of the field as well. These areas are actually costing you money to work, plant, and spray every year. The yield is not even enough to pay back the input costs on those acres. They also reduce the average yield over the entire field when lumped in with the rest of it.

Wooded edges are not the only culprits however; streams, ditches, road edges, and even perennially wet spots will reduce yields of the acres around them. These areas are also known for having some very high rates of erosion, and as entry points of agricultural run-off in our surface water. Sedimentation and nutrient loading in our streams effects all of us locally that use those sources for drinking water, and is having a large impact on aquatic systems all the way down to the Gulf of Mexico.

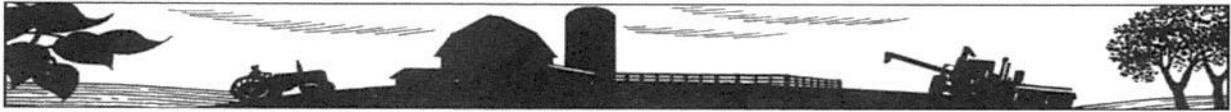
How can we increase our on the farm profits and reduce erosion, sedimentation, and nutrient run-off all at the same time? The key is that can accomplish all of this is field buffers. Buffers, or borders, of native grasses and forbs do an excellent job of catching sediment and nutrients that are trying to leave the field. Erosion reduction can be dramatic by taking away the un-obstructed path that water once had to the edge of the field. This is true for both conventional till and no-till systems. The best part is, these buffers can be planted through the Continuous Conservation Reserve Program (CCRP). CCRP provides an annual payment for those acres under the program just like the traditional whole field CRP program. There are many options for practices under CCRP, but the main buffer practices include CP-21 Filterstrips, CP-22 Riparian Buffers, and CP-33 Habitat Buffers for Upland Birds. (There are also buffer programs for pastureland along a creek as well for those who may be interested.) All of these practices can be established to wildlife friendly native warm season grasses and forbs. These native grasses stand up much better to water flow, and will slow run-off very well. These can all be great practices for increasing wildlife habitat as well.



Cp-33 is a program that really works well for the land and the landowner. Instead of having all the input costs of trying to produce a crop on these buffer acres every year, you get paid to leave it sit idle in grass. These acres that were once costing you money every year to plant and spray, are now producing you a profit. On top of the cost share for the seeding of these acres and the annual payments, you also get a practice incentive payment to cover up to 80% of the establishment and a sign-up incentive payment of \$150/ac for the first year. So even in the year of establishment for these programs, these acres are making you money.

As weird as it seems, farming every available acre is not necessarily the most profitable. Let these programs work for you, to increase your bottom line on your farm. Your pocketbook will thank you, and so will the wildlife.

For more information about how these programs can work for you, visit your local USDA Service center. You can also contact Ryan Diener directly at 636-399-8733 for more information.



State Cost Share

WOODLAND EROSION



Woodland erosion is caused by the removal of soil or vegetation through livestock trampling or improper tree harvesting. In order to protect woodlands and water from the impacts of livestock or recover an already damaged area, you can: plant trees and shrubs; install fence to exclude livestock; ensure that timber harvest operations use proper construction of logging roads and stream crossings; and correct and control gully erosion through proper timber harvest

practices. Well-managed woodlands will add beauty, income, diversity, and excellent ground cover for wildlife habitat, reduce soil erosion and improve water quality. All of the Woodland Erosion practices have a 10 year maintenance life span.

FOREST PLANTATION- Converting land to woodland (certain trees do not qualify).

USE EXCLUSION- Excluding livestock from an area to protect plants, soil and water resources; reimbursed 75% of computed State Average.

TIMBER HARVEST PLAN- Harvesting timber according to a management plan; AFTER sales, 20-75 ac = \$20/ac, 74+ ac = \$1,500 plus \$15/ac; \$3,000 per farm/landowner/year maximum \$9,000.

RESTORE SKID TRAILS, LOGGING ROADS, STREAM CROSSINGS OR LOG LANDINGS-

Controlling erosion where improper harvest was done; max \$1,500 per gully and max \$6,000 per landowner.



If you have questions, concerns or would like a field visit to help address any above practices, please call the office.

BOARD OF SUPERVISORS

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1004 Vondera Ave. • Union, MO 63084
636-583-2303 • 855-535-5203

The Franklin County Conservation District was organized in 1944 with a primary objective to solve soil and water conservation problems. The District, upon request, aids in planning and applying appropriate land use and conservation treatment measures.

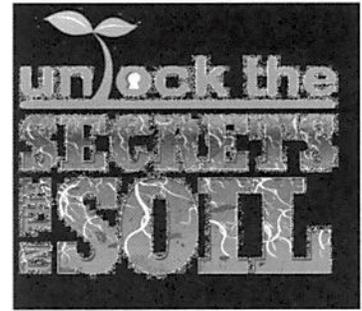
OFFICE STAFF PERSONNEL

Lori Nowak, District Clerk, FCSWCD
Stephen Sparks, District Technician, FCSWCD

Rhonda Davault, District Conservationist, NRCS
Kervin Bryant, Soil Conservationist, NRCS
Teresa Morris, Soil Conservationist, NRCS
Jerry Busch, Area Soil Technician, NRCS

Lia Heppermann, Private Land Conservationist, MDC
Ryan Diener, Farm Bill Wildlife Biologist

BASICS & BENEFITS



Managing for soil health is one of the most effective ways for farmers to increase crop productivity and profitability while improving the environment. Positive results are often realized within the first year, and last well into the future.

Soil Health

Soil is made up of air, water, decayed plant residue, organic matter from living and dead organisms, and minerals, such as sand, silt and clay. Increasing soil organic matter typically improves soil health since organic matter affects several critical soil functions. Healthy soils are also porous, which allows air and water to move freely through them. This balance ensures a suitable habitat for the myriad of soil organisms that support growing plants. It's not difficult to improve soil health. Here's how: till the soil as little as possible; grow as many different species of plants as possible through rotations and a diverse mixture of cover crops; keep living plants in the soil as long as possible with crops and cover crops; and keep the soil surface covered with residue year round.

Soil Health Benefits

Farmers who manage their land in ways that improve and sustain soil health benefit from optimized inputs, sustainable outputs and increased resiliency. Healthy soils benefit all producers – managers of large, row crop operations to people with small, organic vegetable gardens. Healthy soils provide financial benefits for farmers, ranchers and gardeners, and environmental benefits that affect everyone.

Healthy soils lead to:

Increased Production – Healthy soils typically have more organic matter and soil organisms which improve soil structure, aeration, water retention, drainage and nutrient availability. Organic matter holds more nutrients in the soil until the plants need them.

Increased Profits – Healthy soils may require fewer passes over fields because they are only minimally tilled and they aren't over-reliant upon excessive nutrient inputs to grow crops. Healthy soils can increase farmers' profit margins by reducing labor and expenses for fuel, and optimizing inputs.

Natural Resource Protection – Healthy soils hold more available water. The soil's water-holding capacity reduces runoff that can cause flooding, and increases the availability of water to plants during droughts. Good infiltration and less need for fertilizers and pesticides keep nutrients and sediment from loading into lakes, rivers, and streams. Groundwater is also protected because there is less leaching from healthy soils. Additionally, fewer trips across fields with farm machinery mean fewer emissions and better air quality.

Soil Health Management Systems

Implementing Soil Health Management Systems can lead to increased organic matter, more soil organisms, reduced soil compaction and improved nutrient storage and cycling. As an added bonus, fully functioning, healthy soils absorb and retain more water, making them less susceptible to runoff and erosion. This means more water will be available for crops when they need it. Soil Health Management Systems allow farmers to improve profitability because they spend less on fuel and energy while benefiting from the higher crop yields resulting from improved soil conditions.

Contact your local NRCS office to learn more about Soil Health Management Systems and the technical and financial assistance available to help "Unlock the Secrets in the Soil."



*Have a safe and happy
holiday season!*

*Dan, Bernard, Carl, Matt,
John, Lori and Stephen*



MARK YOUR CALENDAR

*The Franklin County Soil & Water Conservation
District's Annual Meeting will be held March 19, 2015
at the KC Hall in Union, MO.*

*Ryan Diener, Quail Forever will be the
evening's keynote speaker.*

**SECTION
OMITTED**

Area III – MICHAEL & CINDY KLEEKAMP



Our Area III Outstanding Farmer award goes to Michael and Cindy Kleekamp. In 2006, Mike and Cindy purchased this farm in Gerald. The farm was grown up in cedars and had old fencing for cattle. Mike has worked hard in cleaning up the farm and making it a very productive asset.

Through Mike's efforts, the farm is now about 80 acres in grass and about that much in woodland. The grass fields are brome, mixed grasses and orchard. Next year, Mike plans to have orchard and alfalfa available for the hay market. Over 1200 trees were cut down during the clean-up effort. Wildlife is now visible and making the farm their home - in the 4 ponds, wood ducks have claimed their nesting boxes and deer graze the fields. Mike and Cindy participate in the USDA NRCS programs of EQIP (Environmental Quality Incentive Program) and CSP (Conservation Stewardship Program) to help them protect and conserve the farm's natural resources.

Even though the farm takes up much of Mike's time, he does work in the grocery business full time. Mike, Cindy and their two children enjoy coming out to the farm and putting on a good ole' family gathering for all to enjoy.

Congratulations to Michael and Cindy Kleekamp and keep up the good work to improve your natural resources!



FRANKLIN COUNTY CONSERVATION DISTRICT

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COMING EVENTS

Wed - Fri, Dec 10-12, 2014
Employee Training Conference
District Office Closed

Thursday, December 25, 2014
USDA Service Center closed
Christmas Day Holiday

Thursday, January 1, 2015
USDA Service Center closed
New Year's Day Holiday

Tuesday, January 13, 2015
SWCD Regular Board Meeting
10:00 a.m., USDA Service Center

Monday, January 19, 2015
USDA Service Center closed
MLK's Day Holiday

Tuesday, February 10, 2015
SWCD Regular Board Meeting
8:00 a.m., USDA Service Center

Call to confirm meeting date and times. All regular meetings are open to the public.



Quarterly Quote

“There is nothing in which the birds differ more from man than the way in which they can build and yet leave a landscape as it was before.”

—Robert Lynd

THANK YOU

The District Board appreciates the cooperation of the businesses that advertise in our newsletter and hope that our readers patronize these advertisers. The Board especially appreciates the financial assistance of the Franklin County Commission. Thanks also to our partners in conservation: NRCS, FSA, DNR, University Extension, MDC, Quail Forever. Assistance from the Soil and Water Conservation District is available to all county residents regardless of race, color, national origin, sex, religion, age, disability, gender identity, reprisal, political beliefs, marital status, familial or parental status, sexual orientation or individual's income. State Cost-Share funds are available for agriculture landowners that have active erosion and are approved to complete practices that solve the erosion problem and for practices that protect our water quality.