STONE COUNTY SOIL & WATER CONSERVATION DISTRICT

May 2017 Newsletter

If there has been any **destruction** to a cost share practice due to the **flooding** recently, please be sure to contact your local SWCD for assistance! There will be cost share funding to re-establish the practice to function as it should.

Call the Stone County office at 723-8389 or email: melissa.white@swcd.mo.gov

or kevin.wray@swcd.mo.gov

Nearly $39 million Obligated to Missouri Farmers for Conservation Practices

Nearly $39 million in cost-share funds have been obligated by local county soil and water conservation districts in assisting Missouri farmers to implement voluntary planned soil and water conservation practices from July 1, 2016 to March 31, 2017. Local county soil and water conservation district boards, staff and conservation partners provide financial and technical assistance to farmers and operators to voluntarily implement locally approved soil and water conservation practices. Fifty different soil and water conservation practices are available to address the following resources issues:

- Management of grazing lands
- Woodland erosion
- Nutrient and pest application to crops and pastures
- Protection of sensitive areas such as streams and sinkholes
- Sheet, rill and gully soil erosion
- Irrigation management
- Animal waste management

To contact your local soil and water conservation district office or to find out more information, visit dnr.mo.gov/env/swcp/service/index.html or http://www.swcd.mo.gov/stone
Soil and water conservation practices are funded by the Parks, Soils and Water Sales Tax.

GOOD FOR MISSOURI STATE PARKS, SOIL & WATER CONSERVATION

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Stone Co Soil & Water Conservation District

Flood-Damage Assistance Available through NRCS

The USDA's Natural Resources Conservation Service (NRCS) is gearing up to provide assistance to Missouri communities and landowners affected by flooding.

"Unfortunately, we've been through this before," said State Conservationist J.R. Flores. "We don't have estimates of damages yet, but we're not waiting. We know that when the floodwater recedes that there will be damages that we might be able to help repair."

Flores points to two programs in particular. One is the Emergency Watershed Protection Program (EWP). The other is the Environmental Quality Incentives Program (EQIP).

EWP is the USDA's primary method of providing financial and technical assistance for most restoration measures including levee repair, logjam removal, sediment removal from drainage ditches, and streambank stabilization near roads, bridges and buildings. An EWP project must have a local sponsor that is a legal subdivision of state government, such as cities, counties, levee districts and drainage districts.

EQIP provides financial and technical assistance for conservation practices that improve natural resources on agricultural land and non-industrial private forestland. While EWP is for new issues related to a flood, EQIP flood assistance applies only to conservation measures already put in place through EQIP that have been destroyed by flooding.

"We encourage those affected by the flood to meet with their local NRCS representatives in order to assess the needs of our state," Flores said. "At this time, we are unsure of what funds will be available, but it is important for us to have a clear understanding of how many potential projects there are in Missouri."

For further information, please visit the Missouri NRCS website or contact the local NRCS office serving your county.

In This Issue:

Pg. 1– Obligated to Conservation

Pg. 2– Cost-Share Programs

Pg. 3– Riparian Buffer

Pg. 3— Palmer Amaranth

Pg. 4 Outreach, Flooding, Beef to Brazil

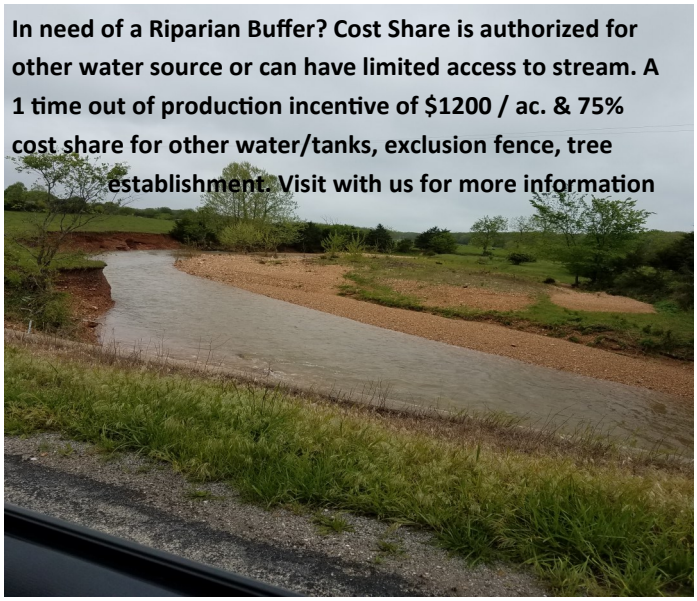
Pg.5 - WIA Conference & Sinkholes

Pg.6—Grazing School Schedules

COST SHARE PRACTICES

Sensitive Areas

Agricultural land along streams, springs or fields that has the potential to preserve water quality by filtering and absorbing pollutants is known as a sensitive area. Buffers, a strip or area of vegetation either at the edge of a crop field or along a stream, protects water quality by collecting and filtering out sediment and other nutrients that run off of agricultural fields. With funding from the parks, soils and water sales tax, landowners can voluntarily install field borders, filter strips, riparian forest buffers and exclude livestock from streams while providing alternative water.



Gully Erosion

Gully erosion is severe erosion in which trenches are cut into the soil by running water. Water is channeled across unprotected land and the soil is washed away along drainage lines. Large gullies are difficult and costly to fix, but repair work done in the early stages of newly formed gullies is easier and more economical than letting the problem go unchecked for too long. By diverting the water flow and stabilizing the gully, this problem can be overcome. Funds are available for landowners who voluntarily want to install practices that can remedy this problem which include installing terrace systems or diversions, establishing permanent vegetative cover or constructing sod waterways.

Woodland Erosion

Soil, waterways and timber production suffer when woodlands are grazed. The removal of soil or vegetation through animal feeding and trampling or tree harvesting allows soil to become susceptible to erosion. A simple solution to this problem is to exclude livestock from the woodland area. Funds are available to install an exclusion fence as well as help with restoring skid trails and logging roads during timber harvesting.

Riparian Forest Buffers: An Agroforestry Practice

Kate MacFarland / Assistant Agroforester / USDA National Agroforestry Center **Richard Straight /** Lead Agroforester / USDA National Agroforestry Center **Mike Dosskey, PhD /** Research Ecologist / USDA National Agroforestry Center *Published February 2017*

Introduction: Located along streams, lakes, or wetlands, riparian forest buffers deliver water quality, habitat, recreation, and other benefits in agricultural, woodland, range, suburban, and urban settings. A wide variety of state and federal programs support the installation of riparian forest buffers on public and private lands.

Definition: A riparian forest buffer is an area adjacent to a stream, lake, or wetland that contains a combination of trees, shrubs, and/or other perennial plants and is managed differently from the surrounding landscape, primarily to provide conservation benefits.

Objectives: Riparian forest buffers can help meet a number of natural resource, economic, and social objectives, including: Filtering nutrients, pesticides, and animal waste from agricultural land runoff, stabilizing eroding banks, filtering sediment from runoff, providing shade, shelter, and food for fish and other aquatic organisms, providing wildlife habitat and corridors for terrestrial organisms, protecting cropland and downstream communities from flood damage, producing income from farmland that is frequently flooded or has poor yields, diversifying landowner income and creating recreational spaces.

In the east, buffers are often used to reduce nutrients and sediments flowing into streams and estuaries, while in the Midwest, buffers are generally used to stabilize stream banks, reduce pollutant runoff, and restore habitat for fish and wildlife in extensively cultivated landscapes. Riparian forest buffers can be effective at meeting conservation goals and can be used in conjunction with other conservation practices. It is important to remember that one size does not fit all. The most effective location, size, and composition will vary depending on site conditions and natural resource objectives. Riparian forest buffers can be designed to achieve more than one goal or objective. **Another practice WQ10 offers exclusion of the stream, for natural regeneration without the planting of trees.**

*VISIT WITH YOUR LOCAL SOIL & WATER OFFICE ABOUT **FUNDING** TO IMPLEMENT YOUR BUFFER or WQ10 PRACTICE & THE FINANCIAL INCENTIVES AVAILABLE.*

Palmer Amaranth - To Be Controlled

An invasive weed, Palmer amaranth my have infested some newly seeded conservation plantings across the upper Midwest. State Departments of Agriculture and Land Grant Universities have identified Palmer amaranth in select counties

Palmer amaranth emerges in May and grows through September. Seed matures in August to September depending on location. This weed is on the state noxious weed list in Minnesota, Ohio, and Delaware. Other states are considering adding it to their list. Regardless of its classification, Palmer amaranth is very difficult to identify and control. Spreading occurs in many ways, including livestock feed, manure, birds, and contaminated seed mixes. It is a pigweed and close relative of water hemp. It grows rapidly, is highly competitive and produces over 100,00 seeds per female plant, and is difficult to eradicate. The seed production of the Palmer amaranth increases the rick of it moving into additional crop fields where it will potentially increase production costs and threated crop yields. Because of the threat it poses to agriculture, it is important to identify fields where Palmer amaranth has been introduced and reduce the likelihood of infestations becoming permanently established. Furthermore, if Palmer amaranth is found to have infested your Conservation Reserve Program (CRP)

Educational Programs: "Starting Young. . ."

Intern Kara Berrey giving soil and water conservation programs in local school districts

LOCAL 4TH GRADERS LEARN ABOUT SOIL PROFILES

We would like to say thank you to the Stone County fourth grade classes for participating in our Info-Ed demonstrations this spring. We believe that the children of the present, are the leaders of the future. The majority of America's consumers are disconnected from agriculture in that most have no idea of where their food comes from. In the last 50 years, the disconnect between people and their food has grown exponentially in relationship to the number of people who are no longer working in agriculture. As little as 60 years ago, over half of the people in the U.S. were involved in agriculture. Today, that number has dropped to 2%.

Our info-ed demonstration helps the students understand the purpose of soil, how soil is made, and what comes from soil. The students really enjoyed asking questions and learning about the importance of our soils. They learned why it is important to take care of our soils and to prevent erosion. We talked about soil profiles and how each level is important and why. The students enjoyed digging into some soil and making their own soil profile to take home.

Each student was given a pre-test prior to our discussion and a post test after. We have concluded overall, students showed an increase in understanding the importance of our soils after our visit. We are very thankful to be able to reach out to our local students and believe that it is important to instill the importance of our natural resources to our future leaders.

USDA Support in Face of Heartland Flooding

(Washington, D.C., May 4, 2017) – U.S. Secretary of Agriculture Sonny Perdue today pledged the full resources and support of the U.S. Department of Agriculture (USDA) in response to severe flooding occurring in many states across the center of the country. Representatives of relevant USDA agencies, including the Farm Service Agency, the Office of Rural Development, and the Natural Resources Conservation Service, will be on the ground gathering information and assisting members of the agriculture community with their needs as they prepare to assess the damage.

First Shipments of U.S. Beef to Brazil—Good News for U.S. Beef Producers

(Washington, D.C., May 4, 2017) – Secretary Sonny Perdue announced today that the first shipment of fresh U.S. beef has arrived in Brazil following a 13-year hiatus. The entrance of American beef into the Brazilian market ushers in promising long-term economic opportunity for U.S. beef producers.

"With Brazil's large market reopened to the United States, U.S. beef exports are poised for new growth. I look forward to Brazilians getting the opportunity to eat delicious American beef, because once they taste it, they'll want more of it." said Secretary Perdue. USDA Press Office press@oc.usda.gov 202-720-4623

Hooked on AG...

2017 State Women in Agriculture Conference

Old Kinderhook Resort
678 Old Kinderhook Drive Camdenton, Missouri
September 11—13, 2017

2017 State WIA Conference

Hotel Information:
Old Kinderhook
20 Eagle Ridge Rd
Camdenton, Missouri
(573) 317-3500

Room Pricing
One Bed $91
Two Bed $182

Registration $80 per person before August 11, $100 after. Registration fees include costs of all workshops, tours, Monday evening banquet, Tuesday continental breakfast and tour lunch, Wednesday continental breakfast and closing luncheon.

Women in Ag Shirts are available to order when you register.
NOTE: Hotel Accommodations should be made separately.
Contact Sandy Stratman for registration form or additional information.

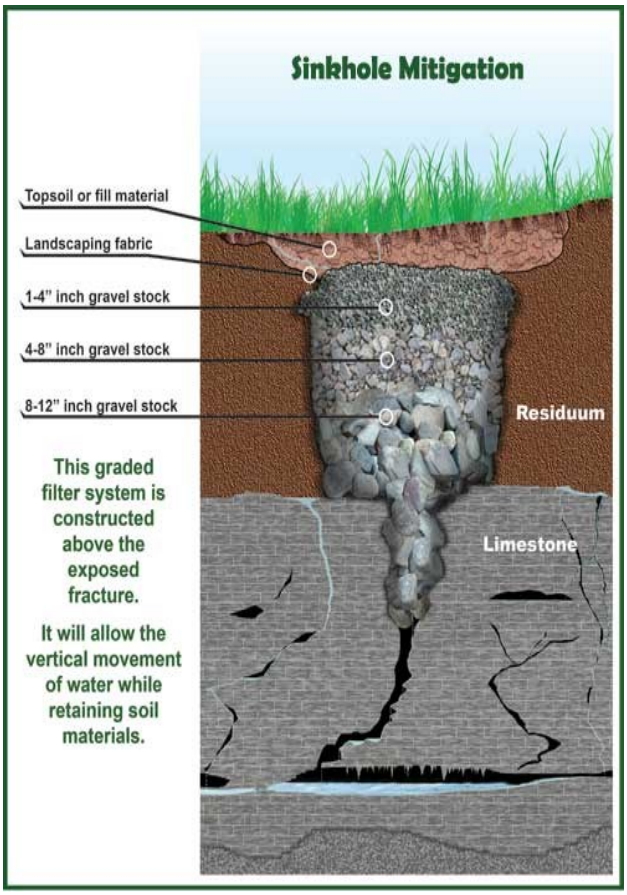
By phone 573-422-3342 or by Email Sandy.Stratman@swcd.mo.gov

SINKHOLES

Sinkholes occur throughout the Ozarks. Protecting sinkholes is the key to preserving water quality. Missouri and Arkansas are only one of the four karst regions found in the U.S. A karst landscape is distinctive by dissolving limestone and other soluble underlying rocks. Over time, this action results in cave and sinkhole formations.

Most sinkholes are bowl-shaped depressions that collect water and funnel it underground. The Ozark region is one of the most rapidly developing areas in Missouri. Urban/Suburban development can cause an increase in storm water runoff. Runoff in a sinkhole allows surface contaminants direct access to our groundwater supply.

Planting vegetative barriers will filter sediment and contaminates from surface runoff and reduce soil erosion. This filtration protects the quality of water. Protecting a sinkhole means being a responsible property owner! There are different ways you can protect our ground water supply from sinkhole contamination. **Contact Soil & Water for Cost Share Information.**



Things to do: Vegetative barriers, native plantings, fence out livestock, clean out old sink holes if previously used as a dump

Things to avoid: Clearing vegetation, dumping chemicals and trash, don't build on or around the rim of a the sinkhole

What to do if your property develops a sink hole: Notify local offices of of NRCS or Soil & Water or for more information & remediation the Mo. GS at number below. Fence or rope the hole off, keep children away, protect the area from livestock, garbage, waste, chemicals, polluted runoff & contact your homeowners insurance if necessary.

The Geological Survey Program has verified 15,981 sinkholes in Missouri. (Rolla, MO 800-361-4827 , 573-368-2100)

STONE COUNTY SOIL & WATER CONSERVATION DISTRICT

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CRANE, MISSOURI 65633
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www.swcd.mo.gov/stone

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What is a Management-Intensive Grazing System? Also known as rotational grazing management. A system where grazing is managed for both the benefit of the livestock and forage. Livestock graze in each pasture long enough to harvest the forage, but removed before too much leaf area is consumed. A basic system may have four or five pastures, while a more management intensive system will have eight to ten. Cost Share is available, give us a call to start your planning.

SW– MO. Regional Grazing Schools Schedule

LOCATION:	DATES:	CONTACTS:
Neosho, MO	June 6, 7, 8 (daytime)	Newton County SWCD 417-451-1366 Tracy.white@swcd.mo.gov
Ozark, MO	June 12, 13, 14 (daytime)	Christian County SWCD 417-581-2719 John.stratman@swcd.mo.gov OR Jeremy.wallen@swcd.mo.gov
Marshfield, MO	September 19, 20, 21 (daytime)	Webster County SWCD 417-468-4176 Jody.lawson@swcd.mo.gov
Stockton, MO	October 3, 5, 10, 12 (evening) October 14 Field day (daytime)	Cedar County SWCD 417-276-3388, ext. 3
Bois D'Ark, MO	October 18, 19, 20 (daytime)	Greene County SWCD 417-831-5246 ext. 3

Cost Share Programs

Save Money While Improving Your Grazing System & Enhancing Forage Production

Below is a system scenario. We will work with you to estimate and design your own system before implementation.

DSP 3.1 System Water Development

$95 / acre Served maximum

Example: Install Well to service 80 acres (average 500ft depth)

Maximum cost-share is 80 X $95 = $ 7,600.

Total system may include more acreage.

Water Well Components based on Average State Cost:

Well drilling $6.50 / ft (500ft) Pressure Tank $555.00 each Well casing $10.50 / ft (84ft)
Well Misc. $400.00 each Submersible Pump $2346.00 each
Well house $632.00 each

Estimated State average cost of Well is $8065.00
75% Cost-Share is $6049 (We are under the Max. of $7,600. So you would receive the $6049 for your well system.)

DSP 3.2 Grazing System Water Distribution

$85 / acre Served Maximum

Example: Water pipeline and tanks installed to service 80 acres.

Maximum cost-share is 80 X $85 = $6,800.

Total system may include more acreage

Water Distribution Components based on Average State Cost:

Trench and Backfill $1.36 / foot
PVC 1 ½' pipe & labor $1.16 / foot

Freeze Proof Concrete Tank $1100.00 /each
Freeze Proof Hydrant $100.00 each

Example, Water Distribution: 3000 feet pipeline, 4 concrete tanks.]Estimated cost: $11,960.00 75% Cost-share is $8,970.00 (You cap at $6,800 in cost-share.)

Your costs may vary depending upon labor, personal choice of vendors, and products.

DSP 3.3: Fence

$60 / Acre Maximum

Example: Hi-tensile electric Fence installed per grazing system design on 80 acres pasture.

Maximum Cost-share is 80 X $60 = $4,800.00

Fencing Components Average State Cost:
1 strand Hi-Tensile Wire $0.70 / foot
Charger 10j $155.00 each
Charger installation $276.00 each (ground rods, parts, labor ,etc.)

Example: Install 6,500 feet of 1 strand Hi-Tensile cross-fence & 1 charger with ground system.

Estimated cost is $4,981.00 75% cost-share = $3,735.00

DSP 3.4 One time Lime application

$50 / acre Maximum

Available after completion of a Managed Grazing System.

Lime is applied per current soil test results.
Lime Component - Average State Cost: $0.0357 Cents per Pound
Example:
Lime 40 acres of pasture
Soil test recommendation 1000 lb. ENM / acre.
State avg. cost is .0357 cents per pound.
Estimated cost is: 40,000 lbs. ENM of lime X .0357 = $1,428.00
75% cost-share = $1,071.00 ($26.78 per acre.)

DSP 3.5 One time Inter-Seed

$40 / acre Maximum

Available after completion of Managed Grazing System.
Landowner must bring Fertilizer needs up to Soil Test recommendations at their expense.
Inter-seed Legumes avg. cost= $39.62 / acre
75% Cost-Share=$29.71 / acre