

Reporter

ST. CHARLES COUNTY

SOIL AND WATER CONSERVATION DISTRICT

Office Contact Information

The USDA FSA/NRCS and SWCD office location has been identified, but no opening date is currently scheduled. Office operations continue with FSA working from the Warrenton office, and NRCS working from the Union office. The SWCD staff is working remotely. All staff can be reached by calling 636-922-2833. You can also reach SWCD staff through their emails:

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Annual Meeting Planned for November

The St. Charles County SWCD Board of Supervisors will host an Annual Meeting this year for Cooperators of the district. The catered meal and meeting will be held in November at the University Extension office in St. Peters. Watch for a postcard in the mail.

Renee Cook Retires



Renee Cook

NRCS District Conservationist Renee Cook retired September 23 after a 37 year career with the USDA Natural Resources Conservation Service. The SWCD board would like to extend their sincere appreciation for the work that she did in the county that furthered the protection of soil and water resources. See more on

page 3.

Conservation Cost-Share is Climate Smart Farming

The recently passed Inflation Reduction Act commits nearly \$20 billion in funding to the U.S. Department of Agriculture (USDA) to support “Climate Smart Agriculture”. The focus on agriculture is intense because farmers and the lands they manage must be able to feed a growing population during periods of climate fluctuation and extremes.

Climate Smart Agriculture is defined differently by different agencies. The USDA Natural Resources Conservation Service (NRCS) recently published a list of conservation practices considered to be climate smart for their contributions to either *reducing greenhouse gases or increasing carbon sequestration*. The United Nations Food and Agriculture Organization defines climate smart agriculture as “...actions to transform agri-food systems towards *green and climate resilient*

practices”. The World Bank identifies three climate smart agricultural goals: *increasing productivity, enhancing resilience and reducing greenhouse gas emissions*.

In brief, climate smart agriculture means investing in methods that *protect and improve natural resources while enhancing farm productivity* for generations to come.

Landowners who are cooperators of the Soil and Water Conservation District and the Natural Resources Conservation Service are well on their way to having a climate smart farm operation. The conservation cost-share practices offered to farmers in Missouri and around the country are focused on resiliency of natural resources and sustainability of farm production—two pillars of climate smart farming.

Take terraces for example. Farmers have used

See [Farming](#), pg. 4

Eli Isele is New SWCD Board Supervisor

The St. Charles County and St. Louis County SWCDs are pleased to welcome Eli Isele to the boards of both districts. Eli is a Field Specialist in Horticulture with MU Extension, and has a background in both commercial agriculture and academia. This blend of experience and education allows Eli to bring both science and first-hand field knowledge to the boards.

Eli’s history includes a BS in General Agriculture and a Masters in Sustainable Development Practice. He volunteered in the Peace Corps in Malawi, working with beekeepers; and served as an Extension agent in Hawaii working in sustainable agriculture and focusing on macadamia, cacao and breadfruit.

Through the MU Extension and SWCD partnership, Eli will work directly with

farmers.

“My interests lie with regenerative agriculture,” he said. “And I enjoy working in the field and directly with landowners to help them with healthy and sustainable production.”

He added that he appreciates the partnership between MU Extension and the SWCDs and he looks forward to not only helping homeowners and landowners, but also assisting the boards in their soil and water conservation goals.



Eli Isele

NRCS Outlines Four Strategies for Maximizing Soil Health

USDA-NRCS

Soil is not an inert growing medium – it is a living and life-giving natural resource. It is teeming with billions of bacteria, fungi, and other microbes that are the foundation of an elegant symbiotic ecosystem.

Soil health is defined as the continued capacity of soil to function as a vital living ecosystem that sustains plants, animals, and humans. Healthy soil gives us clean air and water, bountiful crops and forests, productive grazing lands, diverse wildlife, and beautiful landscapes. Soil does all this by performing five essential functions:

Regulating water – Soil helps control where rain, snowmelt, and irrigation water goes. Water flows over the land or into and through the soil.

Sustaining plant and animal life – The diversity and productivity of living things depends on soil.

Filtering and buffering potential

pollutants – The minerals and microbes in soil are responsible for filtering, buffering, degrading, immobilizing, and detoxifying organic and inorganic materials, including industrial and municipal by-products and atmospheric deposits.

Cycling nutrients – Carbon, nitrogen, phosphorus, and many other nutrients are stored, transformed, and cycled in the soil.

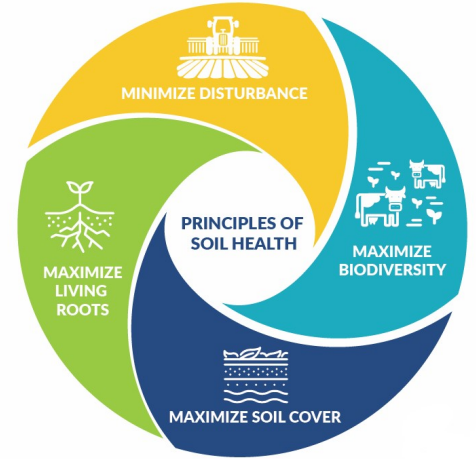
Providing physical stability and support – Soil structure provides a medium for plant roots. Soils also provide support for human structures and protection for archeological treasures.

Soil health research has determined how to manage soil in a way that improves soil function.

The main principles to manage soil for health are:

- Maximize Presence of Living Roots
- Minimize Disturbance
- Maximize Soil Cover
- Maximize Biodiversity

As world population and food production demands rise, keeping our soil healthy and productive is of paramount importance. By farming using soil health



principles and systems that include no-till, cover cropping, and diverse rotations, more and more farmers are increasing their soil's organic matter and improving microbial activity. As a result, farmers are sequestering more carbon, increasing water infiltration, improving wildlife and pollinator habitat—all while harvesting better profits and often better yields.

Visit the USDA NRCS website for more information on enhancing natural resources on your farm. (Info provided by USDA NRCS.)

**St. Charles County
Soil & Water Conservation District
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The Reporter Newsletter is published by the St. Charles County Soil & Water Conservation District quarterly, in March, June, September and December.

Writer/Editor—Theresa Strunk

For advertising information or to submit news, call the district at 636-922-2833, ext. 3.

The district is supervised by a board of supervisors made up of farmers from St. Charles County and an University of Missouri Extension representative:

Board of Supervisors

Adam Bonderer, Chairman
Paul Kamphoefner, Vice-Chairman
Eli Isele, Secretary
Sam Harris, Treasurer
James Borgman, Board Member

SWCD Personnel

Frankie Coleman, Manager
Charlie Perkins, Technician
Theresa Strunk, Outreach

NRCS Personnel

Brandon Rivera, Soil Conservationist
Michael Edwards, Soil Conservation Technician

The mission of the Soil & Water Conservation District is to conserve the soil and water resources of the county; promote the wise use of these resources through education; protect residents from undue hardship caused by erosion, sedimentation and flooding; protect the agricultural soil base to ensure continued productivity; and preserve the quality of water and water courses within the county.

Stream Care Guide Available Online

The St. Charles County Soil and Water Conservation District (SWCD) worked with City of Wentzville Stormwater staff to produce a new county-wide Stream Care Guide. The guide is sponsored by the SWCD, the City of Wentzville and St. Charles County government. This guide highlights the watersheds we live in and the activities within our watersheds that can harm water quality. It explains the functions of a stream and the natural and human influences that affect stream ecosystem changes. St. Charles County has made it available online to all residents. You can visit the county website's **Stormwater Management and Watercourse Protection** page to link to the new Stream Care Guide.

NEW
Stream Care Guide Available

Educating St. Charles County Residents About Local Streams and How to Protect Waterways and Private Property

To help the community better understand our impact on waterways, landscaping and stream stabilization tips, St. Charles County—in partnership with the City of Wentzville and the St. Charles County Soil & Water Conservation District—has created a unique and engaging Stream Care Guide. In this guide, residents will find out how they can:

- Prevent or minimize erosion issues.
- Avoid flooding impacts.
- Protect property values.
- Preserve water quality.
- Contribute to the survival of fish and wildlife.

As stewards of the two mightiest rivers on the North American continent, everything we do has the potential to affect our county's tourism, flooding, tax dollars, and the beauty of life's most important natural resource: water.

Scan the QR code with your phone's camera to begin reading the Stream Care Guide to learn more about the county's local waterways and what you can do to protect them and your property.

District Conservationist Renee Cook Retires from NRCS

Thirty-seven years ago, a “city” girl from St. Louis County decided to study agronomy. Thousands of contracts, hundreds of landowners, and dozens of trainees later, Renee Cook is retiring from a long and impactful career with the USDA Natural Resources Conservation Service (NRCS)

Renee began her career with the Soil Conservation Service (today—NRCS) in 1985 as a student trainee working in Scott County in southeast Missouri where her education was expanded through surveying, designing and checking out WASCObS and grassed waterways. The following year, she was stationed in Lafayette County, east of Kansas City, where she learned first-hand the problems with flooding.

“Everyone in Lafayette County who walked through the door was asking for terraces with underground outlets or grassed waterways,” she recalled. “And then the sky opened up and the excessive rains led to flooding all across the state. All the newly built terraces had to be repaired.”

The effects of the flood persisted beyond Renee’s college graduation date. After wearing the cap and gown for Southwest Missouri State University (now MSU) in 1987, Renee was stationed in St. Charles County, and the primary workload was a result of that ‘86 flood.

“My focus was FSA compliance planning

and Emergency Watershed Program (EWP) sediment removal from drainage ditches in the Missouri River floodplain.”

Little did she know as she stood on the land between the great rivers addressing those flood impacts, that she would someday return to St. Charles County, and that flood impacts would visit her career in a somewhat cyclical pattern.

But by 1988, Renee was transferred to Gasconade County to accept the District Conservationist position, working with her team to complete compliance planning and grassland conservation practices. And in 1989, she was in St. Genevieve County where her work expanded to include the Conservation Reserve Program (CRP), and no-till outreach and education.

St. Charles County got Renee back as DC in 1992...just in time for the 1993 flood.

“My past work with EWP kicked in and I was fortunate to have both SCT’s and engineers detailed to assist,” she said.

No sooner had they completed the 1993 EWP work, then the 1995 flood hit, extending the program and keeping Renee and her crew busy.

Renee has overseen the work of many NRCS employees over the years and has offered technical and operational advice and assistance to the Soil and Water Conservation District (SWCD) on a daily basis. Renee forged NRCS and SWCD workers into a team with one focus—the landowner. All members of the team



shared a goal: to provide the finest research-based conservation opportunities to farmers and to design and implement practices to achieve natural resource preservation goals.

Many times that work extended beyond the agricultural community. Renee provided information in the development and review of the “Protecting Water Quality” field guide to erosion, sediment and stormwater best management practices for development sites. She was also part of a team that brought information and education to municipal and county planners and developers as the county continued to grow in the ‘90s.

“I was able to help planners understand best management practices for establishing sediment and erosion control ordinances that go a long way in slowing erosion and protecting local streams,” she explained.

By 1996, Renee was selected as the DC for St. Charles and St. Louis Counties where she continued the NRCS programs, including wetland determinations, CRP, and the newer program EQIP, but also facilitated a watershed planning effort in Peruque Creek Watershed.

Over the years, other counties were added to Renee’s Field Office Service Area (FOSA), and to each one she brought her sincere commitment to the duties at hand, but also her honest love for the land and the producers who feed the world. Her fascination with nature and desire to protect natural resources for future generations was woven into the work of every day of those 37 years. She may not have been the first one in the office each day, but she was usually the last to leave, and she made herself available to landowners on

Photos:

Left: Renee (center) and Frankie Coleman (left) assist Shawn Keller with a soil erosion demonstration at the 2010 Annual Meeting.

Below: Renee speaks to a group of local producers during a Grazing Tour on the Kamphoefner Farm in 2009.

Above Right: Renee speaks with Afghani visitors on the Kamphoefner farm in 2013.



Farming, from pg. 1 terraces throughout history to slow water down and soak it in, to retain soil, and to produce food on slopes and ridges. Thousands of years ago, farmers may not have realized this practice was increasing carbon storage and protecting ocean waters miles away. Today, farmers can cost-share on developing terraces on highly erodible land, both to improve the farm and protect water resources.

Climate smart agricultural practices are ones that keep soil in place, improve soil health, slow water runoff, reduce nutrient loss, manage animal waste and make the best use of the terrain while doing the least damage to natural ecosystems.

Keep Soil In Place

Conservation practices to consider when dealing with soil erosion include cover crops, no-till, and crop rotation. All of these disturb the soil as little as possible which protects soil structure and improves water infiltration. Year-round cover in fields increases organic material in the soil, improves its water holding capacity, and builds nutrients for plant use. This leads to better water uptake by the crop, less rill

and gully formation, and less runoff and nutrient loss on the farm.

Improve Soil Health/Store more Carbon

Again cover crops are a top contender for best soil health builder. St. Charles County farmer Dennis Machens has been cover cropping for years and is reporting massive amounts of large earth worms. The worms and the roots of cover crops make channels in the soil that improve its ability to take in water. Cover crops build soil organic matter, hold soil in place, and feed soil organisms that provide valuable nutrients to cash crops.

Reduce Nutrient Loss

To help keep nutrients and chemicals out of water, climate smart practices would include developing a nutrient and pest management plan. With soil testing, healthier soils, and a good management plan, you may reduce the need for expensive inputs like fertilizer.

Slow Stormwater Runoff.

Slowing down water and allowing it to absorb into the soil is the goal of many conservation practices. Terraces, edge of field plantings, pollinator habitat development, pasture establishment, etc., all aid in slowing the movement of water.

Grassed waterways can address gully erosion and improve filtration while creating habitat.

Increase Filtration of Runoff

Since not all runoff can be stopped, it's important to filter as much stormwater as possible before it leaves the farm. Streamside and edge of field habitat restoration, as well as grassed waterways and healthy pastures are climate smart practices that help slow down and capture some pollutants.

Manage Animal Waste

Preventing animal waste from entering water sources is a key way to protect water quality. Grazing Management with rotational grazing, fencing, water distribution and animal waste management practices including storage, incineration and composting facilities are all climate smart.

Protecting natural resources during a changing climate is nothing new to most farmers, but sometimes the cost of having a whole farm plan can be daunting. That's where the SWCD & NRCS can help. One practice at a time, you can protect the environment and improve your farm's production for generations to come.

Beef Processing Plant to Open in Warren County

A beef harvest plant is scheduled to be in operation in Warren County by the end of 2024. American Foods Group, LLC (AFG) is building a \$450 million slaughterhouse near Archer Road and Veterans Memorial Parkway. The site will have a daily harvest capacity of 2,400 head.

AFG, a family-owned business based in Green Bay, Wisconsin, has announced the plant will employ 1,300 workers.

Annual Forage/Grassland Conference Planned

Register now for the Missouri Forage and Grassland Council (MFGC) Annual Conference, to be held in Springfiede, Mo., November 2-3.

The Forage/Heart of America Grazing Conference will include presentations in the following areas:

- Advanced Technology (cameras, drones and tracking systems)

- Climate Smart Ag
- Native Plants for grazing and soil
- Soil Biology under fescue
- Regenerative Agriculture (partnering with nature)

And more...

Register through a link on the MFGC website: missourifgc.org/upcomingevents. For more information, call/text 573-338-1772 or email at mofgc.es@gmail.com

USDA Provides Grants for Fertilizer Production

In September, the U.S. Department of Agriculture (USDA) announced that the administration is making \$500 million in grants available to increase American-made fertilizer production to increase competition and combat price hikes on U.S. farmers.

The Fertilizer Production Expansion Program funds are being made available through the Commodity Credit Corporation.

Eligible entities are for-profit businesses and corporations, nonprofit entities, Tribes and Tribal organizations, producer-owned cooperatives and corporations, certified benefit corporations, and state or local

governments. Private entities must be independently owned and operated to apply. Applications will be accepted through the website: www.grants.gov. There will be two opportunities for submissions.

Extension Offers Annie's Project Workshop

Annie's Project is an educational program that was created specifically for women in agriculture and is sponsored by University of Missouri Extension and the USDA.

The 18-hour course is a discussion-based workshop bringing women together to learn from experts in production, financial management, human resources, marketing and the legal field. Participants will attend a weekly 2.5 hour live interactive online session via Zoom and complete self-paced activities and videos. The cost is \$50. The course begins Oct. 18, at 6 p.m., with subsequent sessions Oct. 25th and November 1st, 8th, 15th and 22nd. For more information, contact Karisha Devlin at: devlink@mssouri.edu, or 660-397-2179.

Renee, from page 3

their time, knowing that a farmer’s clock is very different than most others.

Since 2005, Renee has been the DC for the area that includes Franklin, Jefferson, St. Charles, St. Louis and Washington counties.

“Assisting landowners over multiple generations has been exceptionally rewarding,” she said, “and seeing the benefits on their land and in their operations made it all worthwhile.”

Renee said she is looking forward to taking a few vacations with her husband,

Ken, and to completing some projects around the house. Her immediate family is close, so she plans to spend more time with her children and their families/friends. Her son Nathan and daughter-in-law Haley have two sons, Kolton and Tanner. She plans to make more memories with them, as well as with her daughter Ashely and Ashley’s boyfriend Nieman.

As for the work family? Well its time to say good-bye.

“I’ve had some of the best people to work with,” Renee smiled. “We had our challenges, our roadblocks and

deadlines, but we worked together to find solutions and to meet our goals. The work we did together required a lot of teamwork and I couldn’t have gotten anything done without my NRCS team, the cooperation of the SWCD team and the partnerships with FSA, Extension, MDC, and more. Together we’ve made a real difference in the health of the land and water in our counties and I know the good work will continue.”



Above, Renee is with fellow NRCS staff Jerry Bush, Shawn Keller and Curtis Hoeft in 2018, and below she speaks with a St. Charles County landowner in 2016.



Renee along with staff and partners received an Office of Merit award from Missouri NRCS State Conservationist J.R. Flores in 2007.

(Disclaimer by Theresa—if date is wrong, “Ages Ago” is implied).

From left: Renee Cook, Frankie Coleman, Mark Palm, Shawn Keller, Jerry Weinrich, Theresa Strunk, Chuck Pierce, J.R. Flores, Charlie Perkins, Curtis Hoeft, and Jeff Easley.

Local Envirothon Team Places 11th at International Level

The Lindbergh High School Envirothon team represented Missouri in the 2022 NCF Envirothon Competition in Ohio and placed 11th among 40 teams. Lindbergh Envirothon Coach Barry Marquart expressed pride in his students. “I’m super proud of these kids,” he said. “They brought to the group their individual interests in the environment and natural resources, and came together as a real team to study real-life issues and discover possible solutions.” Marquart said he was only a little surprised when they took first place at the Missouri competition last spring, and then over-joyed with their placement at the national level. “They missed the top ten (which receive awards and prizes) by only one place,” he said, “I’m extremely proud.” The students are: (l to r) Ava Wood, Raina Clements, Emma Schmitt, Sophia Unzicker and Blake Burns.



Landowners Speak at Greenway Network's River Soundings

Greenway Network hosted the River Soundings Conference at Klondike County Park in September. This conference featured presentations and activities centered around water quality and water recreation opportunities. The 2-day event brought together policy makers, local leaders, water enthusiasts and conservationists.

Two local landowners joined the SWCD on a panel during an agriculture-focused presentation by SWCD Program Director Jim Plassmeyer. Plassmeyer spoke about the work of the districts and the positive results of conservation work on farms, including reducing soil and nutrient loss to streams. He provided information about edge-of-field testing that is showing the effectiveness of individual conservation practices.

Rick Rehmeier, a life-long farmer, cooperater of the district and owner of a multi-generational hog farm in the county, joined the panel to share his experience with farming the conservation way. Rehmeier is a former chairman of the St. Charles County SWCD Board of Supervisors, and descends



Photo: Brian Waldrop

Seated on the panel from left are farmers Rick Rehmeier and Dennis Machens, and SWCD Technician Charlie Perkins, with SWCD Director Jim Plassmeyer standing at right.

from a long line of conservation-minded farmers.

Dennis Machens, owner and operator of a bottomland row crop operation, also joined the panel and shared his experience with cover crops. He was able to describe the richness of the soil as he has observed

soil health building over the seasons.

The farm panel at River Soundings was an impactful way to share the good work of farmers who are taking steps to reduce sediment and nutrient loss.

Riverlands Sanctuary is the Place to View Migratory Birds

Autumn begins the great migration of songbirds and waterfowl, and according to the St. Louis Audubon Society this region of Missouri sees 60% of North American songbirds and 40% of North American waterfowl traveling through. A good place to see gulls, swans, ducks, eagles and pelicans is the Audubon Center at Riverlands, home of the Riverlands Migratory Bird Sanctuary.

The sanctuary is 3,700 acres of floodplain habitat within the Mississippi Flyway, offering viewing opportunities of over 300 species of birds that live or migrate throughout the sanctuary. There are trails and viewing platforms, as well places within the Audubon Center where



there are high-powered scopes to comfortably view some favorites on a cold day.

Riverlands has the largest population of over-wintering Trumpeter Swans in the interior of the U.S., numbering around 2,300. They typically arrive in early November and stay through mid-February.

Bald eagles can be seen year-round, but in the winter they migrate down the Mississippi River looking for open water to access fish. Using the scopes within the Audubon Center, visitors can watch the eagles catching fish and flying to their perches on Ellis Island. The Eagle Ice Fest is held the first Saturday of January, and Eagle Sundays are held every Sunday through

January and into February.

The number of American White Pelicans increases greatly during their migration period from March to April and from September to November. Their breeding range is from eastern Colorado north into Canada's Northwest Territories and from the Dakotas to Northern California. Their winter territory begins just south of Missouri, so they will depart by mid-November. Visitors will find them fishing in Ellis Bay.

Living between the two great North American Rivers, and having access to the confluence area is a special treat during migration seasons. Visit Riverlands at 301 Riverlands Way, West Alton.



Photos on this page courtesy of the Missouri Dept. of Conservation