



Minutes from the State Technical Committee Meeting

10/26/22 9:00 a.m. – Noon

This meeting was held virtually in the Teams Live meeting platform. The meeting was recorded and can be viewed at:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_NzliMDM4OWEtZDZjMy00YzQ2LTkyNjUtNThjMTEwNzhjMTA4%40thread.v2/0?context=%7b%22Tid%22%3a%22ed5b36e7-01ee-4ebc-867e-e03cfa0d4697%22%2c%22Oid%22%3a%22e9530ef9-b929-49e3-916e-df1a8cc0ce5b%22%2c%22IsBroadcastMeeting%22%3atrue%7d&btype=a&role=a

Presenters

Kurt Readus, State Conservationist, NRCS

Dr. Trina George, State Director, Rural Development

Lesle Peavie, Supervisory Agricultural Program Specialist / Program Chief, FSA

Roddrick Bell, Director RMA

James McCoy, Deputy Forest Supervisor, Forest Service

Dr. Drew Gholson, Assistant Professor & Extension Irrigation Specialist; MSU Coordinator National Center for Alluvial Aquifer Research

Dr. Martin A. Locke, Director, USDA-ARS, National Sedimentation Laboratory

Gary Blair, Secretary-Treasurer, NACD

Ron Howard, Acting Director, USDA Gulf Coast Ecosystem Restoration Team

James Curtis, State Soil Scientist, NRCS

Rogerick Thompson, State Resource Conservationist, NRCS

Natalie Segrest, MDEQ, Chief, Basin Management and Nonpoint Source Branch Surface Water Division

Olguy Louis, State Conservation Engineer, NRCS

Nick Ivy, Executive Director, MS Soil and Water Conservation Commission

Jason Keenan, Assistant State Conservationist, NRCS, Easements

Earl McMillian, Assistant State Conservationist, NRCS, Programs

Agenda

Moderator - Earl McMillian

Welcome

Kurt Readus

Rural Development

Dr. Trina George

Farm Service Agency Program

Lesle Peavie

Risk Management Agency

Roddrick Bell

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Forest Service	James McCoy
National Center for Alluvial Aquifer Research-MSU	Dr. Drew Gholson
Agricultural Research Service	Dr. Martin A. Locke
National Association of Conservation Districts	Gary Blair
Gulf Coast Ecosystem Restoration Team	Ron Howard

Break – 5 minutes

Soils Tools and Technology - NRCS	James Curtis
Ecological Sciences – NRCS	Rogerick Thompson
Mississippi Department of Environmental Quality	Natalie Segrest
Engineering – NRCS	Olguy Louis
Mississippi Soil and Water Conservation Commission	Nick Ivy
Easement Programs - NRCS	Jason Keenan
NRCS Programs	Earl McMillian
Closing Comments	Kurt Readus

Mr. Earl McMillian opened the meeting, welcomed the attendees, reviewed housekeeping information for Teams Live meetings with attendees and introduced Mr. Kurt Readus, State Conservationist.

Welcome - Kurt Readus

Mr. Readus welcomed the attendees to the State Tech Committee meeting.

Mr. McMillian will be the moderator of this meeting. He has taken the role of the Assistant State Conservationist for Programs for Mississippi. Mr. Readus welcomed the NRCS sister agencies and the presenters of the meeting.

Currently, we are under a continuing resolution until 12/16/22, we will be working as a lean operation until funding is received.

NRCS is meeting the Justice 40 goals as the President's executive order has directed all of his departments. We are proud to be a part of this success. We've also published our first Equity Plan, which was attached to that executive order. We've had major bills that were passed that directly impact



NRCS and the service we provide to our agricultural producers, municipalities and local government. Some will be in the Inflation Reduction Act (IRA) where we received funding to reduce greenhouse gases. This will increase funding for the agency, and we are currently creating our plan.

We were also recipients of the Bipartisan Infrastructure legislation that was passed in which many of our towns and communities have received watershed planning assistance. We look forward to providing the assistance through our Farm Bill programs to address those resource concerns throughout Mississippi. Welcome again and I will turn the floor over to Dr. Trina George, the State Director for USDA Rural Development.

Rural Development Dr. Trina George

Rural development is the economic and community development arm of USDA. We provide agencies and nonprofit agencies and individuals throughout rural America with grants and low interest loans. To fund infrastructure facilities and equipment, we handle wastewater, rural businesses and housing throughout rural America. We have over 40 programs to offer rural America.

The three main development offices are:

Rural business cooperative service

Rural housing service

Rural utility service

In the rural utility service, we offer electric programs, water and environmental programs, telecommunications and broadband programs. Due to the IRA funding, we are working on broadband programs to provide to rural America. The general field representative for this program is Michael Wilburn, we don't handle this program in our State office.

Rural housing and community facilities that deals with housing ownership loans, home repair loans, mutual self-help technical assistance grants, are stakeholders can assist the communities. We have multi-family housing loans. This program is no longer handled in the state of Mississippi, but it is handled out of our national office.

We handle farm home housing loans and grants as well as preservation grants. The community facilities loans and grants and our rural business and cooperative service vision. We also handle the business and industry guaranteed loans, and we want to highlight our one guarantee loan. It is a big hit, and we deal with our financial institutions to provide loans directly to the public. We also have our intermediary relending program, the rural business development grants, as well as our rural energy for America program.

Rural business and cooperative services-

We also have our value-added producers grant and cooperative development assistance.

We have one of the largest portfolios in the United States, and last year we had a very successful physical year, we spent over 871.4 million throughout the state of Mississippi assisting rural America.



National portfolio = \$31 billion

Mississippi Fiscal Year 2022 program statistics:

\$871.4 million total funding obligated to Mississippi communities

\$416.6 million - Single Family Housing Loans/Grants

\$81.6 million - Multi-Family Housing Loans/Grants

\$86.6 million - Community Facilities Loans/Grants

\$27.4 million - Water & Environmental Infrastructure Loans/Grants

\$47.1 million - Business & Cooperative Programs Loans/Grants

\$53.7 million – Telecommunications Loans/Grants

The Value-Added Producer Grant and what this program does is helps agricultural producers enter into value-added activities related to the processing and/or marketing of bio-based, value-added products. Independent producers, agricultural producer groups, farmer- or rancher-cooperatives, and majority-controlled producer-based business ventures are eligible to apply for this program. This program generates new products, or it could create expand marketing opportunities as well as increased producer income.

The grant and matching funds can be used for planning activities, for working capital expenses related to producing and marketing a value-added agriculture product are some examples. The planning activities include, conducting feasibility studies and developing business plans for processing and marketing the proposed value-added product. Some examples of working capital expense include processing costs, marketing and advertising expenses as well as some inventory and salary expenses that you may have.

Our USDA housing programs is essential to the state of Mississippi, our rural counties and rural America. In the single-family housing program, we have about 7 different programs that fall under the housing programs. Our single-family housing direct loans as well as our single-family housing repair loans and grants are handled in the state of Mississippi. Our single-family housing guaranteed loans and multifamily housing loans, are handled out of the National Office. All of the rest of the housing information and programs are handled within the state of Mississippi.

New USDA Broadband Reconnect Program – High-speed internet

Eventually we'll get high-speed internet throughout all our rural communities we're trying to push out the Reconnect Program. It uses funds for construction, improvement in acquisitions of facilities to provide services at a minimum of 20 megabytes downloads for service areas not within incorporated areas greater than 20,000. It must be in a rural area, must be underserved, meaning current speeds do not exceed 10 Mbps.

There are three options:

100% Grant

50% Grant/50% Loan



100% Loan

This program is handled out of our National office, but we have a field representative that services the state.

The Community Connect Grant, Rural Broadband Loan Program and Pilot Program and the Distance Learning and Telemedicine Grant have allowed us to assist community colleges with distance learning, and hospitals with telemedicine capabilities in rural areas. In Rural Development we're providing capacity and leadership building and wealth, quality jobs and quality of life with high-speed internet for rural America.

We have six area offices throughout the state:

MS Area Office Contacts

Area 1 - Brookhaven Area Office

Phone: 601-833-9321 Fax: 1-844-325-7040

Area 2 - Decatur Area Office

Phone: 601-635-2556 Fax: 1-844-325-7045

Area 3 - Grenada Area Office

Phone: 662-226-4441 Fax: 1-844-325-7047

Area 4 - Hattiesburg Area Office

Phone: 601-261-3293 Fax: 1-844-325-7050

Area 5 - Batesville Area Office

Phone: 662-578-7008 Fax: 1-844-325-7037

Area 6 - Starkville Area Office

Phone: 662-323-8031 Fax: 1-844-325-7037

I encourage you to visit our RD website, sign up for Egov-delivery to stay abreast of what's going on in rural America. If you need to contact me directly, I'm providing my contact information.

Contact Information:

Dr. Trina N. George, State Director

601-965-4316

trina.george@usda.gov

For additional information, please visit: www.rd.usda.gov/ms

Program Summary: https://www.rd.usda.gov/files/RD_ProgramMatrix.pdf



Farm Service Agency Lesle Peavie

It's a great privilege to be in this meeting today and to provide information and analysis to our state and federal natural resource agencies and our agriculture environmental organization and other stakeholders. FSA's goal is to continue fostering relationships with our partners and provide consistency and success in promoting our programs. Most importantly our goal is to provide the utmost quality and customer service from our big commodity crop producers all the way to our small-scale urban agriculture producers.

I'm Lesle Joi Peavie, I am the Program Chief for FSA. My staff consists of Amy Moore, our Conservation Program Specialist with 20 years of FSA service. Megan Hogue, our Compliance Program Specialist with seven years of FSA service. James Smith, our GIS Technology Specialist with 19 years of FSA service and Nicholas Hancock our GIS Technology Specialist with seven years of service.

Today, we're going to update you with some new things in FSA this year. Starting with our three State Acres for Wildlife Enhancement (SAFE) projects, which are the Black Bear Habitat project, the Black Belt Prairie Project, and the Bobwhite Quail Habitat Project

The Black Belt Prairie project, we partner with FSA Alabama and NRCS, it's a dual project between Mississippi and Alabama agencies. This initiative gives participants an opportunity to install conservation practices that restore vital habitat for our targeted species, which is our Louisiana bear, our eastern bear, northern bobwhite quail, southern conch shells, southern club shell and eastern cottontail rabbit to name a few.

Last year, National office announced that all SAFE practices will be included in continuous sign up and no longer in general sign up. The National office requested that all active state projects that contain general practices be modified in order to be continued as a SAFE project. We accomplished this with the help of our partners.

204 Grassland Signup

This year we had a record-breaking grassland sign up. USDA accepted more than 3 million acres in CRP grassland, the highest in the program's history.

This allows producer land to continue grazing practices while protecting grassland and promoting plants and animal diversity.

Voluntary Termination of CRP Contracts expiring 9/30/2022.

The National Office wanted to make sure the potential of global food supplies and the challenges that could present due to the Russian invasion of Ukraine. USDA decided to waive refund penalties for CRP participants who voluntarily request to terminate a CRP contract that is in its final year and set to expire 9/30/2022, in order to be put back into production. This was only effective for the fiscal year, 2022. This did not impact many Mississippi contracts; the majority of our CRP contracts are for trees. The Midwest has more CRP grassland contracts.

Grassland priority zones



Currently, we are working on renewing and modifying Mississippi Grassland priority zones with the help of NRCS. We are renewing and modifying our grassland priority zones. These play a vital part in ranking in our CRP grasslands. We looked at our grassland zones and wanted to identify and ensure that we are decreasing the threat of development, decreasing the conversion of crop on grassland into cropland, and ensure our wildlife can be protected. They use pasture and grasslands as cover and food. The counties are located in the Black Belt prairie and also the Jackson prairie areas.

General CRP – Fiscal Year 2022 statistics

FY 2022 Expired CRP

FY22 Expired CRP Contracts and Acreages		
	Contracts	Acreage
General	1,749	88,434.50 ac
Continuous	345	8,969.52 ac
Total	2,094	97,404.02 ac

FY22 Acceptable CRP Offers

SU 58 General	
Acres	41,834 ac
Number of Offers	784

SU 204 Grassland	
Acres	610 ac
Number of Offers	13

Fiscal Year 2023 statistics:

FY 2023 Expiring CRP

FY23 Expiring CRP Contracts and Acreages		
	Contracts	Acreage
General	714	33,017.33 ac
Continuous	236	6,756.10 ac
Total	950	39,773.43 ac



Disaster program statistics occurring between 3/22/22 through 4/17/22:

FY 22 ECP & EFRP State Program Requests and Allocations

ECP & EFRP	
Disaster Date	3/22/2022 - 4/17/2022
Number of Farms Affected	257 Farms
Total Allocation	\$117,184.00

In the programs we provide emergency funding and technical assistance to farmers and ranchers that their farmland has been damaged or construction structures damaged by natural disasters. We received request from 257 farms that were affected during a tornado, or high wind or flooding event.

Some of the practices that we implemented were:

Removing debris from farmland, grading and shaping or leveling, replacing and restoring permanent fences, bottomland, hardwood, forest restoration, upland hardwood forest restoration, and upland softwood forest restoration.

Risk Management Agency Roddric Bell, Regional Director

Thank you for inviting me to participate in today's meeting and allowing me the opportunity to provide an update on the federal crop insurance program, which is vital to our Mississippi producers. The Risk Management Agency serves Mississippi, Arkansas, Louisiana, Kentucky and Arkansas from our Jackson, MS office. I'll provide updates on:

- Mississippi Crop Insurance Profile
- 2018 Farm Bill Implementation
- Risk Management Education
- Pandemic Cover Crop Program
- Expanding Insurance Coverage for Double Cropping
- Whole Farm Revenue Protection and Micro Farm
 - Changes for the 2023 Crop Year



In Mississippi, soybeans remain the number one insured crop. With 3,492 policies, on 2,186,652 acres covering \$1,041,775,677 total liabilities. Insurance is important to our producers as commodity prices fluctuate. Crop insurance is one stabilizing vehicle that producers use in our state. Farming is risky and we try to develop product to help our farmers. We insure a variety of commodities, from soybeans, blueberries to Apiculture. Many are starting to get in the honeybee business, and we have a product to help mitigate of their risks when it pertains to weather. With our crop insurance products, we try to expand where it makes sense.

Year	Total Policies	Total Liabilities
2012	8,239	\$1,250,893,454
2013	8,692	\$1,382,288,997
2014	8,196	\$1,217,516,366
2015	8,255	\$1,151,272,040
2016	8,304	\$1,232,657,507
2017	7,251	\$1,288,743,561
2018	7,617	\$1,424,018,698
2019	7,795	\$1,444,850,030
2020	7,639	\$1,500,529,180
2021	7,433	\$1,669,493,534
2022	7,822	\$2,088,662,254
Grand Total	87,243	\$15,650,925,621

Farm Bill initiatives implemented that impact Mississippi Producers.

Industrial Hemp offered as policy in 2020. Not offered in Mississippi, but on course after being certified for 2022.

Specified cover cropping as a good farming practice if done per Natural Resources Conservation Service(NRCS) guidelines.

Created a Veteran Farmer or Rancher Category which means veteran farmers will receive additional crop insurance benefits such as increased subsidy.

New Research and Development. There was a push to move away from ad-hoc disaster programs. With that we developed a tropical storm or hurricane insurance policy. A Hurricane Policy was developed and has been offered since the 2020 crop year. Tropical Storm is being developed and possibly offered for 2023 crop year.

Rice Irrigation Practices. There were two additional practices in MS but were not insured. As of the 2020 crop year we added it to our special provision for insurance. Alternate Wetting and Drying(AWD) and Furrow Irrigated(Row Rice) practices are insurable under the rice policy provisions.

Corn, Cotton, and Soybean production on batture land in the lower Mississippi Valley. Flooding causes losses to producers. Study was completed by outside contractor and initial recommendations have been presented to management for consideration. Study will be available for public review soon.



Risk Management Education

RMA recently announced it is awarding \$2.2 million to 16 organizations to educate historically underserved producers, small-scale farmers and others on farm risk management and climate-smart farm practices. The funding from USDA's Risk Management Agency (RMA) provides the resources for organizations, such as nonprofits and universities, to develop training and resources for producers on risk management options. This \$2.2 million investment for 2022 builds on a nearly \$1 million investment in 2021.

Funded projects:

MCL JASCO, a minority and veteran-owned family company will team with agriculture universities and farm associations to train underserved producers in farm financial benchmarking, crop insurance, marketing contracts, and other existing and emerging risk management tools to establish or enhance operations in Mississippi. Funding Amount: \$190,000

Up In Farms, a nonprofit, focuses on Mississippi's least visible audience – limited resource and historically underserved producers. The organization delivers education via a YouTube channel and in-person workshops, which equips trainees with the vocabulary, study skills and confidence to engage insurance professionals and begin the application process. Funding Amount: \$190,000

Rural South Institute, located in Georgia, educates producers on the basics of crop insurance, financial risk management education, as well as computer literacy training. The project serves Alabama, Georgia, and Mississippi, and is targeted toward African American producers, Historically Underserved, Limited resource, Livestock and Specialty crop producers. Funding Amount: \$200,000

Other Education Initiatives

Underserved Agent Licensures - Agent/Loss Adjuster Training Program

RMA has established a pilot program to identify, recruit, train, help certify, and help place trained and certified candidates within targeted underserved communities with crop insurance agencies. These representative underserved crop insurance agents and loss adjusters would work and serve the community of their stakeholders.

This pilot will be through a collaboration of 4 partners. Alcorn State University has been selected as one of partners for this initiative.

Risk Management Agency Navigator Program

The University of Arkansas System Division of Agriculture will lead the development of a pilot project to strengthen outreach and technical assistance to farmers and ranchers through the development of a cohort of risk management program navigators—program specialist trained by project collaborators to strategically and intentionally engage and serve all participants across the crop insurance sector.



The two-year pilot project features a collaboration with the USDA Risk Management Agency (RMA) and the Southern Risk Management Education Center (SRMEC).

Pandemic Cover Crop Program (PCCP)

PCCP was initially offered in 2021 and is part of USDA's Pandemic Assistance for Producers initiative, a bundle of programs to bring financial assistance to farmers, ranchers and producers who felt the impact of COVID-19 market disruptions.

PCCP provides premium support to producers who insured their spring crop with most insurance policies and planted a qualifying cover crop during the 2022 crop year. The premium support is \$5 per acre, but no more than the full premium owed.

Reduces producers' overall premium bills and helps them maintain their cover crop systems.

Qualifying cover crops include all that are reportable to FSA, including cereals and other grasses, legumes, brassicas and other non-legume broadleaves, and mixtures of two or more cover crop species planted at the same time. A full list is available in FSA Handbook 2-CP.

There were over 166,000 acres that received the benefit and an additional \$799,000 in subsidies in 2021. There was over 153,491 acres that received the benefit and an additional \$743,580 in subsidies in 2022. Will probably be offered for the 2023 crop year as a part climate smart ag initiative.

Expanding Insurance Coverage for Double Cropping

With challenges related to the pandemic, supply chains, and the war in Ukraine, farmers are doing their part to feed the world. The U.S. Department of Agriculture (USDA) is making that easier by simplifying the crop insurance application process and expanding double cropping coverage, enabling producers to insure two crops on the same land each year, such as soybeans following the harvest of crops like winter wheat.

To increase awareness of double cropping, USDA's Risk Management Agency (RMA) reminds producers that for the 2023 crop year there may be insurance options for double crop soybeans as well as grain sorghum and other crops in counties where the Following Another Crop (FAC) practice is not available.

For the 2023 crop year, farmers in select counties in Arkansas, Kentucky, Louisiana, Mississippi, and Tennessee may now be eligible to request a written agreement through their crop insurance company to insure their FAC cropping practice. Producers requesting FAC coverage for the first time, have until the acreage reporting date of July 15 to submit a request to their agent. Contact your agent for additional details and applicable deadlines.

Micro Farm

Whole Farm Revenue Protection (WFRP) - first offered in 2015 to provide coverage for all crops under one crop insurance policy for diversified producers including specialty and organic crops. Cap was increased to \$17,000,000 from \$8,000,000.

Micro Farm - first offered in 2022 as a streamlined approach to WFRP - specifically for small producers.



Micro Farm protects your farm against the loss of farm revenue that you earn or expect to earn from:

All commodities on your farm except timber, forest, and forest products; and animals for sport, show, or pets.

Commodities you produce during the insurance period, whether they are sold or not.

Commodities you buy for resale during the insurance period.

Less paperwork requirements. Insures farm operations with approved revenue up to \$350,000 (up from \$100,000 in 2021) for the initial year of insurance & \$400,000 for carry-over policies.

Post-production and value-added costs may be included in approved revenue.

Expected value are based on the insured's past three-year average of total revenue and acres

No individual crop policies allowed

Eligibility for Micro Farm coverage requires you to:

Be eligible to receive Federal benefits

Be a U.S. citizen or resident

File either a Schedule F tax form or other farm tax form that can be converted to a Substitute Schedule F for a specified number of years and have no more than 50 percent of total revenue from commodities purchased for resale.

You can contact me at:

- Roddrick Bell
roddric.bell@usda.gov
601-965-4771
601-331-4228
www.rma.usda.gov

Forest Service

James McCoy

National Forests in Mississippi are comprised of about 1.2 million acres of congressionally designated National Forest Land. We have seven Ranger districts across the state. Each Ranger district is a little bit different, and in some cases a lot different ecologically speaking.

Our offices are open at present and are fully operational. We are continuing to meet all the COVID and the pandemic guidelines in our state's counties. Right now, all our offices are fully open and staffed.

We have many vacancies and are actively recruiting new employees, especially for entry level positions working in our fire and timber programs. Reach out to us if interested in joining our service.



Prescribed fire is one of our major program areas. It's a very important tool that we use to manage hazardous fuel accumulations and to improve forest conditions. Those two things go hand in hand here in Mississippi as this is what we call a fire adapted ecosystem. Fire is as important as rain and wind and soil in Mississippi land management.

Last year, we burned about 200,000 acres in Mississippi, which was a bumper year for us and gets us up to the mark where our land and resource management plans suggest we should be ecologically for fire on the ground here in Mississippi. Now this is not the total that was burned to Mississippi, many of our partners and many private landowners burned acres in addition to this figure.

Timber Harvest, another key program area in terms of economics for the state and in terms of resource management and managing for forest health in Mississippi. I'm proud to share that we sold 283,5000 tons of timber off the Mississippi National Forest last year. Those are products and that contribute directly to the economy and those are treatments that contribute directly to forest health here in the state.

Our programs are often counter leveraged with state programs and partner initiatives, and we do a lot of work through stewardship agreements and contracts and good neighbor agreements and various other partnership authorities. We work very closely with our partners. Some of our key partners that we work with are:

State of Mississippi Forestry Commission, Camp Shelby, The Nature Conservancy, National Wild Turkey Federation, Ducks Unlimited and a new partner, the National Deer Association. Each one of these brings something a little bit different to the table and have been very strong partners with us in managing National Forest Mississippi over the last several years.

Several years ago, we had a severe outbreak of the southern pine beetle. This is an endemic native insect here in Mississippi and across the south and occasionally due to climatic conditions such as drought, or mild winters and overstock forest conditions we have in some areas, outbreaks. They can reach near emergency levels and when these outbreaks occur.

Our basic treatment to cut and remove those trees that are infected by the beetle and remove their food source. We treated 16,500 acres of pine plantations that have been heavily affected by the beetle. Those acres are in much better condition. This isn't the only natural disturbance, we deal with. We also deal with other disturbance events, such as widespread ice storms, hurricanes; things that try to attack our timber.

Each Ranger district has a vision statement. They include ecological condition maps that provide an assessment of the overall quality of forest conditions on each Ranger district. They're ranked and color coded to indicate, good, fair and poor conditions. The intent of these vision statements and the maps is to communicate with the public and our partners the work we're doing and the advances we're making in overall ecological health in each district.

National Center for Alluvial Aquifer Research – MSU Dr. Drew Gholson

The Mississippi State University Delta Research and Extension Center is in Stoneville, Mississippi.



It's a joint and cooperative program that's between USDA's Agricultural Research Service (ARS) and Mississippi State University.

It's a cooperative program that our project within the center we focus on conservation and the sustainability of water resources for agriculture. They mainly focused on the Mississippi River alluvial aquifer. We look to develop management systems that increase profitability, conserve water, protect water quality as well. So, they're all encompassing. We cover several topics, and we have several different scientists and faculty from both Mississippi State University and scientists from ARS that have different backgrounds in hydrology, soil science, agronomy, economics and in engineering.

Several of the projects that fall within each one of those five main objectives that we're aiming for to provide updates and the different types of research that we're looking at.

One is recommendations for sensor-based soybean irrigation. We're trying to fine tune a lot of the irrigation scheduling. Using soil moisture sensors to schedule irrigation, we know that we can reduce water use and pumping from that by just timing it correctly. We're working with not only understanding more of when the right time to irrigate is but make user friendly or farmer friendly decisions that are relatively straightforward. To have science behind that sensor triggers and be able to understand and give a simple recommendation.

If you use these type of soil moisture sensors; then this is the recommendations that we have for that. We're fine tuning a lot of those within the soybean irrigation agronomy research with moisture sensors.

Another project is directly comparing overhead irrigation / sprinkler irrigation compared to furrow irrigation. A majority of our acres in the Mississippi Delta are furrow irrigated acres. There's a lot of reasons that we know why that's the case. Flat and land leveling is important for drainage and. We're just trying to quantify the water use efficiency and then also compare the yield. To be able to have some numbers to show farmers directly comparing the systems. Also comparing with that, we're looking at different row patterns combinations with different types of irrigation strategies between furrow and sprinkler and different types of row spacings.

Another study that we're looking at is overhead irrigation triggers based on soil type. We have different irrigation triggers and thresholds depending on the soil type that we're that it crosses. Maybe you have multiple soil series and soil types within the same field using a variable rate irrigation overhead sprinkler system. We can pre-prescribe those different thresholds based on that soil type and interacting that with nitrogen application to see if there's different nitrogen use efficiencies within different types of irrigation thresholds across those different soil types.

Sensor-based Irrigation scheduling and cover crop impacts on corn production, is another project. This project is looking at sensor-based irrigation scheduling using soil moisture sensors and the available moisture within the soil profile that the triggers that we've been recommending and then combining those with cover crops.

So, looking at soil physical property changes within that but also looking at, combining cover crop impacts and seeing if that impacts our scheduling based on those moisture sensors.



If we utilize cover crops within corn or soybean, is it within this study? Does that prolong that first irrigation? Can we hold off a little bit longer because there's more moisture or it held more or whatever benefits that we might be able to see with that. We're combining moisture sensor scheduling within cover crops to see if there's any effects on the ability to irrigate less and use less water.

Another study is establishing the water budget from a tailwater recovery system. Quantifying what's coming in from an irrigation standpoint onto the field, what's being collected within the tailwater recovery system and then what's being reapplied back on there. We're saying what's being captured, what's being reused, what's the crop using and then how much irrigation. Looking at a total water budget within a closed system with a tailwater recovery system that allow us to go a few steps after that fact. Once we establish that water budget to be able to utilize tailwater recovery systems as efficiently as possible.

Advancing adoption of soil moisture sensors through on-farm training and demonstration. This is the program that's more extension and outreach. I've mentioned several of our studies looking at soil moisture sensors and trying to fine tune those recommendations and understand a little bit more about how they might interact with cover crops. Or, how they might interact with different soil types. But this is a technology that we really stand behind and can see a lot of benefits and using less water and being more efficient from a farmer irrigation decision standpoint. We have this program within the center that's trying to advance the adoption of moisture sensors and it's an on-farm training program. We work directly with farmers through our county extension offices and have a training program where we train the agents and equip them with the moisture sensors. The county agents have multiple farmers that they're working with and this year we had a total of 35 collaborating farmers. We installed the soil moisture sensors, address their questions, provide installation information, and aid in the irrigation decision making process based on the sensor's data.

We go through the full season; sensor installation, to decision making to soil moisture sensor removal and then we have program meetings with them at the end of the season. We see good outcomes from this program and adopt the use of moisture sensors after their participation in this program.

Another research project that we're looking at is soil management effects on furrow infiltration. One of the common issues, especially when we work with moisture sensors, they start to see that infiltration is not happening as much as they anticipated or, thought they might. Some of these soils can silt up and the water just shoots across and so we have infiltration issues. This project was looking at mechanical, biological, utilizing cover crops, different types of tillage regimes and then also some amendments that can be applied to the soil to see if there's any type, between those different treatments. Can there be anything to look at to increase the infiltration. Looking at utilization of cover crops and different types of tillage practices and also some of those amendments, and infiltration rings to see if it absorbs and then takes in water quicker. We're looking at other rainfall effects and moisture sensors and neutron probes to really dive into what may affect and help increase infiltration which in turn will help us with our irrigation water use efficiency.

Ongoing educational efforts on our research projects and our approach to get this information to the farmers. We're utilizing peer to peer learning, field days, hands-on training, one-on-one consultations, and multimedia resources. This past year we had several NRCS staff came to the water center to look at



the projects I've highlighted today, and I look to do this again next year. This helps us to discover the on-farm questions and address these research questions to increase, water quality issues, soil health and make it applicable to the farmer's use in the field.

The 2021 research projects will be on our website, <https://www.ncaar.msstate.edu> will be on our site and will highlight our research projects and the preliminary results.

On the website we're developing web tools. We're developing flow meter calculator tools, watermark averaging, and the Mississippi irrigation termination optimization tool (MITOL). This helps make irrigation system decision. It helps show the cost of irrigation and adopting these practices to reduce water use.

NCAAR flow meter is helpful from a management standpoint and how to read the flow meter, it's a simple tool where the beginning and ending reading number are entered along with the total acres. It will provide the output to tell how much was applied. It can be used per irrigation event, or season long.

We offer a Mississippi Master Irrigator educational program. It is funded by NRCS to tie into NRCS EQIP dollars to support the tools we promote and encourage adoption in the field. It helps to support the tools we love to promote and adopt that practice in the field correctly. It's a hybrid approach with face-to-face and online courses. It formalizes the education with a 24-credit hour formal education course designed to educate producers on water-related topics. We're collaborating with several agencies and the resources they have to conduct this program.

Contact information provided.

Dr. Drew M. Gholson Cell: 979-255-7018 email: drew.gholson@msstate.edu.

Agricultural Research Service (ARS)

Dr. Martin Locke

There are fourteen scientist in ARS looking at research problems related to conservation management. Many are at the National Sedimentation Laboratory in Oxford, but we also have scientists at the Sustainable Water Management Unit (SWMRU) in Stoneville, which is affiliated with the water center that Drew Gholson discussed, and we collaborate on some of the projects.

Some of the projects I will talk about are new, others I've previously discussed.

The 21- Gun project is a runoff study, looking at various management practices, irrigation, tillage and cover crop. We are working with Drew Gholson on this one and a graduate student at to look at production, environmental effects and runoff.

We also have a larger scale field research project called the Long-Term Agroecosystem Research (LTAR). This is part of a national network of mostly ARS scientists across the nation. We're looking at fields where we can assess practices that we call aspirational. They include some of these same conservation management practices on a larger scale.

One project that I hope many of you are familiar with is our Conservation Effects Assessment Project (CEAP) and we have a site in Beasley Lake Watershed, near Indianola, Mississippi. We're looking at the



edge of field practices such as quail buffers and also CRP. We're looking at the effects on lake ,nutrients and algae in the lake.

It's an Oxbow lake so all the watershed drains into that lake. Comparing two different watersheds, Beasley versus another watershed in the Delta. Beasley has less total phosphorus measured in the water. As a result, there's less harmful algae that's found in the water. We are trying to look at ways that we can see that these practice's effect in the water bodies.

A new study that we have. It's CEAP Legacy Sediment. These legacy projects are funded by headquarters and involve other locations across the country. It's to look at specifically processes that influence sediment in watersheds. We're excited to start this project and work with the other sites across the country. Some previous research that we've done shows is that there is a lot of sediment in water bodies that comes from the bank as opposed to running off from the field. Many times, we think it's just coming from the field, the farm farmland area, but there's a significant amount that is derived from banks.

A new project for us related to phosphorus is the CEAP Legacy phosphorus project. It's also funded by NRCS headquarters and is to look at understanding phosphorus contributions in runoff, effects of practices on the phosphorus. We have a lot of phosphorus in our water bodies, and this is a problem that we want to address with this project.

We have a soil, water and wildlife conservation project, near Indianola, MS, that we're working with EPA and other agencies as well as universities. NRCS isn't directly involved with this, but we do interact with Trinity Long and Paul Rodrigue on this project. We're looking at flooding soybean fields and cornfields during certain times. Part of the funding was driven by having water on the surface so that migratory birds would have a place to land and rest. What else could benefit from flooding fields during winter times, it was determined there may be ways to reduce nitrogen in runoff. We are seeing and measuring that nitrogen is removed through denitrification. Unflooded fields have more nitrite that is lost, versus flooded fields where the nitrate is being processed and not lost in run off.

Technology to evaluate plant stress triggers and greenhouse gas emissions. Research that we are conducting in collaboration with Drew Gholson's group and the ARS unit in the Water Center. He talked about this research in his presentation, and it is basically using remote sensing to evaluate the kinds of things that stress plants and what triggers that stress. We're looking at greenhouse gas emissions and measuring the effects of practices on those.

An area that Drew covered, we're also looking at tailwater recovery systems and ways that we can reduce water use, downstream nutrient loads and ways to improve furrow irrigation efficiency and using variable rate irrigation prescriptions.

This is a project that our laboratory is involved with the Ephemeral Gully project. It's also funded by NRCS and it's to look at processes involving ephemeral gully development. We're using drones to do before and after assessments of land and the gullies and rills as they appear.

Our lab has been heavily involved with supporting developing RUSLE2, AnnAGNPS, Concepts all are NRCS supported models. To manage surface and subsurface water resources as part of a regional water



management strategy. We're looking at ways that we can link the models together to get a broad landscape view of environmental aspects.

The Groundwater Transferring Injection project is where we mine subsurface water from the Tallahatchie River, bring it up through an extraction well, move it a mile and half and inject it back into the aquifer. This is to look at the feasibility of using this to help replenish the aquifer.

National Association of Conservation Districts

Gary Blair

www.nacd.net

The National Association of Conservation Districts (NACD) began during the Dust Bowl. We have almost 3,000 conservation districts, one in every county in Mississippi and we work in partnership with NRCS.

Our Board of Directors make sure to advocate on behalf of NRCS and the federal funding for all conservation programs. Our mission is to promote responsible management and conservation of natural resources on all lands by representing locally led conservation districts and their associations through grassroots advocacy, education and partnerships.

Our officers are from Washington state, Massachusetts, Minnesota, Iowa, Mississippi and Washington, DC. We provide one voice for conservation and advocate for programs, policy and funding for conservation on Capitol Hill and throughout the country. We communicate these through publications blogs and social media. We provide direct services and support to districts and develop conservation leaders.

We advocate on behalf of the conservation districts, through our visits to Capitol Hill and working with our congressional delegations. Advocacy efforts we have begun working on the 2023 Farm Bill and have a Farm Bill task force established. I am currently serving on this task force, and we have met several times throughout the year to review the major USDA conservation programs. Our national president has testified before the house Ag. committee on conservation and forestry. Attend committee hearings have also been attended by our board members and we are working with the Inflation Reduction Act (IRA) funding that could be provided through that act for NRCS programs could be upwards of \$18 billion.

We hope this will satisfy critical needs of the oversubscribed federal programs such as EQIP, RCPP, ACEP and CSP. Our conservation districts will play a large role in working with our USDA partners to ensure these funds are put on the ground for conservation practices.

NACD has been involved in the climate smart commodity project and have been named as a lead partner of a \$90 million partnership for a Climate-Smart commodities project through USDA. We'll be working through local districts to deploy these funds through local areas. Another is a NFWF project to accelerate long-term cover crop adoption. We are excited about this federal funding and will be finding ways to get this to our constituents. All will be done in conjunction with NRCS across our state.

Forestry is a major part of Mississippi. We work closely with National Forester's offices, regional foresters, NRCS, landscape forestry efforts including Joint Chiefs landscape restoration partnership projects.



We have many publications, and you can find them at nacdn.net and subscribe to our publications. Our forestry notes are a great one if you're interested in forestry. We have a daily roundup providing links to other publications across the nation, weekly updates are in our conservation clips.

We do provide a number of direct services to our conservation districts, and we work directly within our NRCS, FSA, RD. We are offering special projects such as solar health case studies, webinar, urban conservation grant initiative, resource policy groups, stewardship and educational materials.

Who are the soil health champions? A network of over 300 farmers ranchers and forest landowners from across the nation who practice and promote the use of soil health management. We provide access to all first technologies and information specific to soil health and conservation to engage champions and research and outreach.

Technical assistance grants provide funding for boots on the ground. We work with our districts across the state to provide additional staff in our USDA service centers to work on the USDA programs. Mississippi has been awarded almost \$1 million over the past five years and these technical assistance grants.

Urban grants we have awarded 6.5 million for 153 different projects across the southeast there have been 20 projects in eight states from friends of NACD districts. We've awarded grant fundings across the country. Stewardship and education are a big part of what we do.

Our 77th annual meeting is February 11th- 15, 2023, in New Orleans LA. Every day NACD works together to find more opportunities to serve across the nation. Nacdn.net website can provide you with more information about our organization.

Gulf Coast Ecosystem Restoration Team

Ron Howard

I'm representing the Gulf Coast Ecosystem Restoration Team (GCERT) and USDA's Gulf restoration effort. The team is located in Madison, MS and as many of you know, Under Secretary Wilkes launched the team after the BP oil spill.

In response to the 2010 Deepwater Horizon oil spill, USDA was named one of the federal agencies to play a direct role in the Gulf restoration alongside other federal, state agencies and restoration partners. Because of USDA's relationship with private landowners, to address conservation needs on their property, we were uniquely situated to respond to the natural resource challenges presented by the oil spill. This was highlighted in the NRCS investments in the Gulf of Mexico initiative and the Mississippi River Basin Healthy Watershed immediately following the oil spill.

There are three funding streams in which USDA accesses funds to conduct restoration and assess damages from the oil spill. Natural Resource Damage Assessment (NRDA), Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast State Act (RESTORE Act), and Gulf Environmental Benefit Fund (GEBF): National Fish and Wildlife Foundation (NFWF) partnership. We're able to leverage Farm Bill programs with NFWF programs to restore and conserve the Gulf's resources.



Gulf wide benefits-USDA works with other federal and state trustees to provide oversight of the BP settlement funds. Since the oil spill we've worked on developing restoration plans and to approve projects implemented.

When it comes to resource concerns, USDA's role has been to highlight and address restoration work on private lands that can benefit Gulf resources, including our wildlife. We've dealt with gully erosion, nutrient reduction to address water quality, large gullies on forested lands, and wildlife habitat in general.

Out of the portfolio of USDA projects, five projects impact Mississippi.

Mississippi Gulf Coast Conservation Reserve Program

Comprehensive Commitment and Planning Support (CPS)

Gulf Coast Conservation Reserve Program,

Enhancing Gulf Waters through Forested Watershed Restoration,

Upper Pascagoula Water Quality Enhancement.

NRCS projects include RESTORE, and Gulf Coast Conservation Reserve Program, that were funded at a rate of 2.5 million dollars for investments in wildlife habitat, addressing longleaf pine habitat, and stream bank stabilization. The initial 1.5 million dollar invested through the Gulf Coast Conservation Reserve Program and working on wildlife habitat projects are currently implemented. The \$1.5 million for stream bank stabilization will be coming to our state soon. Relative to the natural resource damage assessment, the Upper Pascagoula Water Quality Enhancement Project was the first project funded through NRDA to address nutrient reduction. This project includes 3.3 million dollars to address nutrient and sediment runoff on private land.

The U.S. Forest Service is also part of the USDA umbrella, and they are addressing forestry work and Mississippi under RESTORE. The funding will address private lands, working with the state's forest agency and other conservation partners.

The next project on our horizon is Nutrient Reduction Project proposals. We're working with the Mississippi Trustee Implementation Group, under NRDA, and we will look at nutrient reduction on private lands in George and Jackson counties to continue our gulf restoration efforts.

Soils Tools and Technology- NRCS

James Curtis

I want to highlight some new sensing data that became available this year. The web soil survey refresh data was updated October 1, 2022, tabular corrections were made. Web soil survey data that is used by the public was discussed. In FY 22, hydric rating was the most popular, followed by the hydric soil group. Other areas of the web soil survey ratings, popularity by user, were discussed.

To utilize the geospatial data for our conservation planning it has to be on a public map service, or created in a layer within the GeoPortal. We have approximately 38 layers in our database.

There is a national push to digitize the old versions of high attitude photography imagery. For Mississippi



this was 1982 to 1983 flights. We are working to obtain version 2, which is from January to February 1986 flight dates.

This coincides with the Food Security Act, signed December 23, 1985. It became available online about two weeks ago.

Last year we had a pilot program, NAPE imagery flights in Mississippi. The imagery was upgraded to high resolution and is now available. The difference in this imagery is it is one foot, versus 3-foot imagery and FSA uses the imagery for crop assessments. In Mississippi, the flights are typically made during the months of July and August, but this pilot program's imagery was flown in November.

In 2017 we had full LiDAR coverage for Mississippi. We have been conducting flights in areas to increase quality level specifications to obtain higher resolution in some areas of our state. The new elevation data will be available in November 2022.

Ecological Sciences – NRCS

Rogerick Thompson

I want to give an overview of practices and processes used in Mississippi to address resource concerns.

Today NRCS' goal is to address up to 47 identified resource concerns. In Mississippi we address up to 33 that when they are present on the agricultural land uses there are 161 practices in Mississippi of the 166 NRCS conservation practices that have been identified to address resource concerns.

Each practice is represented by a conservation practice standard. Where the applicability, purpose, and criteria serve as the focal point of the standard. Standards typically have a life span of 5 years and are reviewed by national discipline leads at the end of this term. Afterwards, they are updated and posted to the Federal Register for public review and comment for 30 days from the publishing date. Currently, nine standards are making their way through the federal register process to grant commenting by the public.

Eleven standards have migrated through Federal Register commenting process and are scheduled for release. Following the release of the standards, each state has one year to adopt the national standards or make those standards more state specific to address resource concerns.

This fiscal year, fourteen ecological, vegetative and/or management practices are scheduled for review and posting to the Federal Register for public review and committing. Some are: access control, brush management, contour farming, crosswind ridges, fish raceways or tanks, forest trails and landings to name a few.

In addition to the 166 practices that NRCS has available, the interim practice standard is a mechanism to test new practices within the state. They would be issued for a term not to exceed three years. At the conclusion of that three-year term, we would use an evaluation plan to conduct and document annual evaluations of the performance and effectiveness of those interim practices.

The report will include an evaluation of the methodology, materials, site preparation or protection and other pertinent information to learn about the use of these interim practices. At the end of the interim



practice term, we would prepare a final report and at the end of the evaluation.

The final report would be submitted to the national discipline leads responsible for the interim practice. The report will include a description of the practice, a summary of the annual evaluations, conclusions about the effectiveness of the practice and a recommendation to either make the interim practice a national practice or incorporate the technology of the interim practice into an existing national conservation practice standard, or to discontinue the use of the interim practice.

Interim conservation practice 812, raised beds is one of two available this year. Both are relative to urban agriculture or small-scale farms. Raised beds are planned on unsuitable sites due to contaminants or debris. In addition to addressing farm bill requirements for soil remediation and human considerations with resource concerns.

The raised bed resource concern's purpose is to reduce concentration of salt, reduce field operation induced particulate emissions and increase plant health and productivity. Interim conservation practice 821, low tunnel systems is the second interim practice offered this year. Protecting crops during early and late season weather conditions is a primary benefit of this practice. Floating covers and hoop supports are two of the low tunnels available for planning purposes this year.

Our conservation practice standards may be found on our web page under the Resources tab.

The Field Office Technical Guide (FOTG) is the primary technical reference for NRCS planners. It contains technical information about the conservation of soil, water, air, plants, animals, and energy resources, and related human considerations.

The FOTG contains Sections 1 through 5, as identified below and appropriate subsections:

- (1) Section 1 – General Resource References
- (2) Section 2 – Natural and Cultural Resources Information
- (3) Section 3 – Resource Concerns and Planning Criteria
- (4) Section 4 – Practice Standards and Supporting Documents
- (5) Section 5 – Conservation Effects

Section 4 contains conservation practice standards for each conservation practice. The available state practices will be listed in alphabetical order.

In addition to our conservation practices, NRCS have 33 activities designated as CPAs, DIA, or CEMAs. All which have been updated for this new FY.

They are:

6 Conservation Planning Activities (CPA)

14 Design and Implementation Activities (DIA)

13 Conservation Evaluation and Monitoring Activities (CEMA)

The activities are offered through our financial assistance programs.



Technical Service Providers (TSPs) deliver conservation planning activities, design and implementation activities and conservation evaluation and monitoring activities to agricultural producers such as farmers and private forest landowners on behalf of the Natural Resources Conservation Service (NRCS).

TSPs include individuals, private businesses, American Indian tribes, nonprofit organizations, and public agencies. TSPs expand the number and availability of conservation technical experts capable of offering customized, one-on-one conservation advice to agricultural producers.

Conservation Planning Activities (CPAs) are activities that result in a conservation plan consistent with steps 1-7 of the NRCS conservation planning process. The CPA will document client decisions regarding selected alternatives including identification of desired primary and supporting practices that the client would like to use to treat identified resource concerns.

Design and Implementation Activities (DIAs) are activities that allow for development of specific practice designs, management prescriptions, or other instructions that allow the client to implement the conservation practice or system of conservation practices. These activities are consistent with Step 8 of the NRCS conservation planning process. (Does not include assistance with conservation practice installation, review, and checkout.)

Conservation Evaluation and Monitoring Activities (CEMAs): Activities that include evaluation, monitoring, testing, or assessment for a specific purpose, to complete practice implementation requirements, or to determine the effectiveness of conservation practices and activities. CEMAs are consistent with Step 9 of the NRCS conservation planning process but may be used at any point in the planning process.

The Ecological Science staff is also actively recruiting for these positions:
State Wildlife Biologist, State Forester, State Grazing Land Specialist and State Agronomist

Rogerrick Thompson, State Resource Conservationist

601-863-3911 – office 601-259-2811 – cell

Rogerrick.Thompson@usda.gov

Mississippi Department of Environmental Quality

Natalie Segrest

I appreciate the opportunity to speak at the State Technical Committee meeting each year and have been at DEQ in a non-regulatory capacity to implement what NRCS does with our landowners in Mississippi. I grew up working on a crop farm, driving tractors and I get to merge my two passions in this position.

With the passage of the Bipartisan Infrastructure Law or IIJA a new grant program was funded for the Gulf Hypoxia Program (GHP). This will help states to implement strategies to reduce implement nutrients contributions into the Mississippi River. As part of this funding \$60 million was allocated for Mississippi and the Mississippi River drainage states. This is exciting for us and over the next five fiscal years we will receive over \$4 million to implement strategies and actions to address this in our state.



This GHP grant funding is limited in scope to the western part of our state which drains directly into the Mississippi River, and it is limited to those watersheds. Projects must address state needs while meeting GHP objectives. Work plans have been submitted on how we would use these funds and anticipate funding through fiscal year 2030. They must address nutrient reduction strategies and there is a heavy focus on developing measurable outcomes.

With the phase one GHP projects in Mississippi we have talked with NRCS, landowners, USGS and individuals that put practices in place and measure outcomes. We will continue with the model to obtain input to determine what is important for this funding. Where would like to do this in a way to better help Mississippi tell our story and do our part to address what is going on in the Gulf of Mexico.

Focus for phase one will include putting sensors in place, develop a tool to look at the actions our partners are conducting across the state and the settlement savings sediment on the land. A means to measure responses and what we are seeing in the environment. To show in five years from where we are, compared to where we've been.

Feedback mechanism we have in place, our programs and practices and the work we do, and how to use it together. USGS has a SPARROW model to look at the ground loading which is coming into our waters and landscape. NRCS programs that put conservation practices on the ground, individual landowner investments and how we can estimate environmental outcomes from those dollars spent. We plan to achieve this with the tool and measure those responses possibly with sensors, to create a data-driven approach.

USGS has a SPARROW model, and we are working with them on areas in our state to use Mississippi data to validate what is going on in Mississippi. We have been working with USGS to do this, it will be a key mechanism for understanding our state's nutrient baseline which we are measuring from.

We will work with a nonpoint source (NPS) reduction estimation tool to make estimations of what we've achieved through time at watersheds, counties, basins at a larger scale period to build a larger scale tool that will help us to use the data NRCS has at the watersheds for scale. We'll use from 2008 to present to combine and put this information out so we can see we are doing, and we can estimate reductions. It won't have the farm scale location data, but to share this information to tell a positive story.

We have been working with NRCS data, the practices implemented in Mississippi, and we have environmental tools to estimate from a handful of those. We are working to look at where the biggest nutrient impact is coming from to help us move into the gulf hypoxia funding of this inlet tool. To help us come up with estimations of environmental benefits and develop BMP data and share this information locally and nationally.

It will help our farmers understand how this will impact their farming. The opportunity to estimate environmental benefits achieved through practice implementation.

Estimating the benefits of MS BMP efforts by leveraging NRCS data and existing models. We have numbers and costs of implemented practices. NRET links what we have with environmental outcomes and successes. What do we need to get there; address data gaps to maximize model outputs by



combining observed data with expert knowledge.

Highly erodible soils practices are heavily implemented in Mississippi, and these have a huge impact in environmental outcomes. We need input from those putting practices on the ground. There is so much we achieve through cooperation and show that Mississippi is doing its part. Think of the added impact we can achieve with the environmental outcomes from the implemented practices put on the ground.

Engineering- NRCS

Olguy Louis

Emergency Watershed Protection (EWP) program provides protection from flooding and soil erosion during a natural occurrence or disaster that causes a watershed impairment. A request is submitted by a sponsor for assistance. NRCS will perform a site visit and complete a damage survey report (DSR) which could result in a formal agreement. The agreement outlines the framework for the project.

We have assisted on 561 dams with 164 million dollars of average benefits with flood protection, sediment reduction, stream bank erosion. We have worked many DSR's in Mississippi from Tate county to Wilkerson county. Within the next five years we have numerous watershed rehabilitation and expect to spend \$14 million in planning, designing, and construction for these dams. In watershed operations we expect to spend \$102 million dollars. Mississippi has been impacted in the past from a lot of floodings and these fundings have been provided by the Infrastructure Bill.

Watershed Flood Prevention Operations Program (WFPO) provides technical and financial assistance to states, local governments, and tribes. To plan and implement authorized watershed project plans for the purpose of flood prevention, watershed protection, public recreation, public fish and wildlife, agricultural water management, municipal and industrial water supply, water quality management and watershed structure rehabilitation. The rehabilitation is specific to dams not constructed by NRCS but are serving in one of these purposes.

The Black Big Black Creek is one of our projects, in Madison County, experience significant flooding in August 2022, impacted Canton, MS, and significantly flooded many areas. We have resources available on the NRCS website and the watershed and landscape planning you'll find information regarding sponsorship. Some technical manuals, and forms to apply for this program are available on our website.

Conservation activities (DIAs) work includes, agricultural energy design, feed management design, forest management practice design, improve management of drainage water design and irrigation water management design. Details supporting documentation and completed work information has been updated in 2022.

Another technical update we have clarified pond technical assistance. NRCS staff shall provide engineering CTA assistance consisting of up to approve designs on ponds meeting the following criteria:

- (a) peripheral dam or levy eight feet or less in height measured from the point of lowest elevation of its toe, regardless of the impounded storage volume; or
- (b) a dam that impounds 25 acre- feet or less at maximum storage volume; or
- (c) a dam that does not impound a watercourse with the continuous flow of water, or perennial stream



Pond conservation technical assistance guidance, conservation technical assistance that are greater in size and volume than the limitations provided shall only consist of forms of the following; topographic, aerial or soils maps soil borings, web soil survey, drainage area calculations, runoff volume calculations.

Another technical update in the Delta region. We are allowing used material - EQIP use steel in Delta in the 440 Conservation Program Manual. Any practice in which used materials are used may be eligible for payment in accordance with criteria set forth in the national engineering manual and the evaluations procedures.

The material quality will be evaluated by a producer specified by the design engineer. If you have any questions, please feel free to contact me, Olguy Lewis 601-863-3932.

Mississippi Soil and Water Conservation Commission

Nick Ivy

Due to technical difficulties, Mr. Ivy was unable to present during this meeting.

Easement Programs – NRCS

Jason Keenan

We have 748 enrolled easements, 694 are closed, 209,000 acres and about 200,000 are closed at this moment across all of our easement programs. WRE is our major program across the state and this year we had approximately 221 eligible applications requesting over 75 million with more than 31,000 acres. I expect that number would realistically be over 100 million, if we could fund every application on file.

We were able to fund 19 applications this year, with 2,970 acres and 19 million in funding. We are looking forward to a new fiscal year 2023, with significant increases in funding in WREPS. Last year in Tri-state WREP we funded 6 agreements, enrolling 703 acres with 2.85 million in funding. Batture WREP had one agreement, enrolling 175.3 acres with \$823,000 in funding. We expect 10 million plus in WREP dollars for 2023.

The ranking in fiscal year 2023 will not change from what we've had in previous years. Payment rates, at this time we do not expect any to decrease in fiscal year 23. Once the 2023 rates are approved, they will be posted to our NRCS Mississippi web page and distributed to our field offices.

Mr. Keenan thanked the easement staff members for their work on processing easements, we could not do this work without them. Landowner workshops are scheduled, if you would like to have a workshop in your region, please let me know. You can reach me at Jason.keenan@usda.gov.

NRCS Programs

Earl McMillian

Financial assistance programs we offer:

Environmental Quality Incentive Program (EQIP)

Conservation Stewardship Program (CSP)

Regional Conservation Partnership Program (RCPP)

Urban Agriculture



EQIP is a voluntary conservation program that assists producers to make conservation work for them. Together NRCS and producers invest in solutions that conserve natural resources for the future while improving agricultural operations. Eligible program participants receive technical and financial assistance payments to implement conservation practices that address natural resource concerns on their land. Payments are made to participants after conservation practices are implemented and verified by NRCS staff. Our fiscal year 2022 accomplishments:

Total EQIP funded \$55,941,680 in obligations.

EQIP Classic and other initiatives 1923 contracts totaling \$39,832,938 in obligations.

MRBI funded 148 contracts totaling \$10,219,849 in obligations

NWQI funded 49 contracts totaling \$2,772,769 in obligations

Climate Smart/Urban Ag funded 78 contracts totaling \$1,703,145 in obligations

CIC funded 15 contracts totaling \$1,412,977 in obligations

The National Water Quality Initiative (NWQI) was established in 2012 to address agricultural sources of water pollution. Specifically, nutrients sediments and pathogens in priority watersheds throughout the country. In 2022 NRCS received 2.8 million in funds to assist with conservation efforts. In NWQI there are currently nine watersheds eligible for funding which are scattered throughout the state.

Mississippi River Basin Initiative (MRBI) was announced in fiscal year 2009, with the program's primary focus on improving water quality. It focuses on restoring wetlands, enhancing wildlife habitat, and sustaining agricultural viability in small watersheds of the Mississippi River basin. It requires a flexible approach tailored to individual watersheds and should support conservation systems composed of practices that avoid, control and trap sediment and nutrients. In 2015 MRBI was updated to align with the nutrient loss reduction strategies developed by Hypoxia Task Force (HTF) member States. NRCS and partners worked with producers and landowners to implement and show the effectiveness of targeted conservation and systems and priority watersheds identified as major contributors of nutrients to the Gulf of Mexico.

The MRBI watersheds are in the Delta and through northwest Mississippi. In FY 2022 these new watersheds were added:

Hopson Bayou

Fighting Bayou

Overcup Slough-Harris Bayou

Otter Bayou

NRCS funded all applications that applied for this initiative. There are currently 15 eligible watersheds available for funding in Mississippi, all funding opportunities are focused in our Delta counties.

MRBI and NWQI partners with Mississippi Department of Environmental Quality (MDEQ) and the Mississippi Soil and Water Conservation Commission (MSWCC). This partnership has resulted in 9 national water quality initiative watersheds, 15 MRBI watersheds, pulling public and private entities together, and assisting in our conservation efforts.

Climate Smart Agriculture and Forestry (CSAF) is a whole government approach to tackling the climate



issues. USDA recognizes the important roles that agriculture plays as well as forestry in climate change mitigation and resilience. The purpose of this targeted EQIP sign-up for CSAF is to prioritize the adoption of conservation practices and systems that mitigate greenhouse gases and ensure availability of this assistance for socially disadvantaged producers and forest land managers.

Core conservation practices, which will also include CSP enhancements, were selected based on their ability to reduce greenhouse gas emissions and sequester carbon in the soil. States are allowed to remove any core practices that are not selected in their payment schedules.

EQIP-CIC conservation incentive contract provisions provide for both incentive practice payments for adopting practices, and annual payments for managing, maintaining, and improving the incentive practices for the duration of the contract. States determine the EQIP incentive high priority areas. These are areas with identified priority resource concerns that represent a significant concern in a state or region. States may identify up to three priority resource concerns for each land use within a given high priority area. Incentive contract lengths is an appropriate length to achieve the desired conservation benefits, not less than five years and not more than 10 years.

NRCS will continue to offer emergency disaster assistance programs.

Fiscal Year 2023 EQIP Sign-up:

EQIP Classic including State and National Initiatives

2023 Sign-up Deadline: October 28, 2022

Eligibility Deadline: December 5, 2022

Obligation Deadline: May 12, 2023

CSP encourages producers to address priority resource concerns and improve and conserve the quality and condition of natural resources in a comprehensive manner by undertaking additional conservation activities and improving, maintaining, and managing existing conservation activities.

CSP – Classic

Helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority natural resource concerns. Participants earn CSP payments for conservation performance, the higher the performance, the higher the payment.

CSP- Renewals

During the first half of the fifth year of the existing contract term, NRCS may allow a participant to apply and compete to renew their contract for an additional 5-year period.

CSP-Grassland Conservation Initiative (GCI)

The purpose of the grassland conservation initiative is to assist producers in protecting grazing issues, conserving and improving soil, water, and wildlife resources, and achieving related conservation values by conserving eligible land through grassland conservation contracts.



Fiscal year 2022 conservation stewardship program accomplishments:

CSP classic, 191 contracts with 22, 349, 584 million dollars obligated

CSP renewal, 52 contracts with 6,487,649 obligated

CSP GCI, 10 contracts \$17,770 obligated

Total FY 2022 CSP obligations \$28,834,234

Fiscal year 2023 CSP annual payments. Participants who elect to receive their CSP annual payment in calendar year 2022 will need to submit CSP documentation prior to November 18, 2022. Participants who elect to receive their CSP annual payment and calendar year 2022 will need to submit their CSP documentation prior to January 20, 2023.

Fiscal Year 2023 CSP sign-up:

CSP-GCI

2023-1 Sign-up Deadline: October 14, 2022

Obligation Deadline: December 16, 2022

CSP Renewals

Application Deadline: April 15, 2022

Assessment and Ranking Deadline: November 4, 2022

Obligation Deadline: December 16, 2022

CSP-Classic

2023-1 Sign-up Announcement: January 2, 2023

Sign-up Deadline: February 1, 2023

Obligation: June 30, 2023

Regional Conservation Partnership Program (RCPP) we funded nine contracts of \$964,542 on 796 acres. Mississippi was not awarded a new project in fiscal year 2023. Louisiana is the lead state for RCPP projects in fiscal year 2023.

Impact – Proposals are effective and compelling solutions that address one of more natural resource priorities.

Partner contributions - Cash and in-kind value added to leverage NRCS RCPP investment. NRCS goals are that partner contributions at least equal the NRCS investment in a RCPP project. Partner contributions are given priority and application evaluation criteria.



Innovation- Innovative conservation approaches or technologies, build new partnerships, take advantage of program flexibilities to deliver conservation solutions.

Partnerships and Management- Partners must have experience, expertise and be able to manage the partnership and project, provide outreach to producers, and quantify the environmental outcomes of an RCPP project. RCPP ranking gives preference to applicants that meaningfully engage historically underserved farmers and ranchers.

Eligible Partners:

Agricultural or silva-cultural producer association

A state or unit of local government

An Indian tribe

A farmer cooperative

Water district, irrigation district, rural water district or association, or other organization with specific water delivery authority to producers on agricultural land. A municipal water or watershed treatment entity.

An institution of higher education period and organization or entity with an established history of working cooperatively with producers, etcetera.

Establishment of Urban Agriculture subcommittee-

In fiscal year 2022, states are charged with creating an urban agricultural subcommittee to assist NRCS with implementation of its conservation program.

Roles of subcommittee:

Primary advisor regarding urban agriculture conservation.

Reports to NRCS Mississippi State Technical Committee chaired by the State Conservationist.

Responsibility of the subcommittee:

Identify local urban AG needs, emerging practices, resource concerns and potential partners.

Identify barriers to implementation of conservation strategies on urban and small- scale operations.

Develop recommendations for outreach strategies.

Provide additional assistance or advice as requested.

For more information on how to become a member of the Urban Agricultural subcommittee please contact Earl McMillan at edward.mcmillan@usda.gov.

If you wish to be added to the State Technical Committee mail out list, email your name, address and telephone number to edward.mcmillan@usda.gov. Mr. McMillian thanked the presenters that participated in today's meeting and for allowing him to be the moderator for the meeting.



Closing Comments

Kurt Readus

Mr. Readus congratulated Mr. McMillian on his position as the Assistant State Conservationist for Programs and for moderating this meeting.

He thanked participants for joining the meeting and thanked the partners, and the participants for their input.

Feel free to contact NRCS at any time regarding Ecological Sciences, Programs, Easements, Engineering or administration of our programs .

There are initiatives being funded for Mississippi, we anticipate migratory bird resurgence initiative, it is not yet finalized. Once finalized, it will be released to the public.

Thanked all sub-committee members for their input and participation, we could not do this work without you. Welcomed those on the newly formed Urban Agricultural subcommittee. NRCS-MS has a new website, it's more focused for our customers. Thanked the team members who help produce this meeting and the federal partners that joined us today. We look forward to a successful fiscal year 2023 and putting conservation on the ground.



United States Department of Agriculture



United States Department of Agriculture

Tuesday, October 26, 2022



Welcome to Mississippi State Technical Committee Meeting

PLEASE SIGN IN BY ENTERING YOUR NAME
IN THE Q & A



Natural
Resources
Conservation
Service

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Dr. Trina N. George

State Director for Mississippi

Who, What, Why?

Who are we?

Rural Development is the economic and community development arm of USDA

What is our mission?

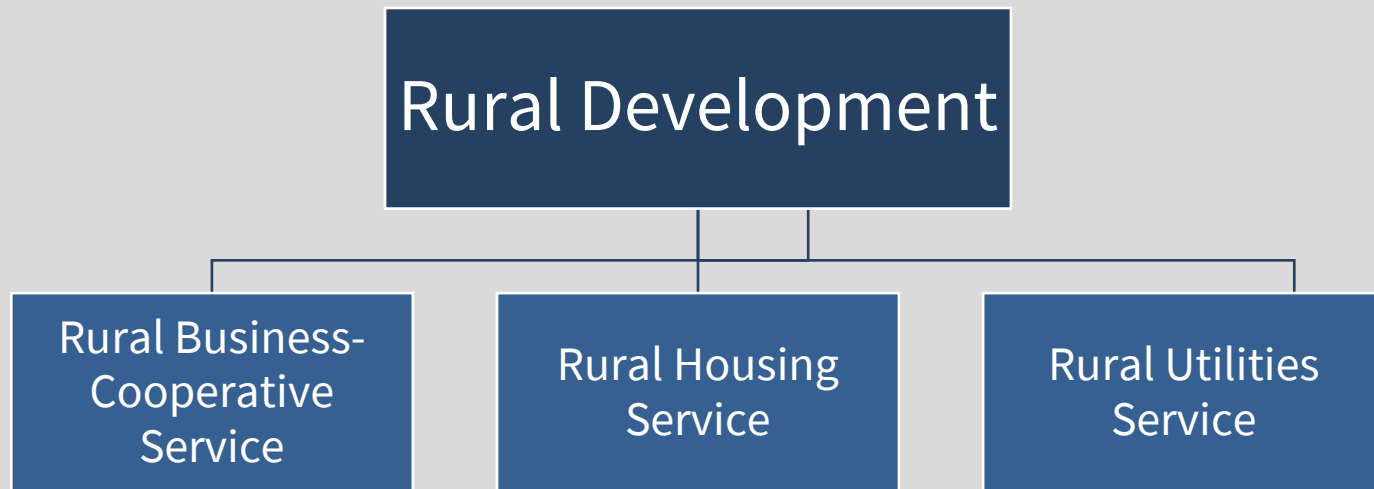
To increase quality of life and economic prosperity in Rural America.

How do we do it?

We offer grants, low interest loans, guaranteed loans, and technical assistance to support and promote:

- ✓ Community Infrastructure, Facilities, and Equipment
- ✓ Water and Wastewater Infrastructure
- ✓ Rural Businesses and Entrepreneurship
- ✓ Housing

Rural Development Offices



Rural Development Program Areas

Rural Utilities Service

- Electric Program
- Water & Environmental Programs
- Telecommunications and Broadband Programs

Rural Housing & Community Facilities

- Homeownership Loans
- Home Repair Loans & Grants
- Mutual Self-Help Technical Assistance Grants
- Multi-Family Housing Loans
- Farm Labor Housing Loans & Grants
- Housing Preservation Grants
- Community Facilities Loans & Grants

Rural Business & Cooperative Service

- Business and Industry Guaranteed Loans
- Intermediary Relending Program
- Rural Business Development Grants
- Rural Energy for America Program
- Value Added Producer Grants
- Cooperative Development Assistance

National portfolio = \$31 billion

Mississippi Fiscal Year 2022 program statistics:

\$871.4 million total funding obligated to Mississippi communities

- \$416.6 million - Single Family Housing Loans/Grants
- \$81.6 million - Multi-Family Housing Loans/Grants
- \$86.6 million - Community Facilities Loans/Grants
- \$27.4 million - Water & Environmental Infrastructure Loans/Grants
- \$47.1 million - Business & Cooperative Programs Loans/Grants
- \$53.7 million – Telecommunications Loans/Grants



RD OBLIGATIONS | Executive Overview

For USDA Internal Use Only

Disclaimer: Dashboards are designed to report program-specific performance and should never be used as a Rural Development financial report of record

Data through: 9/30/2022



Agency	Program Area	Residential vs. Commer..	Loan/Grant	Direct/Guaranteed	Program/Special Initiativ..	Type of Assistance	Fiscal Year	NAICS Code Industry	
All	All	All	All	All	All	All	FY 2022	All	

Disbursed

Obligated

OBLIGATION COUNT

3,181

TOTAL OBLIGATED

\$871,404K

TOTAL DISBURSED

\$422,488K

LOANS

2,574

GRANTS

660

LOANS

\$714,931K

GRANTS

\$156,473K

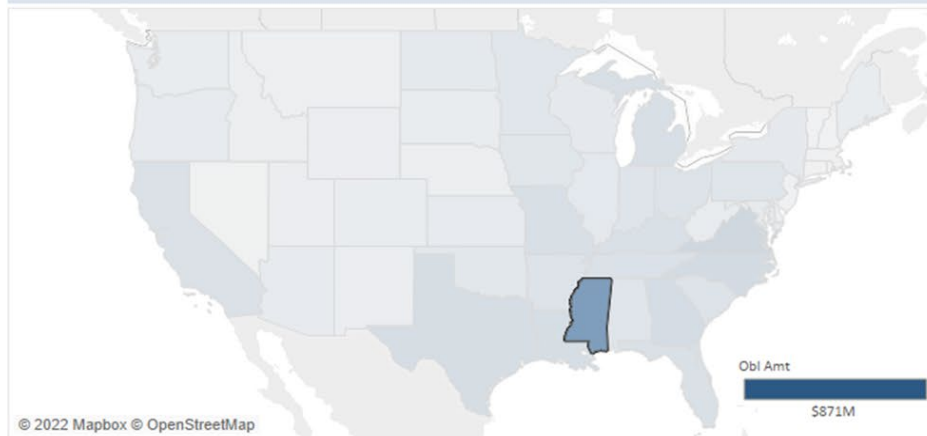
LOANS

\$413,415K

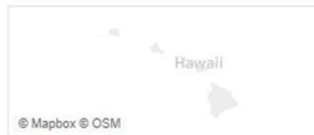
GRANTS

\$9,073K

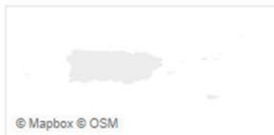
OBLIGATIONS MAP | Click to Filter by State



© Mapbox © OSM



© Mapbox © OSM

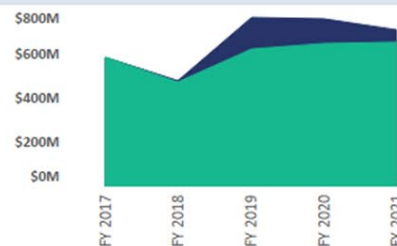


© Mapbox © OSM

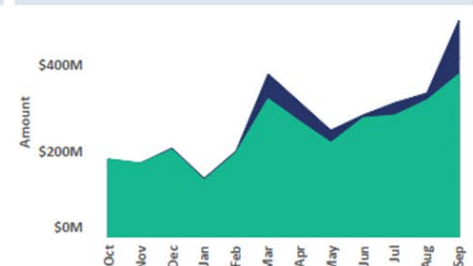
FY 2022 OBLIGATED VS DISBURSED | Click to Filter by Program Area



5-YEAR ANNUAL TREND



MONTHLY TRENDS



Value-Added Producer Grant

What does this program do?

The Value =-Added Producer Grant program helps agricultural producers enter into value-added activities related to the processing and/or marketing of bio-based, value-added products. Generating new products, creating and expanding marketing opportunities, and increasing producer income are the goals of this program.

Who may apply for this program?

Independent producers, agricultural producer groups, farmer- or rancher-cooperatives, and majority-controlled producer-based business ventures are eligible to apply for this program.

How may funds be used?

Grant and matching funds can be used for planning activities or for working capital expenses related to producing and marketing a value-added agricultural product. Examples of planning activities include conducting feasibility studies and developing business plans for processing and marketing the proposed value-added product. Examples of working capital expenses include:

- Processing costs
- Marketing and advertising expenses
- Some inventory and salary expenses

Housing Programs

USDA's Housing Programs help rural communities and individuals by funding low-interest single family home loans, apartments for low-income persons or the elderly, housing for farm laborers, and much more!

- Single Family Housing Direct Home Loans
- Single Family Housing Home Loan Guarantees
- Single Family Housing Repair Loans and Grants
- Mutual Self-Help Housing Technical Assistance Grants
- Multi-Family Housing Loans
- Farm Labor Housing Loans and Grants
- Housing Preservation Grants

High-Speed Internet

- **NEW USDA BROADBAND RECONNECT PROGRAM**
- Use funds for construction, improvement, and acquisition of facilities to provide service at a minimum of 25 Mbps (download) and 3 Mbps (upload)
- Service area not within incorporated areas greater than 20,000 in pop. (serve as many people as you want, but must be in “rural” areas)
- Service area must be underserved (meaning current speeds do not exceed 10/1 Mbps)
- Three options:
 1. 100% Grant
 2. 50% Grant/50% Loan
 3. 100% Loan

High-Speed Internet

Community Connect Grant (up to \$3 million)

- Fund broadband infrastructure deployment – fiber, facilities, construction, etc.
- Eligible if you have less than 10 mgb download speed
- Local governments, non-profits, for profit corps/LLC's

Rural Broadband Loan Program and Pilot Program

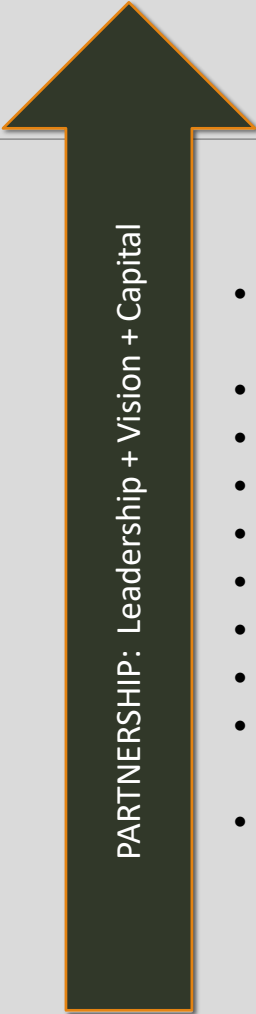
- Funds fiber, facilities, construction, etc. needed for broadband access
- Local governments, non-profits, for profit corps/LLC's
- Loans and loan guarantees

Distance Learning and Telemedicine Grant

- Grants for internet-based telemedicine and educational programs
- 15% match
- Local governments, non-profits, tribes, private businesses, schools, etc.

What's the “WHY?”

- Our FUTURE!
- We MUST improve quality of life!
- We MUST retain our next generation of leaders!
- We MUST secure our healthcare infrastructure!
- We MUST support workforce/skills training!
- We MUST support small businesses!
- We MUST all use our knowledge, experiences, and expertise to connect resources to opportunities!



PARTNERSHIP: Leadership + Vision + Capital

- Capacity and leadership building
- Wealth building
- Poverty reduction
- Quality schools
- Quality healthcare
- Quality jobs
- Quality of life
- Entertainment
- Vibrant, growing communities
- Housing opportunities

MS Area Office Contacts

Area 1 - Brookhaven Area Office

Phone: 601-833-9321 Fax: 1-844-325-7040

Area 2 - Decatur Area Office

Phone: 601-635-2556 Fax: 1-844-325-7045

Area 3 - Grenada Area Office

Phone: 662-226-4441 Fax: 1-844-325-7047

Area 4 - Hattiesburg Area Office

Phone: 601-261-3293 Fax: 1-844-325-7050

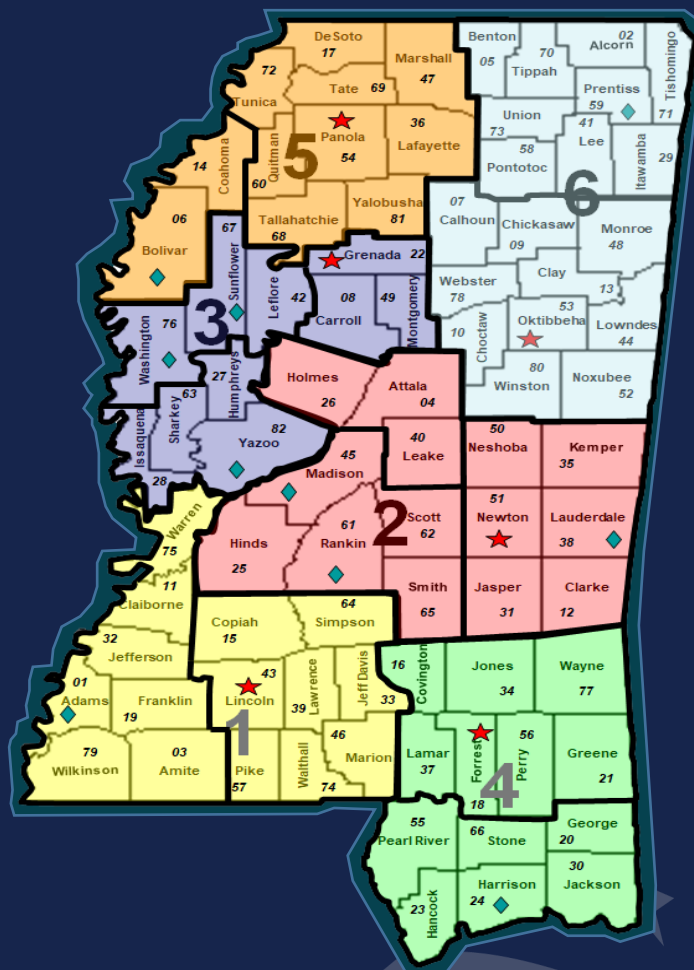
Area 5 - Batesville Area Office

Phone: 662-578-7008 Fax: 1-844-325-7037

Area 6 - Starkville Area Office

Phone: 662-323-8031 Fax: 1-844-325-7037

USDA is an equal opportunity provider,
employer, and lender.



Contact Information:

Dr. Trina N. George, State Director

601-965-4316

trina.george@usda.gov

For additional information, please visit:

www.rd.usda.gov/ms

Program Summary:

https://www.rd.usda.gov/files/RD_ProgramMatrix.pdf



Oct. 26, 2022



Conservation/Compliance/GIS Division

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Conservation/Compliance/GIS Division Staff

Lesle Joi Peavie

Program Chief

Amy Moore

Conservation Program Specialist

Megan Hogue

Compliance Program Specialist

James Smith

GIS Technology Specialist

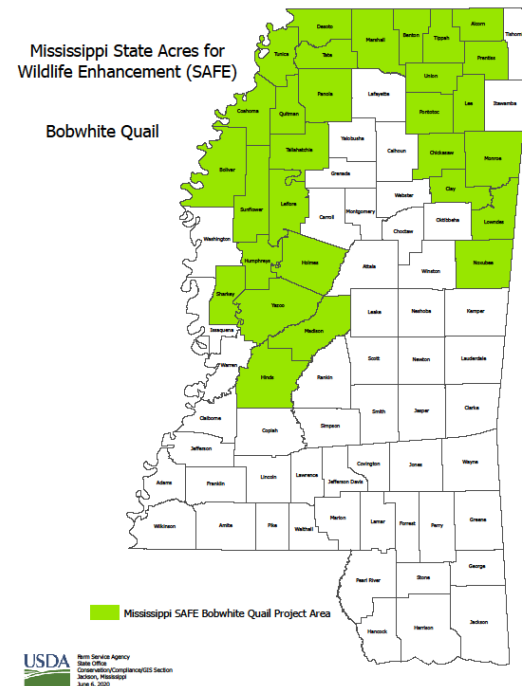
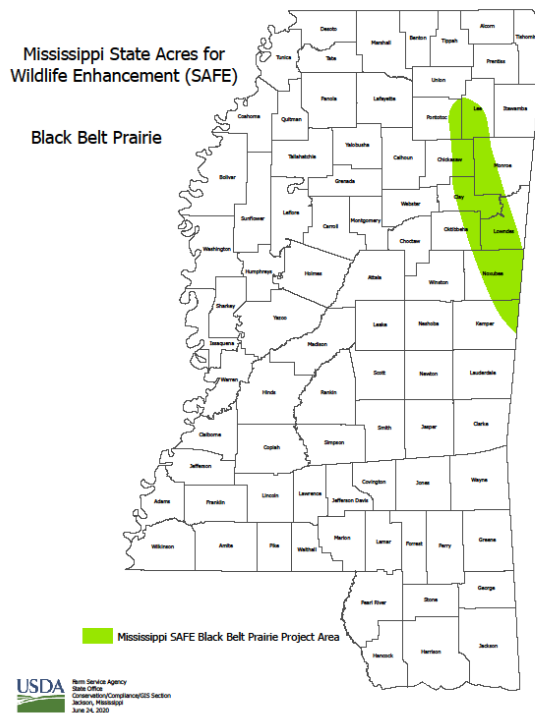
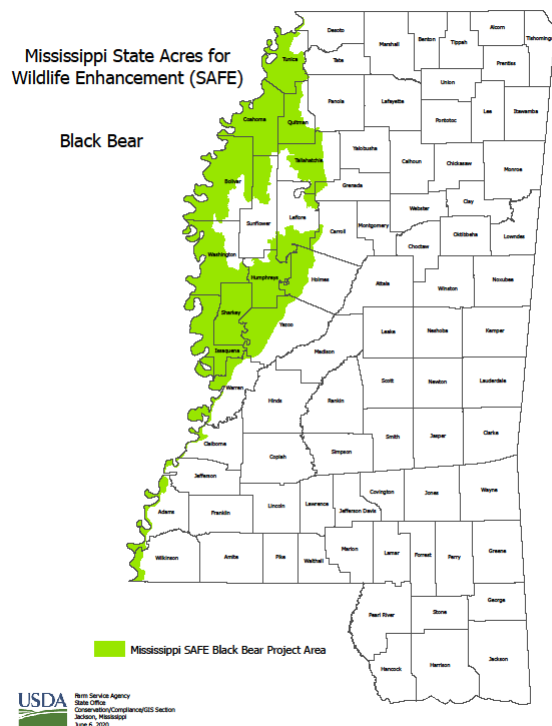
Nicholas Hancock

GIS Technology Specialist

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State Acres for Wildlife Enhancement (SAFE) Projects Modification



204 Grassland Signup Hits Record High for USDA!

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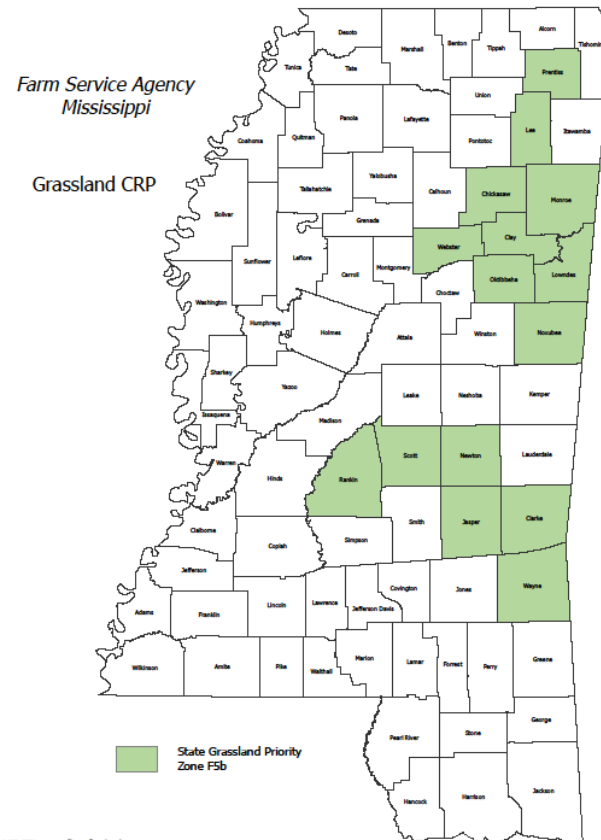
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Voluntary Termination of CRP Contracts Expiring Sept. 30, 2022

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Renewing and Modifying MS Grassland Priority Zones



FY 2022 Expired CRP

FY22 Expired CRP Contracts and Acreages		
	Contracts	Acreage
General	1,749	88,434.50 ac
Continuous	345	8,969.52 ac
Total	2,094	97,404.02 ac

FY22 Acceptable CRP Offers

SU 58 General	
Acres	41,834 ac
Number of Offers	784

SU 204 Grassland	
Acres	610 ac
Number of Offers	13



FY 2023 Expiring CRP

FY23 Expiring CRP Contracts and Acreages		
	Contracts	Acreage
General	714	33,017.33 ac
Continuous	236	6,756.10 ac
Total	950	39,773.43 ac

FY 22 ECP & EFRP State Program Requests and Allocations

ECP & EFRP	
Disaster Date	3/22/2022 - 4/17/2022
Number of Farms Affected	257 Farms
Total Allocation	\$117,184.00

Questions



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NRCS Technical Committee Meeting

Federal Crop Insurance Program Update

Jackson, Mississippi

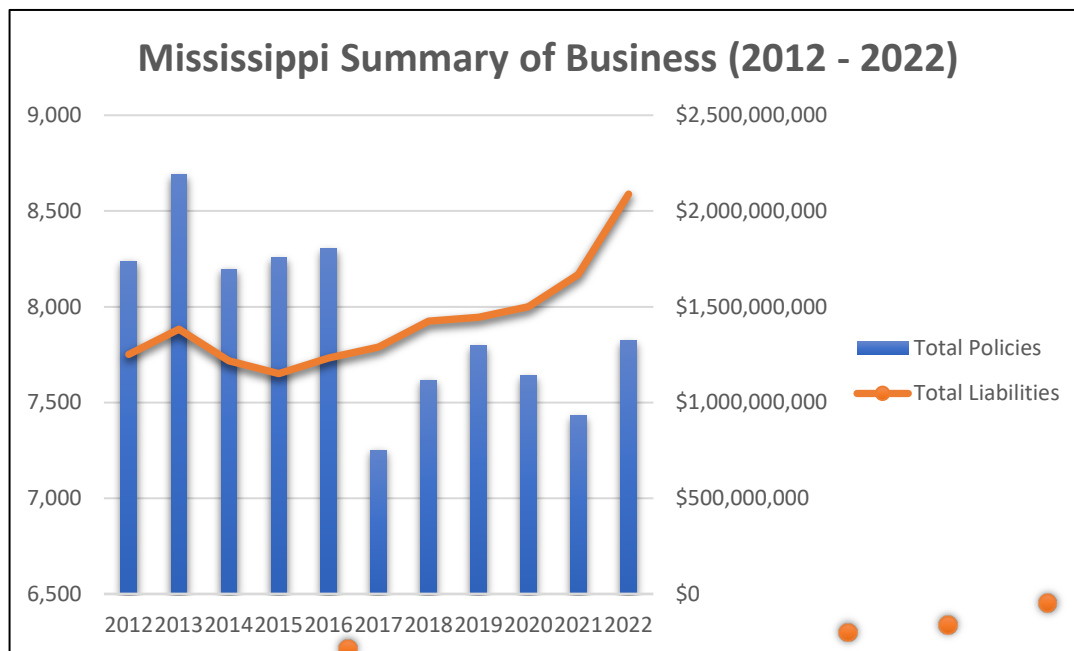
Roddric Bell
Regional Director
October 26, 2023

- Mississippi Crop Insurance Profile
- 2018 Farm Bill Implementation
- Risk Management Education
- Pandemic Cover Crop Program
- Expanding Insurance Coverage for Double Cropping
- Whole Farm Revenue Protection and Micro Farm
 - Changes for the 2023 Crop Year
- Questions

Mississippi 2022 Summary of Business

Commodity	Total Policies	Acres	Total Liabilities
Soybeans	3,492	2,186,652	\$1,041,775,677
Cotton	1,698	512,514	\$474,283,327
Corn	1,804	683,739	\$384,638,919
Whole Farm Revenue Protection	45	0	\$70,979,676
Rice	238	103,781	\$69,448,473
Wheat	287	66,789	\$14,458,147
Nursery (FG&C)	6	0	\$10,031,010
Peanuts	54	11,240	\$9,354,502
Pasture,Rangeland,Forage	117	41,046	\$6,239,692
Apiculture	36	21,586	\$5,291,156
Pecans	9	1,407	\$959,279
Blueberries	17	355	\$810,346
Grain Sorghum	12	587	\$106,883
Dry Beans	2	288	\$80,020
Oats	2	392	\$78,848
Peaches	2	30	\$63,270
Triticale	1	365	\$63,029
Grand Total	7,822	3,630,771	\$2,088,662,254

Year	Total Policies	Total Liabilities
2012	8,239	\$1,250,893,454
2013	8,692	\$1,382,288,997
2014	8,196	\$1,217,516,366
2015	8,255	\$1,151,272,040
2016	8,304	\$1,232,657,507
2017	7,251	\$1,288,743,561
2018	7,617	\$1,424,018,698
2019	7,795	\$1,444,850,030
2020	7,639	\$1,500,529,180
2021	7,433	\$1,669,493,534
2022	7,822	\$2,088,662,254
Grand Total	87,243	\$15,650,925,621



Farm Bill initiatives implemented that impact Mississippi Producers

- Industrial Hemp offered as policy in 2020.
 - Not offered in Mississippi, but on course after being certified for 2022.
- Specified cover cropping as a good farming practice if done per Natural Resources Conservation Service(NRCS) guidelines.
- Created a Veteran Farmer or Rancher Category which means veteran farmers will receive additional crop insurance benefits such as increased subsidy.
- New Research and Development
 - Tropical Storm or Hurricane Insurance Policy
 - Hurricane Policy developed and has been offered since 2020 crop year. Tropical Storm is being developed and possibly offered for 2023 crop year.
 - Rice Irrigation Practices
 - Alternate Wetting and Drying(AWD) and Furrow Irrigated(Row Rice) practices are insurable under the rice policy provisions
 - Corn, Cotton, and Soybean production on batture land in the lower Mississippi Valley
 - Study was completed by outside contractor and initial recommendations have been presented to management for consideration.
 - Study will be available for public review soon.

RMA recently announced it is awarding \$2.2 million to 16 organizations to educate historically underserved producers, small-scale farmers and others on farm risk management and climate-smart farm practices. The funding from USDA's Risk Management Agency (RMA) provides the resources for organizations, such as nonprofits and universities, to develop training and resources for producers on risk management options. This \$2.2 million investment for 2022 builds on a nearly \$1 million investment in 2021.

- MCL JASCO, a minority and veteran-owned family company will team with agriculture universities and farm associations to train underserved producers in farm financial benchmarking, crop insurance, marketing contracts, and other existing and emerging risk management tools to establish or enhance operations in Mississippi. Funding Amount: \$190,000
- Up In Farms, a nonprofit, focuses on Mississippi's least visible audience – limited resource and historically underserved producers. The organization delivers education via a YouTube channel and in-person workshops, which equips trainees with the vocabulary, 'study skills', and confidence to engage insurance professionals and begin the application process. Funding Amount: \$190,000
- Rural South Institute, located in Georgia, educates producers on the basics of crop insurance, financial risk management education, as well as computer literacy training. The project serves Alabama, Georgia, and Mississippi, and is targeted toward African American producers, Historically Underserved, Limited resource, Livestock and Specialty crop producers. Funding Amount: \$200,000

Underserved Agent Licensures - Agent/Loss Adjuster Training Program

- RMA has established a pilot program to identify, recruit, train, help certify, and help place trained and certified candidates within targeted underserved communities with crop insurance agencies. These representative underserved crop insurance agents and loss adjusters would work and serve the community of their stakeholders.
- This pilot will be through a collaboration of 4 partners. Alcorn State University has been selected as the as one of partners for this initiative.

Risk Management Agency Navigator Program

- The University of Arkansas System Division of Agriculture will lead the development of a pilot project to strengthen outreach and technical assistance to farmers and ranchers through the development of a cohort of risk management program navigators—program specialist trained by project collaborators to strategically and intentionally engage and serve all participants across the crop insurance sector.
- The two-year pilot project features a collaboration with the USDA Risk Management Agency (RMA) and the Southern Risk Management Education Center(SRMEC).

- PCCP was initially offered in 2021
- PCCP is part of USDA's Pandemic Assistance for Producers initiative, a bundle of programs to bring financial assistance to farmers, ranchers and producers who felt the impact of COVID-19 market disruptions.
- PCCP provides premium support to producers who insured their spring crop with most insurance policies and planted a qualifying cover crop during the 2022 crop year. The premium support is \$5 per acre, but no more than the full premium owed.
- Reduces producers' overall premium bills and helps them maintain their cover crop systems.
- Qualifying cover crops include all that are reportable to FSA, including cereals and other grasses, legumes, brassicas and other non-legume broadleaves, and mixtures of two or more cover crop species planted at the same time. A full list is available in FSA Handbook 2-CP.
- There were over 166,000 acres that received the benefit and an additional \$799,000 in subsidies in 2021. There was over 153,491 acres that received the benefit and an additional \$743,580 in subsidies in 2022
- Will probably be offered for the 2023 crop year as a part climate smart ag initiative

With challenges related to the pandemic, supply chains, and the war in Ukraine, farmers are doing their part to feed the world. The U.S. Department of Agriculture (USDA) is making that easier by simplifying the crop insurance application process and expanding double cropping coverage, enabling producers to insure two crops on the same land each year, such as soybeans following the harvest of crops like winter wheat.

- To increase awareness of double cropping, USDA's Risk Management Agency (RMA) reminds producers that for the 2023 crop year there may be insurance options for double crop soybeans as well as grain sorghum and other crops in counties where the Following Another Crop (FAC) practice is not available.
- For the 2023 crop year, farmers in select counties in Arkansas, Kentucky, Louisiana, Mississippi, and Tennessee may now be eligible to request a written agreement through their crop insurance company to insure their FAC cropping practice. Producers requesting FAC coverage for the first time, have until the acreage reporting date of July 15 to submit a request to their agent. Contact your agent for additional details and applicable deadlines.

Whole Farm Revenue Protection(WFRP) - first offered in 2015 to provide coverage for all crops under one crop insurance policy for diversified producers including specialty and organic crops. Cap was increased to \$17,000,000

Micro Farm - first offered in 2022 as a streamlined approach to WFRP - specifically for small producers.

- Micro Farm protects your farm against the loss of farm revenue that you earn or expect to earn from:
 - All commodities on your farm except timber, forest, and forest products; and animals for sport, show, or pets.
 - Commodities you produce during the insurance period, whether they are sold or not
 - Commodities you buy for resale during the insurance period
- Less paperwork requirements
- Insures farm operations with approved revenue up to \$350,000(up from \$100,000 in 2021) for the initial year of insurance & \$400,000 for carry-over policies
- Post-production and value-added costs may be included in approved revenue
- Expected value are based on the insured's past three-year average of total revenue and acres
- No individual crop policies allowed
- Eligibility for Micro Farm coverage requires you to:
 - Be eligible to receive Federal benefits;
 - Be a U.S. citizen or resident;
 - File either a Schedule F tax form or other farm tax form that can be converted to a Substitute Schedule F for a specified number of years (see "Information You Provide" below);
 - Have no more than 50 percent of total revenue from commodities purchased for resale.

- Roddric Bell

roddric.bell@usda.gov

601-965-4771

601-331-4228

www.rma.usda.gov



United States Department of Agriculture

National Forests in Mississippi State Technical Committee



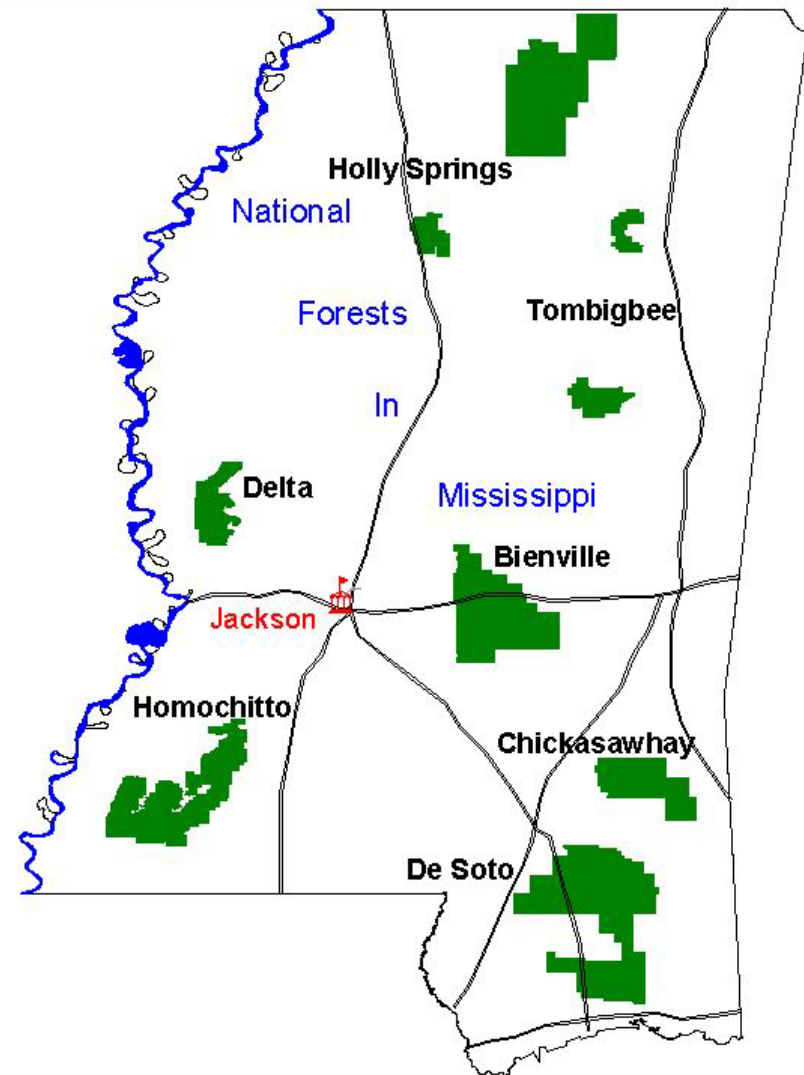
Forest Service

October 2022

National Forests in Mississippi



1.2 million acres of national forest land on seven ranger districts spread out across the state of Mississippi.

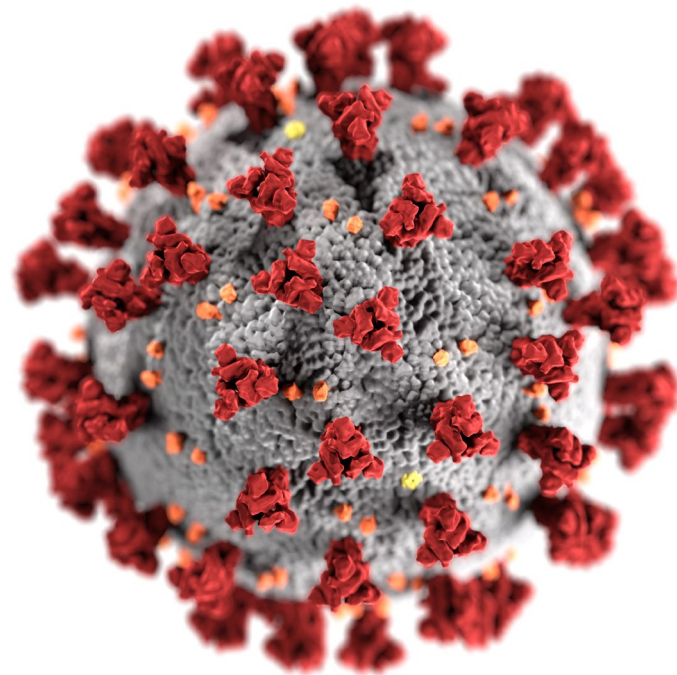


Agency

National Forests in Mississippi – Office Operations



Offices are physically open and continue to follow the appropriate guidance based on weekly updates of county Covid levels.



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National Forests in Mississippi – Employment Opportunities



We are actively recruiting for new employees, especially for entry level positions working in our fire program and our timber program.

Join the U.S. Forest Service!



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National Forests in Mississippi – Prescribed Fire



Prescribed fire is an important tool that we use to reduce hazardous fuels and improve the condition of the forest.



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National Forests in Mississippi – Prescribed Fire



In 2022, we prescribed burned about 200,000 acres, an accomplishment in line with the objectives of our land management plan.

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National Forests in Mississippi – Timber Program



Timber harvest is another key tool we use to manage forests.

In 2022, we sold 283,500 tons of timber.

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National Forests in Mississippi – Partnerships



Using stewardship agreements and contracts and good neighbor agreements and other authorities, we work closely with many partners to manage forest land.

Some key partners include the Mississippi Forestry Commission, Camp Shelby, the Nature Conservancy, the Wild Turkey Federation, Ducks Unlimited, and the National Deer Association.

**Farm
Service
Agency**

National Forests in Mississippi – Southern Pine Beetle Outbreak



Several years ago, the Forest dealt with a severe outbreak of southern pine beetle infestations.

Since that outbreak, we have sold more than 16,500 acres of unthinned pine plantations as part of our long-term effort to treat overstocked timber stands and improve resilience.

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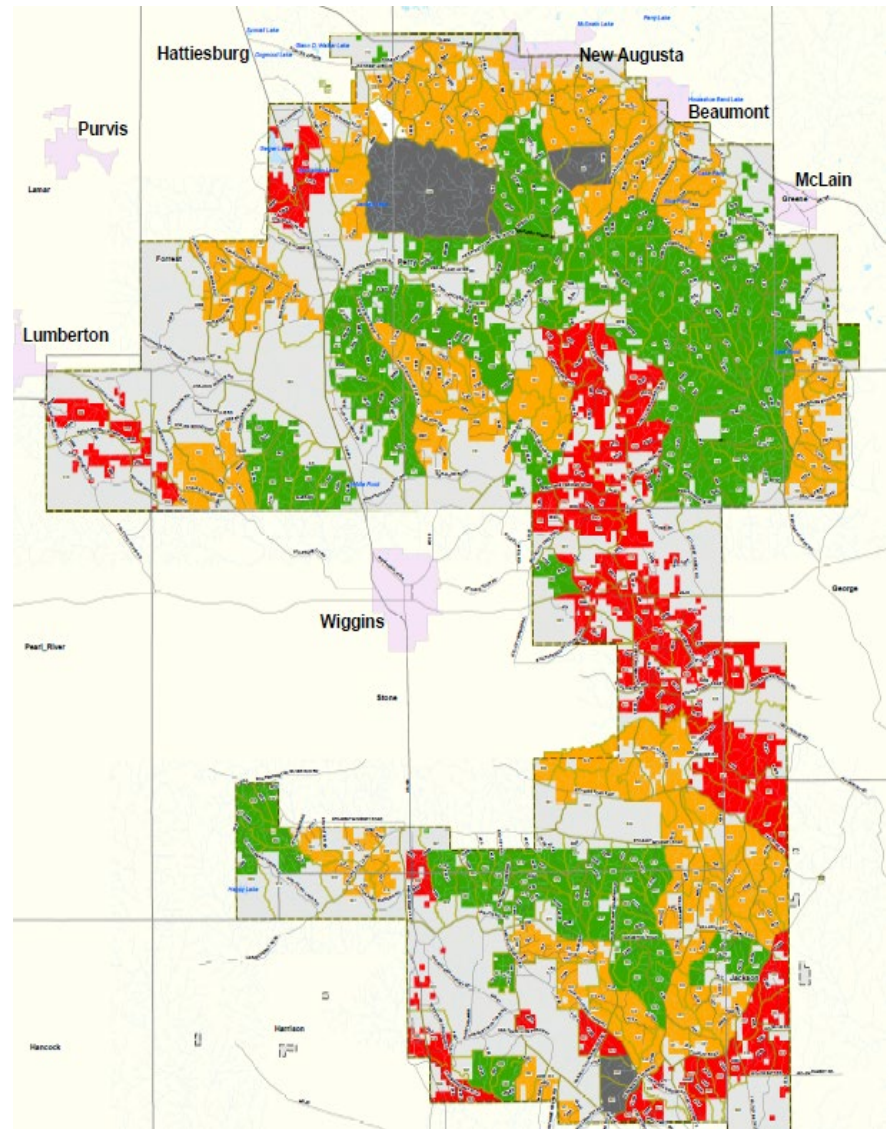


National Forests in Mississippi – Vision Statements



This year, we will share with the public vision statements from each ranger district that include ecological condition maps.

The maps, like the one pictured from the De Soto Ranger District, provide an assessment of the quality of forest conditions.



National Forests in Mississippi



Questions

**Farm
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National Center for Alluvial Aquifer Research

State Technical Committee Meeting
October 26, 2022

Drew M. Gholson
NCAAR Coordinator & Assistant Professor
Extension Irrigation Specialist
Delta Research and Extension Center



MISSISSIPPI STATE
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National Center for Alluvial Aquifer Research
Delta Research and Extension Center

About the National Center for Alluvial Aquifer Research – NCAAR

Cooperative program between USDA's Agricultural Research Service (ARS) and Mississippi State University's Delta Research and Extension Center (DREC) to produce and communicate research aimed at:

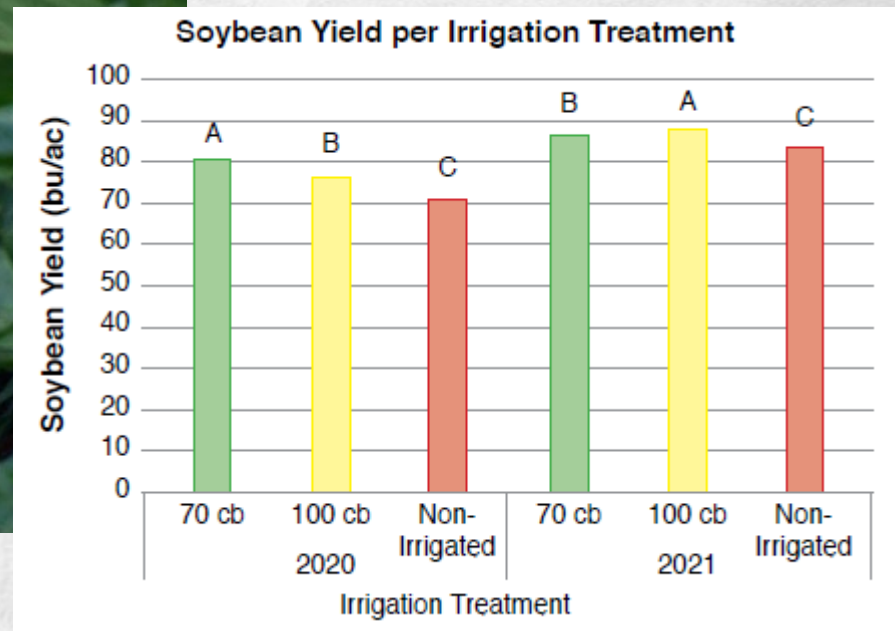
- Conservation and sustainability of water resources for agriculture
- Development of management systems that increase profitability, conserve water and protect water quality



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**National Center for Alluvial Aquifer Research
Delta Research and Extension Center**

Recommendations for Sensor Based Soybean Irrigation





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**National Center for Alluvial Aquifer Research
Delta Research and Extension Center**

Field 6 at DREC



Vargas (2021)

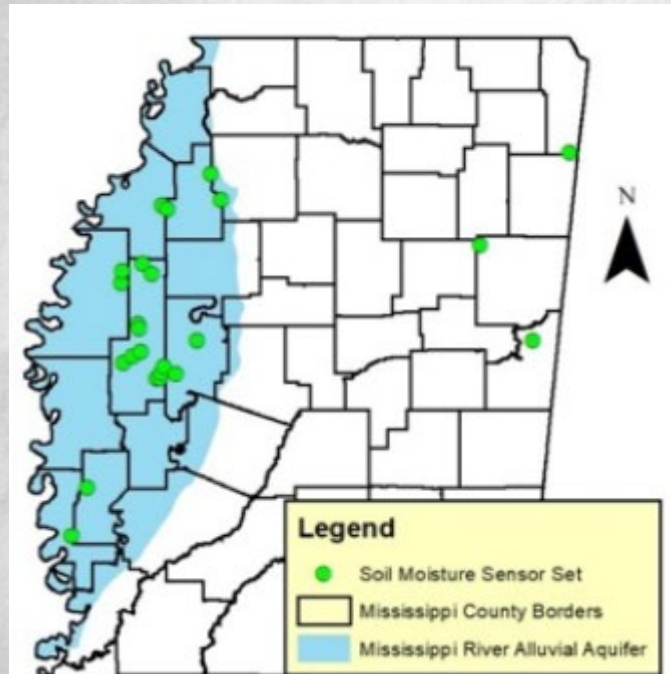
Sensor-Based Irrigation Scheduling and Cover Crop Impacts on Corn Production



Establishing the Water Budget of a Tailwater Recovery System



Advancing Adoption of Soil Moisture Sensors Through On-Farm Training and Demonstration



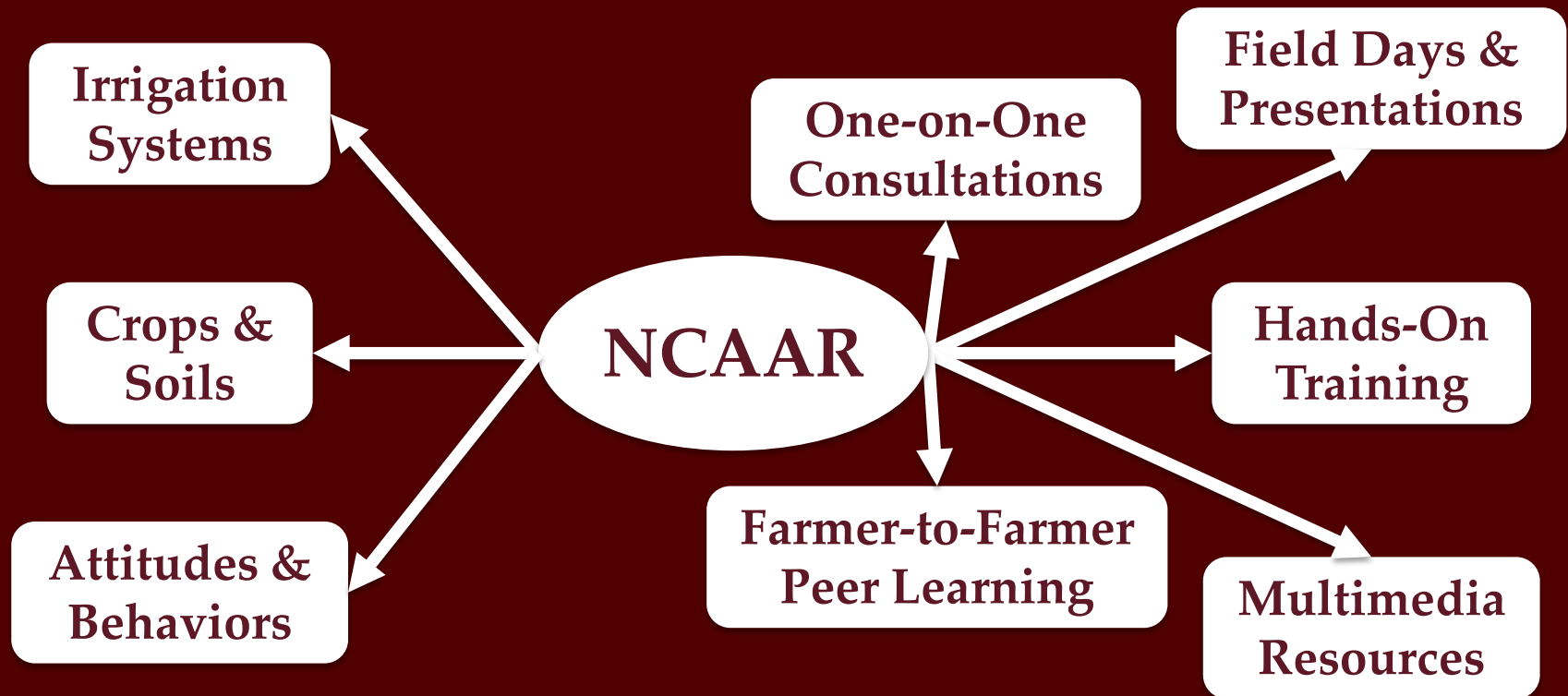
Soil Management Effects on Furrow Infiltration



Ongoing Educational Efforts

Topics

Methods



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National Center for Alluvial Aquifer Research
Delta Research and Extension Center



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MS AGRICULTURAL AND
FORESTRY EXPERIMENT STATION



Agricultural Research Service
U.S. DEPARTMENT OF AGRICULTURE

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NATIONAL CENTER FOR ALLUVIAL AQUIFER RESEARCH



MISSISSIPPI STATE
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National Center for Alluvial Aquifer Research
Delta Research and Extension Center

https://www.ncaar.msstate.edu



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Extension Publications

Soil Moisture Monitoring Showcase

Web Tools

Web Tools

Flow Meter Calculator

Watermark Averaging

Mississippi Irrigation Termination
Optimization on-line app (MITOOL)

Showcase Quick Links

General Information

Participating Vendors

Irrrometer Watermark 200SS

Sentek Drill & Drop

AquaSpy Vector Probe

CropX Soil Sensor

Contact NCAAR

General Information

Kaye Sullivan

vfs23@msstate.edu

662.390.8510

F:662.390.8501

Showcase Demo

Drew Gholson, Coordinator

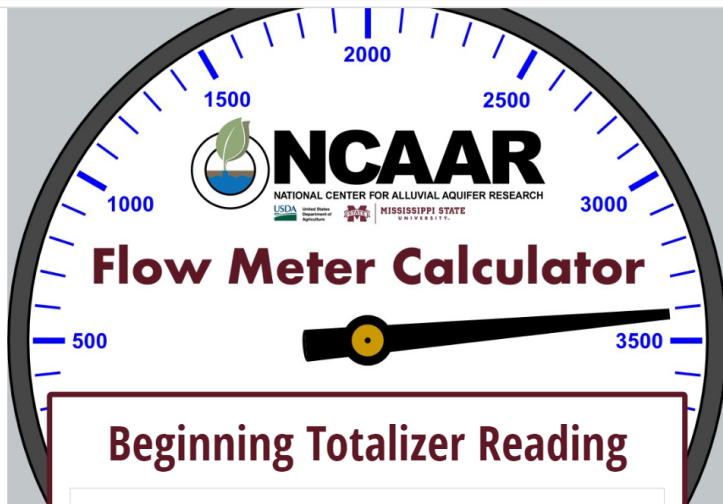
Calculate

Results

Cost	\$/Acre	Total
Pumping	\$8.04	\$1045.20
Labor	\$0.38	\$49.85
Capital	\$1.20	\$156.00
Total Irrigation Event	\$9.62	\$1251.05

Compare the cost of another irrigation with the expected benefits of additional irrigation; you can expect to profitably irrigate if the next irrigation event will result in the following yield gains:

Commodity	Yield
Corn	1.92 bu/acre
Cotton	9.62 lbs/acre
Soybean	1.07 bu/acre



Beginning Totalizer Reading

0

Ending Totalizer Reading

0

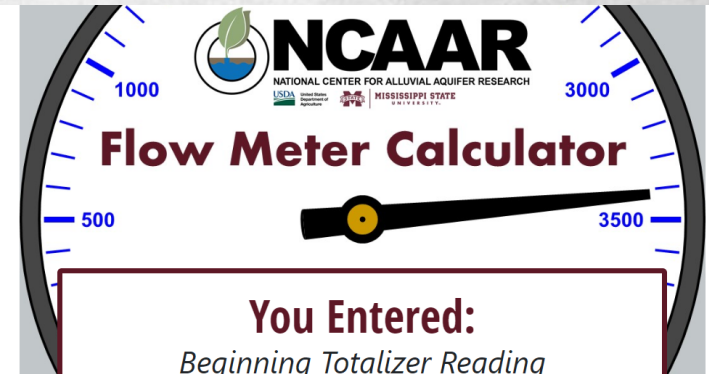
Totalizer Units

~choose units~

Acres Irrigated

0

Calculate!



You Entered:

Beginning Totalizer Reading

200 acre-inches

Ending Totalizer Reading

600 acre-inches

Area Irrigated

150 acres

You Irrigated:

Gross Water Volume

400 acre-inches

33.333 acre-feet

10861714 gallons

Gross Water Depth

2.67 inches

Reuse Inputs

Reset Inputs

What is Mississippi Master Irrigator?

A 24-credit hour formal education course designed to educate producers on **water-related** topics which include but are not limited to:

- Agronomics
- Irrigation Scheduling
- Types of Irrigation Systems
- Economics
- Soil Health
- Policy and Management

How will the course be offered?

The course will be offered as a hybrid system which will include online video modules and in-person sessions.

- Video modules and in-person sessions will be conducted by individuals/entities with specialized experience in each of the listed topics. This includes personnel such as:

- MSU Extension Specialists
- YMD
- USGS
- EPA
- Delta F.A.R.M
- Farm Bureau
- Delta Council



Anticipated Course Timeline:

Completion of videos	Nov. 2022
Completion of online video modules	Jan. 2023
Begin offering course	Mar. 2023
First in-person meeting	Nov. 2023
Second in-person meeting	Feb. 2023

Q&A

Drew M. Gholson

Cell: 979-255-7018

Email: drew.gholson@msstate.edu



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National Center for Alluvial Aquifer Research
Delta Research and Extension Center

Current ARS Research in Mississippi

October 2022

Martin Locke, Director
National Sedimentation Laboratory
USDA ARS, Oxford, MS



USDA ARS Scientists

National
Sedimentation
Laboratory
Oxford, MS

- Ron Bingner
- Lucas
Heintzman
- Eddy
Langendoen
- Richard
Lizotte
- Martin
Locke
- Matt Moore
- Andy
O'Reilly
- Jason
Taylor

Sustainable Water Management
Unit (SWMRU), Stoneville, MS

- Saseendran Anapalli
- Daryl Chastain
- Amanda Nelson

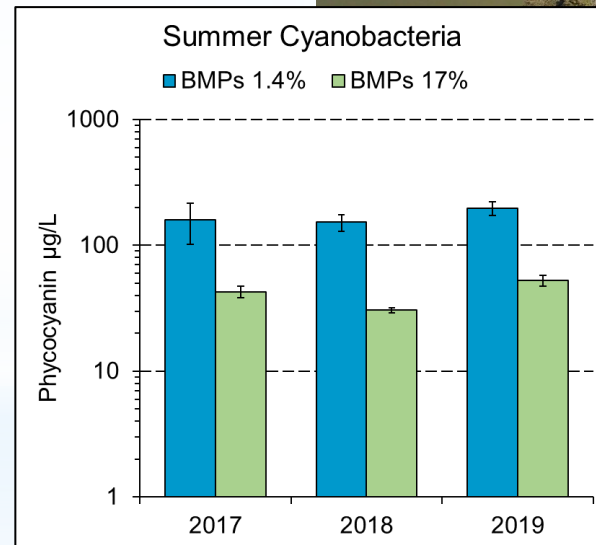
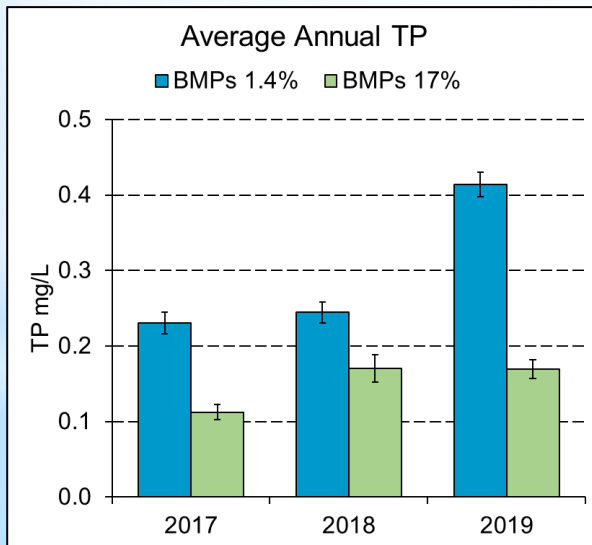
Long-Term Agroecosystem Research (LTAR)

- Experimental Plot Research addressing crop productivity, soil health, and water conservation
 - 21-Gun Project assesses effects of tillage, irrigation management, and cover crop. ARS: Locke with MSU
- Field scale Research:
 - LTAR Project assesses aspirational practices such as conservation tillage, cover crops, and irrigation management on system sustainability. ARS NSL: Locke, Heintzman, Moore, Witthaus with MSU

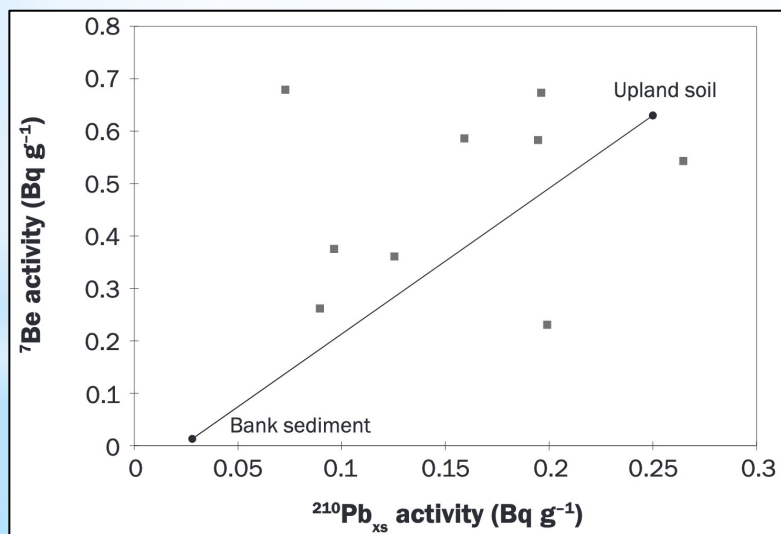


CEAP Beasley Lake Watershed

Agricultural Best Management Practices such as CRP and edge-of-field buffers help reduce lake nutrients and cyanobacteria harmful algal blooms. ARS NSL: Lizotte, Taylor, Locke, Moore, Heintzman, and Witthaus



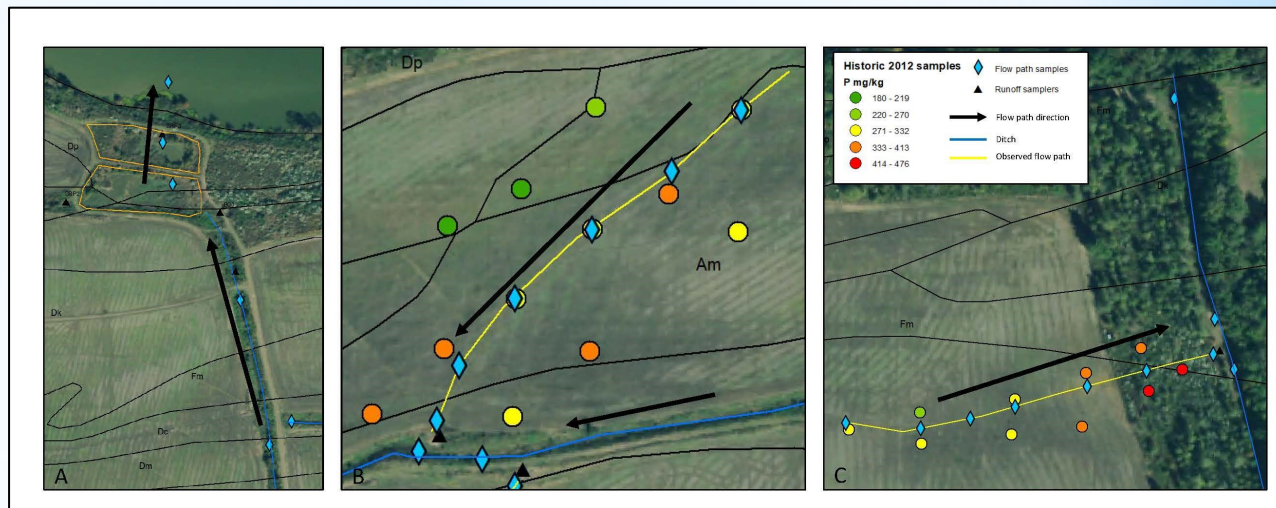
- **Watershed assessments** to understand sources and processes of legacy sediment to sediment load and yield in medium to large watersheds. ARS NSL: Langendoen et al.
- **Watershed modeling and forecasting** to improve representation of legacy sediment in watershed models
- **Develop conservation strategies** for legacy sediment and associated legacy P and N mitigation



CEAP Legacy Sediment



CEAP Legacy Phosphorus



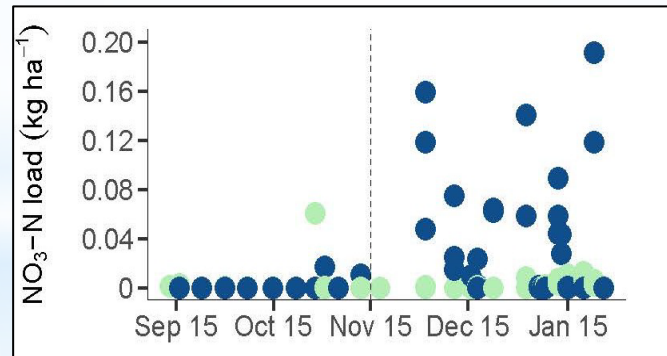
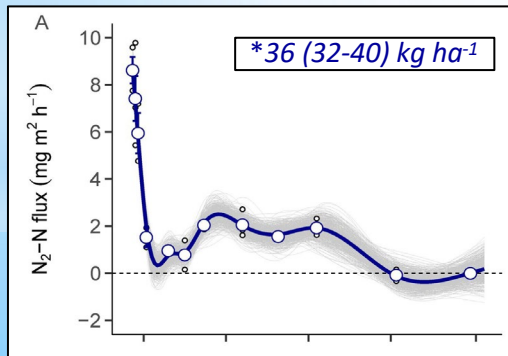
- **Watershed assessments** to understand legacy P contributions to runoff loads at edge-of-field and small watershed scales and within watershed P pool dynamics
- **Watershed simulations and model development** to extrapolate findings to larger watersheds and improve representation of legacy P in watershed models
- **Develop conservation strategies** for legacy P mitigation and **quantify long-term outcomes** of management on P

ARS NSL: Witthaus and Locke

Soil, water and wildlife conservation

How do timing and duration of shallow water habitat (EQIP 644) affect nutrient and erosion loss and migratory stopover habitat for shorebirds on corn and soybean farms? NSL ARS: Taylor, Moore, Locke with U. MS and MSU

- Flooding enhances nitrogen removal through denitrification (36 kg ha⁻¹ in flooded field - left figure below)
- Lower nitrate runoff from flooded (green) versus unflooded fields (blue) [right figure below]

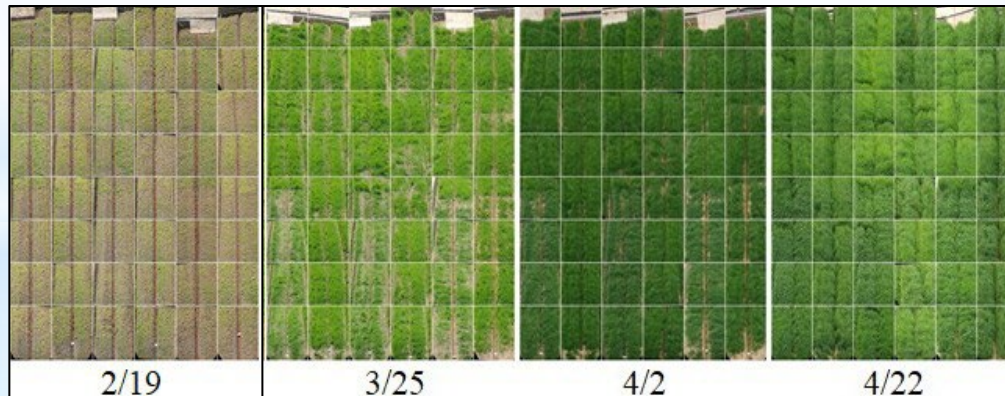


Locke Oct
2022

Technology to evaluate plant stress triggers and greenhouse gas emissions



ote sensing to quantify
ic stresses
ops (water,
erature, chemical)
tain)
Covariance and other
sensors to examine water





Irrigation technology and water storage

- Are tailwater recovery systems effective ways to reduce water use and downstream nutrient load? (Nelson)
- Improve furrow irrigation efficiency on irregularly shaped fields (Nelson)
- Variable Rate Irrigation prescriptions to improve water use efficiency and water runoff monitoring in overhead sprinkler irrigation systems

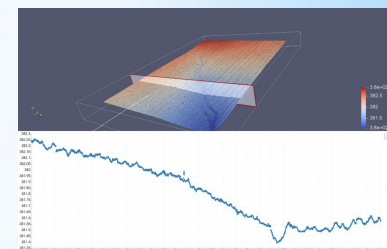


From the laboratory ...

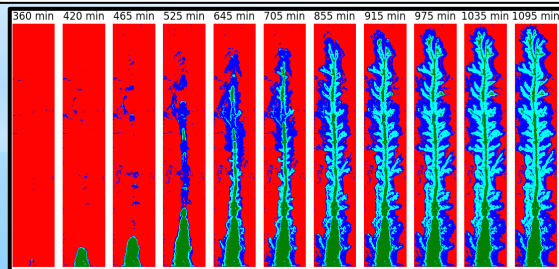


How can we assess, quantify, and predict formation of ephemeral gullies? (NSL: Wells)

... to the field, gullies are identified, monitored, evaluated, and modeled,



raindrop → sheet → rill → gully

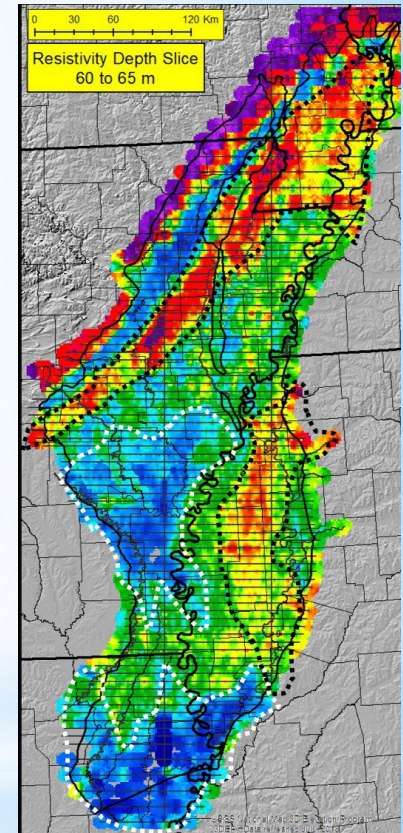


... and prediction tools (AnnAGNPS, CONCEPTS, RUSLE2) are enhanced and validated.

Integrated Water Management Modeling Strategies

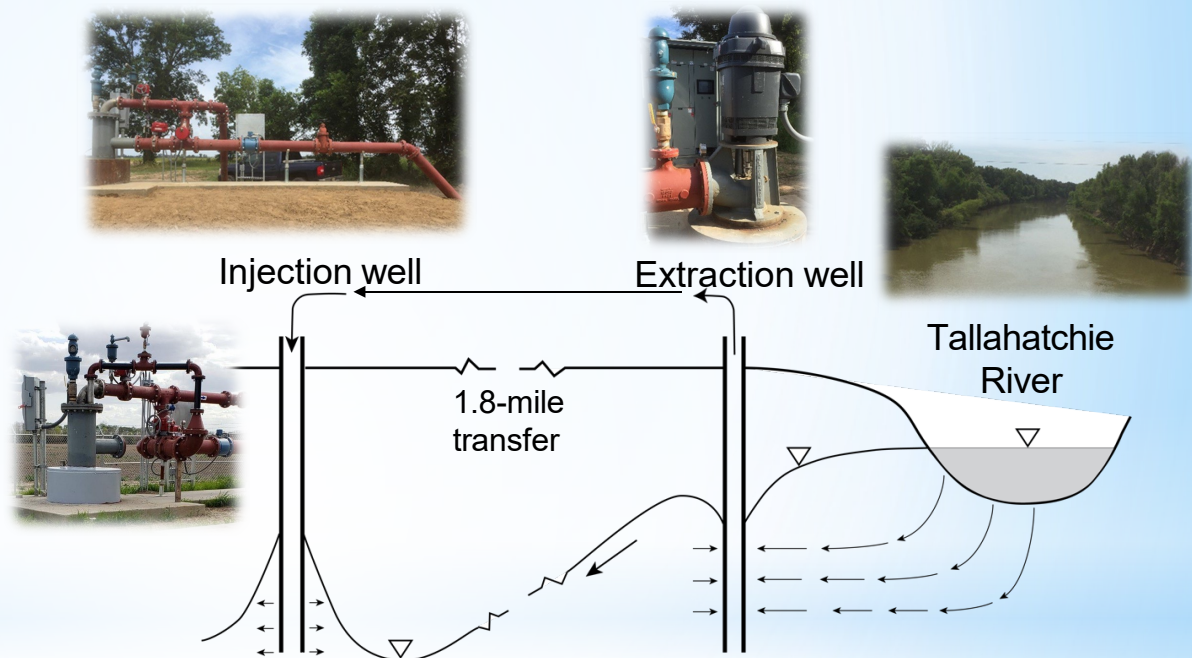
How can we manage surface and subsurface water resources as part of a regional water management strategy? NSL ARS: Ron Bingner and Andy O'Reilly

- Integrate USDA RUSLE2 - AnnAGNPS - CONCEPTS surface and USGS MODFLOW subsurface models
- Provide an irrigation water management tool integrated with the Mississippi Embayment Regional Aquifer System (MERAS)



Groundwater Transfer and Injection Pilot project

- Can groundwater injection reverse regional aquifer declines? NSL ARS: O'Reilly, Wren, Locke et al.
- Extract groundwater of improved quality via riverbank filtration, transfer, and inject water in area of groundwater depletion
- At conclusion of two injection periods, future plans include:
 - Conduct model simulations of current and future groundwater levels
 - Analyze current groundwater geochemistry impacts



QUESTIONS





National Association of Conservation Districts

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www.nacdnet.org



National Association of
Conservation Districts

History

It all started with the Dust Bowl



1933: Soil Erosion Service (later NRCS) is created and housed within the Interior Department

1935: Soil Conservation Act passed; Soil Erosion Service moved to USDA

1936: Congress enacts Soil Conservation and Domestic Allotment Act authorizing USDA to fund conservation

1937: First conservation district created in North Carolina

1937: Model conservation district law developed for state consideration; 22 states pass enabling legislation the same year





National Association of
Conservation Districts

Structure

NACD is a grassroots organization, member-driven by local conservation district boards and governed through a system of graduated representation.

2,900+ Conservation Districts

through

**58 State and Territory
Associations**

select

**116 NACD Board of
Directors Members and
Alternates**



The NACD Board of Directors sets policy and elects region chairs (one per region), the NACD executive board and officers, who execute policy and manage the association.



National Association of
Conservation Districts

Mission

- Established July 25, 1946, NACD serves as the unified, national voice for the nearly 3,000 conservation districts across the United States
- NACD's member-driven board of directors selects conservation policy priorities, which are used to develop and review environmental and natural resources legislation
- NACD works to secure adequate federal funding for natural resources conservation programs

Mission

To promote responsible management and conservation of natural resources on all lands by representing locally-led conservation districts and their associations through grassroots advocacy, education and partnerships.



National Association of
Conservation Districts

Structure



President Michael Crowder
West Richland, Washington



**First Vice President
Kim LaFleur**
Plympton, Massachusetts



**Second Vice President
Ian Cunningham**
Pipestone, Minnesota



**Secretary-Treasurer Gary
Blair**
Starkville, Miss.



**Immediate Past President
Tim Palmer**
Truro, Iowa



**Chief Executive Officer
Jeremy Peters**
Washington, D.C.



National Association of
Conservation Districts

What We Do

- Provide **one voice** for conservation
- **Advocate** for programs, policy and funding for conservation on Capitol Hill and throughout the country
- **Communicate** through publications, blogs and social media
- Provide **direct services** to districts
- **Develop conservation leaders**



National Association of
Conservation Districts

Advocate

NACD advocates for the interests of the nation's nearly 3,000 conservation districts and their state/territory associations on Capitol Hill year-round.

- This past Spring, NACD members from across the country met with the offices of their congressional representatives as part of **NACD's 2022 Fly-in**.
- Last month, **NACD hosted the Next Generation Leadership Institute (NGLI) in Washington, DC**. NGLI members met with agency leaders, congressional staff, and witnessed President Crowder testify at a House Agriculture Subcommittee hearing.
- NACD leaders and staff regularly meet with members of Congress, USDA, and other important stakeholders to weigh in on issues, including the 2023 Farm Bill and the administration of the recently passed Inflation Reduction Act.





National Association of
Conservation Districts

Advocate

Highlights

- Congress is beginning to develop the **2023 Farm Bill**, which will shape federal conservation programs for the next five years.
 - NACD established a **Farm Bill Task Force** to develop NACD's 2023 Farm Bill policy recommendations. The Task Force has published broad policy principles, reviewed major USDA conservation programs, and will release specific policy recommendations in the coming months.
 - On September 20, **President Crowder testified at a House Agriculture Subcommittee on Conservation and Forestry hearing** focused on farm bill conservation programs. Michael's testimony highlighted the need to support locally led, incentive-based conservation.
- On August 16, President Biden signed the **Inflation Reduction Act** into law, which includes \$18 billion for voluntary NRCS conservation programs and \$1 billion for conservation technical assistance.
 - These investments are critical to supporting oversubscribed federal conservation programs, including EQIP, CSP, RCPP, and ACEP.
 - Conservation districts will need to play a large role in helping USDA and our other partners turn these investments into meaningful, on-the-ground conservation.



National Association of
Conservation Districts

Advocate

Highlights

- **NACD was named as the lead partner of a \$90 million Partnership for Climate-Smart Commodities project** to employ districts across the country to strengthen grassroots leadership and build capacity to scale climate-smart production systems and facilitate underserved producers' access to markets.
 - NACD was also named as a partner on a National Fish and Wildlife Foundation-led Partnership for Climate-Smart Commodities project to accelerate long-term cover crop adoption



National Association of
Conservation Districts

Forestry

Forestry Resource Policy Group (RPG)

- The Forestry Resource Policy Group (RPG) advises NACD leadership on forest issues relevant to America's conservation districts and their partners.
- NACD works closely with the NRCS National Forester's office, as well as the regional foresters and NRCS state foresters around the country.
- Conservation districts are partners in many broader landscape forestry efforts, including Joint Chiefs' Landscape Restoration Partnership projects.





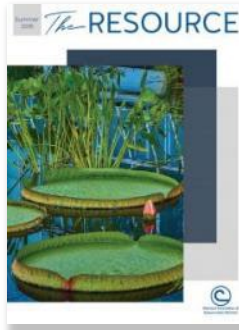
National Association of
Conservation Districts

Publications



eResource

Weekly collaborative newsletter delivered every Tuesday; **18,000+ subscribers**



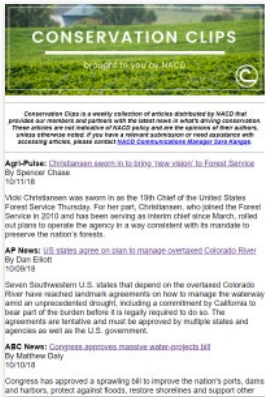
The Resource

Electronic and print; quarterly publication delivered electronically and one printed version to 3,000+ districts



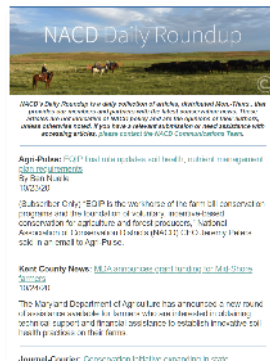
Forestry Notes

Monthly publication with **16,000+ subscribers**



Conservation Clips

Weekly conservation news round-up distributed on Friday morning with **15,800+ subscribers**



Daily Roundup

Daily (Monday-Thursday) conservation news round-up distributed to **100+ subscribers**



National Association of
Conservation Districts

Direct Services

NACD hosts a **national directory**, produces **technical reports and guides** for districts to utilize, runs a number of **programs** that provide education, resources and networking opportunities

To name just a few, **NACD** offers:

- Webinars
- Special Projects like the Soil Health Case Studies
- The Soil Health Champions Network
- Urban Agriculture Conservation Grant Initiative
- Conservation Planning Boot Camp
- Resource Policy Groups
- Stewardship and Education Materials



National Association of
Conservation Districts

Soil Health Champions

Who are soil health champions?

- A network of over 300 farmers, ranchers and forestland owners from across the nation who practice and promote the use of soil health management
- Likeminded soil health advocates who can dialogue with each other as they work to build better soil health practices

What role does NACD play?

- Provides exclusive access to offers, technologies and information specific to soil health and conservation, including a quarterly bulletin, engage Champions in research, outreach opportunities



National Association of
Conservation Districts

Technical Assistance Grants

- Funding for “**boots on the ground**”
- For conservation districts to **hire staff** where additional capacity is needed to improve **COTA, EQIP** and **CSP** customer service and reduce workload pressure
- Mississippi has been awarded a total of **\$993,250** over the past five years.





National Association of
Conservation Districts

Urban Grants

- Since 2016, NACD and NRCS have awarded **\$6.5 million** to conservation districts for **153** different projects.
- Through these grants, conservation districts increase their capacity related to urban technical assistance and small-scale conservation, while addressing community needs in both rural and urban contexts.
- In NACD's Southeast Region, **20** projects in **8** states have been awarded over \$937,287 in funding



National Association of
Conservation Districts

Friends of NACD District Grants

- Since Fiscal Year 2020, Friends of NACD have awarded nearly **\$40,000** in grant funding to **16** districts across the country
- In Fiscal Year 2022, these grants supported 8 district-led projects in 7 states.



In Texas, the Matagorda County SWCD purchased a pig trap system with a Friends of NACD District Grant.



National Association of
Conservation Districts

Stewardship & Education

NACD members can access **stewardship & education materials**
free of charge

“Healthy Soil, Healthy Life” Apr 24 – May 1, 2022



Free materials and print on demand services available at an affordable price!



National Association of
Conservation Districts

National Conservation Planning Partnership



NACD is a member of the National Conservation Planning Partnership (NCP) along with the Natural Resources Conservation Service (NRCS); National Conservation District Employees Association (NCDEA); National Association of State Conservation Agencies (NASCA); and the National Association of Resource Conservation and Development Councils (NARC&DC) to **promote and improve conservation planning.**



National Association of
Conservation Districts

2023 NACD Annual Meeting

77th NACD
Annual Meeting

Feb. 11-15,
2023

New Orleans,
Louisiana





National Association of
Conservation Districts

Learn more at www.nacdnet.org
and on social media @NACDconserve



Gulf Coast Ecosystem Restoration Team

Ron Howard



Break (5 minutes)





United States Department of Agriculture

James Curtis, State Soil Scientist

REMOTE SENSING

Geospatial Data Update



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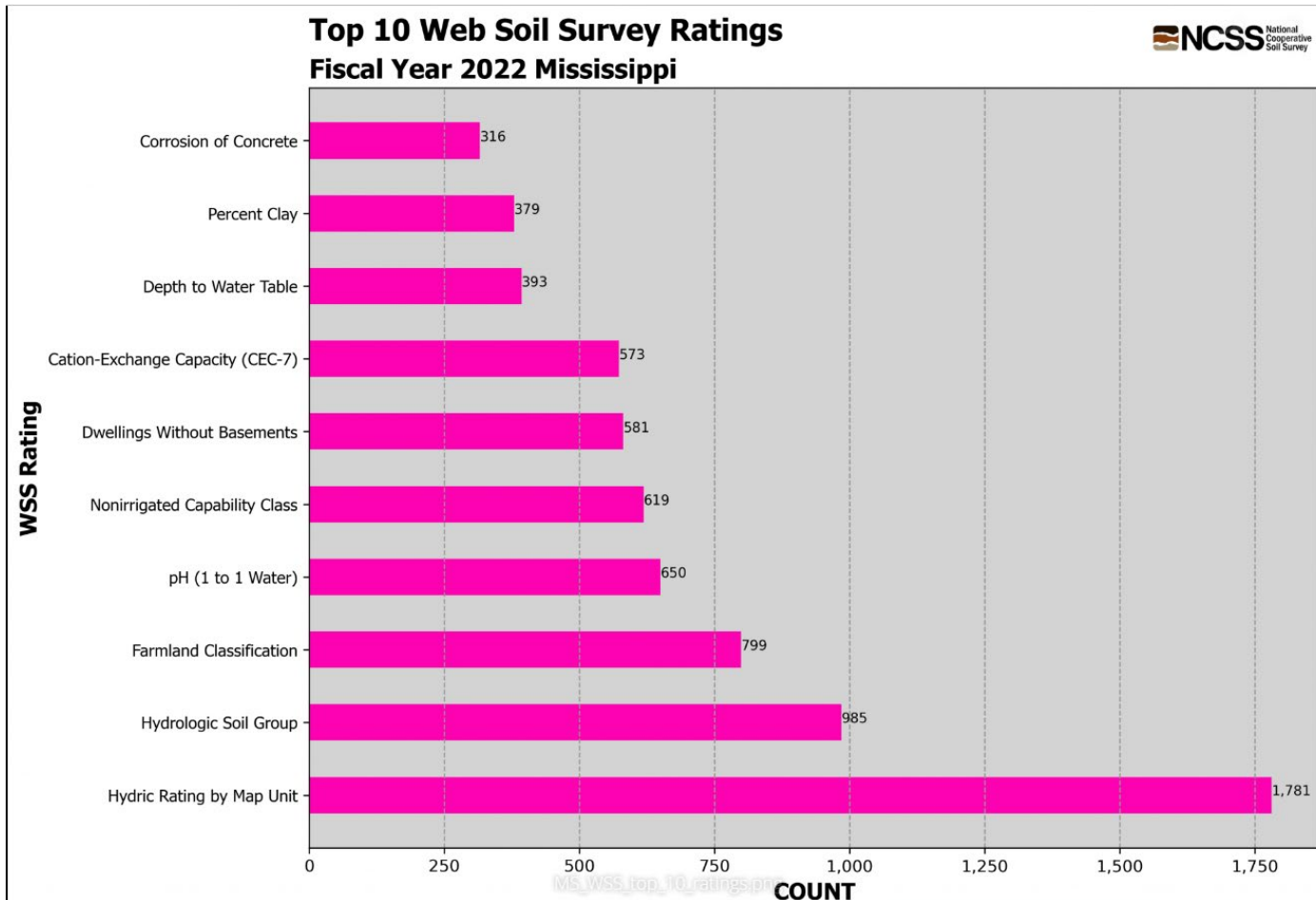
Web Soil Survey (WSS) - Annual Refresh

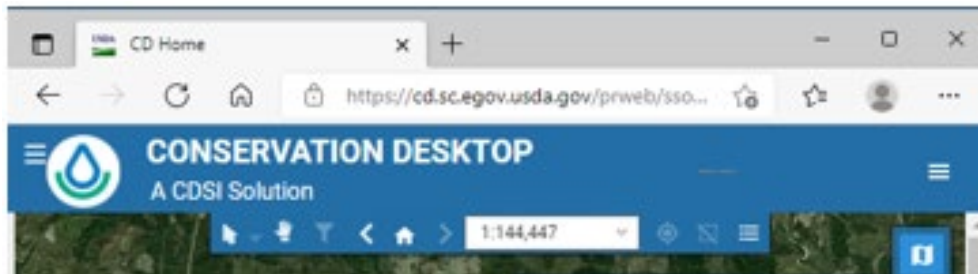


**Web Soil Survey Refresh date,
October 1st, 2022**

The simple yet powerful way
to access and use soil data.







United States Department of Agriculture
Natural Resources Conservation Service

GeoPortal 10.8.1

NRCS Mississippi

OverviewContentMembers



Mississippi Users

owned by 28200310160021018398

Share

Description

A group consisting of the Field Office and Service Center Mississippi Employees.

Details

Created: August 21, 2019

Viewable by: **Only group members**

Contributors: **Only group owner and managers**

Members list: **Visible to all group members**

Recently added content

View All Group Content





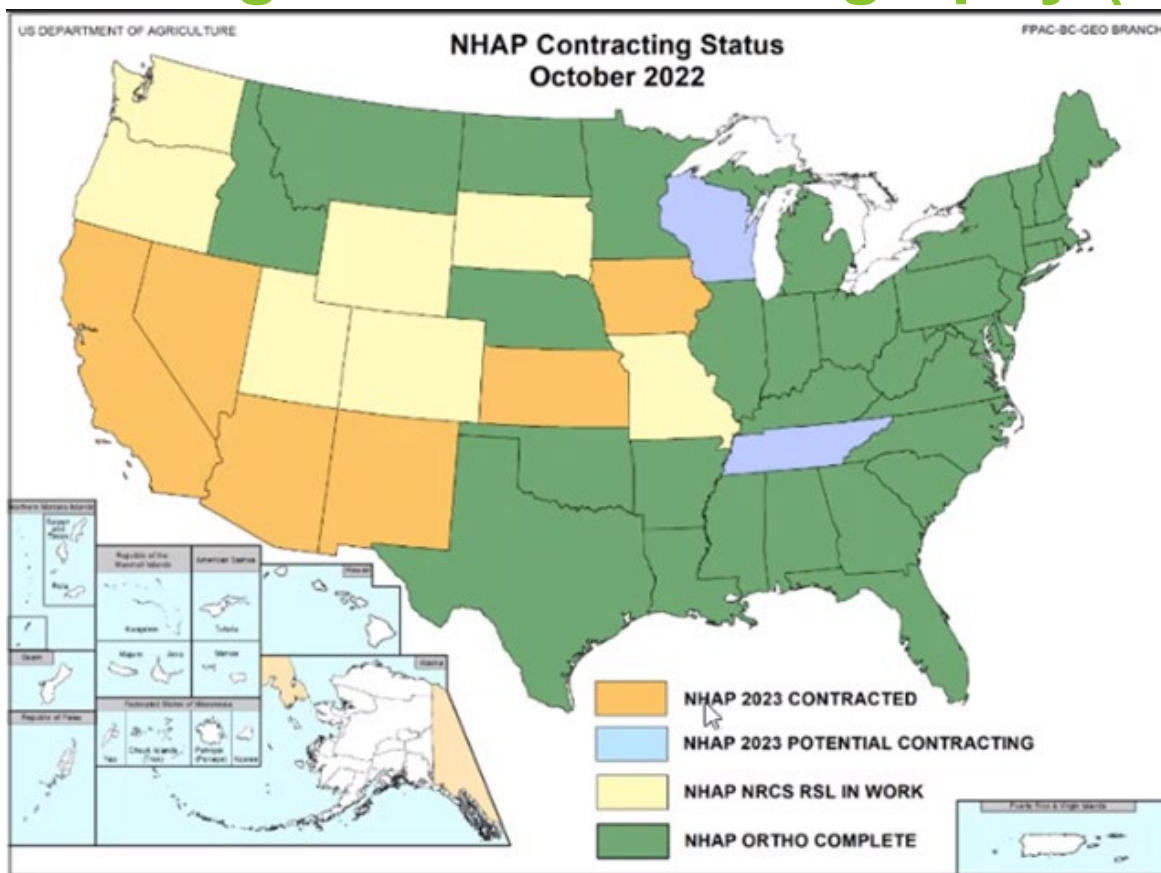


173

38



National High-Altitude Photography (NHAP)



4-Band High-Res Imagery

Mississippi Automated Resource Information System
IHL
News
ArcGIS

MARIS
Back to Data

Home / Data / Aerial-Sat. / NAIP / NAIP 2021

2021 Mississippi NAIP

Description
Download

- 30 cm (~ 1ft)
- Ortho Rectified 3-Band Compressed County Mosaics

Abstract:

The US Department of Agriculture - Farm Services Agency (USDA-FSA) NAIP program is designed to acquire 4-band digital ortho imagery from airborne and/or space-based platforms during the agricultural growing seasons in the U.S. This Emergency declaration from October - December 2021 NAIP product provides 30 cm ground sample distance (GSD) ortho imagery rectified to a horizontal accuracy of within +/- 4 meters to true ground at a 95% confidence level. The tiling format of NAIP imagery is based on a 3.75' x 3.75' quarter quadrangle with a 300 pixel buffer on all four sides. NAIP quarter quads are formatted to the UTM coordinate system using NAD83 Zones 15 (west) and 16 (east). NAIP imagery may contain as much as 10% cloud cover per tile. The county files were generated by compressing NAIP quarter quadrangle tiles that cover a county. MrSID compression, with mosaic option, was used. Target values for the compression ratio are 60:1. For further information concerning the NAIP, visit: [USDA NAIP GeoHub](#)

File Structure: (County files ~ 1.5GB / Statewide ~ 127 GB)

<countyname>_NAIP_2021.sid - County mosaic image
 <countyname>_NAIP_2021.sdw - Mosaic world reference file

Map of Photo Dates:
[Map \(.pdf file\)](#)

2021 True Color Map Service - [REST Endpoint](#)

Natural Color
Color Infrared

Channel	Band
☒ Red	Band_1
☒ Green	Band_2
☒ Blue	Band_3
☐ Alpha	Band_4

Channel	Band
☒ Red	Band_4
☒ Green	Band_1
☒ Blue	Band_2
☐ Alpha	Band_3



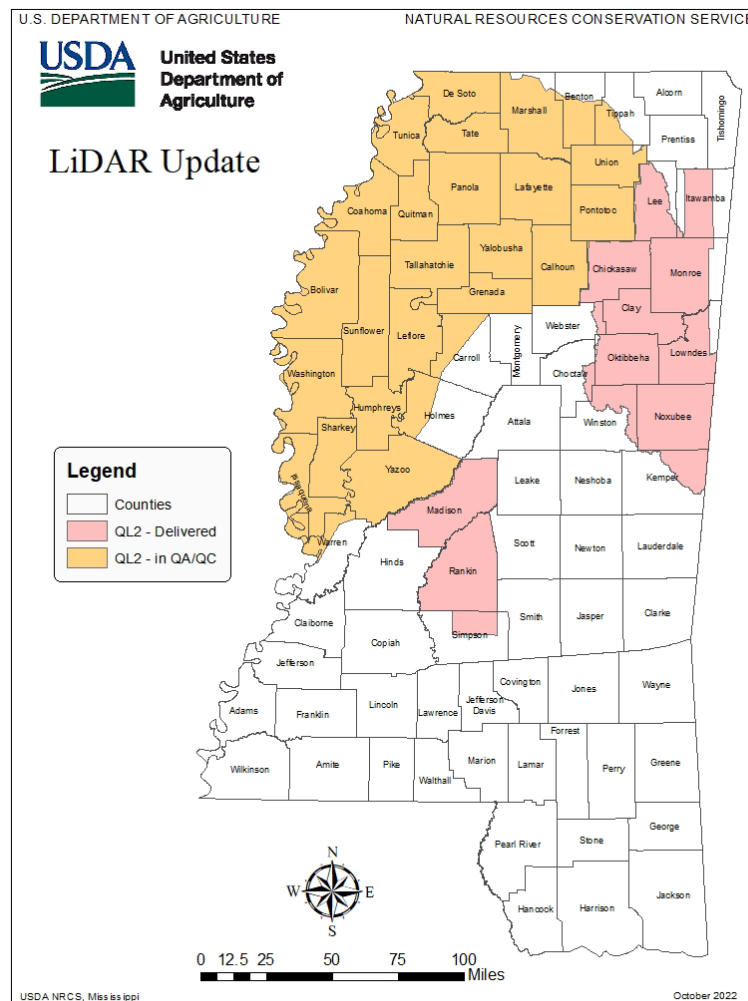
High-Resolution versus 1M--NAIP



New Elevation Data

Table 1 Quality level (QL) specifications

Elevation ^{1/} quality level (QL)	Horizontal resolution terms		Vertical accuracy terms	
	Point density, points/m ²	Nominal pulse spacing, m	RMSEz ^{2/} in open terrain, cm	Equivalent contour ac- curacy, ft
QL 1	8	0.35	9.25	1 ^{3/}
QL 2	2	0.7	9.25	1
QL 3	1-0.25	1-2	<18.5	2
QL 4	0.04	5	46.3-139	5-15
QL 5	0.04	5	92.7-185	10-20





THANK YOU

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Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible Agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at [How to File a Program Discrimination Complaint](#) and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by:

- (1) mail: U.S. Department of Agriculture
Office of the Assistant Secretary for Civil Rights
1400 Independence Avenue, SW
Washington, D.C. 20250-9410;
- (2) fax: (202) 690-7442; or
- (3) email: program.intake@usda.gov

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Ecological Sciences

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Resource Concern Treatment

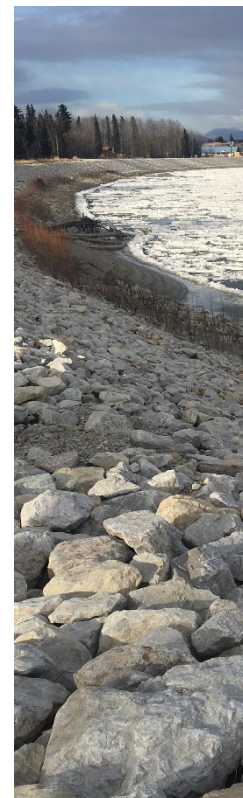


- 47 Resource Concerns
- 33 MS Resource Concerns
- 164 Conservation Practices
- 161 MS Conservation Practices



Standards (9) making their way through the Federal Register process (started *August 2022*)

Practice	Code
Animal Mortality Facility	316
Forest Trails and Landings	655
Lined Waterway or Conveyance Channel	468
Obstruction Removal	500
Terrace	600
Tree-Shrub Establishment	612
Underground Outlet	620
Waste Storage Facility	313
Water and Sediment Control Basin	638

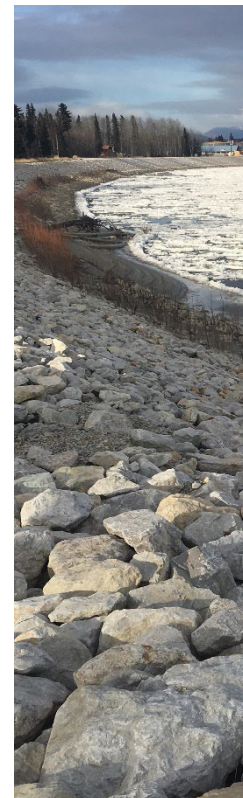


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Standards (11) completed and starting through the release process

Title	Code
Aquatic Organism Passage	396
Deep Tillage	324
Early Successional Habitat Development-Mgt	647
Firebreak	394
Forest Stand Improvement	666
Fuel Break	383
Riparian Herbaceous Cover	390
Soil Carbon Amendment	336
Upland Wildlife Habitat Management	645
Wetland Enhancement	659
Wetland Wildlife Habitat Management	644

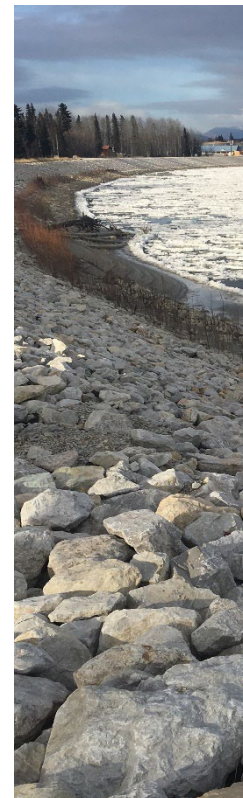


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Ecological Science Practices (14) scheduled for review FY23

Practice Title	Code	Review has started
Access Control (ac)	472	
Brush Management (ac)	314	
Controlled Traffic Farming	334	*
Contour Farming (ac)	330	
Cross Wind Ridges (ac)	588	
Fish Raceway or Tank (no)	398	
Forest Trails and Landings (ac)	655	*
Hedgerow Planting (ft)	422	
Prescribed Grazing (ac)	528	
Riparian Herbaceous Cover (ac)	390	
Stripcropping (ac)	585	
Wetland Restoration	657	*
Woody Residue Treatment (ac)	384	



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Service

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2023 Interim
Practices

Urban Agriculture

NEW INTERIM CONSERVATION PRACTICES RELATIVE TO URBAN AGRICULTURE



ICPS 812 Raised Beds

- Where the existing soil conditions are unsuitable for agricultural production due to contaminants and debris.
- Address Farm Bill requirements for Soil Remediation
- Human Considerations with Resource Concerns



Raised Beds Resource Concerns

- Reduce concentration of salts
- Reduce field operation-induced particulate emission
- Increase plant health and productivity

NEW INTERIM CONSERVATION PRACTICES RELATIVE TO 2023 IN URBAN AGRICULTURE

• ICPS 821 Low Tunnel Systems

- Plant Productivity and Health is improved by extending the growing season or providing protection during early and late season weather conditions.
- Floating covers or hoop supports.





LOW TUNNEL SYSTEMS RESOURCE CONCERNS



- Improve plant productivity and health
- Reduce plant pest pressure





Welcome to the NRCS Field Office Technical Guide

Select a state...



About FOTG

Technical guides are the primary scientific references for NRCS. They contain technical information about the conservation of soil, water, air, and related plant and animal resources.

Technical guides used in each field office are localized so that they apply specifically to the geographic area for which they are prepared. These documents are referred to as Field Office Technical Guides (FOTGs).

Appropriate parts of the Field Office Technical Guides are automated as databases, computer programs, and other electronic-based materials such as those included in these web based pages.

FOTG Sections

Section 1 - General Resource References

- General state maps.
- Descriptions of Major Land Resource Areas, watershed information, and links to NRCS reference manuals and handbooks.
- Links to researchers, universities, and agencies we work with.
- Conservation practice costs and agricultural laws and regulations.

Section 2 - Natural and Cultural Resources Information

- Detailed information about soil, water, air, plant, and animal resources.
- Cultural resources and information about protected plant and animal

Section 3 - Resource Concerns and Planning Criteria

- NRCS Quality Criteria, which establish standards for resource conditions that help provide sustained use.

Section 4 - Practice Standards and Supporting Documents

- NRCS Conservation Practice Standards that define the practice and where it applies. Practice specifications are detailed requirements for installing the practice in the state.

Section 5 - Conservation Effects

- Background information on how Conservation Practices affect each



Mississippi

Change state

Document Tree

Document Search

Recently Published

Keyboard Navigation Instructions

Export Grid

Highlights Only

Section 1 - General Resource References



Section 2 - Natural and Cultural Resources Information



Section 3 - Resource Concerns and Planning Criteria



Section 4 - Practice Standards and Supporting Documents



Section 5 - Conservation Effects



Document Title	Type	Pub Date	End Date	Subject	Keywords	Abstract	Size (kb)	Info
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No documents to show.



[Keyboard Navigation Instructions](#)

Conservation Practice Standards & Support Documents

[Export Grid](#)

[☆ Highlights Only](#)

Document Title	Type	Pub Date	End Date	Subject	Keywords	Abstract	Size (kb)	Info
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No documents to show.

Irrigation System, Surface and Subsurface (443)

Irrigation Water Management (449)

Land Clearing (460)

Land Reclamation, Abandoned Mined Land (543)

Land Reclamation, Currently Mined Land (544)

Land Reclamation, Landslide Treatment (453)

Land Smoothing (466)

Lined Waterway or Outlet (468)

Livestock Pipeline (516)

Livestock Shelter Structure (576)

Low Tunnel Systems (821)

Mulching (484)

Nutrient Management (590)

Obstruction Removal (500)

On-Farm Secondary Containment Facility (319)



Activities

CPA-DIA-CEMA

- **Conservation Planning Activity (6)**
- **Design & Implementation Activity (14)**
- **Conservation Evaluation and Monitoring Activity (13)**



Technical Service Providers



Technical Service Providers (TSP)

Conservation Planning Activity

Name	Code	Type	Release Date
<u>Comprehensive Nutrient Management Plan</u>	102	CPA	10/03/22
<u>Conservation Plan</u>	199	CPA	10/03/22
<u>Conservation Plan Supporting Organic Transition</u>	138	CPA	10/03/22
<u>Forest Management Plan</u>	106	CPA	10/03/22
<u>Grazing Management Plan</u>	110	CPA	10/03/22
<u>Soil Health Management Plan</u>	116	CPA	10/03/22

Design and Implementation Activity

Name	Code	Type
<u>Agricultural Energy Design</u>	120	DIA
<u>CNMP Design and Implementation Activity</u>	101	DIA
<u>Feed Management Design</u>	158	DIA
<u>Fish and Wildlife Habitat Design</u>	144	DIA
<u>Forest Management Practice Design</u>	165	DIA
<u>Grazing Management Design</u>	159	DIA
<u>Improved Management of Drainage Water Design</u>	164	DIA
<u>Irrigation Water Management Design</u>	163	DIA
<u>Nutrient Management Design and Implementation Activity</u>	157	DIA
<u>Pest Management Conservation System Design</u>	161	DIA
<u>Pollinator Habitat Design</u>	148	DIA
<u>Prescribed Burning Design</u>	160	DIA
<u>Soil Health Management System Design</u>	162	DIA
<u>Transition to Organic Design</u>	140	DIA

Conservation Evaluation and Monitoring Activities

Name	Code	Type	Release Date
<u>Agricultural Energy Assessment</u>	228	CEMA	10/03/22
<u>Aquifer Flow Test</u>	224	CEMA	10/03/22
<u>Carbon Sequestration and Greenhouse Gas Mitigation Assessment</u>	218	CEMA	10/03/22
<u>Edge-of-Field Water Quality Monitoring - System Installation</u>	202	CEMA	10/03/22
<u>Edge-of-Field Water Quality Monitoring - Data Collection and Evaluation</u>	201	CEMA	10/03/22
<u>Feral Swine Damage Assessment</u>	297	CEMA	10/03/22
<u>Forest Management Assessment</u>	223	CEMA	10/03/22
<u>Indigenous Stewardship Methods Evaluation</u>	222	CEMA	10/03/22
<u>PFAS Testing in Water or Soil</u>	209	CEMA	10/03/22
<u>Site Assessment and Soil Testing for Contaminants Activity</u>	207	CEMA	10/03/22
<u>Soil and Source Testing for Nutrient Management</u>	217	CEMA	10/03/22
<u>Soil Health Testing</u>	216	CEMA	10/03/22
<u>Soil Organic Carbon Stock Monitoring</u>	221	CEMA	10/03/22

- NRCS Registry
- Locate a TSP
- Become a TSP
- CPA

Programs

- Farm Bill
- Landscape Initiatives
- Financial Assistance
- Technical Assistance
 - Conservation Planning
 - State Technical Committees
 - Technical Service Providers
- Easements
- Landscape Planning
- Alphabetical Listing & Archive

Important Contacts

- SP Regional Certifiers Map
- NRCS AgLearn State Training Officers
- State TSP Coordinators
- USDA Service Center Locator
- Authentication Help Desk
- Conservation Planning Activities (formerly CAPs)
- AgLearn Helpdesk
- NRCS Registry Helpdesk

NRCS Registry

Find a TSP

Become a TSP

Technical Service Providers

Technical Service Providers (TSP)

Notice: The NRCS Registry criteria are being updated.

You may not be able to complete qualifications for certain practices/CPAs/DIAs. We expect to have the corrections completed by next week. The TSP Team will advise when updates have been completed. There are some practices which will require a reset of applications. If you are affected by this required reset, you will be notified via email. Thank you for your patience.

Technical Service Provider Training Opportunities

There are no national trainings scheduled at this time. Please check your state's website for local training opportunities.

Training Videos and User Guides

- » Technical Service Provider - Training Videos (YouTube)
- » NRCS Registry - TSP Application User Guide
- » NRCS Registry - Business Certification User Guide
- » NRCS Registry - Expiring or Expired License or Certification User Guide

What is a Technical Service Provider or TSP?

Technical service providers (TSPs) offer services to agricultural producers such as farmers, ranchers, and private forest landowners on behalf of the Natural Resources Conservation Service (NRCS). TSPs help these producers plan, design, and implement conservation practices or develop conservation activity plans to improve agricultural operations.

TSPs include individuals, private businesses, American Indian tribes, nonprofit organizations, and public agencies.

Contact

Rogerick Thompson

State Resource Conservationist

601-863-3911 – office

601-259-2811 – cell

Rogerick.Thompson@usda.gov

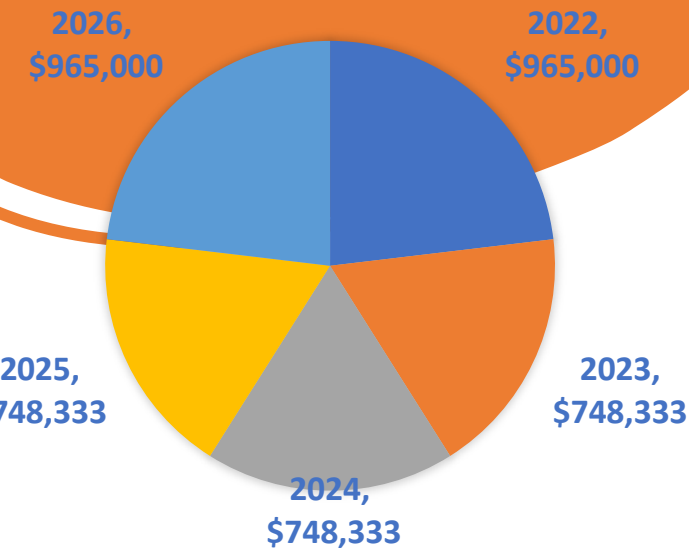
State Technical Committee Annual Meeting October 26, 2022



Natalie Segrest
Chief, Basin Management and NPS Branch
Mississippi Department of Environmental
Quality



Bipartisan Infrastructure Law

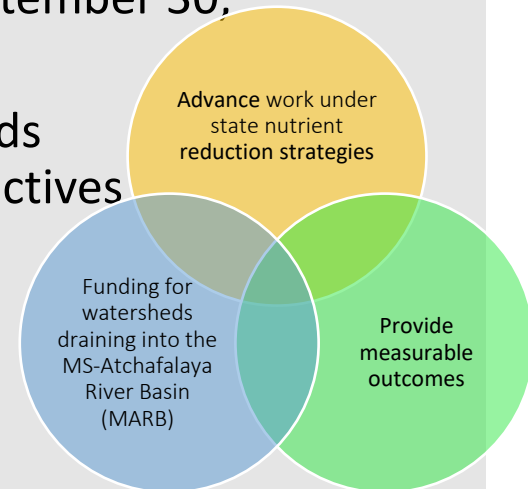


MISSISSIPPI'S PORTION OF THE GULF HYPOXIA PROGRAM GRANT FUNDING

- The Bipartisan Infrastructure Law passed Congress in November 2021
 - Infrastructure Investment and Jobs Act (IIJA)
- \$60M appropriated to EPA to address hypoxia in the Gulf of Mexico
- Gulf Hypoxia Program (GHP) grant funding assists 12 states
- MS will receive a total of \$4.175M (FY22-FY26)

Gulf Hypoxia Program Grant Funding

- Watersheds that drain into MS River
- Yazoo, Tennessee, North Independent, Big Black, and South Independent Streams Basins
- Up to 5 years to complete the work under each grant
- Grants active through FY30 (September 30, 2030)
- Projects must address state needs while meeting Federal GHP objectives



Phase 1 GHP Projects in Mississippi

The first work plan combines grant funding years FY22 and FY23 and for a total of \$1.7M.

Funding will focus on filling data gaps to refine load calculations, estimate reductions achieved, and develop a nutrient response measure

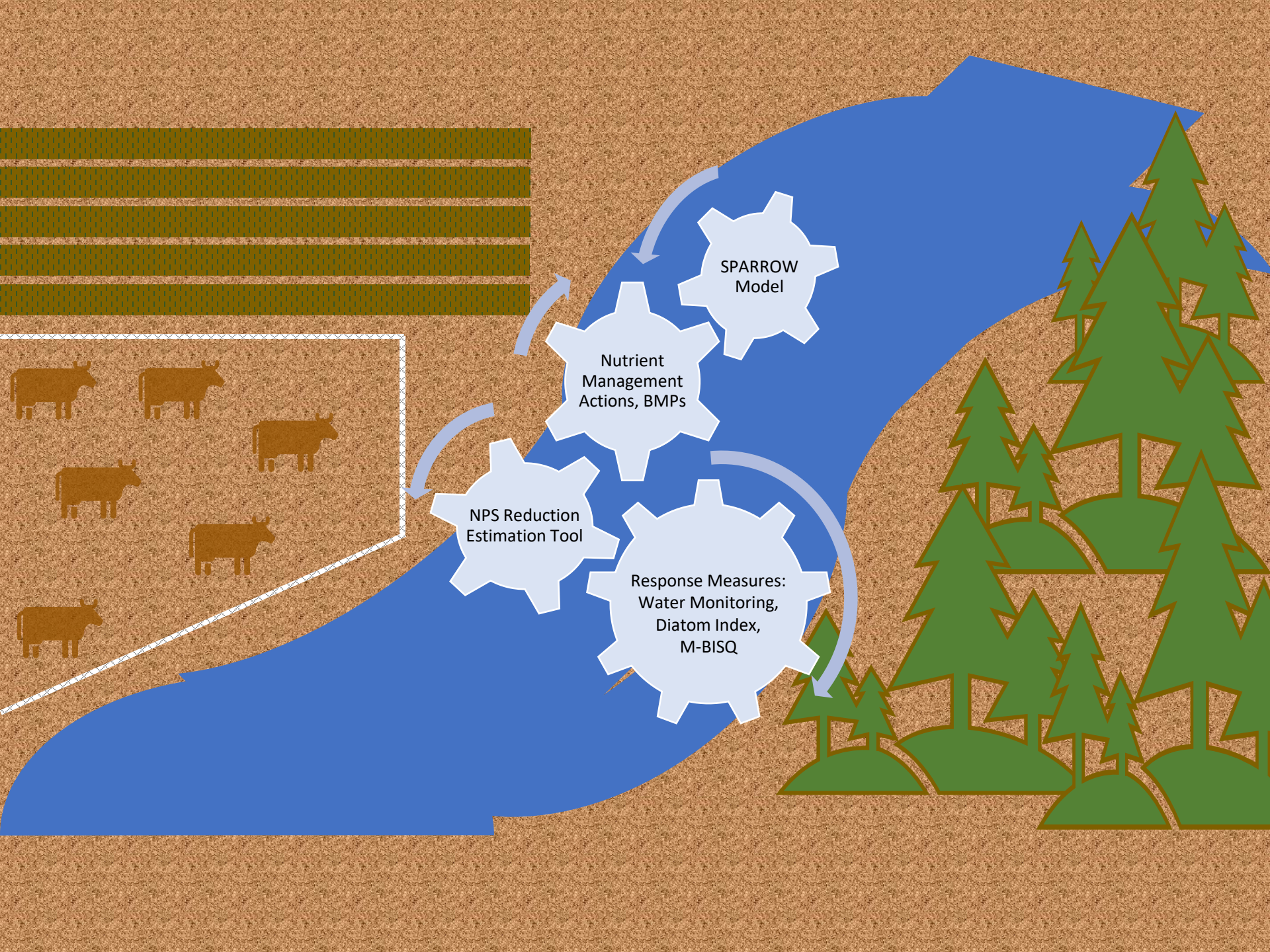
Projects funded in Phase 1:

Continuous NO3
Monitoring Sensors

Nutrient Reduction
Estimation
Tool (**Today's focus**)

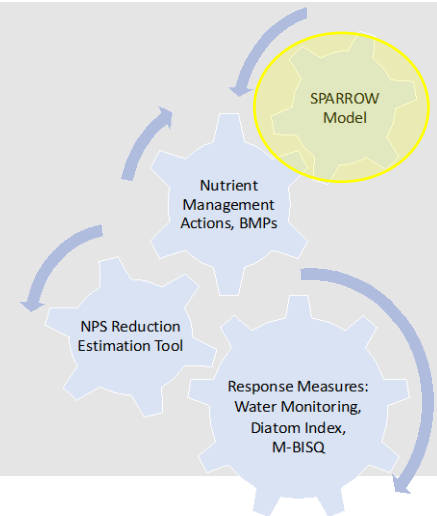
Diatom Index

Nutrient Reduction
Strategy Update



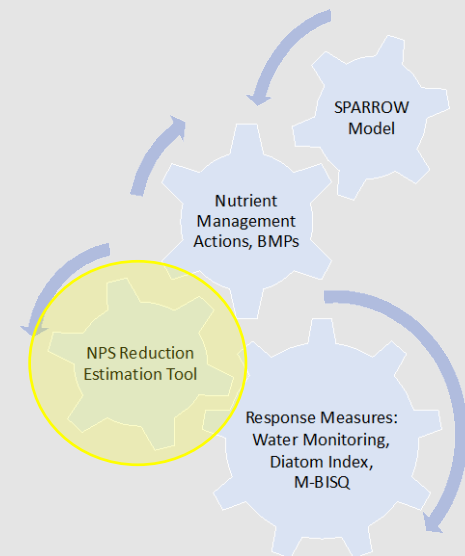
SPARROW Model

- **SPAtially Referenced Regression On Watershed attributes**
- MDEQ/USGS collaboration – Expected Completion in Summer 2023
- Estimates background (land-based) nutrient and sediment loading into the state's surface waters
- Key mechanism for understanding the state's nutrient baseline
- Validated and calibrated with MS-specific data



Nonpoint Source (NPS) Reduction Estimation Tool

- This tool models best management practices (BMPs) to estimate load reductions achieved (2008-present).
- Reductions achieved aggregated at multiple scales: sub-watersheds, watersheds, HUC 8s, basins and regions
- Results published on a web-based dashboard.
 - Communicate successes to public
- Model specific enough to estimate reductions
- **NOT** detailed enough to target specific producers



Leveraged Work: Nutrient Reduction Estimates

Gulf Hypoxia Program Grant Funding

Phase I
2022 – 2023

1. Aggregate all BMPs
2. Identify key practices
3. Estimate acres treated per BMP type
4. Determine BMP efficiencies
5. Calculate nutrient and sediment reductions
 - R5, STEPL, PLET
6. Summarize reductions across scales

BMP Data

Phase II
2023

1. Define an approach to identify nutrient sources
2. List major sources of nutrients
3. Determine an approach to identify source-specific nutrient management actions
4. List pertinent nutrient management actions

Nutrient Sources,
Nutrient
Management
Actions, BMPs

Phase III
2023 – 2027

1. Identify nutrient reduction estimation tools
2. Update BMP calculations and efficiencies with various land use types
3. Develop an interface for a web-based platform
4. Streamline incorporation of updated datasets
5. Build capability for data entry and reporting
6. Test with stakeholders and address per

Nutrient
Reduction
Estimation
Tool

So what?! Telling the Story

Opportunity to estimate
environmental benefits achieved
through practice implementation

Estimating the benefits of MS
BMP efforts by leveraging NRCS
data and existing models

What we have: number and cost
of implemented practices

NRET links what we have with
environmental
outcomes/successes

What do we need to get there:

Address data gaps to maximize
model outputs

How: Combine observed data
with expert knowledge

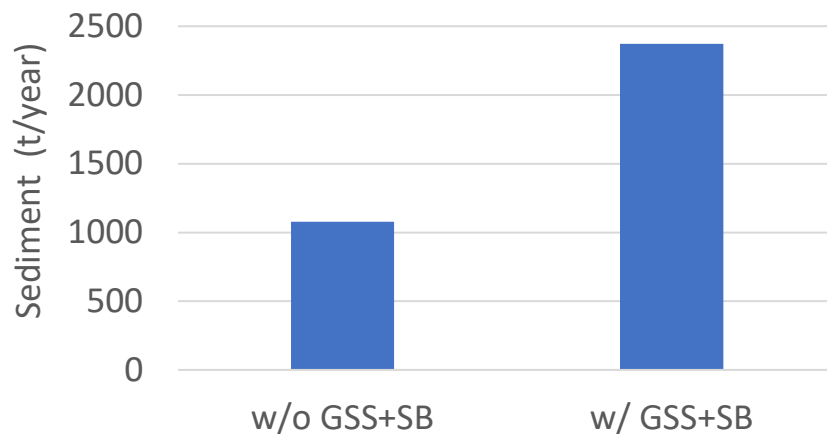
North Tippah Conservation Practices and Costs 2008-2018

Conservation Practices Installed 2008-2018

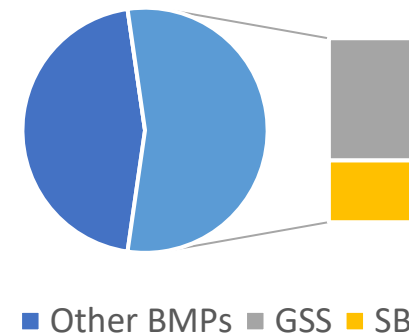
Practice Code	Practice Description	# of Units	Unit	Amount
329	RESIDUE AND TILLAGE MANAGEMENT - NO-TILL	5	ac	\$86.80
340	COVER CROP	1,274.50	ac	\$79,070.77
342	CRITICAL AREA PLANTING	145.95	ac	\$11,827.78
342	CRITICAL AREA PLANTING	6	no	\$238.50
410	GRADE STABILIZATION STRUCTURE	93	no	\$781,281.35
410	GRADE STABILIZATION STRUCTURE	2,002	ac	\$13,467.06
484	MULCHING	10.3	ac	\$9,020.25
512	FORAGE AND BIOMASS PLANTING	32.5	ac	\$10,107.90
580	STREAMBANK AND SHORELINE PROTECTION	12047	ft	\$1,880,091.29
580	STREAMBANK AND SHORELINE PROTECTION	288	ac	\$14,848.14
SUB-TOTAL				\$2,800,039.84

North Tippah

Total Sediment Saved on the Landscape from Implementation of GSS + SB

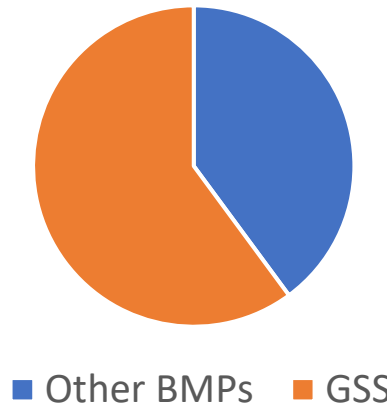


Impacts of GSS + SB in Keeping Sediment on the Landscape in North Tippah



Middle Porter Bayou

Impacts of GSS in Keeping
Sediment on the Landscape in
Middle Porter Bayou



Benefits of Partnership



We have the data and the model, but we need input from experts



Mississippi's agriculture sector is doing its part, but not getting the credit



Reporting # practices and \$ spent is important, but think of the added impact of linking those with environmental outcomes



Work together to show environmental impacts achieved through the work you do



Thank you for your time!



United States Department of Agriculture

State Conservation Engineer

Olguy Louis, P.E.



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Watershed Programs

The EWP Program provides protection from flooding and soil erosion when necessary to safeguard lives and property when a natural occurrence causes a watershed impairment.

Sponsor Request for Assistance

- Units of government
- Sponsors have responsibilities during planning, design, construction, and maintenance



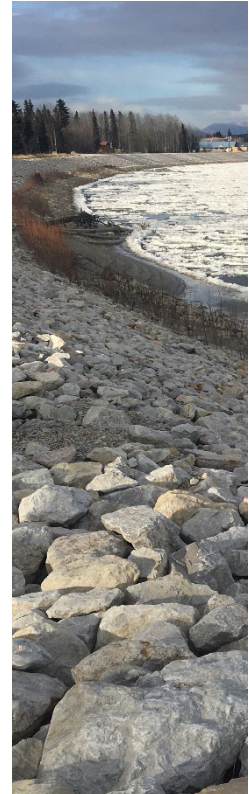
Damage Survey Report

- NRCS will propose practices and cost estimates
- NRCS follows requirements, limits, and practice eligibility criteria when providing financial assistance



Formal Agreement

- The agreement will detail responsibilities and cost share
- The agreement will document if and how funding is provided based on the sponsor's role during



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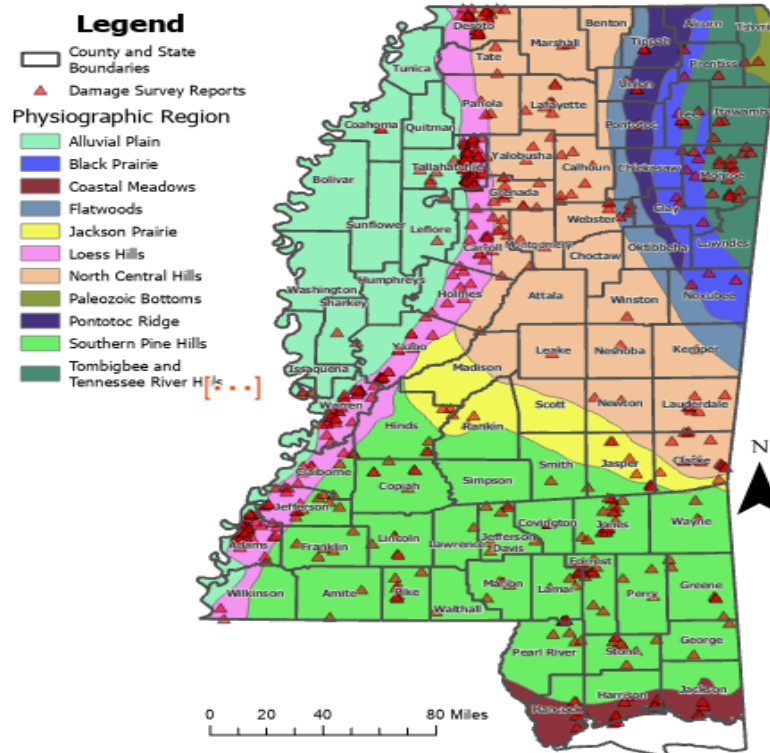
nrcs.usda.gov

Watershed Programs

Dams	561
Built by PL-566	189
Built by PL-534	367
Built by RC&D	5
AVG Annual Benefits	\$164M

Programs	Amount
Rehab	\$ 14,326,000.00
Operations	\$ 102,620,000.00
EWP	\$ 12,842,436.00

DSRs by Physiographic Region



Watershed Programs

The WFPO Program provides technical and financial assistance to States, local governments and Tribes to plan and implement authorized watershed project plans for the purpose of:

- Flood Prevention
- Watershed Protection
- Public Recreation• Public Fish and Wildlife
- Agricultural Water Management
- Municipal and Industrial Water Supply
- Water Quality Management
- Watershed Structure Rehabilitation (There is a separate program that manages rehabilitation projects)



Watershed Programs



Big Black Creek in Madison

- Watershed Operations
- Planning Stage





Resource Available For Watershed.



TRAINING WEBINAR (video recording) :

Watershed Program Funding Opportunities provided in the Infrastructure and Investments Job Act - Dec. 7th, 2021



Templates:

Sample EWP Assistance Letter of Request

Sample WFPO Assistance Letter of Request

Sample REHAB Assistance Letter of Request

Training Webinars (pdfs):

Q & A's from Training Webinars (pdf)

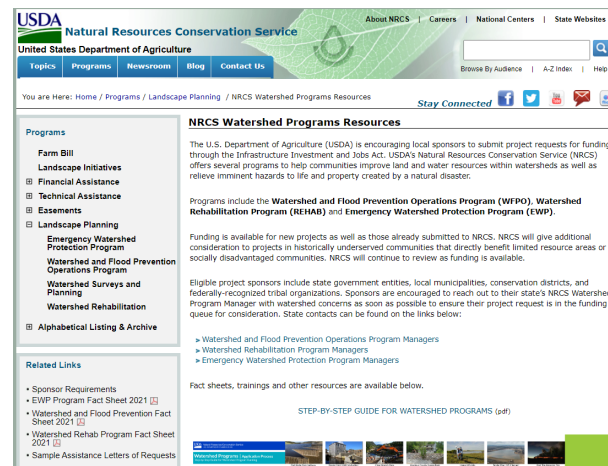
December 6th & 7th, 2021 - Sponsor focus (pdf)

December 15th & 17th, 2021 - HU focus (pdf)

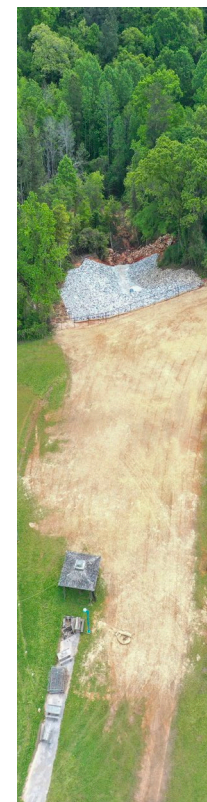
Handbooks and Manuals

National Watershed Program Handbook (pdf), 2.4 MB

National Watershed Program Manual, 4th Edition, 1st Amendment (PDF) 1.55 MB



<https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/programs/landscape/?cid=nrcseprd1859828>



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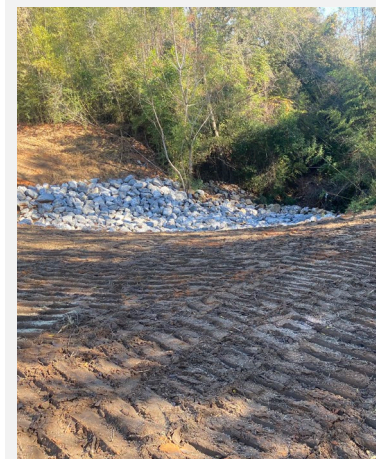


Conservation Activities

Design and Implementation Activities (DIAs)

Name	Code	Type	Release Date
Agricultural Energy Design		120 DIA	10/3/2022
Feed Management Design		158 DIA	10/3/2022
Forest Management Practice Design		165 DIA	10/3/2022
Improved Management of Drainage Water Design		164 DIA	10/3/2022
Irrigation Water Management Design		163 DIA	10/3/2022

Columbia EWP



Agricultural Energy Design (DIA)

- General Requirements
- Technical Requirements
- Cover Page
- Conservation Assistance Notes and Correspondence
- Preliminary Designs
- Design Reports
- Design or Implementation Details
- Supporting Documentation
- Deliver Completed Work

Waynesboro

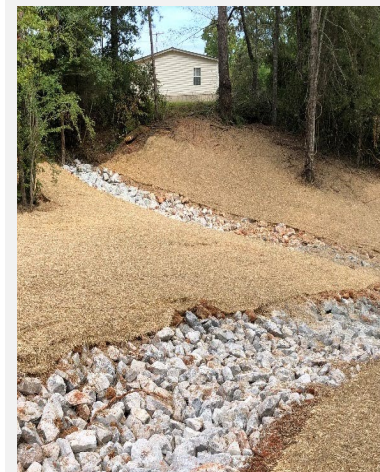


ENG – Pond Conservation Technical Assistance (CTA) guidance

Mississippi NRCS staff shall provide engineering CTA assistance consisting of up to approved designs on ponds meeting the following criteria:

- (a) A peripheral dam or levee eight (8) feet or less in height, measured from the point of lowest elevation of its toe, regardless of the impounded storage volume; or**
- (b) A dam that impounds twenty-five (25) acre-feet or less at maximum storage volume; or**
- (c) A dam that does not impound a watercourse with a continuous flow of water, or a perennial stream**

Lauderdale County - Valley Road EWP

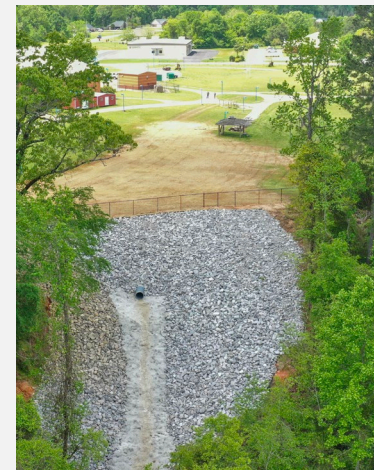


ENG – Pond Conservation Technical Assistance (CTA) guidance

Conservation technical assistance on ponds that are greater in size and/or volume than the limitations provided above shall only consist of forms of the following.

- 1. Topographic, aerial or soils maps**
- 2. Soil borings**
- 3. Web Soil Survey – Suitability and limitations for use - description and table**
- 4. Drainage area calculations**
- 5. Runoff volume calculations**

**MBCI CONEHATTA
ELEMENTARY EWP**



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Used material - EQIP - used steel in Delta

Title 440 – Conservation Programs Manual

Any practice in which used materials are used may be eligible for payment in accordance with criteria set forth in Title 210, National Engineering Manual, Part 512, Subpart C.

512.21 Evaluation Procedures

A. Material quality will be evaluated by a procedure specified by the design engineer.

Evaluation

procedures may include laboratory testing, manufacturer certifications, examination at the job site, or prequalification.

EWP Project



An aerial photograph of a golf course. A large, irregularly shaped area of light brown dirt or sand is the central focus, bordered by green grass. To the left, a dense forest of green trees covers a hillside. A winding path or road curves through the grassy areas. In the lower right, a small building with a blue roof is visible. The text 'Questions?' is overlaid in the upper right quadrant.

Questions?

Olguy Louis

**Mississippi State Conservation Engineer
Suite 1321, McCoy Federal Building
100 W. Capitol Street Jackson, MS 39269
Phone: 601-863-3932**



Mississippi Soil and Water Conservation Commission

Slide will be updated once Mississippi Soil and Water Conservation Commission submit official slide.





Mississippi Easement Programs

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Easement Overview

1992-2021 Easement Summary

Enrolled Easements	726
Enrolled acres	204,527.9
Closed Easements	673
Closed Acres	193,783.06
Fully Restored	185,294.73 (as of 2021)
Pending Restoration	21778



FY 2022 Applications

221 Eligible Applications

\$75M+

31,000+ acres

Funded:

19 enrollments

2,970 acres

\$19M in funding



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WREP

Tri-State WREP - \$2.85M and 6 agreements for 703.4 acres.

Batture WREP - \$823,000 and 1 agreements for 175.3 acres.

Expect \$10M+ in FY2023



Ranking FY2023 – No Changes

Survey: MS WRE Program Questions v2

Ranking Pool Report

Section: MS WRE Program Questions v2		
Question	Answer Choices	Points
Does the offer adjoin a permanently protected area?	Offer adjoins a permanently protected area on 3 or more sides.	32
	Offer adjoins a permanently protected area on 2 or less sides.	27
	Offer is within a 1/4 mile of a permanently protected area.	23
	Offer is within a 1/4 to 1/2 mile of a permanently protected area.	18
	Offer is within a 1/2 to 1 mile of a permanently protected area.	9
	Offer adjoins wooded wetland area/ perm protected area less than 250 acres.	16
	Offer less than 1/4 mile from wooded wetland area/ perm protected area less than 250 acres	11
	Offer is between 1/4 to 1/2 mile from wooded wetland area/ perm protected area less than 250 acres.	9
	Offer is more than 1 mile from a permanently protected area or more than 1/2 mile from wooded wetland area	0
Does offer touch known Black Bear or Pondberry (T and E species) or Forest Bird Reforestation priority habitats?	Yes - Intersects Black bear and/or Pondberry shapefiles	36
	FBBDMS - Priority zone 9 - 36 pts	36
	FBBDMS - Priority zone 8 - 12 pts	12
	FBBDMS - Priority zone 7 - 10 pts	10
	FBBDMS - Priority zone 6 - 7 pts	7
	FBBDMS - Priority zone 5 - 6 pts	6
	FBBDMS - Priority zone 4 - 5 pts	5
	FBBDMS - Priority zone 3 - 4 pts	4
	FBBDMS - Priority zone 2 - 3 pts	3
	FBBDMS - Priority zone 1 - 2 pts	2
Water Quality Filtering - Non-WRE runoff from adjoining lands	No T and E; No FBBDMS Priority zone	0
	Cropland	18
	Pastureland, Hay Land, and/or Aquaculture (non-ditch), Grass CRP	9
	CRP Trees, Forestland, Other Lands, No Filtering	0



FY2023 Payment Rates

Awaiting changes for FY2023
No rate decreases

FY2022 Geographic Area Rate Cap (GARC)

USDA Natural Resources Conservation Service
 Agricultural Conservation Easement Program - Wetland
 Reserve Easement (ACEP-WRE)

ACEP-WRE Market Areas Mississippi 2022 (applied acreage range)

Delta

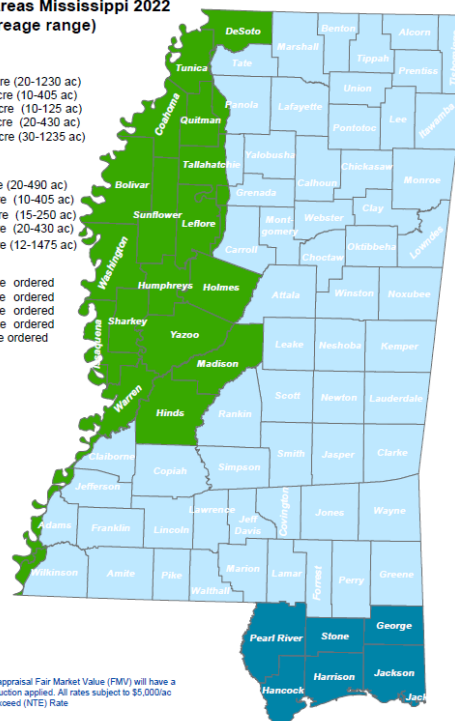
Cropland	\$3,200 per acre (20-1230 ac)
Aquaculture	\$2,600 per acre (10-405 ac)
Pastureland	\$2,500 per acre (10-125 ac)
CRP	\$1,950 per acre (20-430 ac)
Woodland/Other	\$2,350 per acre (30-1235 ac)

Rest of State

Cropland	\$2,400 per acre (20-490 ac)
Aquaculture	\$2,600 per acre (10-405 ac)
Pastureland	\$2,050 per acre (15-250 ac)
CRP	\$1,950 per acre (20-430 ac)
Woodland/Other	\$1,500 per acre (12-1475 ac)

Coastal

Cropland	Appraisal will be ordered
Aquaculture	Appraisal will be ordered
Pastureland	Appraisal will be ordered
CRP	Appraisal will be ordered
Woodland/Other	Appraisal will be ordered



The USDA NRCS is an
 equal opportunity employer.

If used, appraisal Fair Market Value (FMV) will have a
 20% reduction applied. All rates subject to \$5,000/ac
 Not to Exceed (NTE) Rate



Easement Staff

ASTC – Easements – Jason Keenan
Easement Coordinator – Ron McCain
Program Specialist – Yolanda Jackson
Program Analyst – Jahmal Burgess
Easement Specialist – Rick Hagar
Easement Field Coordinator – Ben Naron
Easement Soil Conservationist - Vacant
Easement Biologist – Saahirah Walton
Easement Forester – Alec Conrad

Program Assistant

– Ariel Hollins

Trust for Tomorrow

– Randal Manley
– William McRee
– Jacob Miller



Landowner Workshops

- 3 workshops
 - Indianola
 - Onward
 - Jackson





Any Questions?

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Financial Assistance Programs

Presented by: Earl McMillian
ASTC for Programs
Work: (601) 863-3905
Email: edward.mcmillian@usda.gov



Financial Assistance Programs

- Environmental Quality Incentives Program (EQIP)
- Conservation Stewardship Program (CSP)
- Regional Conservation Partnership Program (RCPP)
- Urban Agriculture

Environmental Quality Incentives Program

EQIP is a voluntary conservation program that assist producers make conservation work for them. Together, the Natural Resources Conservation Service (NRCS) and producers invest in solutions that conserve natural resources for the future while also improving agricultural operations.

Eligible program participants receive technical and financial assistance to implement conservation practices that address natural resource concerns on their land.

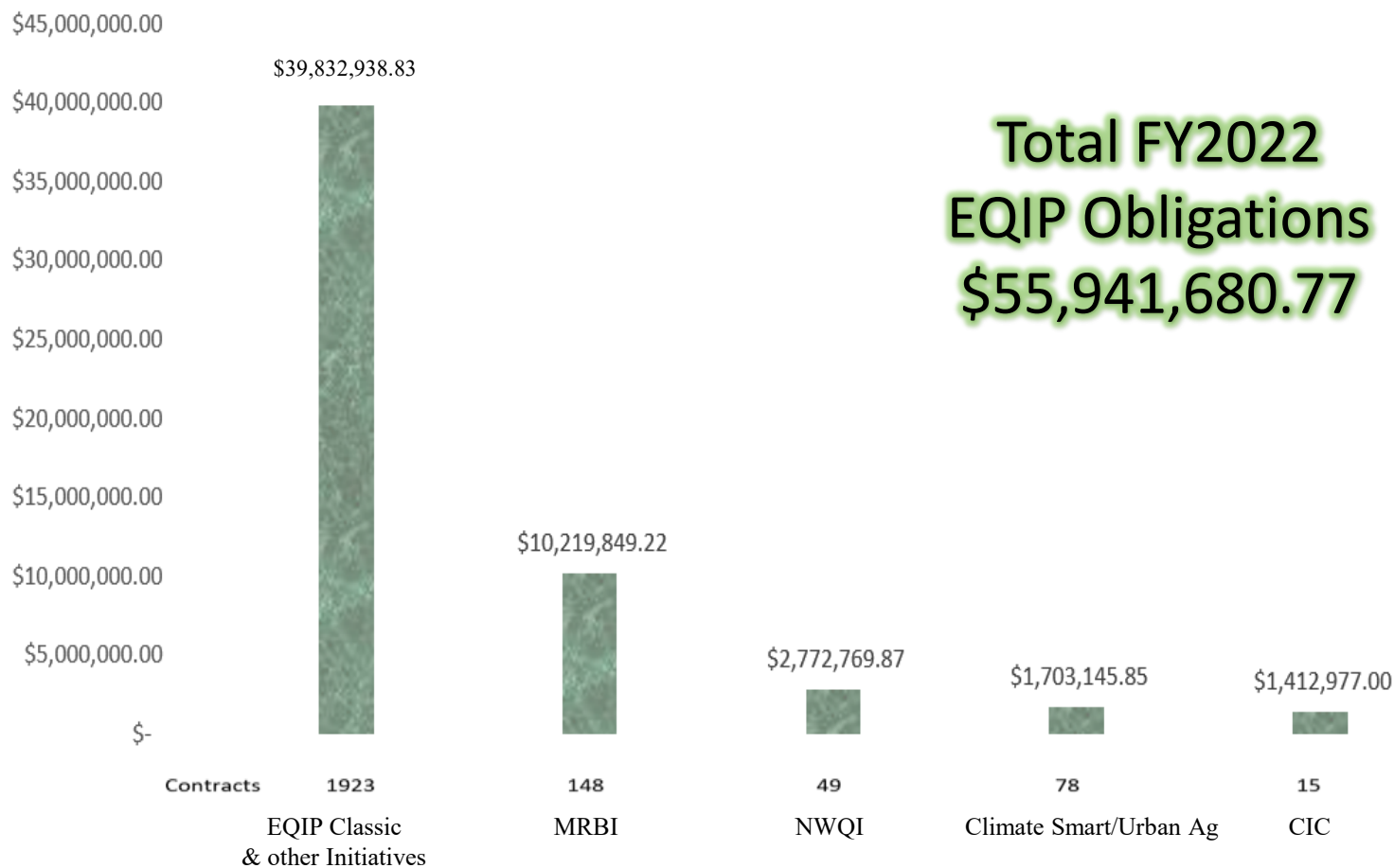
Payments are made to participants after conservation practices are implemented and verified by NRCS staff meeting our standards and specifications.



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Fiscal Year 2022 Environmental Quality Incentives Program (EQIP) Accomplishments



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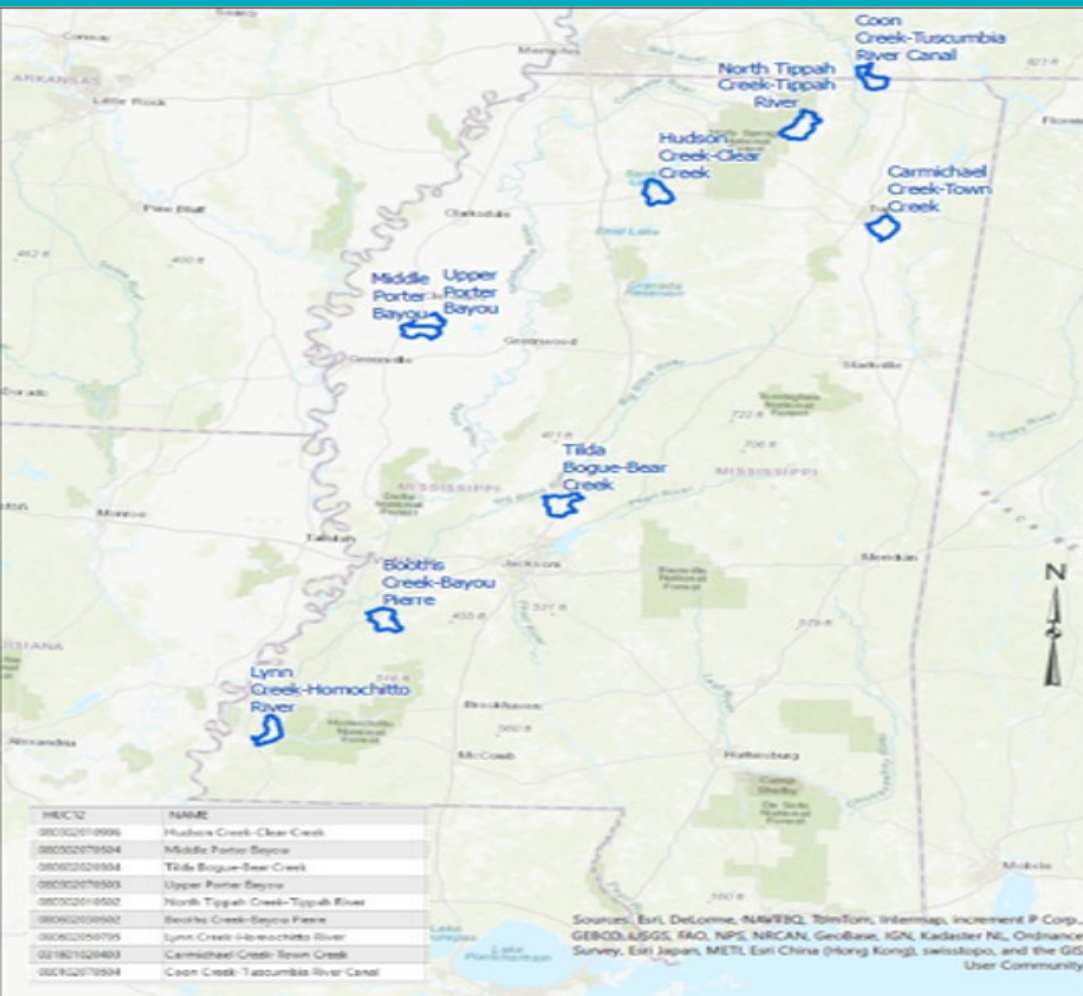
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What is the National Water Quality Initiative (NWQI)?

- NWQI was established in FY 2012 as an initiative delivered jointly with State water quality agencies and the Environmental Protection Agency (EPA) to address agricultural sources of water pollution, specifically nutrients, sediment, and pathogens in priority watersheds throughout the country.



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FY 2022 NWQI Watersheds

- Coon Creek
- Carmichael Creek
- Big Sunflower River - Porter Bayou (2)
- North Tippah Creek - Tippah River
- Lynn Creek - Homochitto River
- Booths Creek - Bayou Pierre
- Hudson Creek - Clear Creek
- Tilda Bogue - Bear Creek

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NWQI in Mississippi

- In FY 2022, NRCS received 2.8 million in funds to assist with conservation efforts in NWQI.
- There are currently 9 NWQI watersheds eligible for funding.
- All NWQI watersheds are scattered throughout the state. (See map)



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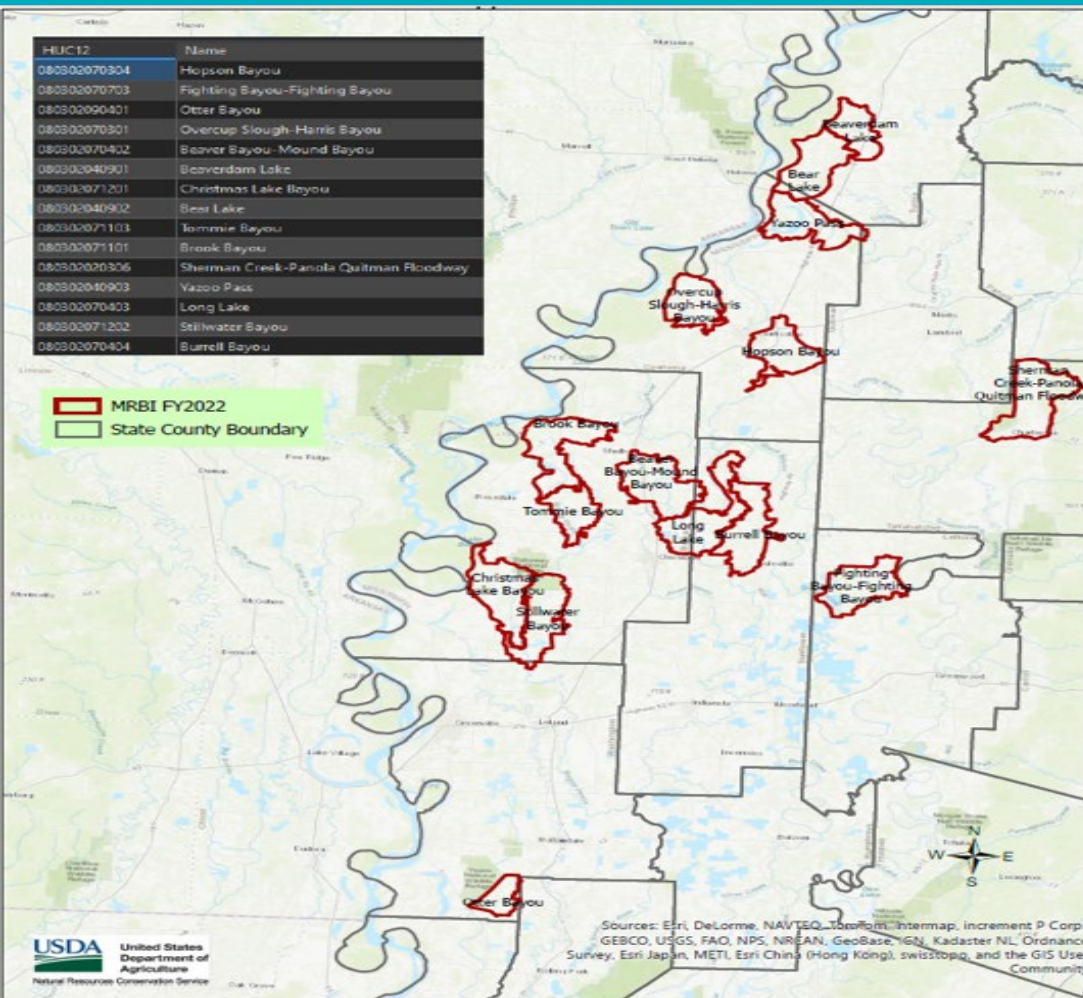
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What is the Mississippi River Basin Initiative (MRBI)?

- The MRBI was announced in FY 2009 with a primary focus of improving water quality.
- Focused on restoring wetlands, enhancing wildlife habitat, and sustaining agricultural viability in small watersheds of the Mississippi River Basin.
- Implementation of MRBI requires a flexible approach tailored to individual watersheds and should support conservation systems composed of practices that avoid, control, and trap sediment and nutrients.
- In FY 2015 MRBI was updated to align with the nutrient loss reduction strategies developed by Hypoxia Task Force (HTF) member States.
- NRCS and partners worked with producers and landowners to implement and show the effectiveness of targeted, voluntary conservation systems in priority watersheds identified as major contributors of nutrients to the Gulf of Mexico.



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FY 2022 MRBI Watersheds

New Watersheds added in FY22

- Hopson Bayou
- Fighting Bayou
- Overcup Slough- Harris Bayou
- Otter Bayou

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MRBI In Mississippi

In FY 2022, NRCS funded all applicants who applied for the initiative.

There are currently a total of 15 eligible watersheds available for funding in Mississippi.

All opportunities for funding in this initiative are focused in the Delta counties.

MRBI and NWQI Partners

- **Mississippi Department of Environmental Quality (MDEQ)**
- **Mississippi Soil and Water Conservation Commission (MSWCC)**

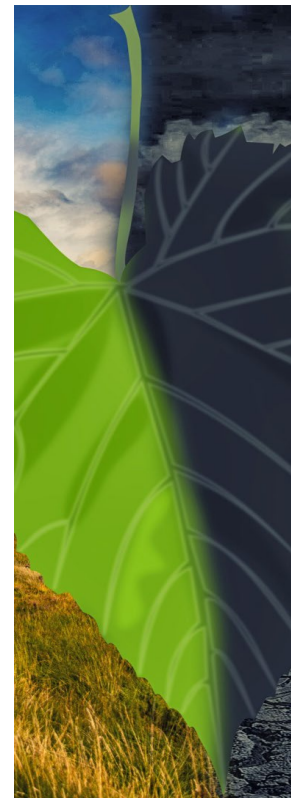
This partnership has resulted in the following:

- 9 National Water Quality Initiative (NWQI) watersheds
- 15 Mississippi River Basin Initiative (MRBI) watersheds
- Pulling public and private entities together
- Assisting NRCS with conservation efforts totaling over \$16,023,596.20 in the last 5 years for NWQI.
- Assisting NRCS with conservation efforts totaling over \$51,356,541.43 in the last 5 years for MRBI.

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Climate Smart Agriculture and Forestry

- A whole government approach to tackling the climate issues, USDA has developed a CSAF strategy that recognizes the important role that agriculture and forestry will play in climate change mitigation and resilience.
- The purpose of this targeted EQIP sign-up for CSAF is to prioritize the adoption of conservation practices and systems that mitigate greenhouse gases (GHG) and to ensure the availability of this assistance for socially disadvantaged producers and forest land managers.
- Core conservation practices, which will also include CSP enhancements, were selected based on their ability to reduce greenhouse gas emissions and sequester carbon in the soil.
- States are allowed to removed any core practices that are not selected in their payment schedules.



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EQIP Conservation Incentive Contracts

- EQIP Incentive Contract provisions provide for both incentive practice payments for adopting practices, and annual payments for managing, maintaining, and improving the incentive practices for the duration of the contract.
- States determine the EQIP incentive high priority area(s). These are areas with identified priority resource concerns that represent a significant concern in a State or region.
- States determine priority resource concern(s). States may identify up to three priority resource concerns for each land use within a given high priority area.
- Incentive Contract Length: An appropriate length to achieve the desired conservation benefits; not less than 5 years and not more than 10 years.



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NRCS will continue to offer
Emergency Disaster Assistance



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Fiscal Year 2023 EQIP Sign-Up

EQIP Classic including State and National Initiatives

2023 Sign-up Deadline: October 28, 2022

Eligibility Deadline: December 5, 2022

Obligation Deadline: May 12, 2023

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Conservation Stewardship Program (CSP)

CSP encourages producers to address priority resource concerns and improve and conserve the quality and condition of natural resources in a comprehensive manner by undertaking additional conservation activities and improving, maintaining, and managing existing conservation activities.



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CSP Assistance Types

CSP – Classic

Helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority natural resource concerns. Participants earn CSP payments for conservation performance—the higher the performance, the higher the payment.

CSP – Renewals

During the first half of the fifth year of the existing contract term, NRCS may allow a participant to apply and compete to renew their contract for an additional 5-year period.

CSP – Grassland Conservation Initiative (GCI)

The purpose of the grassland conservation initiative (GCI) is to assist producers in protecting grazing uses, conserving and improving soil, water, and wildlife resources, and achieving related conservation values by conserving eligible land through grassland conservation contracts.

Fiscal Year 2022 Conservation Stewardship Program (CSP) Accomplishments



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FY 23 CSP ANNUAL PAYMENTS

Participants who elect to receive their CSP Annual Payment in CY 2022 will need to submit CSP documentation prior to November 18, 2022.



Participants who elect to receive their CSP Annual Payment in CY 2022 will need to submit their CSP documentation prior to January 20, 2023.

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Fiscal Year 2023 CSP Sign-Up

CSP-GCI

2023-1 Sign-up Deadline: October 14, 2022

Obligation Deadline: December 16, 2022

CSP Renewals

Application Deadline: April 15, 2022

Assessment and Ranking Deadline: November 4, 2022

Obligation Deadline: December 16, 2022

CSP-Classic

2023-1 Sign-up Announcement: January 2, 2023

Sign-up Deadline: February 1, 2023

Obligation: June 30, 2023

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Regional Conservation Partnership Program

The RCPP Program Promotes coordination of NRCS activities with partners that offer value-added contributions to expand our collective ability to address on-farm, watershed, and regional natural resource concerns.

Partners apply to NRCS for RCPP project awards. Once projects are selected, NRCS works with partners to set aside a certain pool of funding for an awarded project. Producers, landowners, and partners then enter into producer contracts and supplemental agreements with NRCS to carry out agreed-to conservation activities.

FY 2022 Obligations

9 Contracts - \$964,542 - 796.1 acres

Note: Mississippi was not awarded any new projects for FY2023.

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RCPP-What's the Point?

- **Impact**
Proposals are effective and compelling solutions that address one or more natural resource priorities
- **Partner Contributions**
Cash and in-kind value added to leverage NRCS RCPP Investment. NRCS goal that partner contributions at least equal the NRCS investment in a RCPP project. Partner contributions given priority in application evaluation criteria
- **Innovation**
Innovative conservation approaches or technologies, build new partnerships, take advantage of program flexibilities to deliver conservation solutions
- **Partnerships & Management**
Partners must have experience, expertise and be cable to manage the partnership and project, provide outreach to producers, and quantify the environmental outcomes of an RCPP Project. RCPP ranking gives preference to applicants that meaningfully engage HU farmers and ranchers

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Eligible Partners

- Agricultural or silvicultural producer association.
- A State or unit of local government.
- An Indian Tribe.
- A Farmer cooperative.
- Water district, irrigation district, rural water district or association, or other organization with specific water delivery authority to producers on agricultural land. A municipal water or wastewater treatment entity.
- An institution of higher education. An organization or entity with an established history of working cooperatively with producers, etc.

Natural Resources Conservation Services

Establishment of Urban Agriculture Subcommittee

- In FY 2022, States are charged with creating an Urban Agriculture Subcommittee to assist NRCS with implementation of its conservation program.

Role of Subcommittee:

- Primary advisor regarding urban agriculture conservation.
- Reports to NRCS Mississippi State Technical Committee chaired by the State Conservationist.

Responsibility of the Subcommittee:

- Identify local urban ag needs, emerging practices, resource concerns and potential partners.
- Identify barriers to implementation of conservation strategies on urban and small-scale operations.
- Develop recommendations for outreach strategies.
- Provide additional assistance or advice as requested.



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Subcommittee Interest?

For more information on how to become a member of the Urban Agriculture Subcommittee please contact Earl McMillian at edward.mcmillian@usda.gov.



Natural Resources Conservation Services

Questions???

**If you wish to be added to the
State Technical Committee
mail out list email your name,
address and telephone number
to**

Edward.McMillian@usda.gov



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