USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

Mississippi State Technical Committee Meeting

November 14, 2024

Kurt Readus, State Conservationist

FARM PRODUCTION AND CONSERVATION
FSA | NRCS | RMA | Business Center

Rural Development Mississippi STC 2024

USDA Rural Development
U.S. DEPARTMENT OF AGRICULTURE

Who, What, Why?

Who are we?

Rural Development is the economic and community development arm of USDA

What is our mission?

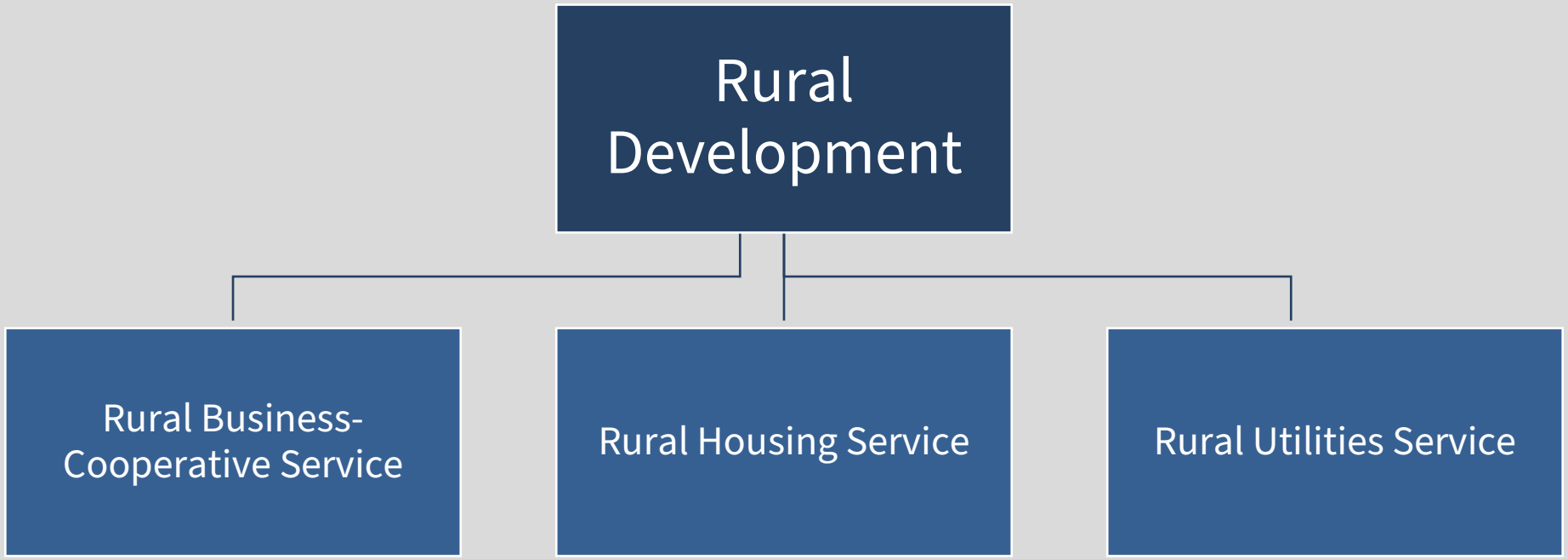
To increase quality of life and economic prosperity in Rural America.

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

RD Obligations | Overview

For USDA Internal Use Only

OEA Announced
All

Fiscal Year	Region	State Name	Agency	Program Area	Subprogram	Investment Type	Funding Code (T..	Recipient Type	NAICS Industry	Special Initiatives
2024	All	Mississippi	All	All	All	All	All	All	All	All

View Table

$371,782,383
TOTAL OBLIGATIONS

Grant Funds	Loan Funds - Direct	Loan Funds - Guarant..	Loan & Grant Combo
$102M	$43M	$227M	$0M

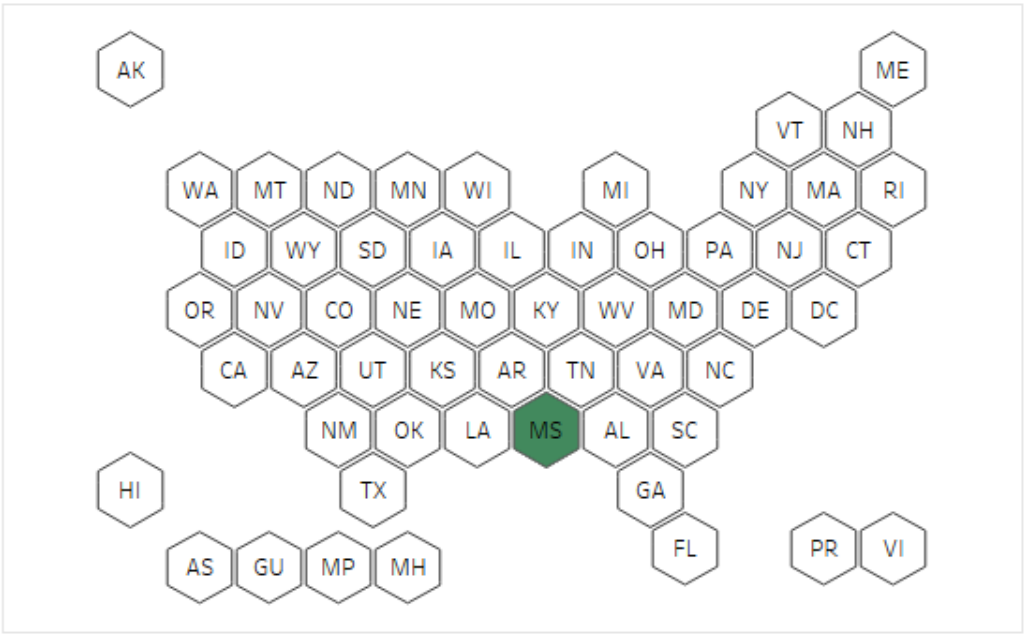
1,863
OBLIGATION COUNT

Grant Funds	Loan Funds - Direct	Loan Funds - Guarant..	Loan & Grant Combo
504	132	1,211	17

	Obl Amt	Obligation Count
Business Programs	$30,704,805	78
Community Facilities	$23,304,117	15
Multifamily Housing	$67,953,018	331
Single Family Housing	$242,297,399	1,433
Telecommunications Programs	$2,013,044	3
Water and Environmental	$5,510,000	3

OBLIGATIONS AMOUNT BY STATE

Select a State on the filter above or on the map below. Then click on the Zoom (+) button to view the county or congressional map



Obl Amt

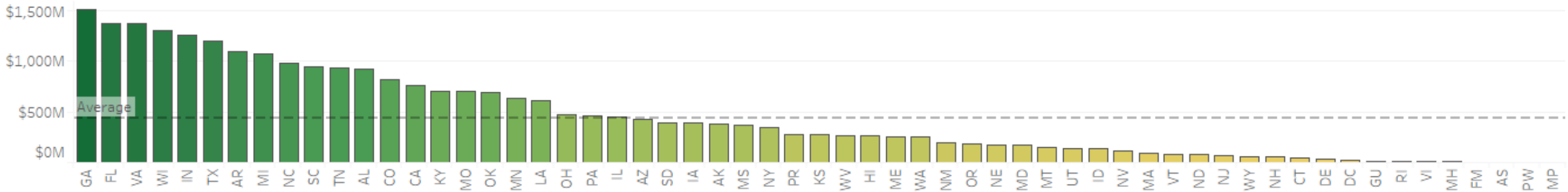
Zoom (+) County

Zoom (+) Congressional

Obligations with unknown counties or congressional districts will not render on applicable map views. Electric and Telecom obligations will not be displayed on the zoom-level maps because these projects serve multiple counties. They are included in the State level. Contact the applicable Program for county level data to review counties served.

OBLIGATION AMOUNT BY STATE

Highlight Obl State
No items highlighted



National portfolio = $26.1 billion

Mississippi Fiscal Year 2024 program statistics:

$371.8 million total funding obligated to Mississippi communities

- $242.3 million - Single Family Housing Loans/Grants
- $67.9 million - Multi-Family Housing Loans/Grants
- $23.3 million - Community Facilities Loans/Grants
- $5.5 million - Water & Environmental Infrastructure Loans/Grants
- $30.7 million - Business & Cooperative Programs Loans/Grants
- $2 million – Telecommunications Loans/Grants

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!

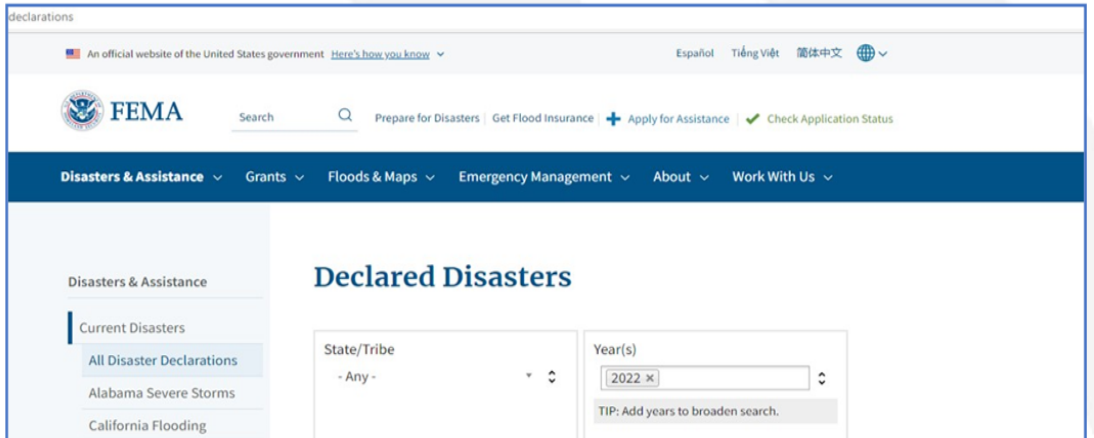
- Single Family Housing Direct Home Loans
- Single Family Housing Home Loan Guarantees
- Single Family Housing Repair Loans and Grants
- Mutual Self-Help Housing Technical Assistance Grants
- Multi-Family Housing Loans
- Farm Labor Housing Loans and Grants
- Housing Preservation Grants

- The maximum 502 Direct loan limit has recently increased to $398,600.00.
- Interest rates are 4.375% effective November 1, 2024, but when modified by payment assistance can be as low as 1%

Disaster Repair Grants
Section 504

Presidentially Declared Disaster

- Income must not exceed applicable very-low income
- Maximum grant assistance of $15,000
- Lifetime grant assistance
- Damage must be directly associated with related storms
- Good for one year from declaration date.



Community Facilities

Loans and grants to help rural communities finance critical community facilities such as:

- ✓ **Hospitals, clinics, assisted living**
- ✓ **Town halls, courthouses**
- ✓ **Street improvements**
- ✓ **Roads, bridges**
- ✓ **Airport facilities**
- ✓ **Childcare centers**
- ✓ **Community centers**
- ✓ **Police, fire departments**
- ✓ **Prisons**
- ✓ **Emergency vehicles**
- ✓ **Public works equipment, vehicles**
- ✓ **Schools, public or private**
- ✓ **Museums, libraries**
- ✓ **Telemedicine**
- ✓ **Community gardens**
- ✓ **Community kitchens, foodbanks**

- Local governments/public bodies
- Non-profits
- Federally-recognized Tribes
- 20,000 or less in population

Community Facilities

What kinds of funding are available?

- Low interest direct loans - Loan repayment terms may not be longer than the useful life of the facility, state statutes, the applicant's authority, or a maximum of 40 years, whichever is less)

- Grants - Applicant must be eligible for grant assistance, which is provided on a graduated scale with smaller communities with the lowest median household income being eligible for projects with a higher proportion of grant funds. Grant assistance percentages of eligible project cost varies

- A combination of the two above, as well as our loan guarantee program. These may be combined with commercial financing to finance one project if all eligibility and feasibility requirements are met

Water Programs

Loans and Grants available for water and wastewater systems; typically a combination of grant and loan

- Local governments, non-profits, Federally-recognized tribes
- SEARCH grants ($30k for feasibility studies, design, and technical assistance in rural areas with population ≤ 2,500
- Circuit Rider program can assist with technical assistance (board training, management/finance, reg. compliance, etc.)
- Water wells, treatment facilities, storage, and distribution
- Sewer/stormwater collection, transmission, treatment, and disposal
- Legal and engineering fees, land acquisition, permits, and equipment
- Start-up operations and maintenance
- Interest incurred during construction
- Purchase existing facilities
- Related buildings and structures

Business & Cooperative Programs

- Business and Industry Guaranteed Loan
- Rural Business Development Grant
- Value Added Producer Grant
- Rural Cooperative Development Grant
- Rural Energy for America Program (REAP)
- Revolving Loan Funds (IRP, REDLG)

Business & Cooperative Programs
Value-Added Producer Grant (VAPG)

The Value-Added Producer Grant helps agricultural producers to generate new products, create and expand marketing opportunities, and increase producer income.

Who may apply for this program?
Independent producers, agricultural producer groups, farmer/rancher-cooperatives, and majority-controlled producer-based business ventures.

How may funds be used?

Funds can be used for planning activities or for working capital expenses related to producing and marketing a value-added agricultural product. Examples 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.

You may receive priority if you are:

- Beginning farmer or rancher.
- Socially-disadvantaged farmer or rancher.
- Small or medium-sized farm, or ranch structured as a family farm.
- Farmer or rancher cooperative.
- Proposing a mid-tier value chain.

*Grants are awarded through a national competition

Business & Cooperative Programs
Rural Cooperative Development Grant Program

What does this program do?
The Rural Cooperative Development Grant program improves the economic condition of rural areas by helping individuals and businesses start, expand or improve rural cooperatives and other mutually-owned businesses through Cooperative Development Centers. Grants are awarded through a national competition. Each fiscal year, applications are requested through a notice published in the Federal Register.

Who may apply for this program?
Nonprofit corporations and institutions of higher education are eligible to apply for this program. Public bodies, cooperatives, for-profit business and individuals are NOT eligible. A Center can be in any area, but the individuals and business assisted must be located in an eligible rural area. Contact your local RD office for details.

How may the funds be used?
Grant and matching funds can be used for developing and operating a Rural Cooperative Development Center. Examples of technical assistance and other services the Centers provide are:

- Conducting feasibility studies.
- Developing business plans.
- Providing leadership and operational improvement training.
- Facilitating strategic planning.

A Center can be located in any area, but the individuals and business assisted must be located in an eligible rural area.

Business & Cooperative Programs
Rural Energy for America Program (REAP)

Guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or to make energy efficiency improvements.

- Funds may be used for the purchase and installation of renewable energy systems (e.g. biomass, geothermal, hydropower, wind, solar)
- Funds may also be used for the purchase, installation and construction of energy efficiency improvements (e.g. HVAC, insulation, door/windows, lighting)

What funding is available?

- Loan guarantees on loans up to 75 percent of total eligible project costs.
- Grants for up to 50 percent of total eligible project costs.
- Combined grant and loan guarantee funding up to 75% of total eligible project costs.

Telecommunications

USDA 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

Telecommunications

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.

Rural Partners Network

An alliance of federal agencies and civic partners working to expand rural prosperity through job creation, infrastructure development, and community improvement.

These collaborations are designed to:

- Provide rural communities with a “one-stop shop” of federal programs, tools, and expertise to increase access to technical assistance; and build capacity to plan and develop
- Improve delivery of federal funding in rural areas inform program leaders and policymakers about rural opportunities and priorities.

Mississippi has **three** community networks in first cohort:

- **Washington County Economic Alliance** includes the counties of Bolivar, Leflore, Sunflower and Washington;
- **Lake District Partnership** includes the counties of Grenada and Yalobusha, and now Holmes Co.;
- **North Delta Planning and Development District** Community Network including the counties of Coahoma, Quitman and Tunica.

Visit RURAL.gov to learn more about participating!

Rural Partners Network: Interagency Partners

- The White House
- U.S. Department of Agriculture
- Department of the Treasury
- U.S. Department of the Interior
- U.S. Department of Commerce's Economic Development Administration
- U.S. Department of Labor
- U.S. Department of Health and Human Services
- U.S. Department of Housing and Urban Development
- U.S. Department of Transportation
- U.S. Department of Energy
- Department of Education
- Department of Veterans Affairs
- U.S. Environmental Protection Agency
- U.S. Small Business Administration
- Appalachian Regional Commission
- Delta Regional Authority
- Denali Commission
- Northern Border Regional Commission
- Consumer Financial Protection Bureau
- Southeast Crescent Regional Commission
- Social Security Administration

- Southwest Border Regional Commission
- Federal Emergency Management Agency
- Federal Deposit Insurance Corporation

MS Area Office Contacts

Area 1 - Brookhaven Area Office
Phone: 601-833-9321 Fax: 1-844-325-7040

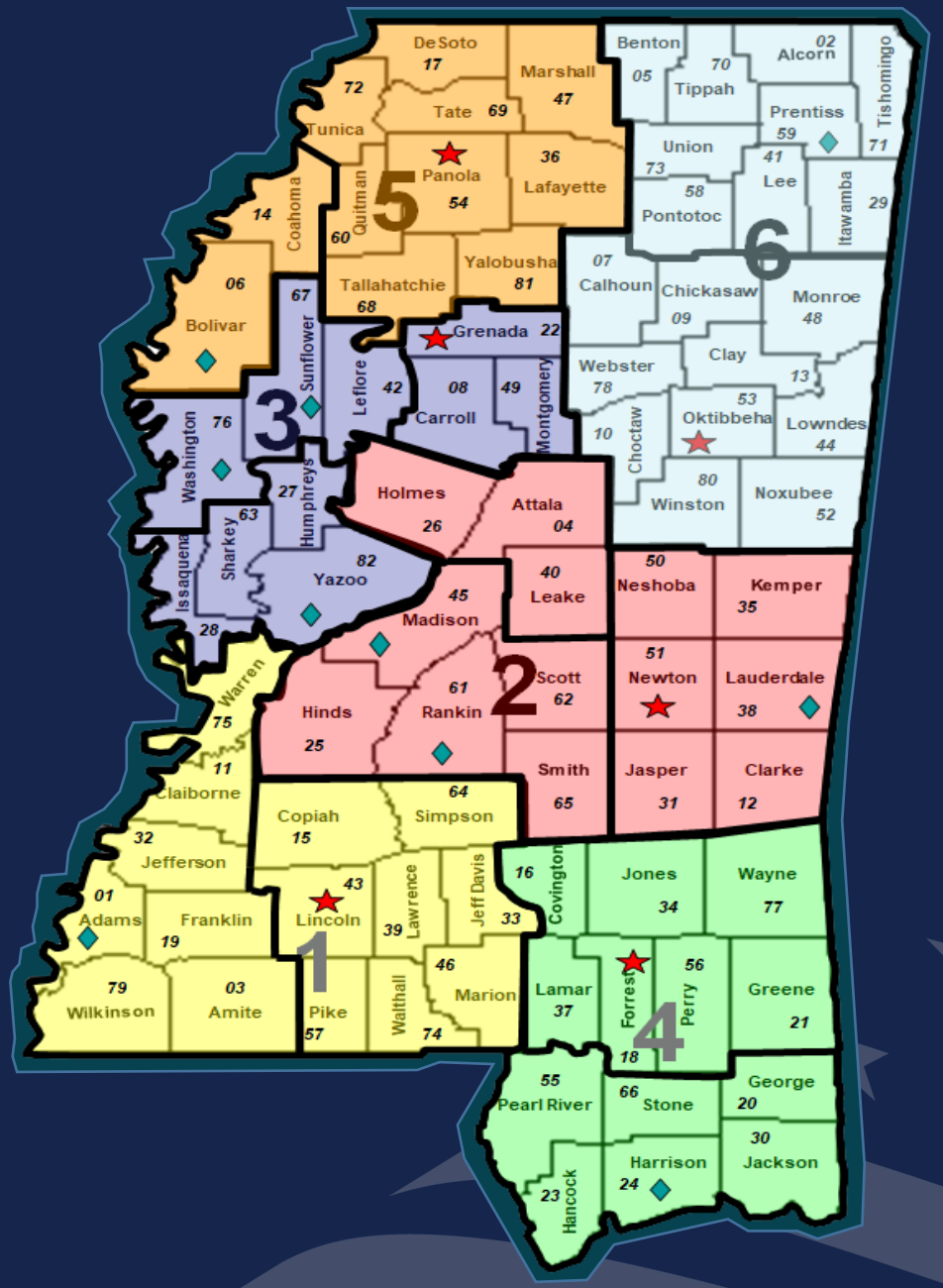
Area 2 - Decatur Area Office
Phone: 601-635-2556 Fax: 1-844-325-7045

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

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

Twitter: @rd_mississippi

USDA United States Department of Agriculture

MS FSA
Updates and News

Farm Service Agency

fsa.usda.gov

Images Courtesy of NRCS

USDA United States Department of Agriculture

Conservation/Compliance/GIS Division Staff

Demetrice Evans
Deputy of SED

Thaddeus Fairley
SED of MS FSA

Farm Service Agency

fsa.usda.gov

Conservation Reserve Program

- The 2018 Farm Bill requires that no more than 27 million acres can be enrolled in CRP
- Current enrollment in CRP is approximately 24.7 million acres
- Contracts totaling approximately 482,527 acres expired on Sept. 30, 2024

Conservation Reserve Program Batching Periods

- **Accepted on a non-competitive first-come, first-serve basis**
- **Placed in a batch process to ensure that program enrollment levels do not exceed the statutory acreage cap**
- **Approved based on upon notification by the National Office of acceptable offers.**

Forest Management Initiative

USDA offers financial assistance to producers and landowners enrolled in CRP to improve the health of their forests

MS Forest Management Initiative			
2024 FMI Total Apps	141 apps	**Cost-Share Approved**	$4,223,014.00
Paid FMI Apps	72 apps	**Cost-Share Approved**	$2,563,081.00
Current Active FMI Apps	69 apps	**Cost-Share Approved**	$1,594.854.00

CRP Authority

No new offers or offers for re-enrollment will be processed or approved after Sept. 30, 2024. If legislation is passed that will re-authorizes USDA's authority to administer CRP.

USDA United States Department of Agriculture

Emergency Forest Restoration Program (EFRP) Statewide Signup

April 15, 2024, announced that all 82 counties in Mississippi have been approved to accept applications for EFRP.

This signup period was open for enrollment from April 15th – August 15th.

Our goal in this signup and program is to address extensive private lands forest losses and damage due to severe drought and related insect infestation.

Farm Service Agency

fsa.usda.gov

USDA United States Department of Agriculture

Acreage Reporting Regarding to LFP

Beginning Program Year 2025, MS Acreage Reporting Deadline for planed rye grass has changed.

- **Native grass certified with Planting Status of Volunteer is not eligible for LFP.**

- **MS has gone to a 365-day grazing period for over-seeded rye-grass where the perennial forage is not disturbed.**

- **Ryegrass and Mixed Forage (PP21) grasses ARD is now 12/15/24**

Acreage Reporting Regarding to LFP

- Rye grass grazing period will remain the same (Dec. 1 – May 15), with a carrying capacity of 1.0 acres per animal units.

- Rye grass planted into existing perennials forage (Mixed Forage IGS PP 21) grazing period is January 1 – December 31. However, the carrying capacity has increased to 2.1 acres per animal units.

Questions

State Technical Committee

Federal Crop Insurance Program Update

Jackson, Mississippi

Roddric Bell
Regional Director
November 14, 2024

SECURING THE FUTURE OF AGRICULTURE

USDA's Risk Management Agency serves America's agricultural producers through effective, market-based risk management tools to strengthen the economic stability of agricultural producers and rural communities.

Fiscally Responsible

LOSS RATIO

10-year loss ratio

MEETS TARGET

IMPROPER PAYMENT RATE

UNDER 3%

for 8 consecutive years, one of the lowest improper payment rates in government.

COMMODITY REVIEW

Insurance rates are reviewed **FREQUENTLY AND EFFECTIVELY** using historical program experience.

PRODUCER INVESTMENTS

$43.3 BILLION

in premiums collected over the last 10 years.

Expanding America's Farm Safety Net

MORE PRODUCTS INSURED

50+

INSURANCE PRODUCTS DEVELOPED

through the 508(h) process, overseen by the Federal Crop Insurance Corporation (FCIC) Board

AVAILABLE CHOICES

134

CROPS INSURED

Up from 112 crops in 2000

604

VARIETIES INSURED

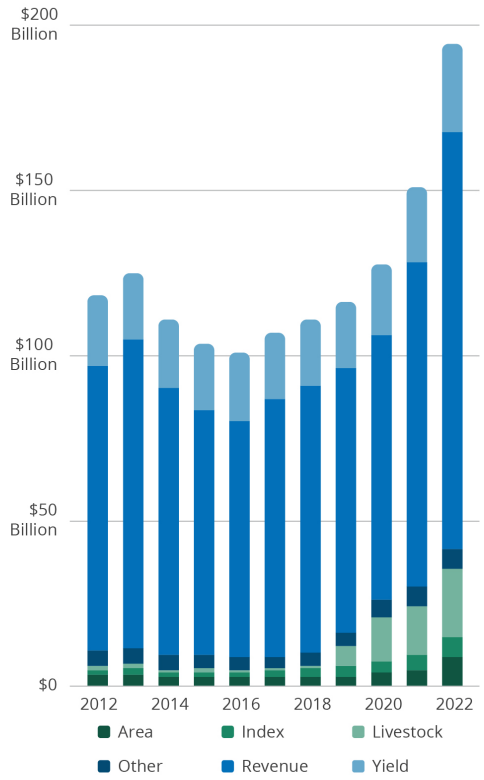
Up from 325 varieties in 2000

36

TYPES OF PLANS

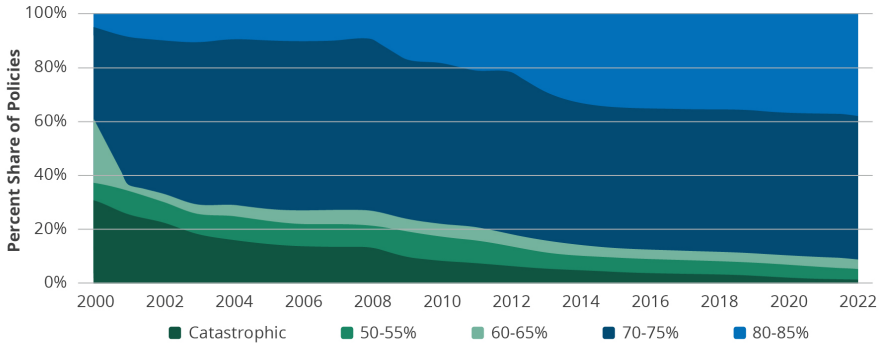
Up from 20 plans in 2012

LIABILITY BY INSURANCE PLAN



COVERAGE LEVEL

Producers have elected higher coverage levels.



Working at RMA

BEST PLACE TO WORK AT USDA

(Federal Employee Viewpoint Survey)

2020 RMA | 2021 RMA | 2022 RMA

Investing in Customer Service

WRITTEN AGREEMENTS

TURNAROUND TIMES REDUCED BY 35%

for individualized coverage applications during the pandemic, from 13.35 days to 8.74 days on average.

PUBLIC ENGAGEMENT

700,000

PUBLIC PARTICIPANTS

were engaged with in 2022 through RMA outreach efforts.

Topics

- Mississippi Crop Insurance Profile
- New Programs
  - Hurricane Insurance Protection(HIP-WI)-Tropical Storm Endorsement
    - Hurricane Francine
  - Shellfish Crop Insurance Program
- Risk Management Education
- RMA Ambassador
- Questions

2024 Mississippi Summary of Business

Commodity	Total Policies	Acres/Quantity	Total Liabilities
Soybeans	3,874	2,227,454	$1,022,026,008
Cotton	1,744	512,850	$413,291,078
Corn	1,862	662,830	$321,853,785
Rice	511	160,228	$143,503,918
Feeder Cattle	84	61,708	$120,402,600
Whole Farm Revenue Protection	44	0	$87,199,131
Swine	1	346,489	$62,129,376
Peanuts	95	24,239	$21,847,949
Fed Cattle	3	4,728	$12,040,455
Nursery (FG&C)	8	0	$11,801,048
Pasture,Rangeland,Forage	168	65,389	$9,652,352
Wheat	155	36,233	$8,047,912
Apiculture	48	23,373	$5,847,930
Pecans	13	1,747	$798,211
Blueberries	15	335	$649,770
Dry Beans	3	909	$370,818
Grain Sorghum	17	2,214	$328,131
Sesame	4	688	$126,502
Oats	3	729	$96,193
Triticale	1	237	$36,962
Grand Total	**8,653**	**4,132,380**	**$2,242,050,129**

Hurricane Insurance Protection(HIP-WI)

➢Tropical Storm Endorsement

- HIP-WI was first available for purchase for the 2020 hurricane season and covers a portion of the deductible of the underlying crop insurance policy when the county, or an adjacent one, is hit with sustained hurricane-force winds from a named hurricane based on data from the National Hurricane Center at the National Oceanic and Atmospheric Administration (NOAA).
- In 2024, RMA added the Tropical Storm Option to this endorsement for damage caused by strong weather systems not categorized as hurricanes. The option would cover named tropical storms, as reported by NOAA with maximum sustained winds exceeding 34 knots and precipitation exceeding six inches over a four-day period. Both the wind trigger and precipitation trigger must occur for an indemnity to be paid.
- The HIP-WI endorsement, including the new Tropical Storm Option, are available in select counties in Alabama, Arkansas, Connecticut, Delaware, Florida, Georgia, Louisiana, Maine, Maryland, Massachusetts, Mississippi, New Hampshire, New Jersey, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, Texas, Vermont, and Virginia.

The following parishes/counties were triggered under the HIP-WI Endorsement for Hurricane Francine.

Cyclone	State	Parish		
Francine 2024	Louisiana	Ascension*	Assumption	Iberia
		Iberville*	Jefferson*	Lafayette*
		Lafourche	Pointe Coupee*	St Charles*
		St James*	St John Baptist*	St Landry*
		St Martin	St Mary	Terrebonne
		Vermilion*		

*Adjacent Parish/County

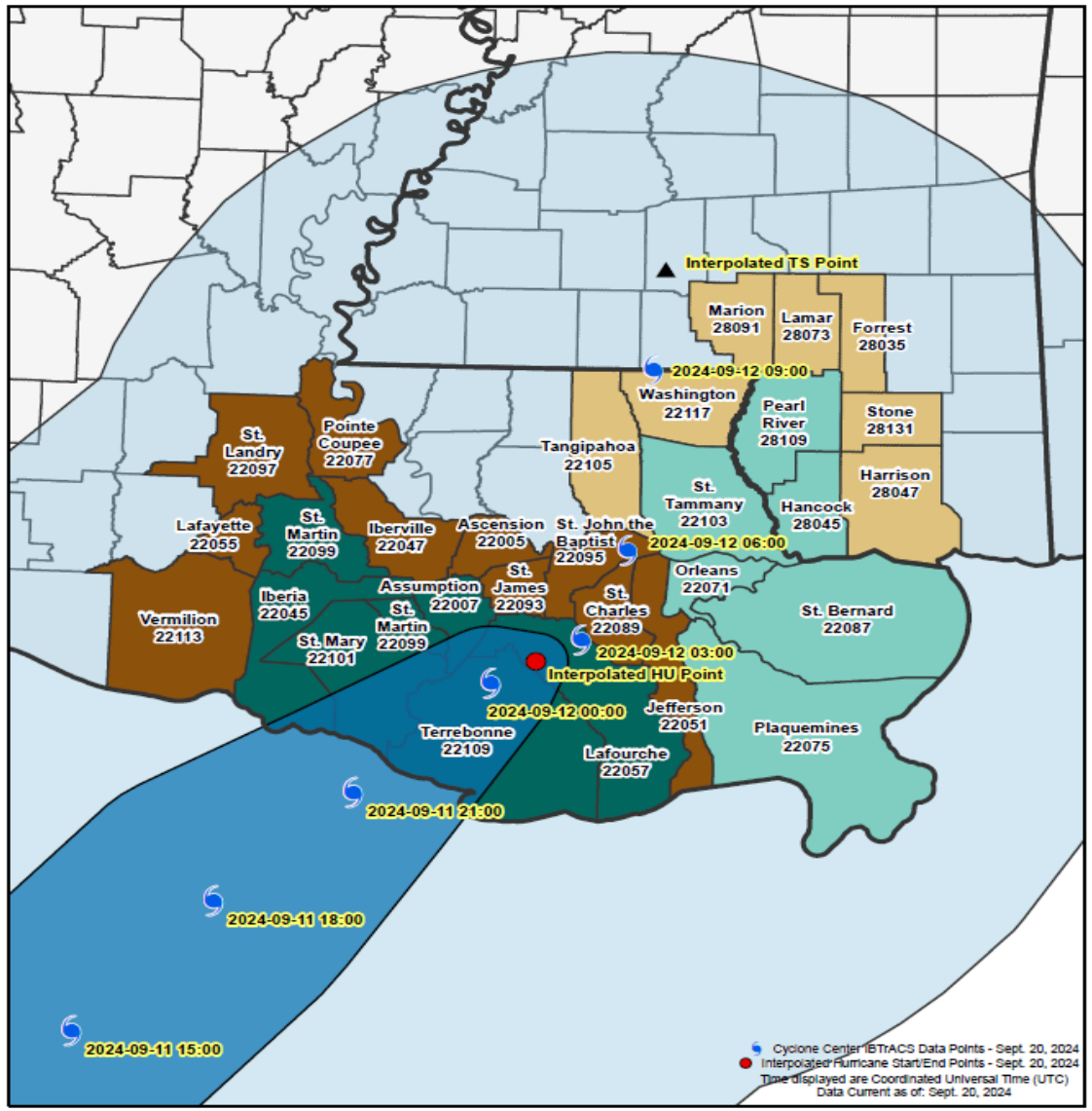
The following parishes/counties were triggered for Hurricane Francine payment under the Tropical Storm Option.

Cyclone	State	Parish/County		
Francine 2024	Louisiana	Orleans	Plaquemines	St Bernard
		St Tammany	Tangipahoa*	Washington*
	Mississippi	Forrest*	Hancock	Harrison*
		Lamar*	Marion*	Pearl River
		Stone*		

*Adjacent Parish/County

2024 Hurricane Francine - IBTrACS

Reinsurance Year 2024



Shellfish Insurance Program

- The Shellfish crop insurance program provides a yield-based product for containerized oysters commercially produced for the half-shell market. The shellfish program provides coverage against four perils:
  - Named storms (hurricanes and nor'easters)
  - Excessive heat during a low tide event
  - Freeze during a low tide event
  - Low salinity caused by excessive rainfall
- The program provides coverage for the expected production of oysters to be harvested in the current crop year. Coverage for immature oysters is not available at this time. Producers can elect to increase their insurable price above the published price election with verifiable sales records supporting a higher price election.

Shellfish County Loss Triggers for 2024 January-September

- On May 19, 2024 Harrison County, MS Triggered for Low Salinity
- Insured producers must demonstrate a loss in production below their production guarantee in order to receive an indemnity.

Risk Management Education

In 2024, RMA awarded awarding about $4.1 million to 15 organizations to educate underserved, small-scale, and organic producers on farm risk management and climate-smart farm practices. The funding from USDA's Risk Management Agency (RMA) provides assistance through its Risk Management Education (RME) partnerships for organizations, such as nonprofits and land grant universities, to develop training and resources for producers about risk management options. In 2023, RMA awarded $6.5 million to 22 organizations to educate historically underserved producers, small-scale farmers and others on farm risk management and climate-smart farm practices.

- Projects will cover all 50 states, Puerto Rico, and the Virgin Islands

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 is being implemented by 4 partners. Alcorn State University, Intertribal Agriculture Council, Annie's Project and Rural Coalition are partners for this initiative.

Other Education Initiatives

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 project features a collaboration with the USDA Risk Management Agency (RMA) and the Southern Risk Management Education Center(SRMEC).

RMA Ambassador

- Dr. Cindy Ayers Elliot- Foot Print Farms

Questions?

- Roddric Bell

roddric.bell@usda.gov

601-965-4771

601-331-4228

www.rma.usda.gov

FOREST SERVICE
U S
DEPARTMENT OF AGRICULTURE
Shannon Kelardy, Forest Super

MISSISSIPPI STATE UNIVERSITY EXTENSION

What's Happening at NCAAR?

MISSISSIPPI STATE UNIVERSITY
MS AGRICULTURAL AND FORESTRY EXPERIMENT STATION

Drew M. Gholson

USDA NRCS

Mississippi State technical Committee Meeting

November 14, 2024

MISSISSIPPI STATE UNIVERSITY

NCAAR
NATIONAL CENTER FOR ALLUVIAL AQUIFER RESEARCH

What's Happening at NCAAR?

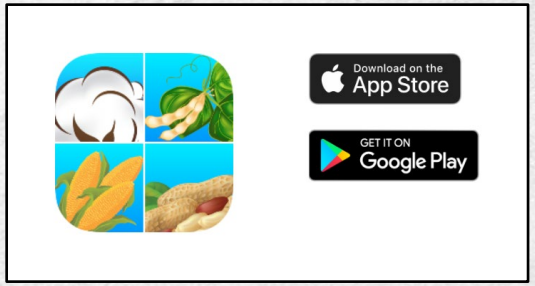
Our Approach

- **Extension & Outreach**:
  - Delivering practical tools and techniques directly to producers to promote water-use efficiency.
  - Hosting workshops, field days, and demonstrations to support adoption of irrigation practices.
- **Research & Innovation**:
  - Evaluating emerging technologies
  - Exploring sustainable irrigation techniques that benefit both **farm productivity** and water **conservation**.

Research at NCAAR

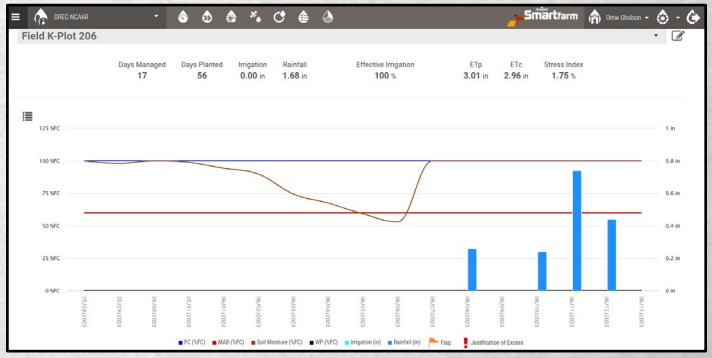
Evaluating irrigation scheduling methods and telemetry services on:

- Crop Yield
- Irrigation Frequency
- Irrigation Water Use Efficiency



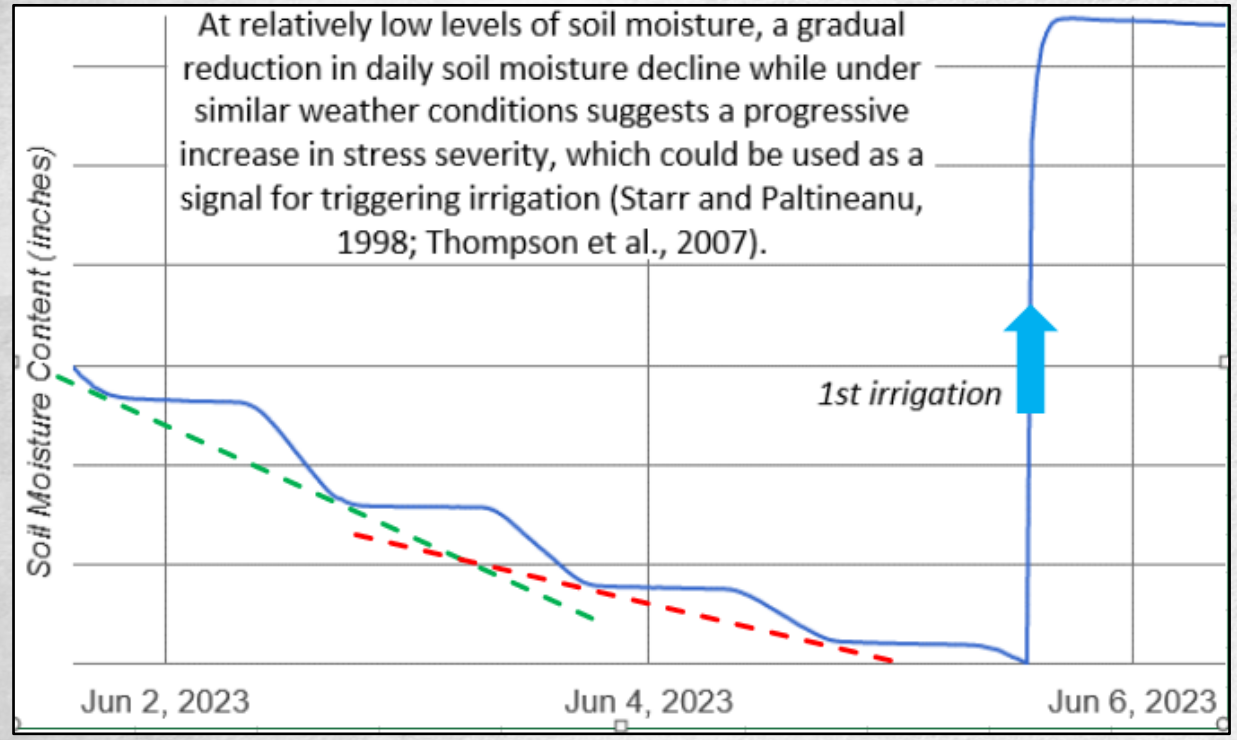
Goanna Ag

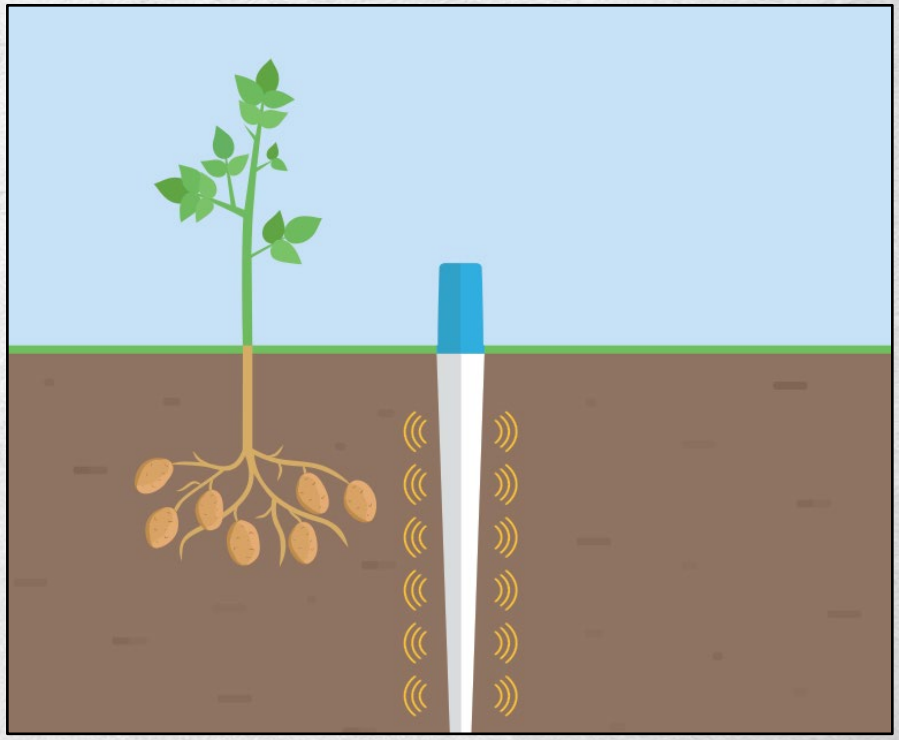
IRROMETER®



Research at NCAAR

Scheduling furrow irrigation using Sentek Drill & Drop probes





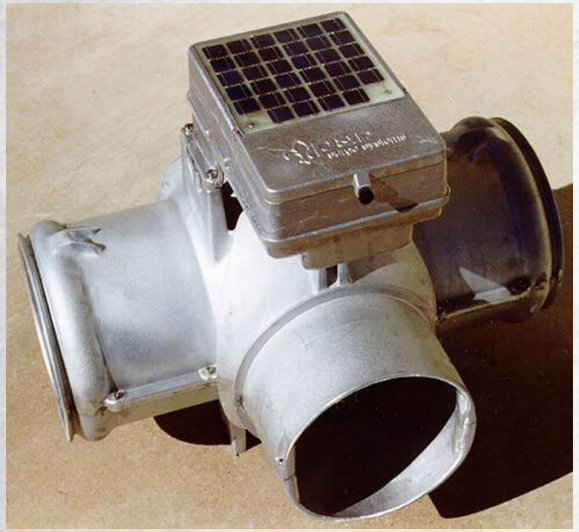
Research at NCAAR

Wide-space furrow irrigation in vertisols (Heavy clay soils)

Research at NCAAR

Increasing furrow infiltration in non-subsoiled loam soils through:

Surge Irrigation



Tillage and Residue Management

Soil Amendments

Biochar

Polyacrylamide (PAM)

Research at NCAAR

Conservation and alternative agriculture practices

Cropping systems

Cover cropping

Double cropping

Testing new cover crops

Evaluation of: Agronomic performance, Soil quality (e.g. soil organic matter), Water use efficiency, Water infiltration and retention

Research at NCAAR

Conservation and alternative agriculture practices

Soil management
No-tillage

Evaluation of: Agronomic performance of crops, Soil quality (e.g. structure), Water infiltration & retention

Nutrient management
Row rice

Evaluation of: Crop nutrient use efficiency, Nutrient losses, Water-nutrient interactions

Research at NCAAR

- Remote sensing to quantify abiotic stresses in crops
- Leading Inflation Reduction Act Methane emissions monitoring for MS Delta – Eddy Covariance and chamber measurements
- Impact of multi-use cover crops on infiltration and runoff quantity and quality
- Groundwater modeling to understand impact of current and proposed practices

On-farm validation of cover cropping as a climate-smart agricultural practice in the Mississippi Delta

Objectives:

- Leveraging producer networks to identify opportunities for and challenges with cover crop and climate-smart agricultural practice adoption specific to the Mississippi Delta.
- Increase producer engagement through on-farm research efforts.
- Increase producer awareness and knowledge of climate impact, co-benefits and tradeoffs.

Research at NCAAR

Economic Sustainability of Irrigation

- **Profitable** farming that **conserves groundwater** ($/ac > bu/ac)
- Economics of:
  - Double-cropping (more $/ac/year
  - Water conservation practices (less GW/ac, more $/ac)
  - Practices that improve irrigation performance
  - Capturing, storing, and re-using runoff in irrigation
- Effects of investments in irrigation infrastructure on land values
- Effects of aquifer depletion on land values
- Effects of high temperatures on unnecessary irrigation decisions
- Determinants of producer practice adoption choices and their timing
- Economically optimal irrigation termination decisions, energy choice and irrigation investment decisions.

What is Mississippi Master Irrigator?

A 24-hour formal education course designed to educate producers on topics such as:

- Irrigation Water Management Practices (IWM)
- Soil Water Dynamics
- Agronomics
- Irrigation Scheduling
- Irrigation Systems and Equipment Maintenance
- Economics of Irrigated Agriculture
- Policy and Management

How is the course offered?

- The course is designed as a hybrid system with online modules and in-person training/demonstration activities
- Enrollment is currently ongoing, and participants have until January 31, 2025, to sign-up
- In-person meetings will take place on February 12th and 13th at the Delta Research and Extension Center in Stoneville, MS

Course Delivery	Hours
Online Modules (via Canvas) due by Jan. 31, 2025	8
In-person training (Feb. 12th)	8
In-person training (Feb. 13th)	8
Total	24

Thank you!

Drew Gholson
Drew.gholson@msstate.edu
Cell: 979-255-7018

Current ARS Conservation Research in Mississippi
November 2024

Jason Taylor, Research Ecologist
National Sedimentation Laboratory
USDA ARS, Oxford, MS

USDA ARS Scientists

National Sedimentation Laboratory Oxford, MS

- Ron Bingner
- Lucas Heintzman
- Frank Johnson
- Eddy Langendoen
- Richard Lizotte
- Martin Locke
- Matt Moore
- Andy O'Reilly
- Jason Taylor
- Rob Wells
- Lindsey Witthaus
- Daniel Wren

Sustainable Water Management Unit (SWMRU), Stoneville, MS

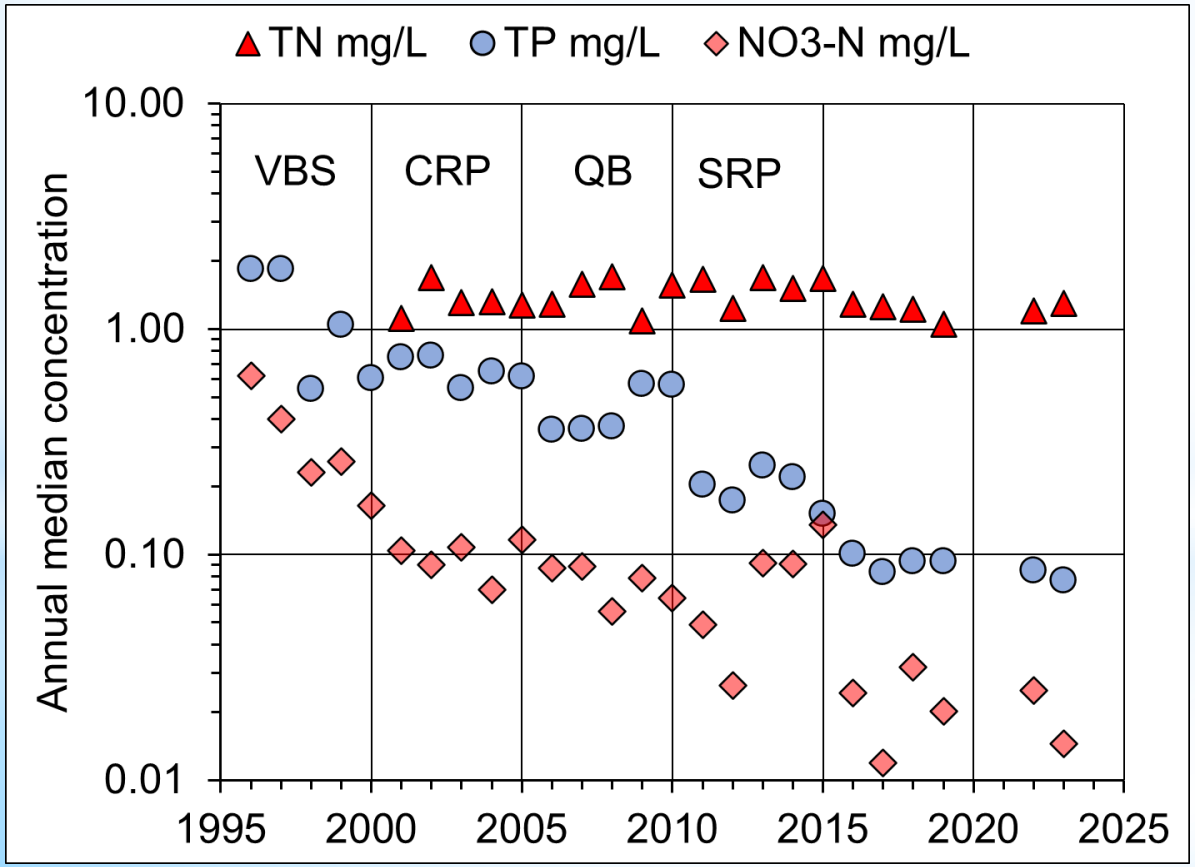
- Chris Delhom
- Mahesh Maskey
- Amanda Nelson
- Zachary Simpson

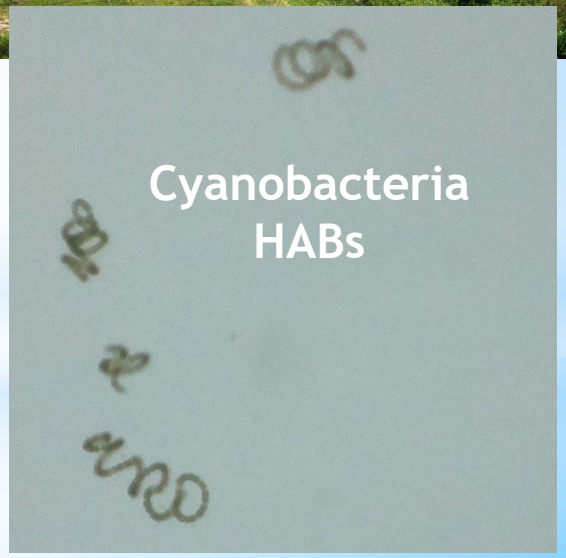
Long-Term Agroecosystem Research (LTAR)

- 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, Johnson, 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, Locke, Moore, Taylor, Heintzman, and Witthaus

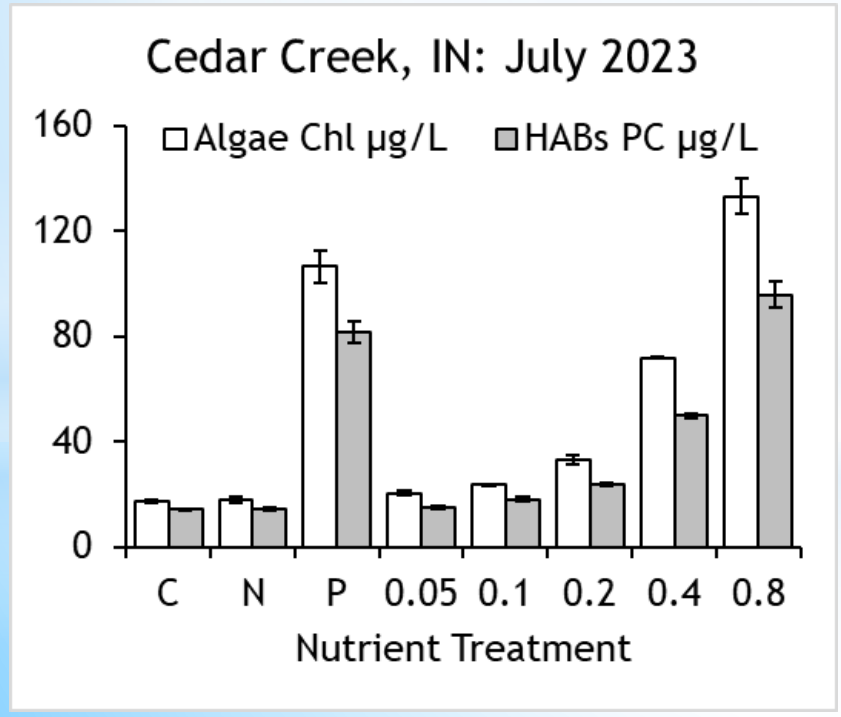


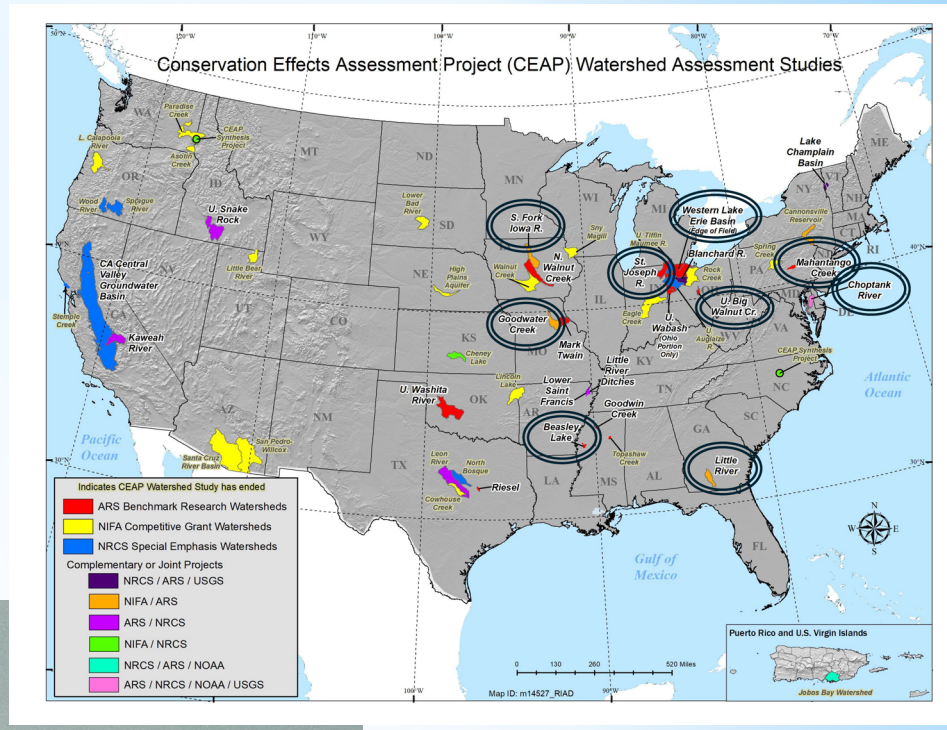


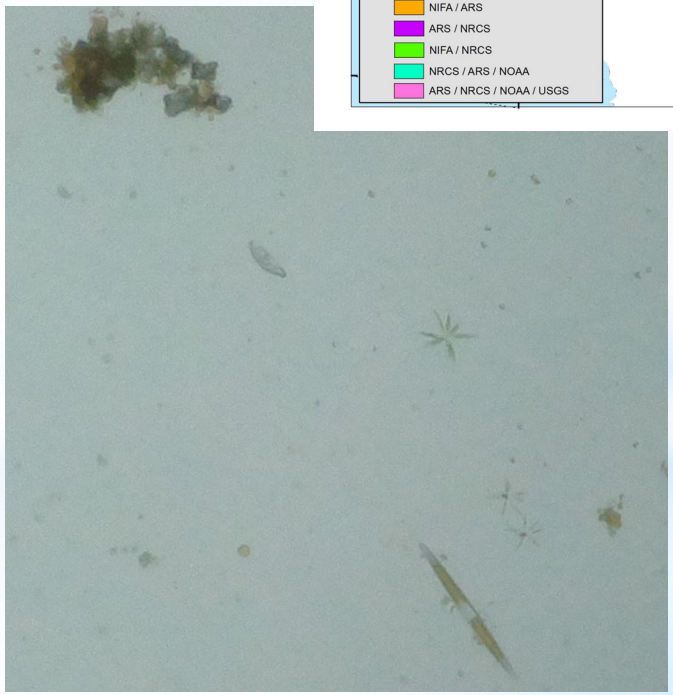
Locke Nov 2024

CEAP Algae Cross-Site Project

Algal nutrient bioassays determine nutrient limitation and target concentrations for Agricultural Best Management Practices to limit eutrophication and harmful algal blooms. USDA ARS: Lizotte, Baffaut, Buda, Hapeman, Malone, McCarty, Pisani, Smiley, and Williams





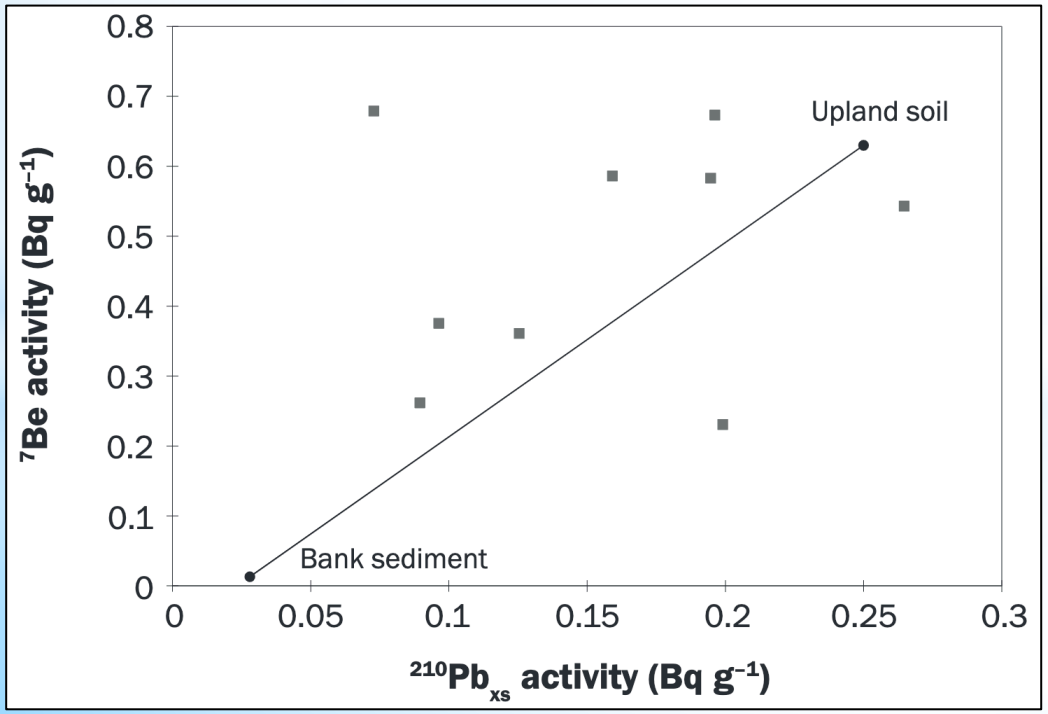


Locke Nov 2024

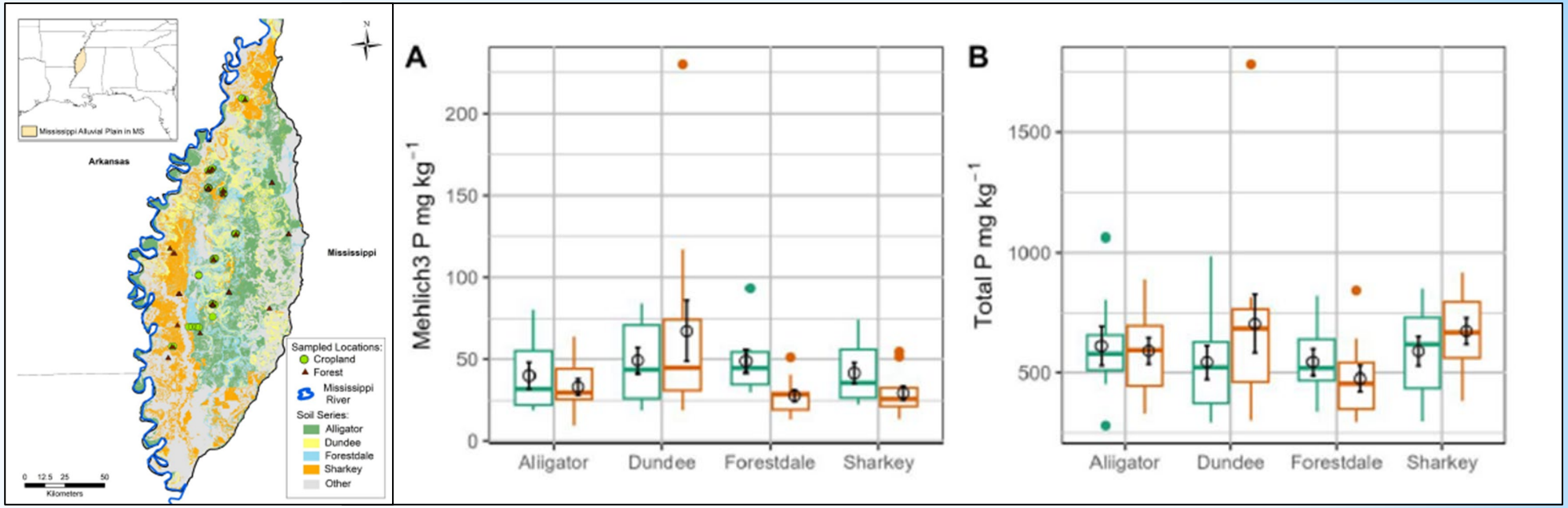
Chl = Chlorophyll *a* (algae); PC = Phycocyanin (cyanobacteria)

CEAP Legacy Sediment

- **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



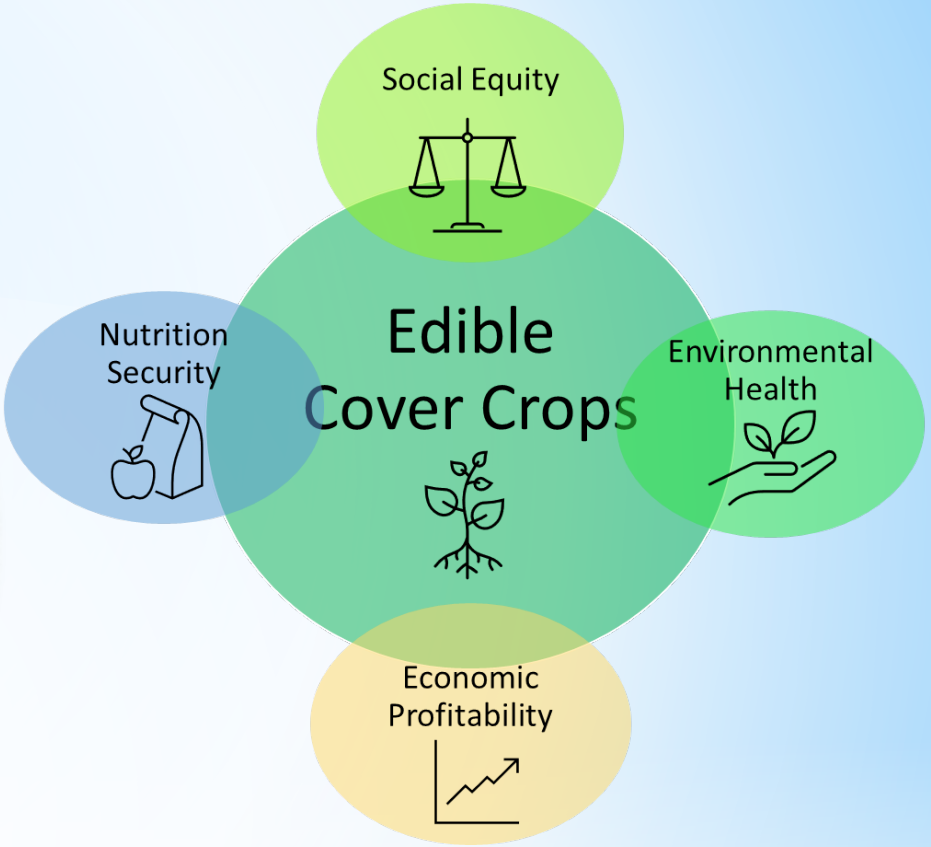
CEAP Legacy Phosphorus



- **Soil characterization to quantify legacy P pools and potential sources**
- **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

Edible Cover Crop Plot Experiment



- **Proof-of-concept study of growing edible greens as cover crops**
- **Measuring benefits: soil health, crop productivity, greenhouse gas emissions**
- **Focus groups with producers and community leaders to discuss feasibility**

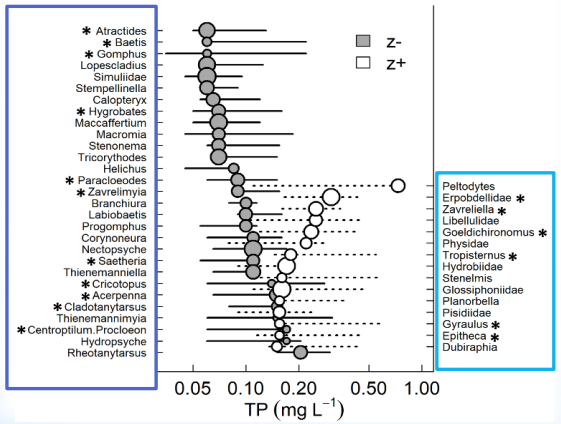
ARS NSL: Witthaus, Moore, Johnson, Heinzman and Locke; ARS: Thomson (Epidemiologist)

New Biological Tools for Monitoring Water Quality Improvements in Ag. Streams

NSL-ARS, Taylor with USGS and MDEQ

Long-Term Dataset (n=99)

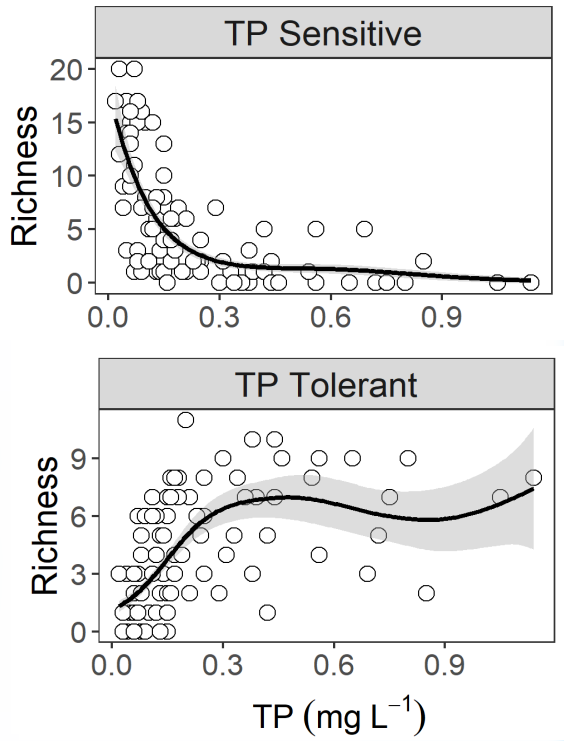
TITAN



Tolerant Taxa List

Intolerant Taxa List

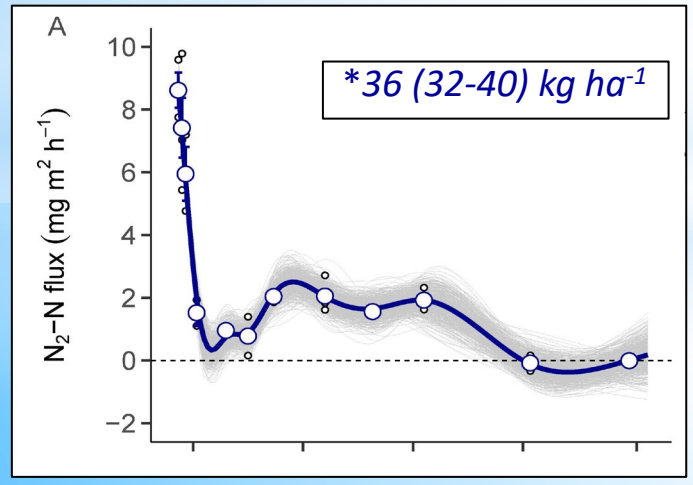
Metrics

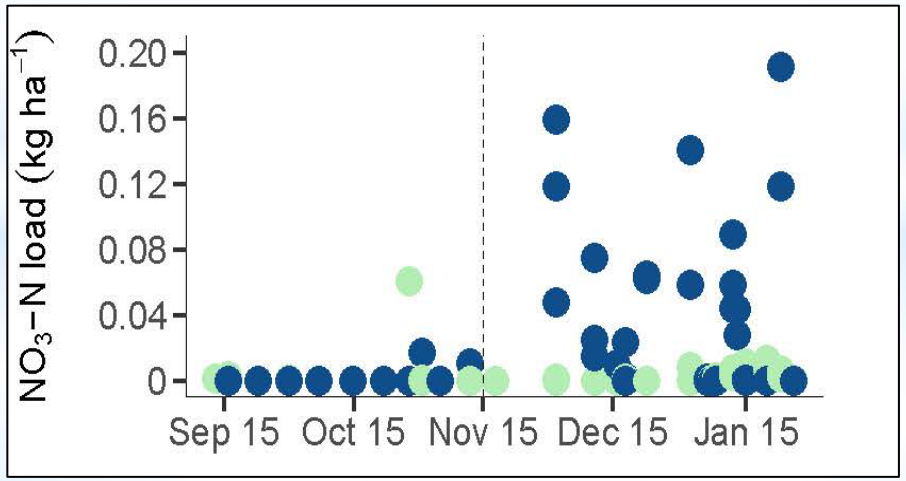


Soil, water and wildlife conservation

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 Nov 2024

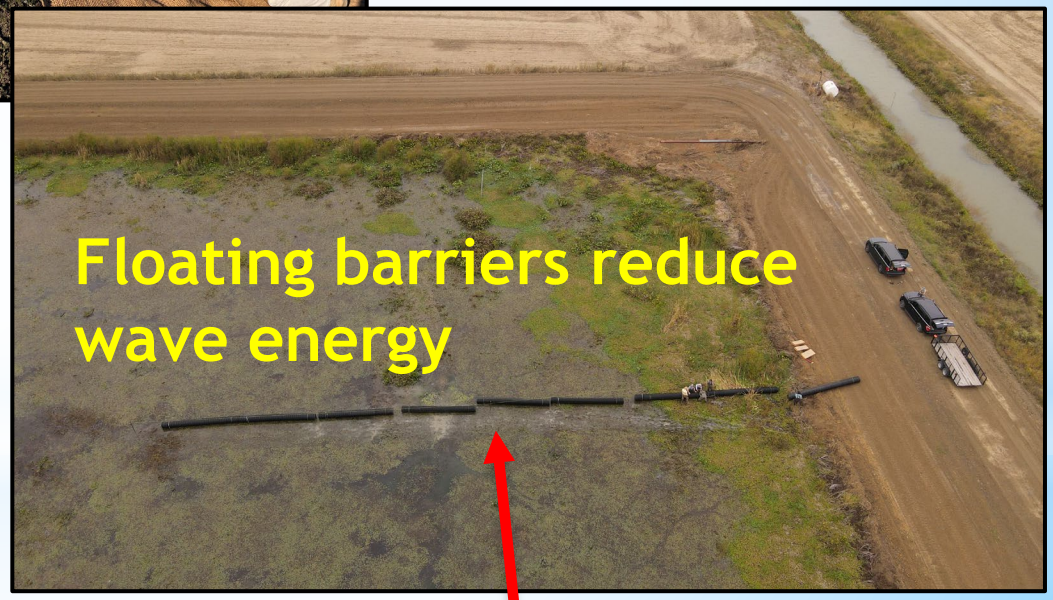
Technology to mitigate crop water stress, runoff and infiltration, nutrient mobility, and GHG emissions

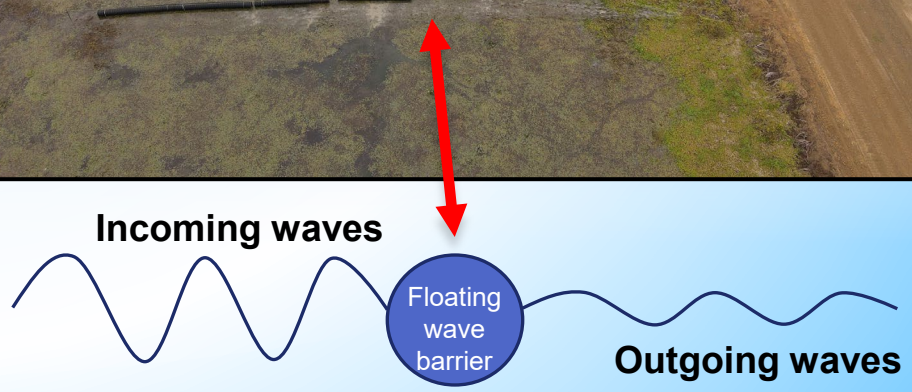
- Remote sensing to quantify abiotic stresses in crops (Delhom, Nelson)
- Leading Inflation Reduction Act Methane emissions monitoring for MS Delta – Eddy Covariance and chamber measurements (Delhom)
- Mobilization of nutrients from soils to water from repeated furrow irrigation (Simpson)
- Impact of multi-use cover crops on infiltration and runoff quantity and quality (Nelson)
- Groundwater modeling to understand impact of current and proposed practices (Maskey)

Irrigation technology and water storage

- Tailwater recovery systems to reduce water use and downstream nutrient load (Nelson)
- Improving furrow irrigation efficiency on irregularly shaped fields (Nelson)
- Irrigation automation for efficiency (Delhom)

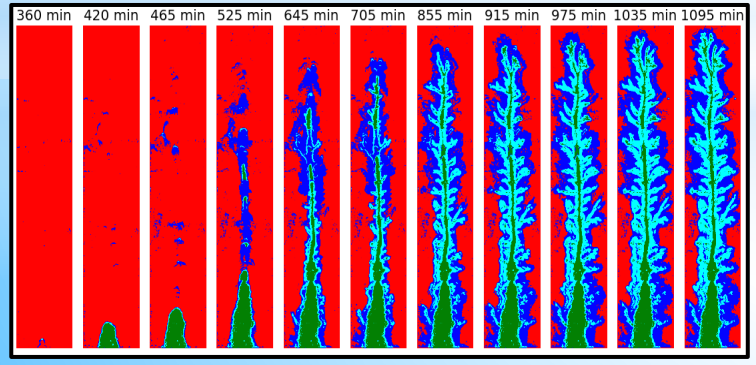
Irrigation reservoir levee erosion and protection research (Wren)





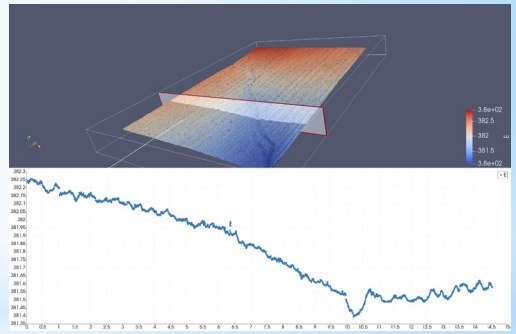
From the laboratory …

raindrop → sheet → rill → gully



CEAP Ephemeral Gully Project: How can we assess, quantify, and predict formation of ephemeral gullies? (NSL: Wells, Bingner)

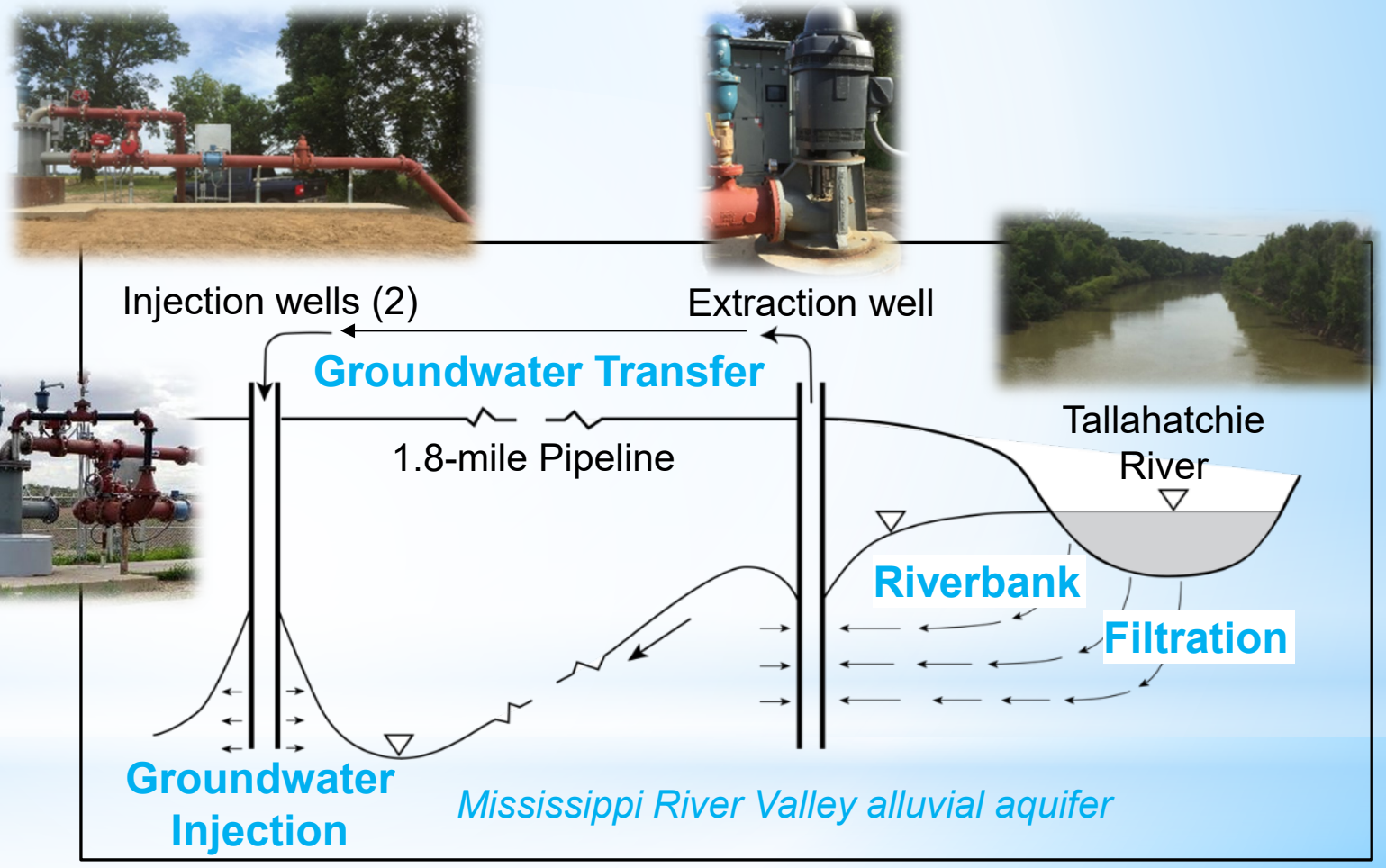
… to the field, gullies are identified, monitored, evaluated, and modeled,



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

Groundwater Transfer and Injection Pilot project

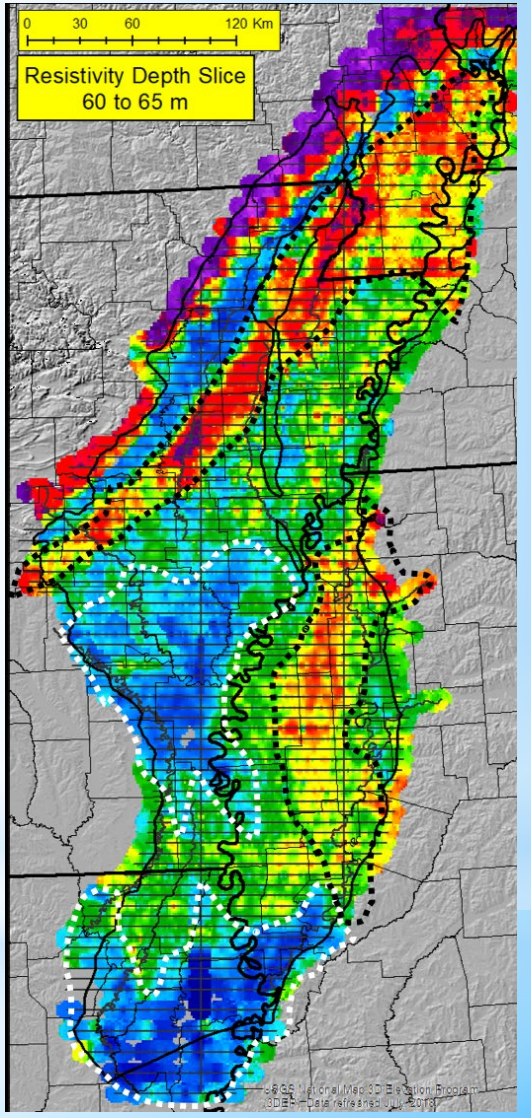
- Can groundwater injection reverse regional aquifer declines? NSL ARS: O'Reilly, Wren, Locke et al.
- Extract groundwater of improved quality via riverbank filtration, transfer, and inject water in area of groundwater depletion
- At conclusion of two injection periods, findings indicate:
  - Groundwater levels increased; no negative impact on water quality
  - Tested technology is "fit for purpose" per engineering consulting firm's review
  - Potential phase 2 expansion under discussion



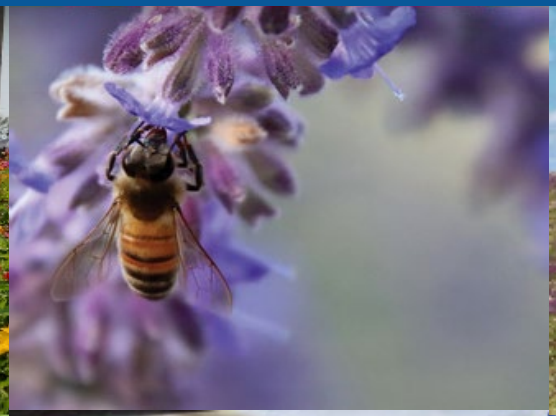
Integrated Water Management Modeling Strategies

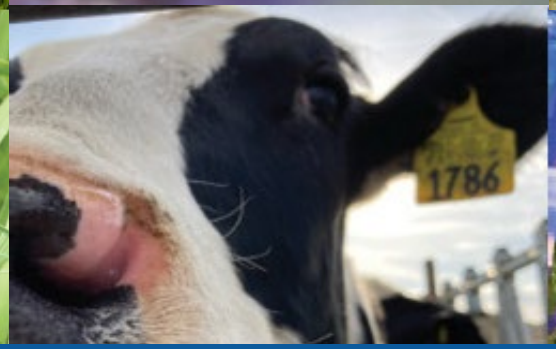
How can we manage surface and subsurface water resources as part of a regional water management strategy? NSL ARS: Ron Bingner and Andy O'Reilly

- 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)



National Association of Conservation Districts





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www.nacdnet.org

What does NACD do?

Advocate for conservation districts with a unified voice

Communicate the value of conservation districts

Educate and develop conservation leaders

Provide **grants and services** to conservation districts

Our Brand of Conservation

- Locally led
- Voluntary
- Incentive-based
- Nonpartisan
- Conservation for all lands and all people

Your NACD Leadership

President
Kim LaFleur
Massachusetts

First Vice-President
Gary Blair
Mississippi

Second Vice-President
Bill Simshauser
Kansas

Secretary-Treasurer
Mark Masters
Georgia

Immediate Past President
Michael Crowder
Washington

Chief Executive Officer
Jeremy Peters
Washington, D.C.

Advocacy

and what it means for you

- NACD speaks on behalf of conservation districts with *one voice*
- NACD's Legislative Committee and Government Affairs Team develops and supports policy requests
- NACD’s Spring Fly-In provides an opportunity for members to meet with their legislators on Capitol Hill

What's up in Washington?

- **Farm Bill**
  - Stalled. Expired on September 30.
  - The Republican and Democratic leaders of the congressional agriculture committees have called to integrate all remaining IRA conservation investments into the conservation title of the farm bill.

- **FY25 Appropriations**
  - Congress passed a CR to extend current levels of federal funding until December 20
  - NACD leads the conservation community in calling on Congress to increase funding for NRCS Conservation Operations in FY 2025

Youth Education & Outreach

- 2024 Stewardship theme: “May the Forest Be With You Always”
- 2025 Stewardship theme: Home Is Where the Habitat Is”
- Photo and poster contests
- NACD Education Hub is a one-stop-shop for K-8 materials

Scan for the Education Hub

Leadership Development

NACD invests in developing conservation leaders

- NACD Board of Directors provides opportunities to work on a national scale
- In-person educational and training opportunities at Annual and Summer Meetings

National Conservation Foundation (NCF)

Next Generation Leadership Institute

Agriculture Future of America (AFA) + NACD

Sustainability Institute

Outreach & Technical Assistance Grants

Bring in new people

Involve new and historically underserved producers in conservation

Build Resilience

Improve economic and environmental resilience in rural and urban communities

Address Issues

Food security, heat equity, clean water, and more

Learn more here

Urban and Community Conservation Grants

Learn more here

Goal

Provide urban technical assistance and small-scale conservation in both urban and rural areas

Eligibility

Conservation districts, state associations and agencies, tribal organizations, RC&Ds

Friends of NACD District Grants Program

Mission

Conduct new activities or test novel approaches to district operations

Eligibility

Member conservation districts

Funding

Up to $2,500

Learn more

Perimeter Fencing for Feral Swine Grant Program

Goal

Protect agricultural operations, natural resources, and native ecosystems

Eligibility

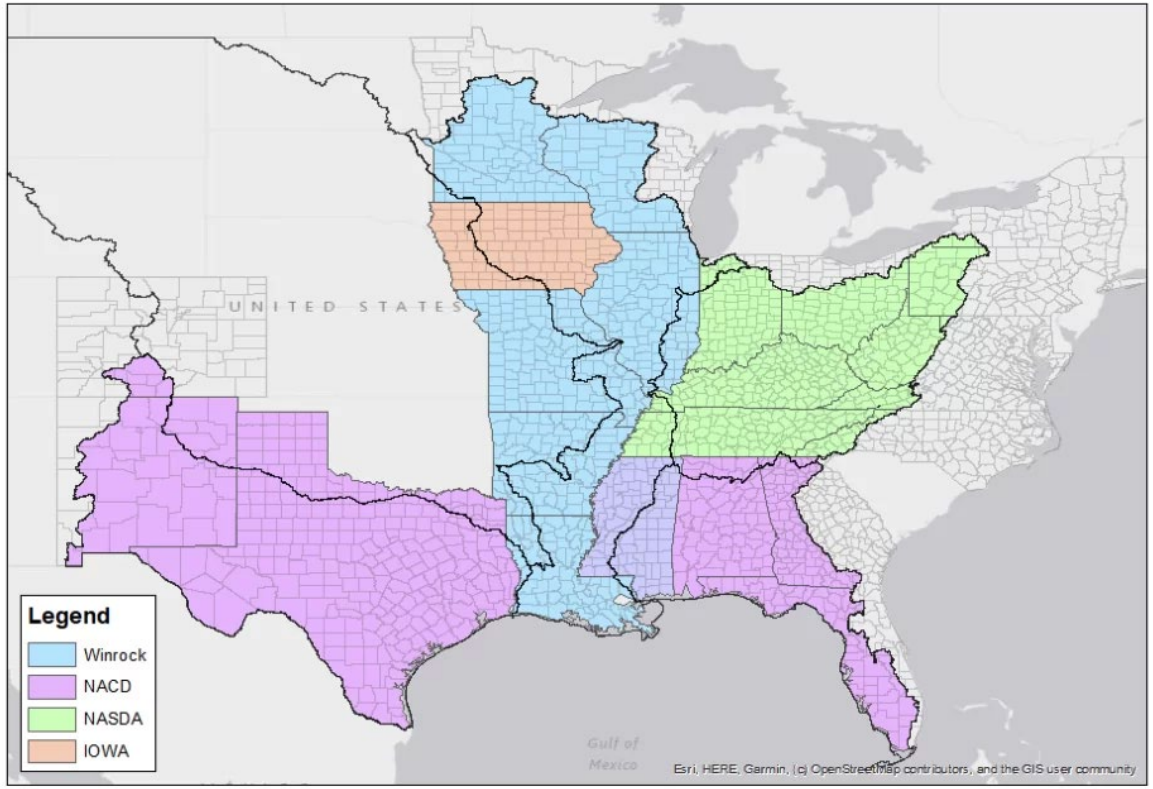
Conservation districts, state and territory associations and agencies, RC&DCs, Indian Tribal Governments, intertribal consortia

Learn more

Funding

$7.5 million in cost-share available for technical and financial assistance to install or repair perimeter fencing to restrict feral swine access and impacts

Historically Underserved Farmer-to-Farmer Outreach Grant Program



Funding

Awarding up to **$2.7 million** for outreach and projects that **mitigate hypoxic conditions** in the **Gulf of Mexico**.

Learn more

Climate-Smart Commodities Grant Program

Goal

Foster private-public partnerships, implement climate-smart practices, support participation in markets

Eligibility

Public and private entities, must involve conservation districts

Funding

$80 million for outreach, technical, financial, and marketing assistance

Learn more

Communications & Publications

stay informed

Sign up

Stories for and by you

- Weekly eResource
- Quarterly *The Resource*
- Monthly Forestry Notes
- Weekly news, Conservation Clips

2025 NACD Annual Meeting

February 8-12, 2025

Hyatt Regency

Salt Lake City, UT

Scan to register online

Get Involved

We can get more conservation on the ground together!

- Subscribe
- Attend a meeting
- Apply for grants
- Share your input
- Share your stories
- Grow your membership

Contact Info

Gary Blair

President Elect

P: 602-757-3345

Gary-Blair@nacdnet.org

National Association of Conservation Districts

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www.nacdnet.org

USDA

United States Department of Agriculture

USDA's Contributions to Gulf Restoration
In Response to the Deepwater Horizon Oil Spill

Natural Resources Conservation Service

nrcs.usda.gov/

On April 20, 2010, an explosion occurred on the *Deepwater Horizon* drilling platform in the Gulf of Mexico.

The explosion, which killed 11 men, caused the rig to sink and started a catastrophic oil leak from the well.

Before it was capped three months later, approximately 134 million gallons of oil had spilled into the Gulf, the largest offshore oil spill in U.S. history.

- Executive Order 13554 was issued on **October 5, 2010**, established the Gulf Coast Ecosystem Restoration Task Force to implement and facilitate the restoration process.

- The Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act) was signed into law in **July 2012**: established a Gulf Coast Restoration Trust Fund.

- On **April 4, 2016**, the court approved an $8.8 billion settlement with BP for natural resource injuries stemming from the spill.

The belief that infinite environmental gains can be achieved through the implementation of conservation measures to address natural resource concerns in the Gulf Coast Region.

USDA
United States Department of Agriculture

Natural
Resources
Conservation
Service

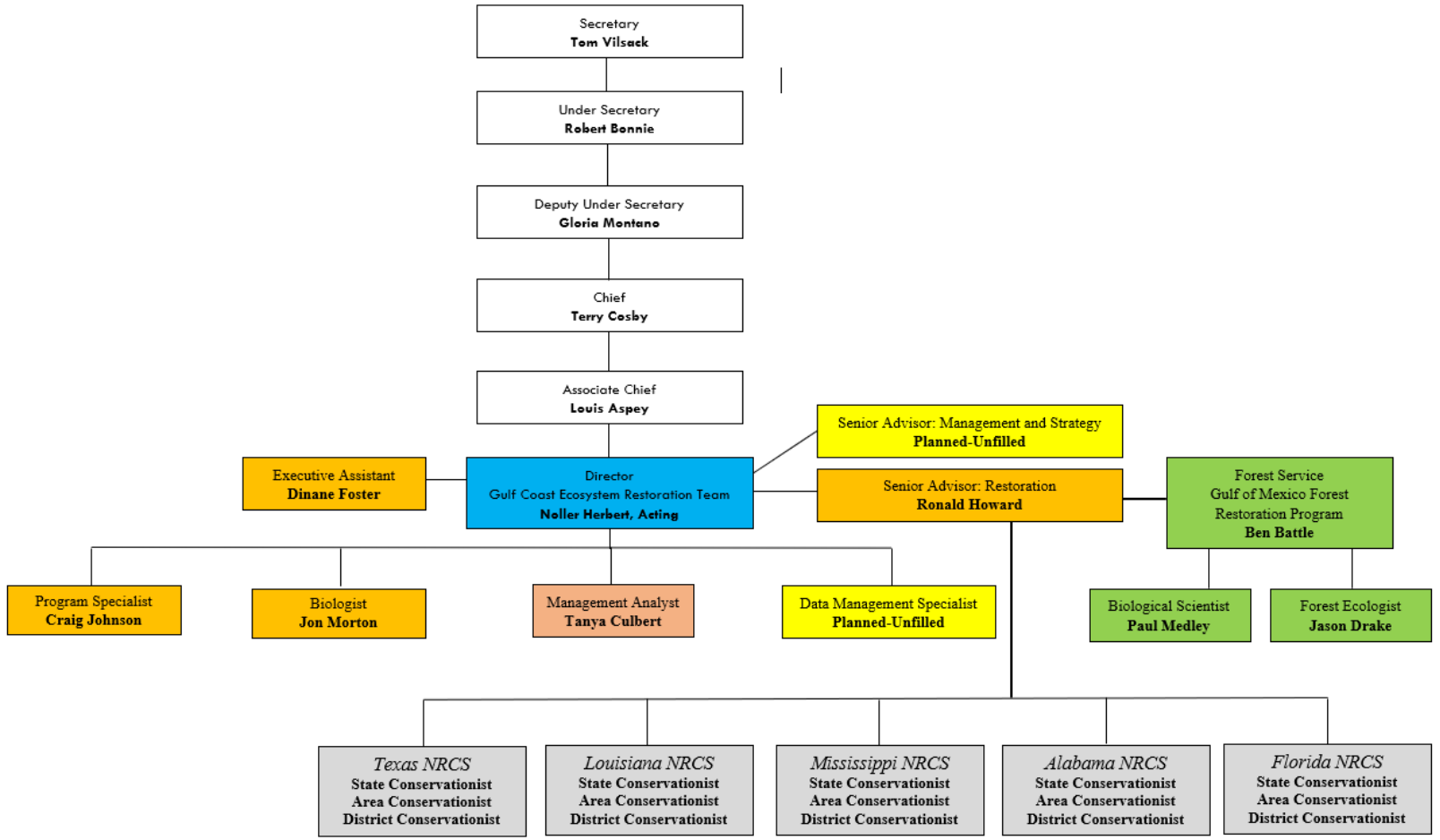
nrcs.usda.gov/

USDA
United States Department of Agriculture
Gulf Coast
Ecosystem Restoration Team
Natural Resources Conservation Service

Natural Resources Conservation Service

nrcs.usda.gov/

UNITED STATES DEPARTMENT OF AGRICULTURE
GULF RESTORATION



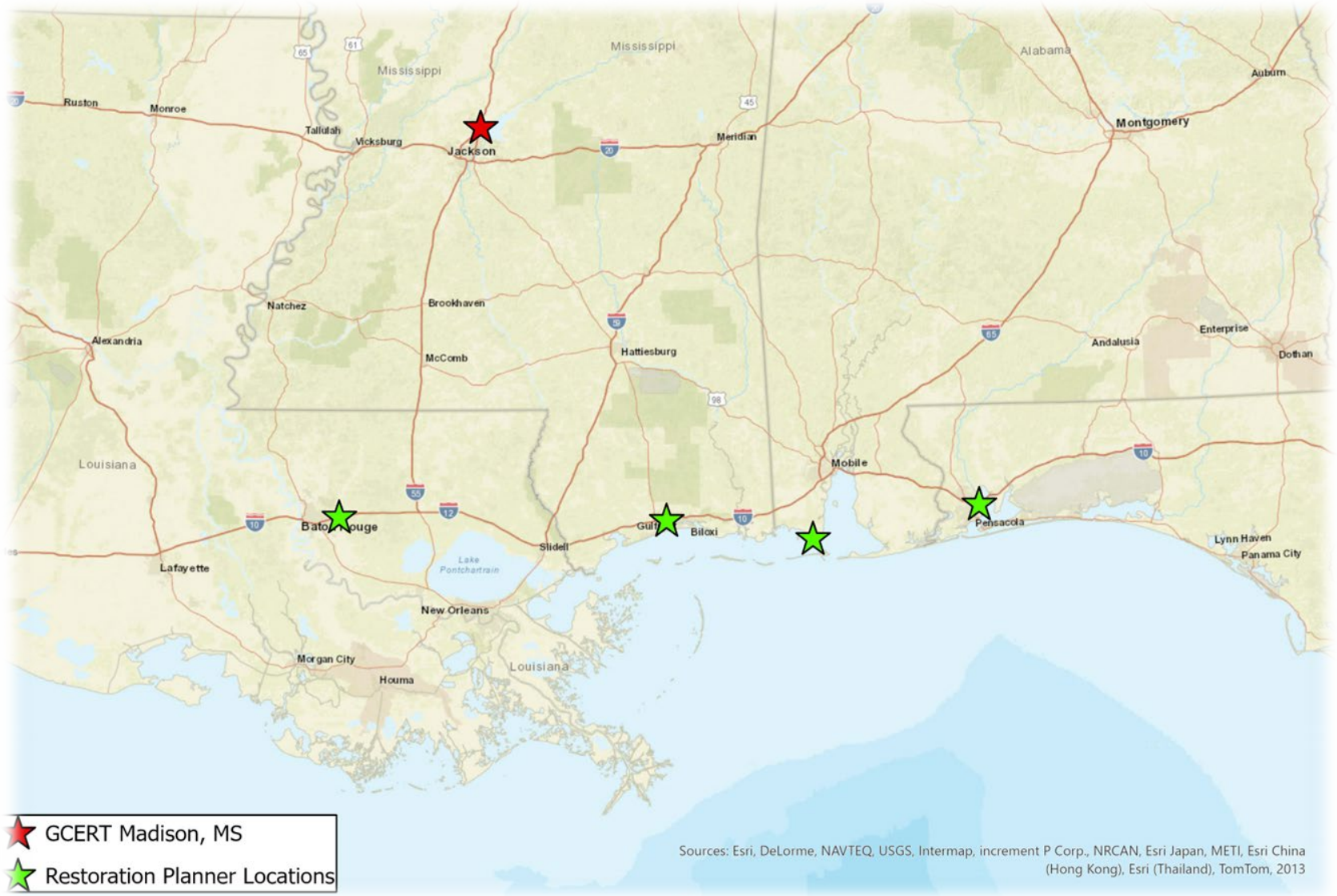
Legend
On Board – Gulf Coast Ecosystem Restoration Team (GCERT – Madison, MS)
Vacant - GCERT
Work Detail - GCERT
Forest Service – United States Forest Service
Planned-Unfilled - GCERT
State Staff – Natural Resources Conservation Service

Natural Resources Conservation Service
nrcs.usda.gov/

FPS

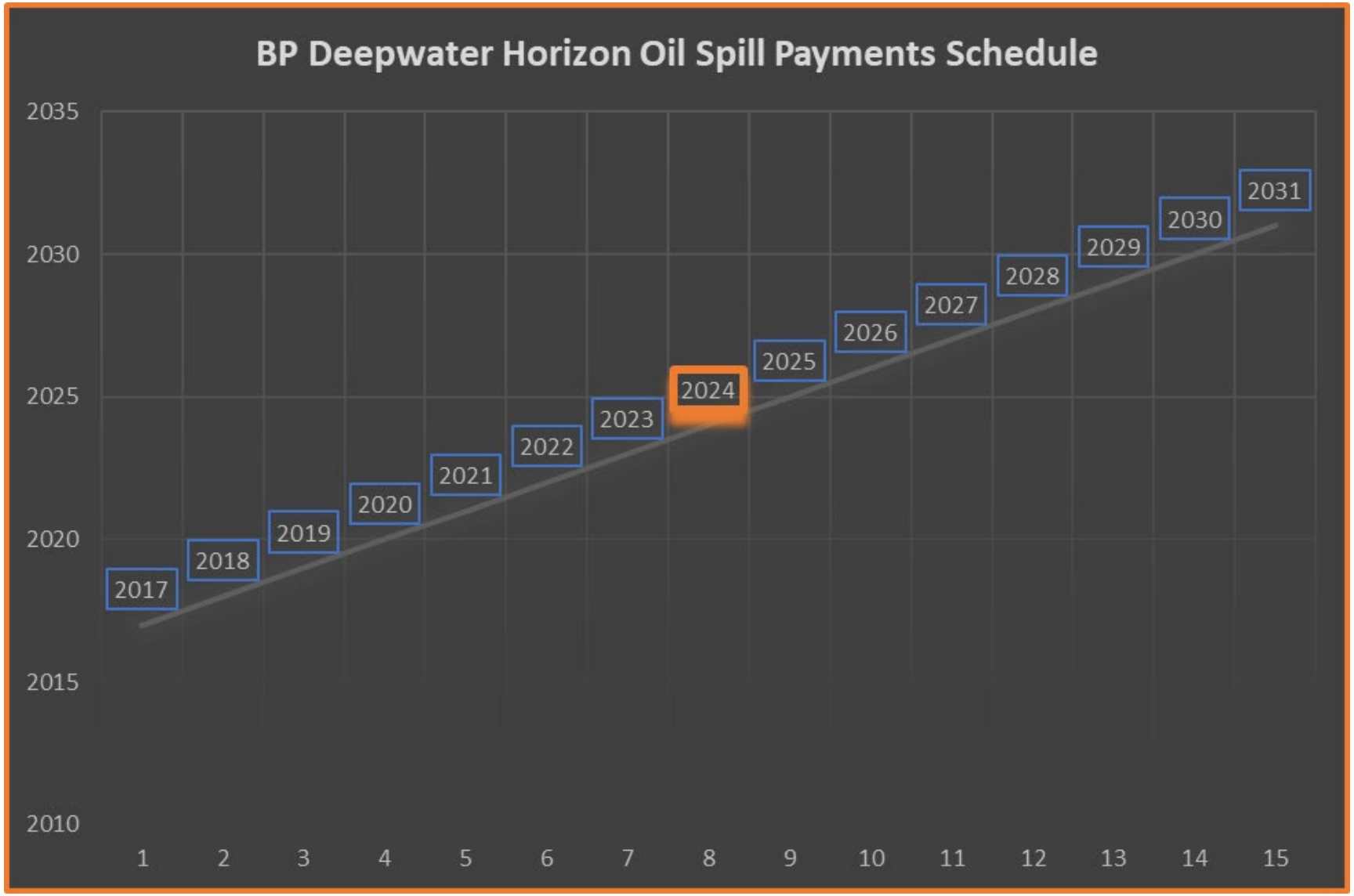
Natural
Resources
Conservation
Service

nrcs.usda.gov/


Mississippi
Mississippi
Alabama
Auburn
Ruston
Monroe
Tallulah
Vicksburg
Jackson
Meridian
Montgomery
Natchez
Brookhaven
Alexandria
McComb
Hattiesburg
Andalusia
Enterprise
Dothan
Louisiana
Mobile
Baton Rouge
Gulfport
Biloxi
Pensacola
Slidell
Lake Pontchartrain
Lafayette
Lynn Haven
Panama City
New Orleans
Morgan City
Houma
Louisiana
GCERT Madison, MS
Restoration Planner Locations
Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013

Gulf Restoration Funding Streams

- Natural Resource Damage Assessment (NRDA)
- Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act)
- Gulf Environmental Benefit Fund (GEBF): National Fish and Wildlife Foundation (NFWF) Partnership


BP Deepwater Horizon Oil Spill Payments Schedule
2035
2030
2025
2020
2015
2010
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2017
2018
2019
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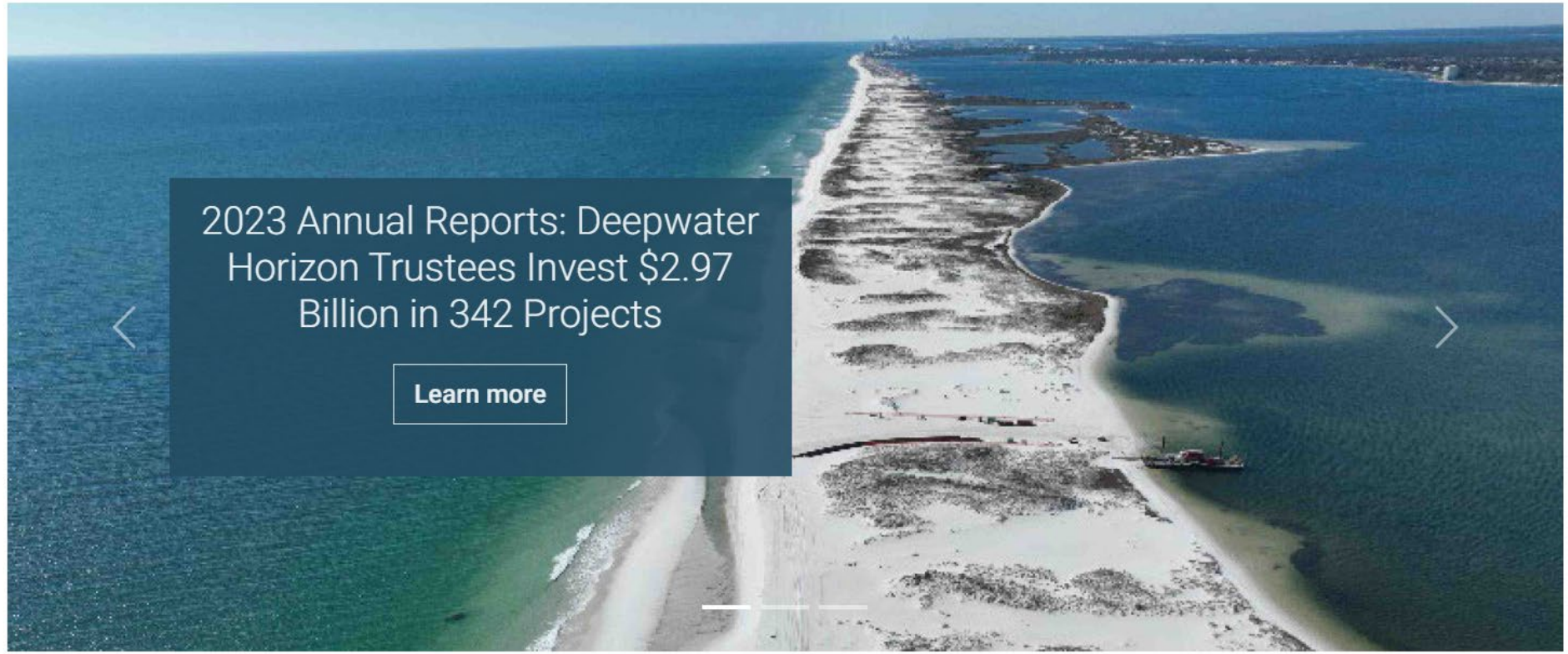
2030
2031

GULF SPILL RESTORATION

Website maintained by NOAA on behalf of the Deepwater Horizon Natural Resource Damage Assessment Trustees



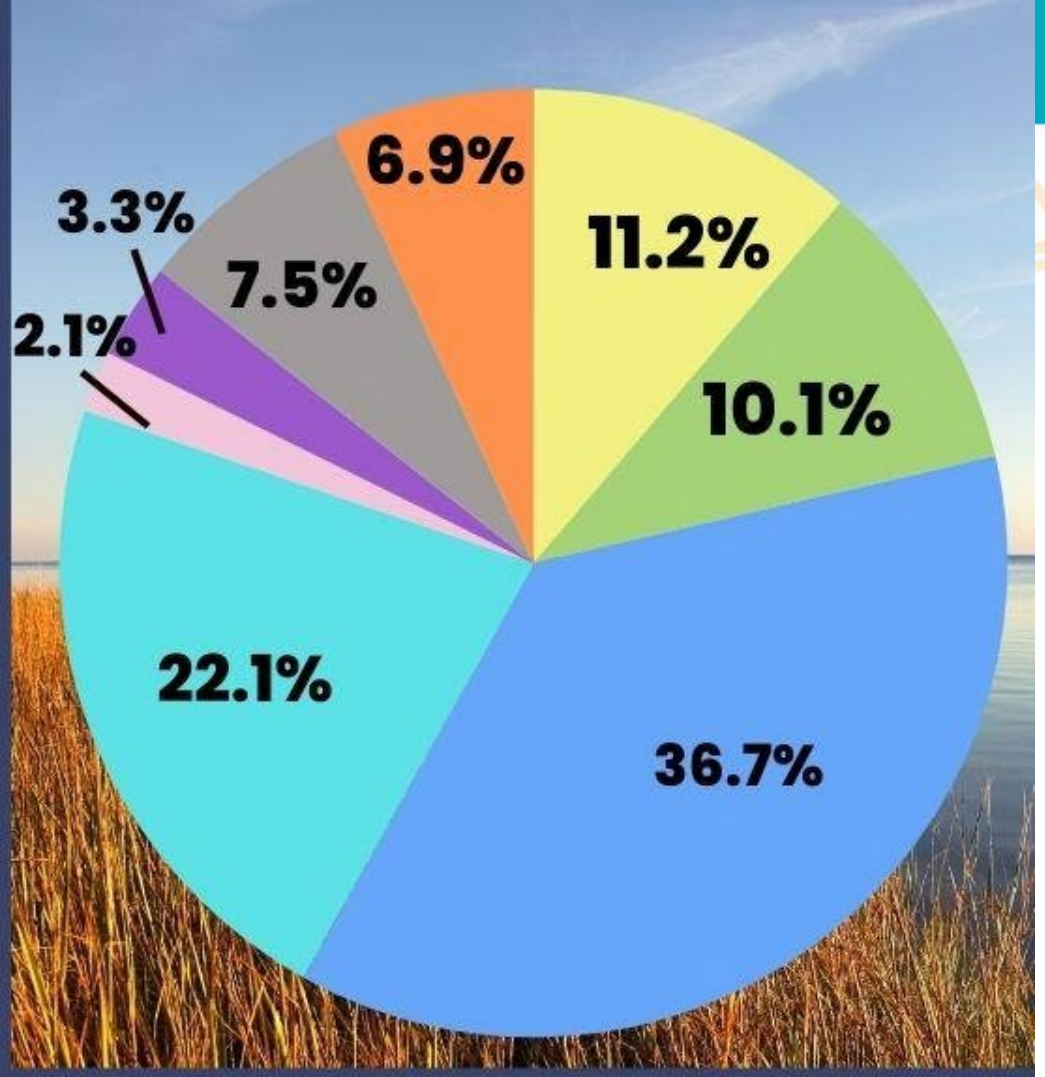
Restoration Areas

Alabama | Florida | Louisiana | Mississippi | Texas | RegionWide | Open Ocean

USDA

$1 BILLION INVESTED IN GULF RESTORATION

- Create, restore, and enhance coastal wetlands, islands, shorelines, and headlands
- Protect and conserve coastal, estuarine, and riparian habitats
- Restore hydrology and natural processes
- Reduce excess nutrients and other pollutants to watersheds
- Restore oyster habitat
- Promote natural resource stewardship and environmental education



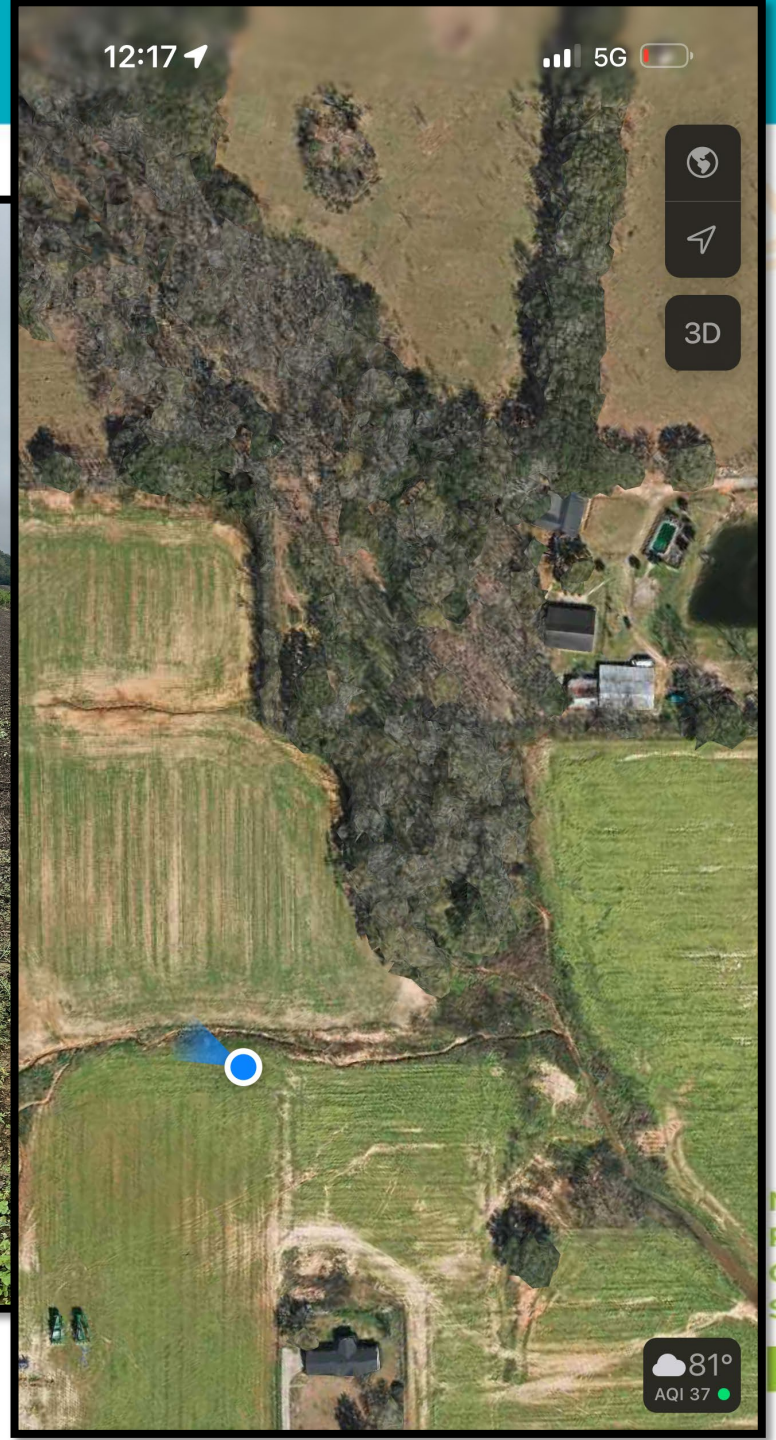
- Improve science-based decision-making process
- Restore and revitalize the Gulf economy

Natural Resources Conservation Service

nrcs.usda.gov/

Natural Resources Conservation Service

nrcs.usda.gov/


12:17
5G
3D
81°
AQI 37

Natural Resources Conservation Service

nrcs.usda.gov/

Approved Restoration Projects	Status	Restoration Area	Funding	Funding
Toulmins Springs Engineering and Design	On-going	AL TIG	NRDA	$ 479,090
Fowl River Nutrient Reduction	On-going	AL TIG	NRDA	$ 1,000,000
Weeks Bay Nutrient Reduction	On-going	AL TIG	NRDA	$ 2,000,000
Nutrient Reduction on Dairy Farms in St. Helena & Tangipahoa Parishes	On-going	LA TIG	NRDA	$ 2,500,000
Nutrient Reduction on Dairy Farms in Washington Parish	On-going	LA TIG	NRDA	$ 2,500,000
Nutrient Reduction on Crop and Grazing Lands in Bayou Folse	On-going	LA TIG	NRDA	$ 3,000,000
Winter Water Holding & Ag BMPs in Vermillion & Cameron Parishes	On-going	LA TIG	NRDA	$ 4,250,000
Upper Pascagoula Water Quality Enhancement	On-going	MS TIG	NRDA	$ 3,300,000
Big Cedar Creek – Rocky Creek Nutrient Reduction	New	MS TIG	NRDA	$ 2,000,000
Pensacola-Perdido Water Quality Initiative	On-going	FL TIG	NRDA	$ 2,100,000
Lower Suwannee Water Quality Initiative Project	On-going	FL TIG	NRDA	$ 3,150,000
Petronila Creek Watershed Nutrient Reduction Initiative	New	TX TIG	NRDA	$ 4,282,000
Coastal Trail Connection: Spring Creek to Port Leon (USFS)	On-going	FL TIG	NRDA	$ 1,200,000
Bayou Dularge Ridge, Marsh, & Hydrologic Restoration	Completed	LA	RESTORE	$ 5,162,084
Alabama Gulf Coast Conservation Reserve Program	On-going	AL	RESTORE	$ 1,500,000
Florida Gulf Coast Conservation Reserve Program	Completed	FL	RESTORE	$ 1,500,000
Mississippi Gulf Coast Conservation Reserve Program	Completed	MS	RESTORE	$ 1,500,000
Texas Gulf Coast Conservation Reserve Program	On-going	TX	RESTORE	$ 1,500,000
Tate's Hell Strategy I (USFS)	Completed	FL	RESTORE	$ 7,000,000
Comprehensive Commitment and Planning Support (CPS)	On-going	AL, FL, LA, MS & TX	RESTORE	$ 3,850,000
Gulf Coast Conservation Reserve Program	Pending	AL, FL, & MS	RESTORE	$ 3,100,000
Enhancing Gulf Waters through Forested Watershed Restoration (USFS)	On-going	AL, FL, & MS	RESTORE	$ 23,000,000
Apalachicola Regional Restoration Initiative: Strategies 2 & 3 (USFS)	On-going	FL	RESTORE	$ 5,000,000
				$ 84,873,174

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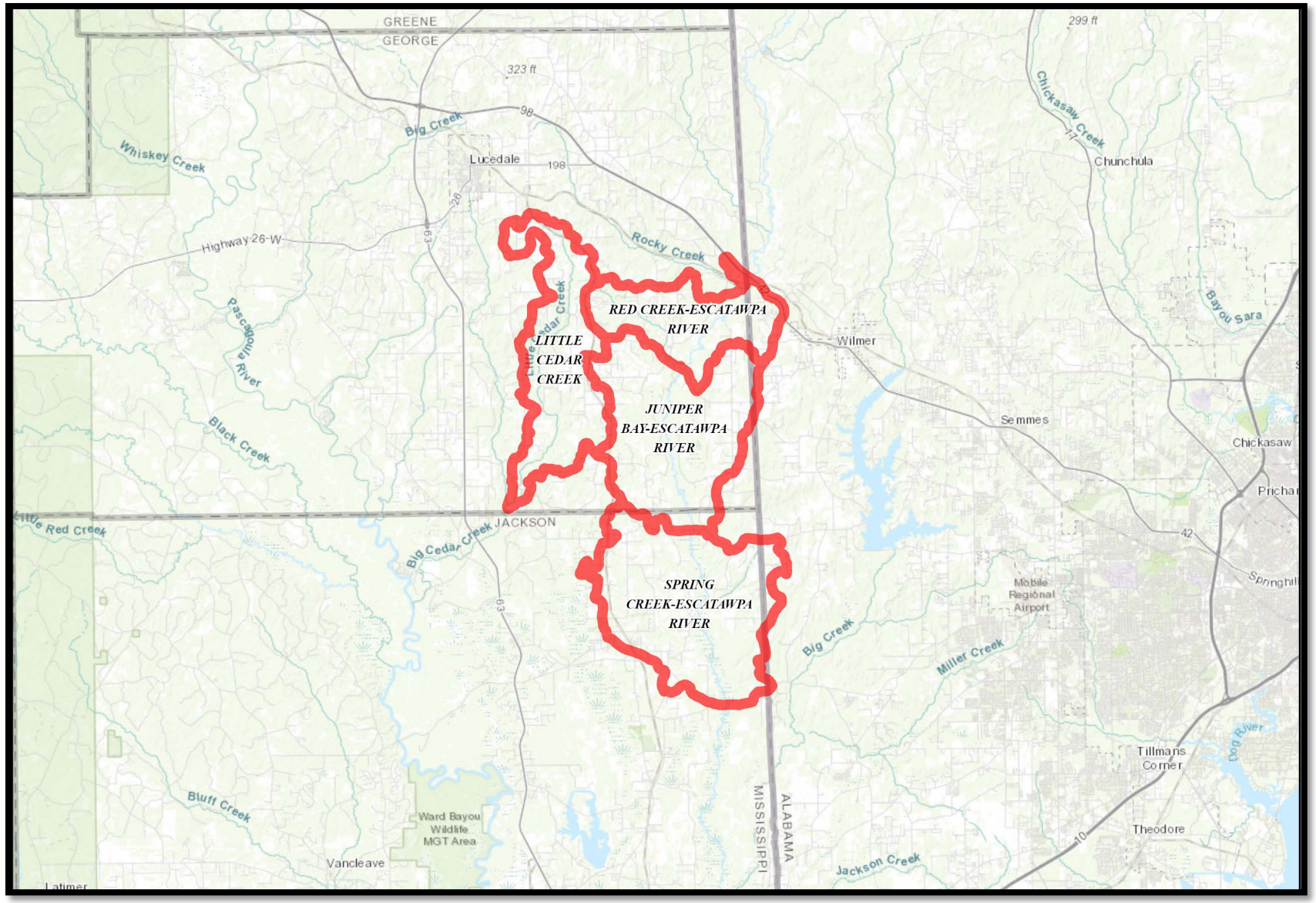

GREENE
GEORGE
323 ft
299 ft
Big Creek
98
Whiskey Creek
Lucedale
198
26
63
Highway 26-W
Rocky Creek
Chickasaw Creek
17
Chunchula
Bayou Sara
Pascagoula River
Little Cedar Creek
RED CREEK-ESCATAWPA RIVER
LITTLE CEDAR CREEK
JUNIPER BAY-ESCATAWPA RIVER
Wilmer
Semmes
Chickasaw
Black Creek
Little Red Creek
Big Cedar Creek
JACKSON
42
SPRING CREEK-ESCATAWPA RIVER
Mobile Regional Airport
Springhill
Big Creek
Miller Creek
Dog River
Tillmans Corner
Bluff Creek
Ward Bayou Wildlife MGT Area
Vancleave
MISSISSIPPI
ALABAMA
Jackson Creek
10
Theodore
Latimer

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

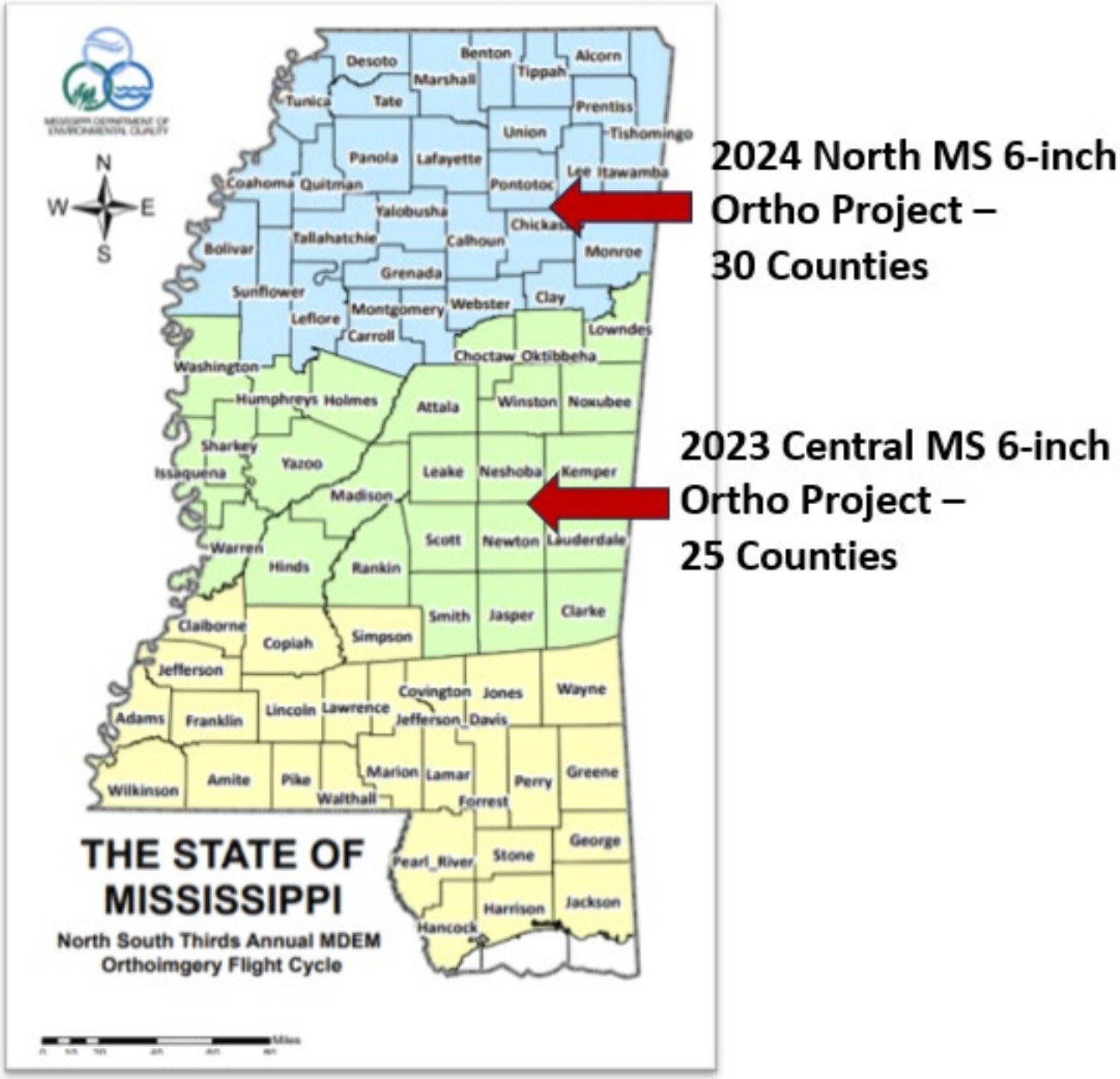
Soils Tools and Technology

REMOTE SENSING UPDATE

- James Curtis, State Soil Scientist

4-Band High-Res (Leaf-Off) Imagery

- **Contracted by MDEQ**
- **Digital 6 Inch Orthophotography Project**
- **Final delivery around December of next year**
- **Available on MARIS website (Mississippi Automated Resource Information System)**



Natural Color

Channel	Band
Red	Band_1
Green	Band_2
Blue	Band_3
Alpha	Band_1

Color Infrared

Channel	Band
Red	Band_4
Green	Band_1
Blue	Band_2
Alpha	Band_3

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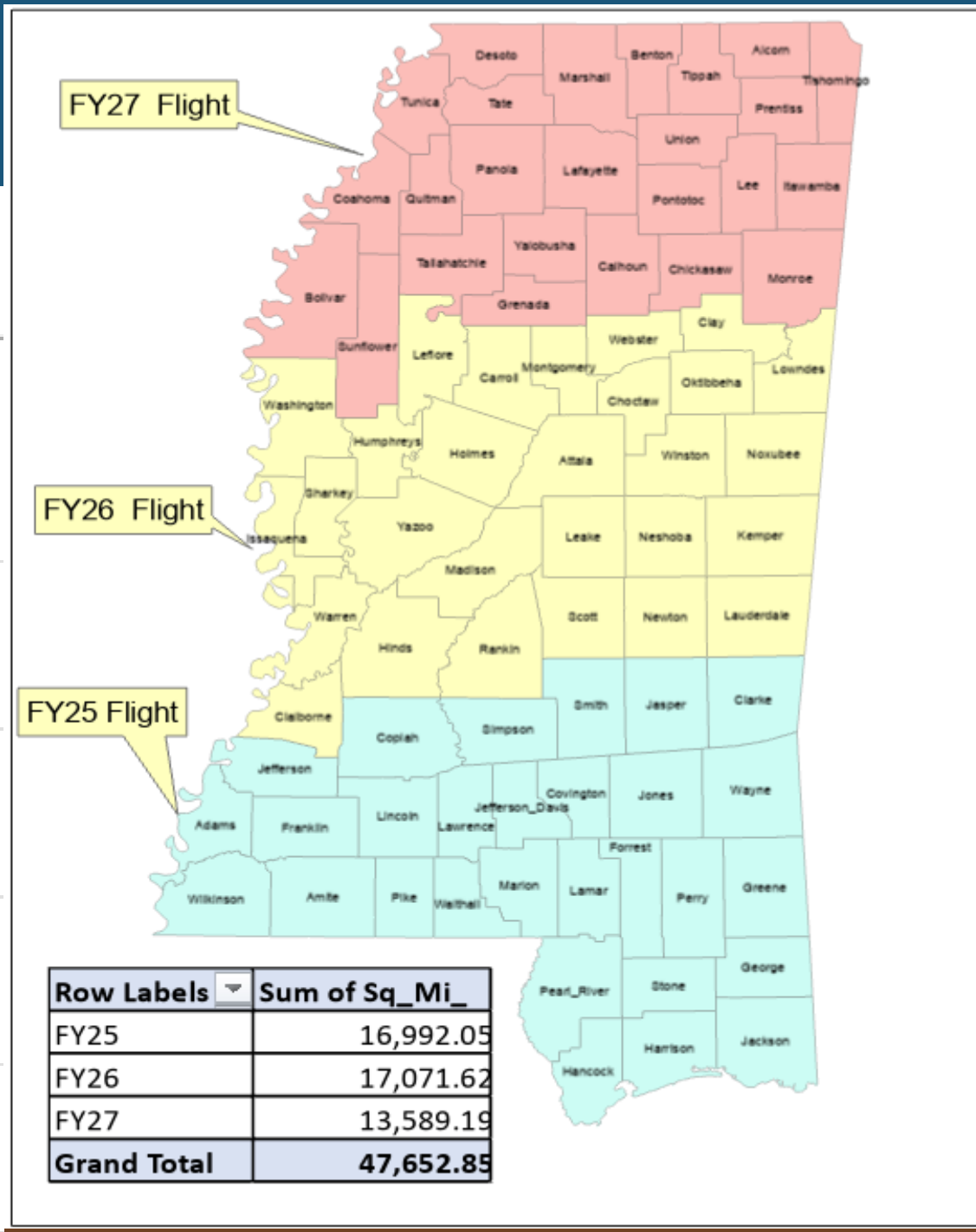
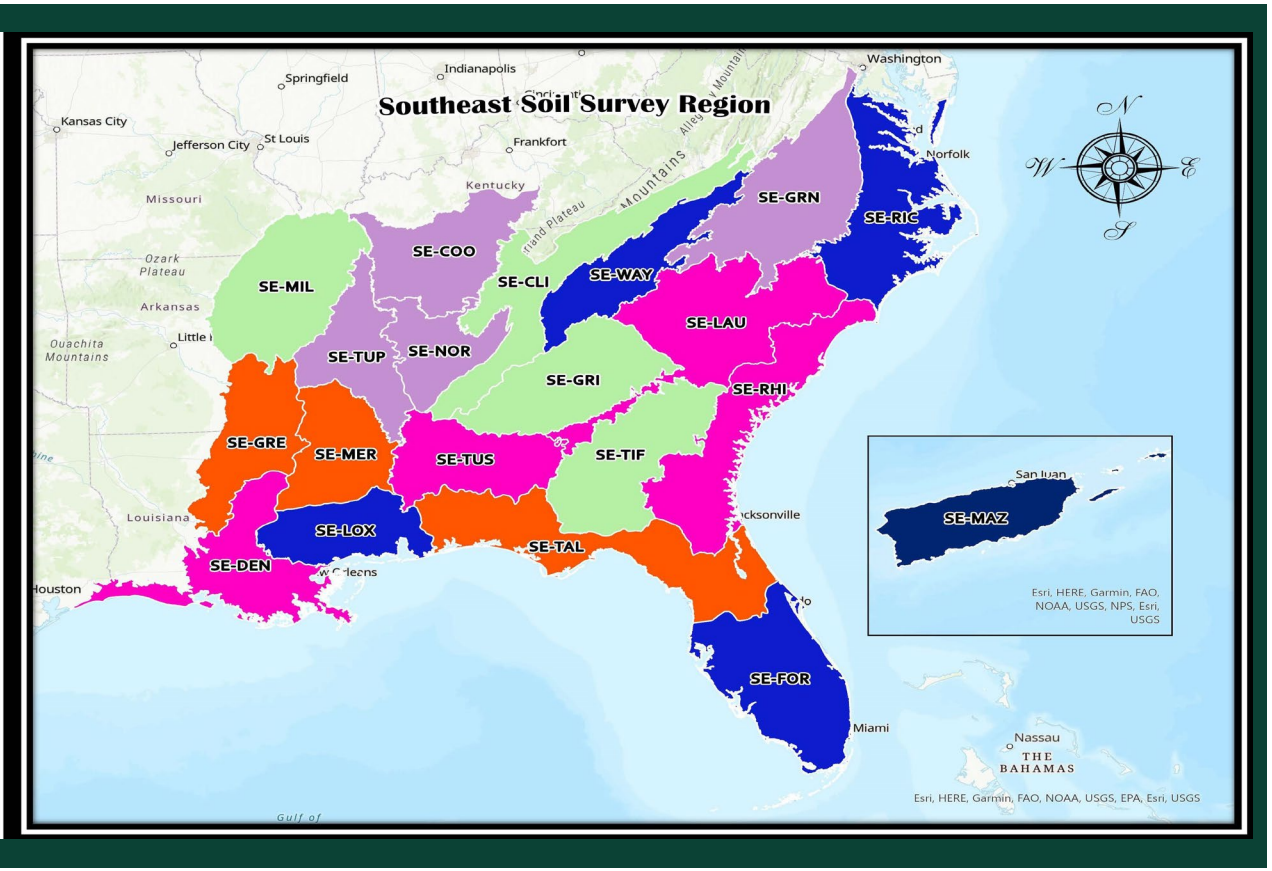
Elevation Data Planning

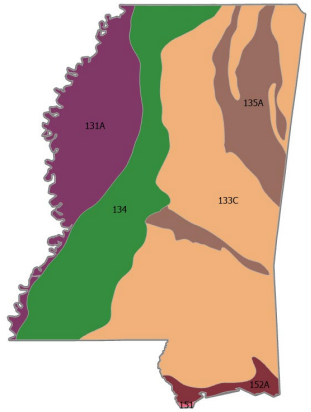
QUALITY LEVEL	VERTICAL ACCURACY RMSEz (cm)	(NPD) points per square meter	(DEM) cell size (meters)
QLo	5 cm	>= 8 pts/square meter	0.5 m
QL1	10 cm	>= 8 pts/square meter	0.5 m
QL2	10 cm	>= 2 pts/square meter	1 m
QL3	20 cm	>= 0.5 pts/square meter	2m



Row Labels	Sum of Sq_Mi_
FY25	16,992.05
FY26	17,071.62
FY27	13,589.19
Grand Total	47,652.85

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE



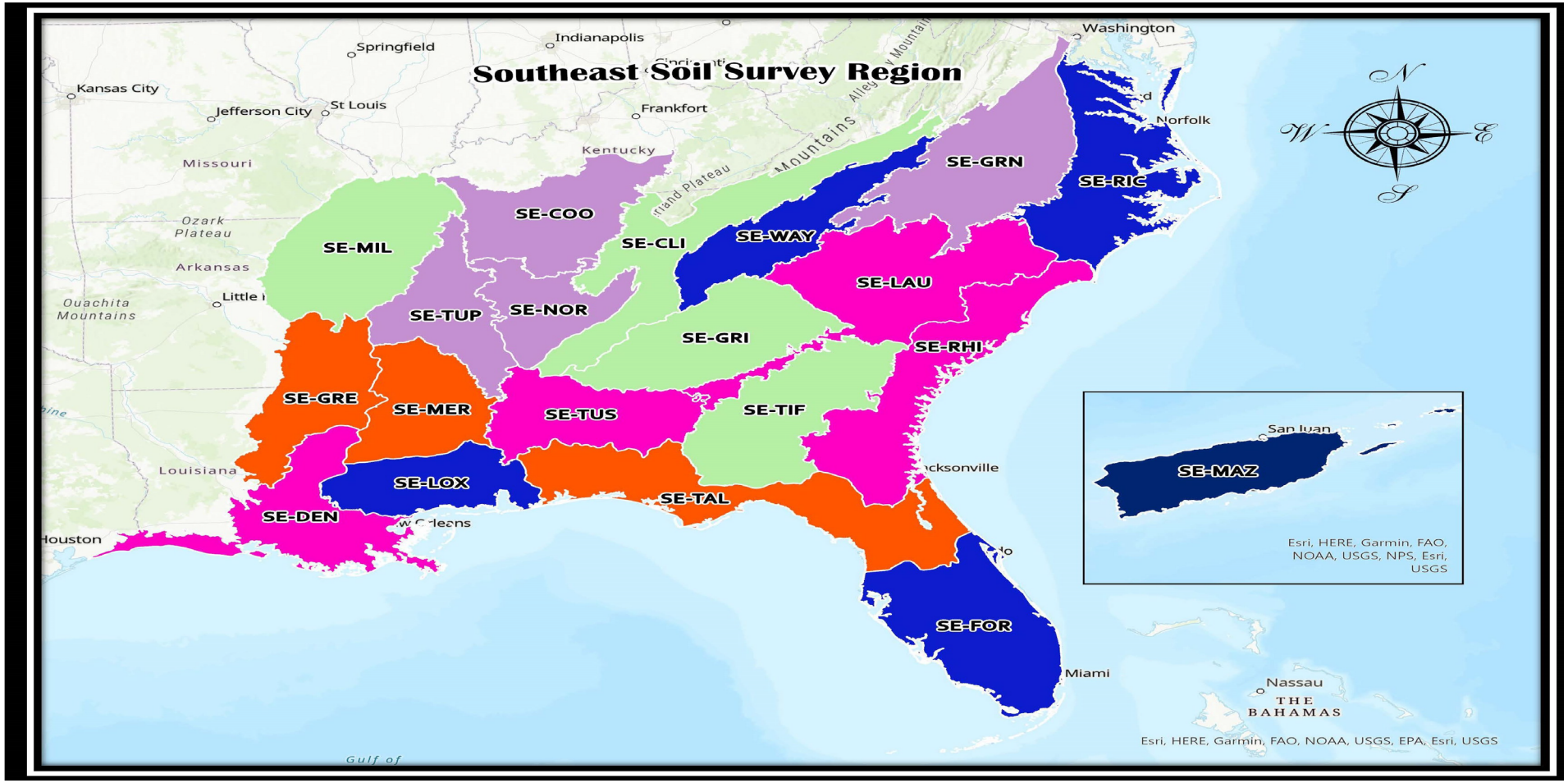


D. Charles Stemmans II

Southeast Regional Ecological site Specialist

Soil and Plant Science Division | soils.usda.gov
SOIL SCIENCE AND RESOURCE ASSESSMENT

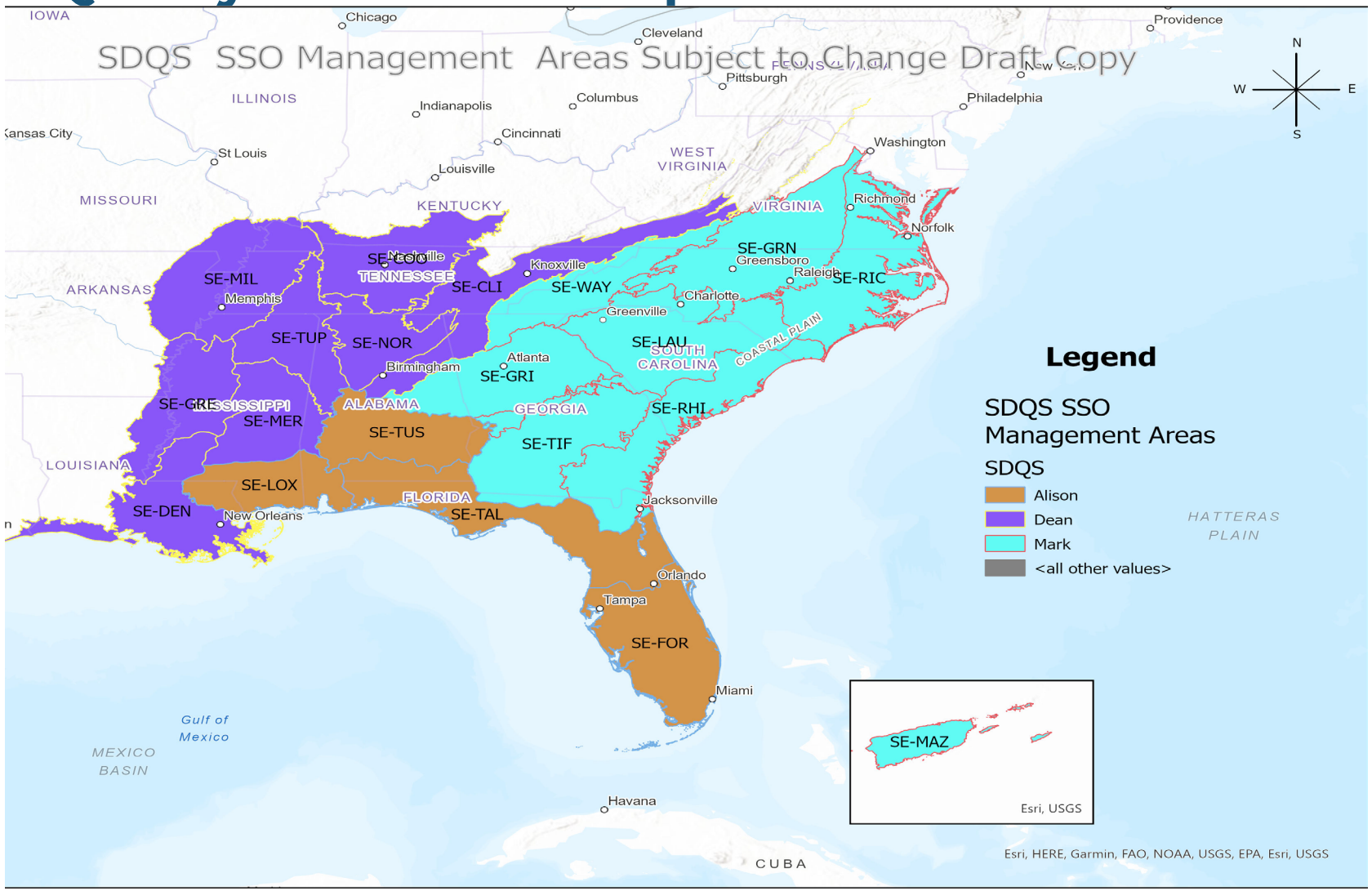
Southeast Region



SE Regional Staff

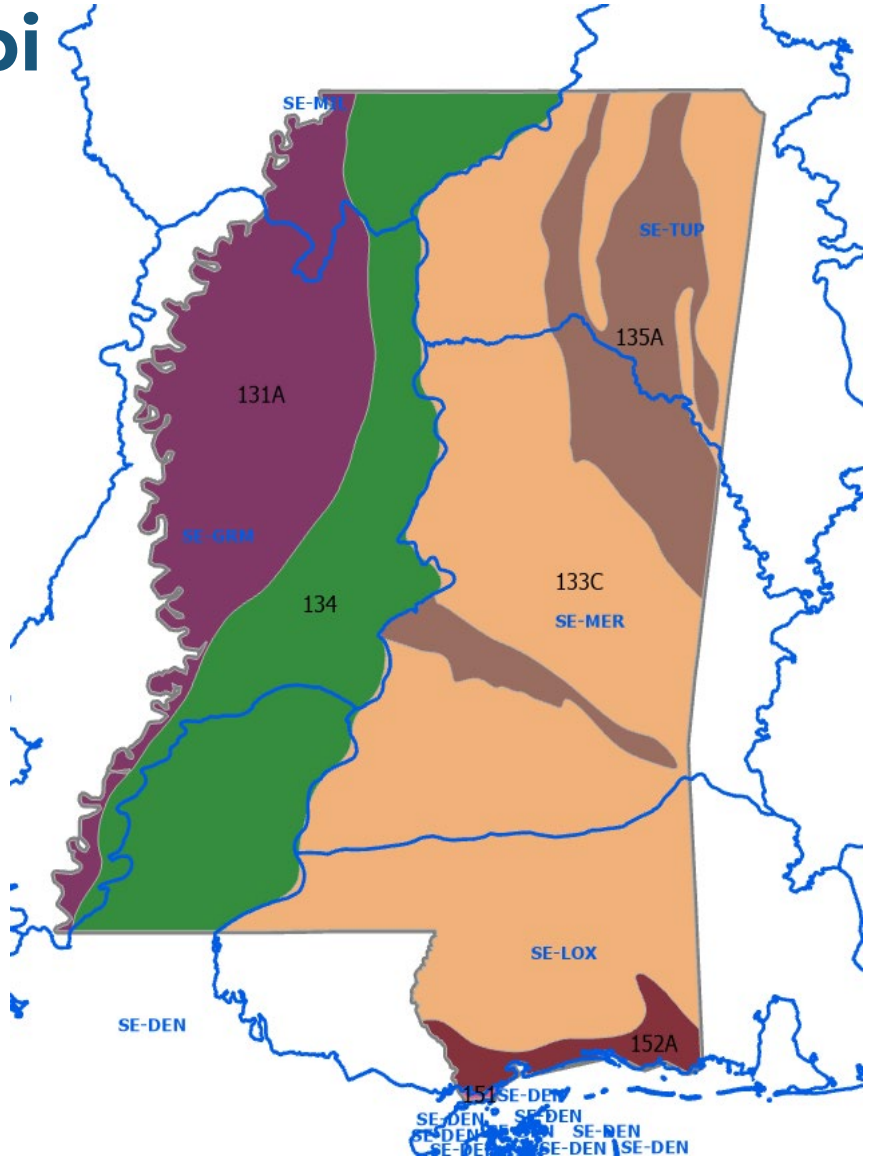
- Kevin Norwood - Regional Director
- Alison Steglich – Senior Regional Soil Scientist
- Charles Stemmans - Senior Regional Ecologist
- Matthew Duvall - Ecological Data Quality Specialist
- Dean Shields - Soil Data Quality Specialist
- Mark Van Lear - Soil Data Quality Specialist
- Joe Norris - GIS Specialist
- Mark Roloff - GIS Specialist
- Camellia Lipscomb - Administrative Assistant

Southeast Quality Assurance Responsibilities



Soil Survey Offices that Service Mississippi

- Milan, TN
- Denham Springs, LA
- Greenwood, MS
  - MLRAs 131A and 134
- Tupelo, MS
- Meridian, MS
  - MLRAs 133C and 135A
- Loxley, AL
  - MLRAs 133C and 152A



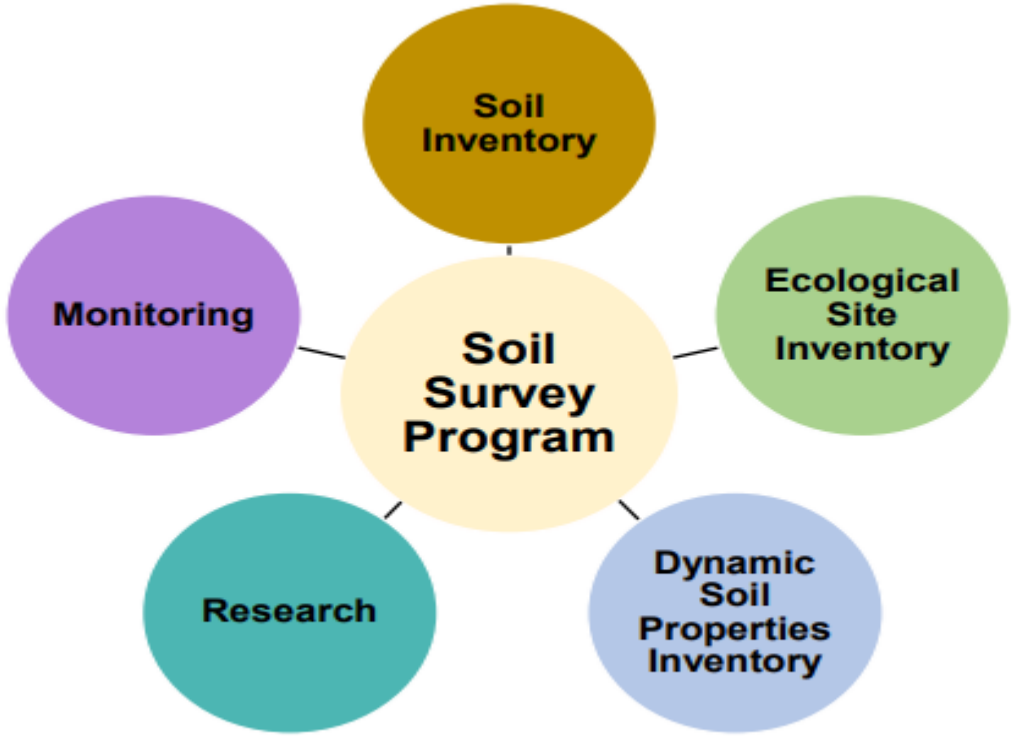
Staffing

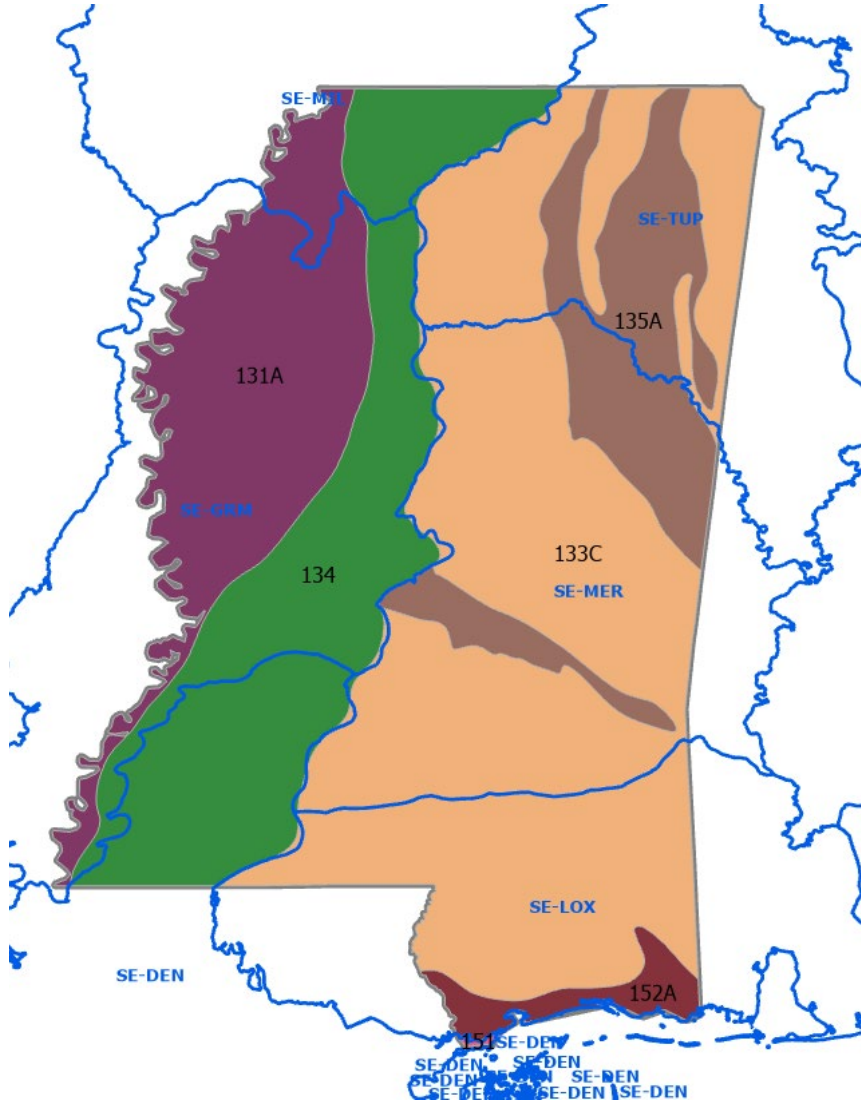
- Direct Hires (Loxley, AL)
- Pathways (Meridian, MS, Milan Tn)

SPSD FY 2024 Priorities

- Dynamic Soil Survey
- Soil Inventory
- Ecological Sites
- Soil Services and Information Delivery
- National Cooperative Soil Survey
- Inflation Reduction Act – Greenhouse Gas Soil Carbon Monitoring Network Field Office Collaboration

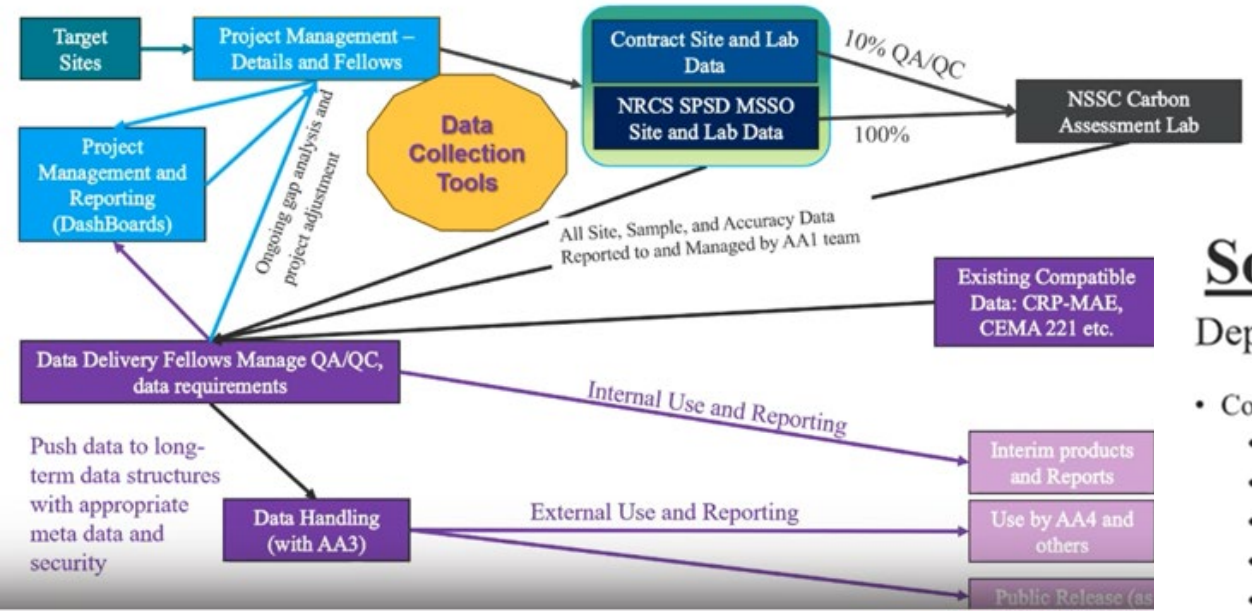
The Names Change…





IRA GHG

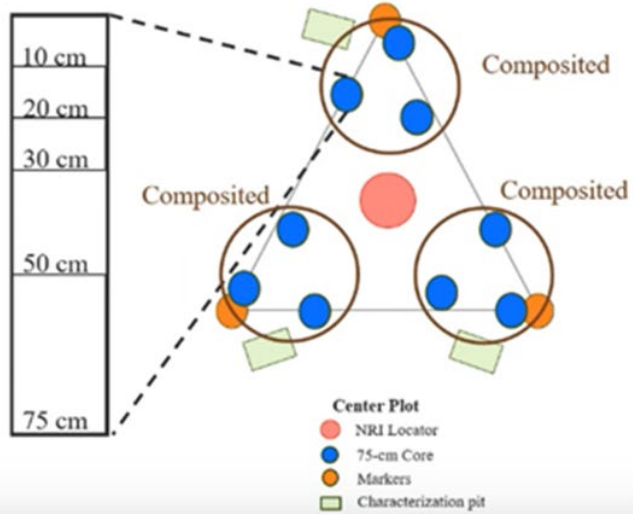
AA 1 Obj 3: Data Handling and Distribution



Soil Sample Collection: Central Plot (triangle)

Depth Increments

- Cores are divided into designated depths
  - 0-10 cm
  - 10-20 cm
  - 20-30 cm
  - 30-50 cm
  - 50-75 cm
- Each group of three cores will be divided into depths as described and then composited



*Method used in previous CSU efforts for NRI –based Daycent verification

Outline

- Briefly, what is an Ecological Site and an ESD?
- Who are we in the SE Region working on the ESDs?
- How can ESDs be utilized in Planning.
- How can you make the product better and more relevant.

The Ecological Site…

- **A CONCEPTUAL division of the landscape, defined as.**

- **A distinctive kind of land based on recurring soil, landform, geological, and climate characteristics that differs from other kinds of land in its ability to produce distinctive kinds and amounts of vegetation and in its ability to respond similarly to management actions and natural disturbances.**

The Ecological Site…

- Each Ecological Site is the product of all the Environmental Factors responsible for its development.
  - Soils
  - Geomorphology
  - Climate
- These abiotic factors interact to govern how plant species are distributed along environmental gradients, and how they respond to other factors such as disturbances and management:
  - Fire
  - Herbivory
  - Drought

The Ecological Site Description…

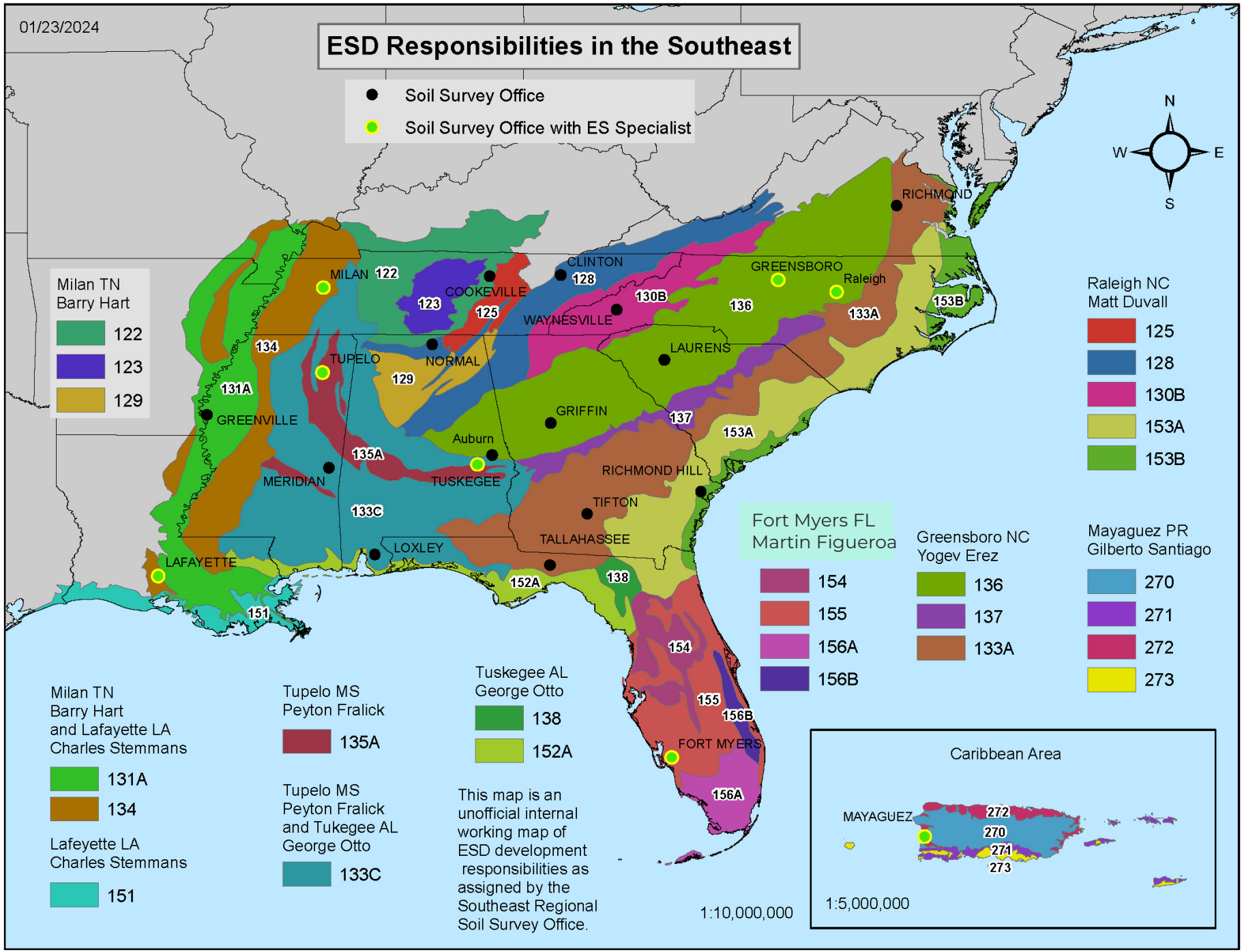
Reports with associated data that document the characteristics of an ecological site (including its climate, soils, and state-and-transition model) and the interpretation of its properties related to use and management.

- **Represents the modal concept for an ecological site (ES).**
- **Describe physiographic features, soil properties and other site conditions**
- **Describe vegetation**
- **State and transition model and legend**
- **Ecological processes and management interpretations.**

SPSD SE Region: ES Staff

RESS: Charles Stemmans
charles.stemmans@usda.gov

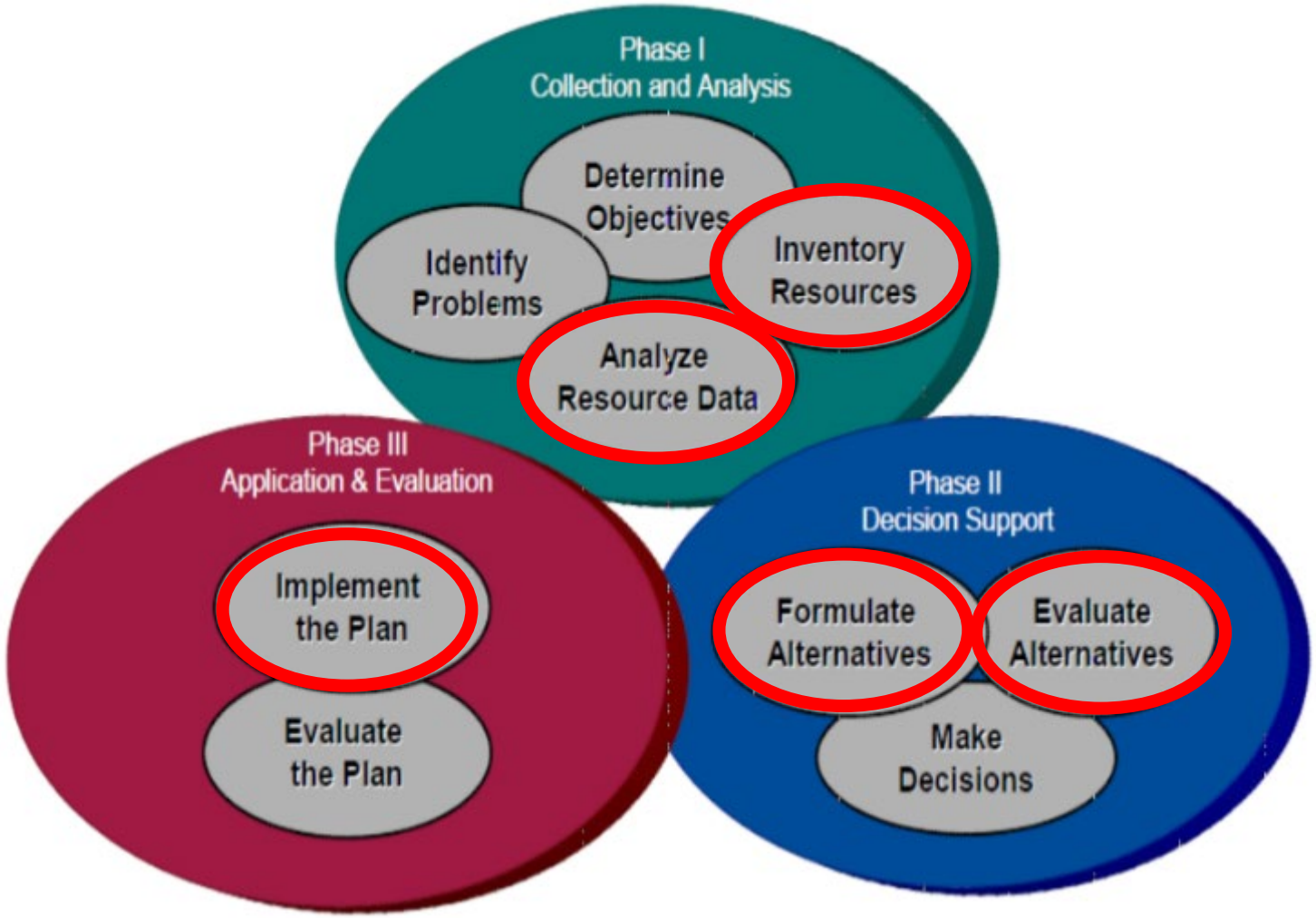
EDQS: Matt Duvall
matthew.duvall@usda.gov



ESDs in Conservation Planning

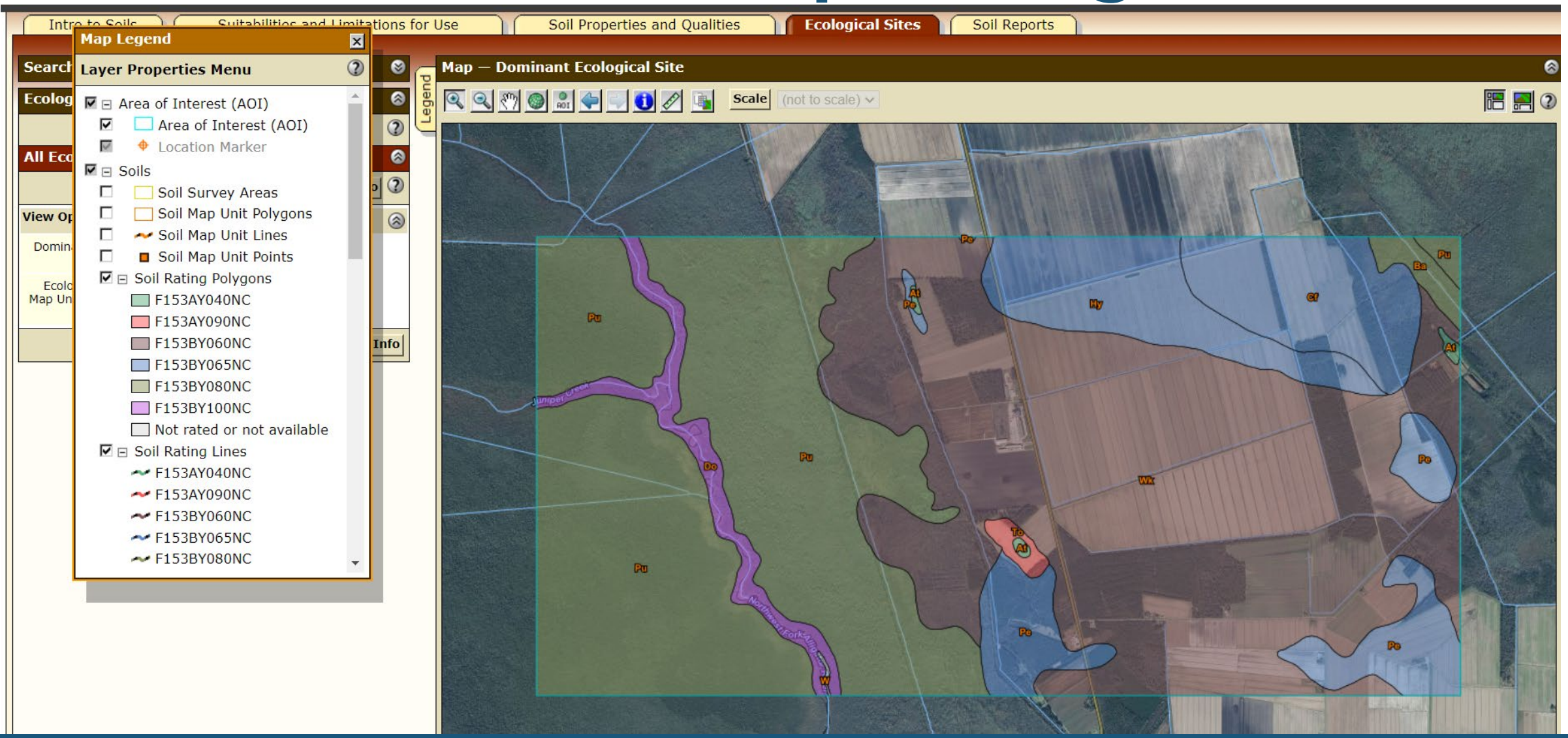
- Are they relevant to the plan location?
- Why do we need ESDs in planning?
- How can they help improve the plan?

ESDs in Conservation planning

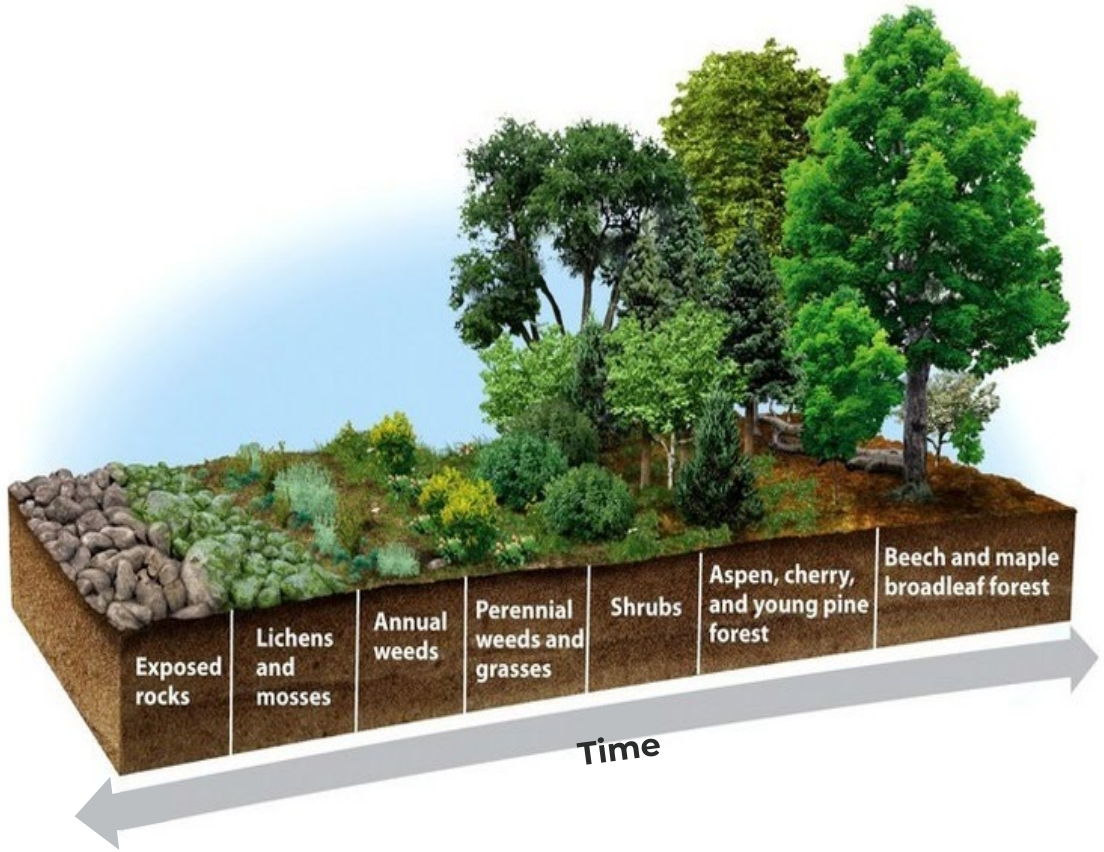


- Inventory: Determine Soil, Ecological Site, and State
- Analyze: Determine Community / Phase
- Formulate: Which States / Communities / Phases that you can get to from where you are.
- Evaluate: Determine what it takes to get there
- Implement: Conservation Practice Implementation Requirements with Ecological Context

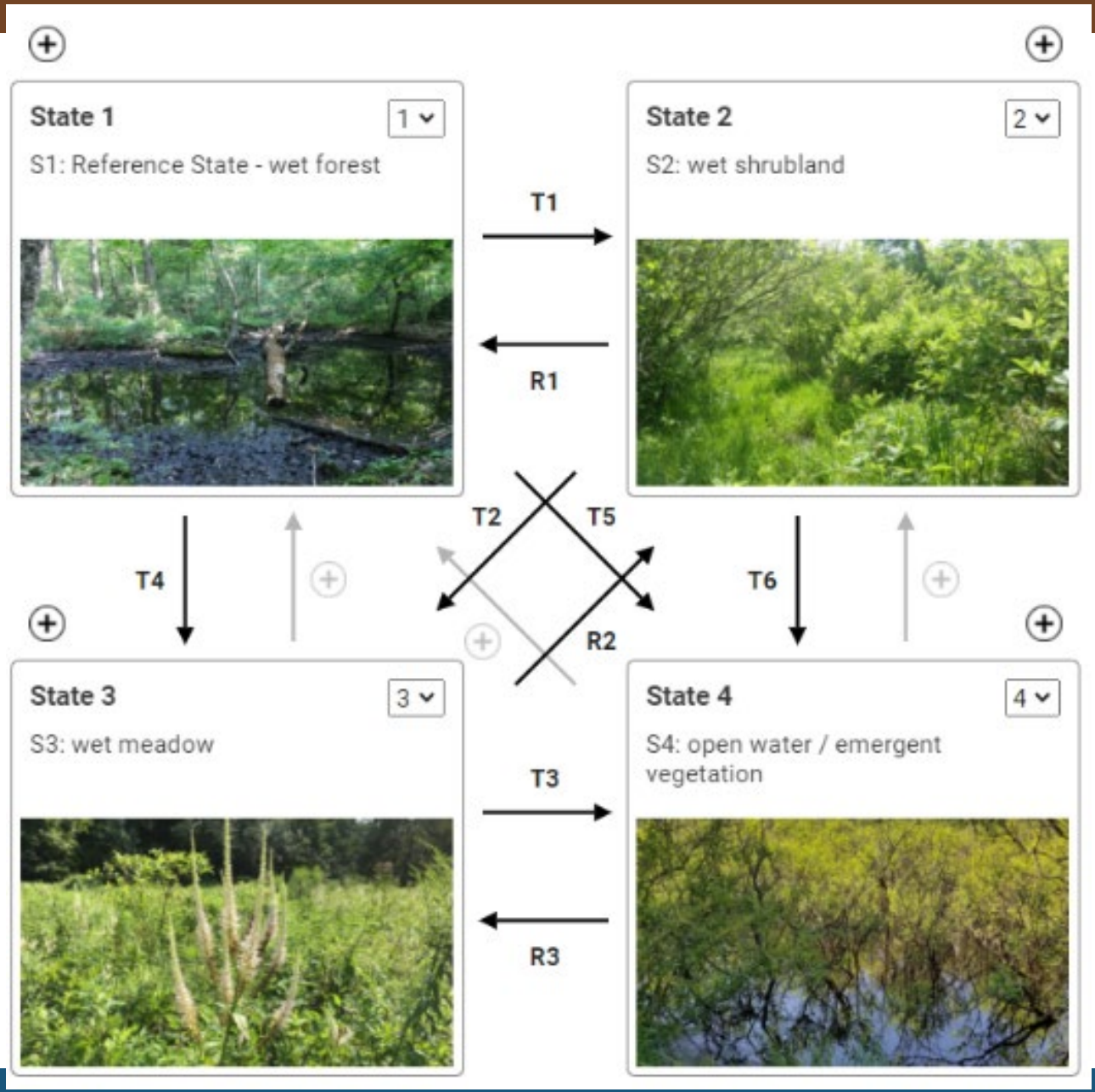
ESDs in Conservation planning



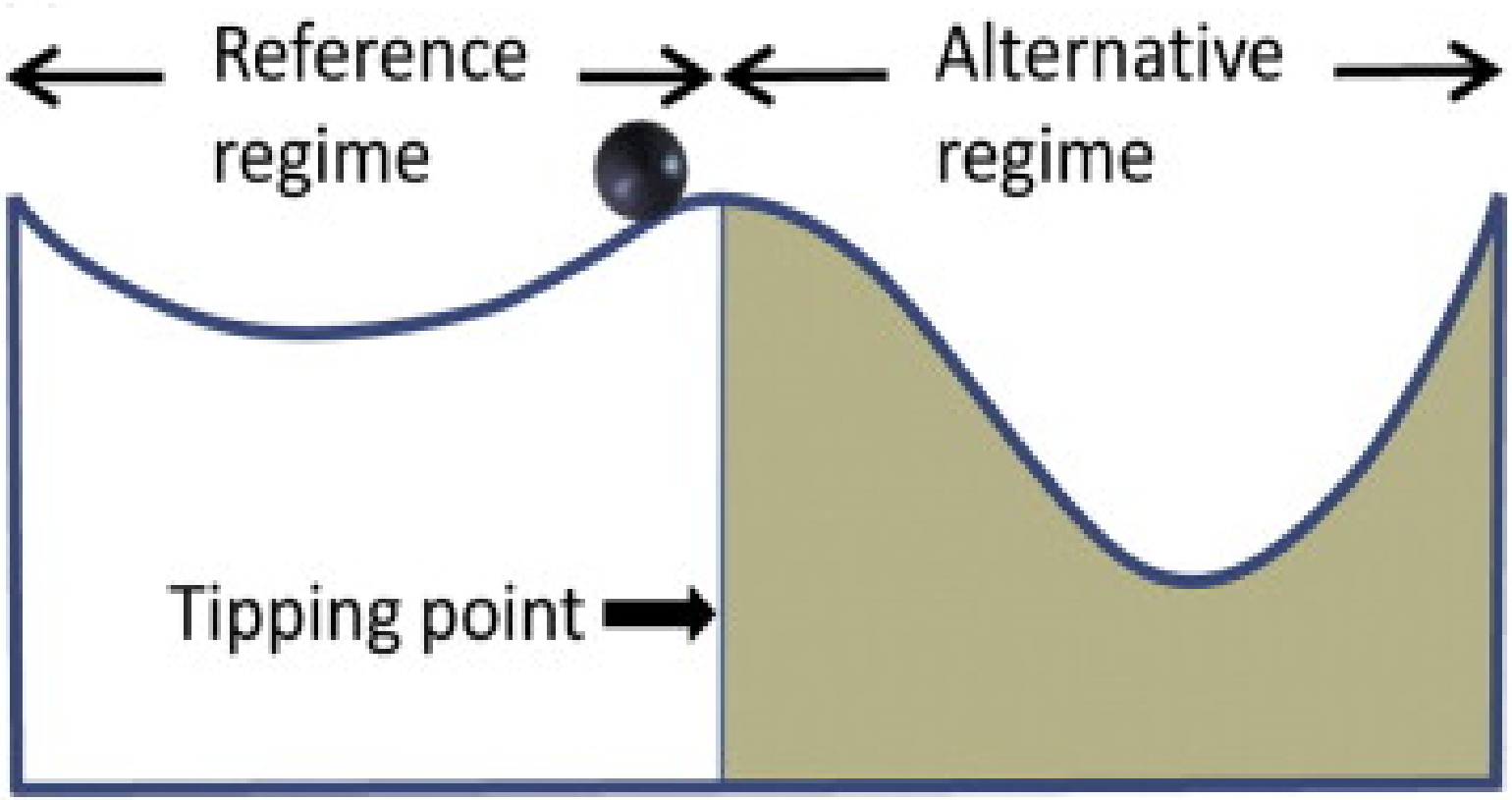
State and Transition



https://livingnatureweb.wordpress.com/ecological-succession/

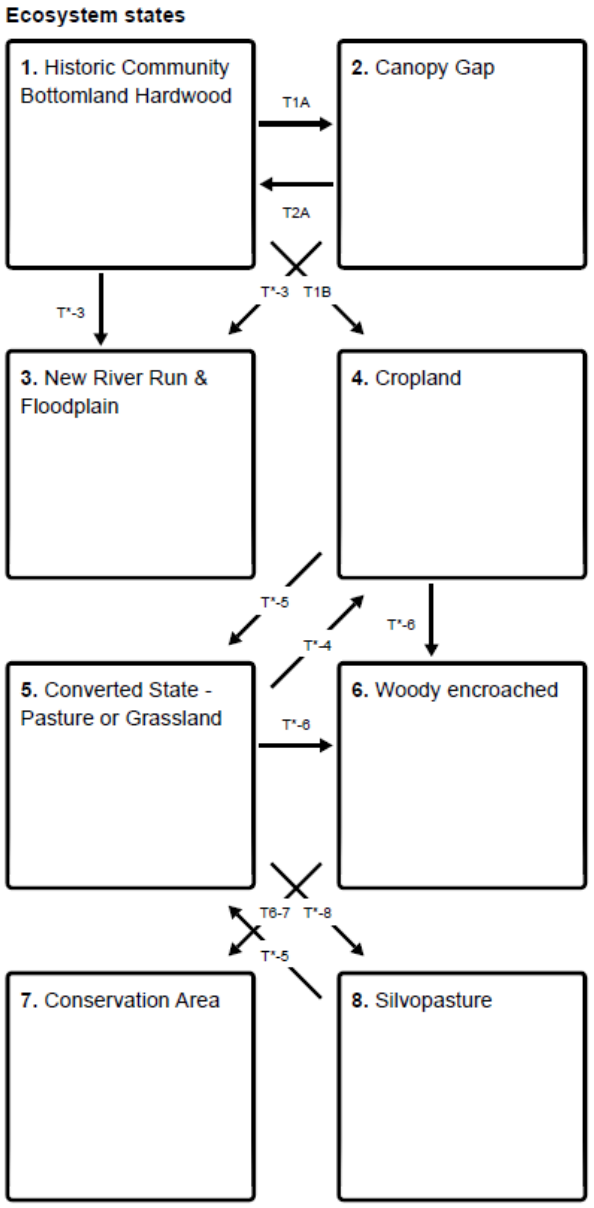


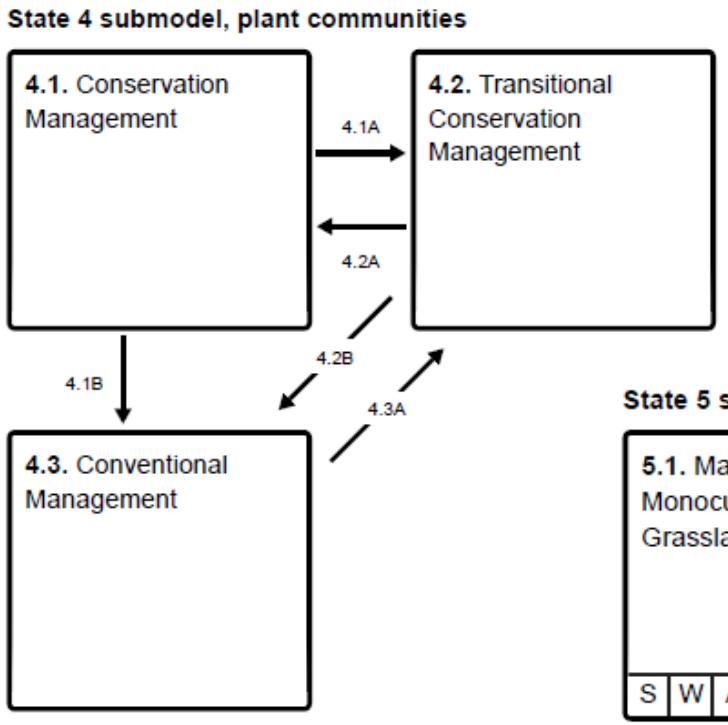
State and Transition

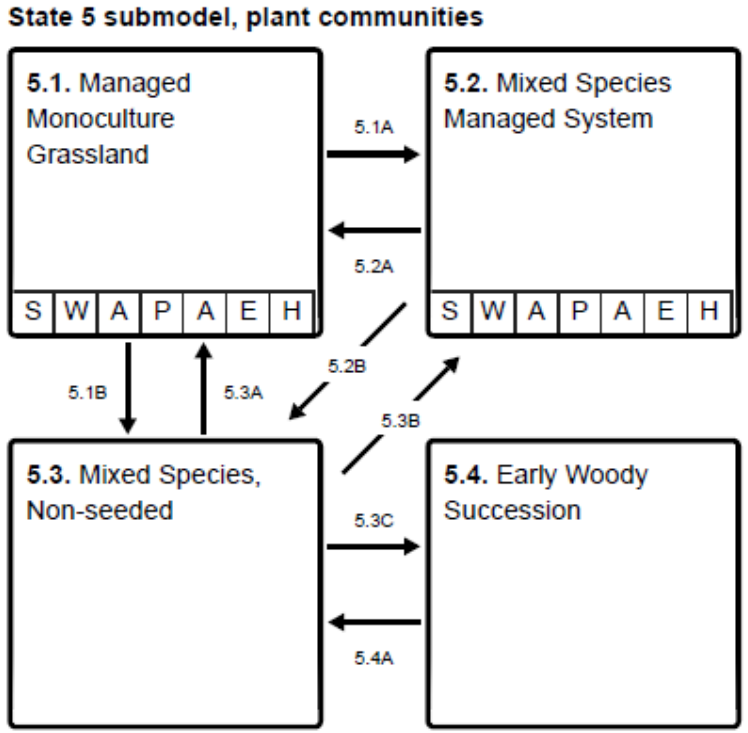


Bestelmeyer. 2015. The Baby with the Bathwater. Rangelands

STM


Ecosystem states
1. Historic Community Bottomland Hardwood
2. Canopy Gap
T1A
T2A
T*-3
T*-3
T1B
3. New River Run & Floodplain
4. Cropland
T*-5
T*-6
T*-4
5. Converted State - Pasture or Grassland
T*-6
6. Woody encroached
T6-7
T*-8
T*-5
7. Conservation Area
8. Silvopasture


State 4 submodel, plant communities
4.1. Conservation Management
4.1A
4.2. Transitional Conservation Management
4.2A
4.2B
4.1B
4.3A
4.3. Conventional Management


State 5 submodel, plant communities
5.1. Managed Monoculture Grassland
S W A P A E H
5.1A
5.2. Mixed Species Managed System
S W A P A E H
5.2A
5.2B
5.1B
5.3A
5.3B
5.3. Mixed Species, Non-seeded
5.3C
5.4. Early Woody Succession
5.4A

Site Description: Woodland Suitability Groups (WSG)

Potential Productivity					
		Av. Annual Growth Per Acre			
Important Species	Site Class	Bd. Ft. (Scribner) 1/	Cds. 2/	Cutting Cycle Years	Species Suitable To Plant
Sweetgum	100	556	1.4	9	Cottonwood
Cottonwood	110				Sweetgum
Sycamore	110				Sycamore
Green ash	90				Yellow-poplar
Hackberry					Green ash
Yellow-poplar	110	673	1.7	8	Water oak
Red oak	90	381	1.0	10	
White oak	90	381	1.0	10	
Water oak	100	482	1.1	9	

1/ Based on the maximum rotation age for sawtimber in SCS yield tables.
2/ Based on the maximum rotation age for pulpwood in SCS yield tables.

Site Description: continued…

WOODLAND MANAGEMENT AND PRODUCTIVITY

Survey Area- ADAMS COUNTY, MISSISSIPPI

Map Symbol and soil name	Ordination symbol	Management concerns: Erosion hazard	Equipment limitation	Seedling mortality	Windthrow hazard	Plant competition	Potential productivity: Common trees	Site index	Prod class	Trees to plant
Ad ADLER	13	SLIGHT	MODERATE	MODERATE	SLIGHT	MODERATE	water oak	100	7	green ash
							willow oak	100	7	sweetgum
							green ash	95	4	American sycamore
							sweetgum	100	10	eastern cottonwood
							American sycamore	115	13	
							eastern cottonwood	120	13	

Site Description: Pasture and Hayland Groups (PHG)

Species	Grazing value for 1/		Canopy Class		
			Sparse	Medium	Dense
			1-35%	36-55%	56-70%
	Cattle	Deer	lb/ac	lb/ac	lb/ac
Pinehill or Little bluestem	P	U			
Big bluestem	P	U	1900	800	200
Indiangrass	P	U			
Switchgrass	P	U			
Longleaf Uniola	D	U			
Low Panicums	D	D	100	250	350
Sedges & Rushes	D	D			

Transition Practices

Longleaf/hardwood/wiregrass/bluestem

Reference Community - Longleaf Pine/Wiregrass/Bluestem

Apply a dormant season burn to top kill hardwoods and reduce the accumulating coarse fuel load, followed approximately 18 months later with a growing season burn to reduce the number and vigor of hardwood rootstocks. In addition to providing hotter fires to help control hardwoods, prescribed burns during the growing season are critical for wiregrass seed production. In some cases a second growing season burn approximately 24 months later may be necessary to further reduce the number of hardwood root stocks. Mechanical or chemical control methods may also be necessary to reduce initial hardwood tree and brush density.

Conservation practices

Brush Management
Prescribed Burning
Prescribed Grazing

Getting Involved

- What descriptive characteristics and data do you need at the State and Community level to facilitate conservation assistance?
- What interpretations do you need at the State and Community level to facilitate conservation assistance?

Thank You!

Connect with us!

- Scan the QR code and visit our website at soils.usda.gov
- Follow us on X, formerly known as Twitter, @USDA_NRCS_SPSD
- Check out our YouTube channel @nrcssoilandplantscience

Scan Me!

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U.S. DEPARTMENT OF AGRICULTURE

Ecological Sciences

Rogerick Thompson

FARM PRODUCTION AND CONSERVATION
FSA | NRCS | RMA | Business Center

New Ecological Sciences Team Members

- Tamara Campbell – State Biologist
- Jordan Roberts Hudson – State Forester
- Tiffari Jenkins – Resource Conservationist

Forestry Updates – MS EFOTG

- Adopting national standards for:
  - 384-Woody Residue Treatment
  - 394 – Firebreak
  - 655 – Forest Trails and Landings
- Adding implementation dates to the IR documents
- Also adding a description document to 384 to clarify when and why we plan that practice

Forestry Updates – General & CSP

- The MFC wood products industry map will be added into to CD for planners to refer to for considerations

- The CSP enhancements listed will receive addendums for further guidance:
  - E666I – Crop Tree Management for Mass Production
  - E666K – Create Structural Diversity with Patch Openings
  - E666O – Snags, Dens, Wood Debris for Wildlife
  - E666P – Summer Roosts for Bat Species
  - E612B – Planting for Carbon Sequestration and Storage

Revise Conservation Practice Standards

- Hedgerow Planting (Code 422)
- Seasonal Water Management for Wildlife (Code 646)
- Wetland Restoration (Code 657)

From Watersheds to Waterways:
Leveraging Program Resources to Improve Water Quality

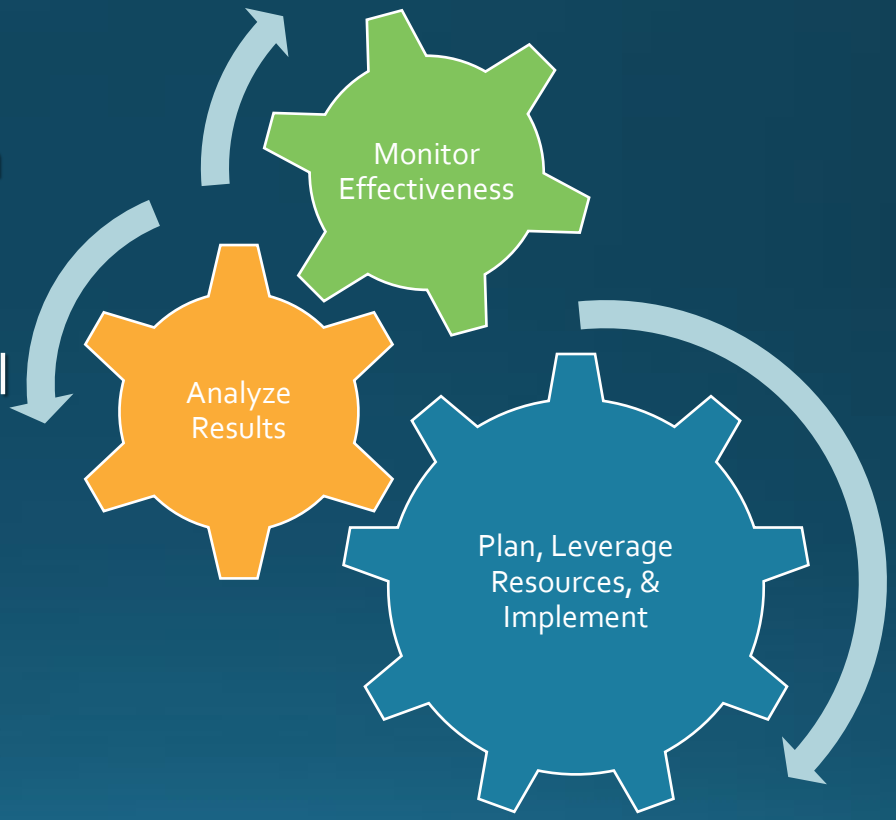
Natalie Segrest
Chief, Basin Management & NPS Branch
Mississippi Department of Environmental Quality

State Technical Committee Meeting
November 14, 2024

BASIN MANAGEMENT AND NONPOINT SOURCE BRANCH

What We Do

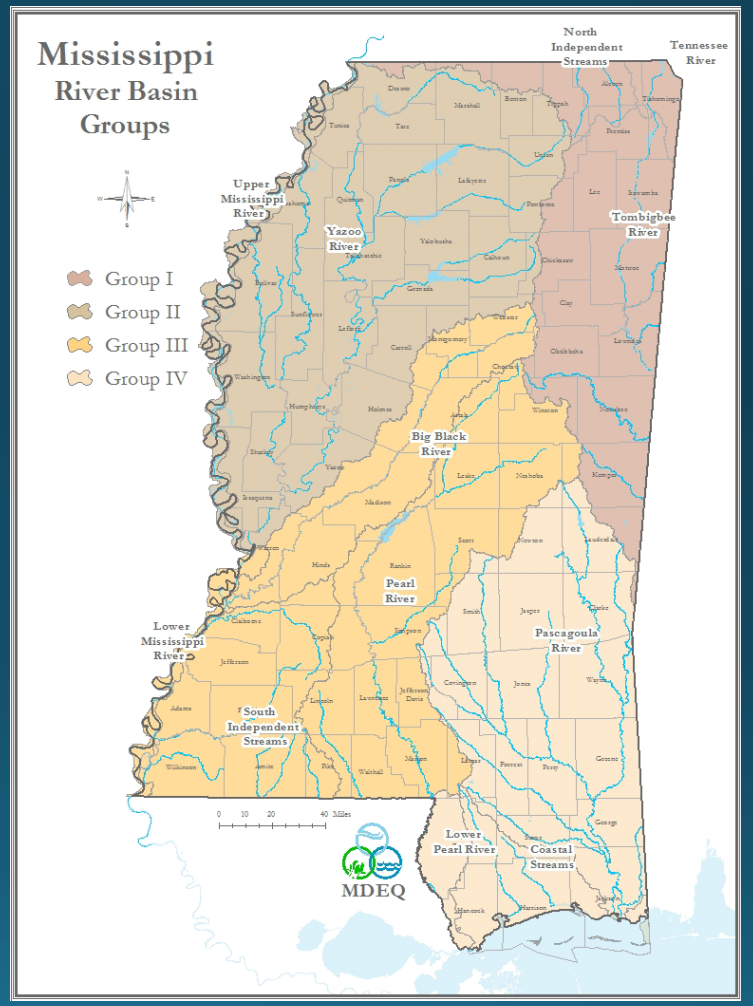
- Manage and Implement the Statewide Nonpoint Source Management Program funded via Section 319 of Clean Water Act
- Coastal Nonpoint Source Program Implementation via Section 6217 Coastal Zone Reauthorization Amendments
- Implement MDEQ's Basin Management Approach
- Statewide Nutrient Reduction Strategy Implementation
- Gulf Hypoxia Program and Hypoxia Task Force



HOW WE WORK

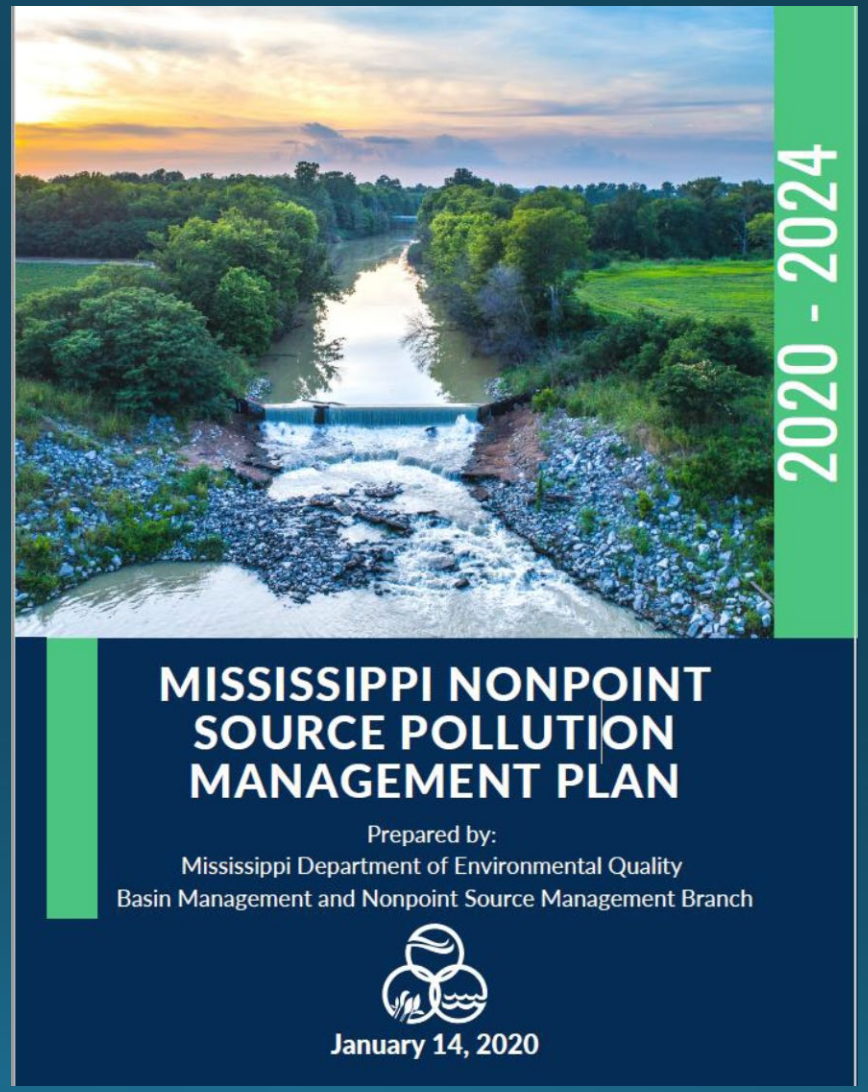
The Basin Management Approach

- Dedicated staff to serve as "coordinators" for major river basins
- Identify and prioritize water quality issues of concern
- Establish priority areas for implementation
- Identify and encourage collaboration and leveraging opportunities
- Seek solutions at the local level
- Seek measurable benefits
- Focus on Success
- Hydrologically based



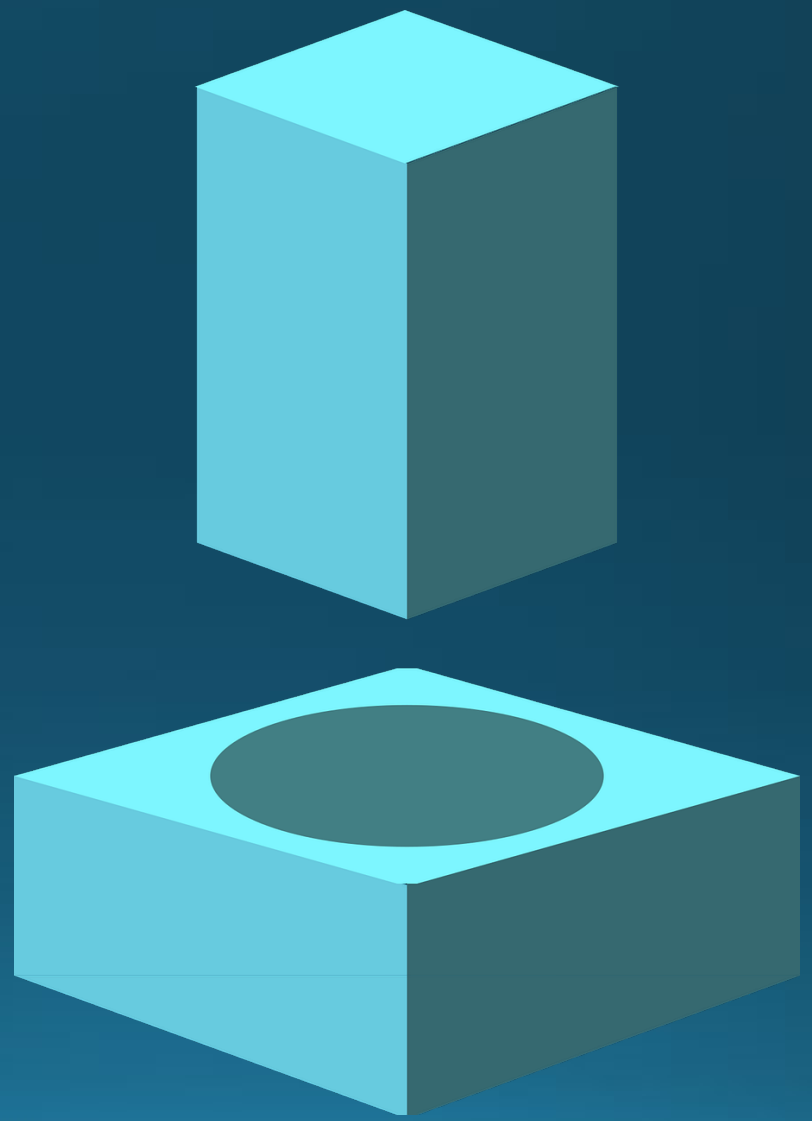
FUNDING

- Section 319 of the Clean Water Act provides funding to states to help manage Nonpoint Sources of Pollution
- Active program in MS since 1989
- Annual grants from EPA
  - Around $3M/year
  - Requires 40% match
- $15M in funds with $9M spent on projects over last 5 years
  - 15-20 projects per grant
  - 5 concurrent grants
- Education, Outreach, Guidance, Tools, and Implementation
- Implementation (BMPs) only in Priority Watersheds



WHAT MAKES US DIFFERENT

- Non-Regulatory Program
- Focus on consensus building and partnerships
- Combines watershed planning with implementation to achieve watershed improvements
- Success depends on voluntary participation from local stakeholders, landowners, NGOs, agencies and entities
- Diversity of eligible projects: Planning, Education, Outreach, Capacity Building, Guidance, Management Tools, On the Ground Projects



Eligible Activities for Funding Under 319 Program:

- Agriculture
- Construction
- Silviculture
- Urban Stormwater
- Mining
- Hydromodification
- Onsite Disposal Systems

How Does this Work?

Leveraging 319 Funding with NRCS Programs

- Provide Support to Develop Watershed Plans and/or Assessments
  - Performed data analysis and developed NWQI and MRBI Watershed Assessments
- Help Prioritize Watersheds for Implementation
- Use 319 to Fill the Funding Gap
  - Can fund applications that don't rank out for EQIP in priority watersheds
- Perform Monitoring to Show Success of Practices through Improved Water Quality
- Use Models to Estimate Load Reductions Achieved through Practices Implemented by NRCS

Watershed Plans & Assessments

EPA 9 Key Elements for Watershed Plans

- Identify Causes/Sources
- Estimate Load Reductions
- Describe Implementation Actions
- Estimate Technical & Financial Assistance Needed
- Information/Education Plan
- Implementation Schedule
- Measurable Milestones
- Criteria to Evaluate Success
- Monitoring

NRCS Watershed Assessment – National Planning Procedures 180-NPPH-600-F

- Background & Purpose
- Watershed Characterization
- Hydrology & Water Quality
- Resource Analysis & Source Assessment
- Implementation Goals
- Budget
- Measuring Progress, Success, & Follow Up

NRCS requires more discussion of soils, geology, climate, rainfall, and NEPA compliance
EPA requires more information on milestones, schedules, monitoring, and criteria to determine success

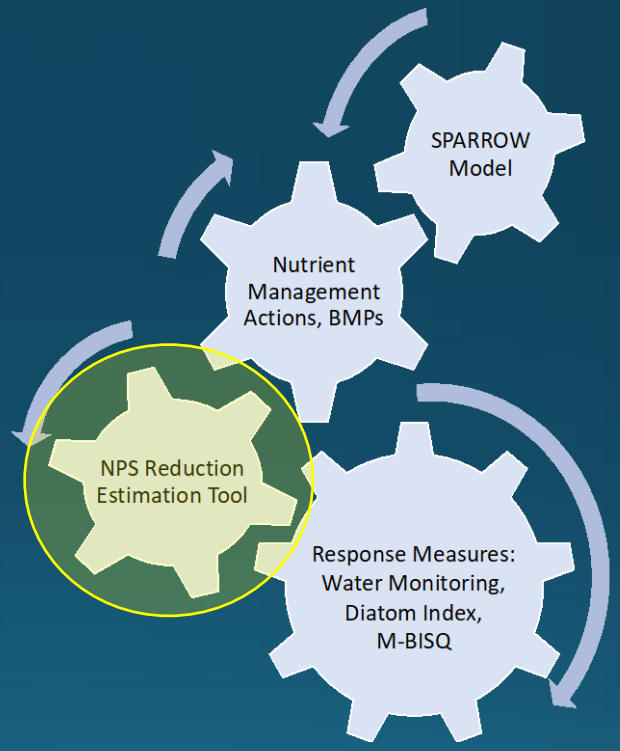
Examples of 319 Projects

- Restoration Project in Owl Creek Watershed
  - $1.2M
  - Grade Stabilization, Streambank, Fencing, Alternative Water Supply, Heavy Use Area
- Restoration Project in Sherman Creek Watershed
  - $1M
  - Grade Stabilization, Streambank, Fencing, Alternative Water Supply, Heavy Use Area
- Restoration Project in Platner Bayou Watershed
  - $700,000
  - Grade Stabilization, Streambank, Fencing, Alternative Water Supply, Heavy Use Area

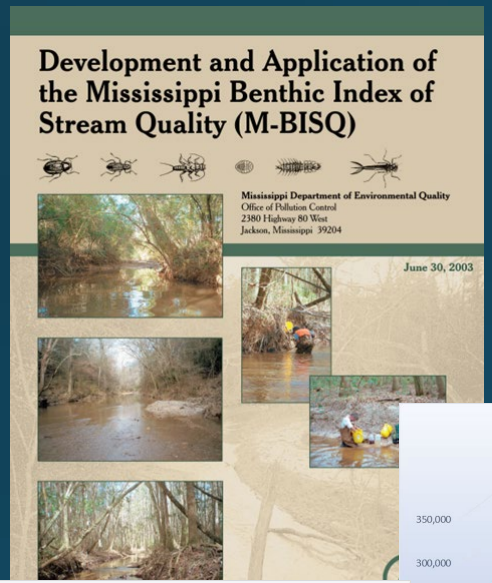
Leveraging Resources to Show Success

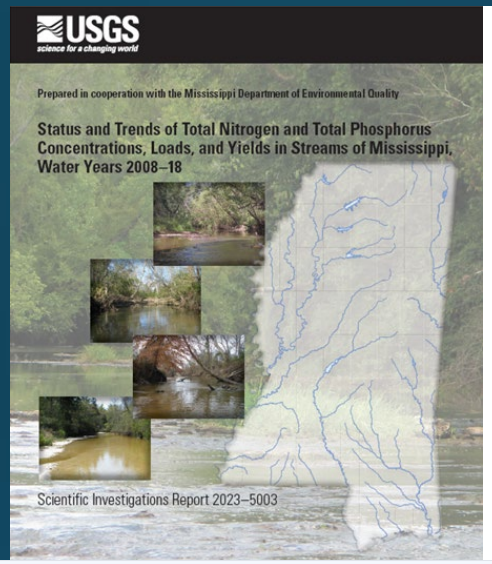
Nonpoint Source Reduction Estimation Tool (NRET)

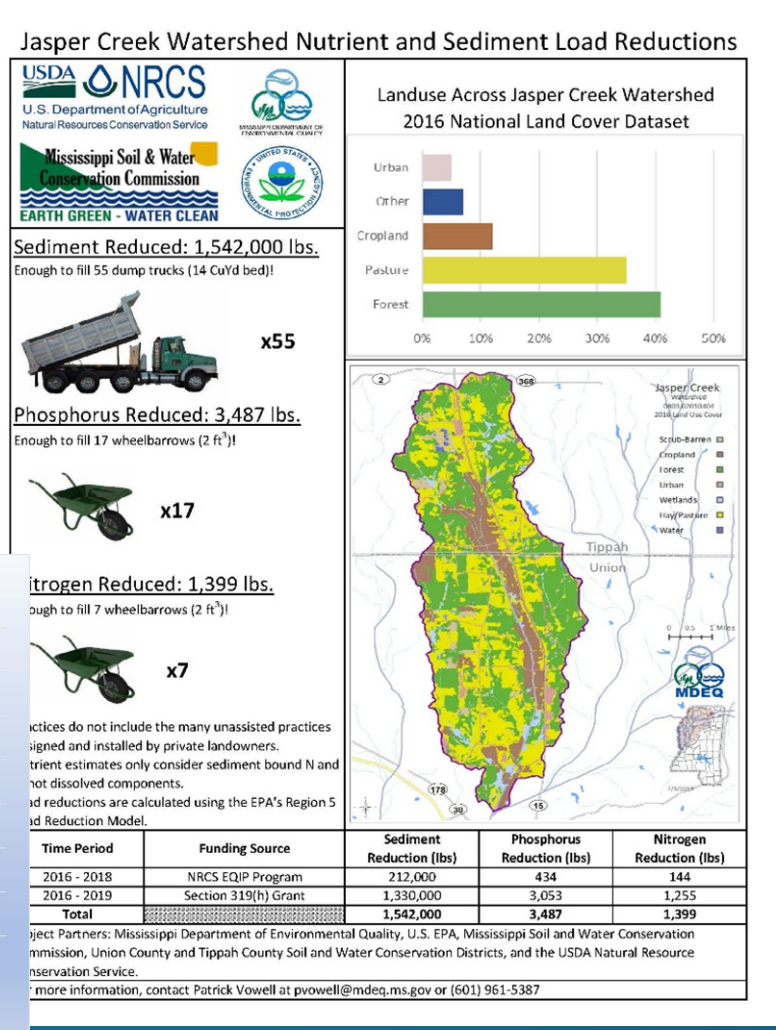
- Building database to store BMP information and run model to estimate load reductions (Sediment, TN, and TP)
- Report reductions at multiple scales, by practice, or by program
  - Watersheds, Basins, Regions, Practice, Year
- Results published to publicly accessible dashboard
  - Communicate environmental impacts of NRCS programs
- Model specific enough to estimate reductions
  - **NO** private data used

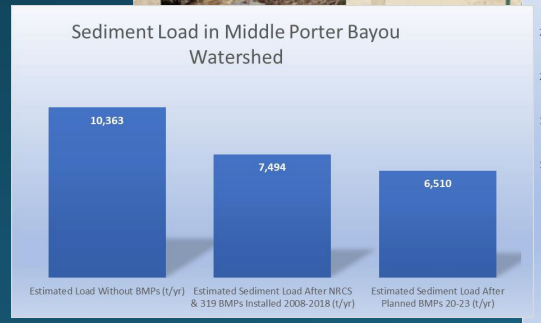


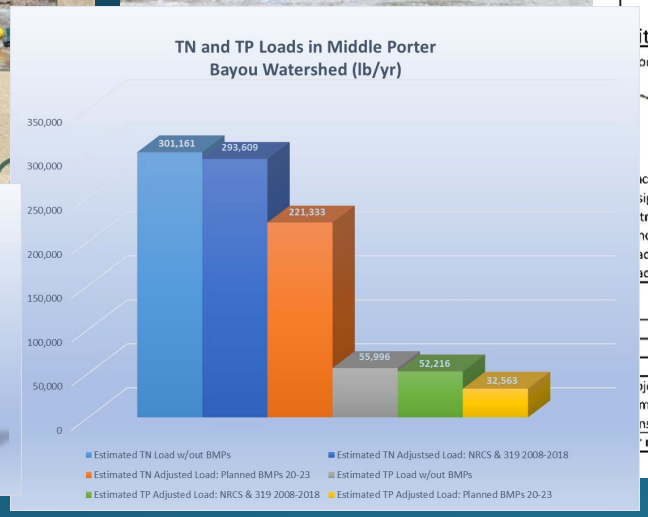
Measuring Outcomes











Waters Restored = Success

- North Tippah Creek Watershed
  - Tippah County
  - Grade Stabilization, Fencing, Cover Crops, Streambank Stabilization
  - BMPs funded through EQIP and NWQI
- Bahala Creek Watershed
  - Copiah County
  - Grade Stabilization, Critical Area Planting, Fencing, Heavy Use Areas
  - BMPs funded through EQIP
- McCall Creek Watershed
  - Lincoln County
  - Fencing, Heavy Use Areas, Watering Facilities, Pasture and Hayland Planting
  - BMPs funded through EQIP

What's Next?

- Building a tool to help determine success in Yazoo Delta Watersheds
  - Diatoms and Sediment Bacteria
  - Partnering with USGS and ARS National Sedimentation Laboratory
  - Other States: AR and AL
- Real Time Nitrate Monitoring
  - Partnering with USGS
  - 6 Major Tributaries into MS River
- Long Term Status and Trends: TN and TP
  - Approximately 40 locations
  - Measure success of programs
- Updated State Scale SPARROW
  - USGS Model
  - Background Loads for Sediment, TN, and TP

QUESTIONS?

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

NRCS State Technical Committee Meeting November 14, 2024 (ENGINEERING)

Presenter: Scott Coleman, P.E.
State Agricultural Engineer

FARM PRODUCTION AND CONSERVATION
FSA | NRCS | RMA | Business Center

Engineering Updates for FY 25 (EQIP)

- **New Practices:**

  NONE

- **New Scenarios:**

  NONE

- **Changes or clarifications:** **“Energy Practices”**

  (672) Energy Efficient Building Envelope

  (670) Energy Efficient Lighting System

  (374) Energy Efficient Agricultural Operation

Practices 374, 670 and 672 - Changes are the same

The practices installed will be based on the type and amount identified in the on-farm energy audit.

The check out sheets will be signed by the producer and installer certifying that the practices were installed as identified in the audit.

Practice 561 Heavy Use Area

Scenario: Rock/Gravel on Geotextile, 6-inches thick

Washed gravel will not be used

Must use crushed limestone or steel slag aggregates

Material shall range in size from 3/8” to 3/4”

Practice 430 Irrigation Water Conveyance

Scenario: All

Pipe lengths can include length for risers and open standpipes.

Practice 580 Streambank Stabilization

Scenario: All

These practices can be included in the Forestry Resource concern

USDA Natural Resources Conservation Service
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QUESTIONS ??

FARM PRODUCTION AND CONSERVATION
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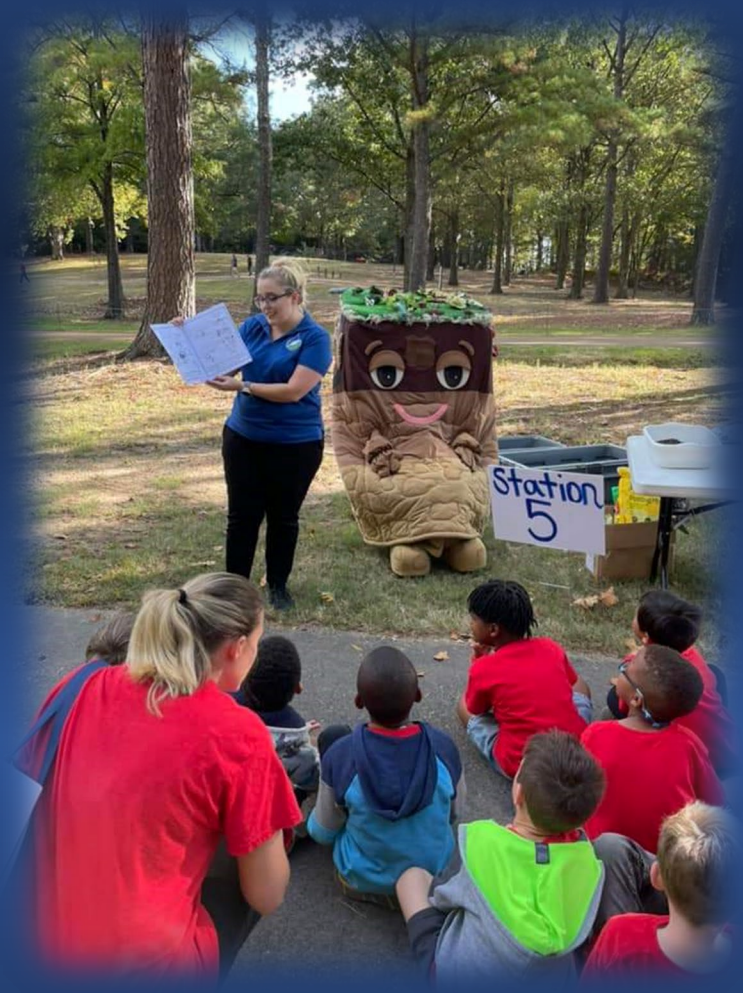
MS Soil & Water Conservation Commission

Guiding, promoting, and demonstrating conservation, development, protection and proper utilization of the soil, water and related resources of the state of Mississippi.

- ✓ District Assistance
- ✓ Water Quality
- ✓ Surface Mines

District Assistance



Natural Resource Education

District Assistance

Assisting the 82 Soil & Water Conservation Districts throughout the state of MS

- Elections and Appointments of Commissioners
- Financial Reporting
- Local projects
- 319 NPS project administration

District Programs

Program	Beginning Balance	Funds Remaining	End Date
CTA	$ 1,150,000.00	$ 672,470.03	9/30/2024
District Technician	$ 1,000,000.00	$ 446,624.57	9/30/2024
CRP	$ 3,250,000.00	$ 2,280,648.34	2/28/2025

✓ **Water Quality**

Non-Point Source Pollution Programs

Streambank and Shoreline Protection

Stream Crossing

Ponds

Check Dams

Cross Fencing

Grade Stabilization Structures

Non-Point Source Pollution Programs

Project Name	BMPs Installed	Allocation	Spent	Remaining
Ellison Creek	6 BMPS	$215,000.00	$109,222.73	$105,777.27
Fuller Creek-Town Creek	0 BMPs	$346,500.00	$0.00	$346,500.00
Muddy Bayou	0 BMPs	$297,635.00	$0.00	$297,635.00
Owl Creek	225 BMPs	$1,149,037.72	$831,047.87	$317,989.85
Platner Bayou	0 BMPs	$637,982.00	$0.00	$637,982.00
Sherman Creek-Panola Quitman Floodway	18 BMPs	$538,889.86	$486,201.77	$52,688.09
Upper Piney Creek	0 BMPs	$310,500.00	$0.00	$310,500.00
Carmichael Creek-Town Creek (completed)	76 BMPs	$647,803.15	$647,803.15	$0.00

Watershed Rehabilitation

De-watering through
MSWCC Siphon System

Watershed Dam Rehabilitation

Richland Creek Dam 2A

Watershed Rehabilitation

Dam Pipe Inspections

Watershed Rehabilitation

The **Watershed Rehabilitation Program** helps project sponsors rehabilitate aging dams that are reaching the end of their design life and/or no longer meet federal or state safety criteria or performance standards.

Watershed Structure
Buntyn Creek Str 16A-1
Buntyn Creek Str 16A-2
Asclamore Creek Str Y-17A-1
Asclamore Creek Str Y-17A-2
Bentonia Creek WS Str #7
Eden Creek Watershed Str Y-37D-10
Tillatoba Creek Str Y-17B-1
N. Tillatoba-Hunter Creek WS Y-17C-6B
Black Creek 100
Greasy Creek WS
Town Creek

Watershed and Flood Prevention Operations

The **WFPO program** provides technical and financial assistance to States, local governments and Tribal organizations to help plan and implement authorized watershed projects 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 and Flood Prevention Operations

Current Projects
City of Charleston
Holmes County
Hubbard Creek
Long Creek Reservior
Madison Upper Bear Creek
Tillatoba Levee
Richland Creek
Coahoma Co - Govt Ditch
Hinds County
Trim Cane
Bogue Phalia
Pelucia Creek - Leflore
Forrest County Rawls Springs
Yalobusha
Carter Rocky Levee System

Conserving for our future, NOW

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

Mississippi Easement Programs for FY25 – An Overview

J.J. Smith – Assistant State Conservationist - Easements

Agricultural Conservation Easement Program

ACEP consolidates three conservation easement programs:

- Wetlands Reserve Program (WRP)
- Grasslands Reserve Program (GRP)
- Farm and Ranch Lands Protection Program (FRPP)

ACEP has two components –

- Wetlands Reserve Easements (WRE)
- Agricultural Lands Easements (ALE)

ALE - Overview

Program Purposes and Objectives

- Protect agricultural uses and related conservation values of eligible land by limiting uses of that land

OR

- Protect grazing uses and related conservation values by restoring and conserving eligible land

BY

- Contributing up to 50% of funds to eligible entities for the purchase of easements to protect natural resources and agricultural use of the land

ALE – Land Eligibility

Private or Tribal Land that is at least one of the following:

- Prime, unique, or other productive soil
- Historical or archaeological resources
- Protect grazing uses and related conservation values by restoration and conservation
- Will further a State or local policy consistent with ACEP

And is:

- In an area with access to agricultural markets/ infrastructure
- Land with development pressure or grasslands subject to threat of conversion
- Pending offer for easement purchase

WRE - Overview

The objectives of ACEP-WRE are to protect, restore and enhance the functions and values of wetland ecosystems to attain:

- Habitat for migratory birds, T&E species, and other wetland-dependent wildlife
- Protection and improvement of water quality
- Attenuation of floodwater
- Recharge of ground water
- Protection and enhancement of open spaces
- Protection of native flora and fauna
- Contribution to educational and scientific scholarship
- Provide producers a viable option for marginal lands

WRE – Land Eligibility

- The land must have been a wetland prior to manipulation.
- The land must have been manipulated for production of food or fiber.
- The land must be restorable.

WRE – Land Eligibility

- Farmed or Converted
- Former or Degraded Wetlands
- Lands Substantially Altered by Flooding
- Riparian Areas
- Restored Wetlands Not Yet Permanently Protected
- Adjacent Lands
- CRP Lands (Active or Expired)
  - ✓ CRP land planted to bottomland hardwood trees are a portion of an eligible WRE offer and offered CRP acres are less than 50% of entire offered acres
  - ✓ CRP land planted to bottomland hardwood trees are adjoining an existing WRP/WRE easement or other permanently protected area (WMA, NWR, NF, SP, etc.)
  - ✓ Failed CRP bottomland hardwood tree planting as determined by MS Forestry Commission
  - ✓ CRP land planted to grass

Emergency Watershed Protection Floodplain Easements – EWPP-FPE

- Floodplain lands damaged by flooding at least once within the previous calendar year or subject to flood damage at least twice within the previous 10 years.
- Other lands within the floodplain are eligible, provided the lands will contribute to the restoration of the flood storage and flow, provide for control of erosion, or will improve the practical management of the floodplain easement.
- Lands inundated or adversely impacted because of a dam breach.

Regional Conservation Partnership Program-RCPP

- RCPP-Upper Pearl
  - ✓ Mirrors the Health Forest Reserve Program (HFRP)
  - ✓ Eligible land is within ½ mile buffer of the Pearl River in Neshoba and Leake County
- RCPP – KKAC Organization MS/AR Conservation Easements
  - ✓ Mirrors ACEP-WRE
  - ✓ Eligible land is land that

Easement Support Staff

- **State Office Easement Staff**
  - ✓ J.J. Smith – ASTC Easements
  - ✓ Ronald McCain – Easement Coordinator
  - ✓ Ariel Hollins – Administrative Assistant
  - ✓ Sara Vinson – Realty Specialist
  - ✓ Vacant – Management & Program Analyst
- **Easement Field Team**
  - ✓ Ben Naron – Natural Resource Specialist/ Field Team Lead
  - ✓ Rick Hagar – Easement Specialist
  - ✓ Alec Conrad – Forester
  - ✓ Jason Makamson – Soil Conservationist
  - ✓ Vacant - Biologist

Easement Contact Information

Office: 662-271-3140 (Greenwood AO)
Office: 601-863-3947 (Jackson SO)

Email: janeiro.smith@usda.gov

Additional Resources
www.nrcs.usda.gov/ms

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

FY25 Mississippi State Technical Advisory Committee Meeting

FARM PRODUCTION AND CONSERVATION
FSA | NRCS | RMA | Business Center

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Mississippi Financial Assistance Programs

FARM PRODUCTION AND CONSERVATION
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U.S. DEPARTMENT OF AGRICULTURE

Financial Assistance Programs

Presented by: Ashley Kellum
CSP Program Manager/LMT-SLDP
Work: (662) 458-0396
Email: Ashley.Kellum@usda.gov

Mississippi Financial Assistance Programs

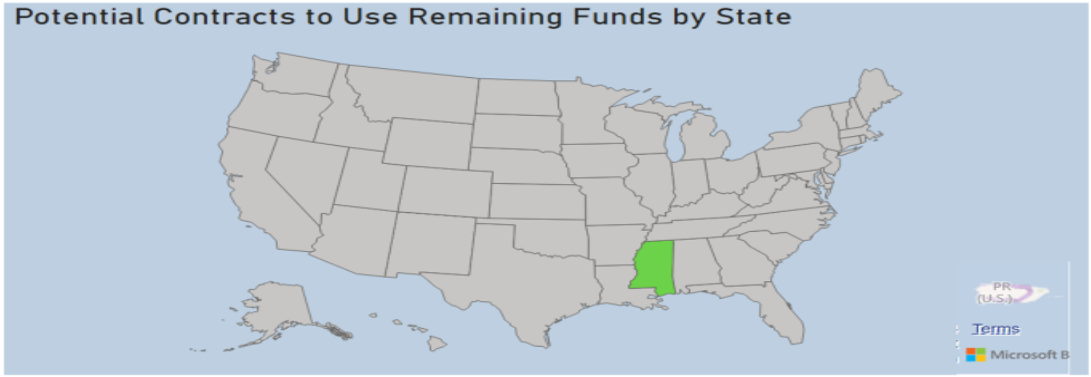
- Environmental Quality Program (EQIP)
- Conservation Stewardship Program (CSP)
- Inflation Reduction Act (IRA)
- Regional Conservation Partnership Program (RCPP)
- Urban Agriculture

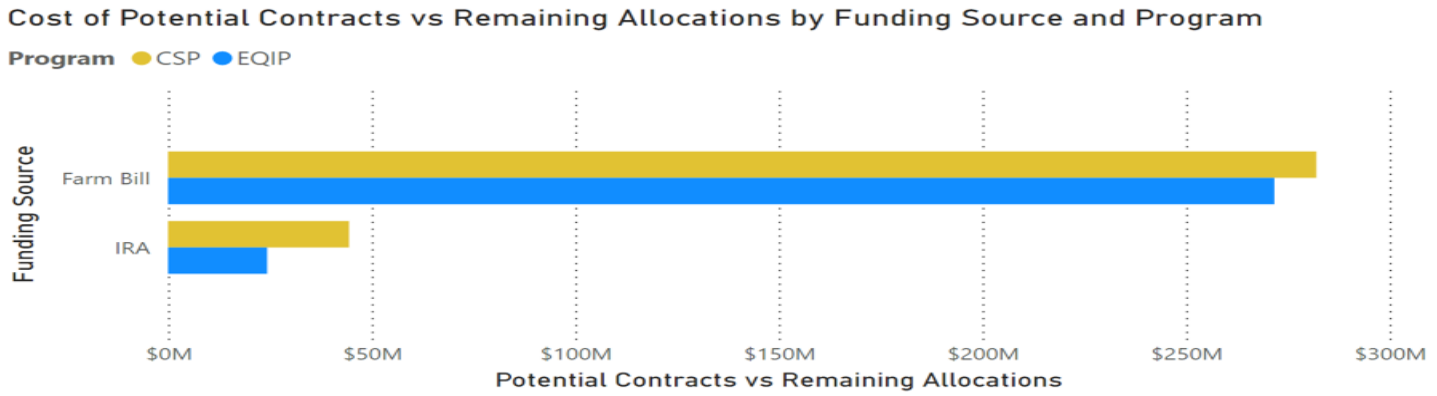
FY2024 Program Obligations

Mississippi

Region: All | State: Mississippi | Program: All | Funding Source: All

Program to Link	Initial Allocation	Adjusted Allocation[2 3]	Change in Allocations	# Contracts	Obligation	Acres	$ per ac of Conservation	% Obligated	Avg Cost of Contract	Remaining Allocation	# Potential Contracts[1]	Cost of Potential Contracts by Avg Cost of Contract
CSP	**$40,417,691**	**$55,417,691**	**$15,000,000**	**396**	**$54,057,528**	**234,253**	**$231**	**97.55%**	**$136,509**	**$1,360,163**	**2,418**	**$327,787,795**
Farm Bill	$25,630,691	$40,630,691	$15,000,000	294	$39,570,066	178,837	$221		$134,592	$1,060,625	2,103	$283,047,102
IRA	$14,787,000	$14,787,000	$0	102	$14,487,463	55,416	$261		$142,034	$299,538	315	$44,740,693
EQIP	**$83,985,039**	**$109,946,094**	**$25,961,055**	**2,475**	**$109,927,501**	**225,983**	**$486**	**99.98%**	**$44,415**	**$18,593**	**7,150**	**$296,027,257**
Farm Bill	$41,127,039	$67,088,094	$25,961,055	1,648	$67,021,661	158,102	$424		$40,668	$66,434	6,682	$271,746,805
IRA	$42,858,000	$42,858,000	$0	827	$42,905,841	67,881	$632		$51,881	($47,841)	468	$24,280,452
Totals	**$124,402,730**	**$165,363,785**	**$40,961,055**	**2,871**	**$163,985,030**	**460,236**	**$356**	**99.17%**	**$57,118**	**$1,378,756**	**9,568**	**$623,815,052**





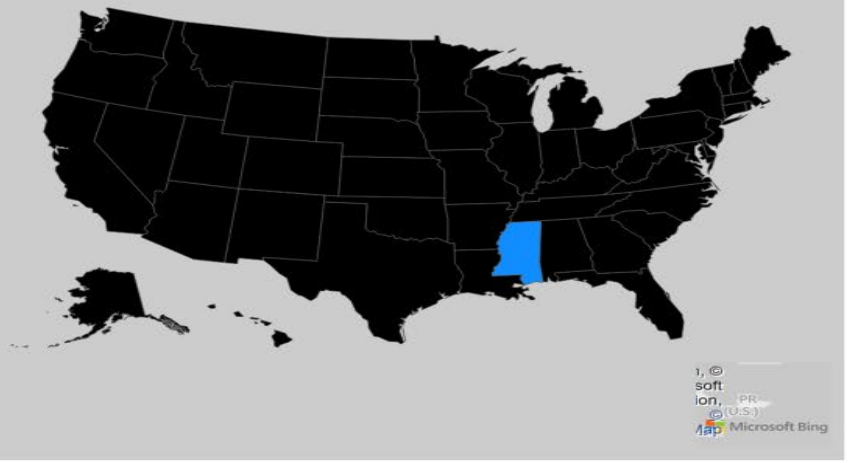
FY2024 Historical Underserved

USDA FY24 HU Contracting Information

Region: All | State: Mississippi | Program: All | Funding Source: All

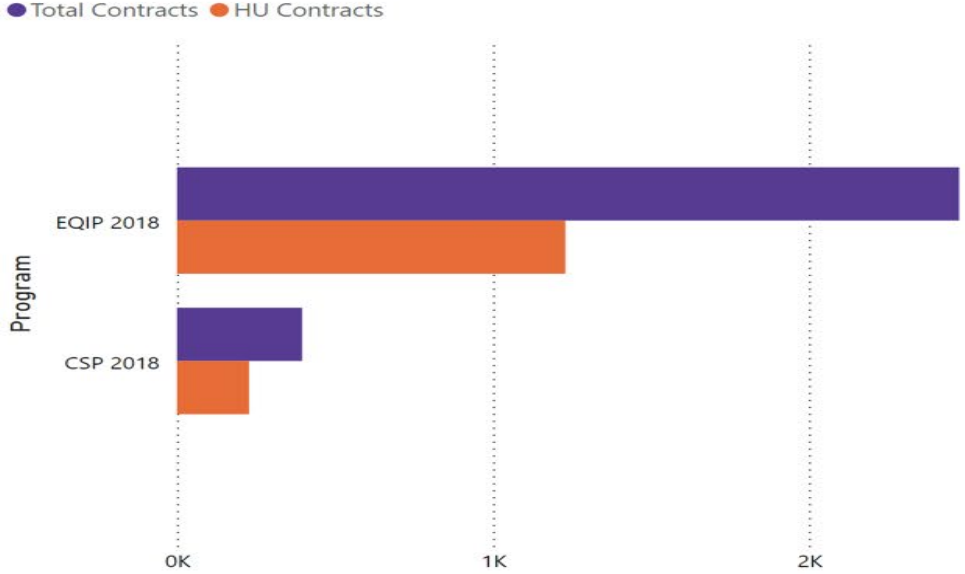
1,457	$67,514,309	135,915	50.7%
# Contracts	Total HU Obligation	Total HU Acres	% HU Contracts

HU Contracts by State



BF | LR | SD | VF

Total Contracts and HU Contracts by Program



986	121	766	103
# BF Contracts	# LR Contracts	# SD Contracts	# VF Contracts

Source: ProTracts Last Update: 9/30/2024

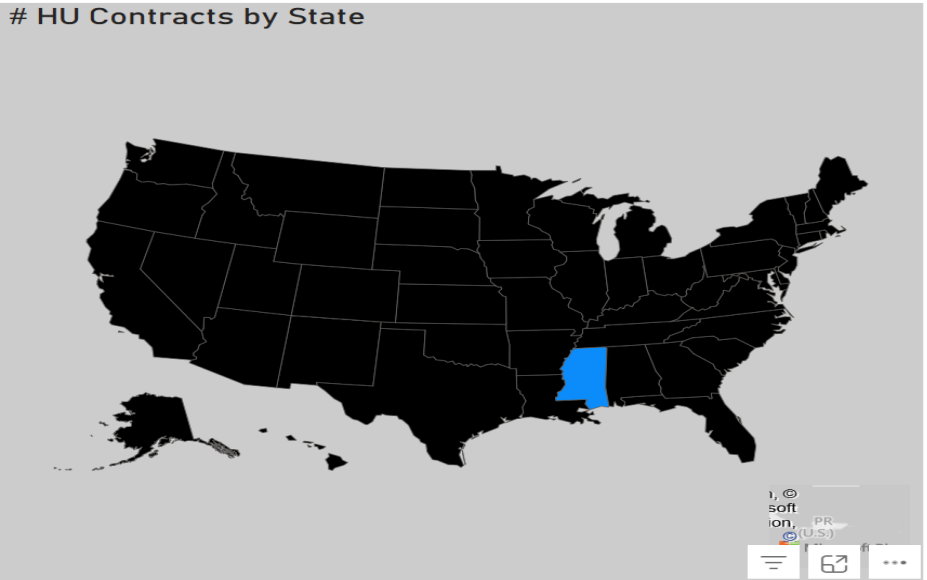
FY2024 BF

FY24 HU Contracting Information

Region: All | State: Mississippi | Program: All | Funding Source: All

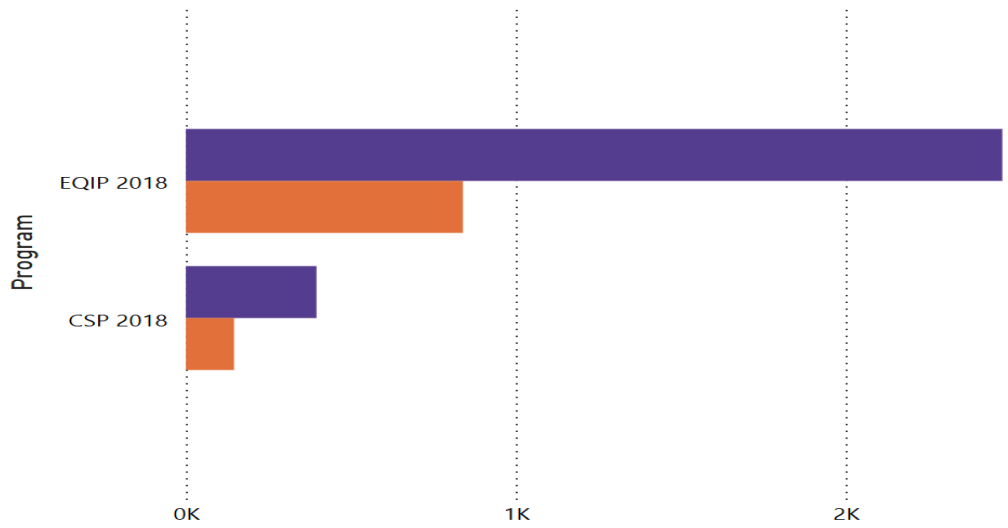
986	$45,149,005	88,304	34.3%
# Contracts	Total HU Obligation	Total HU Acres	% HU Contracts

HU Contracts by State



BF | LR | SD | VF

Total Contracts and HU Contracts by Program



986	(Blank)	(Blank)	(Blank)
# BF Contracts	# LR Contracts	# SD Contracts	# VF Contracts

Source: ProTracts Last Update: 9/30/2024

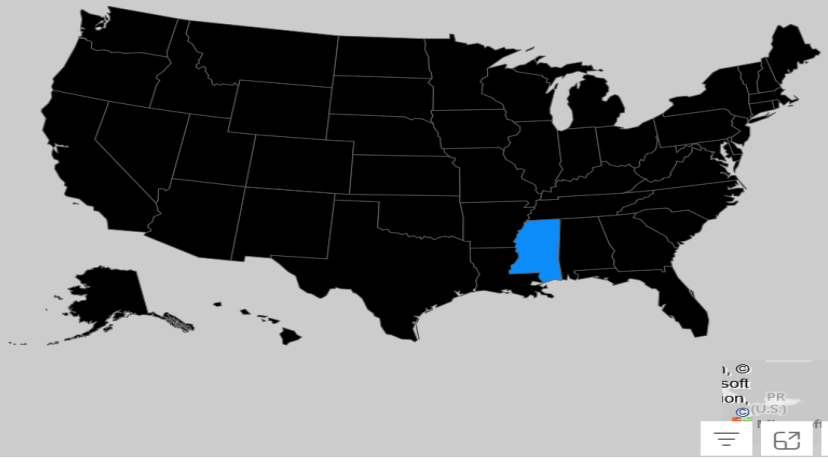
FY2024 LR

FY24 HU Contracting Information

Region: All | State: Mississippi | Program: All | Funding Source: All

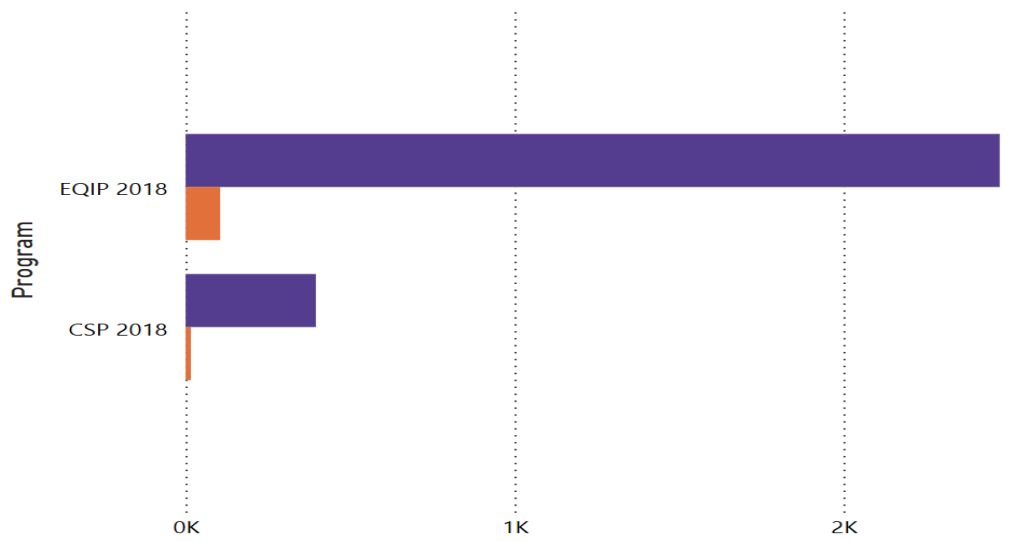
121	$3,510,836	7,359	4.2%
# Contracts	Total HU Obligation	Total HU Acres	% HU Contracts

HU Contracts by State



BF | LR | SD | VF

Total Contracts and HU Contracts by Program



(Blank)	121	(Blank)	(Blank)
# BF Contracts	# LR Contracts	# SD Contracts	# VF Contracts

Source: ProTracts Last Update: 9/30/2024

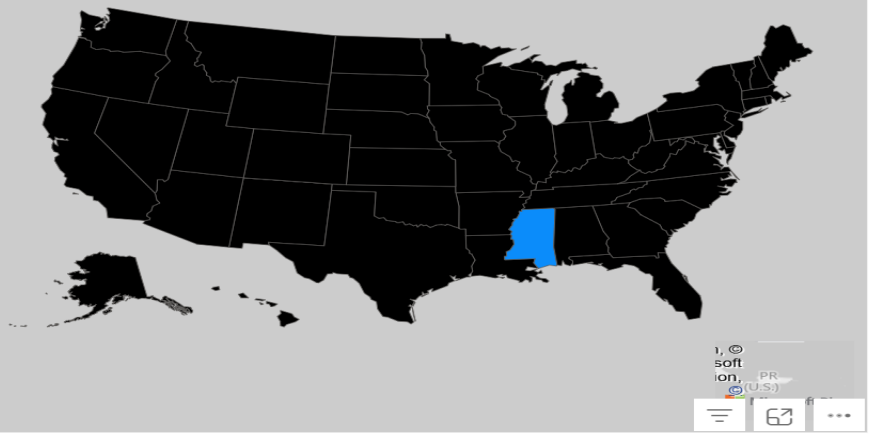
FY2024 SD

FY24 HU Contracting Information

Region: All | State: Mississippi | Program: All | Funding Source: All

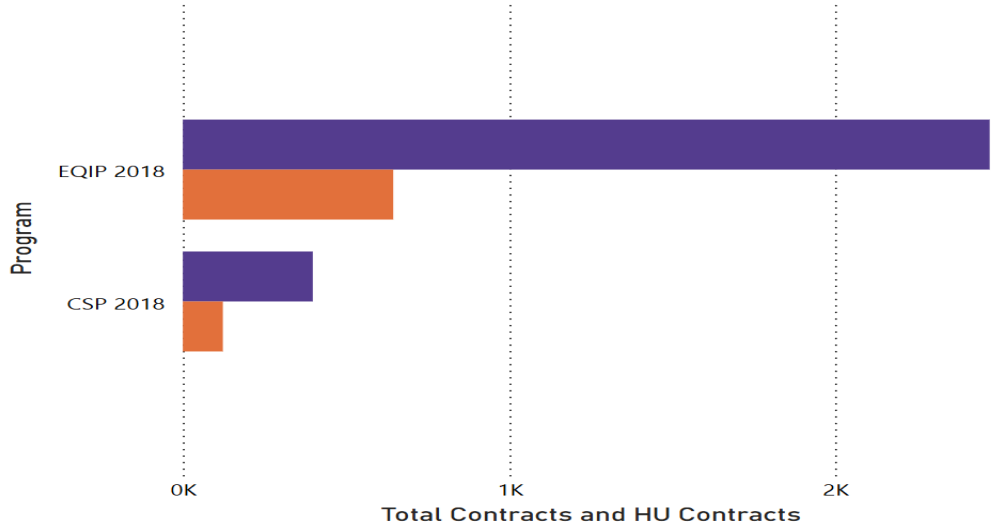
766	$36,162,575	65,734	26.7%
# Contracts	Total HU Obligation	Total HU Acres	% HU Contracts

HU Contracts by State



BF | LR | SD | VF

Total Contracts and HU Contracts by Program



(Blank)	(Blank)	766	(Blank)
# BF Contracts	# LR Contracts	# SD Contracts	# VF Contracts

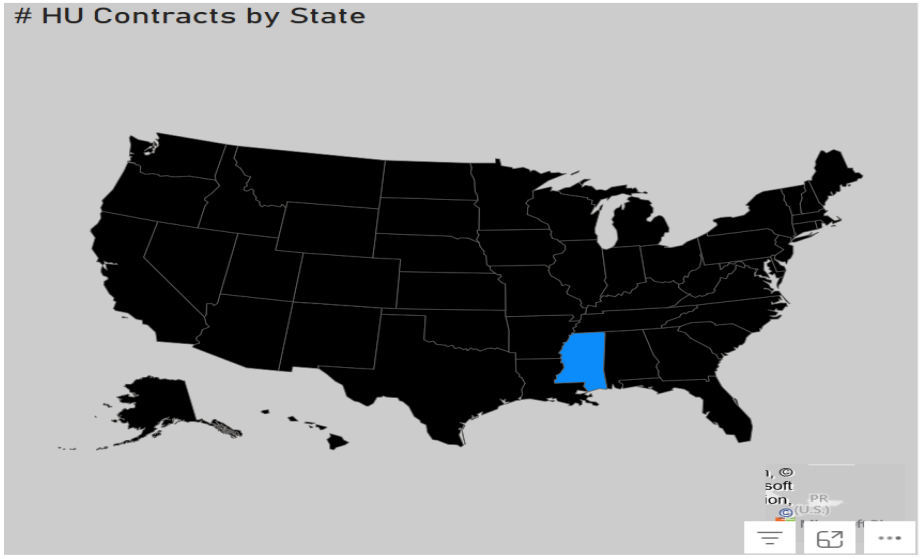
Source: ProTracts Last Update: 9/30/2024

FY2024 VF

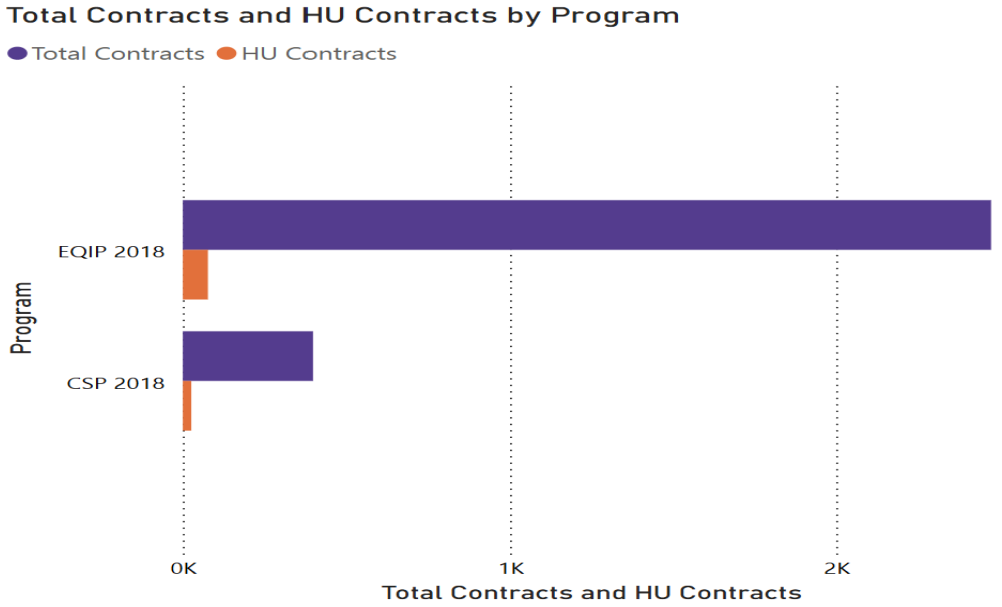
FY24 HU Contracting Information

Region: All | State: Mississippi | Program: All | Funding Source: All

103	$3,046,361	6,609	3.6%
# Contracts	Total HU Obligation	Total HU Acres	% HU Contracts



BF | LR | SD | VF



(Blank)	(Blank)	(Blank)	103
# BF Contracts	# LR Contracts	# SD Contracts	# VF Contracts

Source: ProTracts Last Update: 9/30/2024

Environmental Quality Incentives Program

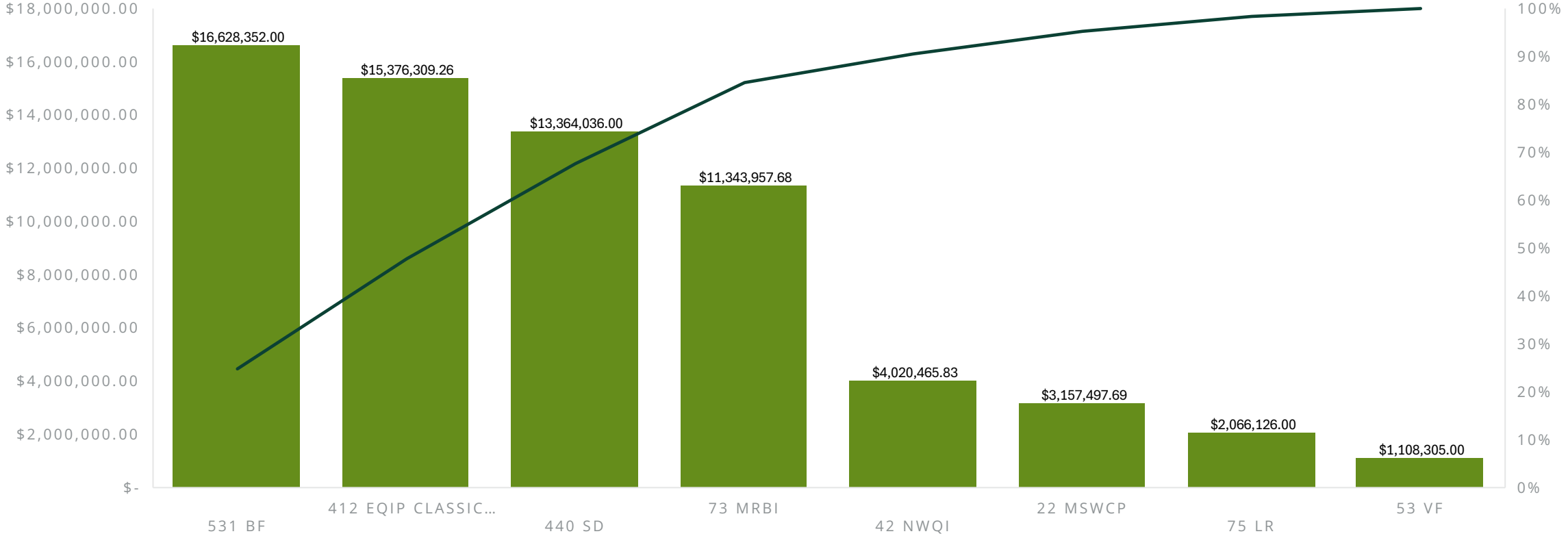
EQIP is a voluntary conservation program that assist producers make conservation work for them. Together, the Natural Resources Conservation Service (NRCS) and producers invest in solutions that conserve natural resources for the future while also improving agricultural operations.

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.

Environmental Quality Incentive Program

- $67 Million Allocated
- 1648 Contracts

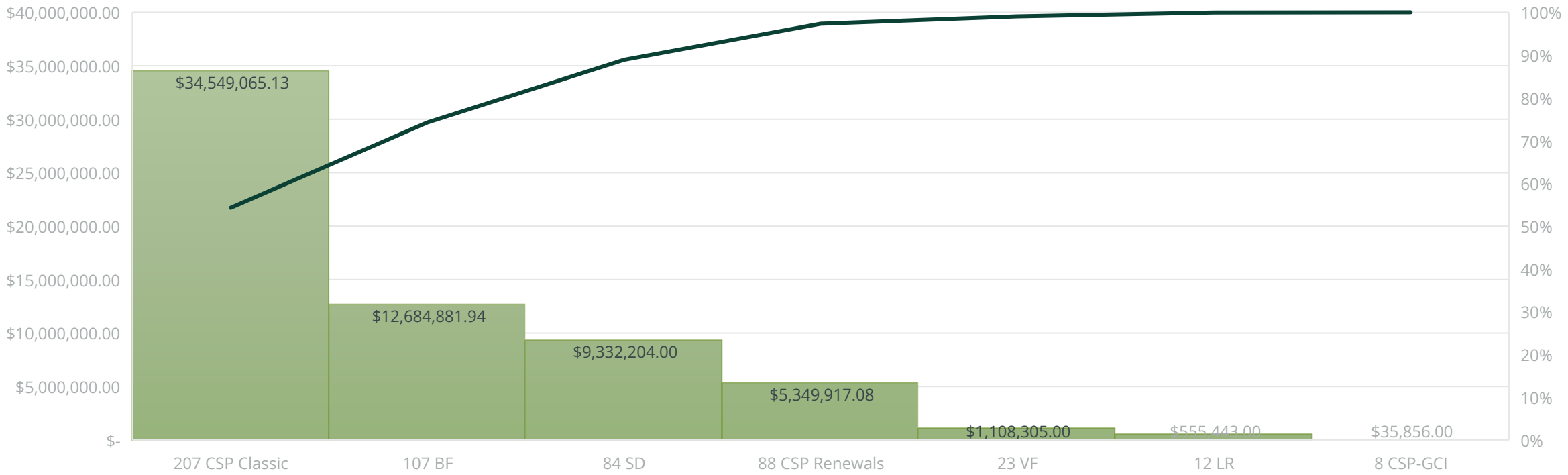


Conservation Stewardship Program (CSP)

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.

Conservation Stewardship Program

- $39 Million Allocated
- 303 Contracts

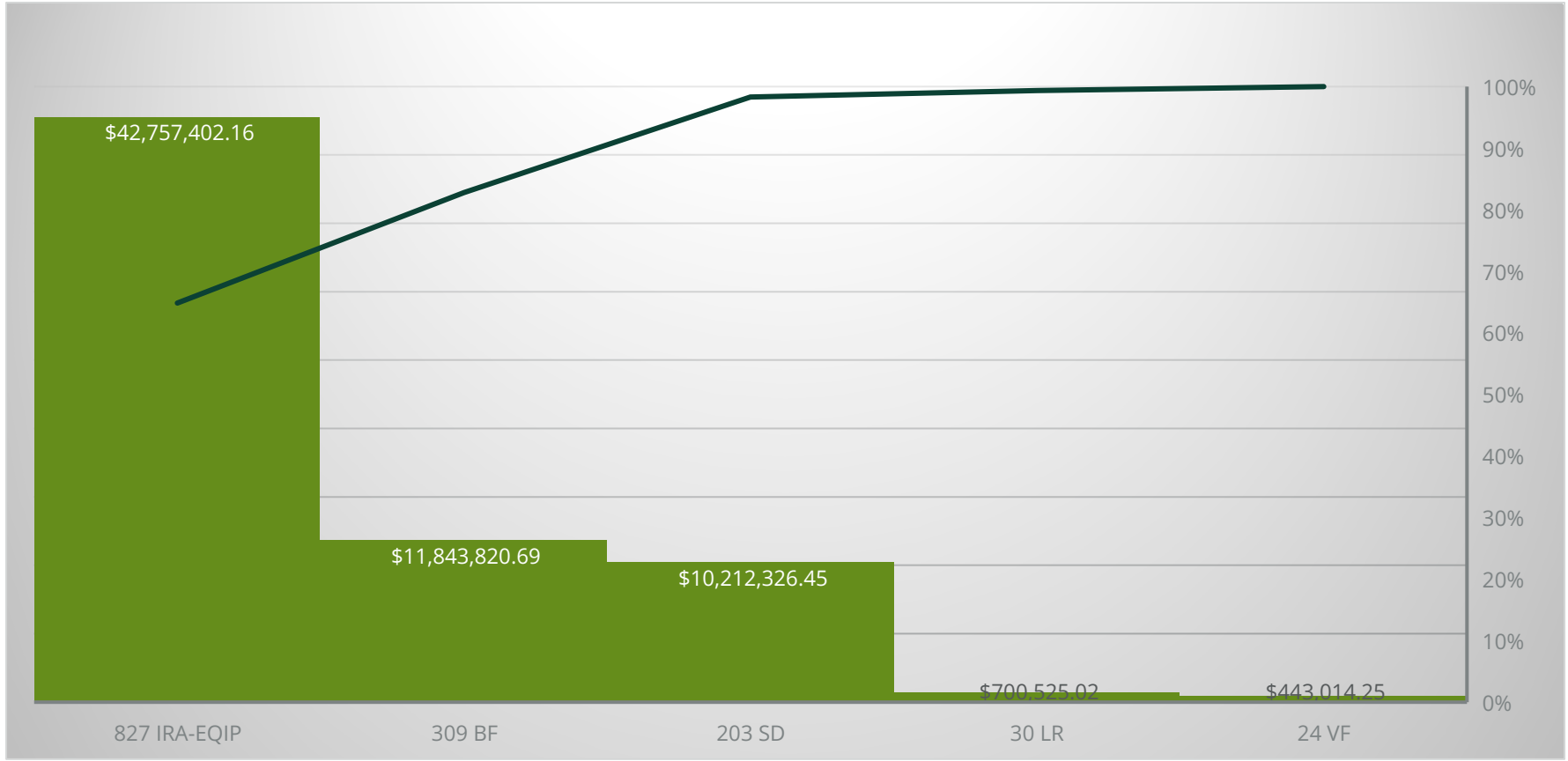


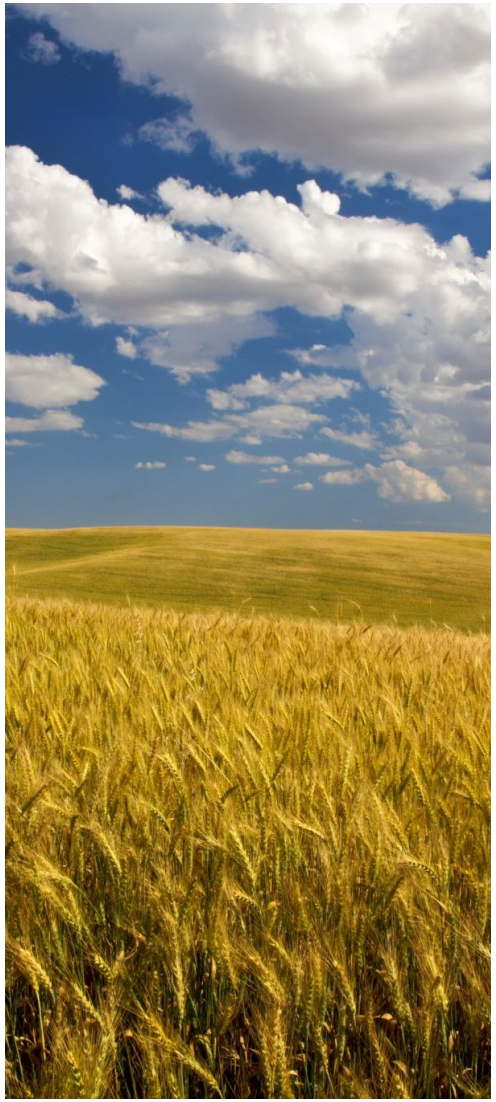
Inflation Reduction Act (IRA)

The Inflation Reduction Act of 2022 will provide assistance to agricultural and forestland producers to invest in climate and clean energy solutions and promote climate-related benefits through NRCS programs.

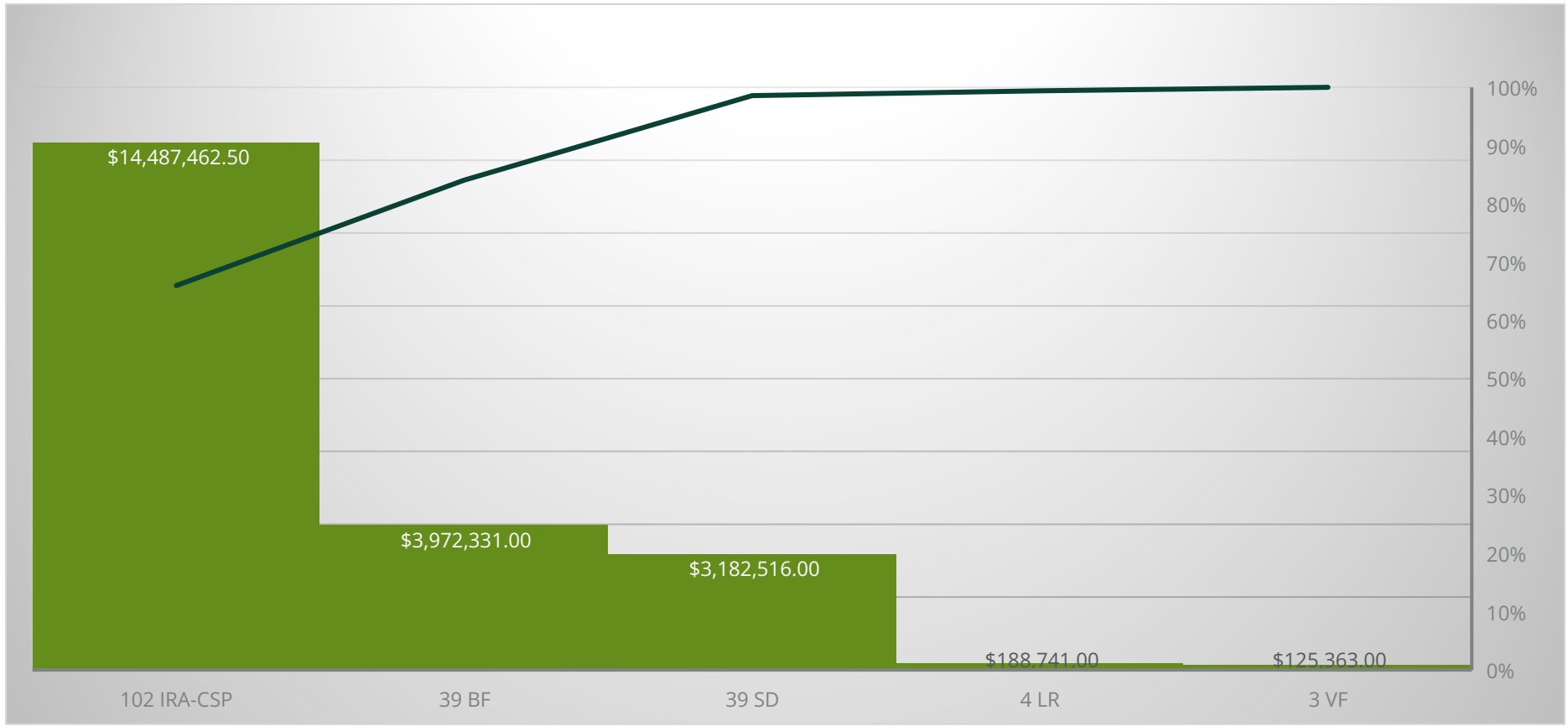
IRA is not a new administered program. It's a funding vehicle to support programs EQIP, CSP, RCPP and ACEP to address the unmet demand from producers who have previously sought funding for climate-smart conservation activities.

Inflation Reduction Act (IRA)IRA-EQIP





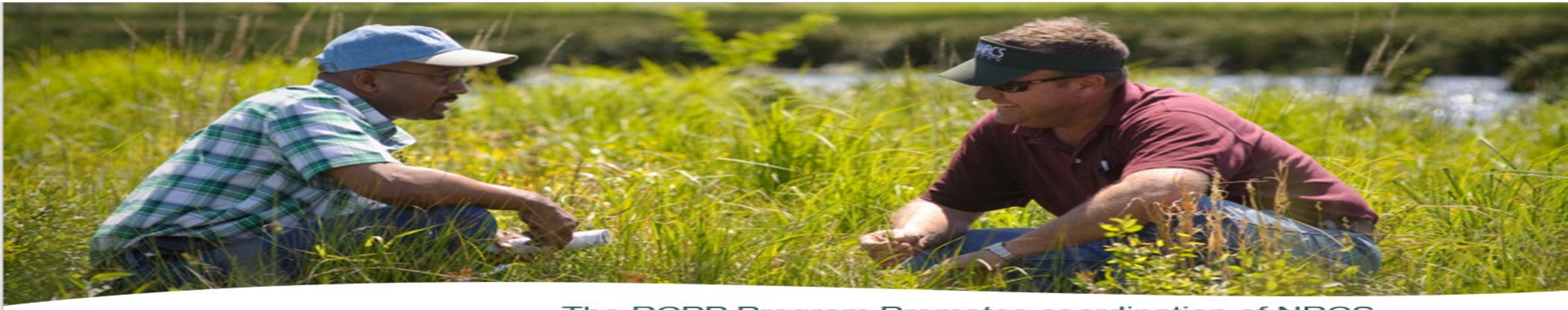
Inflation Reduction Act(IRA) IRA-CSP



IRA Focuses on Mitigation

- The IRA directs NRCS to use the additional funds specifically for **climate change mitigation**.
- Mitigation activities ***reduce greenhouse gas emissions and improve carbon storage.***
- FY25 list of **NRCS climate-smart mitigation activities:** https://www.nrcs.usda.gov/sites/default/files/2023-10/NRCS-CSAF-Mitigation-Activities-List.pdf
- NRCS is continually evaluating mitigation activities and IRA implementation approach and will update them as appropriate.
  - Federal Register notice (Nov. 21, 2022)

Regional Conservation Partnership Program



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.

Regional Conservation Partnership Program

- FY2024 Approved Agreement
  - Managing Native Vegetation for Climate Mitigation through Grassland Bird Conservation in Georgia and Mississippi

- FY2025 – 3 Approved Agreements
  - Pending Approvals

FY2025 Program Timeline

- https://usdagcc.sharepoint.com/sites/nrcs_mississippi/program/Lists/Announcements/Attachments/9/FY2025%20Programs%20Timeline_10032024.pdf

Natural Resources Conservation Service

- Fiscal Year 2025 EQIP Sign-Up

EQIP Classic including State and National Initiatives

2025 Sign-up Deadline: November 1, 2024

- Eligibility Deadline: November 29, 2024
- Obligation Deadline: August 29, 2025

Natural Resources Conservation Service

- **Fiscal Year 2025 CSP Sign-Up**

CSP Renewals

Application Deadline: March 29, 2024

Assessment and Ranking Deadline: November 22, 2024

Obligation Deadline: December 13, 2024

CSP Classic including State and National Initiatives

2025 Sign-up Deadline: November 1, 2024

- Eligibility Deadline: November 29, 2024
- Obligation Deadline: August 29, 2025

FY2025 Allocation

Program	Initial Allocation
CSP	**$66,876,691.00**
Farm Bill	$41,205,691.00
IRAS	$25,671,000.00
EQIP	**$103,372,828.00**
Farm Bill	$45,741,675.00
IRAE	$57,631,153.00
Totals	**$170,249,519.00**

FY2025 Changes

NEW

- MS Water Conservation Program FY2025

  - The Mississippi Water Conservation Management Project is a voluntary conservation initiative that provides financial and technical assistance to producers to implement agricultural water enhancement activities on agricultural land for the purposes of conserving groundwater through the enhanced use of water conservation and surface water. As part of the Environmental Quality Incentives Program (EQIP), this project operates through program contracts with producers to plan and implement conservation practices in eligible counties.

Natural Resources Conservation Service

QUESTIONS???

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Email: Edward.McMillian@usda.gov

Natural Resources Conservation Service

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