



Florida Climate Smart Agriculture Initiative 2023 Work Plan

Mission Statement: *The Florida Climate Smart Agriculture (FLCSA) initiative will identify and implement climate smart agriculture solutions and ecosystem services that benefit the public, producers and the planet.*

Planned Workstreams and Work Group Leads:

Ecosystem Services

FLCSA- Mike Adams and Mallory Lykes Dimmitt

UF- Alina Zare, Jose Carlos Dubeux and Joel Harley

- Quantifying and Valuing AgroEcosystem Services using Artificial Intelligence. Through this project, FLCSA leaders, UF/IFAS Researchers and students will co-design systems and tools to measure and quantify the delivery of agroecosystem services. The AI project design calls for layering management practices and examining ecosystems service deliverables using AI and computer modeling. Data collection work in 2023 will focus on plant diversity. This project will process satellite and drone images using machine learning to quantify the ecosystem services. Efforts are continuing to secure necessary funding to underpin this important work and create AI-HARVEST: a Hub for Agricultural Reporting and Verification of Ecosystem Services through Sensing Technologies.
- Attributes of an effective payment for ecosystems service program. The only way for a payment for ecosystem services (PES) programs to be successful is if they work for farmers, ranchers and foresters. With this imperative in mind, FLCSA leaders will discuss and define what it would take for them to participate.

Solar Energy

FLCSA- Scott Kirouac

UF- TBD

- FLCSA leaders will explore distributed generation models of solar energy development that work for farmers, ranchers and forest landowners. Florida's current model of solar energy development is large scale, utility owned and does not allow for community owned, distributed generation systems. FLCSA's Solar Work group will explore models being used by other states, including clean energy cooperatives, distributed generation projects with rural electric cooperatives and power purchase agreements. A key area of focus will be strategies and partnerships to remove policy barriers which impede or block their deployment.

Healthy Farms-Healthy Bays Initiative

FLCSA Co-Chairs- Ed Chiles and Randall Dasher

UF/IFAS Leads- Drs. Bob Hochmuth, Mike Allen and Wendy-Lin Bartels

- Through this new initiative, FLCSA will collaborate with aligned partners in connecting upland farmers and ranchers with downstream aquatic ecosystem stakeholders in a joint effort to: enhance sustainability of agricultural operations; and improve water quality, fisheries and habitat in key Gulf Coast bays and estuaries. Beginning in the Suwanee River watershed, FLCSA will help farmers think about and experiment with solution pathways and tactics that reduce external inputs, close nutrient loops, regenerate soils and concurrently produce agricultural and food products, protect and renew ecosystems and provide multiple services and benefits to the farm enterprise and to society.

The goal is to build on existing restoration plans and projects, using best available science and leading technical advisors, to achieve a new future- a future where healthy and productive bays, rivers and streams across the peninsula are underpinned and supported by a vibrant and sustainable agricultural economy.

Socially Disadvantaged/Underserved Producer Engagement

FLCSA- TBD

Florida A&M University- Dr. Jennifer Taylor

- FLCSA leaders have committed to develop a manageable plan of action to engage socially disadvantaged, underserved and limited resource producers by building a concrete strategy for ways to identify and understand the unique needs of these communities and explore initiatives and policies that could help improve their livelihoods.

Communications Outreach

FLCSA Chair- David Hill

UF/IFAS- Chris Moran

- With support from the VoLo Foundation. FLCSA has committed to develop a series of public service announcements (PSAs) featuring farmers, ranchers and foresters delivering ecosystem services at scale. The first PSA was released in early 2021 and featured Jim Strickland discussing ecosystem services generated through sustainable ranching operations. A second PSA focusing on the state's nursery and landscape industries was produced in 2022 for release in 2023. Each PSA will be accompanied by an op-ed that will be published in media outlets across the state along with feature articles that can help educate readers on these services.
- FLCSA will host one or more field days in partnership with IFAS research stations to share knowledge about systems and practices that enable the delivery of high value ecosystem services. Preliminary plans call for hosting one in the northern half of the state in a second in the southern region. The viability of these options will be explored further as the COVID-19 situation in FL evolves.