November 1, 2021

Submitted via www.regulations.gov

Re: Climate-Smart Agriculture and Forestry Partnership Program (Docket ID: USDA-2021-0010)

Mr. Robert Ibarra
United States Department of Agriculture
Commodity Credit Corporation
1400 Independence Avenue, SW
Washington, DC 20250

Dear Mr. Ibarra:

On behalf of Iowa's 38,000 soybean farmers, including more than 13,500 Iowa Soybean Association (ISA) farmer members and industry partners, thank you for the opportunity to provide further input on the United States Department of Agriculture's (USDA) climate strategy through recommendations that will aid the development of a Climate-Smart Agriculture and Forestry Partnership Program (CSAF).

With more than 50 years of environmental leadership and on-farm experience, ISA is driven to deliver programs and services that meet the needs of soybean farmers. From industry-leading soybean research to transportation and infrastructure to market development and communications, ISA is home to a suite of programs that provides information and assistance to help farmers expand the use of climate-smart farming practices, and ultimately, be more competitive in the marketing of agricultural commodities. As a part of this commitment, the **ISA Research Center for Farming Innovation (RCFI)** was established in 2020. The goal: To deliver the very best farmer-led research combining agronomic, conservation, and analytics tailored for soybean farmers. The RCFI is delivering innovative research, tools, and technical support to assist farmers when considering big picture management decisions for short- and long-term sustainability and profitability.

Recognizing that healthy soils are critical to mitigating climate change and increasing resiliency on the farm, ISA is helping farmers develop and implement agricultural systems, strategies, and long-term mitigation efforts that scale up and accelerate soil health and water conservation across Iowa farmland.

We acknowledge that soybean farmers face a myriad of seasonal challenges, including changing climate, and market signals based on world production (supply/demand) volatility. This understanding combined with greater yield and crop price volatility is why the ISA applauds the USDA for taking a leadership role in promulgating climate-smart agriculture practices in partnership with the private-sector entities that allow farmers to capture additional value at the farm level. We are positioned to serve as a central partner in the effort to bring forth meaningful actions that expand the use of climate-smart farming practices, deliver cost-effective financial risk management strategies, and aid in the marketing of agricultural commodities.

To further cost-effective solutions for soil and water stewardship, ISA launched AgOutcomes and the **Soil and Water Outcomes Fund** in 2020 to expand the trusted partnership between Midwestern farmers and public-private beneficiaries, while also providing financial incentives to those who adopt on-farm conservation practices that yield positive environmental outcomes like carbon sequestration and water quality improvement. In its first year of

implementation, the Outcomes Fund provided financial incentives to farmers implementing conservation practices across 10,000 acres of Iowa cropland.

In 2021, the Outcomes Fund enrolled over 100,000 acres of farmland across multiple cropping systems and states. Outcome customers include USDA-NRCS (via RCPP AFA awards), the Iowa Department of Agriculture and Land Stewardship, the municipalities of Cedar Rapids and Ames, Iowa, Dubuque County Board of Supervisors, Cargill, Nutrien Ag Solutions, PepsiCo, Ingredion, BASF, and Cotton Incorporated. By stacking together multiple environmental benefits, aligning multiple partner customers within a single transaction, and aligning producer payments with environmental outcomes achieved versus practices implemented, the Outcomes Fund provides a cost-competitive solution for public and private entities looking to achieve regulatory or voluntary environmental outcomes.

As we prepare for the future and help farmers address climate change, navigate market volatility, and achieve conservation, water quality and sustainability goals, the following principles guided ISA's response.

- ISA supports the development and maintenance of voluntary, incentive and outcome-based ecosystem service strategies.
- ISA supports fair and equitable financial compensation for farmers that provide ecosystem services, including but not limited to carbon sequestration, water quality improvement, flood mitigation, and habitat creation.
- ISA supports a carbon regulatory system that recognizes the contributions of agriculture through conservation practices, biofuels, and production efficiencies.
- ISA supports USDA assuming a leadership role in the administration of federal policies and programs involving agriculture- and climate-related efforts.
- ISA supports the inclusion of Iowa soybean farmers in future discussions and dialogues related to USDA's involvement and oversight of climate strategies.

The ISA and its 13,500 farmer members and industry partners are optimistic about the role biofuels, public-private partnerships, and climate-smart agriculture can play in addressing current and future challenges. USDA should solicit and work closely with a diverse set of stakeholders to develop and implement risk management tools and effective environmental policies and programs that are based on sound science. Such solutions should incorporate adaptive management and provide farmers long-term benefits directed at productivity, profitability, resiliency, and sustainability, which soybean farmers agree are the best pathways to improving and maintaining environmental quality. ISA is eager to engage and support the USDA and Secretary of Agriculture Vilsack in the ongoing effort to tackle climate change. For any questions or additional information regarding ISA's response to Questions 1-8, please contact Roger Wolf, Research Center for Farming Innovation Director, at rwolf@iasoybeans.com or Adam Kiel, AgOutcomes Executive Director, at adam@agoutcomes.com.

Thank you for considering these comments and recommendations on behalf of Iowa's soybean farmers.

Sincerely,

Robb Ewoldt
President
Iowa Soybean Association

Climate Smart-Agriculture

Iowa soybean farmers are leading the way in the development and adoption of climate-smart practices that reduce emissions, promote soil health, and protect our water and air quality, all while producing more food, fiber, and renewable fuel than ever before. For decades, Iowa farmers have embraced innovation as a result of significant investments in agricultural research and adopted climate-smart practices to improve productivity and enhance sustainability.

ISA sees opportunities for farmers to provide ecosystem service benefits through conservation practice adoption on working lands. There is also an opportunity to leverage private sustainability commitments and funding to expand the reach of taxpayer dollars. ISA supports USDA development of a CSAF Partnership Program to deliver opportunities for farmers by leveraging public and private support for future climate solutions. We urge the USDA to consider a model that would support private marketplace delivery of programing to farmers in order to produce greenhouse gas (GHG) reductions and soil carbon sequestration. Underpinning any retooling of existing working lands programs or creation of new programs should focus on farmer access to market opportunities, sound science, technological advancements, streamlined enrollment, and provide adequate financial support to drive and scale up environmental outcome production.

Question 1: How would existing private sector and state compliance markets for carbon offsets be impacted from this potential federal program?

The ISA is supportive of federal programs that complement and support growing private sector and state compliance markets for GHG offsets and insets and water quality credits. To avoid disruption of private sector and state compliance markets, we recommend ecosystem service outcomes (GHG, water quality, biodiversity, and other environmental outcomes) generated by CSAF funding are retained by the landowner/producer and not transferred to USDA ownership. This approach allows for monetization of these outcomes through:

- Outcome purchase commitments from private corporations seeking offsets or Scope 3 insets, and municipalities and state agencies looking to meet regulatory obligations or environmental targets, or
- Purchase of climate-smart produced commodities or potential premiums for climate-smart commodity production.

By retaining ownership of outcomes and credits, landowners and producers are incentivized to implement and maintain climate-smart practices that provide the supply required to meet growing demand from the private sector and state compliance market participants. Ensuring this supply exists and expands by retaining landowner and producer ownership of the ecosystem outcomes supports the scaling of private sector and compliance markets to a maturity where they have a material impact on GHG reductions and water quality improvement.

Over the past several years, the ISA has witnessed accelerating growth in demand from corporations aspiring to meet Scope 3 GHG reduction goals from producers within their supply chains. This demand will continue to grow as more corporations commit to Scope 3 GHG reductions. Demand for GHG insets has matched increased interest in verified water quality credits by municipalities and states driven by a need to meet total maximum daily load (TMDL) requirements or nutrient reduction commitments. Purchasing verified water quality outcomes (I.e., “pay for outcomes”) can reduce state and municipal costs for the nutrient reduction by 30% or more versus traditional grant and “pay for practice” programs. As more municipalities and state agencies adopt “pay for outcomes” approaches, the market for verified water quality outcomes will grow and mature.

The growth of these markets is possible because the ownership of ecosystem services remains with the landowner and producer. The ISA through the RCFI and the Soil and Water Outcomes Fund supports producers in measuring, verifying, and monetizing these environmental outcomes by stacking dollars from federal investments with private, state, and municipal GHG and water quality purchase agreements, allowing for the Outcomes Fund to pay up to $40 per acre based on the environmental outcomes generated. Using a federal program such as CSAF to "stack" with other public and private outcome buyers accelerates producer adoption of climate-smart practices at scale by providing sufficient economic incentives to cover producer costs. This supports the growth of private sector and state compliance markets by stimulating the supply of outcomes generated by climate-smart practices.

Question 2: In order to expand markets, what should the scope of the Climate-Smart Agriculture and Forestry Partnership Program be, including in terms of geography, scale, project focus, and project activities supported?

The USDA should focus on projects working directly with producers to implement climate-smart practices. Although important to the growth of markets, a smaller focus should be placed on research and technology solutions to advance modeling, measurement, and verification techniques.

The USDA should prioritize geographies where GHG outcome-generating practices or activities can be implemented at scale and where adoption of practices is lower today. These practices may include the conversion to reduced tillage or no-till, the addition of cover crops, diversified cropping rotations, extended rotations, or the implementation of perennial crops. Funding provided to the project and ultimately to producers should be calibrated to the GHG outcomes produced through the implementation of climate-smart practices. An outcomes-based approach should incentivize producers to implement combinations of practices rather than the current USDA pay-for-practice approach. Projects should be selected that maximize the beneficial impact across as many cropping systems and acres as possible.

The ISA supports a "pay for outcomes" approach that aligns producer incentives with environmental outcomes generated. Historically, barriers such as data gathering, outcome modeling, risk management, outcome pricing, and cost-effective verification would have added too much complexity and cost for programs seeking to enroll producers at scale. However, over the last several years, programs such as the Soil and Water Outcomes Fund have built the infrastructure, technology, and producer outreach and verification processes that can scale "pay for outcomes" approaches with greater efficiency than traditional "pay for practice" programs.

Question 3: In order to expand markets, what types of CSAF project activities should be eligible for funding through the Climate-Smart Agriculture and Forestry Partnership Program? Projects should promote the production of climate-smart commodities and support adoption of CSAF practices.

To expand markets, the USDA should support CSAF project activities that directly result in producer adoption of climate-smart practices at scale with sound quantification methodologies and robust verification. Specifically, the USDA should make the following activities eligible for funding through the CSAF:

- Producer payments for GHG outcomes resulting from the implementation of climate-smart practices,
- Agronomic and technical support for producer outreach and program enrollment,
- Quantification of GHG outcomes using USDA supported models,
- Monitoring of GHG outcomes using USDA or university suggested techniques,
- Funding to support the development of an ecosystem registry to ensure fields are not enrolled in multiple CSAF projects or private sector markets, and

- Support testing new technologies to lower the cost of producer enrollment, data collection, modeling, and measurement.

We recommend CSAF project funding be structured to fund environmental outcomes generated by climate-smart practices. The ISA would utilize the following structure to implement a CSAF project:

- Producers choose which climate-smart practices to implement with technical support from ISA conservation agronomists,
- USDA would enter into short- or long-term cooperative agreements with qualified partners like the ISA or Soil and Water Outcomes Fund with dedicated administrative and technical capacity to execute a CSAF implementation project,
- A dedicated CSFA project agreement would include milestone metrics regarding annual enrollment that could be reviewed and scaled up annually.

We support USDA's consideration of approaches that help producers adopt climate-smart agricultural practices and access new revenue streams through markets attached to climate-smart commodity production or ecosystem services markets such as GHG, water, and biodiversity. We encourage USDA to be agnostic in determining the marketing and monetization pathway of the environmental benefits of climate-smart production, as opportunities, programs, and commodities are not uniform. While the monetization pathways should remain open, we recommend USDA only consider approaches that 1) maintain and enhance the quantification and accounting for the GHG benefits, such as those used by the Soil and Water Outcomes Fund, and 2) ensure ownership and benefit of ecosystem services outcomes generated by the producer are retained by the producer.

For the implementation of the CSAF program, we recommend funding go to the producers in alignment with the GHG and other environmental outcomes generated versus commodity buyers or supply chain intermediaries who would then assign premiums to commodity purchases. We believe direct payments to producers through a program, such as the Soil and Water Outcomes Fund, ensures producers receive the maximum dollars for practice adoption, aligns payments with individual outcomes generated, and allows for more efficient and transparent monitoring and tracking of dollars and outcomes at the farm- and field-level.

Question 4: In order to expand markets, what entities should be eligible to apply for funding through the Climate-Smart Agriculture and Forestry Partnership Program?

The USDA should allow public and private entities to submit applications for CSAF funding. Eligible entities should have the following characteristics:

- History of working with producers to implement climate-smart practices,
- Experience with USDA program requirements (e.g., NEPA, compliance, conservation planning, etc.),
- Experience collecting and managing producer data and contracts,
- Experience using USDA-supported models and monitoring approaches to quantify environmental outcomes,
- Experience building public-private partnerships which leverage the USDA program investments with non-federal dollars, and
- Provide climate-smart related producer payments independent of other product sales.

CSAF funding should not be provided to projects with producer requirements that could be viewed as anti-competitive, such as locking producers into using specific products or services unrelated to the GHG outcomes. Projects should not be allowed to distribute CSAF dollars with contingencies on other input products or services purchases, either through price discounts or member requirements. Producer requirements can limit choice and can

lead to higher long-term input costs or lower quality inputs. Projects requiring producers to be their customers or members should be ineligible for CSAF unless they remove any customer or member requirement.

The RCFI has an established track record in working with USDA to maximize public funds. This has been accomplished through the development of many successful cooperative agreements such as Regional Conservation Partnership Program (RCPP) projects and Conservation Innovation Grants (CIG). These agreements enable the administration of project implementation elements, provide adequate capabilities to track and record progress for accountability requirements, and promote sound alignment with local, state, and federal USDA authorities. Collectively over the years, we have learned how to become more efficient with developing and executing these projects successfully.

Question 5: In order to expand markets, what criteria should be used to evaluate project proposals for receiving funding through the Climate-Smart Agriculture and Forestry Partnership Program?

a. For example, potential criteria may include estimated GHG or carbon sequestration benefits; estimated costs; potential for addressing identified barriers for producers; ability to benefit underserved producers and early adopters; environmental justice benefits; and demonstrated capability to ensure success

We encourage the USDA to consider the following criteria recommended by the Soil and Water Outcomes Fund for evaluation and selection of projects receiving CSAF funding:

- Record of distributing dollars to producers for climate-smart practice implementation,
- Ability and experience calibrating producer payments to environmental outcomes (versus pay-for-practices, which may have different environmental outcomes based on commodity, geography, and past practices),
- Use of USDA-supported models to quantify environmental outcomes,
- Access to or ownership of technology and data management tools to:
    - Gather producer data,
    - Model impact of practice changes on environmental outcomes using USDA supported models (e.g., COMET-Farm, Nutrient Tracking Tool),
    - Relationship with producers to perform/implement practice changes,
    - Distribute payments based on expected environmental outcomes,
    - Verify climate-smart practice implementation and ongoing monitoring, and
    - Report environmental results in aggregate and at the field level.
- Ability to monitor and verify environmental outcomes using USDA or university-supported procedures,
- Network of public and private partnerships to support producer outreach and enrollment,
- Economic support from non-federal partners and private corporations to match USDA funds to increase producer payments for enrollment or expand the acres under contract,
- Ease of producer participation including:
    - Ease of enrollment in the program,
    - Producer flexibility in choosing best management practices to adopt, and
    - No customer, income, operation size, or geography restrictions.
- Ability to engage with producers at a scale of one million acres or more.

b. Should USDA establish a consistent payment per ton of GHG generated through these partnership projects as part of the project payment structure, or evaluate a range of incentive options?

We encourage the USDA to be open to a range of projects proposals and associated payment structures. Those projects wishing to compensate producers on a per-ton basis should be encouraged to use the current year's social price of carbon, which is currently $51 per ton. This aligns with the Biden Administration's assessment of the social price of carbon, and on a per-acre basis aligns with the expected costs of climate-smart practice implementation costs.

Question 6: In order to expand markets, which CSAF practices should be eligible for inclusion?

a. What systems for quantification and key metrics should be used to assess the benefits of projects funded through the Climate-Smart Agriculture and Forestry Partnership Program?

b. What should the quantification, monitoring, reporting, and verification requirements for projects funded through the Climate-Smart Agriculture and Forestry Partnership Program be?

c. What types of systems should be used or supported to track participation, implementation, and potential benefits generated?

d. What types of data and metrics should be collected and reported to determine project success and GHG benefits delivered? How should the data and metrics be analyzed to inform future decisions?

The USDA should include all practices that have the potential to produce GHG reductions and removals with a particular focus on practices that can be used on working lands in conjunction with commodity production. High priority practices should include no-till, cover crops, nutrient management, and conservation crop rotations. These practices are relatively easy for producers to implement and maintain, require little upfront capital, provide long-term soil health benefits, generate additional environmental benefits such as water quality improvements, and have been proven to reduce GHG through sequestration and reduction. Adoption of these practices can be scaled relatively quickly with the right producer incentives and support services.

To quantify benefits, we recommend CSAF utilize USDA-supported environmental models that are proven to show the GHG, and water quality benefits generated from climate-smart practices. The USDA should require projects to utilize these USDA-supported models (e.g., COMET-Farm) to quantify the climate-smart practices' benefits through the CSAF program and prioritize projects that can quantify the additional environmental benefits of the climate-smart practice implementation. Since the same practice does not yield the same results across multiple field types and crop management plans, the quantification process and payment should be correlated to the generated outcomes. The USDA should use the outcomes quantified by the models - e.g., soil carbon sequestered and nitrous oxide reduction per acre - as metrics for measuring benefits produced by the projects.

Other metrics should include the tracking of current acres versus new acres that are generating benefits. It will be important to track both current and new acres of practices individually to quantify the progress of new adoption and affiliated longer-term benefits by commodity, practice, and geography. While maintaining the permanence of current practices is important, it is equally important to have organic growth of acres adopting climate-smart practices.

Utilizing practice and sustainability metrics from commodity organizations like the ISA, can provide additional data to support future policy, practice, pricing, and funding decisions for USDA and private and public outcome buyers. For example, the RCFI is conducting dedicated long-term on-farm research trials studying the effects of using cover crops in corn-soybean rotations. We are also conducting research designed to understand the agronomic and integrated cropping and livestock considerations farmers are working with to effectively adopt CSAF practices into their farming systems. Data and information generated from this research is a critical part of implementing practices and systems

that are expedited to produce CSFA outcomes. And finally, we are working to build out synergistic and aligned partner collaborations with university researchers where plot-scale research is directly linked to field-scale implementation. We believe this will be key to fostering coordination between aligned groups and will add further legitimacy to validating the performance of CSAF practices, providing opportunities to better understand the full spectrum of crop rotations, and bolstering overall implementation backed by robust science and data analytics.

Projects that have in-field soil sampling, remote sensing, and in-field spot checks to ensure practice implementation is occurring and the practices are producing the desired outcomes should be given priority. The USDA should work with university and USDA experts to develop monitoring standards that projects utilize during the implementation phase and beyond.

Systems and technology play an important role in tracking participation, implementation, and environmental outcomes generated. The USDA should select projects that can demonstrate the use of robust tracking systems that have the following attributes:

- Spatially track fields and tie locations to producers,
- Gather sufficient field-level production data to track commodities produced year over year,
- Gather sufficient field-level operational data to track baseline and proposed production and climate-smart practices,
- Track financial payments and expenditures at the field level, and
- Systems should be paired with agronomic and technical advisors who can assist producers with technology issues during enrollment and climate-smart practice guidance during the implementation phase.

The RCFI and Soil and Water Outcomes Fund have implemented varying degrees of the data collection, monitoring, and verification standards described above with input from producers, commodity organizations, and private and public outcome buyers. The Outcomes Fund utilizes USDA-supported models to quantify the environmental outcomes and a custom data and technology platform to enroll producers, procure field spatial data, model outcomes, contract and pay producers, and run outcome reporting. The Outcomes Fund collects multiple years of operational data from participating producers and uses COMET-Farm and Nutrient Tracking Tool to quantify the GHG and water quality benefits resulting from the climate-smart practice implementation.

Question 7: How should ownership of potential GHG benefits that may be generated be managed?

As described in Question 1, ensuring that producers retain ownership for GHG, water quality, and other environmental outcomes is critical to support market growth and provide adequate, sustainable incentives for climate-smart practice adoption.

We recommend programs receiving CSAF funding be required to document and report GHG outcomes at the field level with a standardized tracking methodology. Any GHG benefits transferred or sold from a producer to a private or public buyer should be documented using a program's approved tracking system. This approach prevents double counting of GHG benefits and mitigates the risk of selling the same GHG unit to multiple outcome customers.

Question 8: How can USDA ensure that partnership projects are equitable and strive to include a wide range of landowners and producers?

a. How can the Climate-Smart Agriculture and Forestry Partnership Program include early adopters of CSAF practices?

The USDA should allow projects to take a portfolio approach to working with producers implementing new climate-smart practices and those early adopters who have already implemented climate-smart practices.

The RCFI and Soil and Water Outcomes Fund have focused on implementing new climate-smart practices on acres not previously having practice implementation; however, a substantial number of early adopters have expressed an interest in various programs. The ISA wishes to provide a payment to early adopters to support agricultural commodities production from acres implementing climate-smart practices. These acres present a unique opportunity to study the soil carbon differences between acres with and acres without climate-smart practices. Additionally, early adopter producers are often the best advocates for new and innovative programs. Excluding these producers from economic opportunity may deter other producers from participating and implementing climate-smart practices at scale.

b. How can the Climate-Smart Agriculture and Forestry Partnership Program be designed to ensure that benefits flow to historically underserved producers?

c. How can the Climate-Smart Agriculture and Forestry Partnership Program be designed to ensure that benefits flow to historically underserved communities?

d. How can the Climate-Smart Agriculture and Forestry Partnership Program be designed to ensure that benefits are provided to producers?

The USDA should require that projects accept all sizes of farms. When considering projects, USDA should select projects covering a wide range of commodities and geographies to ensure maximum participation potential across agricultural lands in the U.S. USDA should also ensure CSAF dollars flow to the producer, even if that producer is not the landowner. Many prevailing voluntary carbon programs have acre size minimums, require a producer to have a certain level of income, only accept certain crop types, require long-term contracts that may extend past producer lease terms, have a narrow set of prescribed practices, or require documented history of operating farmland at a pre-described "level." These requirements often end up limiting or constraining market access for underserved producers who wish to participate in such programs and the affiliated economic opportunities.

Historically, one of the most significant impediments from participation in ecosystem service markets and responsible sourcing programs facing underserved communities is the costs affiliated with MRV (monitoring, reporting, and verification), the agronomic support and education related to implementing climate-smart agricultural practices, and the lag time between new practice implementation and payments. Programs that do not provide upfront payments to cover implementation costs and do not guarantee prompt payment upon outcome verification disadvantage underserved producers the most as these producers do not have the working capital or access to financing to purchase cover crop seeds or lease equipment needed to implement climate-smart practices. The USDA should ensure programs supported through CSAF remove these barriers to access by providing payments in a timely manner and requiring programs provide upfront capital for underserved producers in particular.

Biodiesel

For Iowa's soybean farmers, biofuels are a homegrown energy success story, reducing carbon and GHG emissions, increasing our energy independence, and supporting rural communities and economies. Home to eleven biodiesel production facilities, Iowa is the nation's top biodiesel-producing state. Given Iowa's position as a top state annually in soybean production, soybean oil is the primary feedstock used to produce biodiesel.

When compared to petroleum diesel, biodiesel made from soybean oil leads to significant reductions of virtually all regulated emissions. Biodiesel reduces lifecycle GHG emissions by up to 86%, lowers particulate matter by 47%, and

reduces hydrocarbon emissions by 67%, offering an immediate and abundant solution to help USDA meet carbon reduction targets and GHG emission goals. Considering its renewable, clean-burning, and environmentally friendly properties, biodiesel is one of the most practical and cost-effective ways for this administration to immediately address climate change.

As the USDA considers the possible development of a Climate-Smart Agriculture and Forestry Partnership Program, the ISA supports the Department working to understand, capture, and promote the full environmental benefits of biodiesel and other renewable energy sources. We recommend that USDA consider the development of methods to assign changes in soil organic carbon to specific practices and crop rotations versus single crop planting through a standardized measurement and verification program nationally. The biggest impact from agriculture is that we can introduce additional soil organic carbon sequestration into the carbon intensity of the products that are produced, such as biodiesel and renewable diesel. A federal program which creates a standardized measurement of carbon storage would provide certainty and fairness as producers enter current and future carbon markets and would allow biofuels producers to accurately account for their carbon intensity.