

December 21, 2022

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Re: NACD's Response to Notice of Request for Public Comment Docket ID No. NRCS-2022-0015

Thank you for the opportunity to provide input on how the Natural Resources Conservation Service (NRCS) could implement funds received under the Inflation Reduction Act (IRA). These historic investments in mitigating climate change, increasing agricultural productivity, and improving food security have never been more important.

It is estimated that producers will need to feed 9 billion people across the globe by 2050. Our food systems must be productive and conservation oriented. The underlying infrastructure must support small, local, and Tribal producers who help communities achieve their food security and sovereignty goals. It must also drive greater equity and access by removing barriers and allowing all producers to meaningfully participate in programs and growing markets.

To successfully transition an industry to a climate smart conservation-oriented production system; we need to rely on the millions of decisions that producers make each day. The locally led conservation delivery system is key to reaching and educating cooperating producers on the benefits of such systems, providing the one-on-one technical expertise needed to help them develop and implement their conservation plans. Conservation districts are key leaders in the conservation delivery system. They are local units of government established under state law to carry out natural resource management programs.

The National Association of Conservation Districts (NACD) represents America's 3,000 conservation districts, their respective state and territory associations, and the 17,000 individuals who serve on their governing boards. Our comments address the following as it relates to IRA implementation:

- NRCS should leverage multi-sector, interagency collaborations to design systems and
 protocols for quantification, monitoring, reporting, and verification. Producer groups
 should be represented so that barriers to participation can be understood and mitigated.
 Datasets need to be more robust and supporting systems should prioritize interoperability.
- While climate-smart agriculture and forestry (CSAF) practices are important, NRCS should use a holistic, systems-based approach to enhance results and achieve multiple cobenefits that can be sustained over a long period of time. NRCS should also continue to



invest in the forests, grasslands, rangelands, and coastlines that help improve resilience to climate change and natural disasters (e.g., floods, hurricanes, wildfires).

- NRCS should consider investments in state/territory, Tribal, and local partnerships and expanded farmer to farmer outreach and programming. As NRCS considers expanded private-public partnerships, it should continue to leverage local leaders and the conservation delivery system to ensure long-term sustainability and impact.
- NRCS should consider recommendations to reduce bureaucracy and process inefficiencies, such as continuous sign-up, automatic approvals, and the use of "turn-key" projects. It should also continue to invest in innovation and technology.
- Conservation delivery system partners are standing by to support NRCS in its goal of implementing the IRA. Partners can be leveraged to deliver conservation technical assistance, help new NRCS employees develop local partnerships and networks, and expand the recruitment pipeline through workforce development initiatives.
- 1) What systems of quantification should NRCS use to measure the carbon sequestration and carbon dioxide, methane, and nitrous oxide emissions outcomes associated with activities funded through IRA?

a. Design Systems Using a Multi-Sector, Inter-Agency Approach

Developing a scientifically based framework for quantification requires collaboration with experts across industries. NRCS should consider convening a multi-sector, interagency task force. By engaging with experts across academia, NGOs, and the private sector, NRCS can ensure that:

- Any resulting system is aligned to global industry standards, such as the Greenhouse Gas Protocol
- Resulting protocols optimize the use of innovative and emerging technologies that streamline data collection and analyses
- It limits some of the redundancies producers face when collecting and reporting their data

NRCS should also consider collaboration across the federal government. The U.S. Department of Energy, National Aeronautics and Space Administration, and Environmental Protection Agency are only a few examples of federal agencies investing heavily in the science and technology to quantify, model, and forecast GHG emissions, sequestration, and climate change scenarios. The USDA Agricultural Research Service, state agencies, and land grant universities and minority serving institutions also play a key role in conducting long-term research on climate-smart agriculture based on regional soils and climate conditions.

b. Consider Producer Needs and Benefits

Producers face several barriers when attempting to quantify their own conservation outcomes:

• Data collection and reporting is extremely time consuming, manual, and labor intensive



- Participation can be based on "pay to play" meaning that producers must express interest in an industry service or product to receive reports or recommendations
- Historically underserved producers often have smaller plots or marginal lands; because it is difficult to achieve scale with small parcels, they do not always receive the same level of outreach or engagement

Including client facing groups (e.g., producer groups, conservation districts) in the design process helps ensure that barriers to participation are acknowledged and mitigated. It also provides for ongoing knowledge transfer, improving the quality of outreach and education. USDA can also champion data democratization, which provides producers access to critical reports and estimation without having to commit to a certain firm or interest. This is also key in reaching and equitably engaging historically underserved producers.

NRCS should also consider synthesizing climate outcomes and economic data based on current research. This type of information can help producers understand the tangible and intangible economic benefits, which informs their decision-making process for implementing new practices or participating in climate-smart markets.

c. Modernize COMET Farm and Planner

While tools like COMET Farm and Planner were major advancements in quantification, they were developed prior to the scientific community's growing understanding of the importance of the microbiome as it relates to soil carbon and agricultural emissions processes. There are now more advanced, peer-reviewed models that are better suited to incorporating complexities like soil microbial activity and Gross Primary Productivity (GPP).

For example, NACD's partner, HabiTerre, developed the Ecosys model that incorporates more comprehensive quantification methods and leverages the latest remote-sensing and observational data gathering technologies. Newer quantification systems move beyond the incremental performance of individual conservation practices and quantify the impacts of multiple conservation practices/system components.

d. Develop and Publish More Robust Datasets & Focus on Interoperability

NRCS can support producers and the USDA GHG Inventory and Assessment program alike by reducing the need for manual data gathering while delivering scientifically credible and defensible quantification of outcomes at scale. The data space at USDA is ripe for multi-sector innovation, but siloed approaches to data collection drive duplication and create bottlenecks. Researchers need access to high quality databases. Certain data points remain persistently difficult to access and are highly variable, both spatially and temporally. For example:

NRCS data on soil health metrics has value at the aggregate level, but even greater value
at the field level. NRCS should consider collecting and sharing field-level soil health
metrics, such as soil carbon measurements, fertilizer application data (volume, source,



timing, and application method), and yield data where available. This would build upon the great work that went into the SSURGO database and other efforts.

- Eddy covariance towers located at geographically distributed research sites measure actual inflows and outflows of the various gasses present in production systems. NRCS should leverage these gold standard sources to enhance their databases and modeling capabilities.
- NRCS should also consider sharing data that addresses the performance of different conservation practices in improving soil health, increasing carbon storage, reducing GHG emissions and increasing economic returns of such systems.

Interoperability of datasets and databases is critical. Should NRCS build a custom model or tool, it should be developed such that both USDA users and external parties (e.g., universities, private sector) can easily develop an interface to extract, scrub, and synthesize key datapoints. Common data dictionaries should be developed in collaboration with agency and industry partners within this space. NRCS should also align data usability across USDA programs and agencies, including Forest Inventory and Analysis, Conservation Effects Assessment Project (CEAP) and the collaborative effort employed as a model for pursuing additional quantification, measurement, and evaluation systems.

e. Programmatic Considerations

As NRCS considers the breadth of its efforts, it should consider quantification models and systems for all IRA-funded conservation programs, not just approved EQIP practices. This includes quantifying the GHG sequestration benefits of ecosystems that increase resilience to climate change, such as native grasslands, rangelands, and sagebrush preservation, the wildland-urban interface and working forests, and systems that enhance water quality and restore and protect coastlines.

2) How can NRCS engage the private sector and private philanthropy to leverage the IRA investments, including for systems of quantification?

Public-private partnerships and co-investments can play a major role driving alignment amongst stakeholders around shared conservation goals. Federal, state, and private incentives, paired with long-term market opportunities, are effective tools to advance and scale voluntary conservation. The overwhelming response to the Partnerships for Climate Smart Commodities demonstrates interest and willingness of the private sector and NGOs to engage in private lands conservation. The Regional Conservation Partnership Program (RCPP) has also demonstrated the value of state and private sector investments.

When considering these expanded partnerships, NRCS should also ensure that the conservation delivery system and local working group are key components of program delivery. Organizations cannot successfully invest funds into a community without generating buy-in, building the capacity and skillsets to sustain such efforts, and creating a sense of ownership. Local leaders and the community must be engaged for these investments to have long-term impacts and returns.



Across all IRA-funded programs, we recommend an expanded use of the NRCS authorities for cooperative agreements, contribution agreements, grants, and procurement contracts to engage all conservation sectors in the delivery and to fill technical knowledge, skill, and capacity gaps across the agency. NRCS should also consider how administrative requirements and processes can disincentivize broader participation.

The process for entering into a grant or agreement with NRCS can also be highly burdensome and costly for entities without significant resources. USDA should consider the risk and corresponding benefit when requiring information, reports, and submission formats. For example:

- RCPP places an incredibly high administrative and financial burden on project partners. The process for issuing program agreements and underlying programmatic partnership agreements is lengthy and time consuming. For organizations with limited resources, engaging in the administrative processes takes time and attention away from strengthening the partnership, producer engagements, and on-the-ground results.
- RCPP awardees often face significant delays in receiving funding, thereby delaying their ability to support producers and get conservation on the ground. Grant awardees in general have faced lengthy delays in receiving payments, which adversely impacts their cash flow and ability to fund basic operations (e.g., payroll).
- Access to resources to apply for and manage grants can be a barrier for many communities.
 These investments must be considered when structuring grant programs/partnerships.
 NRCS may also consider some allowances for pre-award costs, which would help offset the resources invested in developing projects/partnerships that yield mutual and public benefits.
- USDA should consider the risk and corresponding benefit when requiring information or submission formats. It takes considerable time and resources for organizations to develop detailed proposals and budgets, as well as work with federal partners to administer agreements (e.g., reporting and billing processes).
- 3) How should NRCS target IRA funding to maximize improvements to soil carbon, reductions in nitrogen losses, and the reduction, capture, avoidance, or sequestration of carbon dioxide, methane, or nitrous oxide emissions, associated with agricultural production?

a. Continue to expand the CSAF List & Utilize a System-Based Approach

NACD recognizes and applauds the scientific rigor behind the development of the FY2023 Climate Smart Agriculture & Forestry (CSAF) list which includes a variety of important practices that reduce or sequester GHG emissions. However, *NRCS should not utilize IRA funding to pursue a narrow practice list.* To be most effective, conservation planning and the implementation of conservation practices must fully account for the combination of all soil, water, air, plant, animal, and human resources that comprise an agricultural system.



Although individual conservation practices can be targeted to achieve goals and resolve specific issues quickly, a conservation systems-based approach focuses on incorporating a suite of effective practices that work in tandem to enhance results and achieve multiple co-benefits that can be sustained over a long period of time. As an example, reduced tillage is a conservation practice that has been proven to reduce emissions, control erosion, and increase organic matter in the soil, among other benefits. Although some of these benefits may be attained by implementing this practice alone, complementary practices - such as terracing and grassed waterways - are often integrated in tandem to reduce soil degradation and enhance greenhouse gas sequestration potential. They also yield co-benefits, such as improvements to water quality, air quality, wildlife habitats, and more.

b. Continue to Invest in Landscape Scale Conservation and in our Forests, Grasslands, and Rangelands

Landscape scale conservation is critical as nature knows no bounds. America's waters and working forests, grasslands and rangelands serve to increase resiliency to climate change. Protecting these ecosystems improves biodiversity, mitigates wildfire risk, and contributes to climate change mitigation.

NACD encourages NRCS to use IRA investments to implement landscape scale conservation initiatives that support the long-term sustainability of our forests, grasslands, rangelands, and waters. NRCS's Working Lands for Wildlife initiatives, for example, have been highly successful in aligning diverse stakeholders to "defend the core" and tackling critical natural resource concerns impacting the sagebrush and grassland ecosystems. Their work enhances the overall resiliency of the ecosystems and surrounding communities to climate change.

NACD was pleased to see that NRCS added a host of agroforestry and forest management practices to the Fiscal Year 2023 CSAF list. While afforestation plays an important role in efforts to sequester carbon, control erosion, and improve soil health, NACD also encourages NRCS to prioritize practices that facilitate long-term management and sustainability of our private forests. Post-planting and harvesting-related forestry practices should be supported to unlock the full benefits of forest carbon sequestration.

c. Invest in Innovation

On-farm productivity is a critical consideration when we think about the agricultural industry's need to feed and clothe 9 billion people by 2050. Improving on-farm productivity via conservation systems can also reduce the demand for land, which helps preserve important ecosystems such as our native grasslands and forests.

Through the Conservation Innovation Grant (CIG) program, NRCS has successfully advanced hundreds of promising conservation-oriented technologies. *Public-private partnerships can play a major role in scaling conservation-oriented innovations that mitigate climate change or support producer adaptation and resilience*. Conservation districts are also well positioned to



support producer outreach and education, as well as trials, evaluations, and outcome monitoring. They are also able to incorporate innovative practices into producers' conservation plans.

d. Invest in Small & Local Producers

NACD encourages NRCS to consider small and community-based agriculture in its implementation of IRA funds. These producers play a critical role in helping communities achieve their food security and sovereignty goals. In addition to social benefits, there are also supply chain related climate benefits that should be considered and quantified (e.g., reduced gas/vehicle emissions associated with local delivery, reduced packaging waste).

4) How should NRCS streamline and improve program delivery to increase efficiencies and expand access to IRA funded programs and projects for producers, particularly underserved producers?

a. Expand Farmer-to Farmer Outreach Efforts and Programming

Innovative programming could enhance existing farmer-to-farmer outreach efforts. NRCS could create incentives for early adopters of conservation practices and historically underserved conservationists by developing a reward system that is tied to educating others. Many producers watch what their neighbors do and outreach at the local level helps spread new ideas and practices.

For example, NRCS could couple technical assistance programs with education program that focuses on certifying producers as conservation leaders within their communities. NACD's soil health champions network, which consists of over 400 producers, could be a starting point for participants. Leveraging conservation leaders to conduct annual training programs on demonstration farms, tied to NRCS sign up dates, could help increase awareness of the value of NRCS programs and conservation practices.

NACD applauds NRCS' hiring strategy, which strengthens service to Tribal and historically underserved producers. **Investing in local partnerships, local working groups, and capacity** will be key to improving access to IRA funds. Many organizations, particularly in the non-profit space, lack the funding and staffing to expand partnerships, apply for grants or projects, and have staff time to dedicate to such initiatives. Investments in these communities to build sustainable capacity, which includes development and training efforts, will be key to project viability. NRCS should also **leverage as many flexibilities as possible when funding such outreach projects and initiatives**, particularly as it relates to funding on-the-ground implementation and demonstrations.

b. Continuous Sign-Up & Automatic Approval

NACD encourages NRCS to consider continuous sign-up and automatic approval for a defined set or systems of practices. States could define this set or system of practices based on their natural resource priorities, then establish a threshold or pool of funding for automatic approvals.



This would expedite financial assistance to producers and help them better plan for time-sensitive practices that need to be coordinated with their farm operations (e.g., planting, harvesting). It would also reduce paperwork and administrative delays involved with the current process of ranking, evaluating, and selecting applications.

NACD encourages NRCS to consider a system of practices that improves water quality, reduces erosion, improves soil health, and bolsters climate change resilience. These should not be deprioritized at the expenses of expediting practices on the CSAF list alone.

c. Increase Utilization of Turn-Key Projects

As NRCS considers ways to better leverage the capabilities and capacity of its partners, such as conservation districts and Technical Service Providers (TSPs), it should implement expanded use of "turn-key" projects to maximize efficiency and expedite conservation practice/system planning, design, and implementation. Through this innovative approach, conservation districts and qualified TSP partners collaborate in complementary ways to assist program participants with focused, specialized, and often more complex practices/systems requiring engineering expertise, such as those projects including automated drainage water management systems that return multiple environmental and economic benefits. Use of the "turn-key" project approach means that NRCS can reduce its workload burden and narrow its focus in these projects to inherently governmental tasks, such as environmental evaluations, conservation compliance, cultural resources compliance, project oversight, and outcome assessment.

d. Leverage Technology

NRCS should continue to integrate resource assessment tools within their conservation planning software that enhance the information being delivered to the conservation planner and producer, but do not create laborious and expanded data entry. Modernizing existing systems, such as ProTracts, would also be encouraged. Partners in the conservation delivery system should also be trained in the interpretation and application of this information to the planning area and be skilled in adjusting their recommended alternatives to the producer based on the actual field conditions.

NRCS should also consider existing technologies, such as robotic process automation (RPA) and ocular character recognition (OCR), to automate high volume, manual processes. Processing producer contracts and payments, for example, are routine practices with clear business rules. Given the anticipated surge in producer contracts with IRA, this technology can help automate data entry/processing. This can streamline workload and allow staff to focus on quality assurance and customer service.

5) How can NRCS expand capacity among partners to assist in providing outreach and technical assistance to support the implementation of IRA funding?

a. Invest in Local Partnerships



Technical assistance (TA) is the most fundamental component of our conservation delivery system. While NRCS programs have increased in scope and complexity and serve more diverse producers over the past several decades, the level of field staff to administer TA has not kept pace.

As NRCS works to hire trained and experienced personnel to meet technical assistance demands, local conservation delivery system partners stand by to provide greater support. Local partners, such as conservation districts and Agriculture Conservation Experienced Service (ACES) Program participants, can help NRCS ramp up over the next several years by:

- Increasing outreach, education, and technical assistance to producers
- Supporting the conservation planning and contracting process
- Strengthening the Local Working Group processes and outcomes
- Providing management support, training, and onboarding to NRCS' new, expanded cadre of conservationists
- Helping new NRCS employees build local networks and cultivate partnerships

By investing in local partnerships, NRCS may consider investing in full-time positions (both federal and non-federal) dedicated to developing partnerships and relationships with minority and historically underserved producers.

NRCS may also consider using long-term, multi-year agreements with local partners, conservation districts, and their respective associations. This would provide greater stability to the workforce and help achieve longer-term objectives of ramping up outreach, partnership development, technical assistance, conservation planning, and administration of financial assistance contracts.

b. Leverage Partners to Expand the Recruitment Pool

All partners in conservation and natural resources stewardship are challenged by a limited recruitment pool. Developing and recruiting the next generation of conservationists will take a long-term vision and investment in partnerships.

By investing in local partnerships that provide for youth education, community outreach, and placement opportunities (e.g., internships), NRCS can exponentially broaden its reach. Universities and extension programs are excellent partners, but NRCS should also consider investing in community-based organizations that provide unique and diverse opportunities for development.

Conservation districts can provide this support through existing grant programs (e.g., Outreach & Technical Assistance Grants, Urban & Community Grants). Districts can also expand opportunities for youth to learn and serve in coordination with our local partners. It takes an industry-wide effort to increase awareness and provide opportunities across academic interests – whether in natural resource sciences, outreach, communications, etc.

c. Invest in Technical Training and Upskilling



NRCS should also consider providing resources to develop educational and training programs for local conservation delivery system partners. NACD is highly appreciative of NRCS's leadership and investments in the National Conservation Planning Partnership (NCPP). We are grateful for the attention to the strategic planning process and objectives for developing our conservation workforce. NACD would like to highlight the following training recommendations:

- Increase accessibility to conservation planning training for all partnership employees
- Develop a collaborative process for regional conservation planning training opportunities and establish a cadre of effective trainers
- Streamline the conservation planner certification process
- Encourage use of third-party vendors to help deliver conservation planning and support training
- Consider supporting "boot camps" and "onboarding portals" for new local conservation hires
- Assess NRCS processes and bottlenecks, then leverage partners to support and strategically target where capacity is needed most

Thank you again for your consideration of NACD's comments. The 3,000 conservation districts across the U.S. and its territories are key partners in facilitating an inclusive approach to scaling conservation efforts and implementing the IRA. The locally led process engages community leaders and stakeholders to develop and implement local solutions that reduce and sequester GHG emissions through voluntary actions. It also provides for local ownership, empowerment, and sustained outcomes within each community.

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