April 29, 2021

Secretary Tom Vilsack
U.S. Department of Agriculture
1400 Independence Ave., S.W.
Washington, DC 20250

Re: Request for Public Comment on the Executive Order on Tackling the Climate Crisis at Home and Abroad, (FR Docket No. USDA–2021–0003)

Submitted electronically via Regulations.gov

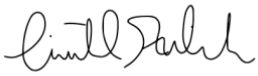
Dear Secretary Vilsack,

The National Sustainable Agriculture Coalition (NSAC) welcomes the opportunity to submit comments in response to the Notice of Request for Public Comment on the Executive Order on Tackling the Climate Crisis at Home and Abroad, 86 Fed. Reg. 14403 (March 16, 2021), Docket No. USDA-2021-0003. We appreciate the opportunity to offer recommendations on how the U.S. Department of Agriculture (USDA) can best encourage voluntary adoption of climate-smart agricultural and forestry practices that sequester carbon, reduce greenhouse gas emissions, improve soil health, build resilience, and decrease wildfire risk fueled by climate change; as well as recommendations on expanding on-farm renewable energy production, and addressing institutional racism through structural change to foster equity and ensuring programming is available and accessible to all communities.

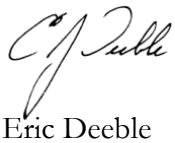
NSAC is a national alliance of family farm, food, rural, and conservation organizations[i] that together take common positions on federal agriculture and food policies to advance sustainable agriculture. Our member organizations, and the farmers and ranchers they work with across the country, understand that the climate crisis presents a severe and immediate threat to the agriculture sector and to both rural and urban communities across the country. Farmers and ranchers have practical insight and valuable tools that are essential to climate change solutions, and thus, must be active partners in the development of farm and food policy that will be a central element to our nation's response to the climate crisis. In that light, NSAC makes the following recommendations that directly benefit farmers and can be readily implemented by USDA.

We thank you for your serious consideration of our recommendations, and look forward to working with you to support policies and programs that equip farmers and ranchers with the tools they need to significantly mitigate and adapt to the pressures of a changing climate.

Sincerely,



Cristel Zoebisch
Policy Specialist



Eric Deeble
Policy Director

cc:
Robert Bonnie, USDA Deputy Chief of Staff for Policy and Senior Advisor on Climate
Seth Meyer, Chief Economist

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Agriculture and Land Based Training Association - Salinas, CA
CCOF (California Certified Organic Farmers) -Santa Cruz, CA
California FarmLink – Santa Cruz, CA
C.A.S.A. del Llano (Communities Assuring a Sustainable Agriculture) – Hereford, TX
Catholic Rural Life – St. Paul, MN
Center for Rural Affairs – Lyons, NE
Clagett Farm/Chesapeake Bay Foundation – Upper Marlboro, MD
Community Alliance with Family Farmers – Davis, CA
CISA: Communities Involved in Sustaining Agriculture – South Deerfield, MA
Dakota Rural Action – Brookings, SD
Delta Land and Community, Inc. – Almyra, AR
Ecological Farming Association – Soquel, CA
Farmer-Veteran Coalition – Davis, CA
Florida Organic Growers – Gainesville, FL
FoodCorps – Portland, OR
Grassworks – New Holstein, WI
Hmong National Development, Inc. – St. Paul, MN
Illinois Stewardship Alliance – Springfield, IL
Institute for Agriculture and Trade Policy – Minneapolis, MN
Interfaith Sustainable Food Collaborative – Sebastopol, CA
Iowa Natural Heritage Foundation – Des Moines, IA
Izaak Walton League of America – Gaithersburg, MD
Kansas Rural Center – Topeka, KS
The Kerr Center for Sustainable Agriculture – Poteau, OK
Land Stewardship Project – Minneapolis, MN
LiveWell Colorado – Denver, CO
MAFO – St. Cloud, MN
Michael Fields Agricultural Institute – East Troy, WI
Michigan Integrated Food & Farming Systems – MIFFS – East Lansing, MI
Michigan Organic Food and Farm Alliance – Lansing, MI
Midwest Organic and Sustainable Education Service – Spring Valley, WI
Missouri Coalition for the Environment – St. Louis, MO
Montana Organic Association – Eureka, MT
The National Center for Appropriate Technology – Butte, MT
National Center for Frontier Communities – Silver City, NM
National Hmong American Farmers – Fresno, CA
Nebraska Sustainable Agriculture Society - Ceresco, NE
Northeast Organic Dairy Producers Alliance – Deerfield, MA
Northern Plains Sustainable Agriculture Society – LaMoure, ND
Northwest Center for Alternatives to Pesticides – Eugene, OR
Ohio Ecological Food and Farm Association – Columbus, OH
Oregon Tilth – Corvallis, OR
Organic Farming Research Foundation – Santa Cruz, CA
Organic Seed Alliance – Port Townsend, WA
Rural Advancement Foundation International – USA – Pittsboro, NC
Union of Concerned Scientists Food and Environment Program – Washington, DC
Virginia Association for Biological Farming – Lexington, VA
Wild Farm Alliance – Watsonville, CA
Women, Food, and Agriculture Network – Ames, IA

Recommendations on USDA's Climate-Smart Agriculture and Forestry Strategy

Climate-Smart Agriculture and Forestry

Many existing conservation, research, and rural development programs can be readily improved to encourage the voluntary adoption of climate-friendly agricultural and forestry practices on working farms, ranches, and forest lands. We urge USDA to prioritize these improvements and present a list of recommendations upon which USDA can take immediate action.

1. Urge Congress to double funding for federal conservation programs.

Farm Bill conservation programs are routinely oversubscribed and funding for these programs has historically fallen short of meeting the demand from farmers and ranchers for technical and financial assistance. Demand for conservation on 13.8 million acres goes unmet because of inadequate funding every year (Theodore Roosevelt Conservation Partnership, 2019). With current funding, conservation programs meet only a fraction of the need for voluntary conservation on the landscape. To drive the adoption of soil health and other climate-friendly practices at the scale needed to address the climate crisis and other natural resource challenges, USDA will need substantially increased capacity to meet the expanding need for education, outreach, technical assistance and financial assistance to farmers, ranchers, and landowners.

President Biden's *American Jobs Plan* places a priority on "positioning the U.S. agricultural sector to lead the shift to net-zero emissions while providing new economic opportunities for farmers." Increasing funding for USDA's popular and effective Farm Bill conservation programs is the quickest and most practical way to directly equip farmers and ranchers, energize rural economies, improve climate resilience, and ensure that agriculture is part of the solution to the climate crisis. USDA should press Congress for a doubling of the federal commitment to Farm Bill conservation programs, including the Conservation Stewardship Program (CSP), the Environmental Quality Incentives Program (EQIP), the Agricultural Conservation Easement Program (ACEP), the Conservation Reserve Program (CRP), and the Regional Conservation Partnership program (RCPP) as part of any climate change and infrastructure legislative package.

Additionally, USDA should ask Congress for a robust increase in the NRCS Conservation Technical Assistance appropriation to expand NRCS capacity to help farmers and ranchers design and implement soil health plans and management intensive rotational grazing plans.

2. Revise the Conservation Stewardship Program (CSP) Final Rule to ensure it is the USDA's premier climate mitigation and adaptation program.

The Conservation Stewardship Program (CSP) is the largest working lands conservation program in the country, and it is unique because it rewards ongoing, actively managed, whole-farm and -ranch

conservation activities, as well as new or enhanced conservation efforts. The CSP is ideally suited to play a central role in USDA's climate change strategy because: (1) its whole-farm approach ensures that the net greenhouse gas footprint of the entire farm or ranch, not just a small part, is considered in determining climate-related incentives; (2) providing rewards for both existing and new conservation practices rewards 'early adopters' who may otherwise be left out of other climate-related payments; and (3) it was designed to foster continuous improvement in conservation systems, which will be needed for American agriculture to reach or exceed net zero greenhouse gas emissions.

However, before CSP can be the centerpiece of American agriculture's response to the climate crisis, it warrants reform as the Final Rule for the program was issued hastily in the waning days of the Trump Administration and it contains major shortcomings. The Final Rule should also be revised so that a renewed CSP can reflect President Biden's commitment to "dramatically expand and fortify the pioneering Conservation Stewardship Program to support farm income through payments based on farmers' practices to protect the environment, including carbon sequestration," as stated in his Build Back Better Agenda for Rural America. To correct both these deficiencies, USDA should publish a revised Interim Final Rule, with a comment period, that can be finalized before the end of 2021 to guide fiscal year (FY) 2022 and all future enrollments in the program. The revised Interim Final Rule should address the following issues.

a. **Fulfilling the President's Campaign Promise:** New provisions should be added to a revised Interim Final Rule to fulfill President Biden's rural platform campaign pledge on CSP and climate change. In order to establish the framework to fulfill this pledge, the revised Interim Final Rule should establish climate mitigation and resilience as nationwide Priority Resource Concerns for the CSP. The revised Rule should also authorize the Secretary of Agriculture to use the Commodity Credit Corporation (CCC) to provide additional funding to the program, as envisioned by the President. This additional funding should be both to increase general CSP funding (including implementation changes to the program to further target soil health and greenhouse gas emissions reduction), as well as for climate bundles, as discussed below. Corporations, foundations, and other donors could be permitted to contribute to the program, as proposed in the campaign platform proposal, to make additional resources available for dramatic program expansion.

b. **Contract Renewals:** The current Final Rule includes a provision prohibiting participation in the program for two years if a producer's application for renewal is unsuccessful. There is no statutory basis for this provision, and with limited funding for renewals (due to 2018 Farm Bill provisions both cutting funding and eliminating automatic renewals for eligible applications), this places renewal applicants at a serious disadvantage, forcing many excellent applicants out of the program. Furthermore, in the Final Rule, additionality is heavily weighted in ranking of

applicants, which is in conflict with the statutory requirements for renewal and leaves the most innovative farmers without the opportunity to continue to enhance their conservation efforts through the program. These issues must be fixed in the revised Interim Final Rule and must also be corrected in the Conservation Assessment and Ranking Tool (CART) and in the CSP Manual.

c. **Annual Payments and Ranking Factors:** In the Final Rule, NRCS reversed Congress' decision to streamline CSP ranking and payments to provide equal weight to farmers' active management of ongoing and new conservation activities on their farms. This change denies payments to farmers who meet the highest USDA conservation standards and have implemented all the relevant CSP-available conservation activities on one or more of their land uses. The Final Rule contradicts the statute and congressional intent, so this should be fixed in the revised Interim Final Rule. Changes are also needed in the CART ranking tool so that CSP applications are scored based on the overall benefits of existing and additional conservation activities, as well as the number of resource concerns addressed. Currently, CART does not give the appropriate weight to ongoing annual management of conservation, diminishing the chances of good land stewards to secure a CSP contract to further advance their conservation efforts. This unfair weighting in the ranking template of CART severely compromises the capacity of CSP to support our best land stewards to continue and enhance the carbon sequestration, climate mitigation, production resilience, and other ecosystem services they provide to society.

d. **One Additional Activity Per Land Use:** The Final Rule requires the adoption of new, additional conservation activities on every land use on a farm to qualify for an annual payment on that land use. This requirement does not appear in statute and violates the basic principle and philosophy of CSP. This provision should be removed in the revised Interim Final Rule as it can render ongoing maintenance of the most climate-friendly systems, such as advanced grazing management, economically infeasible for many current or would-be CSP participants.

e. **Payment Limit for Joint Operations:** The Final Rule doubles the statutory payment limit for joint operations. There is no basis in law for declaring that general partnerships may receive double the amount for which corporations and sole proprietorships are eligible. The current provision gives larger, corporate farms an unfair competitive advantage in accessing CSP and reduces the number of farms the program is able to serve. To ensure all farmers have fair access to the program, the revised Interim Final Rule should adopt the statutory payment limit of $200,000.

f. **Ranking Pools:** We urge NRCS to ensure that separate ranking pools for beginning farmers and ranchers, socially disadvantaged producers, military veteran farmers and ranchers, and organic and transitioning to organic producers are included in the revised Interim Final Rule. This is a key equity consideration in the program, and

it is very concerning that the Final Rule hinted that this practice may change in the future. To ensure adequate resources for historically underserved producers, the national set-aside percentage should be doubled to 10 percent or the states could be given the option to increase set-asides to parallel the demographics of their farming population. Setting aside only 5 percent is simply not ambitious enough for most states, so we urge NRCS to at least double the set-aside to 10 percent. While the CSP Manual clearly requires separate ranking pools and spending plans for beginning, socially disadvantaged, military veteran, and organic/transitioning to organic farmers, that is not reflected in the Final Rule. NRCS should address this oversight in the revised Interim Final Rule by including separate pools of funding for each group.

g. **First Ranking Period:** NRCS must hold the first ranking period in the first quarter of the fiscal year, per the statute, but there is no need to add another ranking period during the last quarter of the previous fiscal year. We urge the Agency to remove the addition of a ranking period occurring in the last quarter of the previous fiscal year in the revised CSP Interim Final Rule. We also urge NRCS to provide a common, national deadline for farmers and ranchers seeking to apply for the CSP in a given fiscal year.

h. **Stewardship Threshold:** To the extent practicable, NRCS should use both planning criteria and accumulated program data to establish the stewardship threshold. The thresholds should be established initially at no less than the planning criteria, with the possibility of increasing them over time based on program data. NRCS should then use scientifically validated assessment tools and guides to measure the level of conservation at the time of the application and the improvement once the participant applies additional conservation activities to meet or exceed the stewardship threshold for a resource concern. The Final Rule only refers to the tools the agency will use to establish the stewardship thresholds, not the planning criteria and the program data per the statute. This issue should be fixed in the revised Interim Final Rule and the CSP Manual. Furthermore, we urge NRCS to add COMET-Farm, Pasture Condition Score Tool, WIN-PST, and several water quality assessment tools to the existing list of tools.

Outside of the Final Rule, we urge USDA to restore organic enhancements under CSP (removed in 2017), revisit the process for determining and establishing stewardship thresholds, and address the low payment rates for certain climate-friendly practices under CSP. The new NRCS Chief should direct the Program division, and the Science and Technology division as needed, to make these changes in time for inclusion in the FY 2022 enrollment process materials.

a. **Payment Rates for Climate-Friendly Practices:** We urge the agency to prioritize, promote, and expedite the delivery of the supplemental CSP contract payments for comprehensive conservation planning. This will defray producer costs and encourage more producers to undertake comprehensive, whole-farm conservation planning, leading to increased innovation and adoption of climate-friendly practices and enhancements. The supplemental CSP contract payment provision of the 2018

Farm Bill remains unimplemented, an unacceptable delay that limits the impact of the program.

We also urge USDA to enhance CSP payment rates for conservation practices. CSP payment rates for conservation practices adopted as part of a contract should not be capped at 10 percent of the Environmental Quality Incentives Program (EQIP) rate. Differences in practice payment rates should be based on actual projected differences in costs, benefits, and forgone income, rather than on an arbitrary formula that results in unreasonably low payments under CSP. The large discrepancy between EQIP and CSP payments reveals a significant programmatic bias on the part of the leadership of the previous Administration. This should be fixed immediately in the CSP Manual and in the annual payment schedules rather than waiting for the publication of the revised Interim Final Rule.

b. **Climate Adaptation and Mitigation Bundles:** We urge NRCS to establish climate change adaptation and mitigation bundles within CSP for use in the next sign-up period. In doing so, the agency will ensure that the program appropriately rewards and recognizes the enormous potential of CSP's combined conservation activities to increase carbon sequestration and enhance soil health, reduce overall greenhouse gas emissions, and improve resilience to a changing climate. We request bundles be available for three categories (increase carbon sequestration and enhance soil health, reduce overall greenhouse gas emissions, and improve resilience to a changing climate), for the various land use types (cropland, pastureland, rangeland, forested land) and that the bundles provide flexibility to ensure that producers can select the suite of enhancements that are best suited to climate change mitigation and adaptation efforts on their operation.

c. **Organic Enhancement Restoration:** The 2017 reinvention of CSP eliminated organic-specific enhancements under the incorrect assessment that organic practices were not aligned with conservation practices. A substantial and growing body of research demonstrates that organic production systems make important contributions to a climate-friendly and resource-conserving agriculture. We urge you to restore, and revise as necessary, a full complement of organic-specific enhancements for the 2022 enrollment period and all subsequent years. NSAC and its member organizations played a significant role in developing these specific practices and enhancements funded by a NRCS Conservation Innovation Grant. USDA should not waste its public investment on this.

3. Establish Climate Mitigation and Resilience as a Resource Concern throughout NRCS conservation programs, a nationwide Priority Resource Concern for the Conservation Stewardship Program (CSP), a top priority throughout USDA intramural and extramural research programs, and an actuarial factor in RMA crop insurance programs.

The stability of global and regional climates must be formally recognized and established as a Resource Concern, commensurate with soil, water, air, plants, animals, and energy. Climate disruption poses a threat at least as severe as soil erosion, degradation of soil and water quality, wildlife habitat loss, and species extinctions; thus, it must become part of the NRCS mandate to address the climate as a vital natural resource concern. NRCS should establish both climate mitigation (through carbon sequestration and reduction in agricultural greenhouse gas emissions) and climate adaptation (increased agricultural resilience to the impacts of climate disruption through improved soil health, diverse rotations, and other conservation measures) as Purposes for Conservation Practices, as Resource Priorities throughout the agency's portfolio of conservation programs, and as nationwide Priority Resource Concerns for CSP.

To support these policy and priority changes at NRCS, USDA should expand its research focus and investment in carbon sequestration, climate mitigation, and resilience. USDA must establish climate in agriculture (mitigation and resilience) as a top priority throughout its portfolio of research programs including both intramural (Agricultural Research Service, Climate Hubs, Long Term Agroecosystem Research Network) and extramural (National Institute of Food and Agriculture) programs.

Climate has emerged as a major risk factor for all types of agricultural production and it is essential to account for and address this risk with crop insurance and other risk management tools offered through the USDA Risk Management Agency (RMA) and private insurers. RMA must make climate risk and its management a major objective throughout its programs and risk management offerings, and must adjust actuarial factors to take full account of the climate resilience-enhancing aspects of Good Farming Practices.

4. Establish a Department-wide plan for U.S. agriculture to reduce greenhouse gas emissions in line with the Administration's goals of halving emissions by 2030 and achieving carbon neutrality by 2050.

USDA has made erosion reduction, healthy soils, and improved water quality national priorities, and this is reflected throughout USDA conservation, research, and rural development programs. Preventing erosion conserves soil organic carbon, building soil health enhances soil organic carbon accrual, and best nutrient management to protect water quality also reduces emissions of nitrous oxide, which is the U.S. agriculture's largest *direct* contribution to greenhouse gas emissions.

USDA should establish a Department-wide plan for U.S. agriculture to reduce greenhouse gas emissions in line with the Administration's stated goals of halving emissions by 2030 and achieving net zero emissions by 2050. To support the broader effort, USDA should focus a significant portion of conservation, energy, research, risk management, and rural development program funding on biological systems and practices that are most effective for carbon sequestration and greenhouse gas emissions reduction. The Agency should also support widespread adoption through funding allocations, financial and technical assistance for producers, ranking of program applicants, support services, and other policies throughout its suite of programs.

5. Improve payment rates for climate-friendly conservation practices and fund projects that develop and expand market opportunities for small grains, cover crops, and forages to incentivize adoption.

The benefits of climate-friendly conservation practices, including resource-conserving crop rotations (RCCRs) and cover cropping, are well documented and include building healthy soil, sequestering carbon, increasing soil organic matter, and protecting vulnerable water resources. However, obstacles to adoption of these practices remain, indicating that additional financial incentives, field demonstrations, improved guidance and technical assistance, dedicated outreach, and market development are needed. We urge the agency to improve payment rates for practices that maximize plant biomass, optimize biodiversity in cropping systems, integrate livestock and crop production, and encourage whole-farm system changes. The initial investment farmers must make to adopt cover cropping can be a major barrier. To address this, USDA must make available more cost-share incentives and technical assistance to further cover crop adoption. While CSP and EQIP both provide some assistance, improving the payment rate and structure of these payments for cover crop activities would accelerate uptake.

For example, RCCRs are promoted in CSP but even with the 2018 Farm Bill directive that increases RCCR payment rates, the payments remain low relative to potential foregone income and climate and environmental benefits. For instance, in Iowa, the CSP rate for the basic conservation crop rotation practice is less than $2 an acre, while the RCCR enhancement is $20 an acre. Improving an RCCR by adding another RC crop is just $7 an acre and the Department's special soil health crop rotation enhancement is less than $5 an acre. These payment rates are inadequate to support widespread adoption of RCCRs, and we urge NRCS to rethink how CSP and other conservation programs pay producers to adopt integrated farming systems changes that may incur significant costs and foregone income while providing substantial climate mitigation and resilience benefits.

EQIP payments for cover crops are approximately $50 per acre per year for three years. The Sustainable Agriculture Research and Education Program's (SARE) national economic report on cover crops showed that the net cost for cover cropping starts at $30 - $40 in year one but declines as net profit improves. EQIP payments should use a step-down approach over three or four years, to incentivize up to incentivize 50 percent more acres.

Decreasing EQIP payment rates for cover crops beyond the first year or two may also encourage participants using cover crops or conservation crop rotation practices to "graduate" to CSP where they would continue to be recognized for their active management of critical conservation activities for years into the future. However, CSP cover crop payments are too low. Currently, CSP payments for the basic cover crop practice is approximately $5 an acre, and the payment for cover crop enhancements is roughly $12 an acre. While the structure and purposes of CSP and EQIP are different, and hence different payment rates should apply, the importance of cover cropping dictates that the CSP payment rates should be set considerably higher.

The necessary expansion of cover cropping practices will require utilizing several federal programs to spur the development of new markets for small grains, forages, and cover crops to create stronger market incentives for adoption of RCCRs and cover cropping. Programs like the Local Agriculture Marketing Program (LAMP), which includes both the Value-Added Producer Grant Program (VAPG) and the Farmers Market and Local Food Promotion Program (FMLFPP), and Conservation Innovation Grants (CIG) are already being used to support projects and initiatives to create markets for small grains.

To promote further adoption of cover cropping and RCCRs, USDA should continue to give grant awards through FMLFPP, VAPG, CIG, the Regional Conservation Partnership Program (RCPP) and other programs to projects that seek to develop and expand market opportunities for small grains, cover crops, and forages. The agency should allow cover crops to be harvested for seed and also allow small grain crops, such as oats, to be sold as cover crop seed if they fail to make food grade specifications in order to provide multiple markets for cover crops.

6. Allow for greater economic use for the cover crop conservation practice and all of the cover crop conservation enhancements under federal conservation programs.

Currently, restrictions apply on whether a producer can hay or graze cover crops under the cover crop conservation practice standard (CPS 340) and multiple cover crop enhancements. We urge NRCS to reconsider these restrictions and modify the practice standard and enhancements to allow for haying and grazing of cover crops in a way that preserves the conservation benefits of cover crops but allows for their economic use as well.[1] We are encouraged by the modification included in the revised practice standard (Docket No. NRCS–2020–0008) clarifying that the prohibition on harvesting cover crops applies to *mechanical* harvest, and adding new Additional Criteria for managing cover crop grazing to maximize soil organic matter. However, additional language is warranted to clarify that grazing cover crops can enhance soil organic matter and soil health benefits, as supported by growing evidence and research. Doing so will encourage adoption of cover crop grazing across farming operations and reintegrate livestock into cropping systems, enhancing the carbon sequestration potential of agricultural soils.

7. Update cover crop termination guidance for clarity and flexibility.

One of the biggest barriers to planting cover crops is the fear that putting in a cover crop will cause a loss in crop insurance coverage, and farmers have been denied indemnity payments precisely for this reason in the past. The 2018 Farm Bill reduced one of the most significant barriers to cover crop adoption by clarifying the definition of cover crop termination.

[1] "Baling off" residues of annual cash or cover crops can cause erosion and destroy some soil organic carbon, so some restrictions may still apply, while careful grazing of residues does much less damage (Blanco-Canqui et al., 2016a, 2016b).

NSAC applauds USDA for quickly moving forward to try to ensure changes to address this issue in the 2018 Farm Bill were in place for the 2020 crop year and for incorporating some of NSAC's comments into the updated guidelines. However, the updated cover crop termination guidelines remain confusing and limiting, and the existing guidance document should be clarified so that farmers can understand that the termination guidelines are not intended to function as a substitute for locally adaptive management for cover crop termination timing, but rather serve as but one option available to producers. In practice, the optimum termination date for a cover crop varies not only with local conditions but with season. For example, in a dry year, earlier termination saves moisture for the following crop, while in an excessively wet year, letting the cover crop grow as long as practical removes excess moisture, which not only facilitates timely planting and establishment of the next crop but also builds soil health by improving drainage and adding organic carbon. As climate change intensifies both drought and extreme rainfalls, adaptive flexibility in termination date becomes ever more critical for successful production and agricultural resilience (i.e., risk reduction). Thus, it is essential cover crop termination decisions can be flexible and site-specific in order to optimize water use efficiency, erosion control, soil health improvement, weed and pest control, habitat for beneficial organisms, nutrient cycling, and water quality improvement.

We encourage USDA, and RMA in particular, to continue moving quickly to make further improvements on the cover crop rules, such as including intercropping, planting green, and other emerging cover crop practices in the guidelines, and informing producers that they may rely on published materials from agricultural experts.

- USDA should add a new provision to the cover crop termination guidance that clarifies that cover cropping practices, including intercropping interseeding, overseeding, relay planting, strip intercropping, and planting green do not affect the insurability of crops. Interseeding cover crops, for example, is helpful to producers because they can use the cover crop for grazing immediately after harvesting their cash crop.

- USDA to make it clear that the cover crop termination guidance document is to provide guidance only and should never be grounds for denying an insurance claim if a farmer chooses to let the cover crop grow longer to remove excess moisture, add more nitrogen, or reduce saline seeps.

- USDA should revise the cover crop termination guidance document, in time to be effective for the next crop insurance year, so that it no longer interferes with crop insurance coverage and with sufficient clarity and comprehensiveness to reduce the number of individual GFP determinations that must be made. The guidance document should also be revised to improve its readability and make it more accessible to farmers which will reduce farmer perception that insurance problems may arise due to the adoption of cover cropping.

- USDA should conduct a scientific review of the June 1 termination deadline, which many Northern tier dryland farmers report is neither realistic nor helpful for their conservation efforts and goals.

Once these and other improvements are made, USDA will be able to proceed to address the larger issue of ensuring that all conservation practices acceptable as Good Farming Practices within the federal crop insurance program.

8. Modify the Good Farming Practices definition and handbook to clarify that all NRCS conservation practices and standards, without exception or caveat, are Good Farming Practices (GFP).

Farmers who implement conservation practices and enhancements in line with NRCS standards should not find themselves in conflict with RMA rules as a result. Conservation is a key element of risk management and RMA rules and policies should reflect this understanding. RMA and NRCS, two Farm Production and Conservation (FPAC) agencies, should coordinate so that neither issues a contradictory rule or recommendation that impacts farmers.

RMA's current policy goes part way there, recognizing that conservation activities can be GFP, but makes an exception any time an AIP or adjuster believes the conservation practice inhibited yield. This has resulted in farmers being ineligible for an indemnity payment when they were attempting to follow an NRCS conservation practice in good faith. The current RMA GFP definition and policy furthers the perception amongst farmers that adopting conservation standards and practice adoption may cause one to lose coverage or to negatively impact one's indemnity payments.

RMA should revise its policy and affirm in its communications with farmers that any NRCS conservation practice or enhancement is an RMA compliant GFP and in no way can jeopardize indemnity payments if any insurance loss occurs. RMA should be required to file interagency comments every time conservation practice and enhancements standards are open for review, and once those standards are adopted, the determination should be made that the practice is a GFP. GFP determinations should not prevent farmers from adopting conservation practices and enhancements.

9. Support advanced grazing management systems, including management intensive rotational grazing (MIRG), through federal working lands conservation programs.

MIRG and other advanced grazing management systems adapted to locale have been shown to restore soil and forage health, improve livestock health and production, sequester at least one ton of carbon per acre annually, and achieve a far lower net greenhouse gas footprint for livestock production, sometimes attaining or exceeding net zero emissions (Machmuller et al., 2015; Teague et al., 2016). Farmers indicate that hurdles to more widespread adoption of MIRG practices include

the initial costs of infrastructure, acquiring new management skills, lack of educational and technical assistance resources, and other socioeconomic factors.

To deploy innovative practices that have been proven to improve the resilience and carbon sequestration potential of livestock production systems, and to promote and support their adoption throughout the country, we urge the following:

- Modify various NRCS grazing conservation activities to reflect that MIRG systems can dramatically improve soil health, carbon sequestration, and water quality;

- Encourage further adoption of advanced grazing management systems, including MIRG, through robust ranking consideration, increased payment rates, technical assistance and training for implementation, and bundled payment options under CSP and EQIP;

- Dedicate funding to support research, demonstration, education, workforce development, and planning and outreach projects on advanced grazing; and

- Establish a grazing apprenticeship support program to provide the training that ranchers need to transition to advanced grazing management systems.

10. Expand the Conservation Reserve Program (CRP), including its Grasslands Initiative, to explicitly support carbon sequestration goals.

NSAC also strongly encourages the Farm Service Agency (FSA) to expand the role of the Conservation Reserve Program (CRP), including its Grasslands Initiative, to explicitly support carbon sequestration goals. FSA could support highly effective carbon-sequestering and climate-mitigating practices such as forested riparian buffers and improved range and pasture by using the Clean Lakes, Estuaries, and Rivers (CLEAR) initiative, the Conservation Reserve Enhancement Programs (CREP), and the Grasslands Initiative to their full and complete potential. USDA should:

- Protect and enhance CLEAR bonus and practice incentive payments (PIPs) to their full amount. NSAC has long advocated for increased incentives for the Continuous Conservation Reserve Program (CCRP), including CLEAR, as they represent the most cost effective and beneficial enrollments in the program. We thank USDA's reversal of the previous Administration's reduction in the CCRP PIPs and rental rate bonus, as well as the addition of the new climate smart practice incentive, to encourage enrollment in the CCRP and CLEAR and signaling to farmers that enrollments of high return practices like riparian buffers, prairie strips, and grass waterways will be financially rewarding.

- Allow for adoption of the 2018 Farm Bill's improved management options without any payment rate reductions in CREP negotiations with states;

- Contact all landowners who enrolled through a general sign-up well in advance of contract expiration of their options for continuing in the program under CLEAR, CREP, and Grasslands; and

- Create and pilot a new agroforestry initiative within CRP to encourage transition to perennial production systems.

11. Stop offering payments to new or expanding concentrated animal feeding operations (CAFOs).

The increasing use of liquid manure storage facilities has been the major driver of increased total U.S. agricultural greenhouse gas emissions between 1990 and 2018 and also threatens water quality and drinking water safety. NRCS has a responsibility to protect natural resources and the environment, so it is extremely problematic that the agency has continuously supported and subsidized CAFO expansion in areas already at high environmental risk and that disproportionately impact communities of color. We urge NRCS to:

- Limit eligibility of CPS 359 (Waste Treatment Lagoon) and other related livestock waste standards to existing CAFO operations only. NRCS should not offer financial assistance under CPS 359 or other standards for new or expanding CAFOs;

- Strengthen requirements such that liquid manure be applied at ecologically acceptable rates and appropriate times of year;

- Reallocate the 50 percent of EQIP funding for livestock production to support more sustainable pasture-based livestock, dairy, and poultry operations by providing technical assistance, outreach, and more robust payments to producers seeking to initiate, improve, or transition to grass-based operations;

- Target EQIP waste management practices to seasonally confined livestock operations that keep animals on pasture for as much of the year as possible. NRCS should prioritize technical and financial assistance to producers who pasture their animals as much as their climates permit and support those farmers efforts to manage the unavoidable manure accumulations during the coldest parts of the year;

- Require that existing CAFOs receiving EQIP funding not simply develop, but also implement comprehensive nutrient management plans; and

- Provide incentives, including both financial and technical support, through existing programs to livestock producers to adopt alternative manure management practices in lieu of

liquid manure storage, including composting, dry stacking, and field application in solid form. NSAC urges USDA to fund and support programs to address alternative manure management practices as detailed in the Alternative Manure Management Program provision in the *Agriculture Resilience Act* (H.R. 2803; S.1337).

Without stronger safeguards, conservation funding further entrenches CAFOs and their harmful environmental and public health externalities and allows them to persist at the expense of climate-friendly alternatives.

12. Increase USDA agricultural data integration and analysis, both within and across Agencies.

Key research insights needed to advance innovation can be uncovered by increasing integration and analysis of USDA's agricultural data across programs and agencies. Several opportunities exist to immediately improve data innovation and research at USDA, both internally and externally, by partnering with researchers at land grant institutions or other agricultural colleges and universities. We encourage USDA to:

- Continue working to create an internal data dashboards system for USDA Mission Areas and to extend it to all Mission Areas. This shared, internal platform makes data available all those in leadership to inform decision-making and increase the Agency's ability to generate robust data insights;

- Incorporate more types of data into these dashboards to advance research and organizational decision-making efforts; and

- Establish agreements with trusted researchers at land-grant universities to answer key research questions related to the agency's production and environmental goals. Section 1619 of the 2008 Farm Bill allows USDA to share its agricultural data with land grant institutions for the purposes of technical assistance.

Expanding research capacity will help create a strong scientific basis to drive innovation forward.

13. Create a coordinated five-year strategic plan for organic research at the Agricultural Research Service (ARS) and the National Institute of Food and Agriculture (NIFA) and commit to organic research funding reaching at least 6 percent by 2024, with an emphasis on climate mitigation and adaptation.

Since passage of the Organic Food Production Act in 1990, USDA has supported organic agriculture mainly as a market niche based on consumer demands for food free from the National Organic Program's (NOP) prohibited substances. However, with increasing recognition and

scientific validation of organic production as a major contributor to resource conservation, soil health, and climate resilience and mitigation, it is vital that USDA reframe organic agriculture as a leading tool for addressing the climate crisis and other environmental and natural resource concerns.

Recent research indicates that organic systems enhance soil health and carbon sequestration, agricultural resilience, and yield stability, showcasing the climate mitigation and adaptation potential of organic agriculture. Continued investment in research and development of practical solutions to challenges faced by organic producers, such as improved methods for weed control and nutrient management and the need for crop cultivars and livestock breeds better suited to climate-friendly organic management practices, will help organic producers to increase production levels to match conventional agriculture production systems, while further reducing the environmental and greenhouse gas footprint of organic production systems. Organic agriculture is a clear example of an innovative approach that is both ready to go and high priority for continued research and innovation.

Increasing emphasis and investment in organic research through NIFA programs, such as the Sustainable Agriculture Research and Education Program (SARE), the Organic Transitions Program (ORG), the Organic Agriculture Research and Extension Initiative (OREI), and the Agriculture and Food Research Initiative (AFRI), are steps USDA can take now to advance organic production systems and further our understanding of their climate mitigation and adaptation potential. While NIFA programs focus on short- and medium-term research, the need for long-term research on organic agriculture, particularly on aspects of climate mitigation and adaptation, is also critical. Programs at ARS such as the National Program 216: Sustainable Agricultural Systems and National Program 212: Soil and Air must expand their investment in organic systems especially with regard to soil health, climate mitigation, and resilience, and should be coordinated with NIFA programs with similar priorities.

USDA should dedicate agricultural research funding specific to organic production systems at a level that is at least commensurate with the market share of organic food in the U.S. food system, which is currently six percent and projected to continue growing. Therefore, we urge USDA to create a coordinated five-year strategic plan for organic research at ARS and NIFA and to provide at least six percent of research funding to organic agriculture by 2024 to advance organic production systems' potential to sequester carbon and reduce greenhouse gas emissions, to protect water quality by reducing nutrient losses by 50 percent or more, and to recycle food waste to the land via a composting process that converts the waste into a valuable soil amendment.

14. ***Establish an Agency-wide priority to support the widespread adoption of resource-conserving and climate-friendly organic systems through adequate and appropriate technical assistance and nationwide access to relevant conservation activities under federal conservation programs.***

Federal programs like the National Organic Certification Cost Share Program (NOCCSP) require sizable investments in order to keep pace with the continued and accelerating growth of the organic market. Furthermore, NRCS should have dedicated staff to guide and enroll organic producers in working lands conservation programs, such as CSP and EQIP, and conservation practices and enhancements should be aligned with the requirements producers need to meet under the Organic System Plan (OSP) to encourage transition to organic farming. USDA can further support organic and transitioning to organic producers by:

- Supporting NOCCSP to help farmers meet current and future consumer demand and expand outreach and education opportunities for historically underserved and beginning farmers and ranchers;

- Restoring the funding formula for NOCCSP to the levels delineated in the 2018 Farm Bill of a 75 percent reimbursement of certification costs up to $750 per scope;

- Conducting a survey and publishing data on the current costs of organic certification – including the disparity with the current level of certification support of $750 – by the end of 2022 to ensure it can be considered by Congress as Members begin deliberation and drafting of the 2023 Farm Bill;

- Increasing support for organic and organic-transitioning producers by establishing "new or expected resource concerns related to organic production" as a program purpose for NRCS working lands conservation programs, like EQIP and CSP (as mandated in 2018 Farm Bill);

- Build national NRCS capacity to work effectively with organic and transitioning producers, including conservation planning, program enrollment, and selection and implementation of NOP-compliant conservation activities that help producers meet NOP requirements to conserve and improve soil, water, and other resources, build biodiversity, and to protect organic production areas from unintended exposure to NOP prohibited substances;

- Maintaining the separate ranking and funding pool for organic producers in EQIP and CSP; and

- Providing technical assistance to Congress as Members consider increasing the contract payment limit from $140,000 to $450,000 for organic producers under EQIP to remove the bias in contract payments between organic and non-organic producers.

15. Fund the development of farmer-ready cultivars and breeding networks for a changing climate

A tremendous opportunity exists for development of farmer-ready cultivars to meet the challenges of climate disruption through cost-efficient development of crop cultivars using classical breeding

amplified by modern genomic analysis. Recent advances in understanding the role of plant-soil microbiomes and plant genetic traits in crop nutrient and water use efficiency, resilience to diseases, weeds, and abiotic stresses (drought and other weather extremes brought on by a changing climate), overall vigor and capacity to increase yield in organic and other sustainable production systems demonstrate the need to make this a priority within the agency.

Additionally, farmer participation in plant breeding networks can hasten development and adoption of regionally adapted, resilient, farmer-ready public crop cultivars. Plant breeding networks that include farmer researchers, funded through OREI, for instance, have achieved the development of several dozen new cultivars and several hundred advanced breeding lines with valuable agronomic, resilience, and market traits which compare favorably with those of genetically modified crops at a small fraction the R&D cost.

USDA should expand support for public cultivar development (distinct from genomics and other basic crop genetics research) by:

- Dedicating at least $50 million per year to this research and prioritizing farmer-participatory breeding endeavors leading to the release of farmer-ready public cultivars that are regionally adapted, climate-resilient, and resource-efficient cultivars, and that meet market needs of farmers; and

- Creating a separate AFRI sub-program funded at least $10 million per year dedicated for public cultivar development.

Steps should also be taken to ensure that new cultivars developed with public funding remain in the public domain, not subject to utility patents or other excessively restrictive intellectual property provisions.

16. Increase research that engages farmers, ranchers, and stakeholders in perennial production systems and incentivize widespread adoption of these production systems.

Perennial production systems, including agroforestry, alley cropping, permaculture, and silvopasture, are highly promising – both in terms of production and environmental benefits. Conversion of annual cropland to any of these forms of perennial agriculture typically sequesters 2,000 lbs. carbon per acre, or more, annually, compared with just 400-600 lbs. per acre for conversion of conventional production of annual crops to either organic or conservation agriculture management of the same annual rotations. Perennial cropping systems and crop-livestock integrated systems cycle nutrients efficiently, protect soil from erosion and degradation, and require far less fertilizer per acre-year. Low fertilizer inputs combined with year-round living roots minimize excesses of soluble nitrogen and phosphorus in the soil, and thereby curb emissions of the powerful greenhouse gas nitrous oxide, and protect water quality by reducing nutrient losses.

These highly resilient production systems should be prioritized by USDA and advanced through additional research, education, and extension that engages end users and all stakeholders in permaculture systems to build productivity to levels that will meet the needs of the U.S. population, while maintaining a small environmental and climate footprint. By leveraging existing sustainable agriculture research programs such as SARE and the USDA Agroforestry Center, the Agency can encourage widespread adoption of relatively "low-tech" and accessible practices and systems that have a tremendous relative advantage to annual cropping systems in terms of soil, water, other resources, and carbon sequestration.

17. Increase support for composting as a climate-friendly alternative to landfill and manure lagoon disposal of organic residues.

Diverting organic materials from manure lagoons or landfills (e.g., food waste, yard waste, municipal leaves) to make compost for agricultural use has a significantly lower greenhouse gas emission footprint than the anaerobic decomposition that would occur in lagoons and landfills. Compost also enhances plant growth and soil organic carbon accrual on treated acreage (DeLonge et al., 2013). Composting – and land-applying organic residues that would otherwise be disposed of as "waste" – is an important strategy for climate mitigation and adaptation and to improve the resilience of the agriculture and food system.

Compost works synergistically with living plants to enhance soil health, carbon sequestration, and efficient nutrient cycling, provided that compost is applied at rates in accordance with sound nutrient management practices to avoid accrual of excess soil phosphorus. Recycling the nation's organic "wastes" back to the soil via composting can greatly improve the health and carbon sequestration of many millions of acres of agricultural lands.

USDA should increase support for composting as a climate-friendly alternative to landfill and manure lagoon disposal of organic "wastes" by:

- Renaming conservation practice standard (CPS) 317 (Composting Facility) to "Composting and Composting Facility" and expanding the purposes, criteria and considerations to include the composting process itself and the proper use of compost based on sound nutrient management; and

- Revise criteria for CPS 317 (Composting Facility) and CPS 633 (Waste Recycling) to support composting of both on-farm and off-farm sourced organic residues so that they do not become "wastes" discarded in landfills or held in waste lagoons, where they will emit large amounts of methane.

Both of these recommendations would improve soil health and water quality, and they represent ready to go approaches that USDA can implement now.

18. Improve the Interim Conservation Practice Standard (CPS) 808 Soil Carbon Amendment and make it a national and permanent practice standard as soon as possible.

This standard promotes soil health, soil carbon sequestration, and compost use as a conservation practice. The use of compost and other organic amendments plays a central role in most organic production systems, and it can be highly effective in promoting both soil carbon sequestration and resilience to weather extremes and other stresses when done in accord with sound nutrient management and in conjunction with maximizing soil coverage, living root, and biodiversity. Therefore, CPS 808 can play a major role in achieving the Biden-Harris Administration's greenhouse gas mitigation goals within the agricultural sector.

NSAC appreciates that NRCS has continued to develop and modify the standard to optimize conservation outcomes and encourages further refinement. Because the standard covers a collection of highly disparate amendment materials with divergent properties and impacts on soil carbon and nutrient dynamics, different management considerations may be needed for these diverse carbon sources, warranting revisions to the standard. The impact of management practices on soil organic carbon and soil health will differ among the various amendment types covered by the standard, and best results may accrue from mixing different materials.

NSAC encourages NRCS to improve the biochar section of the standard due to its distinct properties and novelty. Biochar is a highly promising, relatively new technology, so this section of the standard will need to be updated to refine guidelines for practical application as additional research is published. Additionally, the standard should specify that production of biochar, compost, or other organic amendments should not be based on annual crop residues, native vegetation or other plant biomass whose harvest and removal for this purpose degrades soil health or reverses or compromises carbon sequestration of the "donor" acres. Furthermore, the standard should prohibit production of biochar derived from expired/disposed neonicotinoids and/or fungicides coated seeds.

Overall, NSAC appreciates NRCS's ongoing work to refine and improve Interim CPS 808, and we also note that each of the amendment types addressed in Interim CPS 808 may require separate sets of criteria for their optimal use for carbon sequestration and other conservation objectives. Once Interim CPS 808 is revised, we urge NRCS to make it a national, permanent conservation practice standard as soon as possible.

19. Establish a Monitoring, Evaluation, and Reporting Initiative to create outcomes-verified data and metrics needed for tax credits, supply chain initiatives, and carbon trading.

Measurement, evaluation, and reporting (MER) requirements on conservation outcomes are needed for all conservation programs and initiatives, including a description of all the approaches, methods, and metrics USDA is developing or already has in place. This information is necessary in order to define, evaluate, and communicate outcomes specifically related to the potential of USDA conservation programs to help farmers mitigate impacts of climate change. Recent and ongoing advances in sensor technology and real-time in-field monitoring of soil carbon and nitrogen dynamics as well as crop-soil water relations, crop nutrient status, and plant diseases should help make effective MER more feasible in the near future.

While USDA is currently able to measure conservation effects on a national, regional, and landscape scale through the Conservation Effects Assessment Program (CEAP), CEAP is not able to assess the effects of individual USDA conservation programs, practices, and initiatives – which will be needed in order to establish outcomes-verified data on the carbon sequestration rates of various NRCS practices and integrated suites of practices. To build the necessary partnerships, infrastructure, and capacity to measure, evaluate, and report on the effects of conservation programs and initiatives on carbon sequestration and net greenhouse gas footprint, USDA will need a dedicated source of funding.

20. Increase support for small- and mid-sized slaughter and processing capacity to build resilience and incentivize widespread transition to pasture-raised livestock and poultry.

Pasture-based livestock systems build soil health, control erosion, and capture carbon from the atmosphere, so USDA should encourage and incentivize transition to pasture-based systems to support climate change mitigation and adaptation. There is an opportunity for this sector to assist with climate change mitigation efforts through improved soil health and carbon sequestration gained from well-managed grass-based livestock production. However, you cannot have locally produced, grass-fed beef or pastured poultry in schools or neighborhood grocery stores without the processing capacity and infrastructure to get it there. Small-scale meat production can help conserve farmland and benefit local rural economies.

A key bottleneck in the local, sustainably-raised meat value chain is limited availability of processing services, exacerbated by increased demand for local meat resulting from pandemic-driven supply chain backlogs. Limited access to processing keeps current producers from expanding and new producers from entering the market, when we should incentivize transition from an industrialized system that contributes to climate change to a pasture-based system that, when properly managed, contributes significantly to carbon sequestration, soil health, and can have a negative net greenhouse gas footprint.

In 2016, NSAC with support from Secretary Vilsack, built a network over the last five years of small processors and the farmers and ranchers that utilize those processors via small plant roundtables in partnership with USDA. The roundtables uncovered several issues small meat processors and climate-friendly producers experience, including a lack of scale appropriate regulations and access to slaughter. USDA must prioritize measures to support small-scale slaughter and processing facilities that have enabled farmers and ranchers to access slaughter and processing, particularly now as we witnessed the vulnerability of our current processing infrastructure seen through the prominent

closures of large-scale plants during the COVID-19 pandemic, which further proved the need to transition from our current large scale system that harms farmers, workers, the planet, and consumers.

NSAC urges USDA to increase support for small processing by:

- Providing funding to expand small scale slaughter and processing facilities and infrastructure;

    - Implementing a small plant infrastructure program through their broad authority in the *Consolidated Appropriations Act, 2021* and the *American Rescue Plan Act of 2021*[2]. USDA should use $1 billion in funds from the *Consolidated Appropriations Act, 2021* and the *American Rescue Plan Act of 2021*, to implement a food supply chain infrastructure and COVID-19 recovery and resiliency grant program to support fixed and moveable infrastructure and expansion costs that are required in order for these entities to fully respond to COVID-19. USDA must ensure that small processors are able to access a significant amount of grant funds of up to $500,000, to strengthen their infrastructure and support other necessary investments to enable their ability to respond to COVID-19, and to fully recover from the financial costs of COVID-19; and

    - Supporting passage and funding of the Processing Resilience Grant Program provision in the *Agriculture Resilience Act* (H.R. 2803; S.1337) and the *Strengthening Local Processing Act* (H.R.1258; S.370).

- Developing a plan to implement recommendations from the small plant study final report conducted by Oregon State University. The 2018 Farm Bill included this small plant study in Section 12107 "to review the effectiveness of existing Food Safety and Inspection Service (FSIS) guidance materials and other tools used by small and very small establishments." The final report includes specific ideas for small plant inspections and other regulatory issues, including the scale appropriate regulations mentioned below;

- Focusing on scale-appropriate regulations and fair inspections and supporting efforts to guarantee that FSIS regulations are interpreted and applied in a way that does not unfairly burden small processors. USDA should:

    - Develop a continuing education program for inspectors specific to small and very small plants. Plant inspectors often come to small plants from a large plants that look and operate very differently from small plants without any training;

    - Create model Hazard Analysis and Critical Control Points (HACCP) plans for multiple types of small plants, make them available on the FSIS website, and establish a searchable database of all the peer-reviewed validation studies approved by FSIS;

[2] The authority to do so is included in Section 751 of the Consolidated Appropriations Act, Section 751 of the *Consolidated Appropriations Act, 2021* and Section 1001(b)(3) of the *American Rescue Plan Act of 2021*.

- Revise assigned pathogen-testing procedures to ensure sample size proportions are the same for large and small plants; and

- Ensure that the report in Sec. 764(e)(2) of the *Consolidated Appropriations Act, 2021*, on possible improvements to strengthen the Cooperative Interstate Shipment program is prioritized. Two new states have recently been added and this is an opportune time to improve and expand the program to help address the pressing needs of the sector.

- Improving enforcement of meat and poultry label claims through the development of an interagency agreement that allows the Agricultural Marketing Service (AMS) to establish animal-raising labeling claim standards that can be utilized by FSIS in approving labels, and that also provides for AMS auditors to investigate questionable labels on behalf of FSIS. Misleading claims disadvantage small scale producers that meet applicable standards, such as grass-fed and pasture-raised, since products labeled with similar claims are not necessarily produced under the same standards;

- Addressing inspection overtime fee issues facing small plants by:

  - Ensuring, at the very least, the fee reduction matches the structure in the *Small Packer Overtime and Holiday Fee Relief for COVID-19 Act of 2020* (H.R.6977; S. 3797), which proposed that FSIS reduce fees charged to very small plants by at least 75 percent and to small plants by at least 30 percent. Section 1001(d) of the *American Rescue Plan Act of 2021* provided $100 million to USDA to help cover the costs of small and very small plant overtime fees;

  - Setting in motion a four-year plan to reduce small and very small plant overtime fees by requesting the funds needed to eliminate fees for very small plants and reduce fees by 75 percent for small plants through 2025;

  - Ensuring flexibility where USDA can help cover the costs of overtime fees for inspectors that are available for over eight hours a day, but still less than 40 hours a week, in a small plant; and

  - Committing to sending only necessary inspectors (and not extra inspectors) to small plants on holidays and working with small plants around inspector scheduling during holidays.

21. Include climate and agriculture-focused investments in USDA budget requests.

USDA must demonstrate strong leadership and highlight the enormous opportunities that exist from climate and agriculture investments in its annual budget requests. Existing programs can be enhanced and expanded to provide greater investments in agriculture-focused climate solutions. NSAC urges USDA to champion no less than $50 billion for agriculture conservation, farm-based renewable energy and energy efficiency, and agricultural research, all targeted to climate, in the *American Jobs Plan Act* as it moves forward into the legislative phase. Depending on the outcome for

agriculture in this budget bill, the proposed budget requests listed below may require some adjustment. USDA should include budget requests that grow discretionary funding available for the following programs over the course of the next several fiscal years:

- ARS and USFS – Climate Hubs: increase discretionary funding to at least $75 million annually over the course of the next four fiscal years.

- ARS Long-term Agroecological Research (LTAR) Network: increase discretionary funding to $75 million annually over the course of the next four fiscal years and include language to utilize increased funding for sustainable agriculture research efforts focused on climate mitigation and adaptation;

- USFS and NRCS Agroforestry Center: increase discretionary funding to $25 million annually over the course of the next four fiscal to expand the work of the existing centers and to establish regional satellite centers;

- NIFA – Sustainable Agriculture Research and Education (SARE) competitive grants program: increase discretionary funding to $100 million annually over the course of the next four fiscal years, and include language to dedicate increase to climate mitigation and adaptation research and extension, including on-farm innovation R&D;

- NIFA – Integrated Pest Management (IPM): increase discretionary funding to at least $40 million annually over the course of the next four fiscal years targeted towards climate change adaptation;

- ARS and NIFA – Organic Agriculture Research: increase discretionary funding to $80 million annually over the course of the next four fiscal years at ARS and $90 million annually over the course of the next four years at NIFA targeted towards organic agriculture and advancing climate mitigation and adaptation through organic production systems;

- NRCS – Conservation Technical Assistance: increase discretionary funding to at least $1.1 billion annually over the course of the next four fiscal years and target the increase in funding to providing technical assistance for resource-conserving and regenerative production systems including:

    - Reaching the goal of $50 million annually dedicated to supporting a reinvigoration and expansion of the Grazing Lands Conservation Initiative (GLCI);

    - Reaching the goal of $25 million annually to fund Grazing Coordinators in all states; and

    - Reaching the goal of $100 million annually dedicated specifically for technical assistance in the implementation of perennial systems of agriculture (i.e., agroforestry, silvopasture, managed grazing, perennial grain crops, etc.). This includes the $50 million annually dedicated to GLCI.

- FSIS – Federal Inspection Program: increase discretionary funding to $1 billion annually over the course of the next four fiscal years, utilizing the additional funding to support the small plant inspector workforce in upholding the integrity of climate-friendly labeling claims such as pasture-raised, grass-fed, (including removing false and misleading claims from the marketplace) and conducting outreach and assistance with HACCP plans and validation studies, humane handling, and other issues facing very small and small plants with grants of federal inspection;

    - Include Sec. 6 of the *Strengthening Local Processing Act* (H.R.1258; S.370) in USDA's proposal to Congress for the infrastructure or FY 2022 Budget Reconciliation bill. Workforce development is fundamental to the revival and growth of the small plant sector; and

    - Request in the FSIS FY 2023 budget request and annual budget requests thereafter additional overtime fee funding to cover overtime fees for small and very small plants to ensure this fee reduction remains consistent beyond these initial years of pandemic-related funding.

- RBCS – ATTRA Sustainable Agriculture Program: increase discretionary funding to $5 million annually over the course of the next four fiscal years with the increase targeted to climate and agriculture work, including the Soil for Water, Agro-Solar, and Armed to Farm (veteran farmers) programs and enhanced ATTRA basic outreach on climate mitigation and adaptation technologies;

- RBCS – Rural Energy for America Program (REAP): increase discretionary funding to at least $100 million annually over the course of the next four fiscal years;

- RBCS – Value Added Producer Grant Program (VAPG): increase discretionary funding to $75 million annually over the course of the next four fiscal years to support value-added marketing projects including for crops or animals added to rotations for soil health, carbon sequestration, or greenhouse gas emissions reduction purposes.

- RBCS – Agricultural Innovation Center Program: increase discretionary funding to $10 million over the course of the next four fiscal years and prioritize applications focused on providing technical assistance and support for climate-friendly and sustainable production and marketing systems;

- RUS – Rural Water and Waste Disposal Program: increase discretionary funding to at least $700 million over the course of the next four fiscal years and utilizing the increased funding for grants to establish rural food waste to energy projects;

- FNS – Farm to School Program: increase discretionary funding to $15 million over the course of the next four fiscal year dedicated to reducing food waste at schools; and

- Office of Urban Agriculture and Innovative Production: increase discretionary funding to $25 million over the course of the next four fiscal year to support entering into additional

cooperative agreements with local governments to host Community Compost and Food Waste Reduction (CCFWR) pilot projects.

We urge USDA to include these items in annual budget requests and advocating for agriculture to receive its fair share of climate funding. Without increased discretionary funding investments, agriculture will not be positioned to contribute in a meaningful way to climate change mitigation and adaptation.

Biofuels, Wood and Other Bioproducts, and Renewable Energy

NSAC strongly urges USDA to conduct in-depth and multifaceted assessments of the climate, environmental, and social impacts of encouraging increased use of biofuels in transportation, increased use of woody biomass, and increased production of biogas from livestock prior to assuming that they are climate-smart solutions. For example, USDA must consider whether incentivizing biofuels will lead to further land conversion that will contribute to soil erosion and degradation; negatively impact water quality, wildlife habitat, and biodiversity; and release vast amounts of greenhouse gases.

Furthermore, USDA must consider how incentivizing biogas might further entrench concentrated animal feeding operations (CAFO) that have enormous negative impacts on air and water quality, local communities, which are often low-income and communities of color, and the agricultural workforce. While a CAFO operating a methane digesters may temporarily delay the release of some greenhouse gasses it does not generate truly clean energy and such investments only stall the shift to more sustainable, pasture-based livestock production practices. Subsidizing digesters also puts small and mid-size dairy farms at a competitive disadvantage and does little to address methane emissions from manure lagoons.

However, existing programs at USDA, like the Rural Energy for America Program (REAP) do encourage renewable, low-carbon energy production and energy efficiency.

1. Advance renewable energy produced and used on farm (wind, solar, and on-farm use) to lower costs and improve resilience of farms.

Our farms and ranches can improve energy use efficiency and generate renewable energy from low-carbon sources to meet needs of the farm operation and potentially nearby communities. Solar and wind show great promise as low-carbon energy sources, while biofuel production from agricultural biomass requires careful lifecycle assessment and consideration of social and environmental impacts. Powering America's farms with low-carbon renewable energy rather than fossil fuels can increase the control of farmers and ranchers over their energy sources, reduce costs, and mitigate climate change.

However, large-scale solar panel installations are sometimes being installed on prime farmland, key wildlife habitat, and other healthy soil-plant ecosystems that presently sequester carbon and perform other vital functions. Thoughtful integration of solar collectors into a diverse farm landscape can maximize benefits and avoid or minimize costs to productivity and other ecosystem services.

USDA should develop standards and offer cost-sharing for photovoltaic technology and wind turbines at appropriate scales that support renewable on-farm energy production, while protecting farmland productivity and conservation outcomes. We urge the agency to:

- Utilize the Rural Energy for America Program (REAP) and improve outreach on this program to incentivize widespread adoption of on-farm generation of low-carbon renewable energy for on-farm and local community use; and

- Accelerate research to ensure solar and wind on-farm energy equipment is installed and integrated into the farm operation in a way that helps producers reduce energy costs while attaining their production and conservation goals, avoids removing prime farmland from production, and does not harm natural areas and biodiversity.

2. Increase the focus of EQIP, CSP, and the Regional Conservation Partnership Program (RCPP) on climate change mitigation, energy conservation, and renewable energy production.

USDA should continue and expand the use of EQIP, CSP, and RCPP, which are authorized to promote energy conservation, to assist farmers and ranchers in obtaining energy audits of their operations, improving the energy efficiency of their operations, and establishing renewable energy systems.

USDA can increase the focus on energy conservation and on-farm renewable energy production through a variety of ways, including:

- Increasing the capacity of NRCS to provide technical assistance on energy conservation and renewable energy on farms;

- Increasing the number of energy conservation practices and systems approved for technical and financial assistance through conservation programs; and

- Expanding the use of EQIP, CSP, and RCPP to fund energy audits and the establishment of on-farm renewable energy.

3. Conduct a full lifecycle analysis on the utilization of plant biomass for biofuel production to evaluate net greenhouse gas footprint impacts as well as impacts on soil health, water quality, native plant communities, biodiversity, and wildlife.

While it is tempting to consider the conversion of plant biomass into biofuels for energy production or transportation as "renewable" and "carbon neutral," we must consider the impacts on soil health and the carbon cycle of removing and burning plant biomass that would otherwise be returned to the soil. Removal of crop residues such as corn stover is known to deplete soil carbon and harm soil quality. Periodic harvest of the topgrowth of perennial grasses, forbs, or shrubs grown as biofuel crops is less harmful but requires further research, including lifecycle analysis, to verify and quantify net benefits. Utilization of woody biomass for either bioenergy or wood products similarly requires careful lifecycle analysis to ensure that harvest does not compromise biodiversity of the carbon sequestration and other ecosystem services provided by forest and woodland plant communities.

Under no circumstances should the capacity of our natural plant communities or perennial conservation planting to convert atmospheric carbon dioxide into soil and biomass carbon be compromised to enable biofuel production.

Addressing Catastrophic Wildfire

NRCS offers a number of conservation practices related to forest management that provide or enhance fuel breaks to protect farms and rural communities from wildfire. NRCS also offers conservation practices that reduce or remove accumulations of excessive combustible fuels in forest and grassland ecosystems. In this case, diversion of the surplus fuel (brush, undergrowth, etc.) into biofuel production could yield a net benefit by reducing wildfire danger while generating energy. This same resource could also be utilized to produce biochar, a valuable soil amendment that stabilizes soil carbon. These potential benefits should be further studied through full lifecycle assessments, as recommended above.

1. ***Expand NRCS financial and technical assistance in management of woody biomass, fine fuels, and wildfire risk for farmers, ranchers, and landowners in wildfire-prone regions.***

California and other parts of the western U.S. are home to producers and landowners whose operations, families, and communities are threatened by wildfire dangers intensified by the climate crisis. These areas and the producers and landowners that live there must be prioritized to receive NRCS programmatic and technical assistance in adopting effective fuel break, fuel management, and other conservation practices that reduce fire risks, specifically including controlled burns and prescribed or targeted grazing. USDA should also prioritize protections for farmworkers from wildfire impacts.

2. ***Encourage and support the utilization of excess woody biomass removed to reduce wildfire risk to generate biochar and renewable energy.***

Any brush or other excess fuel removed from woodland and forest communities for the purposes of reducing wildfire dangers can be utilized for the co-generation of gaseous biofuels and biochar through pyrolysis. When added to agricultural soils in conjunction with cover crops, compost, and/or other organic amendments, biochar can increase carbon sequestration by stabilizing soil organic carbon, enhance habitat for the soil microbiome, and improve nutrient cycling. Thus, removal of excess fuel for wildfires can not only mitigate catastrophic wildfire, but also contribute to climate mitigation through enhanced soil carbon sequestration. Biochar production from excess fuel removed from forest ecosystems at risk of catastrophic wildfire can also spur green jobs and business enterprise opportunities in communities located within or near these forest ecosystems.

Environmental Justice and Disadvantaged Communities

In any conversation about climate change, it is imperative to acknowledge and take concrete action to address the disproportionately heavy impacts of climate disruption on low-income, rural, and minority communities; and on farmers of color, migrant farmers and farmworkers, and other historically underserved constituencies. These communities, both rural and urban, are often some of the first to feel the impacts of climate change and have the fewest resources to withstand its impacts.

It is also important to recognize the invaluable contributions of indigenous communities to agricultural solutions to the climate crisis, and acknowledge the wisdom native peoples have learned about survival under difficult and changing environmental, social, emotional and political conditions.

USDA must include specific policies and accountability measures to ensure farmers of color, and other underserved farmers are not excluded from, or suffer additional barriers to access, any programs. This includes ensuring that farmers of color have access to – and are actually participating in and benefiting from – USDA programs. Unfortunately, historic discrimination in the administration of USDA programs is not just a distant memory – it remains a lived reality for many farmers of color to this day, and additional accountability and transparency measures must be in place before USDA can make real progress and ensure equitable program design, implementation, and access for all farmers and ranchers.

1. ***Ensure historically underserved farmers and ranchers, including beginning, socially disadvantaged, military veteran and limited-resource farmers and ranchers, are fully supported and empowered in their climate resilience and mitigation efforts.***

While USDA has adopted provisions to improve service to producers of color, beginning, veteran, and limited-resource producers, and other historically underserved constituencies, particularly through higher payment rates and advance-payment options in EQIP and other conservation programs, more needs to be done to ensure that these producers receive the financial and technical support they need in order to meet the challenges of climate change and contribute to solutions.

Many eligible producers have not accessed the EQIP advance payment option because they did not know about it, and overall participation by farmers of color and limited-resource farmers in conservation and other USDA farmer programs has lagged behind enrollment of white farmers. In addition to the urgent need to build agricultural and community resilience for those most vulnerable to the worst impacts of climate disruption, every producer who is not served by the programs that could help them build healthy, resilient, climate-mitigating production systems is a missed opportunity, and every farm that goes out of business due to lack of USDA program support can lead to a huge increase in net greenhouse gas emissions if the land is converted for residential or commercial development.

Climate change has significantly impacted the nation's 2.4 million farmworkers by threatening their health and adversely affecting fruit and vegetable production, which heavily depends on the labor of farmworkers. Higher summer temperatures have directly aggravated heat stress for field workers and at the same time intensified pest pressures, leading to increase use of pesticides. Safety gear that farmworkers must wear when working in sprayed fields further increases heat stress, often to a dangerous degree. Policies to protect farmworkers' well-being from the combined dangers of extreme heat and pesticides are urgently needed (Ferguson et al., 2019).

NSAC urges USDA to:

- Improve outreach and service delivery to farmers and ranchers of color and other historically underserved producers, including technical assistance with conservation planning and program application, and informing eligible producers about the EQIP advance payment option and about set asides in CSP and EQIP for socially disadvantaged and beginning farmers and ranchers;

- Invest in programs such as the ATTRA Sustainable Agriculture Program whose mission specifically serves historically underserved producers and communities to build resilience and contribute to climate solutions;

- Study and issue a report on the impact of EQIP funding of CAFOs on surrounding communities, which are often communities of color;

- Study and issue a report on the impacts of intensified heat stress and increased pesticide use on the health and safety of farmworkers and develop recommendations for mitigating these impacts and improving the health and resilience of farmworkers and their communities;

- Create new RCPP Critical Conservation Areas to cover significant gaps in geographic regions where many small scale farmers of color operate;

- Ensure program eligibility rules do not exclude or pose barriers to tenant farmers who wish to participate in conservation programs, and payment structures that ensure tenants, not the cash landlords, collect the payments and other program cost shares;

- Conduct and share transparent data collection on rates of farmers of color application and enrollment in all USDA conservation and easement programs;

- Commit to at least doubling funding available for conservation programs and projects serving underserved communities – including farmers of color, women, urban, immigrant, and refugee farmers, as well as farmworkers and military veterans;

- Provide targeted technical assistance to help producers and communities of color and other historically underserved populations mitigate and adapt to the impacts of weather extremes and climate disruption through participation in conservation programs like CSP and EQIP, farmer-centered research and education through programs like SARE, and local food systems through LAMP and other local food and urban agriculture programs; and

- Design and implement all climate-mitigation and climate-resilience provisions within conservation programs and across mission areas so that they actively dismantle historical racism and thereby protect public health and food security, preserve natural resources, and provide environmental and climate justice for communities of color and other disproportionately impacted communities.

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