



April 29, 2021

Submitted Via Federal eRulemaking Portal (<http://www.regulations.gov>)

Office of the Chief Economist
U.S. Department of Agriculture

Re: Document Citation: 86 FR 14403
Docket Number: USDA-2021-0003
Document Number: 2021-05287
Federal Register: Tuesday, March 16, 2021; Vol. 86, No. 49; Page 14403-14404

Notice of Request for Public Comment on the Executive Order on Tackling the Climate Crisis at Home and Abroad

Dear Secretary Vilsack:

American Farmland Trust (AFT) is pleased to submit these comments regarding the Executive Order on Tackling the Climate Crisis at Home and Abroad. Our nation's farmers and ranchers are not only on the front lines of climate change's impacts, they also represent critical allies in our efforts to mitigate climate change. Our recommendations are aimed at harnessing this incredible potential.

Founded in 1980, AFT is the only national organization that takes a holistic approach to agriculture, focusing on the land itself, the agricultural practices used on that land, and the farmers and ranchers who do the work. Because of this diversity of perspectives, AFT is uniquely positioned to offer recommendations for how USDA can pursue a climate-smart strategy in a way that benefits farmers and ranchers while ensuring the continued productivity and resilience of the agricultural economy.

AFT has been a leading voice at the intersection of climate change and agriculture for well over a decade, building upon our extensive prior work on soil health. In 2009, AFT led the so-called "Gang of Five," a group of major farm organizations that championed the industry's support for the Waxman-Markey climate bill. In 2010, AFT created the "BMP Challenge" to reduce financial risk for farmers adopting climate-smart nutrient management practices. In 2015, we partnered with the University of California, Davis on a pioneering study demonstrating how farmland protection, coupled with smart growth, could significantly reduce greenhouse gas emissions; AFT then used that research to persuade California's cap and trade authority to invest over \$100 million in farmland protection. In 2017, we launched our National Climate Initiative, and in October 2019, the Initiative's Director [testified](#) on the science of climate change before the House Select Committee on the Climate Crisis. Most recently, we published a

report, “[Combatting Climate Change on US Cropland](#),” which presents the substantial carbon sequestration potential of cover crops and no-till. This analysis was conducted using our [CaRPE tool](#) which was developed in partnership with USDA’s Agricultural Research Service. We have also played a critical role in advancing policies to encourage climate-smart, or regenerative, practices, such as Illinois’ Cover Crops for Spring Savings Program. Moreover, we have on-the-ground experience helping producers implement climate-smart practices in their fields.

AFT applauds the Secretary and the Biden Administration for prioritizing climate change, and for seeing farmers and ranchers as an integral part of the climate solution. AFT research has shown that the nation’s producers have immense potential to sequester carbon into their soils. What’s more, is that carbon sequestration can be a true “win-win” opportunity: Not only will it help to mitigate the worst impacts of climate change, it will also help to make farms and ranches more resilient to extreme weather, build healthy, productive soil, improve water quality, and increase farmers’ bottom lines.

As USDA and the Administration look to farmers and ranchers to help combat the climate crisis, they must remember that without the land, none of this is possible. In the 15-year period from 2001-2016, 11 million acres of agricultural land were paved over or converted to uses that threaten the future of agriculture. In order to maintain current carbon stocks and preserve the nation’s ability to sequester additional carbon in the future, not to mention produce food and other products, it is imperative that we slow this alarming rate of farmland loss. As such, farmland protection is an essential tool to any comprehensive climate strategy.

USDA has a long and successful legacy of voluntary conservation, which must be the foundation for subsequent climate action. AFT believes that there is no one-size-fits-all approach. America’s farmers and ranchers are very diverse, and thus the most effective strategy will ensure that producers have multiple avenues to pursue cutting emissions, and increasing the carbon content of their soils. To this effect, USDA already has numerous programs that incentivize climate-smart practices, and the popularity of these programs is demonstrated by the fact that many are over-subscribed. AFT is supportive of USDA developing new programs and policies to encourage practice adoption and maintenance, but believes that these new efforts should not replace or detract from the suite of existing programs that have already gained the trust of farmers. Technical assistance will also be essential to implementing any new strategies. In addition to hiring more staff, USDA must grow partnerships with organizations and other professionals to ensure that producers have the support they need to succeed.

AFT believes that one of the fastest and most efficient ways to get additional climate-smart practices on the ground would be to increase funding and technical assistance for existing programs, and to prioritize certain practices that have proven climate benefits. We hope that USDA will continue its efforts to listen to producers of all backgrounds, and will develop programs and policies based on the needs of our nation’s farmers and ranchers.

Our comments below are presented in the order of the original questions found within the federal register.

CLIMATE-SMART AGRICULTURE AND FORESTRY QUESTIONS

Question 1. A. 1. How can USDA leverage existing policies and programs to encourage voluntary adoption of agricultural practices that sequester carbon, reduce greenhouse gas emissions, and ensure resiliency to climate change?

Increase Funding for Existing NRCS Conservation Programs and Prioritize Climate-Smart Practices

USDA conservation programs such as the Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Conservation Reserve Program (CRP), and Regional Conservation Partnership Program (RCPP) are popular among farmers and ranchers and frequently over-subscribed. These programs incentivize the adoption of climate-smart practices such as planting cover crops and rotational grazing. These practices have not only proven effective at sequestering carbon, but also provide broad environmental benefits such as improved water quality and increased resilience to extreme weather events.¹ Because these programs are well-established and trusted, AFT believes that increasing their reach and effectiveness represents the most efficient way to encourage the adoption of additional climate-smart agricultural practices.

One barrier to making the industry climate-smart is the question of permanence, or the ability to keep sequestered carbon permanently in the ground. Agriculture is different from other carbon-capturing industries because its management decisions are made annually. A farmer must sustain certain actions, while avoiding others (such as development, or tillage), in order to grow, or even maintain, the level of carbon. For instance, if a farmer implements conservation tillage one year, and then plows the next, the climate benefit is partially negated. To either actively sequester or maintain carbon, it is important that farmers be incentivized to continue climate-smart practices for a sustained period of time.

Recommendation: Through USDA’s annual budget submission and jobs/infrastructure proposals, request that Congress provide additional funding for the existing NRCS conservation programs.

Recommendation: Evaluate whether current cost-share and rental rates are sufficient for incentivizing adequate practice adoption, and consider increasing payments if necessary.

Recommendation: Expand the use of EQIP Incentive Contracts, which were authorized in the 2018 Farm Bill but remain underutilized. These contracts could help incentivize longer-term practice adoption, while providing a stable source of income. NRCS should also take advantage of CSP’s ability to bundle practices that sequester additional carbon when implemented in tandem with one another. CSP also provides an opportunity to pay farmers for the continuation

¹ E. Bruner, J. Moore, M. Hunter, G. Roesch-McNally, T. Stein, and B. Sauerhaft, “Using Cover Crops and No-Till to Combat Climate Change on US Cropland.” AFT. https://s30428.pcdn.co/wp-content/uploads/sites/2/2021/02/AFT_Combating_Climate_Change_USCropland_factsheet.pdf.

of practices, which is critical since some practices have annual costs and the sequestration benefits can be lost if practices are not maintained.

Recommendation: Select a set of climate-smart practices to prioritize across all conservation programs, chosen to reduce net greenhouse gas (GHG) emissions (whether by reducing emissions, or increasing sequestration) over a certain period of time. These practices should be incentivized by giving them additional weight during the application scoring process and/or offering additional cost-share. AFT recommends starting with cover crops, no-till, nutrient management, and rotational grazing.

Recommendation: Prioritize acres for CRP enrollment that are most vulnerable to soil loss, as well as acres eligible for Continuous CRP enrollment. AFT also commends USDA's recent changes to CRP, including creating climate-smart practice incentives, increasing the CRP Grassland minimum rental rate, expanding CLEAR30 into a nationwide program, and investing in the CRP Monitoring, Assessment, and Evaluation program to better measure program impacts.

Bolster ACEP-ALE to Protect Working Lands from Development

At the same time that USDA looks to farmers and ranchers to help combat the climate crisis, the land that these producers steward is being lost at an alarming rate. According to AFT's May 2020 report "[Farms Under Threat: The State of the States](#)," from 2001-2016, 11 million acres of agricultural land (equivalent to all US farmland devoted to fruit, nut, and vegetable production in 2017) were paved over or converted to uses that threaten the future of agriculture. This crisis of land conversion comes at a pivotal moment for the agricultural industry. With the average age of principal landowners being 66.5 years old, and of principle operators being 58, AFT estimates that 40% of the nation's farmland will change hands in the next 20 years.^{2, 3, 4} Whether this land remains available to combat climate change, or is lost to development, is within our control.

Agricultural land offers significant opportunities for carbon sequestration, but when it is developed, the ability to harness these carbon sinks is lost forever.⁵ New development is often preceded by removing topsoil from the land, which causes stored carbon to be released back into the atmosphere. Development often disproportionately impacts "Nationally Significant" land, our nation's most productive, versatile, and resilient acres which has been spatially identified through a collaborative research initiative undertaken by NRCS, AFT, and Conservation Science Partners.^{6, 7} Of the 11 million acres converted or threatened, 4.4 million were Nationally

² USDA NASS, "2012 Census of Agriculture: Highlights: Farmland Ownership and Tenure." 2015.

https://www.nass.usda.gov/Publications/Highlights/2015/TOTAL_Highlights.pdf.

³ USDA NASS, "2017 Census of Agriculture: Selected Producer Characteristics: 2017 and 2012." 2019.

https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1_Chapter_1_US/st99_1_0052_0052.pdf.

⁴ J. Freedgood, M. Hunter, J. Dempsey, and A. Sorensen, "Farms Under Threat: The State of the States." AFT, May 2020. https://s30428.pcdn.co/wp-content/uploads/sites/2/2020/09/AFT_FUT_StateoftheStates_rev.pdf.

⁵ E. Bruner et al, "Using Cover Crops and No-Till to Combat Climate Change on US Cropland."

⁶ Freedgood et al, "Farms Under Threat: The State of the States."

⁷ "Nationally Significant" land is a new standard created by AFT in "Farms Under Threat: The State of the States."

Significant.⁸ The loss of this land pushes agricultural production to more marginal land which will require greater inputs, such as fertilizer, to achieve comparable production. Finally, the majority of land conversion is low-density residential, which is associated with higher carbon emissions than urban development, due to associated travel miles.⁹ In fact, an acre of New York farmland produces 66 times less GHG emissions than an acre of cropland.¹⁰ For these reasons, it is imperative that farmland protection be included in any meaningful climate strategy.

Protection of agricultural land through perpetual conservation easements or long-term non-development covenants would keep these lands available for carbon sequestration, while advancing our nation's food security, providing more affordable land to the next generation of producers, and strengthening rural economies. USDA's Agricultural Conservation Easement Program – Agricultural Land Easements (ACEP-ALE) is the sole federal program dedicated to permanently protecting agricultural land for future agricultural production, and will require additional resources to meet demonstrated demand and future need.

Recommendation: Through USDA's annual budget submission and in future proposals, request that Congress provide additional funding for ACEP. Currently, ACEP-ALE is only able to meet a fraction of demand, which leaves tens of thousands of acres vulnerable to conversion. Increased funding would ensure that agricultural land remains available to achieve long-term climate goals.

Recommendation: Give ACEP-ALE participants priority access to conservation technical assistance and participation in other USDA conservation programs, including the potential Carbon Bank. Because these lands will never be lost to development, and are likely to remain in agricultural use, eased lands represent some of our best potential investments for carbon sequestering practices. It should be noted that producers farming permanently protected agricultural land have already been shown to have a higher rate of conservation practice adoption than the general farming population.¹¹

Read AFT's whitepaper "*Maximizing the Economic and Environmental Benefits of ACEP-ALE*" [here](#).

Strengthen the Farmland Protection Policy Act to Mitigate the Federal Government's Role in the Conversion of Agricultural Land

In addition to supporting ACEP-ALE, there are other ways for the federal government to lead in protecting agricultural land. One of the largest contributors to agricultural land conversion is the federal government. Over that same 15-year period where 11 million acres were converted

⁸ Freedgood et al, "Farms Under Threat: The State of the States."

⁹ Freedgood et al, "Farms Under Threat: The State of the States."

¹⁰ S. Arjomand and D. Haight, "Greener Fields: Combating Climate Change by Keeping Land in Farming in New York." AFT, May 2017. https://s30428.pcdn.co/wp-content/uploads/sites/2/2019/09/AFT_NY-GrFields-RPT_FNL2lo.pdf.

¹¹ AFT, "Impacts of the Federal Farm and Ranch Lands Protection Program: An Assessment Based on Interviews with Participating Landowners." 2013. https://s30428.pcdn.co/wp-content/uploads/sites/2/2019/09/AFT_IMPACT-of-FED-FARM-RANCH-PRO_FINAL_singles-4_0.pdf.

to uses that threaten the future of agriculture, 1.3 million acres were proposed for conversion by projects that received federal funding.¹² While vitally necessary, new federal investments in infrastructure can and must be made in a way that minimizes the impact on agriculture, especially Nationally Significant agricultural land. This will be especially crucial as the Biden Administration moves forward with infrastructure legislation.

The Farmland Protection Policy Act (FPPA), enacted in 1981, seeks to minimize the impact that federal programs have on the irreversible conversion of farmland to nonagricultural uses by requiring agencies to report on proposed conversion, and consider alternative actions when possible. However, the FPPA currently serves more as a tracking tool than a deterrent.

Recommendation: Recommend to Congress that the FPPA be strengthened to limit the conversion of agricultural land by federal agencies, particularly Nationally Significant land. A strengthened FPPA should include financial penalties or a mitigation requirement if the project results in the conversion of Nationally Significant farmland. Such a mitigation requirement could require off-site, permanent protection of twice the number of impacted Nationally Significant acres.

Recommendation: Set a USDA-wide conversion reduction goal to establish accountability. This target could focus on reducing conversion of Nationally Significant agricultural land. An initial goal could be to reduce the loss of Nationally Significant land from federally-funded projects 50% by 2030.

Recommendation: Require that federal projects report actual conversion, not just proposed conversion. To build accountability and raise awareness, federal agencies should be required to report to USDA on the outcome of each project subject to FPPA. Reporting should include the number and type of farmland acres initially proposed for conversion as well as the figures for actual conversion.

Recommendation: Provide an annual report to Congress. An annual report to the House and Senate Agriculture Committees is required under 7 U.S.C. 4207. The report must describe the effects, if any, of federal programs, authorities, and administrative activities with respect to the protection of US farmland. While USDA has continued to produce annual FPPA reports, these reports are no longer shared with the relevant congressional committees, thereby missing an opportunity to increase member and public awareness of this issue.

Read AFT's whitepaper "Strengthening the Farmland Protection Policy Act" [here](#).

Increase NRCS Technical Assistance, Outreach, and Education

Increasing the nation-wide adoption of climate-smart agricultural practices will depend upon USDA offering adequate assistance to aid farmers in this transition. Technical assistance will serve many purposes, from teaching new techniques, to working one-on-one with producers in the field to troubleshoot new practices, to supporting producers through the application process.

¹² Freedgood et al, "Farms Under Threat: The State of the States."

In addition to overcoming technical barriers, appropriate assistance will also help overcome social barriers where climate-smart practices are seen as undesirable because they are not “what has always been done.”¹³

The combination of a hiring pause during the previous Administration with an aging workforce and other factors, has led to reduced NRCS staffing. While the agency was able to increase hiring in FY 2020, staffing still remains below the 11,000 employees recommended by NRCS’s own analysis of need.¹⁴ This has led to delays in providing vital on-the-ground technical support to farmers.

Recommendation: Increase technical assistance staffing. The success of federal conservation programs in rapidly supporting climate-smart practice adoption is dependent upon adequate technical support. This will become all the more crucial if additional funding is provided for conservation programs and/or if a carbon bank is established.

Recommendation: Strengthen outreach and education. In order to support the shift towards a climate-smart agricultural system, farmers and ranchers will need to learn about new practices and techniques, become familiar with new equipment and technology, and participate in unfamiliar programs. None of this will be possible without a surge of support from USDA.

Recommendation: Expand NRCS’ ability to work with third parties to provide technical support, including updating the Technical Service Provider (TSP) program. Third-party technical service providers, including partnerships with NGOs, can help to rapidly increase on-the-ground support for farmers and ranchers. The TSP program also has significant potential to provide support, but must be reimagined to ensure that its certification process is not overly burdensome.

Recommendation: Diversify NRCS employees. This can be accomplished by hiring additional Black, Indigenous, and People of Color (BIPOC) as well as women in order to better provide outreach to socially disadvantaged farming communities and non-operating landowners.

Question 1. A. 2: What new strategies should USDA explore to encourage voluntary adoption of climate-smart agriculture and forestry practices?

Establish a Carbon Bank within USDA

AFT supports the concept of a carbon bank as described within the Climate 21 Project’s Transition Memo.¹⁵ Carbon credit generation could become a vital new revenue stream for producers, assuming that credit prices adequately compensate farmers for the implementation

¹³ G. Roesch-McNally et al, “The Trouble with Cover Crops: Farmers’ Experiences with Overcoming Barriers to Adoption.” *Natural Resource Ecology and Management Publications*, March 2017. https://lib.dr.iastate.edu/nrem_pubs/206/.

¹⁴ House Ag Democrats, “Challenges and Successes of Conservation Programs in 2020.” October 1, 2020. Youtube video, 1:54:12. <https://youtu.be/lnCS-OrQdGQ>.

¹⁵ R. Bonnie, L. Jones, M. Harrell, “Climate 21 Project Transition Memo: Department of Agriculture.” https://climate21.org/documents/C21_USDA.pdf.

of new practices and associated risk. Additionally, a reverse carbon credit auction would provide supplementary funding to incentivize conservation practice adoption, which is critical to driving increased uptake, considering that existing conservation programs are oversubscribed and may not be the preferred incentive for all producers.

The creation of a carbon bank could also help to refine our understanding of soil carbon sequestration. AFT's own research has helped to show a strong potential for carbon sequestration in cropland soils, especially for reduced tillage and cover crops.¹⁶ However, building confidence around estimates of soil carbon storage across soil types, regions, cropping systems, and management approaches, as well as the length of time carbon can be actively captured and then held within the soil, will require additional data. Collecting this data, in turn, will require widespread adoption of these practices, to provide ample field sites for scientific study.

A carbon bank could help to address this “chicken and egg” situation created by the simultaneous need for additional data on sequestration, and the need for greater practice adoption to produce this data.

Recommendation: Through a carbon bank, producers could be provided payment via long-term contracts (e.g., 10 years) for their anticipated carbon sequestration based on the best available scientific models. These payments could be provided annually since many of these practices are annual management decisions and because annual payments create a strong incentive for maintaining practices. The level of sequestration would be measured in the field throughout the life of the contract. Regardless of the actual change in soil carbon, the producer would receive the original proposed payments. This would create a degree of stability for the producer, thus making the program more attractive, and would simplify program cost accounting. This approach would involve the purchase and retirement of credits, as opposed to USDA selling those credits on a carbon market.

The field studies should be led by USDA ARS and NRCS scientists and/or in partnership with NGOs and universities. They should be designed to provide data that can improve on the existing models of agricultural GHG emissions and carbon sequestration, such as COMET. The results of the studies would provide USDA with the additional data needed to understand:

1. How much carbon can be sequestered within a given cropping system and soil type.
2. What practices are best for carbon sequestration, and how to utilize these practices most effectively to manage for carbon sequestration.
3. What are the best practices for the measurement of sequestration (e.g., sampling designs, statistical protocols, measurement tools).
4. Which, if any, systems appeared to stabilize or reach a saturation point over the study period.

These data will be invaluable in helping to inform private carbon markets and in increasing consumer confidence in carbon credits. Furthermore, greater demand for sequestration

¹⁶ E. Bruner et al, “Using Cover Crops and No-Till to Combat Climate Change on US Cropland.”

measurement could help to spur the development of new, more affordable technologies. Such an effort should be done on a pilot level, as not to compete against the burgeoning private carbon markets. It should also not detract from efforts to provide additional support for the existing suite of conservation practices.

Create a Debt for Working Lands Program to Protect Farmland from Development

A “Debt for Working Lands Program,” which expands on the Farm Service Agency’s (FSA) existing Conservation Contract Program concept, could be another tool for increasing agricultural land protection while providing debt relief to farmers and ranchers. Such a program could offer debt relief or restructured loans for FSA borrowers in exchange for protecting agricultural land through a permanent agricultural conservation easement or a long-term non-development covenant (10 to 30 years). The amount of relief would be commensurate with the value of the agricultural conservation easement.

This concept might also be expanded to allow FSA to lower a borrower’s debt obligations in exchange for a multi-year agreement to adopt soil health practices such as cover crops or no-till on a certain percent of farm acres, perhaps to be verified by NRCS.

Restructuring new or existing FSA loans would be especially impactful for socially disadvantaged and beginning farmers. FSA is often referred to as the “lender of first opportunity,” due to the availability of credit for borrowers who may not qualify for loans from commercial lenders. Debt relief would help beginning farmers access affordable land and help socially disadvantaged producers expand their operations and build more viable businesses.

Recommendation: Expand the Conservation Contract concept to include a new Debt for Working Lands Program which would offer relief on new and current FSA loans in exchange for a permanent conservation easement or a long-term non-development covenant.

Read AFT’s whitepaper “Creating a Debt for Working Lands Initiative” [here](#).

Implement a USDA Cover Crop Initiative

Cover crops are capable of sequestering immense amounts of carbon into agricultural soils while improving soil health, water quality, and farmers’ bottom lines. Despite this, cover crop adoption across the country is low – in 2017, they were only planted on 6% of harvested annual cropland.¹⁷ Numerous barriers limit farmer adoption of cover crops, such as learning how to successfully implement an unfamiliar practice, paying for the necessary seeds, equipment, and labor without a guaranteed return on investment, navigating how cover crops might interfere with crop insurance payments, and more.

¹⁷ AFT, “Developing a USDA Cover Crop Initiative.” November 2020. https://s30428.pcdn.co/wp-content/uploads/2020/11/AFT-Developing_a_USDA_Cover_Crop_Initiative.pdf.

USDA could catalyze cover crop adoption by providing a 5-year surge of incentives and technical assistance. This 5-year period of support would give farmers the opportunity to determine how to best implement the practice on their land, and would give ample time for the soil health improvements to become evident and begin paying dividends.¹⁸ A 5-year period of broader adoption could also help to normalize the use of cover crops, leading to greater social acceptance of the practice.¹⁹ The goal of a 5-year USDA Cover Crop Initiative would be to create the requisite level of attention, support, training, adoption, and normalization in order for the practice to be continued on its own merits long after the surge without the need to continue significant federal incentives.

Recommendation: Establish a national goal for cover crop adoption to help focus USDA on outcomes and encourage better tracking of progress. One such goal could be to roughly triple the adoption of cover crops from the current 15.4 million acres to a total of 44.4 million acres (from 6% to 17.4% of harvested annual cropland acres). If this were achieved, approximately 14.5 million metric tons of carbon dioxide equivalent could be reduced annually, equal to removing 3 million passenger vehicles from the road for a year.^{20, 21}

Recommendation: Increase the cover crop focus within existing conservation programs. EQIP and CSP already provide support for cover crops and have served as an effective vehicle for encouraging their adoption. In recent years, both of these programs have increased their support of cover crops. In promoting cover crops, NRCS should review cover crop payment rates to evaluate if they are sufficient to encourage adoption and overcome perceived or actual income foregone during the transition.

Read AFT's whitepaper "Developing a USDA Cover Crop Initiative" [here](#).

Question 1. B. How can partners and stakeholders, including State, local and Tribal governments and the private sector, work with USDA in advancing climate-smart agricultural and forestry practices?

Update RCPP Data Sharing Requirements to Improve Climate and Conservation Outcomes

AFT is one of USDA's many Regional Conservation Partnership Program (RCPP) partners, working in the Illinois Upper Macoupin Creek watershed to reduce tillage, increase nutrient efficiency, and implement cover crops – a set of practices that simultaneously improves water

¹⁸ Sustainable Agriculture Research Education, "Cover Crop Economics." June 2019. <https://www.sare.org/wp-content/uploads/Cover-Crop-Economics.pdf>.

¹⁹ L. Prokopy, D. Towery, and N. Babin, "Adoption of Agricultural Conservation Practices: Insights from Research and Practice." Purdue University, 2014. <https://www.extension.purdue.edu/extmedia/fnr/fnr-488-w.pdf>.

²⁰ J. Moore, D. Manter, and T. Brown, "Carbon Reduction Potential Evaluation (CaRPE) Tool." AFT and USDA ARS, September 2020. <https://farmland.org/carpetool/>.

²¹ US EPA, "Greenhouse Gas Equivalencies Calculator." <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>.

quality and sequesters carbon. RCPP is a powerful tool for leveraging federal dollars to get practices on the ground and helping to overcome barriers to practice adoption.

Measuring the environmental outcomes from practices is critical for demonstrating the many benefits of conservation practices. Such efforts to quantify outcomes could be significantly improved if USDA shared conservation practice data with lead RCPP project partners in a more timely and comprehensive fashion. AFT has at times experienced challenges obtaining relevant practice data for EQIP and CSP, such as what practices have been implemented where, and for how many years. In the case of CSP, it would be helpful not just to have access to practice data, but to also have access to data differentiating new practices from existing practices. It is important to know how much new practice adoption is occurring in a project area in order to estimate additional environmental benefits. Without this information, it is difficult to accurately estimate project outcomes.

Recommendation: Provide RCPP project leaders with clear and timely practice data relevant to the project area, including geo-spatial information, data on new and existing CSP practices, and information on how long practices have been in place.

Question 1. C. How can USDA help support emerging markets for carbon and greenhouse gases where agriculture and forestry can supply carbon benefits?

Develop Guidance to Inform Private Carbon Markets

Private interest in carbon credits continues to grow, providing an exciting opportunity to the agricultural sector. Private carbon markets have the potential to offer a powerful incentive to farmers and ranchers to adopt climate-smart practices, while giving them a desperately needed secondary source of income – a true “win-win.” However, these markets are nascent, and many are struggling to overcome fundamental questions such as how to accurately verify and measure soil carbon gains as well as address permanence and additionality, core tenets of a carbon market.

AFT believes that USDA could play a pivotal role in helping to advance these private markets by developing guidance. This guidance should not be prescriptive, but rather, provide basic tenets to increase consumer confidence in credits, and therefore spur increased demand.

Recommendation: Conduct analysis and issue guidance to inform the development of private carbon markets, including:

1. Basic criteria for soil carbon sampling, such as requisite depth of soil cores, timing of sampling, number of samples per acre, and recommended testing methods.
2. Criteria for soil carbon verification and estimation modeling to increase consistency across different approaches.
3. Identification of the geographic areas with the greatest potential for carbon credits based on their ability to sequester and hold carbon long-term, protection status, or level of environmental impairment.

Recommendation: Establish an advisory board to assist in the development of guidance. The [Growing Climate Solutions Act](#) presents a model for an advisory board that can assess the state of carbon markets, barriers to participation, and provide ongoing guidance shaped by the best science.

Recommendation: Draw upon the Growing Climate Solutions Act’s direction to develop a “Greenhouse Gas Technical Assistance Provider and Third-party Verifier Certification Program” which would require providers and certifiers to adhere to a basic set of standards.

Question 1. D. What data, tools, and research are needed for USDA to effectively carry out climate-smart agriculture and forestry strategies?

Establish a Nationwide Dataset for Calibrating and Validating Outcomes Quantification Tools

At present, there are over 1,000 federally-funded farm conservation projects taking place across the country, involving tens of thousands of farmers on millions of acres of cropland.²² Measuring the outcomes of these practices, such as carbon sequestration and GHG emissions reductions, is of paramount importance in order to confirm agriculture’s important role in mitigating climate change. But, given the costs, privacy concerns, and other challenges involved with on-site monitoring, computer models and tools are an indispensable component for effective outcomes quantification.

Unfortunately, models are only as good as the data they are based on. For models to be effective, they must be constantly calibrated with a steady stream of real-world data. Calibration data improves a model’s accuracy and strengthens its ability to serve as a predictive tool for emerging carbon markets. More calibration data that is easier to use will enable the outcomes estimation modeling and tools community to provide more accurate outcomes estimates for additional conservation practices, production systems, and agroecoregions. On the other side of the coin, calibration data is only as good as the field-scale research studies that monitor the effects of conservation practices on agricultural land. Thus, a more robust and comprehensive research program is needed to generate the data to populate the national calibration dataset.

Recommendation: USDA should establish a National Calibration Dataset and associated Research Program. This will continually improve climate and water quality outcomes estimation models and tools, thereby better informing and improving conservation investments. This dataset and research program would help continually calibrate and validate the models and tools necessary to estimate the environmental effects of conservation practices. Doing so

²² M. Perez and E. Cole, “A Guide to Water Quality, Climate, Social, and Economic Outcomes Estimation Tools.” AFT, December 2020. <https://farmlandinfo.org/publications/guide-to-outcomes-estimation-tools/>.

would lend even greater credibility to the tools for conservationists, their farmer clients, and the public.

Read AFT's whitepaper "A Guide to Water Quality, Climate, Social, and Economic Outcomes Estimation Tools" [here](#).

Research Crop Insurance and Risk Management's Role in Incentivizing and Disincentivizing Climate-Smart Practices

Because of its widespread use, crop insurance plays a significant role in shaping producer decision-making. AFT firmly believes that many climate-smart practices, especially no-till and cover crops, should be encouraged by the insurance system for their ability to reduce risk, stabilize year-to-year yields, and ensure soil health and productivity. However, as it currently stands, insurance—paradoxically—can serve as both an incentive *and* disincentive to the adoption of these climate-smart practices.

Farm Bill risk management programs including crop insurance can impede conservation practice adoption when insurers do not offer sufficient flexibility to producers, and penalize the moderate, yet stable, yields associated with conservation practices. For instance, if farmers do not adhere to specific rules regarding cover crop termination dates, they can risk losing their insurance payment. While some of these rules have changed in recent years to provide greater flexibility for producers, more work must be done.

On the other hand, when combined with state-level incentives programs, crop insurance has proven to be an effective vehicle for driving practice adoption. Illinois and Iowa have developed programs that give farmers a \$5 rebate on crop insurance for each acre of cover crops they plant. The Illinois "Fall Covers for Spring Savings" program has been highly successful, incentivizing farmers in 2019 to plant cover crops on 50,000 acres, including 35,000 acres of new adoption. This program demonstrates that even modest incentives can generate high demand. In its second year, the program was only able to enroll 27% of submitted acres.²³ These programs have the benefit of being cost-effective, having a relatively low administrative burden, and being able to incentivize adoption for a portion of the farming community that may be hesitant to apply for traditional NRCS conservation programs.

Recommendation: Conduct a study on the risk management and insurance barriers to climate-smart practice adoption and how such barriers can be effectively addressed.

Recommendation: Research the impacts of insurance rebate programs on incentivizing climate-smart practices. Insurance rebate programs like those in Illinois and Iowa have shown incredible promise and should be further examined to inform their expansion to other states and, potentially, the federal level. Such research should determine if these programs:

1. Are effective in getting additional practices on the ground.
2. Are financially efficient, especially compared with existing NRCS programs.

²³ Program statistics provided by the Illinois Department of Agriculture.

3. Reduce risk and insurance claims on participating farms.
4. Encourage continuing adoption of the practice, even after program participation has concluded.
5. Capture a different set of participants than traditional NRCS conservation programs.

This research could be conducted by FSA and RMA, by comparing historical cover crop implementation data and insurance claims. In order to ensure accuracy, however, it is important that farmers certify their cover crop acres with FSA. If USDA finds the rebate programs to be an effective means of incentivizing climate-smart practices, USDA should consider either making the rebate program nationwide or implementing a pilot program to gain more data. Additionally, improved research on the risk-reduction benefits of conservation practices could enable insurance companies to more accurately account for the benefits of conservation practices within rate structures.

Support Research on Improved Crop Varieties and Best Management Practices

Despite the conservation and climate benefits of cover crops, they are only planted on about 6% of harvested annual cropland.²⁴ Increased research and development of varieties that are highly compatible with cash crops, while still providing climate and environmental benefits, could make cover crops easier and cheaper, while reducing the risk associated with implementation.

Recommendation: USDA should:

1. Expand research to make cover crops more compatible with conventional cropping systems, such as developing additional self-terminating varieties and technology to ensure that cover crop germination is not affected by residual herbicides.
2. Support the development of perennial grain crops such as Kernza® intermediate wheatgrass. Perennial crops provide consistent soil cover, while requiring fewer inputs, and less labor. However, pest resistance must be improved, and yield must be increased.
3. Expand opportunities for “double cropping,” when a field produces both a summer and fall cash crop. Double cropping keeps the soil covered for most of the year and provides a producer with additional income. This should include development of region-specific double cropping systems and cultivars, and double-crop systems best suited for livestock integration.
4. Conduct research on the effects of climate change on all cash and cover crops. In order to use resources efficiently, production systems must adapt to new weather patterns, such as by changing crop varieties and/or implementing practices to increase resilience.
5. Develop affordable, accessible, scale-neutral conservation equipment such as no-till drills, cover crop seeders, and roller crimpers, to allow more farmers to adopt conservation practices. Invest in the development of highly efficient tractors and other machinery, including scaling up electric vehicles and ensuring that they are competitively priced.

²⁴ AFT, “Developing a USDA Cover Crop Initiative.”

Examine the Best Ways to Encourage Adoption of Climate-Smart Practices

The research remains inconclusive on how best to encourage farmers and ranchers to adopt conservation practices, since their decision-making is influenced by many factors. A better understanding of what motivates producers will enable programs and policies to be even more effective.

Recommendation: USDA should:

1. Analyze barriers to the adoption of conservation practices, with the understanding that barriers may differ significantly based on gender, region, production system, and more.
2. Study which policy and financial incentives are the most effective at encouraging climate-smart practice adoption. In addition to examining single mechanisms, research should also explore how different incentive mechanisms can work in tandem.
3. Examine which ground-level interventions are the most effective, such as peer-to-peer networking, education, and NRCS engagement. This research will need to be conducted at the regional and local level, because motivations are likely to differ.
4. Conduct a study on how to incentivize climate-smart practices on rented lands. Farmer tenants may not be incentivized by the same long-term benefits as owner-operators, since benefits such as yield improvements can take several years to be noticed. This is critical because roughly 40% of agricultural land is rented by farmers, including over half of agricultural land in the Midwest.²⁵ This study should draw upon legislation proposed in Rep. Brownley's [Conservation on Agricultural Leased Land Act](#).

BIOFUELS, WOOD AND OTHER BIOPRODUCTS, AND RENEWABLE ENERGY QUESTIONS

Question 2. C. How can USDA support adoption and production of other renewable energy technologies in rural America, such as renewable natural gas from livestock, biomass power, solar, and wind?

Adopt Solar Siting Policies to Avoid Unnecessary Development of Agricultural Land

AFT is supportive of shifting our economy away from the carbon-based fuels that drive climate change toward clean, renewable energies. However, renewable sources such as wind turbines and, especially, solar panels can pose a significant threat to agricultural land. Because farmland, in particular, is generally flat, clear, dry, and located near existing infrastructure such as roads and power lines, it is an ideal location for siting solar panels. Ironically, this is

²⁵ D. Bigelow, A. Borchers, and T. Hubbs, "U.S. Farmland Ownership, Tenure, and Transfer." USDA ERS, August 2016. <https://www.ers.usda.gov/webdocs/publications/74672/eib-161.pdf?v=5125.9>.

also often the most productive farmland, and the land that we, as a nation, can least afford to lose.

AFT believes that without strict guidelines about the siting of solar panels, a national push toward solar energy could have catastrophic impacts on agricultural land. On average, the nation loses an unacceptable 2,000 acres of agricultural land every day to development, which threatens the nation's food security, makes quality land increasingly harder for beginning producers to access, and more.²⁶ Rampant solar development would only exacerbate these existing issues, and would undermine the Administration's goal to support the farming and rural economies.

However, properly sited, solar arrays can provide important economic opportunities to farmers, ranchers, landowners, and rural communities. Dual-use solar (also known as agrivoltaics or co-location of solar) is the practice of installing solar panels on farmland in such a manner that primary agricultural activities (such as grazing) are not disturbed. When this is possible, the farmer not only maintains agricultural production, but can also either gain a secondary source of income through lease payments or reduce energy costs through the on-site generation of electricity.

Recommendation: Increase federal research on best practices for dual-use solar such as:

1. Identifying crop production systems that are most compatible with solar arrays.
2. Researching ways to improve array design by increasing the amount of solar radiation captured by the plants below, or making it easier to share the land with crops or livestock, such as by raising panels further off the ground.
3. Exploring opportunities to create solar installation systems that allow the land to be easily reclaimed for agriculture, such as panels that do not require deep footings.
4. Examining the impacts of solar development on the value of land.

Recommendation: Treat solar installations that displace agriculture as permanent conversion for the purposes of FPPA, even if there is an upfront plan for decommissioning the array. Require that federally-funded solar installations on agricultural land use best practices to avoid soil disturbance and include funding or a decommissioning bond for eventual removal.

²⁶ Freedgood et al, "Farms Under Threat: The State of the States."

ADDRESSING CATASTROPHIC WILDFIRE QUESTIONS

Question 3. A. How should USDA utilize programs, funding and financing capacities, and other authorities to decrease wildfire risk fueled by climate change?

Increase Existing Support for USDA Conservation and Disaster Programs to Mitigate Wildfires

Climate change is a key contributor to the growing risk and extent of wildfires in the Western US and Alaska. While wildfire risk depends on numerous factors, including soil moisture and temperature, climate change increases the amount of dry organic matter in forests and reduces water supply. Due to these factors, the number of large fires has doubled between 1984 and 2015.²⁷ 2020 was yet another record fire year, impacting many farmers, ranchers, tribes, and other land stewards who were affected by smoke, evacuations, and losses of crops and livestock.

Protection of agricultural land and climate-smart practice implementation are key strategies to reduce wildfire risk, and farmers, ranchers, landowners, and tribes are eager to be part of the solution. Protecting land from development helps to reduce GHG emissions, since emissions from urban land uses are significantly higher than those from cropland. In addition, well managed agricultural land has been proven to serve as a critical fire break, keeping natural and developed lands safe. Implementation of climate-smart agricultural practices increases the ability of crop and rangeland to absorb and hold water, helping to prevent the spread of wildfires. Both of these ends can be achieved by increasing support for existing conservation programs (e.g., ACEP, CRP, CSP, EQIP), and increasing related technical assistance to help deploy these programs.

Recommendation: Encourage continued and expanded funding for USDA disaster recovery programs that assist farmers and ranchers affected by catastrophic wildfire to help reduce future wildfire risk.

Recommendation: Continue USDA's Disaster Resource Center and Disaster Assistance Recovery Tool to help farmers, ranchers, and other land stewards identify USDA disaster assistance programs that might meet their business needs and help to decrease future wildfire events.

Recommendation: Continue and increase USDA agency/department coordination at the field office and state levels to provide a centralized hub of conservation planning and implementation programs that support agricultural and forest land protection and implementation of regenerative agricultural practices that reduce wildfire risk. Adequately staff field and state offices to increase inter-agency coordination.

²⁷ M. Wehner et al. "Droughts, Floods, and Wildfires." *Climate Science Special Report: Fourth National Climate Assessment, Volume I*. U.S. Global Change Research Program, 2017. <https://science2017.globalchange.gov/chapter/8/>.

ENVIRONMENTAL JUSTICE AND DISADVANTAGED COMMUNITIES QUESTIONS

Question 4. A. How can USDA ensure that programs, funding and financing capacities, and other authorities used to advance climate-smart agriculture and forestry practices are available to all landowners, producers, and communities?

Maximize Use of Alternative Rules to Allow Socially Disadvantaged Farmers to Take Advantage of Existing Programs

Although existing conservation programs are effective at incentivizing climate-smart practices on some farms, these programs do not necessarily work for all farmers and ranchers. For example, some programs, such as EQIP, require a 50% match for federal funds. While AFT believes that some level of match is important to make sure that the farmer is committed to implementing the practice to the best of their ability, this up-front cost can also be prohibitive for socially disadvantaged farmers, such as BIPOC (Black, Indigenous, and People of Color) and limited-resource farmers.

Currently, USDA does allow for alternative arrangements for certain groups of producers, such as offering reduced cost-share, or up-front payments. However, not all programs include such flexibilities, and it is AFT's understanding that these flexibilities could be used to a greater extent.

Recommendation: Ensure that all relevant NRCS conservation programs, especially EQIP and CSP, offer reduced cost-share options, such as only 10% of the cost being borne by the producer, and ensure that this authority is made known to eligible producers. In addition, barriers to accessing up-front payments should be evaluated and reduced. Finally, USDA should consider increased CRP payment rates for qualifying demographics.

Question 4. B. How can USDA provide technical assistance, outreach, and other assistance necessary to ensure that all producers, landowners, and communities can participate in USDA programs, funding, and other authorities related to climate-smart agriculture and forestry practices?

Increase Culturally-Sensitive Technical Assistance and Ensure an Accessible Application Process

As previously discussed, technical assistance will be a key factor in increasing climate-smart practice adoption and it will be especially crucial for helping socially disadvantaged and limited-resource producers access conservation programs. Socially disadvantaged producers face distinct barriers to entry, such as USDA information being written in highly technical language, materials and education not being available in many languages, program information being most accessible online, etc. All of these barriers serve as impediments to applying for, and enrolling in, USDA programs.

More challenging to address is the fact that many socially disadvantaged producers have a deep-seated distrust of USDA, either due to personal experience, or to USDA's history of discrimination, especially against Black producers. This prevents many farmers from enrolling in USDA programs, applying for FSA loans, and even obtaining the farm numbers that make enrollment possible in the first place. There is no simple solution to this issue of trust, but increasing culturally-sensitive technical assistance could be an important first step. By "culturally-sensitive," we mean that technical assistance is given and received between members of a particular racial or ethnic community.

Recommendation: Hire additional, experienced technical assistance providers, particularly providers of color, women providers, and providers with foreign language skills. Efforts should be made to hire providers who are representative of local communities, and who possess the relevant social knowledge and language skills.

Recommendation: Form partnerships with leadership and pipeline programs targeting socially disadvantaged populations, especially BIPOC, women, and tribal communities to help USDA hire diverse applicants. Examples of such partners may include MANNRS, HEAL Food Alliance School of Political Leadership, National Black Growers Council, National Women in Agriculture Association, AFT's Women for the Land Initiative, etc.

Recommendation: Offer increased assistance with conservation program and loan applications in order to reduce the associated time burden, and increase transparency regarding decision metrics.

Recommendation: Translate program applications and materials into additional languages, including plainer, culturally-sensitive English.

Develop Strong Partnerships with Community Organizations and Build Their Capacity

While USDA addresses the internal issues that have led to distrust from socially disadvantaged producers, it should work with well-known organizations trusted by socially disadvantaged communities to provide services. This could be a way of accessing populations who might otherwise be hesitant or unwilling to be engaged by USDA. While some of this important work is already being accomplished through the Outreach and Assistance for Socially Disadvantaged and Veteran Farmers and Ranchers Program (the 2501 program), its funding is limited, and thus the grants are extremely competitive.

Community organizations that primarily serve socially disadvantaged communities are often under-resourced and under-staffed, meaning that their reach is limited. This can translate into being less competitive for partnership grants, especially when pitted against national organizations or universities. These community organizations may also be challenged in acquiring the money necessary to match a federal grant. By building up these organizations, USDA could help to create strong partnerships that would allow the Department to access and repair relationships with the populations most in need of support.

Recommendation: Offer capacity-building grants for non-profit organizations that provide financial and technical services to socially disadvantaged communities. These multi-year grants would help organizations to develop internal infrastructure such as hiring finance staff, purchasing financial software, undergoing skills training, hiring consultants, and more. This internal development will be necessary to be competitive for federal grants that will allow organizations to eventually hire additional staff and conduct outreach to the communities they serve. This would create a pipeline of fundable organizations able to work with USDA to advance climate-smart agriculture in diverse communities.

Question 4. C. How can USDA ensure that programs, funding and financing capabilities, and other authorities related to climate-smart agriculture and forestry practices are implemented equitably?

Create an Office of Small Farms to Represent Lower-Acreage Operations Throughout USDA

Equitable implementation of USDA programs and other authorities requires making sure that programs are accessible and worthwhile to all producers, including those who have historically gained the least from traditional conservation, commodity, loan, and other programs. Because of the current structure of these programs, they tend to disproportionately benefit larger operations—which are also far more likely to be led by white producers.

Small farms, defined as family farms with gross cash farm income of less than \$350,000 annually, make up 90% of US farms.^{28, 29} However, while small farms represent about half of all farmland, they only receive 33% of working lands conservation payments.³⁰ Small family farms are also more likely to be Hispanic or Black-operated than medium or large family farms.³¹

AFT believes that USDA could advance equity in program enrollment by ensuring that programs work for small farms. This means recognizing that small farms might encounter unique barriers, and that the same practice incentives may not be effective across the board. For instance, the operator of a 25-acre farm will not be incentivized to adopt a new practice for a \$10 per acre payment, while due to economies of scale, the operator of a 1,000-acre farm may feel differently.

Recommendation: Establish an Office of Small Farms to increase support to low-acreage or lower-income farms. The Office would serve as a coordinating body, bringing together representation from USDA’s various agencies to identify additional needs for small farmers. The definition of small farms could be based upon acreage (perhaps 180 acres or below) or farm

²⁸ USDA ERS, “Farm Structure.” December 2018. <https://www.ers.usda.gov/topics/farm-economy/farm-structure-and-organization/farm-structure/>.

²⁹ USDA ERS, “America’s Diverse Family Farms.” December 2018. <https://www.ers.usda.gov/webdocs/publications/90985/eib-203.pdf?v=5583.6>.

³⁰ USDA ERS, “America’s Diverse Family Farms.”

³¹ USDA NASS, “2017 Census of Agriculture: Highlights: Family Farms.” 2021. <https://www.nass.usda.gov/Publications/Highlights/2021/census-typology.pdf>.

income. To ensure the Office is a sufficient priority, it could be overseen by senior USDA leadership, such as the Deputy Secretary of Agriculture. It would have dedicated staff, some of which should be experienced with providing on-the-ground support to small farms and ranches and diverse populations.

Specifically, the Office of Small Farms could:

1. Coordinate efforts to support small farms and ranches across all USDA agencies.
2. Advise other federal agencies on how to effectively reach and serve small farms and ranches.
3. Analyze the development of federal rules and other policies to ensure that the interests of small farms are considered in decision-making.
4. Assist and make recommendations to federal agencies on tracking small farm data, including demographics and program participation rates.

Ensure USDA Programs and Practices Support Women in Adopting Climate-Smart Practices

About 36% of agricultural producers are women, and over half of farms have at least one female producer.³² Considering that female producers are more likely to be young, and that there is historically high enrollment of women and girls in agricultural education programs (e.g., 4H), we have every reason to believe that the future of farming is increasingly female.^{33, 34} Women producers often care deeply about being good stewards of their land, but unfortunately are far less likely than their male peers to enroll in USDA conservation programs. Between 2015 and 2020, NRCS awarded just 16% of conservation practice incentive contracts to women.^{35, 36}

Women landowners are also a demographic that must be considered in any conversation about land management. At present, 40% of agricultural land is rented, mostly by non-operating landowners (NOLs).³⁷ While 37% of these NOLs are women, they own 46% of acres rented out by NOLs.^{38, 39} Unfortunately, women landowners face challenges that can limit the level of

³² USDA NASS, “2017 Census of Agriculture: Highlights: Female Producers.” 2019.

https://www.nass.usda.gov/Publications/Highlights/2019/2017Census_Female_Producers.pdf.

³³ USDA NASS, “2017 Census of Agriculture: Highlights: Female Producers.”

³⁴ C. Schmidt, S. Goetz, Z. Tian, “Female Farmers in the United States: Research Needs and Policy Questions.” *Food Policy*, February 2021. <https://doi.org/10.1016/j.foodpol.2021.102039>.

³⁵ AFT, “Women for the Land.” <https://farmland.org/project/women-for-the-land/>.

³⁶ USDA NASS, “2017 Census of Agriculture: Highlights: Female Producers.”

³⁷ P. Petrzela, J. Filipiak, G. Roesch-McNally and M. Barnett, “Understanding and Activating Non-Operator Landowners.” AFT, 2020. https://s30428.pcdn.co/wp-content/uploads/sites/2/2021/01/AFT-NOLs-MultiState_1_21-web.pdf.

³⁸ D. Bigelow et al, “U.S. Farmland Ownership, Tenure, and Transfer.”

³⁹ D. Bigelow et al, “U.S. Farmland Ownership, Tenure, and Transfer.”

conservation on their land.⁴⁰ AFT’s own research indicates that women NOLs feel less knowledgeable about conservation and have significantly less experience as farm operators.^{41, 42}

As USDA expands programs to increase climate-smart practices, it must ensure that women are not left behind. USDA must work to understand the cause of these disparities, and ensure that women landowners are tapped as a resource to encourage the adoption of practices on their land. Educational programming targeted to women is key to helping them gain the knowledge and confidence they need to become more actively involved in the land they manage or own.

Recommendation: Conduct tailored outreach to women producers and landowners to educate them about conservation program options and to develop the foundational peer support and confidence they need to successfully engage with USDA programming. AFT’s Women for the Land Initiative uses a peer-to-peer, interactive educational format called “[learning circles](#)” to effectively engage women landowners, farmers, and aspiring farmers to this end. This and similar programs should be supported, scaled up, and replicated to advance women’s success in accessing NRCS programs and other climate-smart practice incentives equitably.

Recommendation: Work to improve survey protocols to more accurately and consistently capture the status of women in agriculture, especially BIPOC women.

Recommendation: Set and track benchmarks for program participation of socially disadvantaged producers, including women, and make the data publicly accessible. Being transparent about current participation rates in programs will help USDA to track its progress toward advancing inclusion.

CONCLUSION

AFT appreciates the opportunity to submit our comments on the development of this important new strategy. We look forward to serving as a resource to the Department on these issues and continuing to work with USDA to help farmers and ranchers fight climate change.

Respectfully submitted,

American Farmland Trust

⁴⁰ D. Bigelow et al, “U.S. Farmland Ownership, Tenure, and Transfer.”

⁴¹ G. Roesch-McNally, “Women Non-Operating Landlords; What We Are Learning About Conservation on Rented Lands.” June 2020. AFT. <https://farmland.org/women-non-operating-landlords-what-we-are-learning-about-conservation-on-rented-lands/>.

⁴² P. Petrzela and A. Sorensen, “Conversations with Women Landowners: Understanding Barriers to Sound Farming Practices on Leased Farmland.” AFT and Utah State University. <https://s30428.pcdn.co/wp-content/uploads/2019/05/WNOLs-focus-groups-2018-for-web.pdf>.