Testimony on
A 2022 Review of the Farm Bill: The Role of USDA Programs in Addressing Climate Change

United States House of Representatives
Committee on Agriculture

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Chairman Scott, Ranking Member Thompson, and members of the committee, thank you for convening this hearing: *A 2022 Review of the Farm Bill: The Role of USDA Programs in Addressing Climate Change*. I am joining you today in my capacity as co-chair, alongside former Senator Saxby Chambliss, of the Bipartisan Policy Center’s Farm & Forest Carbon Solutions Task Force. I appreciate the opportunity to share the views of the Task Force on the important linkages between conservation, climate solutions, and rural economic development. My testimony today focuses on the roadmap we developed for scaling public and private investments in land-based climate solutions, ensuring a high level of integrity for these solutions, and reducing barriers to voluntary stewardship practices.

For this hearing, I’d like to emphasize four key points:

1. Natural climate solutions have untapped potential in the United States. Congress and the administration can help us tap this potential by catalyzing new carbon-based revenue opportunities for farmers, ranchers, and forest landowners.
2. Priority should be given to expanding incentives and cost-share programs for natural climate solutions, promoting new investments in workforce training and education, delivering climate-focused technical assistance, improving data and risk management, and spurring technology innovation to make natural climate solutions cheaper and easier to implement.
3. Both government and the private sector need to step up their efforts and partner together to achieve large-scale transformation.
4. If enacted, our proposed policies will speed the deployment of natural climate solutions, deliver significant environmental co-benefits (improved air and water quality, wildlife habitat, etc.), and boost the economy of rural communities.

In sum, we believe American farmers, ranchers, and forest landowners have a unique opportunity, with your help, to build on a long and bipartisan history of environmental stewardship to further support—and be rewarded for—broader climate mitigation efforts.

1. **Introduction**

America’s farmers, ranchers, and forest landowners are key partners in the effort to combat climate change—both as business operators who are uniquely exposed to the damaging effects of extreme weather and as stewards of lands that play an important role in the carbon cycle. Studies show that boosting the amount of carbon stored in plants, trees, and soils can make an important contribution to slowing the buildup of carbon dioxide in the atmosphere, and will be needed, along with emission reductions and other strategies, to meet national and international climate goals. In fact, climate-friendly land management practices—often called “natural climate solutions”—are especially attractive, because many of them deliver valuable co-benefits in terms of wildlife habitat, recreation amenities, and air and water quality. Such practices can also make farms, forests, and rangelands more resilient to the damaging effects of climate change.

In this context, emerging markets for carbon credits, new corporate sustainability initiatives, and government incentives for conservation and greenhouse gas reductions present a substantial economic and environmental opportunity—one with the potential to generate billions of dollars of investment in working farm and forest lands. To fully realize this opportunity, however, substantial hurdles will have to be overcome. Markets for carbon credits and government incentive programs are still not fully mature, and few farmers, ranchers, and forest landowners are accustomed to viewing carbon sequestration and avoided emissions as a business opportunity. Even those who do may lack the time, expertise, and
financial resources to assess their options for carbon markets or incentive programs and then implement changes in their land management practices, particularly if those changes require large upfront investments in expectation of uncertain long-term returns.

BPC’s Farm and Forest Carbon Solutions Task Force came together in early 2021 to explore practical ideas for tackling these challenges. Task force members represent a wide range of interests and perspectives, but we share the view that constructive engagement with the agriculture and forestry sectors is crucial to the success of broader U.S. climate policy.

My testimony today begins by discussing our broad coalition to scale natural climate solutions and our unique, bipartisan approach to developing consensus policy recommendations. I’ll then summarize key Task Force recommendations for new investments and strategic changes at USDA that would enable more farmers and forest landowners to engage in climate solutions without replacing core Farm Bill programs.

2. Task Force Background and Focus Areas

Co-chair Chambliss and I worked with 18 fellow Task Force members, including leaders from agriculture and forestry industries; environmental and conservation nonprofits; trade associations; and former government officials. Together our group combined wide-ranging expertise on key policy issues and included the perspectives of small and large agricultural operations; small and large landowners, timber companies, forest products groups, urban forestry, and public lands; center-left and center-right environmental, conservation, and hunting and fishing organizations; rural communities; and historically underserved groups—Native American tribes, African Americans, and women producers. Task Force members also command deep knowledge about how government programs are effectively funded, overseen, and implemented, and leverage strong relationships across stakeholder communities.

In developing recommendations, we were guided by four principles that we believe are critical to the effectiveness of farm- and forest-based climate strategies and that build on our nation’s track record of effective public-private cooperation in the forestry and agricultural sectors. These principles include:

- Emphasizing voluntary and incentive-based approaches,
- Finding solutions that are supportive of the needs of farm and forest producers and landowners,
- Promoting partnership and collaboration as the best way to address diverse constraints and priorities, and
- Providing for accountability and transparency in the methods used to track and quantify benefits from natural climate solutions.

With the benefit of insights and ideas generated over the course of multiple workshops and meetings and input from a panel of scientific and technical experts, our group reached agreement on 24 policy recommendations that were published in a report last month. The breadth of our recommendations reflects the range of actions we believe are necessary to realize the full potential of farm- and forest-based climate solutions. Several broad themes provide a framework for organizing our recommendations and implementing a comprehensive policy approach:

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1. Increase investment in natural climate solutions through existing Farm Bill programs and offer pathways to new market opportunities for farmers, ranchers, and forest landowners.
2. Expand technical assistance for implementing natural climate solutions and address related workforce needs.
3. Strengthen the integrity of voluntary carbon markets and increase access to these markets.
4. Develop new public and private financial and insurance instruments that address barriers to the broad adoption of natural climate solutions.
5. Enhance resilience to wildfire, drought, insects and disease, and invasive species on a landscape scale.
6. Foster technology innovation in the agriculture and forestry sectors to make natural carbon solutions cheaper and easier to implement and to address measurement and monitoring challenges.

The next section of this testimony summarizes key task force recommendations that relate to USDA programs and authorities under the jurisdiction of this committee.

3. Build on the Foundation of Existing Farm Bill Programs

The Task Force acknowledged the value of existing Farm Bill programs by designing many of our recommendations to build from, address gaps in, or complement these programs. There is a strong bipartisan history of including provisions in the Farm Bill that support conservation, and many of these programs have become very popular with producers. Moreover, there are efficiencies to be gained in using existing programmatic infrastructure and resources. We see the upcoming 2023 Farm Bill as a key opportunity to authorize and implement strategic changes at USDA that enable more farmers and forest landowners to engage in climate solutions without replacing core Farm Bill programs. Our subset of recommendations for improving USDA programs primarily relate to opportunities within the following Farm Bill titles:
- Title 2: Conservation.
- Title 7: Research, Extension, and Related Matters.
- Title 8: Forestry.
- Title 12: Miscellaneous (Support for beginning, socially disadvantaged, and veteran farmers and ranchers).

In addition, we offer a number of recommendations that could be enacted through legislative vehicles other than the Farm Bill— including, for example, through the Growing Climate Solutions Act, Rural Forest Markets Act, Trillion Trees Act, and the annual appropriations process. For a comprehensive look at all Task Force recommendations, please refer to our full report available at: https://bipartisanpolicy.org/report/federal-policies-to-advance-natural-climate-solutions. I have included the executive summary as an appendix to this testimony.

A. Conservation Incentives

We recommend that Congress substantially increase USDA funding for key conservation cost-share and incentive programs under Title 2 of the Farm Bill, dedicating these funds specifically for greenhouse gas reductions and carbon sequestration purposes (Task Force report recommendation 1A). The Task Force is aligned with more than 200 agriculture and conservation organizations that expressed support last
summer for doubling Farm Bill conservation program funding\(^2\)—so that private working lands can both take advantage of new carbon-based revenue opportunities and help lead the fight against climate change. The Bipartisan Policy Center assessed the employment and economic effects of investing in farm-and forest-based climate solutions on America’s public and working lands, finding that new federal funding could support up to 22,000 jobs per year and contribute up to $2.2 billion per year to U.S. gross domestic product.\(^3\)

USDA programs with the greatest potential to achieve positive climate and economic outcomes in the land sector include but are not limited to the Environment Quality Incentives Program (EQIP), the Conservation Stewardship Program (CSP), the Regional Conservation Partnership Program (RCP), the Landscape Scale Restoration (LSR) program, the Farming Systems Project (FSP), and the Conservation Technical Assistance (CTA) program. We recommend establishing climate-focused program metrics and benchmarks to evaluate program effectiveness (Task Force report recommendation 1B).

Many of these programs are implemented by USDA’s Natural Resources Conservation Service (NRCS). Other task force recommendations aimed specifically at NRCS include streamlining the NRCS process for adopting new conservation practice standards (Task Force report recommendation 1D), expanding existing measurement networks like the National Resources Inventory to better integrate climate and carbon-related data (recommendation 1E), and expanding the NRCS network of technical service providers through more innovative partnerships (recommendation 2C). Congress could also authorize the NRCS to be a lead agency in establishing a process for farmers, ranchers, and forest landowners to receive a one-time payment for early adoption of climate-smart practices (recommendation 4D), and in establishing a new, interagency cross-boundary rangeland health initiative (recommendation 5C).

**B. Technical Assistance and Workforce Development**

Our recommendations call for expanding federal technical assistance to achieve greater and more effective uptake of climate-friendly practices and to promote more informed decision making that maximizes economic and environmental co-benefits and ensures long-term sustainability. Investments in workforce development are also vital to support the next generation of farmers, ranchers, and foresters. Although some relevant workforce development programs and many core technical assistance programs that support Title 2 implementation are authorized in legislation other than the Farm Bill, our recommendations identify several opportunities related to Titles 7 and 12.

These include expanding private sector partnerships with the Cooperative Extension program for climate-targeted technical assistance (Task Force report recommendation 2A) and providing tailored technical assistance (similar to the Farming Opportunities Training and Outreach Program authorized in the 2018 Farm Bill) to encourage tribes and historically underrepresented producers and landowners to adopt climate-friendly practices (recommendation 2B). We also recommend new investments in education and workforce development through extension, national service corps programs like AmeriCorps, tribal colleges and universities, and historically Black land grant universities (recommendation 2D).

\(^2\) Letter: 216 Groups Call for Double Agriculture Conservation Funding. Available at: https://www.nwf.org/-/media/Documents/PDFs/Press-Releases/2021-08-04-21_Letter-216-Groups-Call-for-Double-Ag-Cons-Funding

\(^3\) Investments modeled include wildland firefighting, federal forest thinning and replanting, tree planting on marginal lands, cover cropping, grassland restoration, and anaerobic digesters. For more information go to: https://bipartisanpolicy.org/ncs-resources.
C. Land Access

Just as a strong workforce is necessary to scale natural climate solutions, preventing the conversion of productive working lands and increasing access to land is a critical and underappreciated climate strategy. Therefore, we urge Congress to assess and develop new incentives—such as cost shares, state block grants, and tax reform—to improve land access, tenure, and leasing, especially for new, small, and historically underserved landowners and producers, and owners of heirs’ property and fractioned tribal lands (Task Force report recommendation 4C). New federal incentives could help address the major financial, social, and legal obstacles that limit secure access to affordable farmland.

D. Improving Data Tools and Strengthening Emerging Carbon Markets

We recommend that USDA strengthen its data, modeling, and technical/decision support tools to provide farmers, ranchers, and forest landowners with accurate estimates of the impacts of climate-smart practices (Task Force report recommendation 2F). These tools include, but are not limited to, COMET-Farm, COMET-Planner, LandPKS, DairyGEM, GRACENet, APEX, Rangeland Analysis Platform, CART, and the Forest Inventory and Analysis program. More reliable models and improvements in other predictive tools are needed to improve integrity and transparency in voluntary carbon markets and to reduce the administrative and technical burdens faced by potential participants in federal conservation programs, supply chain sustainability programs, and voluntary carbon markets.

The costs of monitoring, reporting, and verifying climate benefits can be prohibitive for small producers and forest landowners seeking to participate in voluntary carbon markets. Similarly, a lack of clarity, transparency, and standardization among credit buyers, project developers, and landowners can be a barrier to quality assurance for farm- and forest-based carbon credits. Currently, however, there are no government programs that seek to address these issues. Task Force members believe the private sector must step up, in concert with targeted public investments, to address problems with transparency and liquidity, incomplete risk management mechanisms, and inadequate financing that are making it difficult for supply to respond to market demand. We therefore recommend that Congress authorize new efforts to improve market integrity and new funding to reduce barriers to entry to emerging carbon markets (Task Force report recommendation 3A). We also call on USDA, in collaboration with other federal agencies, to advance public-private partnerships for enhancing trading infrastructure and developing insurance and structured finance products for voluntary carbon markets (recommendation 3C).

E. Forestry

The Infrastructure Investment and Jobs Act of 2021 allocates historic levels of funding—over $6 billion—for forest restoration, hazardous fuels management, and wood products innovation, among other provisions that support natural climate solutions. Accordingly, our recommendations include a strong focus on policy implementation, including through Title 8 Forestry programs, so that this and other recommended funding can be deployed quickly and effectively.

Task Force members believe the time is now to build on these critical investments to enhance the resilience of our natural and working lands in the face of increasing threats from wildfires, droughts, floods, and other extreme weather, as well as threats from pests and invasive species. This includes providing needed resources to the USDA Forest Service and Department of Interior, not only for wildland firefighting, but for prevention strategies like thinning, prescribed burns, training, fire detection
via remote sensing, and prediction using high performance computing. An all-of-government approach to wildfire resilience is essential (Task Force report recommendation 5B).

We also recommend pursuing a comprehensive strategy to modernize, expand, and fund the network of public and private seed collections and tree nurseries (recommendation 5A). Current estimates suggest that rapidly expanding reforestation demand, partly due to wildfire trends, will require more than doubling tree nurseries’ current output, from roughly 1.3 billion seedlings per year to 3 billion.

F. Research

Innovation in agriculture and forestry is critical to meet the evolving economic and environmental demands on these sectors. Thus, we enthusiastically support R&D investments that will make natural climate solutions less expensive and easier to implement (Task Force report recommendation 6A). Innovation is also required to improve the tools available to monitor, quantify, and verify environmental and climate benefits and reduce related costs.

To meet these needs, we believe USDA must emulate the more integrated research, development and commercialization approach that exists in the DOE National Labs. Consistent with Title 7, the Task Force strongly supports increased funding across the USDA enterprise, including for the Foundation for Food and Agriculture Research. We also call for increased cooperation to promote innovation in natural climate solutions—across federal agencies (especially DOE/ARPA-E, NIST, USGS, and NSF), universities, and the private sector. Enhancing the innovation pipeline, from research and development to broad commercialization of new technologies, is critical to scaling farm- and forest-based climate solutions.

4. Conclusion

The bipartisan infrastructure bill will provide critical resources for implementing natural climate solutions, particularly in the forestry sector. But the levels of funding authorized in that legislation, while historic, represent just a down-payment on the investments that will be needed to meet the diverse needs of producers and land managers in the decades ahead. Looking toward the next Farm Bill, we see a strong opportunity and widespread support for a suite of policies to increase access to federal government programs and private market opportunities for producers and landowners of all types and sizes, and across the whole natural climate solutions supply chain. We strongly believe this can be accomplished without taking away from core Farm Bill programs and instead drawing on policymakers’ decades of experience supporting and implementing voluntary and incentive-driven conservation solutions for America’s farmers, ranchers, and forest landowners.

The 24 recommendations put forth in our full Task Force report reflect confidence that the federal government—and USDA in particular—can be effective in catalyzing the rapid scale-up of farm- and forest-based carbon solutions. Beyond helping us meet climate goals, these solutions will stimulate investment in rural communities and bolster the long-term resilience and productivity of America’s public and working lands. With the bipartisan support that exists for all these objectives, progress is not only possible, but very much within reach. Co-chair Chambless, members of the Task Force, and I look forward to a productive dialogue and partnership with Congress to inform your work positioning America’s farmers, ranchers, and forest landowners to continue to deliver climate solutions.
Appendix A: Executive Summary of the BPC Farm and Forest Carbon Solutions Task Force Policy Recommendations
EXECUTIVE SUMMARY

America's farmers, ranchers, and forest landowners are key partners in the effort to combat climate change—both as business operators who are uniquely exposed to the damaging effects of extreme weather and as stewards of lands that play an important role in the carbon cycle. Studies show that boosting the amount of carbon stored in plants, trees, and soils can make an important contribution to slowing the buildup of carbon dioxide in the atmosphere, and will be needed, along with emission reductions and other strategies, to meet national and international climate goals. In fact, climate-friendly land management practices—often called "natural climate solutions"—are especially attractive, because many of them deliver valuable co-benefits in terms of wildlife habitat, recreation amenities, and air and water quality. Such practices can also make farms, forests, and rangelands more resilient to the damaging effects of climate change.

In this context, emerging markets for carbon credits, new corporate sustainability initiatives, and government incentives for conservation and greenhouse gas reductions present a substantial economic and environmental opportunity—one with the potential to generate billions of dollars of investment in working farm and forest lands. To fully realize this opportunity, however, formidable hurdles will have to be overcome. Markets for carbon credits are still not fully mature, and few farmers, ranchers, and forest landowners are accustomed to viewing carbon sequestration and avoided emissions as a business opportunity. Even those who do may lack the time, expertise, and financial resources to assess their options for carbon markets or incentive programs and then implement changes in their land management practices, particularly if those changes require large upfront investments in expectation of uncertain long-term returns.
BPC’s Farm and Forest Carbon Solutions Task Force came together in early 2021 to explore practical ideas for tackling these challenges. Task force members represent a wide range of interests and perspectives, but we share the view that constructive engagement with the agriculture and forestry sectors is crucial to the success of broader U.S. climate policy. Over the course of multiple workshops and meetings, and with input from a panel of scientific and technical experts, we sought to develop proposals that reflect four guiding principles, including the importance of:

- Emphasizing voluntary and incentive-based approaches,
- Finding solutions that are supportive of the needs of farm and forest producers and landowners,
- Promoting partnership and collaboration as the best way to address diverse constraints and priorities, and
- Providing for accountability and transparency in the methods used to track and quantify benefits from natural climate solutions.

To organize our recommendations and ensure that our approach to farm- and forest-based climate solutions is comprehensive, we also identified six distinct policy objectives, or “themes”:

1. Expand existing Farm Bill programs that deliver climate benefits and offer pathways to new market opportunities for farmers, ranchers, and forest landowners.
2. Expand technical assistance for implementing natural climate solutions and address related workforce needs.
3. Strengthen the integrity of voluntary carbon markets and increase access to these markets.
4. Develop new public and private finance and insurance instruments to help overcome barriers to the broad adoption of natural climate solutions.
5. Enhance resilience to wildfire, drought, insects and disease, and invasive species on a landscape scale.
6. Foster technology innovation in the agriculture and forestry sectors to make natural climate solutions cheaper and easier to implement and to address measurement and monitoring challenges.

Our recommendations in each of these areas are summarized below and detailed in our full report. Many of these ideas build on legislation already passed by the 117th Congress, including the Infrastructure Investment and Jobs Act, and on policy debates that are informing the development of the 2023 Farm Bill. Together, these 24 recommendations reinforce our view that the federal government has a tremendous opportunity over the next several years to put in place policies and programs that will jump-start the rapid scale-up of farm- and forest-based carbon solutions. Given growing bipartisan support for such solutions—not only as another tool for achieving climate goals, but as a means for spurring investment in rural communities and in the long-term resilience and productivity of America’s farms, rangelands, and forests—we are confident that progress is not only possible, but very much within reach.
Theme 1: Expand existing conservation programs

- Increase funding for key USDA conservation programs.
- Set benchmarks and goals for tracking the adoption of climate-friendly practices and quantifying their benefits.
- Issue guidance on how existing USDA programs can assist landowners who are interested in accessing carbon markets.
- Streamline the process of setting new standards for conservation practices.
- Expand USDA’s measurement networks to better integrate climate-related data.

Theme 2: Address technical support and workforce needs

- Recruit private-sector partners to work with USDA and Extension offices to provide training and information on climate-smart practices.
- Set goals and benchmarks for helping historically underrepresented landowners implement natural climate solutions.
- Expand technical assistance on climate issues and opportunities to socially disadvantaged and tribal producers and landowners.
- Invest in education and workforce development, including through extension and scholarship programs.
- Enhance the collection, sharing, and interoperability of climate-related data by USDA and other agencies.
- Strengthen USDA’s technical capacities by investing in state-of-the-art datasets, models, and analytical tools.

Theme 3: Strengthen voluntary carbon markets

- Improve the integrity of voluntary carbon markets and reduce barriers to entry through targeted legislation.
- Use the Commodity Credit Corporation to support climate-smart practices, leveraging carbon markets and supply chain initiatives.
- Support public-private efforts to develop infrastructure, insurance, and structured finance products for carbon trading.

Theme 4: Develop new finance and insurance instruments

- Adopt a tax credit to incentivize ecologically appropriate agriculture- and forest-based sequestration.
- Assess impact of conservation practices on crop yields and insurance payouts, and create incentives for reducing climate risk.
- Develop new strategies for overcoming barriers related to landownership and succession.
- Provide a one-time payment to early adopters of climate-smart agriculture and forestry practices.

Theme 5: Enhance carbon storage and climate resilience of farm and forest lands

- Modernize and expand public and private seed collections and tree nurseries to meet reforestation demand and support scale-up of natural climate solutions.
- Implement an all-of-government approach to increase wildfire resilience.
- Create a new cross-boundary initiative to improve the health and carbon sequestration potential of rangelands.

Theme 6: Foster farm- and forest-based climate innovation

- Increase funding for USDA research and expand R&D collaboration across federal agencies, universities, and the private sector.
- Expedite FDA approval of safe feed additives that reduce greenhouse gas emissions from livestock operations.
- Support emerging markets for innovative wood products through better integration of USDA programs, federal procurement, and manufacturer incentives.
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