

**BPC Transition Policy Recommendations for Natural Carbon Solutions for First- or Second-Term Administration**

As we near the final phase of the lead up to the November 3<sup>rd</sup> General Election, political attention will shortly turn to policy. Whether the transition is to a second term of a Trump administration or to a first term of a Biden administration, existing agency programs can be leveraged to support farmers, ranchers, and forest owners operating in ways that are good for agriculture, forestry, the environment, and the climate.

This year, BPC launched a Farm and Forests Carbon Solutions Initiative to work with a range of stakeholders to build a federal policy agenda that can mobilize American agriculture and forestry to address climate change and win broad bipartisan support in Washington, DC. This memo outlines a set of recommendations for either a Trump or Biden administration for implementing policies that promote natural carbon solutions in agriculture and forestry. A first-term Biden team could begin to organize an ambitious agenda around natural climate solutions, focused initially through executive actions. If President Trump wins a second term in office, the suggestions here could be used by the existing administration's team to build out its Trillion Trees Initiative and pursue additional initiatives to advance natural climate solutions.

**I. The case for natural climate solutions**

There is growing bipartisan support for agriculture and forestry policies that provide opportunities both to reduce climate pollutants and capture carbon from the atmosphere, and store it in soils, vegetation, and wood products. These policies are also uniquely positioned to advance both near- and long-term goals for helping Americans get back to work, supporting rural economic development, and enhancing the environmental and climate change-related contributions of U.S. farms, grasslands, and forests.

A broad suite of activities in agriculture can mitigate climate change, including adoption of soil health practices such as conservation tillage and cover crops, improvements in nutrient management on cropland to reduce nitrous oxide emissions, improved grassland and pasture management, reduced methane emissions through new livestock feed mixes, manure management and methane digesters, and other actions. Likewise, in forestry, practices such as reforestation, longer timber rotations, expanded use of wood products, forest restoration to reduce catastrophic wildfire, and others, can maintain and expand our forests' carbon sequestration potential.

Natural climate solutions policy should focus on (1) incentives and markets that reward voluntary adoption of climate-smart practices, with enhanced and better resourced programs for landowner/producer outreach; (2) improvements in federal land management; and (3)



research into new technologies and innovations that could help agriculture and forestry produce more food and fiber with a better carbon footprint. While regulations have an important role in climate policy, American farmers, ranchers, and forest owners are very diverse with operations covering a few acres to millions of acres. Designing workable regulations for such a diverse sector will be difficult, if not impossible, and would not work well to encourage individuals and companies to adopt conservation practices in their farm, ranch, and forestry operations. Policy must also consider how to ensure that policies and programs are available for all farmers, ranchers, and forest owners—large and small, African American, Hispanic, tribal, and others.

## II. Policy Options

National climate solution policy will focus significantly on the programs and policies of the Department of Agriculture, which has the largest discretionary budget for conservation programs directed at America’s working farms, ranches, and forests. USDA also houses the U.S. Forest Service. As a result, a second-term Trump administration or a first-term Biden administration should focus on USDA programs and policies. That said, other agencies can play an important role, particularly the Department of Interior’s Bureau of Land Management, U.S. Fish and Wildlife Service, and National Park Service—which manage millions of acres of public lands—as well as the U.S. Geological Survey, which provides important scientific research on natural climate solutions.

### Direct Farm Bill Programs to Support Climate Smart Agriculture and Forestry

USDA Farm Bill conservation programs provide approximately \$6 billion in funding annually for American farmers, ranchers, forest owners, and other landowners to undertake a variety of conservation practices. The Secretary of Agriculture has significant discretion in targeting resources towards particular conservation practices, regions, and natural resource challenges. Targeting Farm Bill conservation programs towards natural climate solutions should focus on four programs:

- *Conservation Reserve Program.* CRP is a land retirement program that pays a portion of the costs for a landowner to restore grasses or trees on marginal agricultural land and then an annual rental fee over 10 years or sometimes longer. CRP is currently authorized for 25 million acres in fiscal year 2021, rising to 27 million in FY2023. CRP is a powerful engine for carbon sequestration. Opportunities for expanding CRP’s contribution to climate mitigation include:
  - Restoring incentives that encourage participation, particularly on productive lands that can sequester significant carbon, so that the program is fully enrolled.
  - Targeting CRP enrollment through “continuous enrollments” to those lands that provide the greatest carbon benefit.
  - Tree planting, especially bottomland hardwoods and longleaf pine in the South.

- Using CRP to restore prairie potholes and surrounding grasslands in the Great Plains.
- *Environmental Quality Incentive Program*. EQIP already provides incentive payments to farmers, ranchers and forest owners that undertake practices such as conservation tillage, installation of cover crops, nutrient management, manure management, timber stand improvement and others that have significant climate benefits. USDA can prioritize practices that benefit the climate and/or target EQIP payments.
- *Regional Conservation Partnership Program*. RCPP allows locally-led conservation partnerships to design projects using EQIP and other Farm Bill programs. Because projects are locally designed and implemented, RCPP could provide an excellent model for collaborative climate mitigation projects on working lands.
- *Forest Legacy Program*. Conserving privately-owned working forest lands is critical to U.S. climate mitigation. Given the new infusion of money provided to FLP through the America's Great Outdoors Act, there is an opportunity for USDA to target lands with high carbon sequestration and retention values through FLP.

#### Use the Commodity Credit Corporation to Establish and Carbon Bank that Supports Forest and Soil Carbon Markets

The USDA's Commodity Credit Corporation has broad authority "to stabilize, support, and protect farm income and prices," which includes procuring agricultural commodities and carrying out environmental and conservation program. As such, the CCC could be used to address carbon price uncertainty in forest and soil carbon markets and put liquidity into the carbon market. In particular, the CCC could:

- Operate a reverse auction that purchases certified carbon credits from farmers, ranchers, and forest owners. If Congress authorizes a federal compliance carbon market in the U.S., policymakers could also allow the bank to sell credits into the market and replenish funds in the bank. The CCC could self-insure carbon credit sales to guarantee their environmental performance.
- Guarantee a floor price for carbon for selected carbon mitigation projects.
- De-risk investments from the private sector into voluntary carbon markets by providing carbon price guarantees.
- Provide low-cost financing to carbon projects.

#### Develop Crop Insurance Products that Reward Producers Who Adopt Climate Smart Practices

The same soil health practices—conservation tillage, cover crops, and others—that capture carbon from the air and store it in soil organic matter also make crops more resilient to drought, flooding, and other extreme weather events. The challenge, however, is how to encourage broad adoption of these practices across tens of millions of acres.

USDA provides federally subsidized insurance on some 90% of cropland in the United States with over \$100 billion in liability protection for agriculture. There is growing interest, led by the AGree Coalition and others, to create insurance products that reward farmers who implement soil health practices by providing lower insurance premiums. For example, in Iowa, farmers can receive a crop insurance discount for using cover crops. While few insurance products exist and new ones are in development, USDA could speed development of this tool with new resources for research, data analysis, and product development. Doing so would significantly advance adoption of climate smart agricultural practices.

### Promote Markets for Wood

While it may seem counter-intuitive, bolstering wood markets is an important strategy in promoting forests as a natural climate solution. Development and conversion of privately-owned forests is a significant threat to forest carbon stores in the United States. Markets for wood products provide an economic incentive for landowners to maintain and manage forests. Likewise, many landowners are less likely to plant trees if long-term markets for timber are weak. And, in the western United States, markets for wood products can help support the restoration of federal forest lands, in order to reduce the threat of catastrophic fire. Policies that bolster wood products could include:

- Use federal procurement policy to preferentially use wood in construction, particularly mass timber technologies which can be used in tall buildings and other commercial applications. Encourage governors to do the same.
- Increase funding for Wood Innovation Grants in the U.S. Forest Service.
- Invest in research at the Forest Products Lab into new uses of wood, including nanotechnology and carbon life cycle analyses of wood products.
- Work with the forest industry to promote wood use through USDA check-off programs or other venues.

### Finance Methane Digesters in Dairy and Hog Operations

Methane is a powerful greenhouse gas, and livestock methane accounts for about 41% of U.S. agricultural emissions. Livestock methane can be reduced through a variety of approaches including changing livestock feed mixes, manure management, and capping and flaring manure holding structures. Methane digesters, which capture methane and convert it to energy, can reduce greenhouse gas (GHG) emissions by reducing methane and displacing fossil fuels. The National Renewable Energy Lab suggests that the U.S. could capture 1.9 million metric tonnes of methane per year from livestock waste by installing anaerobic digesters. USDA's Renewable Energy for America's Program can support the installation of methane digesters in dairy and swine operations, though more can be done to improve the workability of REAP for this sector. USDA should develop a FY2022 budget proposal to bolster the program's success in financing digesters.

### Invest in Partnerships with States, Universities, Producers, Conservation Groups, and Others to Deliver Programs

Government agencies—the Natural Resources Conservation Service, U.S. Forest Service, DOI agencies and others—cannot deliver financial and technical assistance to agricultural and forestry producers and landowners alone. Moreover, on public, private, and tribal lands some of the greatest conservation successes involve collaborative partnerships among federal and state agencies, landowner groups, conservation groups, universities, and others. From a cost standpoint, delivering financial and technical assistance will be less expensive if natural climate solutions policies leverage these partnerships. NRCS, for example, already has the authority to develop partnerships with outside organizations to deliver Farm Bill conservation programs. Organizations such as Pheasants Forever and the National Wild Turkey Federation work closely with USDA and other agencies to deliver on the ground conservation in concert with private landowners. Federal legislation, such as S. 3894, the Bipartisan Growing Climate Solutions Act, introduced by Sens. Mike Braun (R-IN) and Debbie Stabenow (D-MI), looks for ways to expand opportunities for private businesses to deliver carbon measurement and verification.

### Provide Special Assistance to Beginning and Minority Landowners and Tribes

Certain groups deserve special attention when designing outreach strategies for natural climate solutions policies. Minority and tribal producers have a long history of being excluded from USDA programs, and beginning farmers often don't have the time or experience to access conservation and other programs. As a result, USDA, DOI, and other agencies implementing programs to promote adoption of climate smart agriculture and forestry should devote staff and resources to ensure these producers can take advantage of new natural climate solutions programs.

### Invest in Restoration of Forests on Public Lands

Fire seasons are now about 80 days longer than three decades ago, and average acreage burned has more than doubled since the 1960s. Further, the Forest Service projects that acreage burned will double again by mid-century. While addressing climate change over the long-term is necessary to slow the loss of forests and grasslands to catastrophic wildfire, restoring forests through scientifically sound thinning of dense stands of trees, and the broader use of prescribed fire to reduce fuels is vital to reducing the severity of fires. Proceeds from timber harvesting on the National Forests and other public lands are too small to finance large scale restoration, and many forests in need of restoration have limited supplies of commercially viable timber. While the forest industry must play an important role in restoration, forest management of the National Forests and other public lands will require public investments.



Unfortunately, the Forest Service spends more than half of its budget annually on firefighting. In 2018, Congress passed a “fire funding fix” which allows the agency to draw on emergency funds when it exceeds its firefighting resources. That “fix” provides significant flexibility for the agency to redeploy resources that would have otherwise gone to firefighting. A second Trump administration or an incoming Biden administration should take advantage of that flexibility to dramatically increase the pace and scale of restoration of the National Forests and neighboring state, tribal, and private lands. In addition, forest and grassland restoration and increased use of prescribed fire on Bureau of Land Management and other DOI lands will also yield significant benefits.

#### Invest in Research and Delivery of Applied Science to Farmers, Ranchers and Forest Owners

USDA invests approximately \$3.5 billion annually in research, data collection, technology, and information dissemination. Approximately 50% of funding flows to external research and education entities. Investments by USDA research agencies and by the Foundation for Food and Agriculture in agricultural and forest productivity, new technologies, and practices that reduce GHGs and enhance carbon sequestration, etc. can drive long-term natural climate solutions. The 2018 Farm Bill established the Agriculture Advanced Research and Development Authority pilot authority to develop technologies, research tools, and products through advanced research on long-term and high-risk challenges for food and agriculture. Modeled after the successful ARPA-E program implemented by DOE, AGARDA focuses on research and development that private industry is unlikely to undertake and could help advance important climate mitigation and resilience research.

Delivery of applied research to farmers, ranchers, and forest landowners is critically important. USDA’s Climate Hubs were established to provide regionally relevant information to agricultural and forestry producers and landowners, but they need additional resources to be successful.

#### Invest in Improved Carbon Inventory and in Tools that Help Producers and Landowners Measure Carbon Cost-Effectively

The Forest Service and NRCS maintain an extensive network of survey plots across the country that provide data on, among other things, the carbon content of agricultural and forest lands. A second Trump administration or a new Biden administration should invest to improve the accuracy and timeliness of these data collection programs.

In addition, USDA has worked with outside partners to develop tools like COMET-FARM which can help producers understand the carbon consequences of adopting various climate-smart agricultural and forestry practices. More can be done to support tools like COMET-FARM and new technologies that improve the accuracy and efficiency of carbon monitoring. Investments in carbon measurement tools, technologies, and modeling will help farmers, ranchers, and



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forest owners understand the carbon consequences of their management decisions. Moreover, importantly, these tools will help producers and landowners participate in carbon markets.