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Public comment to the Senate Special Committee on Climate Crisis

Dear Members of the Senate Special Committee on Climate Crisis,

We are submitting comments on behalf of Oregon Tilth, a leading nonprofit certifier, educator & advocate for organic agriculture since 1974. The organization is accredited by the USDA to offer organic certification services in accordance with the USDA National Organic Program. Our certification program currently serves over 2400 clients in the U.S. and Latin America. We certify a diverse mix of crops, livestock and processed products across the organic supply chain. Our clients' organic sales represent nearly \$6.8 billion of the organic market. We certify over 1100 farm operations, with diverse geography and scales of production.

We are encouraged to see the U.S. Senate address the urgent Climate Crisis, which represents an economic, environmental, and social justice crisis for our nation and the entire world. While the agricultural sector is on the front lines of climate change impacts, we must acknowledge that farm resiliency and viability is threatened by a larger framework of issues. While it is beyond the scope of this committee, the sustainability of our agricultural sector requires tackling a host of bigger issues. These include:

- Spreading risk and reward across the food supply chain through price parity, equitable liability management, and a supply management system that guards against the damaging effects of boom / bust cycles of overproduction and food shortages.
- Addressing workforce challenges involving labor supply, immigration, and fair wages
- Outsized influence of the agricultural input industry. Currently, USDA can't highlight the environmental, economic and public health benefits of organic agriculture. While the EU sets ambitious goals for 25% organic production by 2030, the U.S. is in regulatory capture and unable to act.
- Some of the USDA NRCS's conservation programs perpetuate unhealthy and low resilience systems through continued financial support. Vital and limited funding goes to improving broken systems (mega-sized CAFOs) and mitigating risks (IPM 595- pesticide mitigation) instead of incentivizing management-intensive grazing, reducing pesticides or using Integrated Pest Management strategies.
- We must challenge the dominant narrative of producing the cheapest food to feed everyone. Instead, we must adopt a Total Cost Accounting system that factors and exposes the environmental, climate and public health costs of so-called 'cheap food.'
- Supporting rural America by investing in healthcare infrastructure and delivery, small business economic development, and bridging the digital divide with access to high-speed internet.
- Challenging the "bigger is better" mindset by enacting common sense checks on corporate consolidation and monopolies. The COVID-19 pandemic has revealed weaknesses in overly concentrated supply chain infrastructure and ownership, which cannot withstand major disruptions.

In our pursuit of climate crisis solutions for agriculture, we must recognize the significance of the above systemic and institutional issues. If we don't address these systemic issues, then implementing proposed solutions discussed below will fail to ensure agricultural viability. We strongly encourage the creation of a Senate Committee on Agricultural Resiliency and Viability to address these issues in a holistic manner.

As this Committee begins to review and make recommendations on specific climate-related policies, programs and investments, we hope it will continue to invite and engage participants who reflect the diversity and innovation of this nation's agricultural community, including those that have historically been underserved such as new & beginning, organic, and black, indigenous and people of color farmers.

In response to the questions posed by the Committee, we offer the following input:

1. What challenges do you face from weather extremes? What would it take for your community to be prepared for more severe storms, droughts, wildfires and flooding? What additional tools would be valuable as you work to plan for future weather extremes and to ensure your community is prepared to make it through disaster events?

Farmers, ranchers and farmworkers face the impacts of climate change on a daily basis. They are acutely familiar with unpredictable, hazardous, and extreme weather events. Our food producers are on the frontlines and they are struggling to avoid crop losses. Across the country, water supplies are increasingly limited due to depleted aquifers and vanishing snowpacks, threatening a fundamental resource for crop and livestock production. Additional climate impacts include greater pressure from weeds and pests, increased animal diseases, and reduced winter chill hours. Climate-driven economic and environmental disturbances disproportionately impact already disadvantaged rural communities. While the exact nature and degree of these impacts will vary by region, adaptation is universally required to ensure our farms and food supply increase resiliency.

It is not only the land that we need to worry about, it is the people as well. The current COVID-19 pandemic has acutely demonstrated the essentiality of our food system laborers and farmworkers. And yet these workers are the least protected and most vulnerable to the impacts of climate change. Intensifying heat and climate-related increases in pest pressure lead to more pesticide use and hence farmworker exposure to pesticides. These workers are often forced to choose between their health or their livelihood. This workforce is responsible for about two-thirds of the labor of putting America's food on the table. From a humanitarian standpoint, we are compelled to act. For the long-term sustainability of our food system, we must do more to ensure their health, wellbeing, and livelihoods.

As farmers continue to struggle with the current COVID-19 crisis, extreme weather and an already lagging farm economy, there is significant need for additional financial and technical assistance for programs that support climate change mitigation and adaptation. Oregon Tilth's organic farmers and ranchers are committed to implementing management systems and farm practices that improve soil health, sequester carbon, reduce greenhouse gas emissions, and build resiliency. However, financial constraints, now further aggravated by the pandemic, limit our network's capacity to address the climate crisis unaided. This highlights the need for a substantial Federal investment to support all of the nation's farmers and ranchers in adopting climate mitigation strategies.

2. What are the most important reasons for acting to improve resiliency and slow the impacts of changes to climate? How would you describe the risks and local impacts of inaction?

As we currently navigate two existential threats, climate change and COVID-19, we become increasingly aware of the interconnections between ourselves, our food system, and the land. The farmers, ranchers, and rural communities that we rely on for food production are already suffering. The economic and productive viability of American agriculture is at stake without appropriate mitigation strategies to the climate crisis. With local and national economies already severely impacted by the coronavirus pandemic, a failure to take prompt action to build agricultural and community resilience to climate change could lead to disaster. The dominant agricultural systems in the U.S. lack resilience to disturbances due to low levels of crop and livestock diversity, reliance on non-renewable energy intensive chemical inputs, natural resource degradation, and depleted soils. In the face of increasing uncertainty, major changes in our food production systems are needed. Inaction on both climate mitigation and building resilience will pose a grave threat to our food security throughout the U.S.

3. Are there existing tools for farmers, ranchers and communities such as those at the U.S. Department of Agriculture in their Natural Resources Conservation Service or Farm Service Agency that would help your area be more resilient? Are there ways those tools could be expanded or changed to address the challenges land managers face in keeping our working lands and agricultural operations productive and profitable in the face of changes in local and large-scale weather patterns and growing conditions?

The U.S. Department of Agriculture's (USDA) policy and programs have already begun to highlight soil health as foundational to farm resiliency and an important tool in mitigating climate change. These efforts must continue and be expanded to include the following:

- USDA's National Organic Program requires certified farmers to maintain and enhance soil quality. Increase organic certification cost-share with a maximum reimbursement of \$2500 per certified operation per year. Streamline the cost-share program and increase its accessibility by allowing organic certifiers to administer and directly distribute reimbursement funds.
- Restore and increase funding for the NRCS Environmental Quality Incentive Program's (EQIP) Organic Initiative and the Conservation Stewardship Program (CSP) and expand the focus of both programs on soil health and soil organic carbon sequestration
- Prioritize financial assistance to ruminant livestock operations utilizing management intensive grazing (MIG) methods.
- Support diversification and reduced concentration of processing facilities, especially in meat packing, with support for diverse local meat processing plants.
- While the NRCS has developed helpful planning tools, like RUSLE-2 and COMET, to help farmers predict the soil health and climate mitigation impacts of proposed practices, these tools are models and do not necessarily guarantee results. We need to invest in and develop tools that measure a small number of on-the-ground key performance indicators and clearly capture outcomes. Farmers will only be able to effectively evaluate and continuously adapt their practices for optimal benefit with the help of outcomes-based measurement tools. These tools must be scale-neutral and easily accessible to ensure maximum utilization by farmers across the country. This will require significant investment in research, education and extension.

4. The work that farmers, ranchers, and woodland owners do is crucial to protecting our water quality and keeping our environment healthy. Many of these existing practices, as well as new and expanded ones, can also provide a range of useful benefits to improve resiliency, including reducing flooding, stabilizing infrastructure, and sequestering carbon. Some of the most impactful steps to reducing climate change and reducing the impacts from weather extremes are things that farmers, ranchers and woodland owners are uniquely expert at. Your contributions could make a significant impact in the success of our country at averting the worst challenges. These contributions provide an opportunity for land managers to be compensated for their management practices.

Given that, we would like to hear your perspectives on these opportunities:

- What are the most promising opportunities for land managers to benefit from climate action that are based on tools, such as conservation practices, that are currently in use?**

The USDA National Organic Program, accompanying regulations, and organic label, are a robust, publicly driven effort to recognize and support agricultural systems that are proven to enhance soil health, mitigate climate change, improve on-farm resiliency, decrease environmentally harmful inputs, foster less hazardous working environments, and support healthier communities. The organic label is a success story, for farmers and eaters, and sales continue to grow at higher than average rates. While there is always room for continuous improvement, it is a successful model with a strong foundation of research, public recognition, market premiums, and farmer awareness. With organic certification, land managers have a unique opportunity to take climate action and enter into an established marketplace with increasing demand and price premiums. Congress needs to set ambitious goals to expand organic production and the USDA must highlight the environmental, economic and public health benefits of organic agriculture.

Organic systems are built holistically and require the use of practices that mitigate climate change, sequester carbon, and limit greenhouse gas emissions. Organic producers are required to “maintain or improve the natural resources of the operation, including soil and water quality” (7 CFR §205.200). USDA organic regulations broadly define natural resources as “physical, hydrological, and biological features of a production operation, including soil, water, wetlands, woodlands, and wildlife”.

Organic operations are required to utilize many of the conservation practices supported by NRCS. Congress needs to ensure NRCS increases its capacity to provide technical support to producers interested in organic production. Congress must take steps to restore and expand full funding for CSP not only to meet the already oversubscribed farmer demand for the program, but to also expand CSP's focus and utility to farmers in addressing climate adaptation and mitigation through carbon sequestration, soil health and other conservation goals that are achievable through CSP. Congress should also require NRCS to more fully support and reward active management and maintenance of current conservation efforts of those who are in the program and those who apply for CSP, as well as adoption of new activities. Currently, the program does not properly give sufficient reward to the current conservation efforts of CSP participants and applicants, especially in the application ranking process and payment structure. The goal of CSP should be to reward the best and incentivize the rest.

- **What new tools and strategies have the most potential for improving resiliency and sequestering carbon?**

Efforts to support and expand organic production are already underway and in need of increased Federal investment, support and expansion.

- **Organic Extension:** Oregon Tilth has maintained a formal partnership with Oregon State University (OSU) since 2009. Oregon Tilth has invested over \$225K in OSU, to help protect faculty positions in difficult fiscal years by allowing OSU to leverage matched dollars in this unique public-private partnership. Working closely with the OSU's Center for Small Farms and Community Food Systems we help inform the research and education agenda at OSU to meet the unique needs of the organic sector. In 2017, this [partnership helped launch an Organic Extension Program at OSU](#). Farmers need adequate outreach and technical expertise to put the scientific findings into practice. Organic Extension brings innovation from applied research into the field via high contact with farmers. This increases organic farmers' access to technical assistance, resources and expertise.
- **Organic Conservation Technical Assistance:** A success story is Oregon Tilth's ten-year, national partnership with USDA NRCS. We share the cost of an organic conservation specialist position. Oregon Tilth provides technical assistance and coordination to increase the agency's knowledge and skills for serving organic farmers. Trainings can be 1-3 days with field visits or single session webinars. We develop trainings in response to state-specific needs, coordinating with State NRCS offices, local extension, partner NGOs and farmers. Between 2011 and 2019, we gave trainings to nearly 6,000 NRCS staff in 26 states to empower them to better support organic farms seeking conservation technical and financial assistance. In that same time frame, we also worked together to offer over 70 organic specific webinars, including ones on pollinator plantings, nutrient management, and promoting biodiversity. The partnership seeks to make organic agriculture and management systems part of the language and culture within the agency. The [goal is to increase access to resources & expertise for organic farmers](#).
- **Incentivize increased adoption of organic practices that improve soil health through subsidies and/or tax credits:**
 - Such practices include, but are not limited to, cover cropping, crop rotation, use of organic fertility inputs and nutrient management practices, management intensive grazing for livestock, and conservation tillage.
 - The NRCS EQIP Organic Initiative provides technical and financial support to organic and transitioning-to-organic farmers. The NRCS approach is very practice-centric and has not been able to recognize the benefits of whole-farm organic systems through a standalone NRCS Organic Agriculture conservation practice. The development of such a practice could be the mechanism to provide the necessary support to incentivize and facilitate transition.
 - Several different countries offer models of subsidies for agri-environmental measures that are highly compatible with organic production, including Austria, Belgium, Canada, France, Japan, Mexico, South Korea, and Switzerland.
 - It's also important to note some of the practices used by organic farmers can and have been incorporated on non-organic farms. While they may not implement all the practices necessary to achieve organic certification, non-organic farms can also contribute to climate solutions by selective adoption of some organic practices.

- **What are the key barriers to adoption of these practices? Are there solutions you would recommend prioritizing?**

Organic agriculture is proven to build soil health, mitigate climate change, sequester carbon, and provide economic benefits to farmers and rural communities. This model of agriculture has received a disproportionate level of attention, research, promotion, and federal funding and yet the sector still grows, albeit not as quickly as it should. There are significant cultural barriers in place that are exacerbated by outsized influence of chemical companies on federal funding and promotion, rural communities and the agricultural sector. This needs to be addressed. Given the benefits that sustainable and organic production systems offer in terms of climate change adaptation and mitigation, greater efforts should be made to promote sustainable and organic agriculture as systems of production that can build soil health, improve nutrient cycling, and lower fossil fuel energy input. Oregon Tilth urges Congress and USDA to do more to remove barriers, strengthen support, and set ambitious goals for the adoption of sustainable and organic production systems.

In our 2017 report published with Oregon State University, [*Breaking New Ground: Farmer Perspectives on Organic Transition*](#), we surveyed 1,800 producers who had pursued, successfully and unsuccessfully to transition to organic production. Of the 600+ national respondents the top three obstacles, in order, were weed management, cost of organic certification, and the learning process. The top solutions identified were increased information, mentorship, and one-on-one technical support.

The USDA is equipped to address these barriers immediately, through the expansion of existing programs.

- Increase organic certification cost-share with a maximum reimbursement of \$2500 per certified operation per year. Streamline the cost-share program and increase its accessibility by allowing organic certifiers to administer and directly distribute reimbursement funds.
- Ensuring that financial and technical assistance for organic systems in general, and for non-organic farmers in the process of transitioning to organic systems in particular, are available through EQIP and CSP in every state and county in the nation.
- Incorporating specific CSP enhancements for organic cropping and livestock systems and including organic-specific options for more generally available enhancements such as conservation tillage, nutrient management, pest management, and invasive species control.
- Increase the capacity of the Sustainable Agriculture Research and Education (SARE) program to help farmers increase carbon sequestration and meet the specific regional challenges of a rapidly changing climate.
- Strengthen USDA program outreach efforts, such as the ATTRA Sustainable Agriculture Program, whose mission specifically serves historically underserved producers and communities to build resilience and contribute to climate solutions, including but not limited to, a robust effort to let all eligible producers know about the EQIP advance payment option.
- Authorize Long-Term Agro-Ecosystem Research (LTAR) Network and focus long-term research on climate-resilient and organic agricultural systems.
- Prioritize climate-specific research and education within existing USDA competitive grants programs.
- Fund public plant and animal breeding for climate-resiliency and organic management systems.

- **What challenges do you see in the balance of food and fiber production with the incorporation of additional resiliency and carbon sequestration activities? Are there tools or strategies that could help reduce the difficulty of these challenges?**

The framing of this question reflects and reveals a systemic challenge facing U.S. agriculture: presenting agricultural productivity in opposition to practices that build resiliency and soil health (which increases carbon sequestration). This cannot be presented as an “either/or” option. Instead, we must adopt a “both/and” paradigm and approach. While agriculture’s so-called “Green Revolution” resulted in increased yields per acre, this paradigm accelerated soil erosion and decomposition of soil organic carbon into carbon dioxide; and maximum-yield research led to heavier applications of nitrogen fertilizer and concomitant spikes in nitrous oxide emissions from cropland soils. The USDA’s recent request for stakeholder input on the USDA Research, Education, and Economics mission area’s Agriculture Innovations Agenda for 2020 - 2050 (AIA) continues to reflect this paradigm, calling for a 40% increase in US agricultural production during the next 30 years. While the AIA simultaneously aims to cut US agriculture’s environmental and climate “footprint” by half, today’s farmers often face tradeoffs between maximum production and optimum conservation, soil health, and carbon sequestration.

Paradoxically, while hunger and food insecurity remain major national and global problems, overproduction of corn, soybean, beef, dairy, and other commodities periodically lead to market gluts, depressed prices that can be ruinous to farmers, mass-production of low-nutritional-value food products (e.g., high fructose corn syrup), and during market disruptions, such as those caused by COVID-19, dumping of milk and euthanizing of meat animals. Taking all these considerations into account, U.S. agriculture needs to move from a paradigm of *maximum production* to one of *optimum production* in balance with practices that enhance system resilience, resource protection, soil restoration, carbon sequestration, and greenhouse gas mitigation. Key strategies include decentralization of food systems and diversification of farm and ranch ecosystems. Increased emphasis on local and regional food systems with farmers serving their communities through direct markets and short, regional supply chains that build local economic and social capital will greatly increase food security and community capacity to withstand the multiple impacts of crises such as the current pandemic, as well as climate change itself. More diversified cropping systems and crop-livestock integration improve the resilience of individual farms to market fluctuations, adverse weather events, and other stresses. In addition, diversified farms serving local and regional customers support human health and community resilience through more diverse, balanced diets and improved access to fresh healthful food.

In contrast, a highly concentrated and vertically integrated food system that emphasizes highly processed foods based on a few commodities not only poses human health risks but is also itself more vulnerable to crop failures resulting from extreme weather, pest and disease outbreaks, and other climate change impacts. An excellent case study of highly-concentrated food production is our current reliance on mega-sized concentrated animal feeding operations (CAFOs) as an integral part of the livestock product supply chain in the U.S. CAFOs are currently the source of the majority of meat, dairy, and eggs consumed across the nation, and they generally rely on large-scale row crop grain production using synthetic fertilizers and pesticides and often store animal waste in lagoons and other systems that generate additional greenhouse gas emissions. Currently, some USDA programs support CAFOs with taxpayer dollars. Oregon Tilth recommends moving away from a livestock production system that has massive greenhouse gas and water pollution impacts in favor of well-managed grazing systems, especially rotational grazing systems that sequester considerable carbon while building soil, forage, and livestock health.

Another major challenge to continued adoption of practices that sequester carbon and reduce greenhouse gas emissions is the continued loss of farmland. Losing farmland to non-agricultural uses not only hinders our

ability to store carbon in our soils, it also poses a threat to our food security in the long-term. Oregon Tilth urges Congress to protect one of our most valuable natural resources and one of the best tools we have to sequester carbon and build resilience in food and farming: *our soil*.

Tools and strategies to overcome these challenges include:

- Support climate-friendly, organic livestock production systems and end subsidies for concentrated animal feeding operations (CAFOs).
 - Adopt a national policy to support management-intensive rotational grazing and other advanced grazing systems, including support for transition to grazing.
 - Rigorously enforce Sodsaver.
 - Eliminate conversion of agricultural land to development, as well as conversion of grassland to cropping in the United States by 2040.
 - Strengthen conservation compliance to incorporate soil health.
 - Designate mandatory spending for conservation compliance technical assistance and enforcement, with a focus on ensuring effective compliance with soil erosion prevention measures.
 - Enact legislative measures requiring adoption of conservation compliance plans that include additional measures (such as conservation tillage combined with cover cropping) to increase soil carbon levels and measures (such as nutrient management planning and integrated pest management) to reduce the inputs of synthetic nitrogen and pesticides, and to minimize nitrous oxide emissions from fertilized soils.
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- **What types of recognition, certification, compensation, or other acknowledgement would be most useful to promote the use of conservation practices that are particularly effective at reducing climate change?**

The USDA National Organic Program is the most widely adopted, market-recognized certification program that requires agricultural practices which have been proven to effectively mitigate climate change. As noted in Question 4 above, organic certification is a success story that can and should be built upon. Currently, USDA can't highlight the environmental, economic and public health benefits of organic agriculture in contrast to non-organic. While the EU sets ambitious goals for 25% organic production by 2030, the U.S. is unwilling to act. Congress and the USDA must be bold and set national goals for organic acreage transition.

Resilience in agricultural systems is a function of the health of the entire agricultural ecosystem and climate change strategies must therefore focus on the whole system, rather than piecemeal (practice-centric) approaches. USDA organic regulations require a whole-system lens and comprehensive approach to natural resource management. Climate change research, conservation incentive programs, and federal commodity and crop insurance should focus on organic whole-farm systems. This includes a shift from thinking of specific practices, the structure for many NRCS programs, to thinking about sustainable systems, like organic. Systems are inherently difficult to control, measure, and standardized but must be recognized for their overall benefits and contributions.

We also need to reform USDA commodity and crop insurance programs with the long-term goal of reorienting our farm safety net system from overproduction, specialization, and environmental harm to a new safety net that puts farmers and climate-smart agriculture first, supports diversified operations and a rational balance among production, resilience, and stewardship of climate, soil, water, and other resources.

5. What technical assistance is most important for agricultural producers in your region? Who is best suited to deliver technical assistance? What additional tools or resources would make it possible to best tailor and deploy these strategies in your area?

As documented in our report on organic transition, [Breaking New Ground](#), farmers are most likely to adopt new practices by learning from other farmers. If other farmers are successfully implementing new practices, then their farmer neighbors are more likely to see the practice or system as practical and profitable. Technical assistance providers should incorporate farmer innovators whenever possible. This is especially true for measures to mitigate and prepare for climate change, since these strategies are largely based on recent science, and commonly require site-specific selection and implementation of a suite of multiple, complementary practices. Few priorities are more urgent than providing producers and rural communities with the practical tools and know-how they need to build resilience to the specific impacts of climate change in their locale.

For example, while research and rancher experience have abundantly validated the carbon sequestration and other benefits of management-intensive rotational grazing (MIG) systems, widespread adoption has been thwarted, due to a large degree by the steep learning curve in making a transition from existing practices to MIG, and in adapting the general MIG concept to a specific ranch in its particular locale, climate, soils, and scale of operation. In addition to the new CSP supplemental payment for MIG under the 2018 Farm Bill, livestock producers need technical support in making this transition successfully. Similar constraints apply to adoption of whole farm conservation strategies in organic, agro-ecological, and other cropping systems. Thus, it is essential that Congress create a special technical assistance initiative for climate mitigation/adaptation.

Congress should set aside one percent of all farm bill conservation funding as a dedicated fund for a major technical assistance initiative that involves NRCS, third party providers, non-profit organizations (including nonprofit organic certifiers), Land Grant Universities and Cooperative Extension on an effort to increase adoption rates of the most critical conservation practices and activities for soil health and greenhouse gas emission reduction. Such technical assistance should focus on soil health principles and practices, carbon sequestration in soil/biomass, greenhouse gas-mitigating nutrient management strategies, and farming systems that further climate mitigation goals, including integrated organic and sustainable production systems, crop diversification, crop-livestock integration, agroforestry, silvopasture, and perennial conservation buffers, advanced grazing management. Additionally, Congress should ensure that targeted technical assistance is available to underserved farmers – including beginning, limited resource, small-scale, and socially disadvantaged farmers, such as black, indigenous and people of color communities.

6. What technical assistance is most important for rural communities in your region?

Our experience in fields across the country, paired with what we learned through the [Breaking New Ground](#) survey and report, resoundingly tells us that one-on-one technical support is critically needed. This work is expensive and requires Congress to rebuild the infrastructure to provide it. Historically, USDA field staff and extension agents were the primary, unbiased, technical resource for our nation's farmers. In the past decades, their presence in our fields has been largely replaced by salesmen and private companies. The 'most climate-friendly' agriculture systems do not rely on expensive inputs. To transition our systems to those that will mitigate climate change and build resiliency, we need NRCS and Extension to support and encourage organic practices and technical information. Congress needs to reinvest in local, public, agricultural support infrastructure that can cater programming and assistance to local farmers' needs.

7. A wide range of solutions have been proposed to slow climate change, and there are additional strategies that could be developed. What approaches to policy and action to reduce the severity of climate change and the impacts of severe weather would you be most interested in seeing put in place? What do you see as the best way to accomplish action as quickly as possible?

Some in the agricultural sector are promoting the use of voluntary carbon markets, which are privately-run schemes that pay farmers for carbon sequestered in their soils to generate carbon credits. This approach is problematic for several reasons. First, a carbon market credit system requires rigorous accounting and verification protocols that are not well-suited for the complexity, diversity and variability of cropping systems and conditions across the country. Currently, the tools to measure soil carbon to the degree of accuracy and reliability that a credible market would require do not exist. Furthermore, since voluntary carbon markets do not require farmers to engage in conservation activities permanently, carbon credits cannot serve as a permanent offset for emissions elsewhere. Carbon markets reflect a framework incentivizing false solutions to climate change that benefits private companies over farmers. There are better approaches for incentivizing farmers to adopt practices that boost resilience and sequester carbon, such as public investments in proven conservation and third-party organic certification programs.

Oregon Tilth's comments and recommendations reflect our experience working with thousands of farmers across the United States. They reflect a suite of strategies designed to serve the following topline goals and outcomes:

- Suspension of funding and support of unhealthy and low resilience agricultural systems.
- Creation of an ambitious national goal for increased organic acreage.
- Substantial investment in research, education and extension within the Land Grant University system to support and promote the adoption of climate-friendly, organic and holistic management practices.
- Creation of a special conservation technical assistance initiative for climate mitigation/adaptation, with a focus on organic practices.
- Full recognition and associated compensation of farmers, ranchers and other land managers as leading practitioners of carbon sequestration.

Our recommendations are scale- and commodity- neutral and represent immediate next steps that Congress and USDA can take to address the climate crisis. These efforts will not be successful without comprehensive climate legislation. This must include clear goals around carbon neutrality, a timeframe, and investments to support large-scale adoption of climate friendly, organic and holistic farming practices, which we've extensively covered in the above responses.

It's time we take bold, decisive action to ensure U.S. agriculture not only survives in the face of climate change, but thrives via the adoption of a new paradigm that emphasizes holistic management systems that optimize production within the finite constraints of natural resources while protecting the health of people and the planet, together. It's time to carefully consider what lessons we've learned from the shortcomings and unintended consequences of 20th century food production paradigms and apply those lessons to rebuild a better, brighter food future.

Thanks in advance for your consideration.



Chris Schreiner
Executive Director



Sarah Brown
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