

**Testimony of Kara Brewer Boyd**  
**President, Association of American Indian Farmers (AAIF)**  
**Submitted to the House Oversight and Reform Committee**

**“Fueling the Climate Crisis: Examining Big Oil’s Prices, Profits, and Pledges”**

Dear Honorable Chairwoman Carolyn B. Maloney; Chairman Ro Khanna, Subcommittee on the Environment; Ranking Members and Committee Members. Thank you for the invitation. It is truly an honor to address your committee.

I am Kara Brewer Boyd, Founder and President of the Association of American Indian Farmers (AAIF).<sup>1</sup> The AAIF has over 3,500 members across the United States. Our membership consists of full-time/part-time farmers and ranchers, land and timber owners and many concerned citizens. I am a regenerative farmer and rancher, maintaining about 1,500 acres in Southside, Virginia, where we grow corn, wheat, soybeans, and hemp along with summer vegetables. Our livestock operation consists of beef cattle, dairy and meat goats, and hogs. Aquaculture and poultry are also integrated into our farm operation.

Due to increasing extreme weather, the COVID-19 pandemic, and the war in Ukraine, we are currently in a farm crisis which may lead to a food crisis in the very near future. Farmers already bear the brunt of land degradation as well as the extreme weather events brought on by climate change. The 40 year record high costs of agricultural inputs along with the devastating economic impacts of the pandemic and war have put additional burdens on America’s farmers, ranchers and food supply as we are facing farm foreclosures, significant crop damages and livestock losses due to excessive drought and heat.

Being an Indigenous person here in North America, I highly value food security and resilience, as we've always grown and produced food to feed our families, tribal communities and others. Indigenous agricultural practices help to reduce the burning of fossil fuels and address soil degradation as well as conserve natural resources which include no-till, companion planting, composting, livestock integration, crop rotations and pollinating bufferstrips.

Indigenous people rely on predictable weather patterns and planting seasons to dictate when to plant and harvest our crops as well as breeding, buying and selling livestock for pasture/grassland management. Being a good steward of the land includes making decisions with forethought of the next seven generations - remember to take some, leave some, and there will always be some for future generations.

Most agricultural technologies and models have been developed under an assumption of a stable climate. However, current climate change data affirms and poses severe challenges to our livelihood and survival.

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<sup>1</sup> Association of American Indian Farmers (AAIF) <https://www.nativeamericanfarmers.org/our-mission>

## **Climate Change: Our current farm crisis**

**Today, the foundation of the resource abundance that we have relied on and nurtured for millennia - our soil - is eroding beneath our feet and climate change is only exacerbating this issue.**

It is imperative that we address the fact that the current state of our soils is dire. We are losing [5.6 tons of topsoil per acre](#) on our agricultural lands every year,<sup>2</sup> while the average debt held by farmers has increased by 4.1% per year since 1990.<sup>3</sup> More than [50 percent America's topsoil has eroded away](#).<sup>4</sup> Simply, most of our soils are not functioning as they are meant to, resulting in countless crises including: diminished farmer livelihood, reduced resilience, water scarcity, food scarcity, and biodiversity loss.

Because degraded soils do not properly absorb and retain water, the land becomes more susceptible to extreme flooding and drought conditions increased by climate change. Soils that lack the ability to retain water can also cause higher water bills, increased heat island effects, and critically reduced rates of groundwater recharge that lead to dried up springs and aquifers. Degraded soils also require increased fertilizer and pesticide inputs to maintain yield and protect weak plants, creating a huge financial burden for farmers and rural communities across the nation. This is further exacerbated by the current skyrocketing costs of these inputs.

Increased fuel prices to \$5-6 gallon (up from \$2-3 gallon last year), fertilizer costs of \$1,200 (up from \$400 last year) per ton or over 300% since early 2021<sup>5</sup> and over 400% since 2020.<sup>6</sup> On top of these skyrocketing input costs, extreme heat and drought will have a devastating effect on this year's profitability and yields. I have seen so many farmers who simply don't have the funds to purchase diesel and the conventional fertilizers they have in the past, and they will see lower yields and decreased income this year. Farmers are being forced to decide between planting less acres or selling out to keep from going into foreclosure, and lower supplies of commodities will mean increased prices for consumers.

It is therefore imperative that we all work together (especially those most responsible for contributing to climate change) to build back healthy soils to help farmers reduce input costs and making our land more resilient to extreme weather events all while sequestering vast amounts of carbon (after all healthy soil is literally built from carbon that is currently in the atmosphere). Our national security and prosperity of this country depend on it.

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<sup>2</sup> Lawton, Kurt, "Economics of soil loss", Farm Progress, March 13, 2017.  
<https://www.farmprogress.com/soil-health/economics-soil-loss>

<sup>3</sup> Harris, Tyler, "Report: Average farm debt rises over \$1.3 million", Farm Progress, May 25, 2018.  
<https://www.farmprogress.com/management/report-average-farm-debt-rises-over-13-million>

<sup>4</sup> Hopkinson, Jenny, "Can American soil be brought back to life?", Politico, September 13, 2017  
<https://www.politico.com/agenda/story/2017/09/13/soil-health-agriculture-trend-usda-000513/>

<sup>5</sup> Campbell, Lindsay, "Farmers Struggle to Keep Up With the Rising Costs of Fertilizer", March 2, 2022.  
<https://modernfarmer.com/2022/03/fertilizer-prices>

<sup>6</sup> Smith, Elliot, "Fertilizer prices are at record highs. Here's what that means for the global economy", CNBC, March 22, 2022.

<https://www.cnbc.com/2022/03/22/fertilizer-prices-are-at-record-highs-heres-what-that-means.html>

## **Regenerative Agriculture is a critical solution**

Regenerative agriculture helps to reduce the demand for burning of diesel in our farming operation and offers a comprehensive solution to the aforementioned challenges caused by soil degradation. A system of agriculture that involves restorative farming and grazing practices that rebuild soil and soil function, the demonstrated benefits of regenerative agriculture are many: better farmer livelihoods through increased fertility and input costs reductions<sup>7,8</sup>; increased resilience to extreme weather events due to better water absorption and retention rates that reduce floods and drought effects<sup>9</sup>; more water security due to increased infiltration<sup>10</sup>; restored small water cycles; carbon sequestration through increased soil organic matter; and restored biodiversity, from soil microbes to macrofauna and up.

To ensure local and national security in the face of domestic and global disruptions, we must make the effort to combat climate change, reduce our dependence on fossil fuels and rebuild our soils. The promise of regenerative agriculture is that it works for all sizes and shapes of agriculture. From 7,000 acres of row crops, to a 10 acre market garden, to 50,000 acres of rangeland, regenerative agriculture is a critical solution to mitigating climate change while reducing our carbon emissions.

## **Big Oil can support regenerative agriculture**

Big Oil's profits and pledges can help farmers deliver environmental benefits like improved air and water quality, and reduced erosion and emissions. Investing in renewable energy projects, initiatives and emerging markets such as industrial hemp to rebuild soil health, improve ecological functions, reduce emissions and sequester carbon while allowing the participation of small-scale and pasture-based livestock producers.

Due to increasing extreme weather, the COVID-19 pandemic, and the war in Ukraine, we are currently in a farm crisis which may lead to a food crisis in the very near future. Farmers already bear the brunt of land degradation and extreme weather events brought on by climate change. The 40 year record high costs of agricultural inputs along with the devastating economic impacts of the pandemic and war have put additional burdens on America's farmers, ranchers and food supply as we are facing farm foreclosures, significant crop damages and livestock losses due to excessive drought and heat.

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<sup>7</sup> No-Till Farmer, "Regenerative Practices Yield Benefits Early, Increase with Time," March 10, 2021, <https://www.no-tillfarmer.com/articles/10448-regenerative-practices-yield-benefits-early-increase-with-time>

<sup>8</sup> American Farmland Trust, "Quantifying Economic and Environmental Benefits of Soil Health," <https://farmland.org/project/quantifying-economic-and-environmental-benefits-of-soil-health/>

<sup>9</sup> Elizabeth Creech, "Soil Health Practices for Mitigating Natural Disasters", USDA-Natural Resources Conservation Service - Newsroom - Features, 2018, <https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/features/?cid=nrcseprd1384891>

<sup>10</sup> Union of Concerned Scientists, "Turning Soils into Sponges: How Farmers Can Fight Floods and Droughts", August 2017, <https://www.ucsusa.org/resources/turning-soils-sponges>

Being an Indigenous person here in North America, I highly value food security and resilience, as we've always grown and produced food to feed our families, tribal communities and others. Indigenous agricultural practices help to reduce the burning of fossil fuels as well as conserve natural resources which include no-till, companion planting, composting, livestock integration, crop rotations and polinating bufferstrips.some, and there will always be some for future generations.

Most agricultural technologies and models have been developed under an assumption of a stable climate. However, current data affirms climate change poses severe challenges to our livelihood and survival.

**It is my strong recommendation that Big Oil companies should contribute to a “Climate” Stewardship Fund** that primarily rewards good climate stewards and prioritizes support for small-scale farmers. There exists a link between poverty and social vulnerability on soil degradation and climate change. “The impacts of climate change that we are feeling today, from extreme heat to flooding to severe storms, are expected to get worse, and people least able to prepare and cope are disproportionately exposed,” said EPA Administrator Michael S. Regan<sup>11</sup> Up to 90% of funds should be dedicated to practices that rebuild soil health and ecological function, reduce emissions or sequester carbon, with a 75% set-aside for historically underserved and limited resource farms to implement regenerative agriculture practices so that they may fully integrate a holistic climate stewardship program. Education and grants for necessary equipment are absolutely essential to the successful transition to regenerative management for those farmers and communities most impacted by climate change.

Goals and objectives of the fund will (1) Restoration of degraded and desertified soils, (2) Assisting marginal agricultural areas to adopt and implement recommended regenerative agricultural management practices, (4) Monitor carbon sequestration and off-set anthropogenic emissions, (5) Improve the environment, and (6) Enhance and sustain agronomic productivity.

To share a personal example, over a year ago, I met with my local USDA-NRCS District Conservationist regarding integrating our livestock due to poor fertility on our low grounds which border 2 miles of the Roanoke River. The quickest, cheapest, and easiest way for me to improve the fertility of my soil would be to apply animal manure and implement regenerative grazing methods, but I was informed that I would not be approved if I applied for perimeter fencing because I didn't have my cattle on the land. The tattered and nearly non-existent perimeter fencing on our farm needed to be replaced because it was installed more than 50 years earlier when it was a dairy farm; it would be irresponsible and detrimental to place my cattle in the low grounds without secure fencing to protect them from coyotes and prevent them from wading into the river or running away. **Our cost for 25 acres is roughly \$25,000**, which equates to \$1,000 per acre, which is more than we are able to pay out-of-pocket. Perimeter fencing, along with polywire for adaptive paddock sizing, is a critical way farmers and ranchers could use climate stewardship funding to implement practices that rebuild soil and fertility, but this is currently not allowed due to arbitrary restrictions in agriculture policy that create barriers to the adoption and implementation of regenerative practices at USDA.

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<sup>11</sup> Cover Crops and CAFOs: EQIP in FY 2019 and FY 2020, NSAC, October 6 2021.  
<https://sustainableagriculture.net/blog/cover-crops-and-cafos-eqip-in-fy-2019-and-fy-2020/>

In addition to raising livestock, I am a “cash and sell” farmer, meaning I do not store my crops. I harvest and sell my soybean crops to the Smithfield Foods company, which operates the nearest grain elevator, located in Petersburg, Virginia. This requires trucking my harvest 140 miles roundtrip in 500 bushel capacity grain trucks, at an immense cost not to mention the poor fuel efficiency and carbon emissions from our 1970 1 ton grain truck.

Many farmers are forced to operate this way due to a critical lack of local and regional processing infrastructure, particularly for specialty crops and livestock. At the same time, small-scale and regenerative farmers often face limited options for diversifying their operations and participating in local markets. A farmer with the best intentions to transition to more regenerative practices that will help solve the climate crises by integrating managed livestock grazing would struggle to make that transition economically feasible if there is no local processing or infrastructure thus forcing transportation to distant buying stations.

There is currently not enough local infrastructure to help farmers with the transition to climate-smart, regenerative agriculture. Without access to local processing, regenerative farmers and rural America don't stand a fighting chance. Consolidation and stagnation of production have ripple effects that are leading to less dollars circulating in local economies, and the hollowing out of rural America forcing more tractor trailers on the roadways to transport agriculture products to consolidated regional and national monopoly locations.

As you can tell, these crises are bigger than any one farm - they impact us all.

### **Big Oil can support equity in farming**

As an enrolled member of the Lumbee Tribe of NC, I was raised in a rural tribal community that thrived on an agricultural economy. Over the years, I have seen the number of catastrophic storms affecting North Carolina increase from 1 every few years to almost every year. My mother Geneva Brewer (age 79) was taught by her high school teachers that the east coast would begin to warm and turn subtropical like Florida. She shared this belief with me and I have shared it with my daughter Tequorra Green (age 30) and granddaughter Tori Green (age 5). I can solemnly attest that over my life span, I have seen the visual effects of global warming not only affect our planting and harvest seasons but also the need for irrigation and loss of crops due to flooding and excessive heat in a calendar year.

As a highly vocal social justice advocate for fair treatment of all farmers and socially disadvantaged, underserved, minority and small-scale farmers in particular, USDA aka the People's Agency or the Last Plantation as a system can be a nightmare to navigate. It took over a year after I filed a Noninsured Crop Disaster Assistance Program (NAP) insurance loss claim for assistance and was told to destroy my crop, to be informed I had been denied based on the 20 year county rain average by the local Mecklenburg County, VA FSA County Committee. The county rain average is just that - an average - and should not be the sole basis for denying a farmers' loss claim due to extreme heat and drought when there is documented evidence of record temps during that period.

For me personally, I am still deeply in the RED. Please understand my level of distress as the NAP program provides financial assistance to producers of non-insurable crops when low yields, loss of inventory, or prevented planting occur due to natural disasters. On our farm, where we have utilized cover crops for example, we have witnessed that resilience in real time. It works, protecting the soil with living plants that are keeping the soil alive and aggregated does help reduce erosion very quickly, and it also improves fertility. We are wanting to go even further with these practices because we see what is possible on farms across this country who are well ahead of us in these efforts.

The rapid widespread adoption of regenerative farming requires all farmers and that means we must continue to push for more equity, support, and inclusion in all programs (especially those regarding climate change, soil health and regenerative agriculture) for all BIPOC and historically underserved producers. For specific agriculture policy recommendations on how this may be achieved, please review [Priority 2 of the Regenerate America policy platform](#), which I helped develop.<sup>12</sup>

I continue to be outspoken in calling for justice and corrective action on our plight. My husband, John W. Boyd Jr., Founder and President of the National Black Farmers Association, has continued to plead our case on cable television networks and in media outlets such as the *NewsNation* article that was published on May 15, 2022 under the headline: “[We’re in a crisis: Farmers sound alarm over coming food shortage](#)”.<sup>13</sup>

Most of our AAIF and NBFA members are in no financial condition to sit out a whole farming season with NO INCOME when they lose crops or livestock due to effects of climate change in the form of extreme weather be it intense heat, cold, storms, drought, flooding, wind, etc. We need financial and technical support in a timely way to keep farmers farming.

Madam. Chairwoman, you and your committee members have an opportunity to assure Big Oil Prices, Profits, and Pledges fuel projects and initiatives that mitigate climate change and assure they meet their net zero goals as established. You can push for the development of a farm Climate Stewardship Fund to provide clean energy alternatives in the agricultural industry for many generations to come. To create a regenerative agriculture system inclusive of biofuels, it must start with education and a “change in how we see things.” We must educate and provide alternative fuel equipment to farmers and ranchers to further regenerative principles. But it’s not just the farmers, this is systemic. The crop advisors, the field agents, and all of society, need more education on the ecological approach and how and why regeneration of the land can and must happen to mitigate climate change. That is why I feel that the House Oversight Committee should be aware of these profound problems and their root cause as well as the solution and opportunity that lies in allowing Big Oil’s Prices, Profits, and Pledges to help regenerate the soil beneath our feet. From farmers, to soil scientists, to leading environmentalists, to government officials, you hear a resounding phrase, “I didn’t know”. This is an opportunity for all of us to learn.

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<sup>12</sup> Priority 2: Ensure Equitable Opportunity & Access to All USDA, Regenerate America, <https://regenerateamerica.com/about/>

<sup>13</sup> Bullock, J.J., “‘We’re in a crisis’: Farmers sound alarm over coming food shortage”, ABC4 New, <https://www.abc4.com/news/top-stories/were-in-a-crisis-farmers-sound-alarm-over-coming-food-shortage/>

While many of these regenerative agriculture concepts are rooted in Indigenous knowledge, they are being relearned and shaped by our current context and as new data emerges that further explains how and why these systems work to regenerate land and sequester carbon. We are living in a time like no other, and we need science, technology, Indigenous wisdom, and holistic thinking working together to move us toward saving our planet, so affectionately known as Mother Earth.

Building back healthy soil is the most cost-effective regional, state, and national investment to address soil degradation which is directly impacted by Big Oils extractive practices and the burning of fossil fuels. Indigenous peoples the world over are disproportionately impacted by resource extraction. We feel that it is absolutely *vital* that the Indigenous voices from the communities most affected—communities that have undergone forced relocation and cultural genocide, and are standing as the *very blockade* to continued mining and installation of new pipelines through our ancestral homelands and territories are consulted and compensated.

From risk mitigation to farmer prosperity, to human health, to carbon sequestration, it is a win for all, and this committee, Madam Chairwoman, can help push soil regeneration forward as a critical, comprehensive solution to the climate crisis.

Thank you again for this opportunity, and I look forward to your questions.

Kara Brewer Boyd  
President, Association of American Indian Farmers (AAIF)