



## National Bison Association

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November 1, 2021

Robert Ibarra,  
Commodity Credit Corporation  
U.S. Department of Agriculture  
1400 Independence Ave., SW  
Washington, D.C.

RE: Docket No. USDA-2021-0010  
Submitted via [www.regulations.gov](http://www.regulations.gov)

Dear Mr. Ibarra and All,

I am Dave Carter, Executive Director of the National Bison Association, a nonprofit organization representing 1,200 ranchers, processors and marketers in 49 states. I offer these comments in response to the September 30, 2021, Federal Register Notice requesting information regarding the development of a Climate-Smart Agriculture and Forestry Partnership Program.

These comments will address—at least in part—all of the questions posed in the Federal Register Notice.

The National Bison Association operates under the following vision statement:

*The National Bison Association will bring together all stakeholders to restore one million bison to North America in a manner that respects the integrity of the species, strengthens the economic viability of producers and rural communities, sustains the cultural health Native Americans, and contributes to regenerative health of ecosystems.*

Over the past two decades the National Bison Association has worked to develop programs and information to encourage producers to manage their herds in a manner that helps restore and improve healthy grassland ecosystems. In 2019, our association's Conservation Committee formally launched a [Conservation Management Plan](#) (CMP), which is a voluntary program that allows participants to monitor their practices, and to implement steps to improve the health of the animals, the land, and the people involved in managing the operation. The CMP offers an established platform on which we can work with USDA to successfully implement a partnership program.

Collaboration and a commitment to regenerative health of ecosystems are at the core of the NBA vision statement. Our focus on collaboration is evident in several partnerships the National Bison Association maintains. As these comments are being written, the National Bison Association, the Wildlife Conservation Society and the InterTribal Buffalo Council have submitted a joint request to the United States Senate to designate November 6<sup>th</sup> as National Bison Association. These three organizations have collaborated on this effort annually for the past decade.

Additionally, the National Bison Association and the InterTribal Buffalo Council have operated through a Memorandum of Understanding since 2014.

In 2017, the National Bison Association, National Buffalo Foundation and South Dakota State University initiated a joint effort that resulted in the formal establishment of the Center of Excellence in Bison Studies at SDSU in September 2020. Among the eight competitive grant projects funded during the Center's initial year are:

- *Comparison of ground nesting bee (Apoidea) abundance and diversity between bison wallows and adjacent prairie*, USDA ARS, \$14,462 over two years.
- *Investigating the ruminal metagenome of grass and forage-fed bison to uncover metabolic activities that impact the efficiency of plant fiber utilization*, South Dakota State University, \$77,139 over three years.
- *Bison on the move: how translocations affect bison production across space, time, and organization*, South Dakota State University, \$195,000 over three years.
- *Habitat use and avoidance in a large, patchy landscape by American plains bison: implications for management and conservation of the species*, University of Nebraska at Kearney, \$192,469 over three years; and
- *A Baseline Inventory Assessment of Biological and Cultural Impacts of Buffalo Restoration in Indian Country*, InterTribal Buffalo Council, \$35,000 over one year.

More recently, the nation's largest bison rancher, Ted Turner, launched the [Turner Institute of Ecoagriculture](#), as a 501(c)(3) public foundation with the mission "to research, develop, practice, and disseminate sustainable strategies and techniques for conserving ecosystems, agriculture, and rural communities." The Institute is developing a formal research agreement with the Center of Excellence for Bison Studies. That agreement would include the fiscal and physical sharing of faculty, staff, office laboratory space, graduate students, reaching and extension, publication, academic and research advisory roles, and field stations for undergraduate and graduate studies.

Any Partnership Program developed to support and reward Climate-Smart Agriculture must include a role for bison, and bison producers.

The reasons are simple:

- Bison played a pivotal role in shaping the North American grassland ecosystems over thousands of years; and
- The National Bison Association and its collaborating organizations have both the commitment and the ability to administer a CSAFP for bison.

The complex quiltwork of grassland ecosystems historically covered between 20 percent and 40 percent of the North American landmass, depending upon how those grasslands were defined.<sup>1,2</sup> Grassland ecosystems around the world evolved over thousands of years under the influence of periodic droughts, fire and grazing animals.<sup>3</sup> In North America, bison were the keystone grazers that sculpted these grassland ecosystems.

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<sup>1</sup> Nunez, C (2019) Grasslands, explained, National Geographic, Washington, D.C. March 15.

<https://www.nationalgeographic.com/environment/article/grasslands>

<sup>2</sup> Andres, C (2019) Grasslands: A Lot More than Just Flyover Country, World Wildlife Fund, February 5.

<https://www.nathab.com/blog/grasslands-a-lot-more-than-just-flyover-country/#:~:text=They%20are%20the%20America%20of,of%20the%20original%20grasslands%20remain.>

<sup>3</sup> Anderson, R (2006) *Evolution and origin of the Central Grassland of North America: climate, fire and mammalian grazers*, The Journal of the Torrey Botanical Society, October 1. [https://bioone.org/journals/the-journal-of-the-torrey-botanical-society/volume-133/issue-4/1095-5674\(2006\)133%5b626%3aEAOOTC%5d2.0.CO%3b2/Evolution-and-origin-of-the-Central-Grassland-of-North-America/10.3159/1095-5674\(2006\)133\[626:EAOOTC\]2.0.CO;2.full](https://bioone.org/journals/the-journal-of-the-torrey-botanical-society/volume-133/issue-4/1095-5674(2006)133%5b626%3aEAOOTC%5d2.0.CO%3b2/Evolution-and-origin-of-the-Central-Grassland-of-North-America/10.3159/1095-5674(2006)133[626:EAOOTC]2.0.CO;2.full)

Grasslands are inherently effective carbon traps with up to 343 billion metric tons of organic carbon stored to a depth of one meter. These grasslands sequester large amounts of soil organic carbon (SOC) because of a high belowground carbon allocation, root turnover, and rhizodeposition.<sup>4</sup>

In a sense, grasslands are the equivalent of the North American rainforest. In 2018 the University of California at Davis released a study entitled *Grasslands May be More Reliable Carbon Sink than Trees in California*. Because significant levels of the carbon captured by trees is largely stored aboveground, increasing instances of wildfires have turned those forests from carbon sinks to carbon sources. Grasslands, meanwhile, store higher levels of carbon belowground. That carbon remains sequestered even during periods of fire.<sup>5</sup>

As noted above, grasslands cannot thrive in a vacuum. Interaction with grazing ungulates is vital to maintaining the health of those ecosystems. Bison are equipped by nature to serve as the most efficient “gardeners” of the grasslands.

With that in mind, I offer the following input to the questions posed in the federal Register Notice:

**1. How would existing private sector and state compliance markets for carbon offsets be impacted from the potential federal program?**

If properly implemented, the Partnership Program can support and strengthen the existing compliance markets for carbon offsets.

First, the incentives currently offered are too often inadequate to garner widespread participation. Federal resources could be utilized to expand the incentives that qualified private/state markets can offer to participants.

Second, the Partnership Program can ensure the integrity of these existing programs by establishing a certification program for accredited programs. The landscape for measuring and verifying carbon sequestration in soils resembles the variation in organic certification practices prior to the implementation of the National Organic Standards in 2002. Like the National Organic Standards, USDA should implement a system of Accredited Carbon Sequestration Certifiers, who would adhere to uniform standards and practices. Any producer wanting to voluntarily participate in a market-based carbon credit program would be required to use one of these accredited certifiers.

**2. In order to expand markets, what should the scope of the Climate-Smart Agriculture and Forestry Program be, including in terms of geography, scale, project focus, and project activities supported?**

The program needs to be comprehensive. Although bison ranching represents a small segment of American agriculture, bison production occurs nationwide, just as the animal historically ranged in most regions of the United States.

Project focus in bison should include:

- a. Carbon sequestration – practices that improve the ecosystem’s ability to capture and sequester carbon;

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<sup>4</sup> Lorenz, K; Lal, R (2018) Carbon Sequestration in Grassland Soils. Carbon Sequestration in Agriculture Ecosystems, pp 175-209, Springer, June 1. [https://link.springer.com/chapter/10.1007/978-3-319-92318-5\\_4](https://link.springer.com/chapter/10.1007/978-3-319-92318-5_4)

<sup>5</sup> Dass P, et al (2018) *Grasslands May Be More Reliable Carbon Sinks Than Forests in California*, Environmental Research Letters, University of California at Davis.  
[file:///C:/Users/Owner/Dropbox/My%20PC%20\(DESKTOP-SQC2V6A\)/Downloads/Grasslands may be more reliable carbon sinks than .pdf](file:///C:/Users/Owner/Dropbox/My%20PC%20(DESKTOP-SQC2V6A)/Downloads/Grasslands%20may%20be%20more%20reliable%20carbon%20sinks%20than%20.pdf)

- b. Biodiversity enhancement – supporting management practices that increase the biodiversity of grasses, forbs and wildlife within the area under management.
- c. Soil and water improvement – Practices that help build topsoil and improve the soil's ability to capture and retain moisture.

The Commodity Credit Corporation could fund programs through the Center of Excellence and the Turner Institute for Ecoagriculture to conduct research into practices that will improve carbon sequestration and reduce greenhouse gases. Additional funding could support the development of pilot programs to equip the National Bison Association and InterTribal Buffalo Council to deliver outreach and technical assistance to underserved producers.

**3. In order to expand markets, what type of CSAF project activities should be eligible for funding through the Climate-Smart Agriculture and Forestry Program?**

The National Bison Association's Conservation Management Program is designed for participants to adapt practices that will result in continuous improvement of their ecosystem, and the health of their herds. USDA's Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP) should be expanded to provide resources for producers to improve the quality of the pastures and rangelands. Practices supported should include, but not be limited to:

- a. Installation of internal fencing and watering sources (tanks or stock ponds) that will allow livestock to graze in a manner that allows for the optimal ability of plants to rest and regrow, thus improving their ability to capture carbon;
- b. Terracing and other land improvements that will slow runoff and improve the ability of soil to capture and retain moisture;
- c. Seeding pastures and rangelands with native grasses and forbs; and
- d. Installation of monitoring equipment that will accurately measure carbon sequestration;

**4. In order to expand markets, what entities should be eligible to apply for funding through the Climate-Smart Agriculture and Forestry Partnership Program?**

As noted in your Request for Information, working with producer groups to manage and administer the Programs. The National Bison Association, in cooperation with the Center of Excellence for Bison Studies and the InterTribal Buffalo Council, are well-equipped to administer this program for bison producers.

Specifically, the current Conservation Management Plan provides a framework for participating producers to inventory current management practices, to establish a plan for continuous improvement, and to be able to measure and monitor progress toward their improvement goals. The association's Conservation Committee can work with USDA to adapt the CMP to include additional elements to support climate-smart practices. And, the NBA and InterTribal Buffalo Council are best suited to provide the outreach and education to private producers and Tribal bison manager.

The Center of Excellence can readily provide vital research and technical assistance on climate smart practices. The Center is in a particularly strong position to conduct this work through its collaboration with the Turner Institute for Ecoagriculture.

Additionally, the NBA and ITBC would be equipped to administer the distribution of credits or other rewards to participating producers for climate-smart practices.

Administration of the program can be formalized through a contract between the NBA/ITBC and the USDA.

**5. In order to expand markets, what criteria should be used to evaluate the project proposals for receiving funding through the Climate-Smart Agriculture and Forestry Program?**

Specific criteria for bison and other livestock should include, but not be limited to:

- a. A measurable increase in carbon sequestered in the soil;
- b. A measurable increase in plant biodiversity; and/or
- c. A measurable decrease in runoff and erosion, adjusted to account for weather variability.

**6. In order to expand markets, which CSAF practices should be eligible for inclusion?**

In regard to grassland ecosystems, grazing management is the foundation for CSAF practices. Accordingly, supporting infrastructure improvements to enhance climate-smart grazing practices are important. As mentioned above, those practices include cross-fencing, stock ponds, reseeding, and terracing.

**7. How should ownership of GHG benefits that may be generated be managed?**

Individual ranchers and farmers will be responsible for improvements in carbon sequestration and reduction in greenhouse gases on the land they manage. Accordingly, any benefits need to accrue to those individual producers.

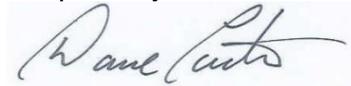
As mentioned above, the National Bison Association and InterTribal Buffalo Council can develop the programs and procedures to administer the benefits for distribution to those individual participants.

**8. How can USDA ensure that partnership projects are equitable and strive to include a wide range of producers?**

For bison, established relationships among the National Bison Association, the InterTribal Buffalo Council and the Center of Excellence will assure equitable participation in the program and allocation of benefits among private and Tribal ranchers.

We hope that these comments provide useful input as USDA develops new initiatives and incentives to promote a climate-smart agriculture and forest strategy. The National Bison Association is willing to provide any additional information or guidance regarding the information in these comments.

Respectfully submitted,



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Executive Director

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