SEALED PROPOSAL

COLORADO NATIVE SEED COMPANY PROPOSAL FOR AWEIDA AND WILLIAMSON PROPERTIES

Prepared for: City of Boulder Open Space & Mountain Parks

Prepared by: Colorado Native Seed Company

Contact Person: Robert Ukeiley 255 Mountain Meadows Road, Boulder, CO 80302 (720) 496-8568 <u>rukeiley@igc.org</u>



Southern Plains bumble bee (Bombus fraternus) photo by Jennifer Hopwood/Xerces Society

Proposal

The Colorado Native Seed Company [hereinafter "Seed Co"] proposes to use the City of Boulder Open Space and Mountain Parks [hereinafter "OSMP"] Aweida and Williamson properties to produce native, ecotypic grass and flower seeds. Grass species used will include the dominate Southern Plains short-grass prairie species of blue grama (Bouteloua gracilis) and buffalo grass (Bouteloua dactyloides). Grass species may also include switch grass (Panicum virgatum), yellow Indian grass (Sorghastrum nutans), little blue stem (Schizachyrium scoparium), western wheat (Pascopyrum smithii), and sideoats grama (Bouteloua curtipendula). Forb species will include "workhorses" of prairie ecological restoration such as hairy goldenaster (Heterotheca villosa) and Lewis flax (Linum lewisii). Forb species may also include purple prairie clover (Dalea purpurea), white prairie clover (Dalea candida), smooth blue aster (Symphyotrichum laeve), and bee balm (Monarda fistulosa) as well as some particularly "showy" species such as blanket flower (Gaillardia aristate).

Key to this proposal is that Seed Co will only use perennial plants native to Boulder County, which all of the species listed above are. We will only grow plants from ecotypic seeds. For the purpose of this proposal, we are defining ecotypic as seeds for Boulder or neighboring counties and harvested from locations that are within plus or minus a 1,000 feet of elevation of the grow site.

This means that once established the plants will require little to no inputs. We do not intend to use any pesticides or herbicides except possibly as necessary to get the plants established. Similarly we do not plan to do any tilling or significant soil disturbance except to get the plants established. We do not plan to use any fertilizers except mycorrhizal fungi supplementation if needed and beneficial. We plan to use minimal or no supplemental watering once the plants are established.

We intend to grow the plants in rows of individual species. However, if we can develop methods where it is practical to harvest and process seeds from multiple species in one row we will pursue those options to strengthen the resilience of the operation. Furthermore, if there are other benefits to interspacing different species, such as using legumes as nurse plants for other plants, we will pursue those options.

We intend to use two business models which will impact our use of the property. The first is "growing out" seeds. In this scenario, an entity such as an open space department of a government will provide us with seeds. We will grow plants from these seeds, harvest the seeds, and then send our harvest, or an agreed upon percentage of the harvest, back to the entity which provided us with the initial seeds.

The second business model is we will obtain our own ecotypic seeds, grow, harvest, and process the seeds. We will then sell the seeds. These two business models are not mutually

exclusive. Rather, both will occur on the property which will optimize our chances for business viability.

We intend to rent equipment needed to establish the native plants and buy the equipment needed to harvest the seeds. We can finance this equipment with private money. This project will likely create a few seasonal agricultural jobs during the labor-intensive planting and harvesting phases.

Seed Co's Principal Team Members

Chris Adams has worked in the horticulture industry for a decade. She has held team member and lead positions with a variety of garden and landscape maintenance operations as well as a retail native plant nursery. She has taken courses toward a horticulture degree and participated in Morris Arboretum's Honor's Project in Horticulture. She also maintains an herb and native perennial garden at her home. Chris spends 100% of her working time on horticultural endeavors.

Robert Ukeiley has nearly three decades of experience working on ecological restoration in the short grass prairie of the Great Plains. This includes co-founding the Southern Plains Land Trust, which now protects and restores 60,000 acres of short grass prairie. He has also worked on dozens of projects harvesting and processing native seeds, planting native plants, restoring stream channels, and returning ponderosa pine forests to their natural savannah state. He also has 20 years of experience running a small business which advocated for the protection of the natural world. He was recently re-appointed by the Board of County Commissioners of Boulder County to a second term on their Board of Adjustments. He is a recipient of the national Sierra Club's William O. Douglas Award which recognizes those who have made outstanding use of the legal/judicial process to achieve environmental goals, particularly those with national significance, and Wildlands Restoration Volunteers' Chainsaw Sawyer of the Year award. Robert spends approximately 90% of his working time on ecological restoration projects which includes the Seed Co.

Daniel Ziskin, PhD, was born and raised in southern New Jersey. In 1993, he received a PhD in physics from The John Hopkins University. His dissertation was on clouds and their impact on the Earth's climate. While he pursued a career at NASA in data management of satellite observations of the Earth, he also became a passionate environmentalist. In 1998 he moved to Boulder, CO to serve as the data manager for a satellite instrument called MOPITT which observes carbon monoxide in the troposphere. In 2017, his friend mentioned that Boulder was in need of an eco-funeral home. As Daniel realized that he could fulfill many of his aspirations doing this, he cofounded The Natural Funeral. This revolutionary funeral home is a trailblazer in deathcare, both in terms of ecological impact and customer choice. Daniel remains committed to finding innovative and feasible paths to a sustainable future or humans and all life on Earth. Daniel intends to devote 10% of his time to agricultural enterprises.

The principal team members are potentially eligible as Historically Underserved Producers under the beginning farmers. In addition, two of the principals are potentially eligible as limited resource farmers.

GOALS, REQUIREMENTS, AND GUIDELINES

Seed Co's proposal meets OSMP's goals for this property. Seed Co's proposal will increase the diversity of agricultural operations and uses on OSMP land by growing and harvesting native seeds on OSMP land using a row crop approach. As far as we are aware, that use does not currently exist. Seed Co will not use any genetically modified organisms.

Seed Co will maintain the fences in good condition. Because Seed Co will not place livestock on the property, the fences will be subject to less "wear and tear".

Seed Co will not use pesticides. It will only use herbicides as necessary for the initial establishment of the native plants. We will use the least toxic and least persistent herbicide which will allow for the initial establishment of the native plants.

By using native ecotypic plants, including a variety of forbs, we will support the native pollinators which evolved with the plants we are using. Because we will not be tilling or significantly disturbing the soil after the initial establishment of the native plants, we will minimize soil erosion and protect soil fertility. We will maintain the integrity of agriculturally related viewsheds. In fact, by growing some particularly "showy" flowers, we will be enhancing the viewshed.

OSMP's Agricultural Land Use Assignment Guidelines state that the primary goals of the agricultural use assignment process include integrating agricultural management practices that support priority ecological values or sensitive species. Seed Co's proposal will advance the ecological value of a diversity of native, ecotypic grasses (graminoids) and flowers (forbs). This value will be advanced on OSMP property <u>and</u> will also have the exponential benefit of being advanced on other lands in the region where Seed Co's seeds are grown. Of course, these other lands are connected to OSMP land in a myriad of ways such as animal movement, seed dispersal, pollinators, and water flow.

Seed Co's proposal will also support sensitive species including pollinators, such as bees and butterflies. Some have gone so far as to describe the challenges currently facing pollinators as an "insect apocalypse." For example, see the work of Jan Chu, who has surveyed the butterfly population on Boulder County land for nearly two decades. Her results demonstrate a steady decline of our butterfly population.

Looking at a few specific species, the Southern Plains bumblebee (Bombus fraternus), pictured below, is one of the largest bumblebees in North America. They have been recorded in Boulder County. However, throughout their range, they are half as abundant as they were historically. In January 2024, the U.S. Fish and Wildlife Service made a formal finding that giving the bee protection under the Endangered Species Act may be warranted and initiated its status review.

Multiple threats are contributing to the bee's decline. Habitat loss and degradation limit nutrition from diverse pollen and nectar sources. Pesticides reduce survival rates, harm their immune systems and hinder reproduction. They provide essential pollination service to native and decorative plants and to pollinator-dependent crops. To survive, the bumblebees need open areas with a variety of flowering plants that are not poisoned by pesticides, heavily grazed, or repeatedly plowed over. The Seed Co's proposal will provide this.

Of course, Southern Plains bumble bee is just one species. The Seed Co's proposal will benefit may other species from the iconic Monarch Butterfly to the hundreds of other lesser-known species like ground-nesting solitary bees.

One other value listed in OSMP's Guidelines is maintain and support a diversity of agricultural operations and uses on city agricultural lands. As far as we are aware, there are no other native seed companies operating on OSMP's agricultural lands.

Seed Company's proposal represents an excellent fit with the city's overall objectives and management objectives for the property. Over 10,000 years of experience demonstrates that growing plants native to Boulder County is suitable to achieve resource conservation and improve soil health.

According to OSMP's Guidelines, Agricultural Experience counts for 30 percent of the decision and Historically Underserved Producer and Access to Land and Diversity and Inclusion count for 15 percent. We acknowledge that Seed Co's team principals have no direct experience growing native short grass prairie plants as essentially row crops, which is essentially what this proposal is, except that Robert Ukeiley has done a few hours of volunteer work at Boulder County Open Space's Peck Farm and will be volunteering more time at Peck Farm during 2024. However, the Team has decades of relevant experience. Robert Ukeiley has worked as a volunteer on dozens of native seed collection, native plant planting, and invasive plant removal projects with Wildlands Restoration Volunteers, Volunteers for Outdoor Colorado, the Butterfly Pavilion's Urban Prairie Project and the Southern Plains Land Trust. He has also spent countless hours planting and nurturing native plants and removing non-native plants on his two-acre property as well as his neighbors' properties in the Sugarloaf community.

Chris Adams has performed work for multiple garden and landscape maintenance operations as well as a retail native plant nursery. She has taken courses toward a horticulture degree and participated in Morris Arboretum's Honor's Project in Horticulture. She also maintains an herb and native perennial garden at her home.

When much younger, Chris and Robert also worked on a variety of farms in New Zealand through the Willing Workers on Organic Farms (WWOOFer) program. Chris, Robert, and Daniel have combined over a century of experience tending home gardens.

On the other hand, the fact that the Team's principals currently are not engaging in commercially growing native plants in a row crop type arrangement means that they are

Historically Underserved Producers because that term included beginning producers according to OSMP's Guidelines. In addition, including a company growing native plants to produce seeds would diversify the type of producers OSMP's agricultural program is supporting.

As explained above, the Seed Co does not propose to graze livestock on the property. The Seed Co's bid is the equivalent of \$16/AUM times the number of AUM that is a reasonable stocking rate for this property.

The Seed Co is committed to paying employees a living wage.

Proposal Form- Required

Failure to complete, sign and return this signature page with your proposal may be cause for rejection.

Contact Information	Response
Company Name including DBA	
List Type of Organization (Corporation, Partnership, etc.)	
Name and Title of Person Authorized to Contract with City of Boulder	
Name and Title of Person Submitting Bid	
Email Address for Person Submitting Bid	
Company Address	
Company Phone Number	
Company Website	
Company Fax Number	

By signing below I certify that:

I am authorized to bid on my company's behalf.

I am not currently an employee of City of Boulder.

None of my employees or agents is currently an employee of City of Boulder.

I am not related to any City of Boulder employee or Elected Official.

I am not a Public Employees' Retirement Association (PERA) retiree.

Signature of Person Authorized to Bid on Company's Behalf

Date

Note: If you cannot certify the above statements, please describe in a statement of explanation.

I cannot certify the above statement as my domestic partner is Elizabeth Crowe, who is a City of Boulder employee in the Housing and Human Services Department. All of the other statements above are true.