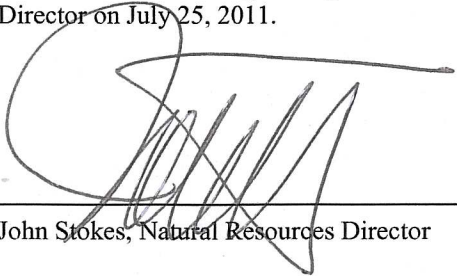


# Natural Areas Program Agriculture Position Statement

July 25, 2011

**Memorandum of Adoption**

The Natural Areas Program Agriculture Position Statement was administratively adopted by the Natural Resources Director on July 25, 2011.



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John Stokes, Natural Resources Director

8/2/11  
Date



# City of Fort Collins Natural Areas Program Agriculture Position Statement July 2011

## PURPOSE AND APPLICABILITY

Citizen-Initiated Ordinance No. 1 of 2002 and the ensuing City Council Ordinance gave broad direction to the Natural Areas Program to acquire, operate, and maintain valued agricultural lands as well as provide appropriate use and enjoyment of these lands by the citizens of Fort Collins. The purpose of this statement is to clarify the value of agriculture to the Natural Areas Program (NAP); to articulate the role of the NAP in acquiring, operating, and maintaining valued agricultural lands; and to define policies with respect to appropriate agricultural production and uses on Natural Areas managed by the NAP. This Position Statement and associated policies are applicable to those properties that are owned and managed by the NAP and do not apply to agricultural production and uses on other lands owned by the City of Fort Collins. An Implementation Plan is intended to follow this Position Statement.

The Natural Areas Program mission is *“To conserve and enhance lands with existing or potential natural areas values, lands that serve as community separators, agricultural lands and lands with scenic values. Conservation of natural habitats and features is the highest priority while providing for education and recreation for the Fort Collins community”*.

Natural Areas were acquired primarily by the City of Fort Collins with dedicated funds from sales taxes approved by the voters of Fort Collins and/or Larimer County for the specific purpose of protecting natural areas and open lands. These lands are part of the fabric of the Fort Collins community, and are viewed as a type of “community facility” intended to meet specific community goals. Agricultural activities that occur within Natural Areas must be considered within this context.

## GOVERNING CONTEXT

The City of Fort Collins has recognized a variety of values inherent in agricultural production, and demonstrated its commitment to agricultural production and agricultural use of lands through principles and policies outlined in the 2011 document *Plan Fort Collins*, the community’s comprehensive plan. These are outlined below:

### *Relevant Plan Fort Collins Principles and Policies*

- **Principle LIV 42:** Rural lands and agricultural land uses will remain a valuable component of Fort Collins’ economy, culture, and heritage, and be used to create an edge to the community where appropriate and when possible.
- **Policy LIV 42.2 - Encourage Agricultural Uses.** To the greatest extent possible, encourage sustainable agricultural uses that are compatible with watershed qualities and wildlife habitats.
- **Principle ENV 3:** Open lands will continue to benefit the City by providing a well-defined edge, establishing community separators, directing development, and conserving rural character.

- **Policy ENV 4.5 - Support Community Horticulture.** The City will encourage and support the establishment of community gardens and other horticultural projects throughout the City to provide food, beautification, education, and other social benefits. Support the development of community-led horticulture projects and agricultural activities on appropriate City-owned lands (e.g., Homeowner Association-run garden plots in neighborhood parks, ongoing leasing for agricultural purposes and farmers' markets in public plazas and parking lots).
- **Policy SW 3:** The City will encourage and support local food production to improve the availability and accessibility of healthy foods, and to provide other educational, economic, and social benefits.

## **BENEFITS OF AGRICULTURE**

Agricultural production on appropriate NAP properties is often a beneficial use for the community when conducted in a sustainable manner. Agriculture can benefit the community when utilized as a vegetation management tool (e.g., grazing, haying) as well as a land use (e.g., traditional farm, urban farm, pasture). As a management tool, agricultural practices can help managers achieve desired resource goals such as controlling invasive plants or helping manage habitat for grassland wildlife species. As a land use, agriculture serves to provide a local food base, contributes to the local economy, and provides a community connection to the rural culture. In addition, agriculture is an important historical land use and is an integral component to the local history of Fort Collins and Larimer County. Preservation and interpretation of this important and declining land use is a benefit to the community from a historical context. Whether it is a land management tool or a land use, agriculture can provide both ecological and community benefits.

### ***Ecological Benefits***

The agricultural practice that provides some of the most important ecological benefits is prescriptive grazing. Situated on the western edge of the shortgrass prairie and deep within the rain-shadow effects of the Rocky Mountains, the open lands around Fort Collins are dominated by short grass systems and receive little precipitation. These grassland ecosystems evolved with a diversity of native grazing animals. Native grazers now generally exist in numbers too few to provide the same ecological benefits. As such, managed grazing systems utilizing domestic livestock are often used in an attempt to mimic the natural ecological process. Research demonstrates that moderate grazing increases productivity and diversity of grasslands, and plants will produce more biomass than could be decomposed in order to compensate for consumption by grazing (Anderson 2006). Grazing animals reduce excessive litter accumulation, which is extremely slow to decompose in this arid environment. While some litter is necessary to help reduce soil erosion, excessive litter inhibits seed germination, decreases light resources for seedling plants, and binds nutrients including nitrogen and carbon, making those nutrients unavailable to living plants. Grazing animals also provide nutrients through their excrement that are beneficial to plants. Additional benefits of grazing include increased photosynthesis, increased root tillering, reduced shading, reduced transpiration losses (Holchek, Pieper & Herbel 1994, p. 126), and turning of the soil surface to incorporate seeds. By providing these benefits, grazing can help improve plant vigor, facilitate plant reproduction, and reduce competition between grasses and shrubs.

Historically, grazing mammals created a mosaic of habitat types with patches of heavily grazed areas with sparse grass cover and lightly grazed areas with taller grasses (Anderson 2006). This diversity of habitat types is essential for ecosystem function; for example, different grassland bird species require different grazing intensities, and many species use different grass structures for different periods in their life cycle (e.g., nesting, foraging, etc) (Gillihan & Hutchings, no date).

When grasslands are not grazed, some of the potential disadvantages include plant decadence, nutrients becoming tied up and residual plant material (excessive litter buildup) impeding light reaching young seedlings, plants becoming less palatable, and weed invasion (Wyman et al. 2006). Excessively resting shortgrass prairie can also negatively impact dependent wildlife species. For example, the Rocky Mountain Bird Observatory notes that long-billed curlews will not use areas that have not been grazed for over one year (VerCauteren & Gillihan 2004, p. 55).

Grazing provides a variety of benefits to grasslands – and is a natural process that has historically occurred on grasslands - that cannot easily be replicated through other vegetation management techniques. Since the NAP's primary mission is the conservation of natural habitats and features, it is important for management techniques to be used that restore or replicate natural processes and outcomes. The NAP's 2004 *Vegetation Management Guidelines* indicate that grazing can be used to meet resource objectives as long as it is carefully managed with defined objectives.

Poorly managed grazing does have the potential to cause significant negative effects, including vegetation loss or vegetation community change; soil compaction and erosion; riparian area overuse and degradation, including bank de-stabilization and woody vegetation loss; and destruction of biological soil crusts. In order to properly manage healthy grasslands it is important to manage according to the following principals: occasional to frequent clipping of above-ground biomass, reduction of accumulating litter, and the conversion of plant material to readily absorbable nutrients. While not providing all of the ecological benefits associated with carefully managed grazing, mowing and haying can replicate some of the aspects of vegetation removal (e.g., removing biomass and thus reducing excessive litter accumulation, providing structural variety) and may be more logistically feasible than grazing on some properties.

### ***Community Benefits***

Agricultural practices and land uses provide community benefits by allowing for more local food production, and allowing the citizens a visual and direct connection to an agricultural heritage through food production, food purchase, and maintaining the pastoral landscape. Local agriculture can also provide an economic benefit, creating jobs and a more sustainable local economic climate, especially when focused on small, local family farms and ranches. Finally, though only a small fraction of the population is actually engaged in agriculture, the cultural and historical mark our agrarian ancestors have left on our culture, especially in the western United States, is undeniable.

### **Local Food Production & Purchase**

Recent statewide and national trends indicate that consumers increasingly want to “buy local” in order to obtain fresher foods, support area farmers, and reduce fuel consumption. Traditional

farms, urban farms, and livestock producers are important contributors to the food supply. Benefits of local food production are numerous and include fresh and healthy food for consumers; lower transportation costs and fossil fuel consumption (compared to trucking or flying goods from elsewhere); support of the local economy; and the educational value of the community seeing firsthand where their food comes from. Citizens participating in local food production, such as at a community garden or CSA, enjoy the additional health benefits of physical activity and direct connection to outdoors and nature.

This trend is evident in Larimer County by the increasing support for farmers' markets and community supported agriculture (CSA) farms; the initiation of the Northern Colorado Regional Food System Assessment; and the success of Be Local Northern Colorado, an organization dedicated to a "Living Economy" and supporting independent community and land-based businesses. Be Local, along with the Northern Colorado Food Incubator, has initiated winter markets in Fort Collins and is working with the Fort Collins Downtown Development Authority (DDA) and other partners to develop a permanent year-round Community Marketplace. Also, several pilot programs related to local food production are planned or on-going, including a proposed study by the Larimer County Open Lands program to assess increased local farmland conservation; local Beginning Farmer apprentice programs; and local school districts' Farm-to-School programs. These programs underscore the importance and need for local food production in the northern Colorado region.

The recently published Northern Colorado Regional Food System Assessment report has addressed many challenges and opportunities surrounding local food production in the northern Colorado area. Key findings in the report include a shrinking number of productive agricultural land and existing productive agricultural land in the path of future development, economic pressures increasingly pushing agricultural land uses out in favor of commercial and residential land uses, and land and water conservation being paramount for sustained agriculture production in the region.

Given the current trends, it seems reasonable to assume that opportunities for local food production and consumption will only increase in the coming years.

#### **Connection to Agricultural Community**

Agricultural use of appropriate portions of certain NAP-owned properties can serve to connect citizens to the agricultural roots of this community in a variety of ways. Some citizens will enjoy working or volunteering to help produce food in a community garden or small urban farm plot. Many citizens will appreciate purchasing produce grown on a property that they helped to conserve or enjoy knowing that the produce was donated to a worthy cause. All citizens can enjoy the view of a field in various stages of growth and watching the planting and harvesting of crops. Agricultural practices and uses also provide educational opportunities for sustainable agriculture and communities.

#### **Connection to Natural World**

Smaller scale agricultural activities such as urban farming or community gardens can involve members of the community in a participatory role, thus allowing people the opportunity to connect with the natural world in a pastoral setting. For those that have had primarily urban

experiences, being outside in a community garden or volunteering for a CSA may be the strongest connection to the natural world they may have ever experienced. This can lead to an increased interest in the natural world and a vested interest in the local community's land conservation efforts.

The abovementioned benefits of agriculture as a land use and a management tool underscore the critical role agricultural lands play in our community. But managing NAP-owned agricultural lands is ancillary to the NAP's primary mission, which is to conserve natural habitats for native wildlife and vegetation.

## **NATURAL AREAS PROGRAM ROLE IN AGRICULTURAL LANDS**

### ***Acquisition of Agricultural Lands***

The NAP acquires land through a willing buyer – willing seller relationship on parcels located within “conservation focus areas,” as outlined in the NAP's 2004 *Land Conservation and Stewardship Master Plan*. Although the goals for each conservation focus area is slightly different, the NAP typically tries to acquire lands within the local focus areas in fee simple ownership to protect remaining habitat and provide close and accessible recreation opportunities for Fort Collins citizens. The program generally acquires conservation easements on lands within the community separator areas to maintain lands in private agricultural production. The NAP acquires a mixture of fee simple ownership and conservation easements in the regional focus areas to protect wildlife habitat, vegetation communities, provide recreation, and maintain working landscapes.

### ***Operating & Maintaining NAP-owned Agricultural Lands***

The NAP has several options for operation of agricultural properties owned fee simple. These options may be used independently or in conjunction with each other:

- **Restore land in agricultural crop production to native vegetation communities**  
Enhancing lands with existing or potential natural features typically involves restoring these lands to native vegetation, which may then benefit from agricultural practices (i.e., grazing or haying).
- **Manage agricultural lands through vegetation management techniques**  
These techniques may include activities such as mowing grasslands in order to mimic the grazing process, thus removing plant biomass and stimulating grassland vigor. This plant material often needs to be removed by raking and burning so that litter does not accumulate.
- **Partner with a third party to perform agricultural activities**  
Up to this point, the NAP has not received guidance from its citizens or the Fort Collins City Council to produce agricultural commodities for profit. Though the NAP recognizes a multitude of potential benefits from agricultural practices and uses, it is not the intent of the NAP to bear the financial burden of agricultural infrastructure (e.g., specialized farm equipment, livestock costs, etc) for the purpose of pursuing agricultural profit. Though agricultural products and profits may not be within the NAP's purview, the NAP can under certain circumstances benefit financially and/or through ecological benefits from allowing third party producers (lessees) to provide food and/or fiber for the community. For example, as described above, the NAP often manages grasslands through mowing, raking and burning vegetation. This effort requires a considerable amount of staff time

and equipment expense. Conversely, allowing a farmer to harvest hay through a leasing process may be a less expensive alternative than mowing with the added advantage of removing the plant material off-site. Significant benefits to allowing local farmers to use certain appropriate Natural Areas for agricultural production include increasing the use of Natural Areas and expanding the audience directly benefitting from Natural Areas.

- **Sell agricultural lands to a third party**

Occasionally the NAP purchases operational farms, places a conservation easement on the property, and then sells the property to a conservation buyer.

## **GENERAL POLICIES**

1. Use agricultural practices that meet the community's goals for Natural Areas conservation.
2. Consider the environmental, economic, and social impacts of any proposed agricultural practice or operation on NAP properties.

## **POLICIES RELATED TO SPECIFIC TYPES OF AGRICULTURE**

1. **Grazing** activities may be considered as a management tool in areas where the vegetation evolved with grazing, and using grazing practices that provide ecological benefits necessary for a healthy plant community. Ecological benefits include invasive plant control, promoting plant growth and vigor, managing structural components of habitat, and promoting the health of certain rare plant populations.
  - a. Grazing plans will focus on enhancing the health of grasslands and enhancing wildlife habitat.
  - b. Grazing plans will identify initial animal stocking rates, timing of grazing, and duration based on recommendations provided in Ecological Site Descriptions, or in consultation with the Natural Resources Conservation Service (NRCS). All grazing plans will be flexible to adapt to changing conditions.
  - c. Grazing plans will ensure that adequate forage is present for consumption by wildlife prior to initiating livestock grazing.
  - d. Infrastructure to accomplish grazing goals may need to be established (e.g., fence, water facilities, handling facilities). Temporary facilities will be preferred unless long term grazing strategies are needed. All facilities will be constructed to avoid or minimize impacts to wildlife and public use of the area. Existing infrastructure may be maintained, relocated or removed to minimize negative impact on wildlife migration, erosion, soil compaction, etc. In addition, wildlife-friendly fencing may be installed to prevent livestock accessing riparian areas and wetlands.
  - e. Local meat production is a component of grazing management and will be considered as a component of conservation grazing.
  - f. A third party producer may perform grazing activities on Natural Areas properties through either a Lease Agreement or a Service Agreement, as determined by NAP staff.
2. **Haying** activities may occur on lands previously farmed or cut for hay and on native or restored grass lands when used to achieve a vegetation management objective or as part of an Integrated Pest Management (IPM) program.

- a. Haying activities will be timed to occur after the nesting period for grassland birds, or measures will be taken to ensure that grassland bird nests are protected from disturbance during haying activities.
  - b. A third party producer may perform haying activities on Natural Areas properties through either a Lease Agreement or a Service Agreement, as determined by NAP staff.
3. **Traditional farming** includes large scale conventional row crop farming. This type of farm generally produces grains and vegetables sold into conventional markets for livestock or human consumption, requires large acreages greater than 40 acres, would have already been an established land use prior to the property being conserved by the NAP, often requires irrigation, and is typically located within the community separators.
- a. Although there are a few exceptions, the NAP generally seeks to conserve operational farms within the community separators by maintaining them in private ownership, either by acquiring conservation easements or purchasing the property and then selling it to another individual or entity with a conservation easement in place.
  - b. If the NAP does purchase operational farms, these properties may continue to be farmed by a third party producer through a Services Agreement or Lease Agreement. The type of crop, water use, soil management and other practices may be modified.
  - c. Depending on the location, connectivity to adjacent natural areas and resources available, the NAP may decide to retain ownership of a farming operation and convert all or part of it into a native plant community.
  - d. In all cases, farming practices will utilize best management practices for soil and crop management, erosion control, and water management.
  - e. Management decisions will discourage fragmentation of large parcels of agricultural lands.
4. **Urban farms** are smaller scale farms, generally 1 acre to 40 acres. Typically, crops grown at this scale are more diverse, intensively cultivated, require irrigation, are intended for direct consumption by the public, and/or marketed locally. (As of July 2011, there was no urban farming on natural areas.)
- a. Urban farms operating on natural areas should be excellent examples of sustainable farming and should provide a recognizable community benefit.
  - b. Urban farms operating on natural areas should provide educational opportunities to the public.
  - c. In all cases, farming practices will utilize best management practices for soil and crop management, erosion control, and water management.
  - d. Management decisions will discourage fragmentation of large parcels of agricultural lands.
  - e. Urban farming operations will be considered on natural areas:
    - i. without conservation easements or other deed restrictions that specifically limit farm production.
    - ii. that were all or in part previously farmed, or disturbed lands, and if they contain soils suitable for the proposed farming operation. Previously



farmed land that has been successfully restored to native vegetation, or is in the process of being restored, will not be considered for farming, but may be considered for grazing or haying when needed for vegetation management.

- iii. that are accessible via existing roads and ideally trail systems.
- iv. that have affordable access to irrigation water.
- f. A third party producer may conduct urban farm operations on Natural Areas properties through a Lease Agreement or other Agreement as deemed appropriate by NAP staff. Potential lease revenues and/or management cost savings should equal or exceed investments by the NAP.

**5. Combination Farms:** Many farms combine crop and livestock production. Crops are rotated to help manage soil nutrients and pests, and manure produced by animals is spread on crop fields for fertilization and to increase the organic component of soils. Many times, the feed for livestock is grown on-site.

- a. A third party producer may conduct combination farming operations on Natural Areas properties through a Lease Agreement or other Agreement as deemed appropriate by NAP staff. If a combination farm is determined to be feasible, NAP staff will make efforts to lease the farm with both/all components (i.e., as described under the “Grazing,” “Haying,” and “Urban Farm” categories above).

**6. Community Gardens** are typically a small parcel less than 1 acre which is divided into small, family-sized garden plots. The Community Garden is typically managed by a community agency or group (Homeowner’s Association, non-profit organization, etc.) and each plot farmed by an individual, family or small group.

- a. Gardening on NAP-owned properties should provide a recognizable benefit to the managing agency and the local community.
- b. The applicant group should be of sufficient size to maintain proposed community garden in the long term.
- c. Gardening on natural areas should provide educational or volunteer opportunities.
- d. Produce from the garden should be consumed by the group or donated to a non-profit agency, and should not be sold for profit.
- e. In all cases, gardening practices will utilize best management practices for soil and crop management, erosion control, and water management.
- f. Community gardening operations may be considered on NAP properties:
  - i. Without conservation easements or other deed restrictions that specifically limit this land use.
  - ii. That were all, or in part, previously farmed, or disturbed lands, and if they contain soils suitable for the proposed gardening operation. Previously farmed land that has been successfully converted to native vegetation or is in the process of restoration will not be considered for gardening.
  - iii. Where the proposed location of the community garden is easily accessed from existing roads or trails (NAP reserves the right to select alternate locations).

- iv. Which have practical access to irrigation water which will in almost all cases be provided by the applicant. (NAP may provide water at it's discretion, but will not be required to)
  - v. When the managing group has no other appropriate land available on which to garden.
  - vi. Where traditional vegetable crops are grown, and no exotic, illegal, noxious or other undesirable crops are grown.
  - vii. Where the proposed location of the community garden is located as close to the property boundary of the NAP property as practical, and does not pose a significant risk for erosion, water pollution, wildlife habitat degradation, or encroachment of other private activities on NAP property.
  - g. A third party producer may conduct community garden operations on Natural Areas properties through a Lease Agreement or other agreement as deemed appropriate by NAP staff. Such an Agreement will typically require that the managing agency or group will cover all expenses associated with creating, operating and managing the garden, and restoring the land if the garden is discontinued, including posting of financial security to ensure maintenance and restoration of the site.
7. Certain agricultural activities are not within the scope of this Position and Policy document, and may be addressed individually or within this document at a later date. These activities include, but are not limited to:
- a. Beekeeping
  - b. Carbon sequestration or sinking
8. Certain agricultural activities are not appropriate for natural areas. These include, but are not limited to:
- a. Intensive agricultural activities, such as concentrated animal feeding operations (CAFOs).
  - b. Medical marijuana production.

### **INCOMPATIBLE ACTIVITIES**

The NAP reserves the right to deny the request for, or prevent the continuation of; any agricultural activities that prove incompatible or inappropriate on any NAP owned or managed property, even if the activities are compliant within the requirements and restrictions herein.

### **PROCEDURES**

Specifics regarding agricultural production on NAP properties will be addressed comprehensively in the Implementation Plan to follow.

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