



# Parks and Open Space

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**TO:** Boulder County Board of County Commissioners

**DATE AND LOCATION:** Thursday, February 25, 2016, 11 a.m. Commissioners Hearing Room, 3<sup>rd</sup> floor Boulder County Courthouse, 1325 Pearl Street, Boulder, CO

**AGENDA ITEM TITLE:** Proposed Amendments to the Prairie Dog Habitat Element of the Grassland Management Plan: Vegetation Relocation Criteria Changes, Prairie Dog Relocation Criteria Adjustment, and Exclusion of Phostoxin (Aluminum Phosphide) for Lethal Control of Prairie Dogs

**PRESENTERS:** Claire DeLeo, Senior Plant Ecologist; Susan Spaulding, Senior Wildlife Biologist; Rob Alexander, Agricultural Resource Supervisor

**ACTION REQUESTED:** Approval of Amendments

## Summary

Boulder County Parks and Open Space staff proposes the following revisions to the Prairie Dog Habitat Element of the Grassland Management Plan:

- Revisions to the vegetation relocation criteria. The current vegetation relocation criteria for areas to receive prairie dogs are:
  - Average cover of bareground no more than 22%.
  - Average native species richness of at least 18 species for native grasslands.
  - Average relative cover of perennial graminoids of at least 55%.

Staff studied the criteria for three years on the Lindsay and Zaharias properties located in the South Central Grasslands Habitat Conservation Area (HCA). The first two criteria will stay the same. The last criteria was determined to be too restrictive. Staff is proposing the following changes to the last criteria, which is twofold:

- 40% relative cover of perennial grasses or 80% relative cover of the reference area's perennial grasses, whichever is less and
- 55% relative cover of native perennial vegetation or 80% relative cover of the reference area's native perennial vegetation, whichever is less.

The proposed revisions will enable additional previously occupied HCAs to be eligible for relocation under the vegetation criteria.

- Extending the dates for prairie dog relocation one month from July 1 to October 15 annually. The current relocation dates are July 1 to September 15.
- Excluding the use of Phostoxin (aluminum phosphide) for lethal control of prairie dogs that is currently allowed under the plan.

## **Background: Vegetation Relocation Criteria**

Boulder County Parks and Open Space last updated the Prairie Dog Element of the Grassland Management Plan in 2012. The 2012 revision added relocation site requirements to meet minimum vegetation cover and diversity as outlined in Appendix I: Relocation Methods and Procedures.

The original language read:

Vegetation and habitat within receiving site meets the following minimum standards based upon data from at least four transects within each habitat type on the receiving site:

- Average bare ground no more than 22% cover.
- Average native species richness at least 18 species for native grasslands. Non-native grasslands, such as those dominated by crested wheatgrass (*Agropyron cristatum*) and Russian wildrye (*Psathyrostachys juncea*), are excepted from this criteria.
- Average relative cover of perennial graminoid species at least 55%.

These criteria were adopted from the City of Boulder Open Space and Mountain Parks Grassland Management Plan with some slight revisions. Staff committed to testing these criteria for three years to determine if the criteria were appropriate for Boulder County Open Space lands.

Staff studied two properties, the Lindsay and Zaharias properties within the South Central Grasslands Habitat Conservation Area (HCA). Both these properties have potential for prairie dog relocation as the plague decimated prairie dog populations between 2008-2009. Staff established permanent transects both within and outside the prairie dog towns and monitored them between 2012 and 2014. Lindsay was monitored a fourth year in 2015. Results from the monitoring will be presented during the POSAC presentation.

After careful analysis of the results, staff felt that the last criteria could be adjusted to allow more HCA areas to qualify for prairie dog relocation and that at the same time would allow sufficient vegetation to support a grassland ecosystem with prairie dogs. The first two criteria will remain, and staff is proposing the last criteria to be revised twofold as follows:

- 40% relative cover of perennial grasses or 80% relative cover of the reference area's perennial grasses, whichever is less and
- 55% relative cover of native perennial vegetation or 80% relative cover of the reference area's native perennial vegetation, whichever is less.

The reference area is the grassland area that was not previously occupied by prairie dogs. Relative cover is the total of vegetative cover adding up to 100% and excluding other aspects of cover, including bare ground, litter, and rocks. Staff observed the following changes in relocation acres when applying the new vegetation criteria.

- Lindsay: 27 acres historically occupied
  - 0 acres met the current vegetation criteria
  - 21.5 acres meet the proposed new criteria
- Zaharias: 57 acres historically occupied
  - 14.7 acres met the current vegetation criteria
  - 42.3 acres meet the proposed new criteria

Staff presented the results of our three year study and the proposed new vegetation relocation criteria to the public at our annual stakeholders on Monday, December 7, 2015. Stakeholder

comments are collected and published each year (attached or found on the web here <http://www.bouldercounty.org/os/openspace/pages/pdog.aspx>). These comments help staff understand community concerns and to address issues over the coming year.

### **Relocation Criteria for Restored Grasslands**

POS hired Smith Environmental and Engineering in 2015 to help staff develop an ecosystem based evaluation tool to determine when restored grassland sites are established to the point that they can support and sustain occupation by prairie dog colonies and maintain healthy ecological function. The tool evaluates many aspects of the restored ecosystem in addition to the plant community characteristics criteria used for HCA evaluation, including soil stability and ecological processes. Staff will be testing this tool this summer and refining the criteria later this fall. Staff's goal is to present the results to the stakeholders at the end of the year.

### **Relocation Timing**

Staff is also recommending lengthening the timeframe during which relocations of prairie dogs may occur. The current criteria states:

- BCPOS will conduct relocations starting July 1, and ending no later than September 15, annually, as needed. By starting relocation efforts no sooner than July, juvenile and female survivorship is maximized (Jacquert et al. 1986). No relocation will be conducted after mid-September to allow for burrow acclimation and body conditioning for reduced winter foraging (Coffeen & Pederson 1986).

Based on recent relocation efforts staff feels that this timeframe can be lengthened by 30 days during years with appropriate conditions. We are proposing to alter this criterion to the following:

- BCPOS will conduct relocations starting no sooner than July 1, and ending no later than October 15, annually, unless it is deemed by staff that conditions would allow for relocations beyond October 15<sup>th</sup>. By starting relocation efforts no sooner than July, juvenile and female survivorship is maximized (Jacquert et al. 1986). Although it has been shown that halting relocations in early Fall allows for burrow acclimation and body conditioning (Coffeen & Pederson 1986), locally it has been observed that in years with the proper conditions (ex: increased levels of vegetation due to high annual rain amounts), relocating into mid-October, and in appropriate conditions, beyond, can be successful. Therefore, with staff approval, based on the current year conditions, relocations may occur up until October 15, or beyond. In years with poor conditions, relocations will cease on September 15.

### **Exclusion of Phostoxin**

The plan currently permits the use of Phostoxin (aluminum phosphide) as a means of lethal control. Since the advent of compressed carbon monoxide as a lethal control alternative, staff feels we can eliminate the use of aluminum phosphide entirely on POS lands.

### **Parks & Open Space Advisory Committee Meeting**

These amendments were presented to the Parks & Open Space Advisory Committee (POSAC) at their January 21, 2016 meeting. After public comment, the committee voted unanimously to recommend approval of the amendments with one change. The committee recommended changing the end of the relocation period to October 15 with staff discretion to extend that period if weather is favorable for relocation.

## **Prairie Dog Questions & Answers from December 7, 2015 Stakeholder's Meeting**

### **When will Boulder County get Black-footed ferrets?**

Boulder County Parks & Open Space does not currently have any areas that meet the US Fish and Wildlife Service requirements for the reintroduction of Black-footed ferrets. The staff is proposing to target 2020 for reintroduction. BCPOS is working with City of Boulder Open Space and Mountain Parks and U.S. Fish and Wildlife Service to achieve this goal.

### **Are there government programs for experimenting with plague management tools such as vaccines?**

We are aware of testing being done on an oral vaccine for prairie dogs. We have made inquiries about participating as a test site, but as the research on the vaccine is well underway, no new test sites were needed. We expect that the oral vaccine may be available by 2017, and are committed to utilizing this method when it becomes available. This vaccine is being developed by USGS - National Wildlife Health Center.

### **Is there an alternative to the 30-day quarantine required for donating prairie dogs to the BFF program?**

A 21-day quarantine is required to ensure that the Black-footed ferrets in the recovery program do not contract the sylvatic plague. Not all of the live delivered prairie dogs are quarantined; some are immediately euthanized at the facility, and frozen for future use.

### **Will translocations require quarantine if ferrets are reintroduced?**

Our understanding is that if the "take" site is dusted with insecticide three weeks prior to removing prairie dogs for relocation, there is no need for a quarantine period.

### **Why do we have vegetation criteria for relocation?**

Boulder County Parks & Open Space manages our properties for many objectives. On grasslands designated as Habitat Conservation Areas (HCAs) and selected for prairie dog reintroduction, it is our goal to develop and maintain a diverse and resilient grassland ecosystem that can support prairie dogs over the long-term as well as many other organisms native to the prairie grasslands. Vegetation criteria help us to maintain a diverse and hopefully resilient ecosystem that can do just that.

### **Why haven't we relocated to the oldest of the restored grasslands yet?**

The grassland restoration program was not designed to provide prairie dog relocation sites when conceived. At the time, the goals focused on restoring native prairie grasses, forbs, and shrubs. As with many restoration programs, we have learned a lot about grasslands and restoration processes since 1996.

The Prairie Dog Habitat Element identified a desire to see prairie dogs return to these restored grasslands, our staff proposed developing a tool for identifying restored grasslands that had become resilient enough to see the reintroduction of prairie dogs while remaining largely intact.

Until these tools are in place, we do not plan to allow prairie dogs on restored grasslands of any age. We do not plan to actively relocate prairie dogs onto any restored grasslands at this time, but once a property has been identified using our restoration tools, we will not remove prairie dogs that migrate onto these properties.

BCPOS hired Smith Environmental and Engineering to help formulate the criteria for restored grasslands. BCPOS plans to test these criteria throughout 2016.

The Rock Creek Grasslands Management Plan can be found at:

<http://www.bouldercounty.org/doc/parks/rcgrasslandsmpn.pdf>

### **Will the new vegetation and restoration criteria improve the potential for relocation?**

Under the current vegetation criteria, 25% of transects studied by BCPOS met the criteria originally approved in the Prairie Dog Habitat Element, but no sites as a whole qualified for relocation. Under the new criteria, a number of sites are now eligible for relocation efforts. We feel that adjusting these criteria has made relocation a real possibility and one that can be pursued responsibly in order to maintain grassland resiliency.

### **Do we still use poisons for the treatment of prairie dog colonies on No Prairie Dog Areas?**

The BCPOS prairie dog program has elected to no longer use aluminum phosphide or "Phostoxin" on any properties. Instead, our program and our partners use either a Carbon-monoxide (CO) machine or CO cartridges to treat colonies in No Prairie Dog Areas. At the 2016 tenant training, BCPOS will inform tenants that phostoxin will no longer be permitted on Boulder County Parks & Open Space property. In addition we will be proposing an amendment to the Prairie Dog Habitat Element stating that aluminum phosphide will not be used on BCPOS properties.

### **Could BCPOS convert the treatment crew into a relocation crew?**

Our prairie dog management crew has led relocation efforts in the past and will be the major contributor to any relocations in the future.

**How many properties do we remove prairie dogs from in a year?**

The number of properties varies based on where prairie dog colonies grow and the time required to manage the colonies each year. In 2015 the prairie dog management crew removed prairie dogs on 30 properties.

**Do any private landowners have an interest in prairie dog conservation agreements?**

We work closely with property owners adjacent to our NPD, MOA, and HCA properties. While we have not received requests for such agreements in the past, we would certainly pursue such agreements if there was interest on the part of the private landowner.

**Will relocation become annual?**

Not necessarily. According to the Prairie Dog Habitat Element, relocation can only occur in areas of HCAs with prairie dog populations below a particular threshold. These areas must meet the vegetation criteria and have been historically occupied by prairie dogs. Therefore, it is difficult to predict how often relocations will occur.

**When will BCPOS determine locations for 2016 relocations?**

Until the vegetation criteria for relocation are updated, no areas on HCAs within the BCPOS system meet the relocation requirements. Once they are updated through public hearings with POSAC and the Board of County Commissioners, we expect to relocate to eligible sites on the South County Grasslands in 2016. Efforts to identify relocation sites on our HCAs are on-going.

**When will restoration criteria go into effect?**

Since the final draft of the grassland restoration protocols has not been submitted, we cannot accurately identify a date for when they will go into effect. However, we do plan to field test the protocols in 2016.

**How will we open up burrows on restored or “recovered” sites?**

One of the criteria for relocation is existing or historic prairie dog colonization. Therefore, if possible we will use existing burrows. However, in many cases, over the time required to see resilient vegetation on these sites, burrows entrances fill in. Therefore, our staff will pursue auguring to open identifiable burrows, in the hopes that the burrow network attached to these burrow entrances is still intact.

### **Why can't we relocate prairie dogs into other counties?**

Colorado law requires that the county commissioners of both the sending and receiving counties approve relocations across county lines. Such relocations are rarely pursued for that reason.

### **How will climate change impact policy decisions?**

BCPOS works to manage our lands adaptively; regularly monitoring the impacts of management and policy decisions to improve our management. Climate change may have a wide variety of impacts on Boulder County and we will seek to flexibly manage our lands to meet those impacts. The Boulder County Climate Change Preparedness Plan provides guidance to county agencies on how to pursue adaptive management in the face of climate change.

### **Why do we have agricultural land in areas appropriate for prairie dogs?**

The agricultural land in Boulder County has been in agriculture for more than 100 years. When we purchase properties we assess the current use of the land and interact with the seller to understand their interests. If the land is currently in agriculture, on valuable agricultural land, or the seller requests that it remain agricultural land we manage it to remain in agriculture in most cases. This is in accordance with the expressed goal of the Comprehensive Plan to maintain agriculture in Boulder County.

In the case of about 2,000 acres of land across the county, we have decided over time that the land would be more suitable as native grassland and we undertake an effort to restore these lands to native grassland. These areas may be suitable for prairie dogs when they are deemed to be resilient and "restored".

### **Prairie Dogs seem fine in current colonies and on marginal land, why do we concern ourselves with restoration?**

Prairie dog colonies are located throughout the plains region of the county and many are located on marginal properties in road medians and other such undesirable locations. However, BCPOS is charged with managing the entire ecosystem on our properties not just for one species. Our goal is to support prairie dog populations on properties that can support a resilient ecosystem that supports a wide variety of organisms.

### **What is the oldest colony in the county?**

BCPOS does not maintain a database of colony age across the county. We have been monitoring prairie dog colonies on our properties since the 1980s (mapping since 1997) and we are aware of colonies that existed prior to that decade.

**Can you make the vegetation monitoring results available to the public?**

The proposed vegetation criteria are available on our website. Once the proposals are prepared for presentation to POSAC and the county commissioners, we will provide the formal proposal as a memo to both bodies on our website. We will also post the data used to develop and test the proposed changes.

**As Boulder County prepares to open land up for prairie dogs in 2016 what is the actual number of dogs, or acreage, you plan to relocate/make available?**

As per the Prairie Dog Element, Appendix I: Relocation Methods and Procedures

- The minimum size of a relocation area is not pre-determined, but rather will be considered, among other criteria, by BCPOS staff on a case-by-case basis.
- The minimum number of prairie dogs to be relocated during each event shall be >60 (Robinette et al. 1995), although greater numbers may increase relocation success (Hoogland 2006; Dullem et al. 2005; Griffith et al. 1989; Roe & Roe 2003; Meaney 2001), particularly at areas without an existing active colony (Robinette et al 1995).
- A target release number of 4-7 prairie dogs per available burrow will be followed (Shier 2006), with the assumption that additional burrows will be constructed by the colony following release.

Given these criteria, acreage and prairie dog numbers will vary by relocation effort. There will be a minimum of 60 animals relocated. As for additional numbers, this will depend on the site characteristics (i.e.- how many open burrows are available?)

**How many prairie dogs per acre are allowed, assuming a relocation actually occurs?**

As per our relocation criteria, we base our numbers on how many burrows are open. Our goal is to place 4-7 prairie dogs per burrow (depending on gender/age parameters).

All proposed relocation efforts must be reviewed by CPW, and this review includes site assessments and approval/disapproval of proposed numbers of animals.

**It was indicated by Susan Spaulding that as the land becomes available, prairie dogs currently on BC land (either open space, AG, or abutting AG) would take priority over dogs in eminent danger on private land. If this is correct I would assume you have an idea of the number of dogs, and their current location, that would be allowed to be relocated on these newly open lands. If so, what are the numbers and the locations.**

We will prioritize removal of prairie dogs for relocation from NPD properties. At this time we do not know which exact NPD properties will be prioritized for the removal and relocation efforts.

The number of prairie dogs to be relocated will depend on the relocation site conditions, but will be >60 per relocation effort..

**What would be the anticipated time frame for these relocations?**

BCPOS will conduct relocations starting July 1, and ending no later than September 15, annually, as needed. By starting relocation efforts no sooner than July, juvenile and female survivorship is maximized (Jacquert et al. 1986). No relocation will be conducted after mid-September to allow for burrow acclimation and body conditioning for reduced winter foraging (Coffeen & Pederson 1986).

**Once the relocation of the dogs from BC lands is complete will you open up land to prairie dogs in eminent danger from development of private land?**

Our Prairie Dog Habitat Element requires us to prioritize Parks and Open Space lands for relocation. However, in the case that we have accomplished our relocation goals (removal of animals from NPD properties is complete), we will consider animals from non-County owned lands.

**How many prairie dogs would you need to have to introduce the BFF and what data are those numbers based on?**

The USFWS service does not identify a number. Instead they require 1,500 acres of active prairie dog colonies on contiguous lands to support 30 adult ferrets (20 females and 10 males). The acreage number of 1,500 is based on a home range of an adult female ferret being 75 acres. . These 1,500 acres of colonies are required to be active, and as research has shown that prairie dog colonies in Boulder County are more densely populated than in less bounded areas, we foresee no issues with having enough numbers of prairie dogs within our colonies to support ferret predation levels.

**Does Boulder County only intend to focus on 1,500 acres for the BFF?**

BCPOS intends to relocate to Habitat Conservation Areas in an effort to achieve the required acreage of active prairie dog colonies to support ferret reintroduction. Of note, we will be working closely with City of Boulder OSMP in the south central part of the county. Only by combining our land base do we have enough colony acreage to achieve the 1,500 acres needed.

**For the purpose of long term survival of the BFF it would seem that Boulder County would need to begin re-population of prairie dogs now to be able to determine if the colonies are stable and healthy prior to BFF introduction, what consideration if being made for this?**

Based on considerable review of available research, we will not relocate during the winter months, as this limits success. (See below).

As outlined in our Prairie Dog Habitat Element, Appendix I-

BCPOS will conduct relocations starting July 1, and ending no later than September 15, annually, as needed. By starting relocation efforts no sooner than July, juvenile and female survivorship is maximized (Jacquert et al. 1986). No relocation will be conducted after mid-September to allow for burrow acclimation and body conditioning for reduced winter foraging (Coffeen & Pederson 1986).

**How many individual ferrets do you plan to introduce?**

At this time, USFWS considers a minimum release number of 20 adult females and 10 adult males per reintroduction effort. This is the minimum number to ensure the best chance of establishing a self-sustaining population.

**How many acres are currently in the Open Space system that could take the BFF right now?**

There are no sites currently appropriate for ferret reintroduction. We have no contiguous habitat with 1,500 acres of active prairie dog colonies.

**Is it correct that Boulder County previously agreed to set aside 5,000 acres for prairie dogs, and currently only 1/2 of that land is actually occupied by prairie dogs?**

BCPOS has designated 19,290 acres as HCA. However, within this acreage, only a proportion is suitable for prairie dog occupancy, based on their habitat requirements (for example, steep slopes, rocky outcrops, water bodies, forested lands are not suitable).

BCPOS proposed a goal of 5,000 acres of **suitable** habitat acres within Habitat Conservation Areas. Currently, the suitable acreage within designated HCAs is 3,326. Our goal is to acquire the additional land necessary to achieve 5,000 acres of suitable habitat with the addition of Dowe Flats adjacent to Rabbit Mountain. We will also add acreage to our suitable habitat totals when Rock Creek Grasslands are fully restored and deemed resilient enough for prairie dog occupancy. Our model parameters for what is determined as “non-suitable” are listed below and are based on extensive research review as well as internal management decisions to preserve certain areas, such as rare plant associations.

## **Appendix E: Non-Suitable Habitat Definition and Areas**

- Slope 10% or less
- Fee properties (COS, JOS, or Suits CE) 7,000 feet or less
- No wetlands (United States National Vegetation Classification (USNVC) vegetation mapping data, Wright Water Engineers data, BCPOS wetland mapping data)No riparian areas (CPW riparian data)
- No rare plants or rare plant alliances<sup>5</sup>/communities with a Colorado Natural Heritage Program (CNHP) ranking of G3 S3 or rarer:
  - Bell's twin pod (*Physaria bellii*): G2G3 S2S3 (BCPOS rare plant mapping data-polygons and points buffered 20 feet)
  - No tallgrass prairie or other sensitive grasslands (USNVC vegetation mapping data correlated with CNHP rare plant communities), which excludes the following rare plant communities:
    - Needle-and-threadgrass (*Hesperostipa comata*): G1G2 S1S2
    - Big bluestem Xeric tallgrass prairie, Big bluestem-yellow indiangrass<sup>6</sup> (*Andropogon gerardii*-*Sorgastrum nutans*): G2 S1S2
    - Indian ricegrass (*Achnatherum hymenoides*): G2 S2
    - New mexico feathergrass (*Hesperostipa neomexicana*): G3 S3
    - Little bluestem (*Schizachrium scoparium*)-sideoats grama (*Bouteloua curtipendula*): G3S2 at Wolf Run property only.  
Note: this plant community is thought to have been xeric tallgrass prairie prior to prairie dogs removing the tallgrass prairie component.
- No Forests, Woodlands, Shrublands (USNVC vegetation mapping data)
- No Lakes (USGS lakes data)
- Suitable soils (excludes rock outcrop, gravel, or terrace escarpments)

**When was the vegetation criteria in Boulder County first introduced? What year did Smith Ecological present these ideas to Boulder County?**

Our vegetation criteria were developed using criteria originally developed the City of Boulder's Open Space and Mountain Parks. We changed them to reflect our interest in relocation and the reality of grasslands on our properties. We proposed these criteria in 2012 and included the requirement of assessing the criteria for three years before making any further necessary changes. The most recent proposals are the result of that three-year assessment.

Smith Environmental and Engineering was hired to address another question posed during the update of the Prairie Dog Habitat Element. BCPOS has been restoring grasslands since 1996 and since that time we have been searching for scientifically tested ways to identify when a restored grassland is resilient enough to be more lightly managed and to see the return of prairie dog colonies. There is no current published scientific literature or technical guidance available to reference for this specific question. Smith was hired in 2015 to help our staff develop protocols for performing that assessment.

**It is the understanding of many prairie dogs advocates that Smith Environmental is in the business of exterminating prairie dogs. If this is correct does it not seem a conflict of interest to hire Smith Environmental to dictate grassland policy?**

Boulder County Parks and Open Space released a public Request for Proposals seeking a consultant qualified to develop protocols for identifying when a grassland is “restored” to a level that means it is resilient enough to weather the impacts of drought, prairie dogs, and other impacts. The request for proposals was released widely, and staff spoke directly with consultants and academics seeking those interested in tackling the subject. The selected consultant was able to provide both an adequate proposal and the qualifications necessary to address the interests of our ecologists, biologists, and rangeland managers. Our staff was as selective as possible and would not have selected a consultant that they did not feel could provide the service in a professional and comprehensive manner.

**Are any other counties, that you know of, in the US implementing these policies prior to establishing prairie dogs colonies on the land?**

We studied the policies of various county and municipal governments during the development of the Prairie Dog Habitat Element. Our relocation criteria were developed using a template developed by the City of Boulder and in consultation with existing literature. At this time, there are no nationally-accepted standards for identifying a, “restored” grassland. BCPOS is leading the field in this effort. We plan to field test and verify all protocols proposed by our consultant and will not implement the protocols unless they meet with our professional satisfaction.

**How many actual acres of potential prairie dog land was added with the recent change in the vegetation criteria? If none, at what time will you consider loosening the vegetation criteria rules further?**

The vegetation criteria have not been applied in the manner suggested by the question to all our HCAs. For the two properties that we studied, the Lindsay and Zaharias properties, the following changes in acreage were observed:

Lindsay: 27 acres historically occupied

0 acres met the current vegetation criteria

21.5 acres meet the proposed new criteria

Zaharias: 57 acres historically occupied

14.7 acres met the current vegetation criteria

42.3 acres meet the proposed new criteria

Other relocation criteria besides the vegetation criteria must also be met for an area to qualify for prairie dog relocation. We identify appropriate areas for relocation and then use the vegetation criteria to test whether the identified areas can meet the criteria. Because of the intensive nature of testing the criteria at identified sites, it would be extremely difficult to test every acre of identified HCA.

**Does Boulder County map prairie dog colonies/numbers on both county owned and private land? If yes, what are those numbers?**

BCPOS maps prairie dog colony acres on BCPOS land only. We have access to the mapping done by the municipalities in Boulder County as well. BCPOS land contains 2,059 acres of prairie dog colonies as of the end of 2015. We have information on the City of Boulder Open Space and Mountain Parks and Parks and Recreation mapping effort. In 2015, they mapped 3,031 acres of active colonies.

**Is Boulder County required to maintain a certain population of prairie dogs within its borders?**

There is no requirement at the local, state, or federal level to maintain a number of acres or individuals. Our goal with management on MOA and HCA acres is to allow colonies to grow and change with as little management as possible.



January 6, 2016

Re: Boulder County Prairie Dog Management

Attn: Jesse Rounds

Dear Staff,

Thank you for hosting the annual prairie dog stakeholders meeting on December 7, 2015. As a result of the information exchanged at that meeting, we'd like the County to formally consider the following comments and requests:

1. Thank you for eliminating the use of poisons to exterminate prairie dogs on your properties.
2. We applaud the three years of data collection and analysis of Grassland Restoration. We are interested to know when this study will be completed and when the sites will officially be deemed "completely restored" so that additional land uses may be considered on these parcels again. Please keep us apprised of any dates discussing the study and its results.  
Specifically, we are interested in:
  - i. We would like a firm plan for when restoration is considered complete for these areas. Also, are there different criteria for when areas are considered completely restored, and therefore, can be considered as potential release sites for prairie dog translocation projects? Are these sets of criteria different?
  - ii. We understand there is a vegetation criterion that has to be met for relocations to occur. How does that criteria relate to when restoration is completed ?
3. We applaud the extensive property acquisition the County has focused on. We recommend that, if acquired, that staff designate the additional acreage adjacent to Rabbit Mountain as a Habitat Conservation Area (HCA).
4. We recommend the County continue to work towards the 2012 goal of establishing 5,000 occupied acres of prairie dog habitat and urge the County to please halt lethal control on county properties until this goal is met.

5. We recommend that the County implement more non-lethal prairie dog management programs on County property. Please evaluate the option of turning the County trap and donate crew into a trap and relocate crew at least until Goal #4 is met and a report is submitted on the results. The Prairie Dog Coalition would be willing to train the County's crew.
  6. We strongly recommend that the County grant burrowing owl areas the highest protections. Currently, a few nesting areas are slated to be designated as MOAs. Could they be even more protected if they were designated HCAs? What assurances can we have that the burrowing owl nest areas will be completely untouched by adjacent land use? Similarly, what types of protections will be afforded to future black-footed ferret reintroduction sites? Please advise.
  7. We applaud the County's goal to reintroduce black-footed ferrets by 2020. The PDC would like to partner with the County in any way possible to help make this goal a reality.
  8. Please work with the Colorado State NRCS representative Noe Marymor-Area Biologist, Chanda Garcia-State Biologist and adjacent landowners to areas being considered for future black-footed ferret reintroduction to thoroughly explore adjacent landowner incentives.
  9. Are there any opportunities for voluntary grazing buyouts in key conservation areas or HCAs in the County? We would like to discuss this option with staff for additional conservation gains.
10. Translocations:
- i. Please consider increasing the prairie dog population in the key conservation areas on Boulder County lands. When making decisions on which prairie dogs to translocate into these areas, we recommend not differentiating between public or private prairie dog lands. Taking prairie dogs from smaller urban public, rural or private lands to restore grasslands could come with a conservation fee for the county thereby taking the fee off the taxpayer and helping balance the County's time for overseeing translocations.
  - ii. Please consider conducting research with the Prairie Dog Coalition on the Boulder County/ Colorado Horse Rescue Relocation study –'The Efficacy of Translocations: A comparison of three release techniques on Boulder County Open Space.' This study would examine prairie dog reintroduction into three different types of release burrows: augured holes, abandoned burrows and artificial burrows.
  - iii. Please change the timeline for relocations to extend beyond September 15 for the following reasons:
    - a. Juveniles born in the spring have had time to gain strength or expire making the population to be moved smaller in numbers and healthier.

- b. Temperatures during the fall days are cooler than the summer months causing less heat stress on the animals being moved and less concern for animals in traps.
  - c. The fall grazing forage is lower quality than in the spring and summer months creating the opportunity for the prairie dogs to become more interested in the baited traps.
  - d. The PDC has experienced multiple successful relocations during the fall months.
- iv. Please amend the current prairie dog reintroduction regulations so that translocating prairie dogs to areas with abandoned burrows is a guideline rather than a requirement.

With the amount of time the County has allowed for restoration prior to reintroduction, abandoned burrows have mainly collapsed and the infrastructure to receive prairie dogs no longer exists. Because of this, prairie dogs will need to be released into something secure – perhaps even including artificial burrows.

Please contact us with any questions.

Thank you so much for the positive contributions you have made for the prairie dog ecosystem. We look forward to continued collaboration for an even brighter future for our native wildlife.

Sincerely,



Lindsey Sterling Krank