

Overall Prairie Dog Conservation Goal: Sustainably conserve prairie dogs in Boulder Region by implementing the following ecological, social, and economic goals, objectives, and strategies.

Goal 1 - Ecological: Update and implement the City's prairie dog management plans to ensure the creation and maintenance of one or more large prairie dog-occupied ecosystem areas that will secure viable plague-resistant prairie dog populations and high-integrity grassland habitat.

- ***Objective 1:*** *In collaboration with county, federal, and private partners, secure **one or more interconnected networks of high-integrity grasslands** containing viable populations of plague-resistant prairie dog colonies naturally limited by native predators.*
 - ***Strategy 1:*** Collaborate with county, federal, and private partners to prioritize acquisitions, easements, and management agreements to **consolidate prairie dog grassland parcels**, and as feasible, *secure connectivity and linkages* among colonies.
 - ***Milestone 1:*** *By 2019, pilot application of a habitat quantification tool with parcels being proposed for new acquisitions or easements related to prairie dog conservation.*
 - ***Strategy 2:*** **Amend prairie dog-related components of the Grassland Management Plan by considering the entire grassland-dominated landscape in the Boulder Region**, and implement the updated plan with an aim to increase the number of receiving sites for prairie dogs.
 - ***Milestone 1:*** *By 2019, work with local experts to review modeling method and data inputs to provide an **updated prairie dog habitat suitability model** and **GMAP target viability criteria** to map current conditions for the mixed grass prairie mosaic and prairie dog colonies across the relevant grassland landscape to serve as guidance for plan updates.*
 - ***Milestone 2:*** *By 2019, based on milestone 1, work with local experts to **update GMAP goals** relevant to prairie dogs along with receiving site location criteria (I-1) to fully utilize existing grassland receiving sites and to allow additional qualified grassland receiving sites.*
 - ***Strategy 3:*** Manage prairie dog colonies for plague resistance.
 - ***Milestone 1:*** *Prior to implementing the plan under Milestone 2, all translocated prairie dogs will receive plague abatement.*
 - ***Milestone 2:*** *By 2019, complete and implement a **plague-management and monitoring plan** using proven-effective state-of-the-art plague management techniques to secure sustainable and plague-resistant prairie dog colonies.*
 - ***Milestone 3:*** *By 2019, work with Integrated Pest Management to create and implement an acceptable policy that may limit the use of insecticides, but **allows such use on large prairie dog occupied ecosystem colonies as necessary.***

- **Strategy 4:** Complete and implement a **plan for the reintroduction of the black-footed ferret into large prairie dog occupied areas** as a key native predator.
 - **Milestone 1:** By 2020, work with adjacent landowners, including the County of Boulder and adjacent counties, US Fish & Wildlife Service, other federal partners, and private landowners in the Grassland Preserves to create and implement a black-footed ferret recovery plan for the southern Boulder Region.
- **Strategy 5:** Apply the mitigation hierarchy (avoid, minimize, mitigate) regarding **adverse impacts to at-risk species** known to be vulnerable to habitat-altering land management practices associated with prairie dog conservation.
 - **Milestone 1:** Based on identified prairie dog occupied and relocation sites, update inventory and monitoring data for at-risk species associated with the Mixed grass prairie mosaic and xeric tallgrass prairie.
 - **Milestone 2:** Document relative compatibilities of relevant land use and management options applicable to prairie dog relocation sites and occupied colonies (e.g., use of insecticides relative to rare insect species, density of prairie dogs relative to rare plant species).
- **Objective 2:** *Secure and implement a suite of **non-lethal methods for managing prairie dog populations** in lands where their proximity to urban and agricultural land use, and other natural values, are in conflict.*
 - **Strategy 1:** Collaborate with county, federal, and private partners to implement non-lethal prairie dog relocations.
 - **Milestone 1:** by 2019, there is an increasing trend in numbers of translocations successfully implemented across the Boulder Region.
 - **Strategy 2:** Invest in creating buffer zones on key prairie dog colonies in conflict.
 - **Milestone 1:** Pilot by 2021 one property that has prairie dog colonies with managed buffer zones.
 - **Strategy 3:** Collaborate with the research community to advance testing of new and emerging tools for managing prairie dog population (such as oral contraception agents).
 - **Milestone 1:** Recruit researchers from USGS, CSU, etc. to secure funding and implement a research plan.
- **Objective 3:** *Amend as necessary and keep all existing **prairie dog plans and policies** (Admin Rule, IPM, UWMP, GMP, Wildlife Protection Ordinance) **current as needed** to ensure they are mutually compatible with Goal 1 and its objectives and strategies.*
 - **Strategy 1:** Review interdependency among policies and identify needed changes; establish a priority amongst current policies; and establish and implement a timeline for plans and policies that need to be updated.
 - **Milestone 1:** By 2020 complete policy review and initiate processes for policy amendments.

Goal 2 - Social Coexistence: Support proactive and innovative non-lethal strategies to minimize conflicts associated with prairie dogs and competing land uses. Increase public awareness of the prairie dog's role in Boulder's Grassland and Urban ecosystems through community outreach.

- **Objective 1:** *Identify and map areas of conflict that can be quantified and tracked annually. Note: Areas of conflict are not to be defined only by these categories and that the map should expand on other new areas of conflict as they arise and are identified.*
 - Conflict categories:
 - **Agriculture (leased/private):** Encroachment of prairie dogs onto existing agricultural lands.
 - **Public and Private adjacent land owners:** Encroachment of prairie dogs onto adjoining properties.
 - **Land developers:** Within City of Boulder, city process for prairie dog removal (time delays/costs).
 - **Communication and protocols:** Clarity and inclusiveness with community.
 - **Relocation demands exceed receiving sites:** Delays in timely relocation of prairie dogs due to lack of receiving sites.
 - **Milestone 1:** By 2019 identify and map conflict areas annually and make it easily available to the public.
- **Objective 2:** *Identify innovative proactive non-lethal strategies to address conflicts in each defined category (Some categories the group has identified):*
 - **Agriculture (leased/private):** Evaluate/Provide barriers or other exclusion/mitigation methods.
 - **Private and adjacent land owners:**
 - Evaluate/Provide barriers on City of Boulder land adjoining high-conflict areas.
 - Add additional criteria to definition of future PCAs in the Grassland Management Plan to consider the level of conflict with adjoining properties
 - **Land Developers:** Follow newly proposed protocol for relocations.
 - **Communication & Protocols:**
 - Have clear and consistent communication among all agencies.
 - Review protocols and update as necessary.
 - **Relocation demands exceed Receiving site:**
 - Explore additional opportunities for relocations in Southern Grasslands by evaluating current relocation criteria, in conjunction with Goal 1 efforts, to alleviate conflicts in other areas.
 - Work towards the reintroduction of the black-footed ferret using connecting parcels from the public/private sector to achieve this goal as a non-lethal strategy in PD management.
 - Collaborate with community partners (ex: Prairie Dog Coalition or Defenders of Wildlife) to implement conflict prevention strategy
 - **Milestone 1:** By end of 2019, initiate a pilot program to implement a conflict prevention strategy in at least two adjoining conflict locations.
 - **Milestone 2:** By 2022 proactively address 10% of defined conflict areas annually.

- **Objective 3:** Review mechanisms for communication and update as required to ensure prairie dog management conflicts and concerns are addressed in an effective and timely manner.
 - **Strategy 1:** Establish who to call when conflicts with illegal activity arise and when animal control cannot be reached.
- **Objective 4:** Develop a campaign to engage Boulder area residents to expand their appreciation of the role of prairie dogs in native grasslands in Boulder County and the complex nature of their management.
 - **Strategy 1:**
 - Create surveys to gauge public awareness and concerns based on historical efforts.
 - Campaign for more public awareness, engage the public through technology, Boulder newsletters and community outreach programs. Presentations at local libraries, schools, Boy/Girl Scout troops and 4-H groups are ways to reach out to the community.
 - Provide Boulder residents opportunities to contribute to PD conservation through assistance with environmental monitoring and outreach programs.
 - Better educate public about plague and update informational sites.
- **Objective 5:** Develop annual assessment feedback mechanisms.
 - **Strategy 1:** Reevaluation of adaptive management practices.
- **Objective 6:** Secure modifications to state regulations to facilitate the transfer of prairie dogs across county lines.
 - **Strategy 1:** Lobby neighboring county commissioners and state legislators to advocate for these adjustments, providing protocols and language for legislation.

Goal 3 - Economic: Implement sustainable processes that provide resources and capacity to secure prairie dog conservation associated with the City of Boulder.

- ***Objective 1: Apply principles of Net Positive Impact¹ (avoid, minimize, mitigate, seek net positive gain) on prairie dog conservation activities, including relocation projects, associated with the City of Boulder.***
 - ***Strategy 1:*** Utilize a habitat quantification tool to score sites (removal and receiving), to help offset on-site impact of development and to determine net-positive impact.
 - ***Milestone 1:*** By 2020, pilot the use of the adapted habitat quantification tool developed to determine Net Positive Impact in one or more scenarios within the city.

- ***Objective 2: Establish a grassland conservation fund that augments operating budgets for meeting prairie dog management and is used for expenditures including but not limited to acquisition (fee title and/or easements), relocations, and stewardship.***
 - ***Strategy 1:*** Establish inflow and outflows of monies into and out of the grassland conservation fund.
 - ***Milestone 1:*** By 2019, create and implement a required fee structure for private landowners relocating prairie dogs to city land.
 - ***Milestone 2:*** Work with Boulder's philanthropic community (e.g., *Community Foundation of Boulder County*²) to identify opportunities to provide sustainable support to Prairie Dog conservation in the Boulder region.
 - ***Milestone 3:*** By 2020, work with conservation entities to identify conservation practices, programs and funding mechanisms that could support grassland restoration and prairie dog habitat. (Example entities include Natural Resource Conservation Service and Great Outdoors Colorado. An example of funding which could be explored includes conservation leases.)

 - ***Strategy 2:*** Establish bi-annual meetings of the PDWG (or their designees) for reporting out on the status of the goals and objectives as well as a review of, and advisement on, inflows and outflows of the grasslands conservation fund.
 - ***Milestone 1:*** By December 2019 staff will provide an annual report on the inflows and outflows.
 - ***Milestone 2:*** By 2019 staff will provide their respective department board or commission with annual updates on the status of the goals and objectives as well as a review of, and advisement on, inflows and outflows of the grasslands conservation fund.

¹ http://cmsdata.iucn.org/downloads/npi_conservation_01_2016_1.pdf

² <http://www.commfund.org/blog/tags/animals-environment>

- **Objective 3:** Support sufficient budgets for city staff to fulfill their roles in achieving the approved PDWG goals, objectives, and strategies as well as recommended changes to plans, policies and practices.
 - **Strategy 1:** Revisit and amend department budget allocations (including a line item for prairie dog management), and annual work plan objectives for staff to ensure they are compatible with, and can accomplish, the PDWG goals and objectives.
 - **Milestone 1:** Recommend departmental operating budget line items for prairie dog management in the 2020 budget.
 - **Milestone 2:** Annually ensure each relevant department has sufficient budgets, staffing and/or consultants to meet the prairie dog management goals and objectives.
 - **Strategy 2:** Maximize in-kind contributions to assist with addressing prairie dog management.
 - **Milestone 1:** By 2019, create a pilot project with at least two outside organizations to help fulfill the PDWG goals and objectives by maximizing in-kind contributions (i.e., donation of nest boxes or fence/barrier materials or installation).
 - **Milestone 2:** Track in-kind contributions on an annual basis and make data available for other funding opportunities.