

## Appendix 3. Mitigation

Voluntary and collaborative conservation will help secure the long-term future of the prairie dog and the unique ecosystems that these keystone species make possible. When losses of habitat are unavoidable, mitigating those losses can be a crucial tool for the long-term sustainability of species conservation and also serve as a means to incentivize responsible development. Any entity that cannot avoid damaging prairie dog habitat should protect or enhance existing prairie dog populations elsewhere, either through direct participation in restoration activities or through depositing money into a fund used for restoration activities or land purchasing. The value of the restored or purchased habitat, or the money deposited into the mitigation fund, should be greater than or equal to the value of the habitat destroyed.

Monetary valuation of lost occupied habitat is a complicated process. Prairie dog habitats play unique roles in both urban and rural settings. Some areas may have value for species of concern, threatened species, or endangered species, while other habitats provide recreation and tourism benefits. To help streamline the process, a Habitat Quantification Tool (HQT) can be used to determine what the habitat is worth through a designation of “functional acres” (the habitat required to support prairie dogs). The Prairie Dog Coalition (PDC) is currently working with a team of agencies and organizations to develop an HQT for black-tailed prairie dogs that is similar to the Colorado Habitat Exchange. The HQT is ready for use and has been implemented in a pilot transaction. Contact the PDC ([pdcc@humane.org](mailto:pdcc@humane.org) or (720) 938-0788) for more information. These transactions may help curtail the net loss of prairie dogs by identifying willing prairie dog ecosystem creditors who create credits through restoration and conservation activities that can be purchased by prairie dog ecosystem debtors.

Since the HQT is still in the preliminary stages, it is possible to take a simpler approach to mitigation; paying directly for replacement of occupied habitat. There are three direct costs potentially associated with habitat replacement: 1. Cost of prairie dog relocation 2. Cost of land set aside for conservation purposes 3. Cost of maintaining already occupied habitats. Direct contribution to one or more of these costs could offset destruction of occupied acres.

Typical actions to consider:

1. Incorporate prairie dogs directly into development plan; this may be feasible depending on the size of the development and its location relative to other natural areas. No mitigation fee.
2. Translocate prairie dogs to public lands. Impose public land use fees determined by the local government.
3. Translocate prairie dog to other private lands. No mitigation fee.
4. Remove prairie dogs and donate to black-footed ferret or raptor recovery programs. This can be time-consuming and expensive (*see Appendix 2*). Charge a reduced fee for net loss of prairie dogs.
5. Lethal control of prairie dogs with restricted-use pesticides. Charge the full fee for loss of prairie dog occupied acres. Charge higher fees for use of more dangerous or inhumane toxicants to encourage use of less toxic chemicals and avoid inhumane practices (*see Appendix 2*).
6. Violation of any ordinances. Charge the full fee plus penalties (*see below*).

One complication with local government mitigation is that technically the language in an ordinance must be habitat-based rather than population- or animal-based. It is more difficult to assign value to an occupied acre than it is to calculate the cost of moving one prairie dog. Prairie dog populations can vary erratically from season to season and year to year, making evaluation of occupied acreages difficult. For example, spring translocations will yield almost double the population of prairie dogs (due to new pups) as compared to fall translocations. When HQT is not available, the best choices include charging replacement values or charging the cost of relocation.

Enforcement of mitigation plans is crucial and breaking the law must be more costly than compliance. Since state and federal goals include protection of occupied acres, penalties for infractions should be based upon amount of occupied acres destroyed.

Infractions might mean:

1. Reckless disregard of natural resources
2. Violation of permitting and failure to follow due diligence procedures
3. Physical damage to occupied acreage

Penalties might include:

1. Withholding building permits
2. Withholding land use changes
3. Cease and desist orders
4. Injunctions
5. Requiring specific performance
6. Judicial actions (civil and criminal) (Seavy, & Design, 2008)

## **Bibliography**

Seavy, S. G., & Design, N. (2008). *Model Land Use Code for Colorado Counties*. Prepared for the Colorado Department of Local Affairs.