WHITE-TAILED PRAIRIE DOG AND GUNNISON'S PRAIRIE DOG CONSERVATION STRATEGY

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RECOMMENDED CITATION

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WHITE-TAILED PRAIRIE DOG AND GUNNISON'S PRAIRIE DOG CONSERVATION STRATEGY

Introduction

The Gunnison's prairie dog (GPD; Cynomys gunnisoni) and the white-tailed prairie dog (WTPD; C. leucurus) play an important role as potential keystone species in maintenance of the sagesteppe and prairie ecosystems. Due to a number of reasons, both species have declined in distribution and abundance throughout their ranges (Seglund et al. 2006a, 2006b). Factors contributing to this decline include, but are not limited to, the absence of species-specific management, necessary staff to implement management policies, and lack of financial resources to conserve prairie dog populations and associated species. The objective of state and federal agencies involved in WTPD and GPD management is to conserve and maintain viable prairie dog populations and the sage-steppe and prairie ecosystems they inhabit. The viability of both prairie dog species was brought into question by petitions to list them under the Endangered Species Act (ESA; Center for Native Ecosystems et al. 2002; Forest Guardians 2004). Both petitions cited habitat loss/conversion, shooting, disease, a history of eradication efforts, and inadequate federal and state regulatory mechanisms as threats to long-term viability of these species. The U.S. Fish and Wildlife Service (USFWS) produced a negative 90-day finding for the WTPD petition (USFWS 2004) and is expected to publish a 90-day finding for the GPD in January 2006. After the petitions were submitted, the states took the lead role in completing multi-state Conservation Assessments that evaluated the status of both species throughout their ranges and impacts to both species. After completion of these documents, a Conservation Strategy was needed to provide management and administrative guidelines to assist state and tribal agencies in managing prairie dogs and their associated ecosystems, and to allow for continued management by these entities.

This Conservation Strategy (Strategy) describes a goal and objectives by which further conservation of WTPDs and GPDs will be implemented. Some objectives include specific activities that will support conservation efforts. An addendum to this Strategy will be developed to further describe specific activities that the state wildlife agencies will address in individual state plans to realize improved prairie dog conservation and management.

This effort is being led by the Western Association of Fish and Wildlife Agencies (WAFWA), working through its Prairie Dog Conservation Team (PDCT; Appendix A), which works with all prairie dog species, and the species-specific White-tailed and Gunnison's Prairie Dog Working Group (WTGWG; a committee under the PDCT). The actions under this Strategy are designed to: 1) promote conservation of WTPDs and GPDs and their habitats; 2) reduce the risk of overutilization of these prairie dog species for commercial, recreational, scientific, or educational purposes; 3) identify research needs; 4) focus use of existing regulatory mechanisms to maintain species viability; 5) reduce the risk of other factors affecting the continued existence of these prairie dog species; and 6) increase landowner participation in prairie dog conservation efforts by minimizing impacts from lost management options. This Strategy recognizes that circumstances

exist where population control is appropriate and identifies these conditions to provide appropriate recommendations for such control.

This Strategy identifies both short and long-term objectives, and sets various time frames for completing activities. It incorporates a rangewide view for long-term species persistence and an ecosystem management approach for habitat conservation.

Planning, and management proposals and actions will be coordinated, at a minimum, among the states and federal agencies. The involvement of tribes, other government agencies, and private entities will be invited and their participation welcomed. The state wildlife agencies will implement this Strategy and will seek new funds to enhance implementation of this Strategy. Effective conservation of WTPDs and GPDs and their habitat under this Strategy will necessarily depend on cooperation of all groups, thus, all cooperators must be aware of the importance of involving private landowners to the extent they wish to be included. Cooperators also must recognize the importance of compatible rural livelihoods and activities (e.g. ranching, outdoor recreation) and voluntary participation by private landowners in habitat identification, enhancement, and conservation, as key to this Conservation Strategy.

The purpose of the WTGWG is to assist with and coordinate the activities of the states and other working group members. This coordination will include: 1) developing protocols for compiling information from the states in categories that can be aggregated to depict conservation measures occurring throughout the species' range, 2) encouraging review and dialogue regarding means for balancing legitimate needs for both protection and control, and 3) identifying research needs and helping to obtain funds to implement projects. WTGWG members may be assigned to various technical committees as information or other needs (e.g. review of materials) arise. Each state wildlife agency PDCT member is responsible for coordinating the Conservation Strategy activities within their respective state. Any member of the public may attend PDCT and WTGWG meetings, provide comments on documents and proposed actions, and attend state work group meetings if such groups are established by the state.

Although this Strategy focuses on WTPD and GPD conservation, participants recognize, because these prairie dogs are possibly keystone species, the risks identified for them also may affect associated sage-steppe and prairie species. Initially, participants agree to direct their conservation actions toward WTPDs and GPDs, but when applicable, will work toward the conservation of sage-steppe and prairie associates.

GOAL

The goal of this Conservation Strategy is to conserve white-tailed prairie dog and Gunnison's prairie dog populations, within each state where they are found, sufficiently to ensure long-term viability and to preclude the need for protection under the Endangered Species Act.

CONSERVATION OBJECTIVES

This Conservation Strategy has 9 objectives, with a number of activities under each objective, for conserving WTPDs and GPDs across their range. These objectives allow cooperators to manage prairie dog populations in a manner that ensures long-term viability while also maintaining management flexibility. The 9 objectives are as follows:

- 1. Implement the Conservation Strategy.
- 2. Continue participation on the Prairie Dog Conservation Team, White-tailed and Gunnison's Prairie Dog Working Group, and state work groups if formed.
- 3. Identify and monitor the distribution and status of both species.
- 4. Promote public education.
- 5. Identify, prioritize, and implement research needs.
- 6. Address the 5 listing factors in individual state management plans.
- 7. Integrate WTPD and GPD conservation strategy objectives with management and habitat objectives of other sage-steppe and prairie species such as greater sage-grouse (*Centrocercus urophasianus*), Gunnison sage-grouse (*Centrocercus minimus*), ferruginous hawk (*Buteo regalis*), black-footed ferret (*Mustela nigripes*), burrowing owl (*Athene cunicularia*), kit fox (*Vulpes macrotis*), and pygmy rabbit (*Brachylagus idahoensis*).
- 8. Develop a detailed addendum to this Conservation Strategy.
- 9. Evaluate progress and accomplishments.

CONSERVATION ACTIVITIES

1. <u>Implement the Conservation Strategy</u>

A. This Strategy will be implemented through the Prairie Memorandum of Understanding (Prairie MOU; Appendix B), which will be signed, at a minimum, by all state wildlife agencies within the historic range of the WTPD and GPD by **January 31, 2006**. This does not preclude any other state, federal, tribal, or local government that wishes to cooperate in this endeavor from signing the Prairie MOU Local, tribal, and federal governments with land or wildlife management responsibilities in these species' historic range may wish to voluntarily cooperate by signing the Prairie MOU. Non-state entities wishing to sign the Prairie MOU need to

notify the Interstate Coordinator of their interest, in writing. Having a minimum of all state wildlife agencies as signatories identifies an entity to coordinate on-the-ground conservation activities. Government agencies that do not wish to be signatories still may participate by attending PDCT meetings and commenting on documents produced by the PDCT. However, only signatories to the Prairie MOU have decision-making authorities in terms of implementing the Prairie MOU.

Other elements of this Strategy will be developed and implemented through individual state management plans and through the cooperation from federal, state, tribal, other government cooperators, and through partnerships with private landowners and organizations.

- B. The needs of the WTPD and GPD must be met in coordination with other wildlife needs and a variety of land uses on federal, state, tribal, and private lands. Thus, this Strategy should be implemented in complete recognition of those factors, and through close coordination with other current or future planning and management efforts. These would include federal, state, and tribal management efforts, as well as private cooperative endeavors in ecosystem, wildlife, and land management. Any proposed changes to management plans or other land uses will be done in consultation, cooperation, and coordination with the lessees, permittees, other involved landowners, and any state or states having lands within the area covered by the proposal, per Section 8 of the Public Rangelands Improvement Act (PRIA; Public Law 95-514/714/1978, U.S.C. Title 43 §1901).
- C. Although this Strategy applies to the full historical range of the WTPD and GPD, implementation of elements will be recognized at a state level. This restricted geographic approach will allow available resources to be focused in an area.
- D. Participation in this Conservation Strategy is strictly voluntary. Parties are not legally bound to take actions that are prohibited by current laws and regulations. No party is committed to expend funds not otherwise available for the purposes set forth in this Strategy. In addition, parties of this agreement recognize the rights and legal authorities of all private, state, federal, and tribal entities for managing lands under their ownership or jurisdiction.
- 2. <u>Continue participation on the Prairie Dog Conservation Team, White-tailed and Gunnison's Prairie Dog Working Group, and state work groups if formed</u>
 - A. The PDCT will continue to be comprised of a minimum of one representative from each signatory to the Prairie MOU that has land or wildlife management authority related to any prairie dog species in the United States.

- (1) The PDCT will continue to meet annually. PDCT meetings will be open to the public. Agendas will be made available to the public and states at least 30 calendar-days in advance, through a notice sent to each state wildlife agency where a state mailing list will be maintained.
- (2) PDCT meetings will be hosted by each state within the range of all prairie dog species (including BTPDs) on a rotational basis. Each state will be responsible for setting up the meeting and ensuring information is distributed in a manner to allow for cooperators to process travel requests.
- (3) The Interstate Coordinator will continue to chair the PDCT. The host state will assist the Chairperson in finding a meeting location.
- (4) The state wildlife agencies within the historic range of WTPDs and GPDs will continue to participate in the WTGWG and will be known as the leads in developing and implementing this Strategy. Each state is to ensure that individual state management plans support conservation measures identified in the Strategy. All state wildlife agencies will identify at least one position in which that individual or individuals will have coordination roles for WTPD and GPD conservation measures.
- (5) Other Prairie MOU signatories will be known as cooperators in developing and implementing this Strategy. These signatories may also participate on the WTGWG.
- (6) The WTGWG will coordinate and monitor progress on the activities outlined in this Strategy. The WTGWG will annually monitor the attainment of objectives and evaluate the completion of specific activities within each state. It will review information provided by interested and affected parties, outline management guidelines, prioritize research needs, promote education, ensure state prairie dog management plans contribute to the conservation of the species, and identify known and potential funding sources for carrying out prairie dog conservation work.
- B. States will have WAFWA-approved state GPD and WTPD management plans in place and initiated by **December 31, 2007**. States should adopt a philosophy and formally recognize prairie dogs and their habitat as valuable components of the landscape, while also recognizing the economic and political realities that control of the species may be necessary in some instances. State plans should identify: 1) funding needed, 2) personnel needed, and 3) time frames for implementing elements of their state plans. Conservation strategies should be coordinated within the state to encompass other management efforts including tribal and federal land management agencies and private landowners. State plans will be flexible enough to allow for modifications, as

new information becomes available. In addition, state plans need not be in place to begin conservation actions. If measures are being implemented during the development of the state plan, it should be acknowledged within the plan.

1. State management plans do not need to be species-specific stand-alone documents. The management plans can be incorporated into existing documents (e.g. grassland plans, Comprehensive Wildlife Conservation Strategies) as long as the requirements set forth in this Strategy and forthcoming addendum are met.

3. Identify and monitor the distribution and status of both species

- A. A body of recognized prairie dog and sage-steppe and prairie ecosystem experts will be assembled for the purpose of advising the WTGWG. With the assistance from this scientific advisory group (SAG), the WTGWG will develop long-term conservation targets for the entire range of the WTPD and GPD. These targets will be included in individual state management plans.
- B. The WTGWG will evaluate and establish survey methods, in concert with SAG, for monitoring prairie dogs in each state. The methodology will be developed to allow for comparable analysis. Survey data will be updated at least every 5 years starting by 2006, and will be addressed in the state plans.
- C. The state objectives in individual state plans must support rangewide objectives. The rangewide population must be capable of sustaining itself and be stable enough to preclude the need for federal listing as a threatened or endangered species.
- D. Each state will identify corrective measures that will be taken if either species is not meeting management objectives and include those objectives and measures in their state management plans. To preclude the need for state listing as a threatened or endangered species, if applicable, corrective or protective measures that may be employed include: regulations or limits on shooting, restriction of control efforts, implementation of mechanisms to control the spread of disease, reestablishment of exterminated colonies and/or establishment of new colonies, and use of habitat improvement techniques.
- E. Each state wildlife agency will coordinate with federal land management agencies, state land departments, participating tribes, and private landowners to conduct WTPD and GPD habitat inventories for inclusion in their state plans. This will include both unoccupied and occupied habitat. Field verification will be required to evaluate habitat data. Tribal and private lands will not be included in a state inventory if the landowners choose not to participate.

On-the-ground habitat inventories, ground-truthing, or other on-the-ground studies conducted on private or tribal lands pursuant to this Strategy shall not occur without prior permission from the landowner or tribe.

- F. Each state will produce state-specific maps delineating land ownership patterns overlaid with suitable occupied and unoccupied WTPD and GPD habitat, insofar as such habitat can be delineated at that time. Private lands on such maps will not be identified to individual owners, except upon written consent of the landowner. These maps will be the primary basis for evaluating constraints to, and opportunities for, prairie dog habitat management within each state. The PDCT will identify a central repository for rangewide inventory information.
- G. Through the WTGWG, federal, state, tribal, and private land managers will be encouraged to conserve or enhance suitable or potentially suitable habitat to ensure that the WTPD's and GPD's current and future habitat needs (including natural dispersal and potential habitat expansion) are appropriately addressed. In doing so, the cooperators will consider state, federal, tribal, and private cooperation, funding sources, and availability of suitable habitat.
- H. State wildlife agencies, in cooperation with the WTGWG, will work with appropriate land management agencies and private landowners to minimize impacts of oil and gas development on WTPD or GPD colonies.
 - (1) State and federal land management agencies will identify oil and gas development that will occur in occupied or suitable prairie dog habitat. In addition to meeting National Environmental Policy Act (NEPA) requirements, federal agencies will be encouraged to conduct a minimal analysis of the area that includes mapping of occupied and unoccupied suitable habitat. States will be encouraged to conduct the same analysis on state trust lands.
 - (2) States and land management agencies should work with the developers to design facilities, well locations, and roads to avoid occupied and suitable habitat, and identify mitigation measures for habitat loss.
- I. State wildlife agencies, in cooperation with the WTGWG and SAG, will monitor and identify new, continued, or diminishing threats to prairie dogs and their habitat to ensure the long-term conservation of prairie dog species.

4. Promote public education

A. The WTGWG will promote public support of WTPD and GPD conservation through development and distribution of informational and educational materials. Prairie dog conservation efforts must work toward gaining support of an informed public throughout the species' ranges. Public support could enhance funding opportunities and facilitate implementation of this Strategy. The publics that will be targeted for information and education efforts will include wildlife viewers, hunters, ranchers, farmers, other private landowners, conservation groups, schools, and local governments.

- B. State wildlife agencies will develop and distribute educational materials and are encouraged to evaluate and implement projects that will help improve prairie dog conservation and management on public, private, and tribal lands. An educational component will be included in the individual state management plans. Materials and projects may include:
 - (1) Informational brochures targeting the general public and land managers. These brochures will emphasize the need for prairie dog conservation and include a description of the natural history of prairie dogs. In addition, a list of beneficial and non-beneficial management practices will be included. Management information should include practices that allow for livestock and prairie dogs to be managed compatibly, incorporating nonlethal control of prairie dogs and the concepts of integrated pest management. Brochures will also recognize the impacts of WTPDs and GPDs to private landowners, and explain management needs and challenges within the state.
 - (2) Fact sheets that explain the effects of plague on prairie dog colonies and surrounding areas.
 - (3) State updates or newsletters, to be distributed to public and private land managers within the state's prairie dog range. This update would keep land managers informed of issues and new technologies being developed for prairie dog conservation. It would also serve as an avenue for the state to receive valuable input from all stakeholder groups.
 - (4) Demonstration areas that would educate land managers on components of prairie dog habitat, how to manage for prairie dog habitat, and what other uses, such as livestock grazing, that can be compatible with prairie dog conservation.
 - (5) Local newspaper, radio, and television stories, segments, or series that inform the public about the prairie dog conservation effort.
 - (6) Educational materials emphasizing prairie dog conservation that could be incorporated into existing school curricula, including a teacher packet for use during visits to prairie dog colonies and a video describing WTPD and GPD ecology, controversy, and activities.

- (7) A database that contains an annotated bibliography of historical and current information on prairie dogs.
- (8) An internet website that provides prairie dog information.
- (9) Watchable wildlife maps and associated materials directing the public to prairie dog viewing sites.
- (10)Landowner meetings to identify issues, concerns, and to help develop constructive solutions to meet conservation objectives.
- C. State wildlife agencies will identify the recreational, educational, scientific, and economic benefits and concerns associated with prairie dogs. This information will be used when developing conservation guidelines and educational materials.

5. <u>Identify</u>, prioritize, and implement research needs

Literature reviews were conducted on both WTPDs and GPDs when their conservation assessments (Seglund et al. 2006a; 2006b) were written. These reviews identified research and information gaps that needed to be completed to better manage these species. Literature, techniques, and other information will be reviewed as it becomes available to allow for state agencies to adaptively manage these species. As such, this list of research needs likely will change over the life of this Strategy. The presented list is not necessarily all inclusive or prioritized.

- A. With the assistance of SAG, the WTGWG will ascertain how much is already known and prioritize information needs. This will occur by **January 31, 2007** through a series of conference calls.
- B. State wildlife agencies will prioritize research needs for their state and will include them in their management plans; both regional and rangewide needs must be considered. In developing state management plans, research projects might support the following needs as identified in the conservation assessments (Seglund et al. 2006a; 2006b):

(1) Land Conversion/Loss of Habitat

Throughout the 19th and 20th centuries, lasting changes in WTPD and GPD habitat have occurred. These changes resulted from conversion of rangelands to seeded pastures and croplands, urbanization, oil/gas exploration and extraction, intensive livestock grazing, alteration in fire regimes, and proliferation of non-native plant species. How these changes have affected these species is difficult to determine since information is not available

regarding WTPD and GPD populations prior to human induced alterations across the western landscape. Research is needed to first, identify habitat characteristics required to maintain viable WTPD and GPD populations and second, address the direct and indirect effects of land conversions on these species. Specific research needs are identified in the conservation assessments (Seglund et al. 2006a; 2006b).

(2) Grazing Effects

One of the most significant human-induced changes affecting the western landscape has been widespread introduction of domestic livestock. Evaluating the influence of domestic livestock grazing on WTPD and GPD habitats and populations is problematic. However, assessments of livestock grazing throughout the west indicate it has had profound ecological consequences including alteration in species composition within plant communities, disruption of ecosystem function, and alteration of ecosystem structure (Fleischner 1994). Still, information is needed to clearly evaluate the effects of grazing practices on WTPD and GPD populations. Until this information is available, the influence of this altered landscape on the population status and viability cannot be determined. Specific research needs are identified in the conservation assessments (Seglund et al. 2006a; 2006b).

(3) Recreational Shooting

Recreational shooting of prairie dogs occurs at various levels across WTPD and GPD range. Limited research exists on the long-term effects of shooting on prairie dog populations, and research conducted thus far has focused on BTPDs; extrapolation of the data to WTPDs and GPDs can only be inferred. Because shooting can introduce a level of uncertainty in the demographics of WTPD and GPD populations, research is needed to provide managers with information to manage take of these species on public lands. Research should be designed to evaluate current recreational shooting, but experimentation may be required for further analyses. Specific research needs are identified in the conservation assessments (Seglund et al. 2006a; 2006b).

(4) Plague

Plague is found throughout WTPD and GPD range, although GPDs in the Aubrey Valley Complex in Arizona have not experienced an epizootic since at least 1974 (Seglund et al. 2006b). WTPD populations, which generally occur at lower densities with dispersed aggregations of animals, have been found to experience less severe population declines (Clark 1977; Anderson and

Williams 1997) than GPDs. However, the effect of plague on the long-term viability of both species is unknown.

Research on plague has clarified aspects of the ecology of the disease, but questions relating to how plague maintains itself in natural foci and under what conditions epizootics will occur remain unanswered (Gage 2004). Without answers to these questions, it is impossible to predict the movement, impact, and/or timing of plague epizootics. In addition, information is needed to investigate the effects of changes in population demographics and recovery rates on colonies following a plague epizootic. Understanding the impact of plague on WTPDs and GPDs is important for future conservation efforts. Specific research needs are identified in the conservation assessments (Seglund et al. 2006a; 2006b).

(5) Prairie Dog Control

Assessing the extent of poisoning on WTPDs and GPDs in the past is difficult because the accounts of poisoning are not usually site or species specific. On public lands, poisoning efforts led to a reduction in occupied habitat, extirpation from local areas, fragmentation, and isolation of colonies. Poisoning in all states became less common after the 1970s, due to federal regulation of poisons. State and federal agencies currently are not involved in large scale control efforts. Research is needed to determine the extent of current control levels. Specific research needs are identified in the conservation assessments (Seglund et al. 2006a; 2006b).

(6) Drought

The effects of drought may have been amplified since the late 1800s due to land use practices that resulted in the invasion by non-native plant species, alterations in plant species composition, and lowering of water tables. Though historic levels of livestock grazing throughout the west had profound ecological consequences, it is unknown how they interact with drought. No studies have been conducted to determine the cumulative effects of drought and the interaction with other impacts on WTPDs and GPDs. Research is needed to identify the effects of various environmental conditions on prairie dog population dynamics over a significant part of WTPD and GPD range.

(7) Prairie Dog Associated Species/Sage-steppe and Prairie Keystone Species

All prairie dog species have been described as possible keystone species or ecosystem engineers. This suggests that these species influence ecosystem functions through their activities in unique and significant ways. If true, then the estimated decline of occupied WTPD and GPD habitat in sage-steppe and prairie habitats should have initiated changes in ecosystem structure resulting in a change in species diversity.

Prairie dog associated species can be categorized as prey dependent or habitat dependent, and obligatory or facultative. For prey dependent species, prairie dog colonies represent patches of dense prey availability. For habitat dependent species, prairie dog colonies increase areas of bare ground and provide burrows for shelter.

The black-footed ferret is probably the only truly obligatory predator of prairie dogs (Knowles 1995). The ferruginous hawk is considered a generalized prairie dog predator. The mountain plover (*Charadrius montanus*) and burrowing owl are believed to be prairie dog habitat dependent species. In Montana, the mountain plover has been suggested as on the verge of being an obligatory habitat species with BTPDs (Knowles 1995). Also in Montana, the decline of the ferruginous hawk has been associated with the decline of BTPDs (Knowles 1995). The burrowing owl is closely associated with prairie dogs, primarily because of the availability of nest burrows. However, the geographic range of burrowing owls is much greater than that of all prairie dog species combined.

Further research is needed to identify relationships and the extent of dependency, if any, between WTPDs and GPDs and associated sage-steppe and prairie species.

6. Address listing criteria in individual state management plans

Individual state management plans must address the 5 criteria used by the USFWS to determine if a species should be listed and protected under the ESA. For each criterion, the state plans must summarize the current status and management, evaluate current information, and make management recommendations if necessary. It is important that each state address the criteria this way, as these documents likely will be used by the USFWS to make listing decisions. The 5 listing criteria and the items discussed in the WTPD and GPD Conservation Assessments are:

- A. Present or Threatened Destruction, Modification or Curtailment of Habitat or Range
 - (1) Agricultural land conversion
 - (2) Urbanization
 - (3) Oil/Gas exploration and extraction
 - (4) Livestock grazing
 - (5) Altered fire regimes

- B. Overutilization for Commercial, Recreational, Scientific or Educational Purposes (1) Shooting
- C. Disease or Predation
- D. Inadequacy of Existing Regulatory Mechanisms
 - (1) Poisoning
 - (2) Shooting
- E. Other Natural or Manmade Factors Affecting its Continued Existence
 - (1) Poisoning
 - (2) Drought
- 7. Integrate white-tailed and Gunnison's prairie dog conservation strategy objectives with management and habitat objectives of other sage-steppe and prairie species such as greater sage-grouse, Gunnison sage-grouse, ferruginous hawk, black-footed ferret, burrowing owl, kit fox, and pygmy rabbit
 - A. The Interstate Coordinator will serve as the PDCT liaison to WAFWA's sagebrush and sage-steppe conservation program.
 - (1) The WTGWG will provide appropriate guidance to the Interstate Coordinator to ensure timely, effective coordination with the companion WAFWA conservation effort for sagebrush and sage-steppe habitats and the species therein.
 - (2) The Interstate Coordinator will assist in integrating this conservation effort into WAFWA's support for development of a Western Shrubland Science and Management Information Consortium.
- 8. Develop a detailed addendum to this Conservation Strategy

A detailed addendum for WTPD and GPD conservation will be developed following approval of this Strategy. It will provide specific activities and timelines for state wildlife agencies to consider in their state management plans. The GPD addendum will be completed by **June 30**, **2006** and the WTPD addendum will be completed by **December 31**, **2006**.

9. Evaluate progress and accomplishments

By the end of February of each year, following execution of the Prairie MOU and this Conservation Strategy, the PDCT will issue a written report on activities implemented to date to conserve all prairie dog species, including black-tailed prairie dogs, within the United States, as well as companion efforts in Canada and Mexico. The annual report also will

identify needs for the following year. The report will be submitted to WAFWA and the USFWS, and made available to all interested parties. Within 60 calendar-days of receipt of each report, the USFWS will inform the states in writing of any areas in which progress is not sufficient to warrant continuation of this Strategy. If such deficiencies are identified, within 90 calendar-days of notification, the primary cooperators will jointly determine whether to implement mutually acceptable, and agreed to by all parties to the Prairie MOU, curative measures.

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Appendix A. List of state wildlife agencies and identified members of the Prairie Dog Conservation Team.

State Wildlife Agency	PDCT Members	Prairie Dog Species in the State
Arizona Game and Fish Department	Bill Van Pelt, Nongame Birds and	BTPD (extirpated)
	Mammals Program Manager	GPD
	Jared Underwood, Small Mammal	
Colorado Division of Wildlife	Coordinator Gary Skiba, Wildlife Conservation	BTPD
Colorado Division of Wildine	Biologist (GPD)	GPD
	Biologist (GLD)	WTPD
	Francie Pusateri, Wildlife	WIID
	Conservation Biologist (BTPD)	
	Pamela Schnurr, Wildlife Conservation	
	Biologist (WTPD)	
Kansas Department of Wildlife and	Mike Mitchener, Wildlife Section	BTPD
Parks	Chief	DEED
Montana Fish, Wildlife, and Parks	Allison Puchniak, Native Species	BTPD
Nebraska Game and Parks	Biologist Mike Fritz, Natural Heritage Zoologist	WTPD BTPD
Commission	Mike Fritz, Natural Heritage Zoologist	ВТРО
New Mexico Department of Game and	Jim Stuart, Nongame and Endangered	BTPD
Fish	Species Mammals Specialist	GPD
North Dakota Game and Fish	Patrick Isakson, Nongame Biologist	BTPD
Department		
Oklahoma Department of Wildlife	Julianne Hoagland	BTPD
Conservation		
South Dakota Game, Fish, and Parks	Alyssa Kiesow, Wildlife Biologist	BTPD
Texas Parks and Wildlife Department	John Young, Mammalogist	BTPD
Utah Division of Wildlife Resources	Kevin Bunnell, Mammals Program	GPD
	Manager	WTPD
	Andless White Consider Consider	UPD
	Anthony Wright, Sensitive Species Biologist (GPD)	
	Diologist (Of D)	
	Brian Maxfield, Sensitive Species	
	Biologist (WTPD)	
	Teresa Bonzo, Sensitive Species	
	Biologist (UPD)	
Wyoming Game and Fish Department	Martin Grenier, Nongame Mammal	BTPD
	Biologist	WTPD

^{**}Note: The state wildlife agency representatives may change over time. This list is current at time of printing.**

Appendix B. Final Prairie Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING
FOR
CONSERVATION AND MANAGEMENT OF SPECIES OF CONSERVATION CONCERN
ASSOCIATED WITH PRAIRIE ECOSYSTEMS

I. Purpose

The purpose of this Memorandum of Understanding (MOU) is to provide, under auspices of the Western Association of Fish and Wildlife Agencies (WAFWA), for interagency cooperation in conservation and management of species associated with prairie ecosystems of the Western Great Plains (i.e. parts of Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Wyoming, and Utah). The primary focus is on federally-listed species, state-listed species, and species of conservation concern. The participating agencies agree that cooperation is necessary to collect and analyze data on these species and their habitats, and to plan and implement actions necessary to establish and/or maintain viable populations of each species that are sufficient to preclude present or future endangerment, within the constraints of approved budgets.

Parties to this MOU are collectively referred to herein as Signatories.

II. Background

The Signatories have been involved in a variety of long-standing and recently initiated efforts to conserve and manage wildlife and habitats in the Western Great Plains. Many of these efforts have been conducted with a single species approach. Despite significant successes to date, the Signatories believe it is in their best long-term interest to move toward a landscape level approach that enables better planning and coordination, efficiency in time and scale of accomplishment, and greater cost effectiveness. The Signatories recognize that such a transition will take time, require adaptive management to respond to emerging needs and priorities, and present unique challenges in terms of process management, shared decision-making, and increased emphasis on community based conservation. They also recognize that as they move toward a landscape level or ecosystem focused, they must ensure that their commitment to conservation and management of individual species cannot be diminished such that imperilment occurs. Given these considerations, in 2004 WAFWA directed its Habitat and Nongame and Endangered Species committees to use renewal of an MOU for black-tailed prairie dog conservation as a vehicle for beginning the transition toward an ecosystem approach (i.e. prairie) in the Western Great Plains. WAFWA also directed the two committees to ensure that the prairie effort is fully coordinated with, and complementary to, a companion effort to conserve sagebrush and sage-steppe communities (and associated species of wildlife) in the Great Basin, because the two biomes share many important species.

III. Objectives

The Signatories agree to accomplish the following conservation objectives:

- 1. Recognize that because the white-tailed prairie dog (WTPD) and Gunnison's prairie dog (GPD) inhabit sage-steppe and prairie scrub ecosystems rather than grasslands, they will fall under the purview of the WAFWA Sagebrush MOU when a new one is developed in 2007.
- 2. Develop a WTPD and GPD conservation strategy by January 31, 2006 to complement WAFWA's existing black-tailed prairie dog conservation strategy.
- 3. Develop state-specific prairie dog management plans, or integrate prairie dog management components into other state-specific and/or regional management plans, as appropriate, by December 31, 2007.
- 4. Develop a cohesive, comprehensive, WAFWA prairie conservation strategy by June 30, 2010 that integrates pertinent components of companion efforts for the WTPD, GPD, BTPD, black-footed ferret, swift and kit foxes, lesser prairie chicken, mountain plover, burrowing owl, ferruginous hawk, Swainson's hawk, loggerhead shrike, and, as appropriate and feasible, other shrub and grassland species in the Western Great Plains.
- 5. Coordinate with, establish, or otherwise convene various conservation teams, work groups, etc. as necessary to implement this MOU.
- 6. Cooperate to maintain and enhance, to the extent practicable, the populations and habitats of the species addressed pursuant to this MOU.
- 7. Coordinate with, as necessary and appropriate, companion conservation efforts in the United States, Canada, and Mexico.
- 8. Enhance awareness of the Signatories and local communities, industries, nongovernmental organizations, and private individuals regarding this conservation effort, and encourage and enhance their participation in partnerships to accomplish mutually agreeable conservation objectives.
- 9. Remain aware of, and inform WAFWA on, any legal, regulatory, or policy action associated with the species addressed pursuant to this MOU.

IV. Actions

- 1. WAFWA will identify a State Director to serve as Sponsor for this MOU.
- 2. The State Sponsor or their designee will:
 - a. Approve additional Signatories and modifications to this MOU;
 - b. Collaborate with IAFWA in contracting an Interstate Coordinator for this MOU; and
 - c. Provide appropriate guidance to the Interstate Coordinator for managing this MOU, including (i) ensuring timely, effective coordination with the companion WAFWA conservation effort for sagebrush and sage-steppe habitats and the species therein; and (ii) integrating this conservation effort into WAFWA's

support for development of a Western Shrubland Science and Management Information Consortium.

- 3. The Interstate Coordinator will serve as Chair for WAFWA's Prairie Dog Conservation Team and liaison to WAFWA's sagebrush and sage-steppe conservation program.
- 4. The Interstate Coordinator will facilitate the Signatories' efforts to identify and implement the most appropriate way(s) to collect data (e.g. rangewide survey and monitoring recommendations) for the species addressed pursuant to this MOU.
- 5. The Interstate Coordinator will assist WAFWA in integrating WTPD and GPD strategies into its sagebrush and sage-steppe conservation effort.
- 6. The Interstate Coordinator will facilitate Signatory cooperation in developing major media releases and media projects, as well as website support and other public outreach efforts, pursuant to this MOU.
- 7. The Interstate Coordinator will provide quarterly reports to WAFWA and IAFWA in April, July, and October, an Annual Report to WAFWA and IAFWA in February of each year, progress reports to WAFWA's Habitat Committee at annual WAFWA Summer Conferences and Mid-Winter Business Meetings, and an annual report to the Prairie Dog Conservation Team.
- 8. The Interstate Coordinator will provide appropriate grant progress reports to the National Fish and Wildlife Foundation in May 2006 (Phase 2 Report).
- 9. The Signatories will assist the Interstate Coordinator as necessary to ensure timely, effective, and well coordinated activities and completion of products and services pursuant to this MOU.
- 10. The Signatories will cooperate to maintain, and enhance to the extent practicable, viable populations and habitats of the species addressed pursuant to this MOU.
- 11. The Signatories will assist the Interstate Coordinator in ensuring local governments, communities, private citizens, and other interested and affected parties are informed on the status of this conservation effort, including ways that might provide local economic benefits.
- 12. The Signatories will recognize and respect the separate authorities of each signatory agency and the interests of other affected or interested parties.
- 13. The Signatories will cooperate in providing financial support for the Interstate Coordinator for this MOU, with a total annual budget of: YR1 \$112,000; YR2 \$112,000; YR3 \$116,000; YR4 \$118,000; and YR5 \$123,000 (the intent is for 50% of the stated annual amounts to be contributed by State Wildlife Agencies and 50% by Federal Agencies).
- 14. The Signatories will provide facilities, equipment, logistical support, authorizations, and permits as necessary and available to implement this MOU.

V. Authorities

This MOU is among various WAFWA States and the Bureau of Indian Affairs, Bureau of Land Management, Department of Defense, National Park Service, Natural Resources Conservation

Service, U.S.D.A. APHIS Wildlife Service, U.S.D.A Forest Service, U.S. Fish and Wildlife Service, and U.S. Geological Survey, under provisions of the following Federal laws:

Federal Land and Policy Management Act of 1976 (43 U.S.C. 1701 et seq.)

Fish and Wildlife Act of 1956 (16 U.S.C. 742 et seq.)

Fish and Wildlife Coordination Act (16 U.S.C. 661-667)

Multiple-Use Sustained-Yield Act [of 1960] (16 U.S.C. 528-531)

Forest and Rangeland Renewable Resources Research Act of 1978 (16 U.S.C. 1641-48)

National Forest Management Act of 1976 (16 U.S.C. 1600 et seq.)

Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)

National Wildlife Refuge Administration Act of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C 668dd et seq.)

VI. Terms and Conditions

It is mutually agreed and understood by and between the Signatories that:

- 1. This MOU is neither a fiscal nor a funds obligation document. Nothing in this agreement may be construed to obligate Federal Agencies or the United States to any current or future expenditure of resources in advance of the availability of appropriations from Congress. Any endeavor involving reimbursement or contribution of funds between the Signatories to this MOU will be handled in accordance with applicable regulations, and procedures, including those for federal government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the Signatories and shall be independently authorized in accordance with appropriate statutory authority. This MOU does not provide such authority.
- 2. This MOU in no way restricts the Signatories from participating in similar activities with other public or private agencies, organizations, and individuals.
- 3. This MOU is executed as of the last date shown below and expires five years from the execution date, at which time it will be subject to review, renewal, or expiration.
- 4. Modifications within the scope of this MOU shall be made by issuance of a mutually executed modification prior to any changes being performed.
- 5. Any party to this MOU may withdraw with a 60-day written notice to the State Sponsor.
- 6. Any press releases with reference to this MOU, the Signatories, or the relationship established between the Signatories of this MOU, shall be reviewed by the Interstate Coordinator and State Sponsor prior to release.
- 7. In any advertising done by any of the Signatories, this MOU shall not be referred to in a manner that states or implies that any Signatory approves of or endorses unrelated activities of any other.
- 8. During the performance of this MOU, the Signatories agree to abide by the terms of Executive Order 11246 on nondiscrimination and will not discriminate against any person because of race, age, color, religion, gender, national origin, or disability.

- 9. No member of or delegate to Congress, or resident Commissioner, shall be admitted to any share or part of this agreement, or to any benefit that may arise from, but these provisions shall not be construed to extend to this agreement if made with a corporation for its general benefits.
- 10. The Signatories agree to implement the provisions of this MOU to the extent personnel and budgets allow. In addition, nothing in the MOU is intended to supersede any laws, regulations, or directives by which the Signatories must legally abide.

VII. Approval

In witness thereof, the Signatories hereto have executed this Memorandum of Understanding as of the last written date below.

Approved	Arizona Game and Fish Department	Date	
Approved	Colorado Division of Wildlife	Date	
Approved	Kansas Department of Wildlife and Parks	Date	
Approved	Montana Fish, Wildlife, and Parks	Date	
Approved	Nebraska Game and Parks Commission	Date	
Approved	New Mexico Department of Game and Fish	Date	
Approved	North Dakota Game and Fish Department	Date	
Approved	Oklahoma Department of Wildlife Conservation	Date	

Approved		Date	
rr	South Dakota Game, Fish, and Parks		
Approved	Texas Parks and Wildlife Department	Date	
Approved	Utah Division of Wildlife Resources	_ Date	
Approved	Wyoming Game and Fish Department	Date	
Approved	Bureau of Indian Affairs	Date	
Approved	Bureau of Land Management	Date	
Approved	Department of Defense	Date	
Approved	National Park Service	Date	
Approved	Natural Resources Conservation Service	Date	
Approved	USDA APHIS Wildlife Services	Date	
Approved	USDA Forest Service	Date	

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ApprovedUS Fish and Wildlife Service	Date	

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