

**DEPARTMENT OF THE INTERIOR****Fish and Wildlife Service****50 CFR Part 17**

[FWS–R6–ES–2008–0111; MO 9921050083–B2]

**Endangered and Threatened Wildlife and Plants; 90-Day Finding on a Petition To List the Black-tailed Prairie Dog as Threatened or Endangered**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Notice of 90-day petition finding and initiation of status review.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), announce a 90-day finding on a petition to list the black-tailed prairie dog (*Cynomys ludovicianus*) as threatened or endangered under the Endangered Species Act of 1973, as amended (Act). We find that the petition presents substantial scientific or commercial information indicating that listing the black-tailed prairie dog may be warranted. Therefore, with the publication of this notice, we are initiating a status review of the species to determine if listing the species is warranted. To ensure that the review is comprehensive, we are soliciting scientific and commercial information regarding this species.

**DATES:** To allow us adequate time to conduct a status review, we request that we receive information on or before February 2, 2009.

**ADDRESSES:** You may submit information by one of the following methods:

- *Federal rulemaking Portal:* <http://www.regulations.gov>. Follow the instructions for submitting comments.
- *U.S. mail or hand-delivery:* Public Comments Processing, Attn: FWS–R6–ES–2008–0111; Division of Policy and Directives Management; U.S. Fish and Wildlife Service; 4401 N. Fairfax Drive, Suite 222; Arlington, VA 22203.

We will not accept e-mail or faxes. We will post all information received on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see the Information Solicited section below for more information).

**FOR FURTHER INFORMATION CONTACT:** Pete Gober, Field Supervisor, South Dakota Fish and Wildlife Office, 420 South Garfield Avenue, Suite 400, Pierre, SD 54501; telephone at 605–224–8693, extension 224. If you use a telecommunications device for the deaf (TDD), call the Federal Information Relay Service (FIRS) at 800–877–8339.

**SUPPLEMENTARY INFORMATION:****Information Solicited**

When we make a finding that a petition presents substantial information indicating that listing a species may be warranted, we are required to promptly commence a review of the status of the species. To ensure that the status review is complete and based on the best available scientific and commercial information, we are soliciting information concerning the status of the black-tailed prairie dog. We request information from the public, other concerned governmental agencies, Tribes, the scientific community, industry, or any other interested parties concerning the status of the black-tailed prairie dog. We are seeking information regarding the species' historical and current status and distribution, its biology and ecology, ongoing conservation measures for the species and its habitat, and threats to the species or its habitat.

Please note that comments merely stating support or opposition to the action under consideration without providing supporting information, although noted, will not be considered in making a determination, as section 4(b)(1)(A) of the Act (16 U.S.C. 1533(b)(1)(A)) directs that determinations as to whether any species is a threatened or endangered species must be made "solely on the basis of the best scientific and commercial data available." At the conclusion of the status review, we will issue a 12-month finding on the petition, as provided in section 4(b)(3)(B) of the Act (16 U.S.C. 1533(b)(3)(B)).

You may submit your information concerning this 90-day finding by one of the methods listed in the **ADDRESSES** section. We will not consider submissions sent by e-mail or fax or to an address not listed in the **ADDRESSES** section.

If you submit information via <http://www.regulations.gov>, your entire submission—including any personal identifying information—will be posted on the Web site. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy submissions on <http://www.regulations.gov>.

Information and materials we receive, as well as supporting documentation we used in preparing this 90-day finding, will be available for public inspection

on <http://www.regulations.gov>, or by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, South Dakota Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

**Background**

Section 4(b)(3)(A) of the Act (16 U.S.C. 1531 *et seq.*) requires that we make a finding on whether a petition to list, delist, or reclassify a species presents substantial scientific or commercial information to indicate that the petitioned action may be warranted. We are to base this finding on information provided in the petition, supporting information submitted with the petition, and information otherwise available in our files at the time we make the finding. To the maximum extent practicable, we are to make this finding within 90 days of our receipt of the petition and publish our notice of the finding promptly in the **Federal Register**.

Our standard for substantial information within the Code of Federal Regulations (CFR) with regard to a 90-day petition finding is "that amount of information that would lead a reasonable person to believe that the measure proposed in the petition may be warranted" (50 CFR 424.14(b)). If we find that substantial information was presented, we are required to promptly commence a review of the status of the species.

In making this finding, we relied on information provided by the petitioners, as well as information readily available in our files at the time of the petition review. We evaluated the information in accordance with 50 CFR 424.14(b). Our process for making this 90-day finding under section 4(b)(3)(A) of the Act and section 424.14(b) of our regulations is limited to a determination of whether the information in the petition meets the "substantial scientific and commercial information" threshold.

On August 6, 2007, we received a formal petition dated August 1, 2007, from Forest Guardians (now WildEarth Guardians), Biodiversity Conservation Alliance, Center for Native Ecosystems, and Rocky Mountain Animal Defense, requesting that we list the black-tailed prairie dog throughout its historical range (and portions thereof) in Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming, and in Canada and Mexico. The petitioners also requested that, if the Service believes that *Cynomys ludovicianus arizonensis* is a distinct subspecies or population segment, it be listed as threatened or endangered throughout its

historical range as well. In addition, the petitioners requested that the Service designate critical habitat for the species. The petition clearly identified itself as a petition and included the requisite identification information as required in 50 CFR 424.14(a). We acknowledged receipt of the petition in a letter to the petitioners on August 24, 2007, and indicated that emergency listing of the black-tailed prairie dog was not warranted. We also explained that we would not be able to address the petition until fiscal year 2009, due to existing court orders and settlement agreements for other listing actions. However, in fiscal year 2008, funding became available, and we began work on this petition finding.

#### Previous Federal Actions

On October 24, 1994, we received a petition from Biodiversity Legal Foundation and Jon C. Sharps, dated October 21, 1994, to classify the black-tailed prairie dog as a Category 2 candidate species. Category 2 included taxa for which information in our possession indicated that a proposed listing rule was possibly appropriate, but we did not have available sufficient data on biological vulnerability and threats to support a proposed rule. We reviewed the petition, and on May 5, 1995, we concluded that the black-tailed prairie dog did not warrant Category 2 candidate status.

On July 31, 1998, we received a petition from the National Wildlife Federation dated July 30, 1998, to list the black-tailed prairie dog as threatened throughout its range. On August 26, 1998, we received another petition to list the black-tailed prairie dog as threatened throughout its range from Biodiversity Legal Foundation, Predator Project, and Jon C. Sharps. We accepted this second request as supplemental information to the National Wildlife Federation petition. On February 4, 2000, we announced a 12-month finding that issuing a proposed rule to list the black-tailed prairie dog was warranted but precluded by other higher priority actions (65 FR 5476), and the species was included in the list of candidate species. Two candidate assessments and resubmitted petition findings for the black-tailed prairie dog were completed on October 30, 2001 (66 FR 54808), and June 13, 2002 (67 FR 40657). On August 18, 2004, we completed a resubmitted petition finding for the black-tailed prairie dog (69 FR 51217), which concluded that listing the species was not warranted, because recent distribution, abundance, and trend data indicated that the threats to the species

were not as serious as earlier believed. The species was then removed from the candidate list.

On February 7, 2007, Forest Guardians and others filed a complaint challenging the decision to remove the black-tailed prairie dog from the candidate list. On August 6, 2007, we received a new formal petition dated August 1, 2007, from Forest Guardians (now WildEarth Guardians), Biodiversity Conservation Alliance, Center for Native Ecosystems, and Rocky Mountain Animal Defense, requesting we list the black-tailed prairie dog throughout its historical range (and portions thereof) in Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming and in Canada and Mexico. The plaintiffs filed the new petition, and withdrew their 2007 complaint, on October 9, 2007.

On March 13, 2008, WildEarth Guardians filed a complaint for failure to complete a 90-day finding on their August 1, 2007 petition. On July 1, 2008, a stipulated settlement and order were signed, in which we agreed to submit a 90-day finding to the **Federal Register** by November 30, 2008. This 90-day finding is in response to the stipulated settlement.

#### Species Information

The black-tailed prairie dog is a member of the Sciuridae family, which includes squirrels, chipmunks, marmots, and prairie dogs. Prairie dogs constitute the genus *Cynomys*. Taxonomists currently recognize five species of prairie dogs belonging to two subgenera, all in North America (Hoogland 2006a, pp. 8–9). The white-tailed subgenus, *Leucocrossomys*, includes Utah (*C. parvidens*), white-tailed (*C. leucurus*), and Gunnison's prairie dogs (*C. gunnisoni*) (Hoogland 2006a, pp. 8–9). The black-tailed subgenus, *Cynomys*, consists of Mexican (*C. mexicanus*) and black-tailed prairie dogs (Hoogland 2006a, pp. 8–9). Generally, the black-tailed prairie dog occurs east of the other four species in more mesic habitat (Hall and Kelson 1959, p. 365). Based on information currently available, we consider the black-tailed prairie dog a monotypic species (Pizzimenti 1975, p. 64). Information submitted by the petitioners and readily available within our files indicates that the black-tailed prairie dog is a valid taxonomic species and a listable entity under the Act. We found that *Cynomys ludovicianus arizonensis* is not considered a distinct subspecies or population segment (Pizzimenti 1975, p. 64).

The Utah and Mexican prairie dogs are currently listed as threatened (49 FR 22330) and endangered (35 FR 8495), respectively. The Gunnison's prairie dog is currently a candidate species within the montane portion of its range (73 FR 6660). The white-tailed prairie dog is undergoing formal status review to consider whether listing is warranted.

The black-tailed prairie dog is a burrowing, colonial mammal; brown in color; approximately 12 inches (30 centimeters) in length; and weighing 1–3 pounds (500–1,500 grams) (Hoogland 2006a, pp. 8–9). The black-tailed prairie dog can be distinguished from other prairie dog species by several key characteristics, which include having a longer (2–3 inches (7–10 centimeters)) black-tipped tail, being non-hibernating, and living at lower elevations (2,300–7,200 feet (700–2,200 meters)) (Hoogland 2006a, pp. 8–9). Overlap of the geographic ranges of the five species is minimal; consequently, species can be identified by locality (Hall and Kelson 1959, p. 365; Hoogland 2006a, pp. 8–9).

The black-tailed prairie dog is considered a keystone species, that is, one that is an indicator of species composition within an ecosystem, and that is key to the persistence of the ecosystem (Kotliar *et al.* 1999, pp. 183, 185). The black-footed ferret (*Mustela nigripes*), swift fox (*Vulpes velox*), golden eagle (*Aquila chrysaetos*), and ferruginous hawk (*Buteo regalis*) utilize prairie dogs as a food source; the mountain plover (*Charadrius montanus*) and burrowing owl (*Athene cunicularia*) depend on habitat (burrows) created by prairie dogs. Numerous other species share habitat with prairie dogs, and rely on them to varying degrees (Kotliar *et al.* 1999, pp. 181–182).

Several biological factors determine the reproductive potential of the black-tailed prairie dog. Females usually do not breed until their second year, live 4–5 years, and produce a single litter of an average of 3 pups annually (Hoogland 2001, p. 917; Hoogland 2006b, p. 38). Therefore, 1 female may produce 0 to 15 young in its lifetime. While the black-tailed prairie dog is not prolific in comparison to many other rodents, it is capable of rapid population increases after population reductions (Collins *et al.* 1984, p. 360; Pauli 2005, p. 17; Reeve and Vosburgh 2006, p. 144).

Historically, black-tailed prairie dogs generally occurred in large colonies that often contained thousands of individuals, covered hundreds or thousands of acres, and extended for miles (Bailey 1905, p. 90; Bailey 1932, p. 122; Ceballos *et al.* 1993, p. 109; Lantz 1903, p. 2671). Currently, most

colonies are much smaller. Colonial behavior offers an effective defense mechanism by aiding in the detection of predators and by deterring predators through mobbing behavior (Hoogland 1995, pp. 3–6). It increases reproductive success through cooperative rearing of juveniles and aids parasite removal via shared grooming (Hoogland 1995, pp. 3–6).

Colonial behavior can increase the transmission of disease (Antolin *et al.* 2002, p. 122; Biggins and Kosoy 2001, p. 911; Olsen 1981, p. 236). Sylvatic plague is a disease foreign to North America that can spread from prairie dog to prairie dog through the exchange of infected fleas or by contact between infected mammals (Biggins and Kosoy 2001, p. 911) (*see Threats Analysis, Factor C*).

### Species Range

The historical range of the black-tailed prairie dog included portions of 11 States, Canada, and Mexico (Hall and Kelson 1959, p. 365). The black-tailed prairie dog currently exists in 10 States—Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming. The species occurs from

extreme south-central Canada to northeastern Mexico and from approximately the 98th meridian west to the Rocky Mountains. It has been extirpated from Arizona (Arizona Game and Fish Department 1988, p. 26). Range contractions have occurred in the southwestern portion of the species' range in New Mexico and Texas through conversion of grasslands to desert shrub (Pidgeon *et al.* 2001, p. 1773; Weltzin *et al.* 1997, pp. 758–760). In the eastern portion of the species' range in Kansas, Nebraska, Oklahoma, South Dakota, and Texas, range contractions are largely due to habitat destruction by cropland development (Black-footed Ferret Recovery Foundation 1999, entire).

### Population Estimates

Most estimates of black-tailed prairie dog populations are not based on numbers of individual animals, but on estimates of the amount of occupied habitat. The actual number of animals present depends upon the density of animals in that locality. Density of animals varies depending on the season, region, and climatic conditions, but typically ranges from 2–18 individuals per acre (ac) (5–45 individuals per

hectare (ha)) (Fagerstone and Ramey 1996, p. 85; Hoogland 1995, p. 98; King 1955, p. 46; Koford 1958, p. 10–11). Density also can vary temporally, due to poisoning, plague, and recreational shooting as discussed in later sections.

Numerous Statewide estimates of black-tailed prairie dog occupied habitat are available, spanning a time period from 1903 to the present. In Table 1, we summarize historical estimates, 1961 estimates from the Bureau of Sport Fisheries and Wildlife (BSFW) that resulted from a rangewide survey following large-scale poisoning efforts, and the most recent available estimates. Different methodologies were used at different times and in different locales to derive the various estimates presented; however, these estimates are the best available and are comparable for the purpose of determining general population trends on the scale of order-of-magnitude changes. Methods have improved in recent years with the advent of tools such as aerial survey, satellite imagery, and geographic information systems (GIS). Consequently, estimates that use these tools can be expected to be more accurate.

TABLE 1—STATEWIDE OCCUPIED HABITAT ESTIMATES FOR THE BLACK-TAILED PRAIRIE DOG

State or country	Historical acres (hectares)	1961 (BSFW) acres (hectares)	Most recent acres (hectares)
Arizona .....	650,000 (263,045) (Van Pelt 2007) ....	0	0.
Colorado .....	3,000,000 (1,214,056) (Clark 1989) 7,000,000 (2,832,799) (Knowles 1998).	96,000 (38,849)	631,000 (255,356); (Van Pelt 2007).
Kansas .....	2,000,000 (809,371) (Lantz 1903) 2,500,000 (1,011,714) (Knowles 1998).	50,000 (20,234)	130,521 (52,819); (Van Pelt 2007).
Montana .....	1,471,000 (595,292) (Flath & Clark 1986) 6,000,000 (2,428,113) (Knowles 1998).	28,000 (11,331)	90,000 (364,217); (Van Pelt 2007).
Nebraska .....	6,000,000 (2,428,113) (Knowles 1998)	30,000 (12,140)	136,991 (55,428); (Van Pelt 2007).
New Mexico .....	>6,640,000 (2,687,112) (Bailey 1932)	17,000 (6,879)	43,639 (17,660); (Van Pelt 2007).
North Dakota .....	2,000,000 (809,371) (Knowles 1998) ..	20,000 (8,093)	22,396 (9,063); (Van Pelt 2007).
Oklahoma .....	950,000 (384,451) (Knowles 1998) .....	15,000 (6,070)	57,677 (23,341) (Van Pelt 2007).
South Dakota .....	1,757,000 (711,032) (Linder <i>et al.</i> 1972).	33,000 (13,354)	625,410 (253,094) (Kempema 2007).
Texas .....	57,600,000 (23,309,892) (Bailey 1905)	26,000 (10,521)	132,515 (53,626) (Van Pelt 2007).
Wyoming .....	16,000,000 (6,474,970) (Knowles 1998).	49,000 (19,829)	229,607 (92,918) (Van Pelt 2007).
United States Total .....	78,700,000 (31,848,760) (BFFRF 1999) 102,600,000 (41,520,746) (sum of State average above).	364,000 (147,305)	2,100,000 (849,839).
Canada .....	2,000 (809) (Knowles 1998) .....	.....	2,500 (1,011) (Everest & Tuckwell 2007).
Mexico .....	1,384,000 (560,084) (Ceballos <i>et al.</i> 1993).	.....	>49,000 (19,829) (List 2001).
Rangewide .....	80,000,000–104,000,000 (32,374,851–42,087,306).	.....	2,152,000 (870,883).

Several estimates of historically occupied habitat for all species of prairie dogs are available; the most

credible estimates indicate that approximately 100,000,000 ac (40,000,000 ha) of occupied habitat

existed rangewide (Anderson *et al.* 1986, p. 50; Miller *et al.* 1996, p. 24; Nelson 1919, p. 5). If average historical

estimates for each State, Canada, and Mexico are summed, the rangewide estimate is approximately 104,000,000 ac (41,600,000 ha). Based on a quantification of potential habitat throughout the range of the black-tailed prairie dog and assuming a 20 percent occupancy rate (an average based on historical occupation of natural short- and mixed-grass prairie available), approximately 80,000,000 ac (32,000,000 ha) of black-tailed prairie dog occupied habitat existed historically (Black-footed Ferret Recovery Foundation 1999, entire; Ceballos *et al.* 1993, p. 109; Whicker and Detling 1988, p. 778). Therefore, a reasonable rangewide estimate of historically occupied habitat for the black-tailed prairie dog is 80–100 million ac (32–40 million ha).

In 1961, the BSWF, a predecessor of the Service, tabulated habitat estimates on a county-by-county basis throughout the range of all prairie dog species in the western United States (BSWF 1961, p. 1). These estimates were completed by District Agents for the Bureau who were familiar with the habitat due to their past control efforts. The survey was completed in response to concerns from within the agency regarding possible adverse impacts to prairie dogs following large-scale poisoning (Oakes 2000, p. 167). Although the data are from 1961, they provide a rangewide estimate for a single point in time when prairie dogs were reduced to very low numbers by intensive government poisoning efforts. The survey has been cited in other seminal documents, including Cain *et al.* (1972, Appendix VIII) and Leopold (1964, p. 38), which resulted in significant changes in predator and rodent control policies in the United States, including a ban of Compound 1080, a highly toxic poison once widely used to control prairie dogs and other mammal species.

If the most recent estimates of occupied habitat are summed for each of the States, Canada, and Mexico, the rangewide estimate is 2,152,000 ac (870,883 ha). Rangewide and Statewide trends for area of black-tailed prairie dog occupied habitat appear to be increasing since the low point following a half century of coordinated rangewide control efforts.

Trends from site-specific estimates are not always reflected in Statewide trends. Site-specific estimates are typically derived from field surveys related to monitoring or research, and include extensive ground-truthing, which provides more precise assessments. Consequently, site-specific estimates are often more accurate than Statewide estimates. However, black-

tailed prairie dog monitoring and research are often focused on plague epizootics (outbreaks of disease that rapidly affect many animals in a specific area at the same time). Consequently, the trends available regarding site-specific occupied habitat estimates often include plague-affected sites (see Table 2 in Threats Analysis Factor C).

### Population Impacts

Three major impacts, which somewhat overlap, have influenced historical black-tailed prairie dog populations. The first major impact on the species was the initial conversion of prairie grasslands to cropland in the eastern portion of its range from approximately the 1880s to the 1920s. The conversion of native prairie to cropland likely reduced occupied habitat in the United States from as much as 100 million ac (40 million ha) of occupied black-tailed prairie dog colonies to about 50 million ac (20 million ha) or less (Laycock 1987, p. 4; Whicker and Detling 1988, p. 778). The second major impact on the species was large-scale poisoning efforts, conducted from approximately 1918 to 1972, to reduce competition between prairie dogs and domestic livestock (BSWF 1961, p. 1). Large-scale, repeated control efforts likely reduced occupied habitat in the United States from about 50 million ac (20 million ha) to approximately 364,000 ac (162,000 ha) by 1961 (BSWF 1961). The third major impact on the species was the inadvertent introduction of an exotic disease, sylvatic plague, into North American ecosystems around 1900. The first recorded impacts on the black-tailed prairie dog were recorded in 1946 (Miles *et al.* 1952, p. 41).

### Threats Analysis

Section 4 of the Act (16 U.S.C. 1533) and implementing regulations at 50 CFR 424 set forth the procedures for adding species to the Federal Lists of Endangered and Threatened Wildlife and Plants. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1) of the Act: (A) The present or threatened destruction, modification, or curtailment of habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; or (E) other natural or manmade factors affecting its continued existence. Listing actions may be warranted based on any of the above threat factors, singly or in combination.

Under the Act, a threatened species is defined as a species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. An endangered species is defined as a species that is in danger of extinction throughout all or a significant portion of its range. We evaluated each of the five listing factors to determine whether the level of threat identified by information in the petition or in our files was substantial and indicated that listing the black-tailed prairie dog as threatened or endangered may be warranted. Our evaluation is presented below.

We placed the threats listed in the petition under the most appropriate listing factor. However, we recognize that several potential threats affecting the species might be considered under more than one factor. For example, poisoning can affect black-tailed prairie dog habitat (Factor A), and can be affected by State and Federal regulatory mechanisms (Factor D), but is primarily addressed in this finding under Factor E (other natural or manmade factors).

#### *A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range*

##### Information Provided in the Petition

The petitioners assert that several factors are affecting black-tailed prairie dog and its habitat, including that:

(1) Conversion to cropland, resulting in habitat loss, is likely increasing due to the demand for corn-based ethanol for vehicle fuel and the removal of land from the Conservation Reserve Program (CRP) for increased corn production;

(2) Urbanization is a threat to the species and its habitat, especially in the Front Range of Colorado;

(3) Oil, gas, and mineral extraction cause habitat degradation and loss, and increased habitat fragmentation;

(4) The loss of prairie dogs from shooting, plague, and poisoning causes a corresponding loss of habitat, primarily due to degraded habitat, decreased grassland productivity, and eventual burrow collapse; and

(5) Livestock grazing and fire suppression negatively impact black-tailed prairie dog habitat by allowing the proliferation of woody plants and noxious weeds that replace native forage species.

##### Response

In some instances, black-tailed prairie dog habitat is currently being destroyed, modified, or curtailed by: (1) Conversion of native prairie habitat to cropland; (2) urbanization; (3) oil, gas, and mineral extraction; (4) habitat loss

caused by loss of prairie dogs; and (5) livestock grazing, fire suppression, and weeds. However, extensive rangeland remains available for potential expansion of black-tailed prairie dog occupied habitat.

The most substantial cause of habitat destruction that we are able to quantify is cropland development. Conversion of the native prairie to cropland has largely progressed across the species' range from east to west; the most intensive agricultural use is in the eastern portion of the species' range. By 1999, approximately 37 percent of the historical suitable habitat within the species' range had been converted to cropland uses (Black-footed Ferret Recovery Foundation 1999, entire). The Natural Resources Conservation Service quantified land cover and use changes from 1982 to 1997; the 11 States within the historical range of the species experienced an estimated 2 percent loss of rangeland during this time period (U.S. Department of Agriculture 2000, pp. 18–24). When the 2 million ac (1.6 million ha) of currently occupied habitat is contrasted with the 342 million ac (139 million ha) of remaining non-Federal rangeland (statistics for Federal land were unavailable), it appears that sufficient potential habitat still occurs in each of the 11 States within the historical range of the species to accommodate large expansions of black-tailed prairie dog populations. This estimate of potential habitat includes rangeland Statewide, but does not include pasture or CRP lands, because these areas were not included in the analysis. However, prairie dogs do use pasture, and therefore this estimate is considered conservative.

Urbanization is occurring within portions of the black-tailed prairie dog range, particularly the Front Range of Colorado. However, on a larger Statewide or rangewide context, loss of habitat due to urbanization is not significant, given the recent Statewide estimates of occupied habitat in Colorado and elsewhere (Table 1). The accuracy of the 2004 Colorado Division of Wildlife (CDOW) estimate of 631,000 ac (255,000 ha) of occupied habitat in Colorado is questioned by the petitioners. Other recent estimates of occupied habitat available for Colorado include: 461,000 ac (187,000 ha), calculated from Tipton et al. (2008, p. 1002); a minimum of 788,000 ac (319,000 ha) of occupied habitat (CDOW 2007, entire); and a minimum of 215,000 ac (87,000 ha) of active occupied habitat (EDAW 2000, p. 20). Each of these estimates for Colorado indicates a substantial increase in occupied habitat since 1961.

Oil, gas, and mineral extraction are occurring within portions of the black-tailed prairie dog range. However, no information provided by the petitioners or readily available in our files quantifies the impacts. Additionally, population trends do not suggest that oil, gas, and mineral extraction are a limiting factor for the species.

Black-tailed prairie dogs do affect their own habitat. The loss or reduction of prairie dogs in areas can result in that habitat becoming degraded. However, documentation of prairie dog effects on habitat is mixed. Black-tailed prairie dogs can have a positive effect on habitat (Johnson-Nistler et al. 2004, p. 641; Koford 1958, pp. 43–62; Kotliar et al. 1999, p. 178; Lantz et al. 2006, p. 2671); positive effects have been particularly notable in the southwestern portion of the species' range where the foraging and clipping habits of prairie dogs destroy seedlings of undesirable shrub and tree species that may invade and eventually convert grasslands, and aeration of soil from burrow construction increases growth of grasses (Davis 1974, p. 156; Fagerstone and Ramey 1996, p. 89; Koford 1958, pp. 43–62; List et al. 1997, p. 150; Weltzin et al. 1997, pp. 758–760). Black-tailed prairie dogs also may have a neutral habitat effect, i.e., a balance between clipping vegetation that could be forage for cattle and improving the protein content of remaining grass, or negative habitat effect by reducing grass species and causing conversion to forb species undesirable for cattle (Bonham and Lerwick 1976, p. 225; Fagerstone and Ramey 1996, p. 88; Johnson-Nistler et al. 2004, p. 641; Klatt and Hein 1978, p. 316; Koford 1958, pp. 43–62). No information provided by the petitioners or readily available in our files quantifies the overall impact that black-tailed prairie dogs have on their own habitat. However, extensive rangeland remains available for potential expansion of black-tailed prairie dog habitat (U.S. Department of Agriculture 2000, pp. 18–24).

Information exists regarding the increase of nonnative plant species in the presence of overgrazing and the absence of fire. However, the impact of plant composition on habitat suitability for black-tailed prairie dogs is contradictory (Cеровski 2004, p. 101; Detling 2006, p. 115; Koford 1958, pp. 43–62; Uresk et al. 1981, p. 200; Vermeire 2004, p. 691). Available information indicates that livestock grazing typically encourages black-tailed prairie dog expansion (Andelt 2006, p. 131; Fagerstone and Ramey 1996, p. 88; Forest 2005, p. 528; Groombridge 1992, p. 290; Hubbard and

Schmitt 1983, p. 30; Koford 1958, p. 68; Marsh 1984, p. 203; Osborn and Allan 1949, p. 330; Snell 1985, p. 30; Snell and Hlavachick 1980, p. 240; Uresk et al. 1981, p. 200; U.S. Forest Service 1995, p. 5; U.S. Forest Service 1998, p. 4; Wuertner 1997, pp. 460–461). Additionally, extensive rangeland remains available for potential expansion of occupied habitat (U.S. Department of Agriculture 2000, pp. 18–24).

#### Summary of Factor A

On the basis of our evaluation of the most recent Statewide estimates of occupied habitat and the amount of potential habitat available for expansion, we determined that the petition does not present substantial information indicating that listing the black-tailed prairie dog may be warranted due to the present or threatened destruction, modification, or curtailment of its habitat or range. The threat to prairie dogs presented by sylvatic plague is addressed under Factor C, and the threat presented by poisoning is addressed under Factor E.

#### B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

##### Information Provided in the Petition

The petitioners assert that recreational shooting of black-tailed prairie dogs and collecting for the pet trade are threats to the black-tailed prairie dog; they indicate that shooting is of special concern because of the cumulative effect of localized extirpation across the species' range. The petitioners indicate that shooting causes both direct effects (mortality) and indirect effects such as behavioral changes, diminished reproduction and body condition, and emigration. The petitioners indicate that the number of shooters is increasing, and the technology available to them is advancing.

The petitioners do not believe that collecting for the pet trade has as great an impact as several other factors, but suggest that pet prairie dogs infected with an exotic disease could be released into the wild, which could pose a risk to wild black-tailed prairie dogs.

##### Response

Recreational shooting of black-tailed prairie dogs can reduce population densities, cause behavioral changes, diminish reproduction and body condition, increase emigration, and cause extirpation in isolated circumstances (Knowles 1988, p. 54; Pauli 2005, p. 1; Reeve and Vosburgh 2006, p. 144; Stockrahm 1979, pp. 80–

84; Vosburgh 1996, pp. 13, 15, 16, and 18; Vosburgh and Irby 1998, pp. 366–371). However, available information indicates that populations can recover from very low numbers following intensive shooting (Cully and Johnson 2006, pp. 6–7; Dullum *et al.* 2005, p. 843; Knowles 1988, p. 12; Pauli 2005, p. 17; Vosburgh 1996, pp. 16, 31). Based on the research cited in this paragraph, it appears that a typical scenario is that either: (1) Once populations have been reduced, shooters go elsewhere and populations are allowed to recover; or (2) shooting maintains reduced population size at specific sites. Research does not further clarify or quantify these factors, and shooting, investigated separately from other threat factors, does not appear to have a significant impact on black-tailed prairie dogs, overall. We do not have an analysis on rangewide impacts of shooting on prairie dogs.

Many landowners maintain prairie dog populations and derive income from charging people for recreational shooting. Monetary gain from shooting fees may motivate landowners to preserve prairie dog colonies for future shooting opportunities, which is currently an alternative to eradicating them by poisoning (Reeve and Vosburgh 2006, pp. 154–155; Vosburgh and Irby 1998, pp. 366–371).

Substantial information is not presented by the petitioners or available in our files to evaluate potential effects of collecting or the spread of disease resulting from the pet trade.

#### Summary of Factor B

Recreational shooting of prairie dogs can cause localized effects. However, much of the literature documenting effects from shooting of prairie dogs also

describes subsequent rebounds in local populations; extirpations, while documented, are rare and, therefore, not a significant threat to the species. Recent Statewide estimates of occupied habitat further reinforce this observation by documenting population increases in areas subject to shooting. We conclude that neither shooting nor the pet trade is a threat to the black-tailed prairie dog. On the basis of our evaluation, we determined that the petition does not present substantial information indicating that listing the black-tailed prairie dog may be warranted due to overutilization for commercial, recreational, scientific, or educational purposes.

#### C. Disease and Predation

##### Information Provided in the Petition

The petitioners assert that sylvatic plague causes mortality rates approaching 100 percent in infected colonies. They indicated that evidence is too preliminary to say that high levels of exposure are necessary before prairie dogs contract plague, or to say that prairie dogs have a limited immune response to plague. The petitioners challenge studies indicating that isolated, low density populations are protected from plague, and indicating that some sites have recovered to pre-plague levels. They note that in recent years several epizootics have occurred, and that plague has expanded into South Dakota. They also note that although not a rangewide threat, prairie dogs also are susceptible to tularemia and monkeypox.

##### Response

Plague is an exotic disease foreign to the evolutionary history of North

American prairie dogs. It is caused by the bacterium *Yersinia pestis*, which fleas acquire by biting infected animals, and subsequently transmit via a bite to other animals. The disease also can be transmitted through pneumonic (airborne) or septicemic (blood) pathways from infected to disease-free animals (Barnes 1993, p. 28; Cully *et al.* 2006, p. 158; Ray and Collinge 2005, p. 203; Locke *et al.* 2006, p. 243; Webb *et al.* 2006, p. 6236). Plague was first observed in wild rodents in North America near San Francisco, California in 1903 (Eskey and Haas 1940, p. 1), and was first documented in black-tailed prairie dogs in Texas in 1946 (Miles *et al.* 1952, p. 41).

Black-tailed prairie dogs are very sensitive to plague, and mortality frequently reaches 100 percent (Barnes 1993, p. 28). Two patterns of die-offs are typically described for black-tailed prairie dogs: (1) A rapid and nearly 100 percent die-off with incomplete recovery, such as has occurred at the Rocky Mountain Arsenal and the Comanche National Grassland in Colorado (Cully and Williams 2001, pp. 899–903); and (2) a partial die-off resulting in smaller, but stable, populations and smaller, more dispersed colonies, such as has occurred at the Cimarron National Grassland (Cully and Williams 2001, pp. 899–903). Several researchers have suggested that the response of black-tailed prairie dogs to plague may vary based on population density or degree of colony isolation (Cully 1989, p. 49; Cully and Williams 2001, pp. 899–903; Lomolino *et al.* 2003, pp. 118–119). Table 2 illustrates die-offs and extent of recovery for several well-studied sites that have experienced plague epizootics.

TABLE 2—SITE-SPECIFIC ESTIMATES OF OCCUPIED BLACK-TAILED PRAIRIE DOG HABITAT OVER TIME  
(IN ACRES (HECTARES))

Site	1st Estimate	2nd Estimate	3rd Estimate	4th Estimate	5th Estimate
Comanche NG, CO ....	5,000 (2,023) in 1995 (Augustine <i>et al.</i> 2008).	1,600 (647) in 1999 (PP) (Augustine <i>et al.</i> 2008).	10,700 (4,330) in 2005 (Augustine <i>et al.</i> 2008).	3,000 (1,214) in 2006 (PP) (Augustine <i>et al.</i> 2008).	
Pueblo Chemical Depot, CO.	4,333 (1,753) in 1998 (Young 2008).	67 (27) in 2000 (PP) (Young 2008).	3,423 (1,385) in 2005 (Young 2008).	2,712 (1,097) in 2006 (PP) (Young 2008).	
Rocky Mtn Arsenal, CO.	4,574 (1,851) in 1988 (Seery 2001).	247 (99) in 1989 (PP) (Seery 2001).	2,429 (982) in 1994 (Seery 2001).	22 (8) in 1995 (PP) (Seery 2001).	1,646 (666) in 2000 (Seery 2001).
N. Cheyenne Res., MT.	10,720 (4,338) in 1990 (Larson 2008).	378 (152) in 1995 (PP) (Fourstar 1998).	3,300 (1,335) in 2001 (Vosburgh 2003).	3,913 (1,585) in 2003 (Vosburgh 2003).	5,683 (2,299) in 2006 (Larson 2008).
Kiowa/Rita Blanca NG, TX, OK, NM.	1,600 (647) in 1999 (Cully & Johnson 2006).	6,800 (2,751) in 2003 (Cully & Johnson 2006).	4,500 (1,821) in 2004 (PP) (Cully & Johnson 2006).	3,000 (1,214) in 2005 (PP) (Cully & Johnson 2006).	
Thunder Basin NG, WY.	16,300 (6,596) in 2001 (Cully & Johnson 2006).	1,600 (647) in 2002 (PP) (Cully & Johnson 2006).	9,000 (3,642) in 2003 (Byer 2003).		

PP = post-plague.

Some studies have documented the development of antibodies in black-tailed prairie dogs surviving a plague epizootic. In one Colorado site, over 50 percent of survivors developed antibodies (Pauli 2005, pp. 1, 71). Recent laboratory research indicates that, at low levels of exposure, a small percentage of black-tailed prairie dogs show some immune response and consequently some resistance to plague, indicating that a plague vaccine may be developed in the future (Creekmore *et al.* 2002, pp. 32, 38). Preliminary work has demonstrated significantly higher antibody titers and survival rates in vaccinated black-tailed prairie dogs that were challenged with the plague bacterium (Mencher *et al.* 2004, pp. 5, 8–9). Oral vaccination may be effective for managing plague epizootics in free-ranging prairie dog populations by reducing mortality in exposed individuals (Mencher *et al.* 2004, pp. 8–9).

Since the black-tailed prairie dog was removed from the candidate list in 2004, plague has expanded its range into South Dakota, previously the only State where plague had not been documented in prairie dogs (Service 2005, p. 1). Despite 3 years of dusting prairie dog burrows in portions of the area with insecticide, in 2008, the disease reached the black-footed ferret recovery area in Conata Basin (Larson 2008, entire). Approximately 9,000 ac (3,600 ha) have been affected through June 2008 in Conata Basin (Griebel 2008, entire). Conata Basin is one of the largest remaining black-tailed prairie dog complexes, and is the most successful recovery site in North America for the endangered black-footed ferret. Plague also has been documented on Pine Ridge and Cheyenne River Reservations in South Dakota (Mann-Klager 2008, entire). The establishment of sylvatic plague in South Dakota could have a significant impact on both the black-tailed prairie dog and the black-footed ferret (Creekmore *et al.* 2002, p. 38).

Tularemia and monkeypox are diseases that have had impacts on captive black-tailed prairie dogs associated with the pet trade; however, we have no information to indicate that either of these diseases are a concern for wild prairie dogs.

#### Summary of Factor C

Some encouraging information regarding plague is available, particularly the development of a vaccine to improve management of plague in prairie dog populations. However, information indicates that plague has expanded its range in recent years and has caused population

declines at several sites. On the basis of our evaluation, we determined that the petition presents substantial information to indicate that listing the black-tailed prairie dog as a threatened or endangered species may be warranted due to sylvatic plague.

On the basis of our evaluation, we determined that the petition does not present substantial information indicating that listing the black-tailed prairie dog may be warranted due to tularemia or monkeypox.

#### *D. The Inadequacy of Existing Regulatory Mechanisms*

##### Information Provided in the Petition

The petitioners assert that regulatory actions influencing habitat loss, shooting, the pet trade, sylvatic plague, and chemical control are inadequate to mitigate impacts from these threats. They indicate that: (1) Most of the regulations that promote black-tailed prairie dog conservation, enacted after the 1998 petitions to list the species, have been rescinded or weakened; (2) Federal, State, and Tribal regulations and local statutes and policies enacted since removal of the black-tailed prairie dog from the candidate list in 2004 favor killing rather than preserving the species; and (3) regulatory mechanisms pertaining to oil and gas development on Federal lands are inadequate and lack safeguards for black-tailed prairie dogs.

##### Response

Many of the regulations promoting prairie dog conservation enacted after the 1998 petitions to list the black-tailed prairie dog have been rescinded or weakened. Regulations enacted since removal of the black-tailed prairie dog from the candidate list in 2004 have not favored preservation of the species. Several notable examples are presented in the petition or readily available in our files, including:

(1) The U.S. Environmental Protection Agency (EPA) has not provided annual records to the Service on the amount of acreage poisoned with zinc phosphide or the amount of chemical sold, despite this reporting being included as a “Reasonable and Prudent Alternative” in a 1993 Biological Opinion (Service 1993, p. II–107). EPA did not agree to collect or provide this data in response to the Biological Opinion. On April 25, 2002, we sent a letter to EPA requesting any records on the amount of zinc phosphide sold or acres poisoned; EPA responded that they were not obligated to provide this information. Having records of this information would enable us to monitor the rangewide

effects of poisoning on black-tailed prairie dogs, and the endangered black-footed ferret, whose primary prey is the black-tailed prairie dog.

(2) The EPA has not initiated additional formal consultation, following the 1993 Biological Opinion, regarding the recent permitting of chlorophacinone and diphacinone (both anticoagulants) to poison prairie dogs, despite their statement that additional consultation may be necessary if any new uses of these pesticides are proposed (EPA 1998, p. 109). Use of these two chemicals constitutes new uses because neither poison was registered for field use on prairie dogs at the time of the 1993 Biological Opinion. Secondary poisoning has been documented in the field in a badger and a bald eagle; additionally, many other species, including the black-footed ferret, are known to be highly susceptible to both chlorophacinone and diphacinone.

(3) The U.S. Forest Service weakened their restrictions on poisoning by rescinding a 2000 policy letter regarding control of black-tailed prairie dogs (Manning 2004, entire), which allowed for expansion of poisoning on their lands.

(4) The State of Montana changed the dual status of the species from “nongame wildlife in need of management” and “vertebrate pest” to the single status of “vertebrate pest” (Hanebury 2007, entire), which eases restrictions on prairie dog poisoning.

(5) The State of South Dakota weakened the designation of “species of management concern” for the black-tailed prairie dog by designating it as a pest if: Plague is reported east of the Rocky Mountains, the Statewide population is greater than 145,000 ac (59,000 ha), or the species is colonizing within a 1-mile (1.6-kilometer) buffer around concerned landowners (South Dakota State Legislature 2005, entire). Currently all of these criteria are being met; therefore, the species is considered a pest in South Dakota, which eases restrictions on prairie dog poisoning.

(6) Since 2004, State agricultural departments have issued permits authorizing the use of chlorophacinone for poisoning prairie dogs in Colorado, Kansas, Nebraska, Oklahoma, Texas, and Wyoming.

(7) Since 2004, State agricultural departments have issued permits authorizing the use of diphacinone for poisoning prairie dogs in Colorado, Kansas, Nebraska, Texas, and Wyoming.

Following the 1998 petitions to list the black-tailed prairie dog, representatives from each State wildlife agency within the historical range of the



species formed the Prairie Dog Conservation Team. The Team developed "A Multi-State Conservation Plan for the Black-tailed Prairie Dog, *Cynomys ludovicianus*, in the United States" (Luce 2002, p. 2). The purpose of this Multi-State Plan was to provide standards for future prairie dog management within the 11 States. The Multi-State Plan endorsed the following minimum 10-year target objectives: (1) Maintain at least the currently occupied acreage of black-tailed prairie dog habitat in the United States; (2) increase to at least 1,693,695 ac (685,946 ha) of occupied black-tailed prairie dog acreage in the United States by 2011; (3) maintain at least the current black-tailed prairie dog occupied acreage in the 2 complexes greater than 5,000 ac (2,025 ha) that now occur on and adjacent to Conata Basin-Buffalo Gap National Grassland, South Dakota, and Thunder Basin National Grassland, Wyoming; (4) develop and maintain a minimum of 9 additional complexes greater than 5,000 ac (2,025 ha), with each State managing or contributing to at least one complex greater than 5,000 ac (2,025 ha) by 2011; (5) maintain at least 10 percent of total occupied acreage in colonies or complexes greater than 1,000 ac (400 ha) by 2011; and (6) maintain distribution over at least 75 percent of the counties in the historical range, or at least 75 percent of the historical geographic distribution. Objectives 3, 4, 5, and 6 have not yet been met; however, objectives 4 and 5 need not be met until 2011.

States also agreed to draft Statewide management plans. Colorado has finalized a conservation plan for grassland species that supports and meets the objectives of the Multi-State Plan. Kansas, Oklahoma, and Texas have finalized management plans that support the Multi-State Plan objectives, but have not yet met all of those

objectives. Montana, New Mexico, North Dakota, and South Dakota have finalized management plans that do not support or meet all of the objectives of the Multi-State Plan. Arizona, Nebraska, and Wyoming have draft plans that were not approved by their Wildlife Commissions.

#### Summary of Factor D

On the basis of our evaluation, we determined that the petition presents substantial information to indicate that listing the black-tailed prairie dog as a threatened or endangered species may be warranted due to the inadequacy of existing regulatory mechanisms, particularly regarding poisoning, which is discussed further under Factor E.

#### *E. Other Natural or Manmade Factors Affecting Continued Existence*

##### Information Provided in the Petition

The petitioners assert that several other threat factors are affecting the black-tailed prairie dog, including that: (1) The historical loss of approximately one-third of the species' potential habitat has resulted in black-tailed prairie dog populations, particularly in the eastern portion of the species' range, remaining vulnerable to stochastic events.

(2) The agricultural industry has put pressure on elected officials to increase both the methods and public financial assistance available to eradicate prairie dogs, promoting intolerance of the species, and that these officials have, in turn, put pressure on public land and wildlife managers to eradicate prairie dogs and halt initiatives to protect them; the majority of States with black-tailed prairie dogs have supported increased lethal control of prairie dogs, including the approval of anticoagulants;

(3) While drought is a natural phenomenon, its effects are exacerbated

by the other stressors affecting the species; and

(4) Climate change may contribute to invasion of noxious weeds and exacerbate the effects of habitat fragmentation.

#### Response

The black-tailed prairie dog evokes strong emotions in many people, which may affect regulations, recreational shooting, and poisoning. However, no information presented by the petitioners, or available in our files, quantifies the effects of intolerance separately from the actual threat factors. Therefore, we only address the latter.

The information presented by the petitioners and available in our files indicates that, in States with recent data available, including South Dakota and Wyoming, the extent of poisoning may have increased since the black-tailed prairie dog was removed from the candidate list in 2004 (Cеровski 2004, p. 101; Kempema 2007, p. 8). Table 3 includes the total sales of zinc phosphide bait by the South Dakota bait station in the 4 years prior to candidate removal. South Dakota is the only State that has been permitted by EPA to manufacture and sell zinc phosphide. Sales from the South Dakota bait station are largely limited to South Dakota, Wyoming, and Nebraska. The States of Colorado, Kansas, Montana, New Mexico, North Dakota, Oklahoma, and Texas acquire zinc phosphide from various manufacturers, but no recent information regarding sales has been made available to us. Additionally, as described in Factor D, other methods of prairie dog control have expanded since 2004, because the anticoagulants chlorophacinone and diphacinone were approved for use in Colorado, Kansas, Nebraska, Oklahoma, Texas, and Wyoming.

TABLE 3—SALES OF ZINC PHOSPHIDE BAIT PRIOR (FRIDLEY 2003, ENTIRE) AND SUBSEQUENT TO (KEMPEMA 2007, P. 8; LARSON 2008, ENTIRE) REMOVAL OF THE BLACK-TAILED PRAIRIE DOG FROM THE CANDIDATE LIST

Amount of bait sold in pounds (kilograms)	Year
42,400 (19,323) .....	2000
26,775 (12,145) .....	2001
42,500 (19,278) .....	2002
97,950 (44,429) .....	2003
334,900 (151,908) .....	Species removed from candidate list.
191,775 (86,988) .....	2004
307,900 (139,661) .....	2005
241,625 (109,599) .....	2006
	2007

If all of the bait sold by the South Dakota bait station were applied at the

recommended rate of 1/3 pound per acre (Hygnstrom *et al.* 1994, p. B-89),

this would equate to approximately 128,000 ac (52,000 ha) poisoned in



2000, 80,000 ac (33,000 ha) in 2001, 128,000 ac (52,000 ha) in 2002, 294,000 ac (119,000 ha) in 2003, 1,005,000 ac (407,000 ha) in 2004, 575,000 ac (233,000 ha) in 2005, 924,000 ac (374,000 ha) in 2006, and 725,000 ac (294,000 ha) in 2007. To provide some perspective, if the current estimate from Table 1 of approximately 2.1 million ac (850,000 ha) of occupied habitat in the United States is used, enough poison has been sold by this single facility since 2004 to poison all occupied habitat in the United States with enough remaining to poison an additional 1 million ac (400,000 ha). This scenario does not include the possibility of individuals stockpiling poison, or applying it at rates greater than 1/3 pound per acre.

Prairie dogs were extirpated from Arizona through poisoning campaigns that occurred in the early 1900s (Van Pelt 2007). As noted in the Population Estimates section of this document, that extirpation took place during a relatively unregulated period of large-scale extermination efforts using a highly toxic poison (Compound 1080).

Drought is a natural and cyclical occurrence within the range of the black-tailed prairie dog to which the animal has adapted (Forrest 2005, p. 528). It has been noted that, in at least some instances, occupied habitat tends to increase during periods of drought, and densities decrease, because animals spread out in search of food (Young 2008, p. 5). However, no information presented by the petitioners, or in our files, quantifies the effect of drought, singly or in conjunction with other threats, on the species rangewide.

The impacts of stochastic events and climate change on prairie dog populations are speculative. No information presented by the petitioners, or available in our files, quantifies these effects. No information on the direct relationship between climate change and population trends is available. Currently, black-tailed prairie dogs occupy, in fragmented populations, 2.1 million acres across 11 States; therefore, it is unlikely that stochastic events pose a threat to the species. In addition, extensive rangeland remains available for potential expansion of black-tailed prairie dog habitat (U.S. Department of Agriculture 2000, pp. 18–24). Therefore the threat of stochastic events does not appear to be significant.

#### Summary of Factor E

On the basis of our evaluation, we determined that the petition presents substantial information to indicate that listing the black-tailed prairie dog as a

threatened or endangered species may be warranted due to poisoning of black-tailed prairie dogs.

We determined that the petition does not present substantial information indicating that listing the black-tailed prairie dog may be warranted due to intolerance to or misconceptions about prairie dogs. We also determined that the petition does not present substantial information indicating that listing the black-tailed prairie dog may be warranted due to stochastic events, drought, or climate change.

#### Finding

We have assessed information provided by the petitioners and readily available in our files. On the basis of our evaluation, we find that the petition presents substantial information indicating that listing the black-tailed prairie dog under the Act may be warranted based on threats associated with Factor C (sylvatic plague), Factor D (inadequate Federal and State regulations), and Factor E (poisoning). Therefore, we are initiating a status review to determine whether listing the black-tailed prairie dog under the Act is warranted.

We determined that an emergency listing is not warranted at this time, because available information regarding Statewide populations indicates stable to increasing trends since 1961. However, if at any time we determine that emergency listing of the black-tailed prairie dog is warranted, we will initiate an emergency listing.

The petitioners also request that critical habitat be designated for the species concurrent with final listing under the Act. We consider the need for critical habitat designation when listing species. If we determine in our 12-month finding following the status review of the species that listing the black-tailed prairie dog is warranted, we will address the designation of critical habitat in the subsequent proposed rule.

#### References Cited

A complete list of all references cited in this document is available, upon request, from the South Dakota Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

#### Author

The primary authors of this notice are the staff members of the U.S. Fish and Wildlife Service, South Dakota Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT**).

#### Authority

The authority for this action is the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Dated: November 23, 2008.

**Rowan W. Gould,**

*Acting Director, U.S. Fish and Wildlife Service.*

[FR Doc. E8–28528 Filed 12–1–08; 8:45 am]

BILLING CODE 4310–55–P

## DEPARTMENT OF COMMERCE

### National Oceanic and Atmospheric Administration

#### 50 CFR Part 622

[Docket No. 070719384–81468–03]

RIN 0648–AV80

#### Fisheries of the Caribbean, Gulf of Mexico, and South Atlantic; Reef Fish Fishery of the Gulf of Mexico; Gulf of Mexico Gag Grouper Management Measures

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Temporary rule; interim measures; request for comments.

**SUMMARY:** This final rule implements temporary measures to reduce overfishing of gag in the Gulf of Mexico (Gulf). This final rule reduces the commercial quota for gag, establishes a gag bag limit within the grouper aggregate bag limit, and extends the recreational closed season for gag. In addition, if Federal regulations applicable to gag, red snapper, gray triggerfish, or greater amberjack are more restrictive than state regulations, this rule requires vessels with Federal reef fish permits to comply with Federal regulations regardless of where such fish are harvested. The intended effect is to reduce overfishing of gag and increase compliance with Federal regulations designed to end overfishing or rebuild overfished reef fish stocks in the Gulf.

**DATES:** This rule is effective January 1, 2009 through May 31, 2009. Comments must be received no later than 5 p.m., eastern time, on January 2, 2009.

**ADDRESSES:** You may submit comments on this temporary rule, identified by “0648–AV80, by any of the following methods:

- Electronic Submissions: Submit all electronic public comments via the Federal e-Rulemaking Portal: <http://www.regulations.gov>.