# Black-Footed Ferret Programmatic Safe Harbor Agreement DRAFT

731

U.S. Fish and Wildlife Service Black-footed Ferret Recovery Program

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#### **Glossary**

**10(a)(1)(A)** Recovery Permit – Section 10 of the Endangered Species Act (Act) provides for exceptions to prohibited activities identified in section 9 of the Act. Section 10(a)(1)(A) specifically allows the Secretary of Interior to issue permits to authorize incidental take of endangered and threatened species for scientific research or to enhance the propagation or survival of such species. The Safe Harbor policy (64 FR 32717) provides for the issuance of such permits to landowners who volunteer to enroll in a Safe Harbor Agreement that provides a net conservation benefit to covered species.

**10(j)** Experimental Population - Section 10(j) of the Act specifically allows the Secretary of Interior to introduce experimental populations into the wild as long as they are wholly separate from non-experimental populations of the same species. This designation is accomplished through a rulemaking process and allows for regulatory flexibility for land uses within these section 10(j) designated areas.

Assurances – Pursuant to the Safe Harbor policy (64 FR 32717), the Service's promise that conservation measures and restrictions on the use of land, water, or resources additional to those already agreed upon in the Safe Harbor Agreement will not be imposed on landowners enrolled in a Safe Harbor Agreement as a result of their voluntary conservation actions to benefit covered species. These assurances are conveyed to enrolled landowners through a section 10(a)(1)(A) enhancement of survival permit for take of the covered species issued under a Safe Harbor Agreement or through certificates of inclusion issued under the permit.

Baseline – Population estimates and distribution (if available or determinable) of the covered species and/or habitat characteristics of enrolled property that sustain seasonal or permanent use, at the time the Safe Harbor Agreement (Agreement) is executed between either Service or the Services jointly and the property owner (62 FR 32178). Baseline for this Agreement will be the number of black-footed ferrets that occur on the property at the time of enrollment.

**Certificate of Inclusion** – The document issued by the Permittee to the Cooperator that conveys the pertinent ESA authorities of the enhancement of survival permit and Safe Harbor assurances to the Cooperator.

**Changed Circumstances** – Changes in circumstances affecting a species or geographic area covered by a conservation plan or agreement that can be reasonably be anticipated by plan or agreement developers and the Service and that can be planned for (e.g. the listing of a new species, or a fire or other natural catastrophic event in areas prone to such events).

**Conservation Activities** –Tthe actions that will be taken under this Safe Harbor Agreement to provide a net conservation benefit to the black-footed ferret. Conservation activities may be

carried out by the Permittee or designee or the Cooperator, as described in the Reintroduction Plan for the enrolled land.

Conservation Zone – The Conservation Zone is a core area on each enrolled property that will provide the necessary attributes to support 30 adult ferrets. Typically, it will be a minimum of 1,500 acres of black-tailed prairie dog habitat or 3,000 acres of white-tailed or Gunnison's prairie dog. It may be owned by one or more landowners. Activities compatible with ferret conservation will be allowed, such as routine ranching and identified conservation activities. The Conservation Zone will be identified on a map of the enrolled lands. All Conservation Activities within the Conservation Zone will be described in the enrolled property's Reintroduction Plan.

**Cooperator** – The Cooperator is any non-federal landowner (including tribes, states and municipalities) eligible for enrollment in the program that voluntarily chooses to assist in the development and implementation of a Reintroduction Plan for black-footed ferrets on their lands (or some portion of their lands).

**Covered Species** – The species that are subject of the Safe Harbor Agreement and for which an enhancement of survival permit provides incidental take authorization and Safe Harbor assurances. For this particular Agreement, the covered species is the black-footed ferret.

**Downlist** – The reclassification of a species from endangered to threatened. Usually downlisting is a result from successful recovery actions that have addressed some portion of the threats to the species.

**Incidental Take** – Incidental take is the accidental or inadvertent harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing or collecting a species listed as threatened or endangered under the Endangered Species Act pursuant to carrying out otherwise legal activities.

**Kit** – A kit is the young of a black-footed ferret.

Management Zone – The Management Zone is intended to provide a buffer to the Conservation Zone. It may or may not have occupied prairie dog habitat. Activities beyond routine ranching and conservation activities, such as prairie dog management, would be allowed in this zone. The Management Zone will be identified on a map of the enrolled lands. All Conservation Activities within the Management Zone will be described in the enrolled property's Reintroduction Plan.

**Non-federal lands** - Lands that are owned by entities other than the federal government, including tribes (see tribal lands below), States, counties, municipalities, private individuals, and non-governmental organizations.

**Parties** – The Parties are collectively the Permittee and the Cooperator and any other Partners as described in Part 10.3 of this Agreement and identified in the Reintroduction Plan.

**Permit** – The enhancement of survival permit, pursuant to section 10(a)(1)(A) of the Endangered Species Act (ESA), issued by the U.S. Fish and Wildlife Service (Service) that authorizes incidental take associated with actions identified in the Safe Harbor Agreement.

**Permittee** – The Permittee is the entity who holds the Permit issued under the Safe Harbor Agreement. Under this Safe Harbor Agreement, the Permittee is the Service's Black-footed Ferret Recovery Coordinator.

Reintroduction Plan – The Reintroduction Plan is the document that describes site-specific characteristics of the enrolled land. It will include a map of the enrolled land, including identification of the Conservation and Management Zones. It will also describe the Conservation Activities to be carried out in each of the Conservation and Management Zones on the enrolled land. The Permittee or designee will work with the landowner volunteering to enroll to develop the the Reintroduction Plan prior to enrollment. Upon approval, it will be signed by the Permittee, the Cooperator and any additional parties as necessary. A template for the Reintroduction Plan is in Appendix B to this Safe Harbor Agreement.

Routine Livestock Grazing and Ranching Activities Those activities required to manage a livestock operation. It may or may not be part of a traditional ranch. These include, but are not limited to grazing livestock; driving vehicles and equipment to and from the livestock operations; driving vehicles to and between pastures to move and/or feed livestock or administer medical attention to animals; building and maintaining fences and watering facilities; and treating invasive plants.

Safe Harbor Agreement (Agreement) – The Safe Harbor Agreement is the document, prepared by the permit applicant, that describes the conservation strategy to provide a net conservation benefit for the covered species. The draft Agreement is submitted to the Service as part of the application package for an ESA section 10(a)(1)(A) permit. The final approved Agreement is signed by the applicant, Service, and sometimes other partners.

**Tribal Lands** – For purposes of this Safe Harbor Agreement, tribal lands refer to those lands within the boundaries of an Indian reservation or land outside of an Indian reservation that are held in trust by the United States for the benefit of an individual Indian or the Indian Tribe, held by an individual Indian or Indian Tribe, or held by a dependent Indian community.

**Unforeseen Circumstances** — Circumstances affecting a species or geographic area covered by a conservation plan or agreement that could not reasonably have been anticipated by plan or agreement developers and the Service at the time of the conservation plan's or agreement's negotiation and development, and that result in a substantial and adverse change in the status of the covered species.

#### 1.0 Introduction

The Safe Harbor Program (64 FR 32717) is a program that provides assurances to non-federal landowners, including tribes, who voluntarily commit to implementing specific activities over a defined time frame that are reasonably expected to provide a net conservation benefit to species listed under the Endangered Species Act (ESA). In exchange for this commitment, enrolled landowners and tribes receive assurances from the U.S. Fish and Wildlife Service (Service) that no additional future regulatory restrictions will be imposed or commitments required for species covered under a Safe Harbor Agreement. The purpose of this Black-Footed Ferret Programmatic Safe Harbor Agreement (Agreement) is to encourage non-federal landowners and tribes to voluntarily engage in conservation activities to benefit and advance recovery of the endangered black-footed ferret (Mustela nigripes). The primary conservation activity under this Agreement will be reintroductions of black-footed ferrets on properties of willing landowners and tribes.

Based on this Agreement and compliance with all other associated regulations and laws, the Service will issue a section 10(a)(1)(A Enhancement of Survival Permit (Permit) to the Service's Black-Footed Ferret Recovery Coordinator position (Recovery Coordinator) for a term of 50 years. Under the Permit, the Recovery Coordinator may enroll eligible and willing non-federal landowners through Certificates of Inclusions for a minimum term of 10 years under this Agreement. The Certificates of Inclusions will convey the Permit's incidental take authorization and the Safe Harbor assurances to the enrolled landowners.

The Recovery Coordinator has the capability and commitment to administer the Permit and the terms of the Safe Harbor Agreement. The Recovery Coordinator oversees the recovery efforts of the black-footed ferret through the coordination and assistance of the Black-footed Ferret Recovery Implementation Team (BFFRIT). The BFFRIT was established in 1996 and reaffirmed with a revised charter in 2012. The BFFRIT is directed by the Executive Committee made up of various state and federal agencies, tribes and non-governmental organizations with the purpose to recover the ferret through coordinated efforts of many interested parties (Appendix G). All of these partners have been instrumental in the implementation of ferret recovery efforts to date. The Recovery Coordinator will work closely with the BFFRIT on the implementation and monitoring of this Agreement. To date, the Recovery Coordinator with the assistance of the BFFRIT has established a successful captive breeding program, has identified 19 reintroduction sites, and coordinated the release of over 3,000 ferrets.

This Agreement is programmatic in nature and applicable across the 12-state historical range of the ferret which includes a wide range of landscapes, habitat types and potential partners. This broad diversity in landscapes necessitates site-specific black-footed ferret

Reintroduction Plans (Reintroduction Plan) for the enrolled lands. The Reintroduction Plans will describe the specific conservation and management details of each site within an identified Conservation Zone and Management Zone on each enrolled property. The Reintroduction Plan will be developed by the Recovery Coordinator and the Cooperator with technical input from other local partners, which may include State wildlife agencies, tribes and the Natural Resources Conservation Service, and will include the roles and responsibilities of all partners as appropriate. As the Permittee, the Recovery Coordinator will issue a Certificate of Inclusion after a Reintroduction Plan is approved and signed by all appropriate parties. Collectively, the Permittee, the Cooperator and any other signatories to the Reintroduction Plan and Certificate of Inclusion are hereafter called the Parties. The programmatic nature of this Agreement provides Cooperators with a streamlined process for obtaining assurances that actions taken to benefit black-footed ferrets on their land will not restrict current land use or result in additional regulatory obligations associated with black-footed ferrets under the Act .

#### 2.0 Background

The black-footed ferret is an endangered carnivore with a black face mask, black legs, and a black-tipped tail. It is approximately 18 to 24 inches long and weighs up to 2.5 pounds. The black-footed ferret is the only ferret species native to North America. The ferret is mainly solitary except when breeding and when mother and young are together (Forrest et al. 1985). In the wild, it breeds at 1 year of age, usually from mid-March through early April with litter sizes averaging 3.5 individuals (Wilson and Ruff 1999). However, the mean life expectancy of free-ranging ferrets in the last known free-ranging population in Meeteetse, Wyoming was 0.9 years (Biggins et al. 2006).

Ferrets prey primarily on prairie dogs (*Cynomys* spp.) and use their burrows for shelter and denning (Henderson et al. 1969; Hillman and Linder 1973; Forrest et al. 1985). Since ferrets depend almost exclusively on prairie dogs for food and shelter, and the ferret range directly overlaps that of certain prairie dog species (Anderson et al. 1986) with no documentation of ferrets breeding outside of prairie dog colonies, we believe that ferrets were historically endemic to the range of three of the prairie dog species (Gunnison, white-tailed and blacktailed). The historical range of these prairie dog species collectively occupied approximately 100 million acres of intermountain prairie grasslands within a range of an estimated 562 million acres extending from Canada to Mexico (Anderson et al. 1986, Biggins et al. 1997). Today, largely due to a number of anthropogenic factors including land conversion, poisoning and introduced disease, most of the prairie dogs species occur in highly fragmented subpopulations (Luce 2003, U.S. Fish and Wildlife Service 2010). These fragmented populations can fluctuate spatially and temporally causing bottlenecks for ferret populations.

The same factors that have impacted prairie dog numbers have also impacted black-footed ferrets. By 1987, the last remaining wild black-footed ferrets were taken into captivity for captive breeding purposes (Hutchins et al. 1996, Garelle et al. 2006). Approximately 280

animals make up the captive population across six facilities which ensure redundancy, reducing risk of a single or even multiple catastrophic events from eliminating the captive population. A Species Survival Plan ensures their genetic fitness and provides surplus animals for release. After successful captive breeding efforts, the first captive bred black-footed ferrets were released back into the wild at Shirley Basin Wyoming in 1991. Today, in addition to the six captive breeding facilities, approximately 800 ferrets exist at 19 managed reintroduction sites across their historical range (U.S. Fish and Wildlife Service 2012). Captive breeding and the release of surplus ferrets continues in efforts to augment existing sites and establish more ferret populations throughout their range. Reintroduction efforts have met recovery goals at four sites, with many being challenged primarily by disease. Considerable effort has been undertaken to identify additional suitable reintroduction sites to advance recovery of the species.

Literature suggests that approximately 75 acres (30 ha) of occupied black-tailed prairie dog habitat or approximately 100-150 ac (40-60 ha) of occupied white-tailed or Gunnison's prairie dog habitat are needed to support one female black-footed ferret (Biggins et al. 2006). However, field observations suggest the prairie dog acreage to support a female ferret may range from 60 to 225 acres depending on prairie dog densities, which vary by species, and other factors including disease and climactic conditions (Biggins et al. 1993, Larson, personal communication 2012). Male ferrets have overlapping ranges with female ferrets and do not require additional prairie dog habitat beyond that considered for females (Biggins et al. 2006).

The amount of habitat needed by black-footed ferrets is directly related to acreage and density of prairie dogs (Biggins et al. 1993). Therefore, prairie dog management can be crucial to black-footed ferrets. However, attitudes toward prairie dogs vary greatly and prairie dogs have long been a focus of conflict with agricultural producers (Miller et al. 2007 and 2012) (Davis et al. 2002). The principal conflict centers on competition between livestock and prairie dogs for forage but also includes concern for livestock safety.

Some of the agricultural community is concerned with potential for competition from prairie dog colonies with livestock for forage, which is seen a direct threat to the economic viability of livestock producers. However, competition among herbivores is a complex interaction that varies by scale, geographic location, vegetation type and biomass productivity, season and year (Miller 2012, Derner et al. 2006, Detling 2006). The complexity associated with this interaction and the ranching concerns has led to a desire by some to control prairie dogs in some areas. Successful reintroductions of ferrets, which depend on healthy prairie dog populations, cannot be sustained without addressing this concern. Judicious and targeted management of prairie dog colonies through non-lethal and lethal methods is necessary to maintain support for the conservation of the ferret from landowners whose ranches provide suitable ferret habitat.

Prairie dog management can involve either lethal or non-lethal methods. Lethal control of prairie dogs typically includes poisoning or shooting, both of which can limit carrying

capacity for ferrets (Pauli 2005, Reeve and Vosburgh 2006). However, both methods are used widely throughout the range of prairie dogs and occur at some of the ferret reintroduction sites that are considered successful, such as Aubrey Valley in Arizona and Shirley Basin in Wyoming. While poisoning of prairie dogs is regarded as a major factor in the historical decline of prairie dogs and black-footed ferrets (Forrest et al. 1985, Cully 1993, Forest and Luchsinger 2005), today, most poisoning is more limited in nature and undertaken by landowners at very localized locations (U.S. Fish and Wildlife Service 2009). Toxicant use on or adjacent to black-footed ferret reintroduction sites is of particular concern due to potential indirect impacts to ferrets and the potential illegal use of; however, carefully managed and implemented toxicant use with specific management objectives has been important to address prairie dog encroachment issues at ferret reintroduction sites (Gober pers. comm., Griebel 2010). At one reintroduction site in Kansas, management of prairie dogs by Wildlife Services at the property boundary, to minimize the expansion of prairie dog colonies onto adjacent properties, has addressed this issue. Purposeful management of prairie dogs can help alleviate conflicts associated with prairie dog expansion and with livestock competition. Flexibility in that management will generate more support from landowners to participate in this program and conserve ferrets. The ability to collaborate to purposefully manage prairie dogs in some areas while limiting their expansion to others can help build a strong private land conservation model for the black-footed ferret.

There are several diseases, both native and nonnative, that can impact black-footed ferrets potentially more so than toxicant use. Of particular concern is nonnative sylvatic plague which can be lethal to black-footed ferrets and prairie dogs, their main prey source (Barnes 1993, Gage and Kosoy 2006). Sylvatic plague is caused by the bacterium *Yersinia pestis* and is transmitted via fleas or through consumption of infected prey, or through breathing in tiny droplets containing the bacterium from infected animals (Godbey et al. 2006). Since 2005, plague has been detected in prairie dogs in all 12 states throughout the historical range of the ferret (Abbot and Roche 2012). The potential significance of plague on black-footed ferret populations underscores the value of establishing multiple reintroduction sites across the widest possible distribution of the species' historical range as more populations can significantly minimize the chances that plague outbreaks cause widespread decline in the species (Gage and Kosoy 2006, U.S. Fish and Wildlife Service 2008). Establishing and managing multiple reintroduction sites will serve as a risk management strategy to promote recovery of the species.

The original recovery plan for the black-footed ferret was completed in 1988. It identified downlisting criteria that included at least 1,500 adult ferrets in 10 wild populations. There was discussion regarding the distribution of those 1,500 adult ferrets across the landscape as well as the minimum size of any subpopulation, but no specified recommendation. Instead it was left open to allow for maximum flexibility. The minimum number of 30 adult ferrets is derived from population viability calculations that predict the necessary number of ferrets to provide the genetic variability to prevent extinction for the next 100 years (U.S. Fish and Wildlife Service 1988).

Since that time, the knowledge and understanding of the species and the threats it faces have grown. Many reviews of the recovery plan and recovery progress have been undertaken including the Conservation Breeding Specialist Group (CBSG) (1992), Hutchins et al. (1996), CBSG (2004), Ray (2006) and U.S. Fish and Wildlife Service (2008). These reviews have been used to inform the preparation of a draft revised recovery plan that will direct ferret recovery into the future. The overall strategy to recover this species will rely on engaging multiple partners including tribes, states, federal land management agencies, nongovernmental organizations and private landowners to achieve recovery. The recovery criteria under development are likely to continue to provide guidance to establish multiple free-ranging populations in an effort to minimize impacts to the stability of ferret populations from localized stochastic events. Future recovery goals will likely include delisting criteria in addition to the downlisting criteria as well as refinement on the distribution of the populations. Potential delisting criteria include the establishment of at least 3,000 free-ranging breeding adult black-footed ferrets in 30 or more populations, with at least 1 population in at least 9 of the 12 states within the historical range of the species, with no fewer than 30 breeding adults in any population and at least 10 populations with 100 or more breeding adults (Gober pers. Com.). The table below identifies the status of reintroduction efforts through 2009.

Table 1. Black-footed ferrets in the wild as of 2008 (Bunnell 2008, Larson 2008a)

SITE (YEAR INITIATED)	PRAIRIE	FERRETS	MINIMUM FALL	ESTIMATED
,	DOG SPP.	RELEASED	POPULATION	BREEDING
			2008	ADULTS
		,		2009
Shirley Basin, WY (1991)	Wtpd	277	196	98
UL Bend NWR, MT (1994)	Btpd	208	13	7
Badlands NP, SD (1994)	Btpd	175	20	10
Aubrey Valley, AZ (1996)	Gpd	173	66 <sup>-</sup>	33
Conata Basin, SD (1996)	Btpd	150	292	146
Ft. Belknap Ind. Res., MT (1997)	Btpd	167	0	0
Coyote Basin, UT (1999)	Wtpd	200	25	13
Chey. River Ind. Res., SD (2000)	Btpd	189	150	75
BLM 40-complex, MT (2001)	Btpd	95	3	3
Wolf Creek, CO, (2001)	Wtpd	209	16	8
Janos, Mexico (2001)	Btpd	282	13	7
Rosebud Ind. Res., SD (2003)	Btpd	99	30	15
Lower Brule Ind. Res., SD (2006)	Btpd	62	26	13
Wind Cave NP, SD (2007)	Btpd	49	26	13
Espee Ranch, AZ (2007)	Gpd	44	Recent release	No data
Logan County, KS (2007)	Btpd	24	15	7
N. Cheyenne Ind. Res, MT (2008)	Btpd	8	Recent release	No data
Vermejo Ranch, NM (2008)	Btpd	53	Recent release	No data
Grasslands NP, Canada (2009)	Btpd	34	Recent release	No data
Total		2464	891	448

Since the ferret's rediscovery at Meteetse Wyoming in 1981, significant progress has occurred towards recovery of this species. Early efforts concentrated on immediate survival of the species through the establishment of a captive breeding population. These efforts led to the establishment of the National Black-footed Ferret Conservation Center (NBFFCC) which coordinates all recovery actions and houses a majority of all captive black-footed ferrets. This facility coordinates the efforts to breed ferrets for reintroduction into the wild while minimizing the loss of genetic diversity. With the success of the captive breeding program, recovery efforts now include other tasks such as establishing a wide distribution of reintroduction sites with sufficient quantity and quality of prairie dog habitat as well as addressing the impacts of disease and the assuring the adequacy of management mechanisms. The accomplishments to date have not been easy. It has taken the leadership of the Recovery Coordinator and the support of an active Recovery Implementation Team. These efforts demonstrate a long term commitment by the Service, the BFFRC to coordinate with the diverse members of the Recovery Implementation Team to cooperatively advance recovery of the black-footed ferret.

#### 3.0 Authorities

This Safe Harbor Agreement has been developed under section 10 the Act, the Service's Safe Harbor Policy (64 FR 32717) and final regulations (64 FR 32706), and revisions to the regulations (69 FR 24084) and supports the intent of the Parties to follow the procedural and substantive requirements of section 10(a)(1)(A) of the Endangered Species Act. The Safe Harbor policy was developed to encourage private and other non-federal landowners to voluntarily undertake conservation activities on their properties to enhance restore or maintain habitat to benefit federally listed species.

#### 4.0 Covered Species

. Covered species are those federally listed species that are subject to a Safe Harbor Agreement and accompanying enhancement of survival permit, as defined in the Service's final Safe Harbor Policy (64 FR 32717). This Agreement's covered species is the black-footed ferret, federally listed as endangered.

#### 5.0 Eligible Lands

The geographical lands eligible for enrollment in this Safe Harbor Agreement include non-federal lands (including tribal lands) within the historical range of the black-footed ferret. This includes portions of Arizona, Colorado, Kansas, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah and Wyoming (Appendix A) that have adequate acres of occupied prairie dog habitat to support a population of at least 30 breeding adult ferrets. The acreage necessary to support 30 breeding adults can vary depending on the species of prairie dogs present. Typically this would be approximately 1,500 acres or more in black-tailed prairie dog habitat or 3,000 acres or more of white-tailed or Gunnison's prairie dog habitat. Eligible land need not be provided by a single Cooperator. Adjacent landowners can collectively enroll lands together under the Agreement such that sufficient acreage to support 30 breeding adult ferrets is enrolled. Potential suitable lands will be evaluated by the Permittee based on available site information and site visits. The number of acres required for enrollment will be determined on a site-specific basis and will be identified in the Reintroduction Plan.

While 1,500 to 3,000 acres of active prairie dog habitat can support 30 breeding adult ferrets, we would encourage and prioritize larger enrollments to maximize the ability to contribute to the recovery goals of the black-footed ferret. Factors such as total size of continuous occupied prairie dog habitat, densities of prairie dogs, the documented presence of plague, total size of the grazing/ranching operation, proximity to incompatible land uses such as urban areas; the number of adjacent landowners who have concerns of prairie dog expansion and the land uses of those neighbors will also be considered in the enrollment of eligible lands. By considering the concerns of the Cooperator and their neighbors, a logistically sound and sustainable ferret reintroduction effort will be possible.

Efforts to distribute ferret populations throughout the historical range stem from the need to maximize the redundancy of populations, which will minimize the risk of a catastrophic event eliminating the species. A potential approach would be to distribute ferret populations in direct proportion to the amount of historical habitat in that state (Appendix C). For example, North Dakota has a much smaller portion of the historical range then does Colorado. As such, Colorado would be encouraged to enroll more acres occupied by prairie dogs and establish more black-footed ferret populations to achieve recovery. Therefore, should enrollment resources become limited; we would consider the historical ferret presence along with the above factors for prioritizing enrollments.

#### 6.0 Baseline Determination

Baseline is a measurement of the conditions associated with the covered species or its habitat that occur on eligible lands at the time of enrollment in the Safe Harbor Agreement. Because the goal of this Safe Harbor Agreement is to establish new populations of ferrets through reintroductions, the logical parameter for measuring baseline of lands to be enrolled, is the number of ferrets present. The presence of prairie dogs is the most definitive indication of suitable black-footed ferret habitat. However, measuring prairie dog population numbers and spatial extent is time-consuming and expensive because these parameters can fluctuate greatly over time. Therefore, the most reasonable and practical approach for determining baseline under this Agreement would be the number of black-footed ferrets present upon enrollment. Since the last remaining wild black-footed ferrets were taken into captivity for captive breeding purposes extensive efforts to find additional wild ferrets have been unsuccessful (Hanebury and Biggins 2006). Therefore, other than in previous reintroduction sites, the baseline on eligible lands for this Agreement is likely to be zero ferrets.

Some ferret reintroductions onto private lands have occurred under sections 10(a)(1)(A) and 10(j) of the ESA since 1991. Section 10(a)(1)(A) authorizes the Service to issue permits for research on and the enhancement of survival of listed species. Six section 10(a)(1)(A) permits for ferret reintroductions have been issued in Arizona (1), Kansas (1), New Mexico (1), Montana (1) and South Dakota (2). These permits and the Service's accompanying section 7 biological opinions provided incidental take coverage to the landowners who volunteered their lands for these reintroductions. However, these mechanisms do not provide the same regulatory assurances to landowners as the Safe Harbor program that no further restrictions or commitments would be imposed. The reintroductions under these permits also did not always have the same conservation activities as this Agreement does that would benefit the species, such as disease management, targeted prairie dog management, and monitoring. Finally, these permits did not provide a baseline condition to which the landowners could return, as provide by the Safe Harbor policy (62 FR 32178).

Ferrets were reintroduced in another seven locations on non-Federal lands under section 10(j) in Arizona (1), Montana (1), South Dakota (3), Utah and Colorado (1), and Wyoming (1). Section 10(j) authorizes the Service to designate experimental populations for the