

# Draft Black-footed Ferret Programmatic Safe Harbor Agreement

---

purposes of reintroduction of threatened and endangered species. Under Section 10(j), non-essential experimental populations are considered threatened for all purposes of the ESA other than section 7 (such populations are considered as if proposed for listing for the purposes of section 7). As such, the Service may issue special rules that provide flexibility in management of these populations. The 10(j) rulemaking process for each of the designated non-essential experimental populations of ferrets uses that flexibility for the continued existing use of all lands within the defined area, include ranching and associated activities. Although non-Federal landowners and tribes within these 10(j) areas don't need additional incidental take coverage, they may desire the higher level of regulatory assurances provided under this Agreement. Furthermore, like some of the section 10(a)(1)(A) reintroductions, all the reintroductions in the 10(j) areas 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.

In both the sections 10(a)(1)(A) and 10(j) situations, the landowners volunteered their lands for these reintroductions to allow the Service to test the effectiveness of release, management, and monitoring methods, as well as attempt to establish new populations. This voluntary participation in reintroduction efforts was the foundation of the development of successful techniques that are allowing the Service to expand reintroduction efforts rangewide through this Agreement. However, these "early adopters" under section 10(a)(1)(A) permits and section 10(j) designations do not enjoy the same level of regulatory assurances as participants in this Agreement would. For these reasons, we propose to provide these landowners the opportunity to sign onto the Agreement and receive Safe Harbor assurances for the reintroductions that have already occurred. Furthermore, if this Agreement had existed at the time of those reintroductions, the baseline conditions for those landowners would have been zero ferrets. Therefore, we also propose to provide the landowners who volunteer to sign the Agreement a zero-ferret baseline determination.

The goal of the conservation activities in this Agreement is to increase the number of ferrets on the enrolled property above the baseline to provide a net conservation benefit to the species through establishment of additional populations (Section 8.0). The Cooperator may opt to return to baseline upon completion of the Reintroduction Plan (Section 7.0 and Appendix B). The landowner will not be held responsible for events beyond their control (e.g. drought, fire, or plague) that may result in a decrease of the number of ferrets below the agreed upon baseline. Because a baseline higher than zero would be rare, we expect the likelihood of such a circumstance to be extremely low.

## **7.0 Conservation Activities**

Conservation Activities are those actions that are be implemented on the enrolled lands and are intended to provide a net conservation benefit to ferrets. The necessary Conservation activities that will provide the net conservation benefit on an individual piece of land may vary by location but will include the reintroduction of black-footed ferrets at a minimum.

# Draft Black-footed Ferret Programmatic Safe Harbor Agreement

---

The Conservation activities are discussed below and will be identified for each site as necessary and defined within a Reintroduction Plan developed for each enrolled property (Appendix B). Within the enrolled lands, a Conservation Zone and a Management Zone will be defined.

The Conservation Zone should be approximately 1,500 acres or more of occupied black-tailed prairie dog habitat or 3,000 acres or more of white-tailed or Gunnison prairie dog habitat to provide adequate habitat to support a population of at least 30 adult ferrets. Conservation Activities within the Conservation Zone will include ferret reintroduction and disease management as discussed below. Routine livestock grazing and ranching activities will continue in the Conservation Zone including livestock grazing, the installation and maintenance of fencing, installation and maintenance of watering facilities, livestock care and movement and noxious and invasive weed management. Land uses and activities that could substantially alter the agreed upon land use (e.g. activities that convert non-cultivated grazing lands to croplands or other activities that would substantially reduce prairie dog numbers such as extensive energy development) will not be allowed in the Conservation Zone during the term of the Reintroduction Plan except as described in Section 11.0 (Changed Circumstances) of this Agreement.

The Management Zone is intended to provide benefits to the ferret while providing more flexibility in prairie dog management to the Cooperator. It will consist of additional acres adjacent to or in close proximity to the conservation zone, but will not exceed the number of acres in the Conservation Zone. It may or may not have occupied prairie dog habitat. Conservation Actions within the Management Zone may also include disease management if occupied by prairie dogs, and/or prairie dog management as discussed below and as requested and defined in the Reintroduction Plan. It is expected that routine ranching activities including livestock grazing, the installation and maintenance of fencing, installation and maintenance of watering facilities, livestock care and movement, noxious and invasive weed management will also continue in the Management Zone as discussed below.

All of the following conservation activities are important in that they support the reintroduction of ferrets. It will require coordinated efforts of multiple partners to implement all of these conservation activities. Likely partners in the implementation of the conservation activities include but are not limited to State Wildlife Agencies, Tribes, U.S. Fish and Wildlife Service Ecological Services Field Offices, Animal Plant Health Inspection Service (APHIS), Wildlife Services (WS), Natural Resources Conservation Service (NRCS), United States Geological Survey (USGS), and other non-governmental organizations. Partners will vary depending on factors such as the state in which the eligible lands are located, budgets, logistics and work efficiencies. This Safe Harbor Agreement provides a mechanism for the coordinated efforts of multiple Partners to contribute to recovery of this species.

## **7.1 Black-Footed Ferret Reintroduction and Management**

# Draft Black-footed Ferret Programmatic Safe Harbor Agreement

---

Lands enrolled under this Agreement will provide an opportunity to increase the number of wild black-footed ferret populations as called for in the Draft Revised Recovery Plan. Once an eligible property has a signed Reintroduction Plan and is enrolled under the Agreement, black-footed ferrets will be reintroduced to the site as described herein. All ferret reintroduction and management actions will be coordinated and carried out by the Permittee (or their agent) and all funding for such actions will be provided by the Permittee and/or other partners. State Wildlife Agencies will be instrumental in this activity.

Typically, a minimum of 20 juvenile ferrets will be reintroduced during one release event in the fall. Depending on the size of the site and quality of habitat additional animals may be released during this timeframe or in subsequent years. In the latter case, the baseline will remain at the level established at the time of enrollment. Release events typically occur at dusk supported by a minimum of two biologists. Depending on topography, most animals can be distributed across the site on foot thus minimizing impact to the landscape. All reintroduction efforts will utilize techniques outlined in Roelle et al. (2006). The Permittee or their designee and will work with each Cooperator to coordinate these activities to minimize disruptions to the Cooperator's use of land during reintroduction activities.

Once black-footed ferrets are released, efforts will be undertaken as necessary to determine the success of reintroduction activities. These efforts are described in Section 9.0 (Monitoring) of this Agreement and could require access to the property. This monitoring may occur in subsequent years, as necessary, in coordination with the Cooperator, to determine if excess wild kit production beyond the carrying capacity of specific enrolled lands could support other approved reintroduction sites.

## **7.2 Disease Management**

While there are a number of diseases that can affect both captive raised and wild ferrets, sylvatic plague presents the greatest threat to wild populations. In order to address this threat, Cooperators enrolled in this Agreement will allow for the treatment of disease as appropriate and necessary on their enrolled lands for the protection of ferrets and prairie dogs. Disease management activities will be coordinated and carried out by the Permittee or their designee at no cost to the Cooperator.

Currently there are effective vaccines that will protect ferrets from plague. All animals at the captive breeding facilities are vaccinated for plague and other diseases as necessary, including those intended for reintroduction. However, if reintroductions are successful and reproduction occurs, it may be necessary to live trap any kits that are produced on a reintroduction site in order to vaccinate them. This would occur in conjunction with other activities discussed herein and in coordination with the Cooperator to minimize disruptions to the Cooperators use of the land.

Fleas are considered the main vector of plague transmission. Currently the most effective control of fleas (and thereby plague) is the insecticide deltamethrin, an unrestricted use pesticide classified by the Environmental Protection Agency (EPA), and considered safe for

# Draft Black-footed Ferret Programmatic Safe Harbor Agreement

---

many applications including use in and around homes. Product transport, mixing, application storage, cleanup and use of protective gear will be consistent with label instruction. Deltamethrin may be applied according to the EPA label requirements once per year, generally between March and August and involve placement of approximately 5 grams of deltamethrin directly into each prairie dog burrow. The insecticide is typically applied by a spray device mounted on ATVs or by hand while walking depending on topography (Matchett et al, 2010, Seery et al. 2003). Applications take several days to two weeks depending on the acreage treated and the size of work crews.

An alternative to the use of insecticides is currently under investigation that involves a sylvatic plague oral bait vaccine for prairie dogs. The vaccine is a genetically modified viral vaccine, using attenuated raccoon pox virus as a vector for orally delivering critical plague antigens to target animals through the use of baits (USGS 2012) If effective, this vaccine could be used on lands enrolled under this Agreement. The oral vaccine is placed in baits that are distributed from ATVs or possibly aurally onto a prairie dog colony once per year or possibly less depending upon research results. Prairie dogs consume the bait and become vaccinated thereby preventing plague outbreaks within the treated lands. Administration of oral plague vaccine is expected to occur no more than once per year after emergence of the young and might occur from late May through October. The oral vaccine may negate the need to live-trap kits for vaccination as discussed above. This plague abatement technique is expected to be less labor intensive. However, it may require limiting access of livestock to treated areas for a couple of days after application to avoid livestock consumption of the bait. The bait will not adversely affect livestock but could decrease the amount available for prairie dogs and therefore decrease the vaccine's effectiveness.

Regardless of the method used, the Permittee (or their Designee) will work with each Cooperator to coordinate these activities to minimize disruptions to the Cooperator's use of the lands during plague management activities. The science of disease management within wildlife populations is evolving. New techniques and protocol may be considered in the future. Any changes in disease management on lands covered by this Agreement will be agreed to by both Parties prior to implementation.

### **7.3 Prairie Dog Management**

Sustainable black-footed ferret populations are not possible without purposeful management of prairie dog populations to address disease and conflict with human activities (U.S. Fish and Wildlife Service 2008). Prairie dog management within the Management Zone may include both lethal and non-lethal activities. Lethal activities can include the use of zinc phosphide and shooting. While lethal prairie dog management will not be allowed within the Conservation Zone of the enrolled lands, lethal means within the Management Zone will be addressed as requested for each enrolled property and defined in the Reintroduction Plan. Responsibility for implementing management of prairie dogs will be determined by the Parties and defined in Reintroduction Plan. Non-lethal management activities may occur in both the Management and Conservation Zones and include but are not limited to barriers and translocation. The Reintroduction Plan can be modified as

# Draft Black-footed Ferret Programmatic Safe Harbor Agreement

---

necessary to address changing prairie dog management needs with concurrence by both the Permittee and the Cooperator. Implementation of this lethal prairie dog management will likely be carried out by Wildlife Services and/or other local entities such as weed and pest boards. Non-lethal prairie dog management may be carried out by other partners or the Cooperator as agreed to and identified in the Reintroduction Plan. Management to maintain sufficient quantity and quality of prairie dog habitat on lands covered by the Agreement will be critical to its success.

## **7.4 Livestock Grazing**

Most, if not all of the private land that supports adequate numbers of prairie dogs which are essential to maintain black-footed ferret populations are agricultural in nature and predominantly used for livestock grazing. It is expected that grazing practices on the enrolled property will continue determined by the Cooperator and described in the Reintroduction Plan. Grazing practices on lands enrolled under this Agreement should promote sustainable management of the enrolled rangeland, provide habitat for the black-footed ferret as well as other wildlife species of interest and be economically viable for the Cooperator. It is understood that certain practices such as, but not limited to fence construction and maintenance and watering facility construction and maintenance, herbaceous weed control may be necessary to facilitate sustainable grazing. Grazing activities will be described in the Reintroduction Plan. Implementation of all grazing activities will be the responsibility of the Cooperator.

## **8.0 Incidental Take and Net Conservation Benefits**

### **8.1 Incidental Take and Return to Baseline**

Implementation of this Agreement and the subsequent Reintroduction Plans developed for specific lands eligible for participation, could result in incidental take of black-footed ferrets. Incidental take associated with this Safe Harbor Agreement may occur during implementation of the conservation activities described in Section 7.0 above, and it may occur through the return to baseline.

Incidental take of ferrets could occur through reintroduction and monitoring of ferrets while handling or transportation to the reintroduction site. Ferret deaths have occurred while anesthetizing animals for health care purposes. In addition, past ferret release sites have experienced occasional ferret deaths during transportation due to heat exhaustion when air conditioning equipment failed (pers. Comm. Larson, 2012). However, to date less than one half of one percent of the 3000 ferrets reintroduced have perished from handling and transportation (pers. Comm. Gober, 2012). While equipment failures could occur with ferret reintroductions carried out as part of this Agreement, the precautions contained in the protocol for handling and monitoring reintroduced ferrets outlined in Roelle et al. (2006) will minimize this possibility.

Incidental take of ferrets may also occur in carrying out the other conservation activities including implementing plague management, implementing prairie dog management and

## Draft Black-footed Ferret Programmatic Safe Harbor Agreement

---

implementing routine livestock grazing and ranching activities. The most likely means of incidental take associated with these activities would occur through vehicle or equipment collisions. While this is possible and has been documented the opportunity for vehicle collisions is limited due to the nocturnal habits of the ferrets. Other than potential collision with vehicles or equipment, plague management is unlikely to result in incidental take of ferrets.

Prairie dog management could include both lethal and non-lethal methods. Incidental take from non-lethal activity is not expected. Incidental take from lethal activity could occur if ferrets are within the management zone where prairie dog management is authorized. Incidental take of ferrets through prairie dog management may occur through non-target exposure of ferrets to toxicants meant for prairie dogs. However, the use of toxicants will not occur within the Conservation Zone which will limit incidental take through use of toxicants.

Routine livestock grazing and ranching activities including fence construction and maintenance, watering facility construction and maintenance and herbaceous weed control necessary to facilitate sustainable grazing, has limited potential for incidental take outside of vehicle or equipment collisions. Domestic dogs have been documented in taking wild ferrets but it is a low risk.

The provisions of this Agreement allow the Cooperator to take the enrolled lands back to baseline through any legal means. Given that virtually all potential eligible lands will have a baseline of zero, a return to baseline may result in incidental take of all ferrets released onto the enrolled lands. Should the Cooperator choose to return to baseline, the most likely means to do so will be through the absence of plague management; through extensive lethal prairie dog control on all enrolled lands including the conservation zone to the point where the prairie dog population is no longer adequate to support a ferret population; or through conversion of enrolled lands from grazing lands to other land uses such as cultivated agriculture or extensive oil and gas development and/or alternative energy development. Before carrying out any activities that would result in a return to baseline, Cooperators would be required to notify the Service in sufficient time to allow relocation of the ferrets.

In the absence of plague management, it is likely that a plague event will occur that decreases prairie dog populations to a level that will no longer support black-footed ferrets. While prairie dogs have the reproductive potential to increase their numbers after such an event, it is unlikely that ferrets will return without additional reintroductions. Likewise, extensive lethal prairie dog management across all enrolled lands would likely result in considerable decreases in prairie dog populations such that they would not support ferrets. The reproductive potential of prairie dogs could allow them to return after extensive lethal control but it is unlikely that ferrets populations would return.

# Draft Black-footed Ferret Programmatic Safe Harbor Agreement

---

While conversion to cultivated agriculture in the past resulted in the loss of considerable habitat, much of the most suitable land has already been converted therefore present and future conversion to cropland is less likely (U.S. Fish and Wildlife Service 2009). However, changes in demands for various crops such as corn for ethanol could influence rate and location of conversion to cropland which is difficult to predict. Unlike conversion to cropland, energy production does not result in a complete loss of habitat. It reduces the total amount of habitat by converting portions of it to an impermeable surface, i.e. roads and well or turbine pads, but does not preclude burrows and occupation of prairie dogs and hence ferrets. However, it may increase the potential for incidental take via vehicle collisions and potentially increased predation. The likelihood of the conversion of enrolled lands to energy production unknown and difficult to predict but will be influenced by energy prices and energy policy. While suburban and commercial development is possible, given the location of many of the eligible lands, it is less likely than conversion to cultivated agriculture or energy development.

By whatever means, a change in land use could make the enrolled lands unsuitable for prairie dog habitat or, more likely, impair the quality of prairie dog habitat. Without adequate prairie dogs, sustainable ferret populations will not be maintained and the enrolled lands will return to their baseline.

The extent of the incidental take associated with the implementation of any of these conservation activities is difficult to quantify as we do not know how many eligible landowners will enroll. Incidental take associated with the return to baseline is difficult to anticipate. However, a qualitative review of the Service's Safe Harbor Program indicates that most participants remain committed to these programs (J. Moore, pers. comm. 2012) and very few choose to return to baseline. Given that livestock grazing and ranching is the primary use for these lands, we anticipate that many cooperators will not return these lands to baseline and in fact, may re-enroll their lands under the Safe Harbor Agreement.

## **8.2 Net Conservation Benefits**

Net conservation benefits are the cumulative benefits to the black-footed ferret minus the impacts of any incidental take allowed by the enhancement of survival permit. Net conservation benefits must be sufficient to contribute, either directly or indirectly, to the recovery of the black-footed ferret. The Conservation activities identified in this Safe Harbor Agreement support recovery efforts identified in the draft Recovery Plan by reestablishing the black-footed ferret on the enrolled lands and by addressing the most significant threats. The net conservation benefits of each Conservation activity are discussed below.

**Black-Footed Ferret Reintroduction** - The principal conservation benefit provided by this Agreement is the opportunity to establish additional free-ranging populations of ferrets throughout their range on non-federal lands. Recovery efforts to date demonstrate that reintroduction of black-footed ferrets can be successful such as those at Conata Basin, South Dakota; Aubrey Valley, Arizona; Cheyenne River, South Dakota and Shirley Basin, Wyoming. Additional reintroduction sites throughout their historical range will provide

## Draft Black-footed Ferret Programmatic Safe Harbor Agreement

---

more ecologically diverse release sites. Release sites that vary in site-specific habitat characteristics will increase options to address uncertainty associated with local stochastic events such as plague, other diseases and potential climate change. If successful, reproduction at these sites could also contribute surplus, wild born kits to additional reintroduction sites elsewhere. This could foster better survival on site as well as at future reintroduction sites.

**Disease Management** – Currently, the most destructive disease impacting black-footed ferrets is sylvatic plague. Diseases that impact prairie dogs and ferrets will be addressed as described in Section 7.2 above and may occur on all lands enrolled under this Agreement as necessary. Engaging in disease management within the Conservation Zone will address the lethal threat to ferrets. Disease management within the Management Zone could also provide a conservation benefit by creating a buffer to plague on adjacent lands. Indirectly, disease management will also benefit ferrets by limiting large fluctuations in prairie dog numbers thus stabilizing their prey base.

**Prairie Dog Management** – Adequate numbers of prairie dogs are essential for ferret survival. That said prairie dogs are not always considered an asset to a landowner. In fact, since the early 1900s considerable efforts have been undertaken to poison prairie dogs as a means of reducing competition with domestic livestock for forage (Forrest and Luchsinger 2005). Lands enrolled under this Agreement will be subject to purposeful prairie dog management. This means that prairie dogs will be conserved in a given area (Conservation Zone) as defined in the Reintroduction Plan and actively controlled as necessary in adjacent areas (Management Zone). Overall, this will likely result in a substantial increase in suitable ferret habitat available on non-federal lands throughout their historical range as control and eradication of prairie dogs are not often purposefully limited on private lands at present.

The Conservation Zone and the Management Zone as defined in this Agreement will demonstrate how a balance of tolerance and control of prairie dogs can benefit ferret recovery and Cooperators alike. The social benefits of allowing purposeful management of prairie dogs in conjunction with ferret reintroduction is critical to minimize impacts of prairie dog encroachment onto neighboring properties and to create an environment that landowners will allow the release of ferrets. Establishing new reintroduction sites will exceed the impacts of any potential incidental take associated with prairie dog management.

**Livestock Grazing** – All lands eligible for enrollment under this Agreement will be non-federal grazing lands. As members of the grassland/shrub steppe systems, prairie dogs have evolved with grazing. While there is much debate regarding competition between ungulates and prairie dogs, grazing can benefit prairie dogs by reducing vegetation height which can reduce predation on prairie dogs. Enrollment of these lands will allow for their continued use as grazing lands during the term of the Reintroduction Plan. It will also ensure that there will not be substantial conversion to other uses such as cropland or other development during the term of the Reintroduction Plan. This addresses the present or

# Draft Black-footed Ferret Programmatic Safe Harbor Agreement

---

threatened destruction, modification, or curtailment of habitat or range, albeit potentially only for the term of the Reintroduction Plan.

All of these conservation activities collectively provide a net conservation benefit at each site by managing the prairie dog habitat with livestock grazing, purposefully managing the prairie dogs present and controlling the diseases that can devastate both prairie dogs and ferrets. All of this makes it possible to carry out the primary goal of the Agreement – to establish additional free-ranging populations of ferrets throughout their range on non-federal lands. Long term benefits include demonstration of the compatibility of working grazing lands and endangered species conservation which could lead to additional ferret populations throughout their range on non-federal lands beyond the term of this Agreement.

As one of the most highly endangered mammals of North America, the black-footed ferret has made great strides toward recovery. It has gone from being extirpated to approximately 800 animals in the wild across 19 sites. This has been achieved through great efforts of many people. However, many more people will need to become engaged to recover this iconic species. In addition to the conservation described above, this Agreement and the conservation activities identified within will allow the Service to engage a broad spectrum of conservation partners including additional ranchers, Tribes, States, non-governmental organizations and others to advance recovery of this species.

## 9.0 Monitoring

The purposes of this Agreement's monitoring program are to: 1. inform the Service of the status of implementation of the Conservation Activities, 2. track incidental take of ferrets, and 3.) determine success of ferret reintroductions on the enrolled properties. The Permittee (or designee) will coordinate all monitoring efforts. The Cooperators and any Partners will provide information and participate where appropriate with the Permittee, as requested, to monitor actions described in each Reintroduction Plan. The monitoring on an enrolled property will vary based on the conservation activities taken and the situation at each site.

In a coordinated effort with the Cooperator, the Permittee will track implementation of Conservation Activities on the Cooperator's property and provide the Service and each Cooperator an annual report (Appendix D). Grazing practices, carried out by the Cooperator, as well as incidental take, will be tracked through a self-reporting process in an annual survey completed by the Cooperator and returned to the Permittee (Appendix E).

In addition to the implementation monitoring described above, the Permittee (or designee) may use aerial imagery, such as National Agriculture Imagery Program (NAIP), , to assess presence and expansion or contraction of prairie dog colonies to determine if adequate ferret habitat exists on enrolled property. Based on the aerial imagery, as well as the Cooperator survey information, the Permittee (or designee) may coordinate periodic site

# Draft Black-footed Ferret Programmatic Safe Harbor Agreement

---

visits, when necessary to confirm the continued presence of reintroduced ferrets. This may include nocturnal spotlight surveys within a fourteen day period in the fall, preferably around the full moon carried out in accordance with methods described in Roelle (2006).

All conservation activities carried out each year on each enrolled property will be summarized into an annual report to be submitted by the Permittee to the Service regional offices (Region 2 and Region 6). This report will include the number of Reintroduction Plans developed and Certificates of Inclusion issued; the state and county in which they were issued, the conservation activities implemented including the number of acres treated, methods used, date of black-footed ferrets release and any incidental take. The Regional offices will review these reports to ensure the terms of the permit, conditions of the Agreement, and purposes of the monitoring program are being met.

## 9.1 Adaptive Management

While methods for successful reintroduction of black-footed ferrets to their native habitat is generally well understood and will be described for each enrolled property in the Reintroduction Plan, it is possible that with time and experience in developing Reintroduction Plans in varied landscapes, knowledge and skills will evolve. Therefore, every five years (or more frequently if necessary), the Permittee will consolidate information and reports from all enrolled properties to date for the purposes of assessing the implementation and administration of the Agreement. All Cooperators and additional Parties to the Certificate of Inclusion will be invited to discuss and provide input. Any necessary changes identified from the information provided will be addressed pursuant to Section 15.0 (Modifications) of this Agreement.

## 10.0 Roles and Responsibilities of the Parties

### 10.1 The Permittee (Black-Footed Ferret Recovery Coordinator)

The Permittee agrees to:

- A. Upon consideration of all other applicable legal requirements, the Black-Footed Ferret Recovery Coordinator will obtain and hold an enhancement of survival permit issued by the U.S. Fish and Wildlife Service Region 6, in accordance with ESA section 10(a)(1)(A), authorizing incidental take of black-footed ferrets as a result of lawful activities on the enrolled property in accordance with the provision of such permit. The term of the permit will be 50 years.
- B. Develop and sign Reintroduction Plans in coordination with each Cooperator for lands proposed to be enrolled in the Safe Harbor Agreement; ensure consistency with the provisions of this Agreement.
- C. Upon signature of a Reintroduction Plan developed in coordination with the Cooperator, issue Certificates of Inclusion to convey incidental take and Assurances to Cooperators pursuant to section 10.1 A hereof.
- D. Coordinate all black-footed ferret reintroduction efforts with appropriate partners and Cooperators pursuant to reintroduction guidelines.

# Draft Black-footed Ferret Programmatic Safe Harbor Agreement

---

- E. Coordinate all plague management actions with appropriate partners and Cooperators.
- F. Coordinate all prairie dog management activities as defined in the Reintroduction plans with appropriate partners and Cooperators.
- G. Encourage private landowner participation in the Agreement and enrollment as Cooperators.
- H. Provide Cooperators with the technical assistance in implementing Conservation activities and monitoring to the maximum extent practicable when requested or needed.
- I. Ensure that any impacts to cultural and historic resources due to activities to be carried out under this Agreement are avoided or otherwise in compliance with Section 106 of the National Historic Preservation Act.
- J. Coordinate monitoring described in the Section 9 of the Agreement and in Reintroduction Plans as applicable.
- K. Provide annual monitoring report to the U.S. Fish and Wildlife Service Region 2 and Region 6 offices.

## 10.2 Cooperator

A Cooperator agrees to:

- A. Work cooperatively with the BFFRC to develop a Reintroduction Plan acceptable to both Parties that includes all provisions identified in Appendix B.
- B. Sign the Reintroduction Plan and Certificate of Inclusion enrolling the identified land under this Safe Harbor Agreement and managing the land pursuant to the Reintroduction Plan. This will include cooperating with the reintroduction and management of black-footed ferrets including disease management as described in the Reintroduction Plan. Implementing all grazing activities as described in the Reintroduction Plan. Implementing and/or cooperating with the management of prairie dogs as described in the Reintroduction Plan.
- C. Except as identified in 10.2 F and as required by law, allow access to the enrolled property with 30 days notice by the Permittee or other agreed-upon party for the purposes related to this Agreement and associated Reintroduction Plan for activities including but not limited to ferret reintroduction, disease management, prairie dog management and grazing as described in the Reintroduction Plan.
- D. Report to the Permittee any dead, injured or ill specimens of black-footed ferrets observed on the enrolled property within 7 calendar days.
- E. Complete annual questionnaire surveys conducted by the Permittee or their Designee for information related to the Reintroduction Plan implementation.
- F. Notify the Permittee of any planned activity that the Cooperator reasonably anticipates may result in take of black-footed ferrets on the enrolled lands so that efforts to recapture any animals can occur in the fall to the extent possible, when trapping success can be maximized.
- G. Notify the Permittee within five working days of any unexpected "take" on the enrolled lands. This includes take that may result from conservation activities. Notifications may be by letter, e-mail or phone.

# Draft Black-footed Ferret Programmatic Safe Harbor Agreement

- H. Notify the Permittee within 30 days of any transfer of ownership so that the Permittee can attempt to contact the new owner, explain the baseline responsibilities and Certificate of Inclusion applicable to the enrolled lands, and invite the new owner to continue the existing Certificate of Inclusion or enter into a new one that would benefit listed species on the enrolled lands.

## 10.3 Additional Parties

Additional parties may be necessary and beneficial to implementing the conservation activities identified in this Safe Harbor Agreement. These Parties may vary for each Reintroduction Plan developed but may include any of the following: State Wildlife Agencies, Tribes, U.S. Fish and Wildlife Service Ecological Services Field Offices, Animal Plant Health Inspection Service (APHIS) - Wildlife Services (WS), Natural Resources Conservation Service (NRCS), United States Geological Survey (USGS), and various non-governmental organizations. Any additional Parties that participate in the implementation of conservation activities may sign the Reintroduction Plan and Certificate of Inclusion.

## 11.0 Changed Circumstances

Changed circumstances are changes affecting the black-footed ferrets within the enrolled lands that can reasonably be anticipated and for which contingency plans can be prepared. These circumstances include but are not limited to drought, fire, disease, land use changes and new species' listings under the ESA within the Agreement plan area. These changes could impact the habitat and prairie dogs necessary for black-footed ferrets. Should alternations to the habitat occur due to natural events, the following actions may be undertaken as necessary as described in table 2. Should any of these circumstances occur, the Permittee will work with the Cooperator to address any issues that may have resulted in the loss of ferrets.

Table 2. Changed Circumstances

Changed Circumstance	Potential Effect to Black-Footed Ferrets	Proposed Response
<b>Drought</b>	Drought can limit forage quantity available for prairie dogs and livestock. Competition for this forage could limit prairie dog reproduction. Limited prairie dog reproduction could lead to limited food availability for ferrets.	Upon identification of a D2 or higher by the Drought Monitor, and declaration by State Authorities, the Permittee will determine if adequate habitat is available on the enrolled lands for ferrets. If not, the Permittee may elect to trap any remaining ferrets for reintroduction elsewhere with adequate habitat. Additional ferrets may be reintroduced to the enrolled lands after drought conditions have broken.
<b>Fire</b>	Direct effects of fire to ferrets or prairie dogs are unlikely as they can seek refuge within their burrows. However, fire can have short term impacts to the availability of forage for prairie dogs and therefore ferrets as discussed above.	Should a fire impact greater than 50% of the enrolled lands the Permittee will determine if adequate habitat is available on the enrolled lands for ferrets. If not, the Permittee may elect to trap any remaining ferrets for reintroduction elsewhere with adequate habitat. Additional ferrets may be reintroduced to the enrolled lands after enrolled lands have recovered from the fire.

# Draft Black-footed Ferret Programmatic Safe Harbor Agreement

<b>Disease</b>	There are a number of native and non-native diseases that can impact ferrets. Impacts occur both directly (death of ferret) or indirectly through the loss of their food source, prairie dogs.	In the case where disease other than plague is suspected to have impacted ferrets, the Permittee will coordinate efforts to identify the disease with U.S. Geological Survey's National Wildlife Health Lab and the appropriate State Agency that oversee wildlife disease outbreaks. Potential response to the disease could include trapping and relocating ferrets if adequate habitat exists elsewhere. If disease causes loss of all ferrets at a reintroduction site, additional ferrets may be reintroduced if adequate habitat exists that is not impacted by disease.
<b>Additional Land Uses</b>	Changes in land use include, but not limited to utility development (e.g. waterlines, power lines), and energy development and associated infrastructure. These changes could take ferrets through vehicle collision and/or decrease available prairie dog habitat and prairie dogs available for ferrets.	Any additional land uses proposed within the enrolled lands during the term of the Reintroduction Plan will be identified and reviewed by the parties to determine if the proposed use will decrease prairie dogs or ferret habitat. Any decreases in prairie dog habitat could be offset by including additional prairie dog habitat contiguous with the Conservation Zone resulting in no net loss of adequate prairie dog habitat.
<b>New Species Listings on Enrolled Lands</b>	Conservation activities that are occurring to benefit the black-footed ferret have potential impacts to the new species.	If a non-covered species that occurs within the Agreement area becomes a federally listed species, the Service will assess whether the implementation of the Agreement may affect such species. If implementation may result in incidental take of such species, the Service will work with the enrolled landowners to determine appropriate modifications to the Agreement's conservation activities to either avoid or minimize incidental take. If take cannot be avoided, the Service will determine whether amending the Agreement and permit would be necessary to cover such additional species through the Section 7 process. If the landowner wishes to conserve the species and receive assurances for that species, the Service and landowner would mutually amend the Reintro Plan to document the baseline conditions for the species; potentially modify or add conservation measures, if necessary; and the Service would amend other associated documents, as appropriate.

## 12.0 Agreement Duration

The duration of a Safe Harbor Agreement must be of sufficient time to realize the net conservation benefit to the black-footed ferret. As identified above, the principal conservation benefit of this Agreement will be the establishment of additional free ranging ferret populations throughout their historical range. Successful reintroduction of ferrets can vary based on a number of factors that are not fully understood. Sometimes it may take several ferret releases for a site to be considered successful such as Conata Basin, South Dakota and Aubrey Valley, Arizona. Experience from past reintroduction efforts suggests that 10 years is sufficient time to accommodate several ferret releases if necessary as well as document reproduction and recruitment. Additional time periods beyond ten years will extend these benefits by providing additional ferret generations exposure to wild conditions. In the event that offspring from these animals are translocated to other sites, it could increase the probability of survival of several separate populations. It will also provide additional years of insurance against catastrophic events elsewhere throughout the range.

This Agreement and the Enhancement of Survival permit, described in section 10.0 A of this Agreement, becomes effective for 50 years from the date of signature of the Agreement by all relevant parties and permit issuance by the Service. Reintroduction Plans developed

# Draft Black-footed Ferret Programmatic Safe Harbor Agreement

---

pursuant to the Agreement will be for a term of at least 10 years and up to 40 years within the 50-year term of the permit. Certificates of Inclusion issued by the Permittee will extend permit coverage to Cooperators for 5 years beyond the term of the Reintroduction Plan, but in no event beyond the term of the 10(a)(1)(A) permit. Should the Reintroduction Plan be fully implemented, the Reintroduction Plan and Certificate of inclusion may be extended or renewed upon agreement by both Parties while maintaining the original agreed upon baseline.

## 13.0 Assurances to a Cooperator

Provided that a Cooperator complies with the provisions outlined in the Agreement and Certificate of Inclusion and detailed in the Reintroduction Plan developed for the enrolled lands, the Service will provide assurances through the Certificate of Inclusion, that no additional restrictions will be applied throughout the term of the Certificate of Inclusion. The Certificate of Inclusion will convey authorization of incidental take of black-footed ferrets consistent with maintaining the baseline conditions as described in Section 6.0 and identified in a Reintroduction Plan in the following circumstances:

- A. When a Cooperator is implementing the conservation activities identified in Section 7.0 hereof and further defined in a Reintroduction Plan.
- B. When a Cooperator is carrying out routine ranching and grazing activities on or adjacent to the enrolled lands in concert with conservation activities identified in section 7.0 hereof and further defined in a Reintroduction Plan.
- C. When a Cooperator is making any lawful use of Cooperator owned non-enrolled lands that are adjacent to or in proximity of enrolled lands.
- D. When a Cooperator is returning the lands to baseline within five years of the expiration of the Reintroduction Plan through otherwise lawful means.

## 14.0 Non-participating neighboring Landowners

The Service recognizes that some landowners may be reluctant to participate in the Agreement due to concerns for non-participating neighbors' fear of ESA liability should ferrets disperse to their lands. As such the Safe Harbor policy provides for assurances to neighbors. For the purposes of this Safe Harbor Agreement, non-participating neighboring landowners are defined as any landowner within the vicinity of enrolled lands upon which ferrets may disperse to and/or occupy as a result of ferret reintroductions.

Implementation of the conservation activities will result in the establishment of additional black-footed ferret populations on enrolled non-federal lands. Reintroduction of ferrets and subsequent successful breeding of reintroduced ferrets on the enrolled lands may result in the expansion of the ferret population that would exceed carrying of the enrolled lands. As a result, excess ferrets could disperse onto non-participating neighboring properties in search of appropriate habitat. Because landowners of non-participating