USDA

United States Department of Agriculture

Forest Service

August 2018

Decision Notice and Finding of No Significant Impact

Little Missouri National Grassland Prairie Dog Management Project

Medora and McKenzie Ranger Districts, Little Missouri National Grassland, Dakota Prairie Grasslands
Billings, Golden Valley, Slope, and McKenzie Counties, North Dakota

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I. Summary of Decision

The Little Missouri National Grassland (LMNG) Prairie Dog Management Project would implement management actions to address unwanted encroachment of prairie dog colonies from National Forest System (NFS) lands to adjacent non-federal lands where they are unwanted. The project includes a suite of management tools including use of rodenticide, and is focused within the interface between public and private lands.

After careful consideration of the potential impacts of the project as analyzed and described in the LMNG Prairie Dog Management Project Environmental Assessment (EA) as well as public comment received during the scoping, comment, and objection periods, I have decided to implement Alternative 4.

Alternative 4 was developed in response to public comments received on the proposed action. Alternative 4 would implement a ¼ mile buffer of control to comply with the good neighbor policy as described in the Dakota Prairie Grasslands (DPG) Lands and Resources Management Plan (LRMP) Record of Decision (ROD).

This Decision Notice (DN) provides details of the decision, the rationale behind the decision, and the Finding of No Significant Impact (FONSI) that allowed me to choose an EA as the appropriate level of analysis.

II. Purpose and Need for Action

The primary purpose of this project is to implement the LRMP as well as direction that can be found in many federal laws concerning the Forest Service's commitment to wildlife and species diversity. The need for this project include:

1. There is a need to be responsive to public concern for encroachment of prairie dogs on to non-NFS lands and comply with the good neighbor policy.
    - Public concern focuses on public health, agricultural production, land values, and facilities on private and other non-NFS lands.
2. There is a need to meet or move towards the LRMP guidance to achieve two or more prairie dog complexes in both the Rolling Prairie (LRMP page 2-22) and Badlands (LRMP page 2-14) Geographic Areas on NFS lands to provide habitat for prairie dogs and associated species.
3. There is a need to take steps to prevent future unwanted prairie dog encroachments onto non-NFS lands.

The purpose and need for the project is discussed in greater detail in the EA on page 4.

III. Public Involvement

Scoping letters were sent to approximately 90 individuals and organizations that might have an interest in this project. Individual letters were also sent to Tribes. A legal notice was also published in the *Bismarck Tribune* on September 5, 2015. Display ads were also placed in the McKenzie County Farmer (September 9, 2015) and the Dickinson Press (September 5, 2015).

The proposal was listed in the Schedule of Proposed Actions beginning on October 1, 2015 through the present (August 2018). The proposal was provided to adjacent land owners, the public, organizations, and other agencies for comment during scoping September 5 through October 5, 2015. Forty-six comment letters were received. Comments were received from a number of individuals and organizations. Comments ranged from those that wanted to protect all prairie dogs from harm to those that wanted to kill all prairie dogs on the LMNG.

IV. Issues

The comments received during scoping for the LMNG Prairie Dog Control Project included:

- Concerns that prairie dog control measures will not be aggressive or effective enough to address concerns for human health risk or to protect infrastructure; that control measures should be implemented annually over multiple years until the target colony is eliminated; that control should occur further than 600 feet or even ¼ mile from private property; questions about the effectiveness of vegetative barriers to discourage unwanted colonization on private property;
- Concern that control of prairie dogs should not be contemplated until LRMP goals and objectives for increase of the species is reached; concerns that the Forest Service (FS) should more aggressively increase prairie dog numbers and colonies managing for larger complexes up to 10,000 acres particularly in MA 3.63; that killing prairie dogs should not occur in areas where there is no conflict; that recovery of prairie dogs is needed to recover other wildlife species found in those ecosystems including golden eagles and burrowing owls; FS should construct artificial burrows to assist dispersal of prairie dogs;
- The project should be designed to recover black-footed ferret, should reintroduce black-footed ferret, or should use black-footed ferret as a biological control for prairie dogs; alternately, comments were received stating that black-footed ferret reintroduction and habitat should only occur in Theodore Roosevelt National Park;
- The FS should use measures to control plague including insecticidal dust or oral vaccines to protect colonies;
- The FS should establish a prairie dog working group including local and national stakeholders;
- Grazing permittees should be compensated for loss of forage if prairie dog colonies expand;
- Concern about injury to domestic animals (e.g. livestock and horses) because of the presence of prairie dog dens;
- Concern about the use of poisons including rodenticides and anticoagulants due to potential effects to non-target species and pain and suffering to prairie dogs;
- Concern that timing measures used to reduce non-target species poisoning may not be effective due to climate change;
- Concerns about plans to relocate prairie dogs; that these plans should be communicated with partners or concerned individuals;
- Concerns about the dangers of shooting of prairie dogs in colonies close to private residences.

Issues were divided into the following five categories:

- Issues that are considered beyond the scope of this project;
- Issues that are already addressed by LRMP standards and guidelines;
- Issues that can be addressed by adopting design features to the proposed action and alternatives;
- Effect of the issue will be measured through comparison of alternatives in the effects analysis;
- Issues best addressed through the development of alternatives to the proposed action.

As a result of public comments, two alternatives, in addition to the no action and proposed action alternatives, were developed and analyzed in detail. These two alternatives include Alternative 3, which uses no rodenticide while still using lethal and non-lethal methods for prairie dog management, and

Alternative 4, which included a broader zone of control (1/4 mile) for prairie dogs, using rodenticide, on NFS lands adjacent to non-NFS lands where encroachment is unwanted.

External and internal comments revealed key issues that drove the development of alternatives, some of which did not receive detailed study. Those issues include:

Issue 1: The FS should consider the use of non-lethal management tools.
In the scoping document, the Proposed Action permits the use of lethal means, particularly in unwanted encroachment situations. This elicited several comments objecting to the use of lethal control tools. These commenters argued that the Purpose and Need could be met without the use of killing prairie dogs. Non-lethal tools are considered more humane than and as effective as the use of lethal tools by commenters.

Issue 2: Use of rodenticides and other poisons as control measures may negatively affect non-target wildlife and domestic animals.
In the scoping document, the Proposed Action permits the use of a USFS approved rodenticide, particularly in unwanted encroachment situations. This elicited several comments objecting to the use of poisons as a management tool. These commenters argued that the Prairie Dog Project Purpose and Need could be met without the use of rodenticide. They also argued that secondary effects to non-target species, in addition to presenting a hazard, can be significant.

Issue 3: The proposed action, which only controls prairie dogs presently encroaching or likely to encroach may not be effective at reducing encroachment on to private lands especially during drought years. Interpretation of the distance for control adjacent to private lands has historically been determined to be 600 feet for initial control. A vegetation barrier is then created approximately 300 feet from the non-NFS boundary. Colonies have been allowed to return up to the vegetation barrier. Concern has been expressed that this control buffer is not enough to prevent unwanted, rapid encroachment.

Issue 4: **Prairie dogs should be controlled regardless of whether or not they are encroaching on private lands.** A portion of responses and interactions with members of the public indicate that some individuals and groups do not accept prairie dogs as an integral part of the prairie ecosystem and feel that their activity on NFS lands causes economic harm to grazing permittees. These commenters would prefer prairie dogs to be eliminated from the DPG.

Design features have been applied to all action alternatives to minimize or avoid negative impacts from the project.

V. Alternatives

Alternative 1 – No Action

The NEPA and National Forest Management Act (NFMA) require the No Action Alternative to be analyzed to assess baseline environmental impacts. For this project, the no action alternative includes no active management or control of prairie dogs. Neither lethal nor non-lethal control measures would be used to manage prairie dog colonies, including interior and encroaching colonies. Active measures that encourage expansion of prairie dog colonies would also not take place. This alternative would not respond to the good neighbor policy with respect to controlling prairie dogs encroaching onto adjacent private lands. This alternative serves as a baseline against which the action alternatives can be compared. For this alternative:

- Prairie dog management would be totally passive in nature and scope;

- All colonies currently encroaching onto adjacent non-NFS lands would likely continue to encroach;
- Contraction or expansion of the colonies would depend on climate, grazing patterns and intensities, and amount of prairie dog shooting, predation, and/or disease present. Therefore, three LMNG prairie dog complexes may or may not retain their minimum 1,000 acres of habitat. The Southwest McKenzie County focal area may or may not move toward the colony complex objective of 1,000 acres.

Alternative 2 – Proposed Action

The proposed action includes implementation of the Good Neighbor Policy starting with identified encroaching prairie dog colonies (see table and maps of specific colonies in Appendix A), and additional control areas using an adaptive management approach. This alternative utilizes an integrated approach to prairie dog management including lethal and non-lethal methods.

Under this alternative the following application of the three Category management zones shall be used to determine management actions and strategies:

Category 1: This category includes interior colonies entirely on NFS lands and more than ¼ mile from non-NFS land boundaries. In this category, prairie dogs will generally only be monitored, allowing for passive management. Under an adaptive context, management actions may be warranted to increase the number of colony acres in some cases and decrease the colony acres in other contexts (i.e. damage to public or private infrastructure or facilities (oil, gas, and water pipelines; fiber optic, telephone, and electric lines) and public health and safety). If, for example, monitoring indicates that the acreage goals or objectives established in the LRMP have not been met, then some activities such as heavy grazing, mowing, or prescribed fire could be implemented to encourage expansion of targeted colonies to encourage meeting the acreage goals. The LRMP limits the use of rodenticide to unwanted encroachment, public health and safety, and damage to/protection of private or public infrastructure (LRMP page 1-18). Control activities for a colony in Category 1 would be uncommon. However, non-lethal tools would still be available to reduce the threat.

Category 2: The second category includes all colonies within ¼ mile of non-NFS lands that are not currently encroaching. Proactive monitoring and coordination with potentially affected stakeholders (e.g. Grazing Association members, adjacent land owners, North Dakota Game and Fish, Fish Wildlife Service) would be used to determine the eventual risk of unwanted colony encroachment from areas within ¼ mile from non-NFS lands and within the good neighbor policy area. Depending on the risk context of a specific colony (does it contribute to population goals, are artificial or natural barriers present, etc.) an array of non-lethal and/or lethal management tools may be employed to neutralize expansion towards non-NFS lands while minimizing colony acreage loss. Non-lethal tools may include: using visual barriers (e.g. fences), managing for high structure vegetation through fenced or non-fenced means, transplanting, increasing predator effectiveness through raptor perches and screening, prescribed fire, and prescribed grazing. The actual methods employed would be site and goal specific as determined by an interdisciplinary team. If the initial actions taken appear to be unsuccessful in preventing the colony from moving toward the non-NFS land, through adaptive management principles, other tools would be used, including rodenticide. Monitoring would help inform how to proceed in the case of the initial action's failure. Lessons learned through monitoring will guide actions in other control areas.

Category 3: The third category includes colonies presently encroaching or likely to encroach (considering a ¼ mile distance or less) on to non-NFS lands as well as colonies damaging infrastructure or posing a potential health/safety risk. Zinc phosphide (a rodenticide) would be the predominant method used and the only rodenticide approved for above ground use on the DPG. Initial

actions in this category would include meeting with the adjacent stakeholder to discuss extent and nature of encroachment or potential encroachment, possible health or safety risks, and reach an agreement for management of the specific situation. For control on NFS lands to proceed, the land owner would need to complete control on adjacent private lands concurrently with the control on NFS lands. Retreatment with rodenticide would likely be necessary to obtain overall control of any given site. Further, given the intermingled ownership patterns and the dynamics of prairie dog colony expansion and contraction, control measures may need to occur on a regular basis to be effective. Total acres of rodenticide used would be expected to decrease after the initial control effort.

Note control of encroaching colonies under Alternative 2, given the objective of reducing or eliminating encroachment from National Forest System (NFS) to non-NFS lands, has typically involved poisoning out 600 feet from the boundary on the NFS side followed by creating a vegetation barrier approximately 300 feet from the property boundary and allowing colonization to return up to the vegetation barrier. This method discourages colony expansion because prairie dogs tend to expand toward low structure vegetation (short grass) and away from high structure vegetation (tall grass). The specific location for the vegetation barrier is best determined specific to each colony to account for soil, terrain, or other site-specific factors. The zone between the vegetation barrier and the non-NFS property boundary would receive continued control as needed.

Control of prairie dogs in response to damage to infrastructure will be considered on a case by case basis. Buffer zones of control, such as those adjacent to non-NFS lands, will not be created around infrastructure in Category 1 and 2 areas. Historically on the DPG prairie dogs have caused little damage to infrastructure such as stock dams, oil and gas infrastructure, and power and phone infrastructure. Therefore this component of the control program is expected to amount to a minor amount of treatment. An interdisciplinary team will assess individual situations and apply the adaptive management toolbox as needed. Earthen stock dams may be replaced with stock tanks and flexible water lines may be exchanged for pipes for example in order to minimize impacts to interior prairie dog colonies.

Comments were received during scoping as well as during interactions with local public indicating that certain colonies were causing a safety hazard to local residences due to public shooting from roads into prairie dog towns with residences located behind. Most, if not all, of these colonies are within the zone of control included in the proposed action. In addition, current laws prevent shooting near homes and structures. Shooting closures, included in the adaptive management tool box, may also be applied to areas where prairie dog shooting presents a hazard. It should be recognized that enforcement of shooting closures will be challenging given the large area under consideration and the amount of enforcement personnel available. Each colony at issue will be addressed using the adaptive management tool box appropriate for that situation.

Application of rodenticide would be completed in compliance with the LRMP and other federal and state guidelines and label restrictions. One LRMP guideline will be modified in order to improve effectiveness of rodenticide application. The guideline in the LRMP is as follows:

> *Rodenticide will only be applied from October 1 to December 31 to reduce risk of impacts to migratory birds in accordance with the LRMP guideline.*

Alternative 2 would extend the timing of rodenticide application to September 15 to January 31. This extension would allow rodenticide control of prairie dogs to occur both during drought conditions should they occur in fall, and during open winters when snowfall does not preclude rodenticide application. Effectiveness of control would be improved by taking advantage of seasonal conditions during which prairie dogs would be seeking food and thus likely to consume bait, while still avoiding application the remainder of the year to minimize impacts to migratory birds. Zinc phosphide product labels allow for application from July through January.

This extension is proposed for the first three years of the project and will only extend beyond those three years (2021) if monitoring of rodenticide application shows minimal effects to migratory birds.

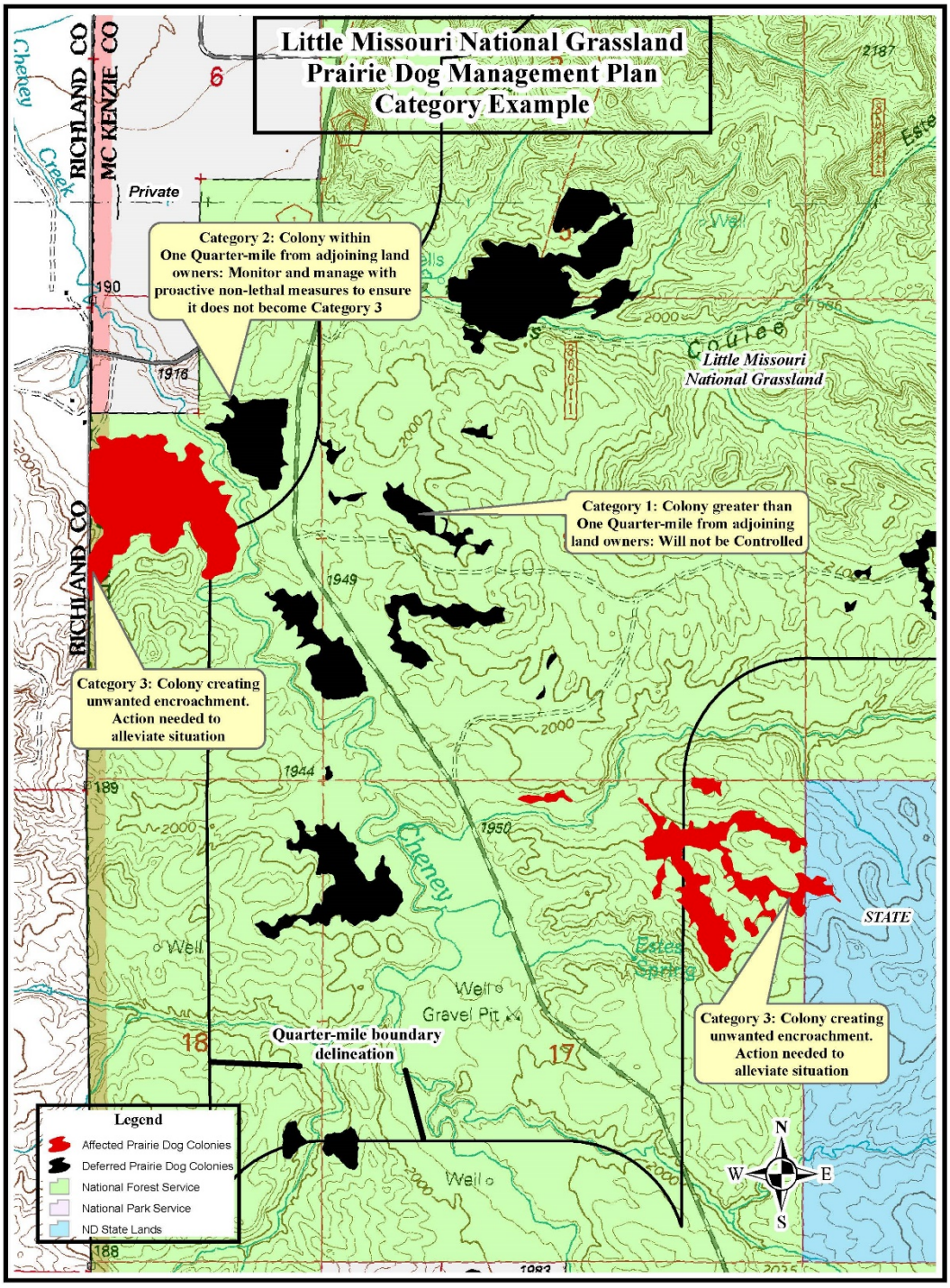


Figure 1: Figure illustrating the three categories of prairie dog colonies with respect to management.

This Alternative includes allowing for prairie dog colony expansion in Category 2 where there is not a threat to infrastructure or human health and safety. The LRMP objectives include four prairie dog complexes (which would include MA 3.63(Black-footed Ferret Reintroduction Habitat)) in two Geographic Areas. This alternative may include more active management actions as compared to the no action alternative to help facilitate the establishment of a fourth prairie dog complex in southwest McKenzie County and consideration given to some management actions to help accelerate an increase in the prairie dog habitat acreage within MA 3.63. Refer to the tool box in Table 1 below for more detail. Active expansion measures would only be implemented if monitoring determined a need. Monitoring for prairie dogs is completed every third year. If less than 5% annual population growth is achieved over the next ten years, then activities encouraging expansion would be considered if funding and resources, including partnerships, are available.

- Under Adaptive Management principles (via monitoring) this alternative:
    - Would implement the Good Neighbor Policy on a regular, as needed basis as determined by monitoring and received complaints;
    - Would consider a stronger emphasis, as compared to the no action alternative, of non-lethal tools such as potentially trapping/translocation, use of vegetative buffer strips, and prescribed grazing to direct prairie dog expansion in Category 2 (see Toolbox listed above).

Alternative 3 – Control of Prairie Dogs without the Use of Poisons

Control objectives for this alternative would be the same as Alternative 2; however measures to achieve those objectives would not include the use of rodenticides or other poisons. Other measures include translocation, lethal traps (e.g. conibear, leg-hold, etc.), shooting, as well as vegetative barriers to discourage colonization where unwanted. This alternative was developed based on comments received during scoping expressing concern over the use of poisons to kill prairie dogs and the effect to non-target wildlife and domestic species.

Under Adaptive Management this alternative would:

- Address the good neighbor policy without the use of poisons;

Some specific management actions include:

- Management actions would take place in the same locations as the proposed action; however it is likely that the progress of implementation would be slower due to the fact that these control measures are more labor intensive and expensive to implement.
- In time, this alternative would fully meet the LRMP complex objectives by continuing to trend toward the LRMP goal of four prairie dog complexes of 1,000 acres each and the minimum habitat objective for MA 3.63 (LRMP page 2-14, G-38) (see Wildlife effects analysis in Chapter 3).

Alternative 4 – Expanded Control Zone; Preferred Alternative

Alternative 4 was developed as a result of local stakeholder input that control of only those prairie dog colonies defined as “presently encroaching or likely to encroach within two years” and interpreted as within 600 feet of non-NFS lands would not be effective at reducing encroachment onto non-NFS lands.

This alternative would allow initial control of prairie dogs on NFS lands bordering non-NFS lands with zinc phosphide along a ¼ mile zone paralleling non-NFS property. When feasible, after control procedures are assessed effective, a vegetation barrier may be established at approximately 300 feet from the non-NFS land boundary to discourage future encroachment. This means lethal control would

be permitted at times both in Category 2 and 3 colonies, whereas the proposed action (Alternative 2) only proposes lethal control within Category 3 colonies or portions of colonies unless damage to infrastructure or threats to human health and safety were present. Prairie dog control would continue within this ¼ mile zone over time as needed.

Under this alternative the following application of the three Category management zones shall be used to determine management actions and strategies:

Category 1: This category includes interior colonies entirely on NFS lands and more than ¼ mile from non-NFS land boundaries. In this category, prairie dogs will typically only be monitored, allowing for passive management. Under an adaptive context, management actions may be warranted to increase the number of colony acres in some cases and decrease the colony acres in other contexts (i.e. damage to public or private infrastructure or facilities (oil, gas, and water pipelines; fiber optic, telephone, and electric lines) and public health and safety). If, for example, monitoring indicates that the acreage goals or objectives established in the LRMP have not been met, then some activities such as heavy grazing, mowing, or prescribed fire could be implemented to encourage expansion of targeted colonies to encourage meeting the acreage goals. The LRMP limits the use of rodenticide to unwanted encroachment, public health and safety, and damage to/protection of private or public infrastructure (LRMP page 1-18). Control activities for a colony in Category 1 would be uncommon. However, non-lethal tools would still be available to reduce the threat.

Category 2: The second category includes all colonies within ¼ mile of non-NFS lands that are not currently encroaching. Alternative 4 expands the control of prairie dog colonies within this category. Proactive monitoring and coordination with potentially affected stakeholders (e.g. Grazing Association members, adjacent land owners, North Dakota Game and Fish, Fish Wildlife Service) would be used to determine the eventual risk of unwanted colony encroachment from areas within ¼ mile from non-NFS lands and within the good neighbor policy area. Depending on the risk context of a specific colony (does it contribute to population goals, are artificial or natural barriers present, etc.) an array of non-lethal and/or lethal management tools would be employed to neutralize expansion towards non-NFS lands.

Category 3: The third category includes colonies presently encroaching or likely to encroach (considering a ¼ mile distance or less) on non-NFS lands as well as colonies damaging infrastructure or posing a potential health/safety risk. Zinc phosphide (a rodenticide) would be the predominant method used and the only rodenticide approved for above ground use on the DPG. Initial actions in this category would include meeting with the adjacent stakeholder to discuss extent and nature of encroachment or potential encroachment, possible health or safety risks, and reach an agreement for management of the specific situation. For control on NFS lands to proceed, the land owner would need to complete control on adjacent private lands concurrently with control on NFS lands. Consecutive treatments and periodic retreatment with rodenticide would likely be necessary to obtain overall control of any given site. Further, given the intermingled ownership patterns and the dynamics of prairie dog colony expansion and contraction, control measures may need to occur on a regular basis to be effective. Total acres of rodenticide used would be expected to decrease after the initial control effort.

Control of prairie dogs in response to damage to infrastructure will be considered on a case by case basis as it pertains to facilities located on NFS lands and extent of damage. Buffer zones of control, such as those adjacent to non-NFS lands, will not be created around infrastructure in Category 1 and 2 areas. Historically on the DPG prairie dogs have caused little damage to infrastructure such as stock dams, oil and gas infrastructure, and power and phone infrastructure. Therefore this component of the control program is expected to amount to a minor amount of treatment. An interdisciplinary team will assess individual situations and apply the adaptive management toolbox as needed. Earthen stock

dams may be replaced with stock tanks and flexible water lines may be exchanged for pipes for example in order to minimize impacts to interior prairie dog colonies.

Comments were received during scoping as well as during interactions with local public indicating that certain colonies were causing a safety hazard to local residences due to public shooting from roads into prairie dog towns with residences located behind. Most, if not all, of these colonies are within the zone of control included in Alternative 4. In addition, current laws prevent shooting near homes and structures. Shooting closures may also be applied to areas where prairie dog shooting presents a hazard. It should be recognized that enforcement of shooting closures will be challenging given the large area under consideration and the amount of enforcement personnel available. Each colony at issue will be addressed using the adaptive management tool box appropriate for that situation.

Application of rodenticide would be completed in compliance with the LRMP and other federal and state guidelines and label restrictions. One LRMP guideline will be modified in Alternative 4 in order to improve effectiveness of rodenticide application. The guideline in the LRMP is as follows:

> *Rodenticide will only be applied from October 1 to December 31 to reduce risk of impacts to migratory birds in accordance with the LRMP guideline.*

Alternative 4 would extend the timing of rodenticide application to September 15 to January 31. This extension would allow rodenticide control of prairie dogs to occur both during drought conditions should they occur in fall, and during open winters when snowfall does not preclude rodenticide application. Effectiveness of control would be improved by taking advantage of seasonal conditions during which prairie dogs would be seeking food and thus likely to consume bait, while still avoiding application the remainder of the year to minimize impacts to migratory birds. Zinc phosphide product labels allow for application from July through January.

This extension is proposed for the first three years of the project and will only extend beyond those three years (2021) if monitoring of rodenticide application shows minimal effects to migratory birds.

Actions Common to Alternatives 2, 3, and 4

Under Alternatives 2, 3, and 4 various levels and methods of prairie dog management would take place on the LMNG. Each of the action alternatives would address the Good Neighbor Policy, but would also consider active measures included in the adaptive management as described below to facilitate expansion of prairie dog populations where desired on the LMNG in accordance with the LRMP. Actions common to these alternatives are presented below.

Adaptive Management

Alternatives 2, 3, and 4 include specific colonies listed for control as well as adaptive management to allow for control of future unwanted colonies that fit the criteria described in the Good Neighbor Policy. Adaptive management is defined as, “A system of management practices based on clearly identified outcomes and monitoring to determine if management actions are meeting those outcomes; and, if not, to facilitate management changes that will best ensure that those outcomes are met or re-evaluated. Adaptive management stems from the recognition that knowledge about natural resource systems is sometimes uncertain” (36 CFR 220.3). It is a process that allows the responsible official to deal with uncertainty and changing conditions over time, and it provides for constrained flexibility to adapt to changing conditions or unanticipated resource response. Adaptive management is based on the assumption that current resources and scientific knowledge are limited and a certain level of uncertainty exists. Nevertheless, an adaptive management approach attempts to apply available resources and knowledge and adjusts management techniques as new information is revealed. In terms of natural resource management, adaptive management focuses on meeting or moving toward the desired condition objectives on the ground.

Under an adaptive approach, the NEPA process considers an initial set of actions to address a set of issues and identifies a series of additional adaptive options that can be implemented if monitoring indicates there is a need to change management actions. Because these additional options are analyzed in the NEPA document, it provides the responsible official with "constrained flexibility" to adapt to changing conditions within the realm of the identified adaptive options. The key feature of adaptive management is its use of monitoring. Monitoring is the basis on which management changes are proposed. In other words, if some aspect of the planned management is shown by monitoring to be ineffective or cannot be implemented as planned, then a team of Forest Service specialists would make a recommendation to the appropriate district ranger for a course of action based on a range of adaptive tools.

Adaptive Management Tool Box

To address prairie dog management, this proposal examines two lethal control measures and nine non-lethal control measures to use in combination with each other as appropriate to meet the objectives for each colony and within the emphasis of each alternative. A complete listing of these tools is found below.

Table 2 describes potential measures to be used for prairie dog control. If initial control measures do not meet management objectives, based on monitoring results, other methods from the tool box can be selected subject to further evaluation of the interdisciplinary team and determination that effects would be the same as or less than those described in this analysis.

Table 2: Table of potential adaptive management actions available to use for prairie dog management.

ADAPTIVE MANAGEMENT TOOLBOX		
Required	**Applicable Alternatives**	**When to use**
Monitoring	1, 2, 3, 4	Monitoring is a necessary and continuous need. Monitoring determines the effectiveness of tools and when objectives are met. For Alternative 1, monitoring would be continuation of LRMP monitoring of occupied area every third year. For Alternatives 2, 3, and 4, LRMP occupancy monitoring would be completed as in Alternative 1. Effectiveness of control measures would also be monitored for Alternatives 2, 3, and 4. Results of effectiveness monitoring will determine whether additional treatments of specific colonies are needed. Monitoring of any non-target poisoning, including non-target animal species and humans, is required to ensure that control measures are safe or that additional safety measures are added if needed.
Lethal Control Tool		
Rodenticide (Zinc Phosphide)	2, 4	Manage/control colonies that are encroaching on non-NFS lands where not wanted; to reduce public health and safety risks, and to eliminate damage to facilities per the LRMP. For Alternative 4, use on colonies or portions of colonies within ¼ mile of non-NFS lands where not wanted.
Lethal Trapping	2, 3, 4	Manage/control colonies that are encroaching on non-NFS lands (or out to ¼ mile with Alternative 4) where not wanted; to reduce public health and safety risks, and to eliminate damage to facilities per the LRMP.
Non-Lethal Tools		
Vegetation Management cattle-exclosure: Temporary (electric fence) or permanent (3 strand-wire) to provide visual/high structure barrier and discourage colony expansion	2, 3, 4	Management/Control
Vegetation Management non-fencing via cattle management to provide vegetation barrier to discourage colony expansion	2, 3, 4	Management/Control
Other Visual and Physical Barriers (e.g. snow fence) to discourage colony expansion	2, 3, 4	Management/Control
Collapsing or burying burrows (“disking” or dragging) to inhibit reoccupation after control. This option requires additional ID team involvement (heritage and botany at a minimum) due to the addition of ground disturbance not previously analyzed.	2, 3, 4	Management/Control
Live-trapping (e.g. live-traps; “foaming”) and translocation	2, 3, 4	Management/control as above with the addition of having an area where expansion or re-establishment of prairie dogs is desired.
Prescribed grazing management to provide low structure vegetation and encourage colony expansion	2, 3, 4	Management, when expansion is desired
Seeding of native plant species for areas where colonies have been removed.	2, 3, 4	When recovering vegetation in areas where prairie dog colonies have been removed, if needed.

ADAPTIVE MANAGEMENT TOOLBOX		
Shooting restrictions (36 CFR 261.10d)	1, 2, 3, 4	National Forest regulations prohibit the discharge of a firearm within 150 yards of a residence, building, campsite, developed recreation site, or any other occupied area; across a road or any body of water adjacent to a road; into or within a cave; or in any negligent manner that could endanger life or property.
Expansion Tools	**Applicable Alternatives**	**When to Use**
Prescribed grazing management to provide low structure vegetation	2, 3, 4	Expansion
Mowing to provide low structure vegetation	2, 3, 4	Expansion
Passive Management	1, 2, 3, 4	Expansion
Translocation	2, 3, 4	Management/Control/Expansion
Consideration of Additional Colonies		
Since location and size of prairie dog colonies is dynamic and will likely change over time, additional colonies may be considered for control as described in the selected alternative if all sideboards are met and interdisciplinary analysis determines that effects are the same as those described in the EA and the action meets all law, regulation, and policy.	2, 3, 4	In future when new or different colonies begin to encroach or are likely to encroach on non-NFS lands where their presence is not wanted.

Reciprocal Management Obligation

No actions will be taken on encroaching prairie dog colonies without surety of commensurate control actions by the adjacent non-NFS land owner or manager. Therefore an agreement will be signed by both the appropriate District Ranger and the adjacent landowner.

Alternatives Considered but Eliminated from Detailed Study

Use of non-lethal control methods only (Issue 1): This alternative includes only control methods that do not intentionally kill prairie dogs, whereas Alternative 3, the no poison alternative, would still allow prairie dogs to be killed using methods other than poisons, and including measures such as trapping. The non-lethal control methods available would consist of live trapping and transporting or relocating prairie dogs to other areas; use of vegetative screening to discourage expansion where it is not wanted; and modifications to livestock grazing. Non-lethal control methods may also be used along with any other alternative.

This alternative would not be feasible because of several factors. First, translocation of prairie dogs does not appear to be necessary for maintenance of a viable prairie dog population on the DPG as evidenced by the increase in occupied area of prairie dog colonies using only passive management (see 2015 Prairie Dog Monitoring Report located in the project file). Secondly, the LMNG has an intermingled land ownership pattern which causes a large proportion of the grassland to be in close proximity to private lands where, generally, prairie dogs are not wanted. This limits suitable relocation sites to some extent. In addition, translocation is expensive and is likely to have limited success (Fischer, J., and D. B. Lindenmayer 2000). Live trapping and relocating under this scenario would likely result in high mortality rates due to predation, though it can be made more effective if coteries (family groups) are captured and released together (Shier 2006). While translocation has limitations if used as the sole method of control for prairie dogs on the DPG, it is one of the tools that may be used under adaptive management with any of the action alternatives.

Continuation of Current Management: Under this Alternative, prairie dog management would continue to occur as it has been since the signing of the current LRMP (2002). Site specific NEPA analysis to address the good neighbor policy would occur sporadically and would be dependent on funding, personnel, and overall priority ranking with other projects on the DPG. In effect, specific colonies, or portions thereof, are targeted for site-specific NEPA to act upon good neighbor policy direction. Because this alternative is reactive rather than proactive, in other words a colony has to become a concern prior to NEPA being completed, there is a lag time between development of the issue and management response. This lag time includes not only the time to complete necessary analysis and decision making, but also the time to receive funding to complete the NEPA and funding to accomplish the control work.

LRMP direction does currently exists to actively manage prairie dog habitat, particularly in Management Area (MA) 3.63, Black-footed Ferret Reintroduction Habitat where the desired condition is for increased prairie dog presence from the current condition. However, management toward LRMP objectives, such as the development of four prairie dog complexes and increasing prairie dog populations would continue to be passive with this alternative.

Therefore, under this alternative:

- When authorized via site-specific NEPA analysis and decision, active prairie dog management would be focused on control of specific unwanted encroachments to address the good neighbor policy. Lethal and non-lethal tools would continue to be used. Control actions would likely entail a large amount of colony acres every few years;
- Follow-up management to ensure adequate achievement of objectives would occur as approved under each decision;
- There would continue to be passive expansion of prairie dog colonies within MA 3.63. Passive approaches may or may not result in development of four prairie dog complexes across the LMNG.
- Response time to developing encroachment would be slower than with the proposed action due to the need for additional analysis, public involvement, and funding prior to taking action on each colony as conditions change and evolve. For this reason, continuation of current management is not analyzed in detail.

Elimination of all Prairie Dog Towns (Issue 4): As described above in Issue 4, some individuals and groups commented that all prairie dogs should be eliminated on the LMNG. This approach would not meet the LRMP, various federal laws (e.g. National Forest Management Act) or the project purpose and need. Therefore this alternative was not analyzed in detail.

VI. Decision

As the responsible official for this project, I am authorizing implementation of Alternative 4, the Expanded Control Zone alternative, from the LMNG Prairie Dog Management Project Environmental Assessment. The activities included in the selected alternative are described above and in the EA.

The selected alternative will respond to the purpose and need for the project by implementing a long-term management strategy along with an adaptive management toolbox for management of prairie dog including issues of encroachment on to non-NFS lands.

VII. Rationale for the Decision

I have made my decision based on the information in the EA, the supporting project file, consideration of issues, review of public comments, and discussions with the interdisciplinary team. I have

determined that my decision is consistent with the Dakota Prairie Grasslands Land and Resources Management Plan (LRMP) as well as applicable laws, regulations, and agency policies. I have also considered the potential cumulative effects of other activities occurring on both public and private lands. My criteria for making a decision on this project was based on how well the management actions analyzed in the alternatives in the EA addressed the purpose and need and considered issues raised in the analysis process, discussed in greater detail later in this section.

Addressing the Purpose and Need

Alternative 4 has been selected because it most responds to the need to eliminate current encroachment and prevent future encroachment of prairie dog colonies on to non-NFS lands where they are not wanted. While the prairie dog is a native prairie species, and the LRMP includes guidance for maintenance of the species on the landscape in the LMNG (LRMP pages 2-14; 2-22), Alternative 4 best meets the purpose and need to prevent encroachment, implementing the good neighbor policy, by increasing the control zone out to ¼ mile while still allowing for expansion of prairie dog populations in interior areas (Category 1) of the LMNG.

Consideration of Issues and Public Comment

In addition to evaluating the purpose and need, I also carefully considered the issues identified following the development of the proposed action. These issues were presented earlier in this document and are addressed below.

Issue 1: The FS should consider the use of non-lethal management tools.
This issue is addressed above in the alternatives not considered in detail section.

Issue 2: Use of rodenticides and other poisons as control measures may negatively affect non-target wildlife and domestic animals. Alternative 3 analyzed management of prairie dogs without the use of rodenticides. As described in the EA, this alternative is expected to have a low to moderate level of effectiveness (Alternative 4 has a medium to high level of effectiveness) (EA page 21) and be more expensive than other alternatives (personal communication located in the project file).

Issue 3: The proposed action, which only controls prairie dogs presently encroaching or likely to encroach may not be effective at reducing encroachment on to private lands especially during drought years. Alternative 4 was developed to address this issue by expanding the area adjacent to non-NFS lands where control of prairie dogs would be implemented. The zone of control would expand to ¼ mile in Alternative 4.

Issue 4: **Prairie dogs should be controlled regardless of whether or not they are encroaching on private lands.** This issue is addressed above in issues not analyzed in detail.

VIII. Finding of No Significant Impact (FONSI)

In accordance with CFR 1508.13 and direction provided in the Forest Service Handbook (FSH 1909.15, Chapter 40, Section 43.1), I have determined that the management actions included in Alternative 4 of the LMNG Prairie Dog Management Project do not constitute a major Federal action, and that the implementation of the proposal will not significantly affect the quality of the human environment. Accordingly, I have determined that an Environmental Impact Statement (EIS) need not be prepared for this project. I have followed the implementing regulation for NEPA (40 CFR 1508.27) and other criteria for determining the significance of effects. Before making my determination, I carefully reviewed and considered the following information:

The direct, indirect and cumulative effects of these actions and other activities occurring on NFS land and private land as documented in the Environmental Assessment for the LMNG Prairie Dog Management Project; and:

- IDT field review and discussions;
- The analysis documentation in the Project Record of the LMNG Prairie Dog Management Project;
- Comments received from the public, organizations, and other agencies regarding the project;
- Past experiences with prairie dog management and control projects on the Dakota Prairie Grasslands.

The Interdisciplinary Team (IDT) and I have reviewed the management actions included in the LMNG Prairie Dog Management Project for significant impacts. The results of this review are summarized on the following pages.

Significant, as used in NEPA, requires consideration of both context and intensity.

Context means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant (40 CFR 1508.27).

The effects of the proposed action are limited in context. The project area includes the Little Missouri National Grassland. Effects are local in nature and are not likely to significantly affect regional or national resources.

Some of the prairie dog colonies that would be treated occur on NFS lands as well as adjacent private lands. The people most affected by the project will be the local residents on the adjacent lands. If the adjacent land owner does not treat prairie dogs on their own land, the adjacent NFS land will also not be treated. Many of the adjacent land owners are project proponents in this case. Any potential short-term adverse effects would be avoided through implementation of the Standards and Guidelines in the Land and Resource Management Plan (LRMP) for the Dakota Prairie Grasslands, Best Management Practices, and the design features (Appendix A) developed specifically for this project.

The project design features minimize and avoid adverse impacts to the extent that such impacts are almost undetectable and immeasurable to non-target species, even at the local level. These design features include, but are not limited to, following all label requirements of the rodenticide, informing local residences of impending prairie dog control activities using rodenticide, and closing application areas to livestock use per the rodenticide product label. Within the context of the landscape as a whole, or at the project level, the ecological consequences are not found to be significant in either the short or long-term.

Intensity refers to the severity of impact. Responsible Officials must bear in mind that more than one agency may make decisions about partial aspects of a major action. The following ten aspects are considered in the evaluation of intensity (40 CFR 1508.27):

1. Impacts may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on the balance the effects will be beneficial.

Both beneficial and adverse effects have been taken into consideration when making a determination of significance. Detailed specialist reports included in the EA and Project Record contain comprehensive effects analyses and the findings from these resource-specific reports and the information found in this document form the basis for my decision.

It is my determination, based on review of these analyses and consultation with specialists, that the proposed action, which includes management of prairie dog populations potentially encroaching on non-NFS lands, would not have a significant impact on the environment. All effects would be minor or short-lived. None is deemed irreversible or irretrievable and do not set in motion further effects. All potential direct, indirect, and cumulative effects are evaluated in the EA, specialist reports, and biological assessments and evaluations.

2. The degree to which the proposed action affects public health or safety.

The proposed prairie dog management project is designed to improve public health and safety by managing prairie dog populations that may encroach on private property. In some cases, these prairie dog colonies are nearby to residences. Rodenticide product labels clearly describe limitations of use. These limitations are designed to protect public health and safety. Design features are included in project to ensure that residents close to colonies that would be managed would be notified to ensure area residents are aware when rodenticides are present on the landscape. In addition, notification for the general public would be placed on the ground in the vicinity of colonies to be managed.

In addition, some colonies of prairie dogs inadvertently create a hazard to area residents through causing some people to shoot toward residences or structures where humans may be present. This shooting is irresponsible, but nonetheless, occurs and presents a hazard to human health and safety. The project includes measures to control such colonies to protect human health and safety.

Because project design features have been developed to address public safety concerns associated with the proposed project, I believe that the proposed action would not have any significant impact to public health or safety.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

The project area does not contain, and is not near areas that have been identified as ecologically critical or otherwise unique for the geographic area. The project area is adjacent to various units of the Theodore Roosevelt National Park. Prairie dog control measures are not anticipated adjacent to the park, unless colonies are also adjacent to private where unwanted, because the adjacent land manager (National Park Service) prefers to maintain prairie dog colonies and associated species. No prairie dog control would take place within the park as a result of this project. Heritage surveys will be completed during the adaptive management process if ground disturbance is proposed, and impacts to historic properties will be avoided. No wetlands will be impacted.

Based on this information, I conclude that the selected alternative would have no effects on unique characteristics of the geographic area.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

While it is not anticipated that effects on the quality of the human environment are highly controversial, management of prairie dogs, whether to maintain or to control, is quite controversial within the project area. Opinions on the value or impacts of prairie dogs are highly polarized. However, the effects are limited to whether individuals prefer to include prairie dogs and their towns on the landscape or whether they prefer prairie vegetation free of prairie dogs on the landscape for a variety of reasons.

I conclude that the effects of the selected alternative are not considered highly controversial by professionals, specialists, and scientists from associated resource fields including range, wildlife biology, soils, recreation, botany, and archaeology.

5. ***The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.***

Based on my review of comments received during the scoping of this project and the analysis documented in the EA and Project Record, I find the possible effects on the human environment that are uncertain or involve unique or unknown risks are minimal or non-existent.

Given the nature of the project, the effects to the quality of the human environment are not significant. The agency has considerable experience with such projects and the consequences of such actions are well established and predictable.

A technical analysis (EA and Project Record) that discloses potential environmental impacts (which is supportable with use of accepted techniques, reliable data, and professional opinion) has been completed, and I believe that the impacts of implementing this proposal are within the limits that avoid thresholds of concern.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The LMNG Prairie Dog Management Project represents a project that does not set precedence for future actions or present a decision in principle about future considerations. Any proposed future project must be evaluated on its own merits and effects. The proposed actions are compatible with the LRMP and the capabilities of the land. I believe that this action does not represent a decision in principle about a future consideration.

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

Connected, cumulative, and similar actions have been considered and included in the scope of the analysis. The analysis accounts for past, present, and reasonably foreseeable actions of the Forest Service and private landowners within the project area. Based on my review of the analysis and disclosure of effects in the EA, specialist reports, biological assessments, and evaluations, this document and other analyses in the Project Record, I conclude that the LMNG Prairie Dog Management Project does not represent potential cumulative adverse impacts.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in the National Register of Historic Places or may cause loss or destruction of significant cultural or historical resources.

Heritage surveys will be completed for the project if and when ground disturbing methods are included during the adaptive management stage of the project. The project has been designed to protect historic properties from potential impacts. The potential for impacting undiscovered sites is mitigated through the design features included as part of the selected alternative. In the event such resources are discovered during project implementation, the project will cease immediately, the District or Grasslands Archaeologist will be called, and any historic properties will be evaluated and protected.

The North Dakota State Historic Preservation Officer (SHPO) was consulted on the project. Because the project currently does not implement any ground disturbing activity, SHPO has not sent a concurrence letter. During adaptive management, if any ground disturbing activity such as collapsing boroughs is considered, consultation will need to take place at that time, and SHPO concurrence will

be necessary prior to implementation. This measure is included as a design feature of the project. A finding of ***No Historic Properties Affected*** has been made due to this and other included design features. Therefore I believe that the selected alternative will not have a significant effect on historic properties.

9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.

No threatened or endangered species or habitat would be adversely affected by the implementation of the proposed action. A biological assessment (BA) for threatened and endangered species has been completed for the proposal; this BA and supporting documentation led to the following determinations for listed species:

Table 3 - Threatened, Endangered, and Proposed Species Determinations

Species	Determination
Endangered	
Gray wolf (*Canis lupus*)	No Effect
Black-footed ferret (*Mustela nigripes*)	No Effect
Whooping crane (*Grus americana*)	No Effect
Interior least tern (*Sterna antillarum*)	No Effect
Pallid sturgeon (*Scaphirhynchus albus*)	No Effect
Poweshiek skipperling (*Oarisma poweshiek*)	No Effect
Threatened	
Piping plover (*Charadrius melodus*)	No Effect
Dakota skipper (*Hesperia dacotae*)	No Effect
Western prairie fringed orchid (*Platanthera praeclara*)	No Effect
Rufa red knot (*Calidris canutus rufa*)	No Effect
Northern long-eared bat (*Myotis septentrionalis*)	No Effect
Designated Critical Habitat	
Piping plover habitat	No Effect
Dakota skipper habitat	No Effect
Poweshiek skipperling habitat	No Effect

These findings are, in part, due to design features such as timing restrictions applied to all alternatives. Therefore the selected alternative will not have significant impacts to threatened and endangered species or designated critical habitat.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

The selected alternative is consistent with all applicable Federal, state, and local laws and requirements imposed for the protection of the environment. These laws are addressed in the EA. Further detail about LRMP compliance and regulatory framework is located in the project record. Applicable laws include but are not limited to:

- The National Forest Management Act (NFMA)
- The National Environmental Policy Act (NEPA)
- The Endangered Species Act (ESA)
- The Clean Water Act and North Dakota State Water Quality Standards
- The Clean Air Act
- The Migratory Bird Treaty Act
- The National Historic Preservation Act
- The American Graves Protection and Repatriation Act
- American Indian Religious Freedom Act
- The Environmental Justice Act

The selected alternative is consistent with Dakota Prairie Grasslands LRMP direction. I have concluded that the selected alternative does not violate any Federal, state, local laws or requirements imposed for the protection of the environment (See also section IX below).

Conclusion

After considering the environmental effects described in the EA and specialist reports, I have determined that the selected alternative will not have significant effects on the quality of the human

environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared.

IX. Findings Required By Laws, Regulations, and Policies

The LMNG Prairie Dog Management Project EA, this DN, and the project record address the regulatory framework and regulatory consistency by resource area. I have determined that my decision is consistent with the laws, regulations, and policies related to this project. The analysis leading to my decision was developed within the frame work of the following laws, regulations, and policies.

National Forest Management Act (NFMA)

1. Consistency with Forest Plan Standards, Goals, and Objectives

The Dakota Prairie Grasslands Land and Resource Management Plan (LRMP) of 2002 establishes management direction for the DPG. This management direction is achieved through the establishment of Grasslands-wide goals and objectives, standards and guidelines. On April 9, 2012 the Department of Agriculture issued a final planning rule for National Forest System land management planning (2012 Rule) 77 FR 68 [21162-21276]. None of the requirements of the 2012 Rule apply to projects and activities on the Dakota Prairie Grasslands, as the DPG LRMP was developed under a prior planning rule (36 CFR §219.17(c)).

Additional goals and accompanying standards and guidelines have been established for specific management areas (MAs) across the Grasslands. Project implementation consistent with this direction is the process in which desired conditions described by the LRMP are achieved. The National Forest Management Act requires that all project-level resource plans, such as this DN, are to be consistent with the LRMP (16 USC 1604(i)). The EA displays the LRMP and MA goals and objectives and the standards and guidelines applicable to the project area throughout the EA. The alternative development process is detailed in Chapter 2 of the EA, while the management goals of the project and the environmental consequences of the project in relation to the LRMP standards and guidelines are described in the EA and the project record.

After reviewing the EA and the project record, I find that my decision is consistent with Forest Plan standards, goals, and objectives.

2. Wildlife Viability

The NFMA directs the Forest Service to manage wildlife habitat to maintain diverse populations of existing native and desired non-native species in the planning area. Based on my review of the wildlife biological assessment and biological evaluation for the LMNG Prairie Dog Management Project, I conclude that my decision poses little risk to the diversity and distribution of native wildlife species.

Sensitive Species

Federal law and direction applicable to sensitive species include NFMA and the Forest Service Manual. The Regional Forester has approved a list of sensitive plants and animals for which population viability is a concern. In making my decision, I considered the effects on all sensitive species listed as possibly occurring on the Dakota Prairie Grassland and have reviewed and analyzed the projected effects on all sensitive species that may possibly occur in the analysis area (EA, Chapter 3 and Project Record). Table 2 below displays those findings. I concur with the findings documented in the EA and biological evaluation for these species and determine that there is no significant effect.

Table 4 - Sensitive Species Determinations

Species	Determination
Sensitive Plant Species	
Slimleaf goosefoot *(Chenopodium subglabrum)*	No Impact
Blue lip's *(Collinsia parviflora)*	No Impact
Torrey's cryptantha *(Cryptantha torreyana)*	No Impact
Nodding wild buckwheat *(Eriogonum cernuum)*	No Impact
Dakota buckwheat *(Eriogonum visheri)*	May Impact ***
Missouri pincushion cactus (*Escobaria missouriensis*)	May Impact ***
Sand lily *(Leucocrinum montanum)*	May Impact ***
Dwarf mentzelia *(Mentzelia pumila)*	No Impact
Alyssum-leaved phlox *(Phlox alyssifolia)*	No Impact
Limber pine *(Pinus flexilis)*	No Impact
Lanceleaf cottonwood *(Populus x acuminata)*	No Impact
Alkali sacaton *(Sporobolus airoides)*	May Impact ***
Easter daisy (*Townsendia exscapa*)	May Impact ***
Hooker's Townsendia *(Townsendia hookeri)*	May Impact ***
Sensitive Wildlife Species	
Bald Eagle	No Impact
Baird's Sparrow *(Ammodramus bairdii)*	May Impact ***
Burrowing Owl *(Athene cunicularia)*	May Impact ***
Greater Prairie Chicken *(Tympanuchus cupido)*	No Impact
Greater Sage-grouse (*Centrocercus urophasianus*)	May Impact ***
Loggerhead Shrike *(Lanius ludovicianus)*	May Impact ***
Long-billed Curlew *(Numenius americanus)*	No Impact
Sprague's Pipit *(Anthus spragueii)*	May Impact ***
Black-tailed prairie dog *(Cynomys ludovicianus)*	May Impact ***
Rocky Mountain bighorn sheep *(Ovis canadensis)*	May Impact ***
Arogos skipper *(Atrytone arogos iowa)*	No Impact
Ottoe skipper *(Hesperia ottoe)*	May Impact ***
Regal fritillary butterfly *(Speyeria idalia)*	May Impact ***
Tawny crescent butterfly *(Phyciodes batessi)*	No Impact
Northern redbelly dace *(Phoxinus eos)*	No Impact

*** May impact individuals or habitat, but will not likely contribute to a trend towards federal listing or cause a loss of viability to the population or species

3. Suitability for Timber Management

The NFMA directs that no timber harvesting shall occur on lands classified as not suited for timber production pursuant to 36 CFR 219.14(a) except for salvage sales, sales necessary to protect multiple-use values, or activities that meet other objectives on such lands if the forest plan establishes that such actions are appropriate [16 U.S.C. 1604 (g)(3)(E)]. This project does not include any timber harvest of any kind.

4. Clearcutting and Even-aged Management (16 USC 1604(g)(3)(F))

When timber is to be harvested using an even-aged management system, a determination that the system is appropriate to meet the objectives and requirements of the Forest Plan must be made. Where clearcutting is to be used, it must be determined to be the optimum harvest method [16 U.S.C. 1604(g)(3)(F)(i)]. This project includes no clearcutting of timber.

5. Roads

The NFMA requires that the necessity for roads be documented and that road construction be designed to "standards appropriate for the intended uses, considering safety, cost of transportation and impacts on land and resources" [16 USC 1608]. The NFMA also requires that "all roads are planned and designed to re-establish vegetation cover on the disturbed areas within a reasonable period of time, not to exceed 10 years ...unless the road is determined a necessary permanent addition to the National

Forest Transportation System" [16 USC 1608 Sec. 8]. No road construction or decommissioning is included in this project.

6. Best Available Science

My decision is based on a review of the record that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgment of incomplete or unavailable information, scientific uncertainty, and risk. The EA includes a list of referenced literature. These references are included in the project file. Reference citations are found throughout the EA, displaying how the analysis is tiered to relevant science.

The National Environmental Policy Act (NEPA)

National Environmental Policy Act (NEPA) provisions have been followed as required by 40 CFR 1500. The LMNG Prairie Dog Management Project Decision Notice complies with the intent and requirements of NEPA.

Scoping for the project included a mailing that provided information about the project and solicitation for comments and a public review/objection period. Issues identified during the initial scoping for the LMNG Prairie Dog Management Project assisted the IDT and me in project design and with the analysis process. Specific comment letters are included in the Project File. Issues identified during scoping are included in the EA (Chapter 2). This DN describes the decisions I have made and my rationale for making the decisions.

Clean Water Act and North Dakota State Water Quality Standards

Upon review of the EA and Project Record, I find that activities associated with my decision would comply with state water quality standards. My decision includes mitigation measures and project design features to protect the water resource (EA, Chapter 2 and this DN) to achieve water quality standards.

This information is described in greater detail in Chapter 3 of the EA beginning on page 27.

Clean Air Act

Because the proposed project implements minimal or no soil disturbing activities, I find that the activities to be implemented would meet the requirements of State Implementation Plans and Federal air standards.

Endangered Species Act

Under provisions of this Act, Federal agencies are directed to seek to conserve endangered and threatened species and to ensure that actions are not likely to jeopardize the continued existence of any of these species. Upon review of the Biological Assessments for wildlife, plants, and fish for the LMNG Prairie Dog Management Project, I find that the project meets the requirements of the Endangered Species Act. Table 1 - Threatened, Endangered, and Proposed Species Determinations in this document displays the findings for these species.

Since all findings on threatened and endangered species were **no effect**, consultation with the U.S. Fish and Wildlife Service was not needed.

Migratory Bird Treaty Act

On January 10, 2001, President Clinton signed an Executive Order outlining responsibilities of Federal agencies to protect migratory birds. Upon review of the information provided in the EA, the biological evaluation for the LMNG Prairie Dog Management Project (Project Record), and the wildlife effects

analysis included in the EA and the project file, I find that my decision complies with this Executive Order.

National Historic Preservation Act, American Indian Religious Freedom Act, and Native American Graves Protection and Repatriation Act

Based upon the analysis in the EA (Chapter. 3, pg. 151 - 159), and material in the Project File, no impact on cultural resources is expected as a result of implementation of the LMNG Prairie Dog Management Project. The selected alternative was designed to protect historic properties.

During the adaptive management portion of the project, if any soil disturbing activities such as colony collapsing are proposed, field surveys for heritage resources may be necessary. An interdisciplinary team will be consulted in order to avoid such impacts. Because of these protection measures, I have determined that my decision to implement the project complies with the Region One programmatic agreement (1995), with the State Historic Preservation Office, and the Advisory Council on Historic Preservation.

The Forest Service has consulted with the Spirit Lake, Standing Rock Sioux, Three Affiliated, and Turtle Mountain Band of Chippewa tribes during the analysis process (scoping period). The intent of this consultation has been to remain informed about Tribal concerns regarding the American Indian Religious Freedom Act and other tribal issues. I believe that our actions fulfill the requirements under the National Historic Preservation Act and other related laws, regulations, and policies.

Environmental Justice (Executive Order 12898)

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” requires that Federal agencies make achieving environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high adverse human health and environmental effects of their programs, policies, and activities on minority populations and low-income populations. I conclude that the risk of such disproportionate effects on minority or low-income populations from this action is very low. My decision does not pose any significant socio-economic risks that disproportionately affect low-income or minority populations in communities where the project is located. The implementation of the LMNG Prairie Dog Management Project would not cause a significant change in local employment or revenue sharing with local communities. Thus, this decision should not disproportionately affect low-income or minority populations and communities.

X. Pre-decisional Administrative Review (Objection) Process and Implementation

The LMNG Prairie Dog Management Project EA, Draft DN, and FONSI were subject to a pre-decisional objection period, pursuant to 36 CFR 218, subparts A and B. The opportunity to object was published in the Bismarck Tribune on May 29, 2018. One objection was received for the project. This objection centered around the impacts prairie dog colonies and activities have on grassland resources. The objector advocates for expanded control of prairie dogs in interior colonies above and beyond those contemplated by the EA and DN for this project. This type of control is not in accordance with the LRMP, and would require an amendment to the LRMP. Such control may also be in violation of NFMA. Consideration of this expanded control concept would be best considered in separate NEPA, if at all, to allow the DPG to proceed in complying with the Good Neighbor policy as directed in the 2002 LRMP Record of Decision. This decision is the final administrative determination by the Department of Agriculture.

Implementation

I have satisfied the objection review requirements under 36 CFR 218.12. Therefore implementation of this project may begin immediately.

Contact Person

For further information on this decision, contact Shannon Boehm, District Ranger, Medora Ranger District, 99 23rd Ave. W., Suite B, Dickinson, ND 58601, phone number 701-227-7800, or email address shannonboehm@fs.fed.us .

Signature and Date

August 28, 2018

NANCY VERES
District Ranger
McKenzie Ranger District

Date

August 28, 2018

SHANNON BOEHM
District Ranger
Medora Ranger District

Date

Appendix A – Design Features

In response to public comments and resource considerations for the proposal, design features were developed to avoid or minimize some of the potential impacts the project may cause. The design features will be applied to the selected alternative.

All Resources

- Conduct an interdisciplinary review of each year's control operations prior to implementation to ensure effects are consistent with those anticipated in this analysis and signed decision. In particular any ground disturbing activities such as colony collapsing may require field survey work to ensure protection of resources.
- Limit the use of rodenticide to unwanted encroachment, public health and safety, and damage to public and private infrastructure and facilities.

Human Health and Safety

- Treatment areas must be closed to access of all but certified applicators in accordance with label requirements. Signage notifying of poison use near (approximately 1 mile) locations where zinc phosphide will be placed. Post signs at access points and around the perimeter of colonies such that parties approaching while recreating or working on NFS lands can be advised and avoid harm to humans, pets, or livestock.
- Inform local residences (within one mile) of the use of zinc phosphide prior to application.

Wildlife

- Rodenticide will only be applied from September 15 to January 31 to minimize potential impact to migratory birds. This design feature is approved for a trial period (first three years – until 2021) and will only extend beyond that time if monitoring of rodenticide application shows minimal effects to migratory birds. If results are not acceptable, the time frame for application will return to LRMP time frame of October 1 to December 31.
- Promptly remove carcasses that remain above ground in accordance with rodenticide label requirements.
- If effects to any threatened or endangered species would occur as a result of proposed prairie dog management for which impacts cannot be avoided or are different than those anticipated in this analysis, the activity will not be implemented.
- To protect Dakota skipper, do not encourage prairie dog colony expansion into Dakota skipper habitat. See detailed analysis in Wildlife section of the EA.
- The annual whooping crane migration will be monitored by the FS to ensure no cranes will consume treated bait:
    - If a threat to whooping crane could potentially occur, shut down poisoning operations immediately;
    - If the FS determines, in consultation with the FWS, that crane migration will pass over the project area/analysis area, poison operations will be shut down and any poison grain on the surface will be disposed of immediately or permanently neutralized until it is determined the crane migration has passed the area and the risk to cranes has passed.

Sensitive Plant Species

- If monitoring indicates that measures used to control prairie dog colonies are a cause of a downward trend in the population of a Forest Service Northern Region sensitive plant species, the population may be fenced, or other protective measures may be applied.
- Prior to ground-disturbing activities, botanical surveys would be conducted and mitigation initiated, if needed. Clearly mark (stake/fence/flag) known populations of Missouri pincushion cactus and Hooker's *Townsendia*, if a decision is made to use mechanical means within colonies 170-4, 333-1, 339-1, and 375-2.
- Keep disturbance to a minimum to reduce the impacts to the native vegetation and spreading of invasive species.
- Clean vehicles and equipment prior to entering NFS lands to remove all seeds and plant propagules (seeds and vegetative parts that may sprout) in order to prevent the potential spread of noxious and invasive plant species.
- Any discovery of sensitive or watch plants within the proposed project area shall be immediately reported to the McKenzie and Medora Ranger Districts offices. Sensitive plant populations discovered after project approval should be protected; therefore, last minute alterations of the project design may be requested in order to avoid negative impacts to such populations.

Livestock

- Rodenticide application areas are closed to livestock use per label requirements. Ensure livestock are removed from treatment areas prior to application of zinc phosphide.

Appendix B – Response to Comments

All comments received were given careful consideration. Substantive comments on the project and the environmental analysis were identified and responded to by the interdisciplinary team. The comment letters are available for public inspection upon request. Table A.1 displays the number that has been assigned to each comment letter responded to in this appendix.

Table A.1 – LMNG Prairie Dog Comment Letters

Commenter	Letter Number
North Dakota Department of Health	1
Little Missouri Grazing Association	2
Donald and Patsy Maus	3
ND Dept. Trust Lands, Humann	4
Donna Sandvik	5
John and Nikki Brown	6
Jim Lowman	7
Henry Bill Madison	8
Monty Carson	9
ND Parks and Recreation	10
Jason Papineau	11
Chad Erickson	12
Bob Fitzgerald	13
Medora Grazing Association	14
Ron Boltz	15
Eldean Flynn	16
David Hatter	17
Melvin Leland	18
Myron Leland	19
Tim Leland	20
Morris and Vonne Tarnavsky	21
George Walker	22
Leroy Leland	23
Virginia Leland	24
Ronald Whited	25
Jim Germann	26
Laura Germann	27
McKenzie County Grazing Association	28
Robert Irwin	29
North Dakota Game and Fish	30
Karley Chernenko	31
Rob Timm	32

Mel Bosserman	33
Bruce Bowman	34
Defenders of Wildlife	35
William Fleck	36
Duane Jacobson	37
Karley Lantz; Garret Leland	38
Boyce Van Vleet	39
Jonathan Klym	40
Jason Bosserman	41
Tom Christensen	42
Randy and Sue Mosser	43
Destry and Amy Northrop	44
David Winter	45
Comments received post comment period	
John Heiser	46
Ken Urhlacher	47
Field trip with LMGA, May 15, 2018, to Indian and Boyce Creeks	48

Comment: Care is to be taken during application of rodenticide near any water of the state to minimize adverse effects on a water body. Caution must also be taken to prevent spills of rodenticide that may reach the receiving water from equipment maintenance, and/or the handling carriers or pesticides on the site.

The proposed project overlies the Yellowstone, Little Missouri River, Cherry Creek, Tobacco Garden, Bennie Peer, and Charbonneau aquifers. The Yellowstone, Little Missouri River, Cherry Creek and Tobacco Garden aquifers are sensitive aquifers. Several domestic/stock water supply wells and non-community wellhead protection areas lie within the extent of the proposed project. Care should be taken to avoid spills of any materials that may have an adverse effect on groundwater quality. All spills must be immediately reported to this Department and appropriate remedial actions performed. [Letter 1]

Response: *The FS agrees that water must be protected during project implementation. Page 142 of the EA states: According to the EPA reregistration document, zinc phosphide degrades rapidly to phosphine and zinc ions, both of which sorb strongly to soil and are common nutrients in soil. Zinc phosphide and its degradation products appear to have a low potential for ground and surface water contamination. Therefore, dietary exposure is not expected from either ground or surface water-fed drinking water (EPA 1998 page 14).*

Also, as stated on page 13 of the EA, "Application of rodenticide would be completed in compliance with the LRMP and other federal and state guidelines and label restrictions."

Comment: Of the four alternatives presented in the EA, alternative # 4 is, by far, our preferred alternative and we would like to see it be implemented as soon as possible. [Letter 2, comment 1]

Response: *Thank you for your comment.*

Comment: Alternative 1, no action, has proven to be detrimental to the conditions of the land. Once a prairie dog town has been established in an area the population devastates the entire area rendering it unusable by livestock or other wildlife who are grazers as the prairie dog feeds on grasses and small seeds but also will eat roots, seeds, fruit, and buds. Anybody who has actually seen a prairie dog town knows that they do not leave much, if any plant life. Not only is the area void of plant life it is also littered by prairie dog burrows which are 16–33 feet long and 6.6–9.8 feet below the ground. The entrance holes are generally 3.9–11.8 inches in diameter. Prairie dog burrows can have up to six entrances. Sometimes the entrances are simply flat holes in the ground, while at other times they are surrounded by mounds of soil either left as piles or hard packed. These entrances could cause injury to livestock or other large animals by fracturing their limbs if they are stepped in. Another concern is their susceptibility to bubonic plague. [Letter 2 comment 2]

Response: *It is recognized that prairie dogs cause change on the landscape, especially with respect to vegetation. This change also causes a change to the species that use or inhabit certain vegetation types. However there are certain species of wildlife that benefit from the habitat created by prairie dogs. Those include black-footed ferret and burrowing owls as displayed in the LRMP and Table 29 of the EA.*

Page 90 of the EA describes these other wildlife species:

> *"Vegetation is highly variable with many habitat types represented. Of particular importance to this project, however, are the prairie dog colonies themselves. Prairie dogs contribute an important habitat type, providing food and shelter for many wildlife species.*
>
> *"An abundance of wildlife species utilize prairie dog colonies to some degree. Knowles (1994) cited literature listing 134 or more species that have been reported on prairie dog colony habitat. There are several species that are strongly associated with prairie dog colonies, including burrowing owls, mountain plover, ferruginous hawks, badgers, and the black-footed ferret."*

The DPG LRMP direction and this project seeks to balance various land uses across the project area, including the need to provide habitat for various species of wildlife and the need to provide forage for livestock.

Comments: The members of the Grazing Associations (GA) who are affected by the devastation brought on by the prairie dogs would prefer if the prairie dogs were totally eradicated from the federal grazing land. Grazing is the only activity taking place on the Little Missouri National Grassland (LMNG) where payment for use is made to the US Treasury. We ask that special consideration be made to our comments because, beyond paying to utilize the federally owned land, the local ranchers take great pride of their outstanding stewardship of the LMNG. It is the rancher who monitors and maintains the LMNG and funds much of the water and other improvements that benefit wildlife as well as livestock. It is the GA members and their neighbors who bear the burdens to maintain thousands of acres for prairie dogs, while trying to make a living by providing food to the world. [Letter 2 comment 3]

Response: *The DPG recognizes the contribution of grazers to the federal treasury. Note that oil and gas receipts also contribute considerable funds to the US Treasury. Land stewardship by the grazing associations is also recognized and appreciated.*

Comments: At the very least we support your alternative 4. A ¼ mile buffer area is considered a minimum by our membership as prairie dogs can, and do, move and expand quickly, especially under certain circumstances. This buffer area must be treated on an annual basis. It is clear that one-time treatment has little to no affect if not followed up annually. As can be seen from the effects of the treatment allowed in 2004, 2007, and 2008. [Letter 2 comment 4]

Response: *By including an adaptive management approach with this project, the DPG will have tools to respond more quickly to situations where prairie dogs encroach on private lands as described throughout the EA. It should be noted that budgetary restrictions may be present due to circumstances beyond control of the DPG. However every attempt is made with this project to be responsive to the good neighbor policy as directed.*

Comment: We strongly urge the Dakota Prairie Grasslands (DPG) to follow the directive given on May 5, 2004 by U.S. Department of Agriculture Deputy Under Secretary David Tenny. To work with state and county officials and local landowners to *aggressively* implement the spirit and intent of the good neighbor policy, identified in your 2002 DPG Land and Resource Management Plan (LRMP) Record of Decision (ROD). And pursue the full suite of management tools available to reduce the potential for prairie dog colonies to expand onto adjacent non-federal lands. Too many years have passed without appropriate action. The time is now to move forward, swiftly and aggressively. [Letter 2 comment 5]

Response: *See response to Letter 2, comment 4 above.*

Comment: If a person simply reads about the prairie dogs, their habitat and habits, you may not learn that visual barriers and attempted management for high structure have been tried and failed. One fact that may be missed is that some soil types within the DPG are incapable of growing high structure vegetation, therefore no management of livestock grazing will ever increase predator effectiveness to control the population of the prairie dogs. While the idea of non-lethal methods may sound like a viable plan, in reality these methods, along with shooting, have been the only methods allowed for most of the past several decades and have failed to prevent encroachment onto non-FS lands. [Letter 2 comment 6]

Response*: The DPG has had good success in discouraging the spread of prairie dogs using high structure vegetation. Success is increased if areas of high structure vegetation are fenced so that grazing does not occur. Visual barriers, with current budgets, are expensive and impractical. Monitoring reported in 2010 and located in the project record describes this success. It is true that used alone, prairie dogs may spread to the point of expanding around the edge of such barriers. Thus, when used as the only tool to reduce expansion, this tool may not be fully effective. This is why the project seeks to use a variety of tools to eliminate or at least reduce expansion of prairie dogs from NFS lands to non-NFS lands. This use of a variety of tools to control a pest is called integrated pest management. A similar approach is used to control noxious and invasive plant species.*

Comment: As noted on page 96 of your EA, sage grouse are known to occur in western Slope County where some prairie dog colonies occur. This overlap occurs within the Boyce Creek/Indian Creek focal area. While it is stated that prairie dog colonies have negatively impacted sagebrush communities, this statement is followed by the idea that the ***effects to the sage grouse under all action alternatives is; may impact individuals or habitat but is not likely result in a loss of viability or a trend towards federal listing.*** It is the belief of the LMGA and

our members that any possible impact on the greater sage grouse habitat within our association boundaries should be taken very serious and preventative steps taken. Local ranchers and members of our association have been proactively working to save the sage grouse habitat in any way possible as the listing of sage grouse as endangered could result negatively on the economic viability of many families in Slope County. [Letter 2 comment 7]

Response: *The FS also seeks to conserve sage grouse and avoid the need for the species to be listed as threatened or endangered. Page 97 of the EA discusses the impacts of prairie dog activity within sage grouse habitat: "Though sage grouse and prairie dogs have co-existed on the northern Great Plains for hundreds to thousands of years, there is potential for conflict given the appreciably decreased area in which to co-exist and the altered disturbance regimes present prior to European settlement.*

GIS mapping indicates an approximate total of 6,252 acres of potential sage brush habitat within the Primary Habitat Management Area (PPH) for the sage grouse. When the 2015 prairie dog survey information is over-laid onto this sage brush habitat information, an approximate total of 65 acres, or 1.03% of sagebrush habitat type is directly impacted from prairie dog activities. In contrast, every acre is potentially annually utilized by livestock.

This is not to say that the FS is not concerned about the effects of prairie dog activity on sage grouse, but rather to compare those effects to the effects of other factors on sage grouse species viability. Should expansion of prairie dogs within sage grouse habitat become more of an impact to sage grouse, consideration of additional control measures may be warranted. However at this point in time, control of prairie dogs to prevent or reduce encroachment onto non-NFS lands will reduce any conflicts between the needs of these two species.

Comment: Take steps to prevent future unwanted prairie dog encroachments onto non-NFS lands. Please consider alternative 4 to control the prairie dogs. [Letter 3]

Response: *The project is designed to do just that. Thank you for your comment.*

Comment: The North Dakota Department of Trust Lands will not be submitting any comments as we do not object to this project. Please let us know the outcome of this proposed project. Should the project be approved we would like to be notified well in advance of control so that we have the opportunity to work with our lessees on any school trust lands adjacent to Federal tracts within the project area. Pest control projects are most successful when control measures are initiated simultaneously over a large area and involve all land management and ownership entities. [Letter 4]

Response: *Thanks for your comments. The FS will work to ensure the ND Department of Trust Lands is informed of project implementation activities.*

Comments: I am writing to plea with you to please act and get rid of the prairie dogs on the National Grassland in Slope County (075) and on the adjoining private land. When my husband and I ran cattle on the Grasslands it was monitored for several years for any over grazing by the cattle so it is unbelievable how the prairie dogs have been allowed to eat the grasses resulting in bare dirt that is eroding. My late husband and I have spent several thousand dollars to try to rid our private land from the encroachment of the prairie dogs from our **"Good Neighbor"** the National Grasslands but since nothing has been done by our **"Good Neighbor"** they continue to spread. I have a letter from 2007 that talks about this project being done and it is 11 years later

and nothing has been done. What about the crops destroyed, soil erosion, and they continue spread across the road into Stark County and private land? I now have prairie dogs within a few feet of my yard! Your motto of **"Caring for the Land and Serving the People"** needs to be changed and you have seemingly done neither to deal with the prairie dog situation. [Letter 5, comment 1]

Response: *One difference between the 2007 project and the current project is that the current project incorporates an adaptive management approach. This approach allows for additional actions to be taken to address unwanted encroachment. See page 16 of the EA for a description of adaptive management.*

Note that complete elimination of prairie dogs from the landscape would be in violation of the DPG LRMP and the National Forest Management Act (NFMA) which ensures that native plants and wildlife are maintained on NFS lands. While the DPG will not eradicate this native wildlife species from the landscape, the current project will address unwanted encroachment of this species on to non-NFS lands using a ¼ mile buffer zone.

Currently prairie dogs occupy less than 1% of the DPG. EA page 42 states: "According to the most recent (2015) prairie dog survey information, there are 137 known prairie dog colonies on the LMNG occupying approximately 5,500 acres (or 0.5%) of the 1.025 million acres on the LMNG."

With respect to soil erosion, page 28 of the EA states:

> *"Although there is a great deal of literature about prairie dogs and their habitat, very little quantitative data could be found on the effects of prairie dog colonies with regard to soil erosion and water quality. Most of the research found, with regard to soil and water, is qualitative and all discuss the positive effects of prairie dog colonies with respect to soil and water. Working on a white-tailed prairie dog colony on the Hutton Lake National Wildlife Refuge in eastern Wyoming, Clark (1970) reported no evidence of increased erosion on the colony and suggested that the benefits from prairie dogs adding organic materials, increasing air and water penetration, and mixing soils might more than offset any accelerated erosion that might occur on a prairie dog colony. Research also suggests that burrowing activities of prairie dogs leads to decreased erosion rates due to the fact that prairie dog burrows allow for more rapid absorption rates during rainfall events (National Park Service 2006a). A recent study by Lourdes Martinez-Estevez et.al. (2013) conducted in the grasslands of the Janos biosphere reserve in northwestern Chihuahua Mexico substantiates these findings."*

These findings also apply to Alternative 4.

Comment: I have my kids and grandkids the come and this is getting to be an unsafe unhealthy environment created by the invasion of prairie dogs. [Letter 5, comment 2]

Response: *With respect to human health and prairie dogs in North Dakota, page 146 of the EA states:*

> ***"Potential for incidences of disease transmission from prairie dog colonies to humans on the DPG****: The potential for disease transmittal from prairie dogs to humans is low with any alternative under consideration in this project. That potential may be even lower with selection of Alternative 2 due to the reduction in prairie dogs occupying NFS lands in close proximity to residences. No incidence of disease transmission from prairie dogs*

to humans has been reported in the project area or the state. In fact the Centers for Disease Control shows no incidences of plague in humans in North Dakota for the years 1970 to 2012 (CDC web information: https://www.cdc.gov/plague/maps/index.html and in the project file). Most incidences are located in the Four Corners region of the southwest. The nearest incident to the project area is located near the Montana/Wyoming border. Alternative 2 would not combine with effects of disease transmission from prairie dogs on lands of any ownership to create a cumulative effect to human health."

Comment: The precious grasses native to the prairie are allowed to be destroyed. The once green grassland is destroyed and looks like a war zone. I can't believe that the environmentalists or conservationists can be happy to see such destruction and mismanagement of National Grasslands. Please take the necessary measures to destroy the prairie dogs on the federal and private land that they have encroached. I am pleading with you to please do something to deal with the crop loss, soil erosion, the loss of production, and to preserve this land for future generations. **Please be a "Good Neighbor" and act on your motto "Caring for the Land and Serving the People".** [Letter 5, comment 3]

Response: *The DPG also seeks to conserve native ecosystems, including native prairie, across the DPG. A portion of that landscape has historically been occupied by prairie dogs and associated wildlife species. The DPG seeks to restore prairie dog to a portion of the landscape while retaining native prairie and associated species as well.*

Comment: I believe it is very past time for the Forest Service to take action on the expansion of prairie dog towns that has been allowed to occur. Alternative Four is my preferred alternative. With the dry weather we have been having the prairie dog towns have been rapidly expanding. What a disgrace that so many of the beautiful river valleys have been turned into bare, blowing dirt because of a lack of management. We keep hearing how prairie dogs will be controlled yet nothing is ever done.

The prairie dogs are expanding rapidly on to private land in LMNG. We are told yearly that something will be done and nothing ever is. We are not allowed to try to control them legally. When the wind blows it is like the Dust Bowl. Something has to be done. It is disgraceful how much land is being totally destroyed by these rodents. [Letter 6]

Response: *Please see the response to letter 5 above.*

Comment: I prefer Alternative 4 as the best for prairie dog control. It should keep a healthy but controlled town of dogs by keeping the population constant and the acreage stable. This insures a healthier land area as well as healthier prairie dogs. When over populated, the land suffers and the dogs can become diseased (bubonic plague, fleas, etc.), which affects other animals and people as well.

I am familiar with dog towns on private land where the numbers are reduced, like every other year, and kept at approximately 30 acres. These towns thrived without taking over acres from other uses. People enjoyed them by watching or shooting for sport. All get along nicely, people and dogs. [Letter 7]

Response: *Thank you for your comments.*

Comment: I live in western McKenzie County and am a permittee on the National Grasslands. My grandfathers homesteaded here nearly 100 years ago and my father and myself have carried on.

I grew up in the 50's and 60's and never saw a prairie dog – most were killed off in the late 30's and 40's. After nearly 50 years they become a severe problem. The FS has basically ignored the issue – limiting control as much as possible. And to put it bluntly we need their help to control them – it is their (the FS) problem!!

If the FS believes in a "good neighbor policy" perhaps something can get done. Alternative #4 would be my choice as it treats more acres and backs away from our private lands at least ¼ mile. A few years ago they treated 200 yards away from our land – nothing was accomplished as 2 years later prairie dogs had moved back. Money and people's time completely wasted!!

Some problems I see with all of these plans:

1.) I don't believe you realize the enormity of the problem (cost and finding people to do it when they are needed).
2.) The window for treating is very small (fall rains can interfere as well as early winter).
3.) I get the impression in your letter that some land owners don't care if they come on their land – I know of no one in this area that believe in that?! One neighbor's wife thought they were cute 20 years ago. Now he has one hell of a mess on his land near his doorstep!
4.) Concerning the comments on this issue that you receive – I'm sure the ranchers out here are out-numbered by a 100-1 margin. The urban people and wild life "lovers" can drive out and see them, take pictures, hunt them, whatever and then head home to their pristine homes, cities and country clubs. We have to live with them 365 days a year! We get to watch the colonies grow and spread out bit by bit each year.
5.) Another problem is that it is almost impossible to purchase bait – let alone buy bait that actually works. Again we continually waste money and time in trying to protect our places.
6.) I already mentioned the ¼ mile buffer zone. If a big percent of the colony has to be baited within the ¼ mile zone how about wiping out the entire colony?

I will say I'm not optimistic about your plan. Common sense guided by 70 years of experience leaves me in doubt. I have watched the prairie dog situation grow the past 50 years (and that started from one little town). What will happen the next 30 years when there is a 100 towns to start from?? The FS has studied them endlessly and kicked the can down the road again and again?? We live in the best cow country and wildlife habitat that God ever made, but all things have to be managed.

P.S. What would you people do if you continually had prairie dogs encroaching on your property!?! [Letter 8]

Response: *Your perspective is appreciated. Please see the responses to letter 5 above. With respect to whether any land owners want prairie dogs, we are aware that, at minimum, the National Park Service will continue to maintain prairie dogs on the landscape. In such situations, the DPG will not control adjacent prairie dog colonies unless there are additional land owners*

with undesired encroachment occurring or likely to occur. Other land owners may or may not have similar stances.

Comment: I ranch in the MCGA and I have a large town moving on to my private land. This has been progressing steadily w/no actions being taken. I support measure 4. [Letter 9]

Response: *Thank you for your comment.*

Comment: The North Dakota Natural Heritage Inventory has records indicating the presence of species of concern and significant ecological community occurrences within or adjacent to many of the project areas. Please see attached spreadsheet and map for more specific information on these species and communities.

The Department supports an integrated approach to prairie dog management, in particular through the use of non-lethal control measures such as establishment of fence barriers to control direction and expansion, and prescribed burning in efforts to manage for high vegetation structure between prairie dog colonies and private lands, and hunting. The Department understands that lethal control measures may be effective in inducing mortality in prairie dogs but have some concerns as to non-target species, in particular species of conservation priority. We also feel that a substantial level of monitoring be implemented focusing on not only of effectiveness of treatment process but impacts to these non-targeted species.

From a natural heritage standpoint, the Department has a strong interest in the conservation status of the black-tailed prairie dog in particular, USFS efforts to maintain a viable population. [Letter 10]

Response: *The FS is similarly concerned for the protection of non-target species, particularly species of conservation concern, including FS sensitive species and threatened and endangered species. Analysis included throughout the EA indicates that the proposed project will not threaten these species further.*

With respect to monitoring, the FS agrees that this is an important aspect of adaptive management. Page 16 of the EA states: "Under an adaptive approach, the NEPA process considers an initial set of actions to address a set of issues and identifies a series of additional adaptive options that can be implemented if monitoring indicates there is a need to change management actions. Because these additional options are analyzed in the NEPA document, it provides the responsible official with "constrained flexibility" to adapt to changing conditions within the realm of the identified adaptive options. The key feature of adaptive management is its use of monitoring. Monitoring is the basis on which management changes are proposed. In other words, if some aspect of the planned management is shown by monitoring to be ineffective or cannot be implemented as planned, then a team of Forest Service specialists would make a recommendation to the appropriate district ranger for a course of action based on a range of adaptive tools."

Table 2 of the EA, which includes the adaptive management tool box, states: "Monitoring of any non-target poisoning, including non-target animal species and humans, is required to ensure that control measures are safe or that additional safety measures are added if needed."

With respect to maintaining prairie dogs on the landscape, the EA describes the requirements to do just that in the LRMP (EA page 4; wildlife section beginning on page 82). This is also a requirement of NFMA as described in the response to letter 5 above.

Comment: I live, with my [family], on a quarter section of land bordering the federal land that we graze cattle on. About a mile from our house is a prairie dog town that claims some of that federal land and is unfortunately encroaching on some private land. Although I am not a proponent of prairie dogs themselves I am also a realist and am not so foolish as to attempt to argue the proposition of eradicating the whole town—which resides mostly on the federal land.

It is to my understanding that this issue--of prairie dog towns encroaching on neighboring private lands--has been one that has been presented quite some time ago. And although I am thankful that action may finally be taken, my point is that it has taken a very long time. My hope is that the clause, 'Prairie dog control would continue within this ¼ mile zone over time as needed' is not relative to the time taken thus far to take action in the first place. But rather a possible yearly 'upkeep' of the buffer zone could be considered as it does not take a prairie dog population long to inhabit an area that already has holes to inhabit, especially if the town is rather large.

Although it is not the most perfect of solutions for us cattle ranchers I am pleased to see some action finally being taken and I strongly support the implementation of Alternative 4. [Letter 11]

Response: *Thank you for your comments. Please refer to the responses to letter 5 above.*

Comment: It is very frustrating to local farmers/ranchers to watch the FS allow these varmints to run rampant. It is one thing for the FS to think that these rodents are an indicator species, but I think that if you were completely honest with yourself and took a long hard look at the damage and complete destruction they cause the only thing that they indicate is a destroyed landscape. Prairie Dogs leave behind a habitat that is barren from grass and shrubs with holes scattered everywhere, creating a hazard to anything that walks across a town. In fact, it seems that that only thing that benefits from these towns is Canadian Thistle, a listed noxious weed, which seems to thrive in the disturbed soil. These rodents cause a lot of problems to private land when they move off of the FS land. They eat cash crops down to the roots and leave pastures destroyed. I have neighbors who have poisoned Prairie Dogs on their private land, but the only problem is that it is a temporary fix. As many have learned the hard way, myself included, that if you don't eradicate the whole town the dogs that do survive just move into the empty holes. On my personal experience we had a dog town of approximately 60 acres adjoined to a neighbor who had 15 acres on his side of the fence. We hired a professional to poison the dogs on our side of the fence and he got a really good kill, however he didn't poison the dogs on the neighbor's side and we didn't disk the holes closed. In a matter of 5 years the dogs not only came back, but actually grew the town to a combined size of 160 acres. We ended up hiring a professional again to poison the whole town on both sides of the fence and dragged the holes shut, which seems to have worked really well.

As I read through the Adaptive Management Toolbox there is only 1 lethal option and only 1 non-lethal option that make any sense to me. That is using a rodenticide for the elimination of the Prairie Dogs and immediately followed by the dragging or disking of the burrows so others don't move right into the empty holes. I also feel that this needs to be done on a biannual basis to make sure that you stay ahead of the ones trying to relocate. While it may look good in the public news that you are trying to be a "good neighbor" if that isn't done you are just wasting time and money. If vegetative barriers work so well, why are there so many Prairie Dogs in the National Parks?

Surely it isn't the cows eating all the grass. If a Prairie Dog wants to see further or expand their territory all they do is chew off the grass to the dirt.

Of the listed alternatives #4 is the preferred option, however I don't think it goes near far enough. If you do decide to go with alternative #4 I strongly urge you to have the dragging or disking of burrows ready to be implemented. If it is "waiting" in the toolbox for some monitoring or other work like botany you will miss your opportunity to do the job that is well over due. These Prairie Dogs have caused a lot of bad blood between local farmers/ranchers and the FS. I urge you to look at this carefully and make sure you do it right. This is your chance to do the right thing and not listen to the special interest groups. [Letter 12]

Response: *Your perspective is appreciated. Please see the responses to letter 5 above. Note that disking or dragging burrow openings is included in the adaptive management toolbox though will require additional clearance work from the interdisciplinary team.*

Comment: As a member of the McKenzie Country Grazing Association, I would like Alternative 4 imposed. And if the encroachment barrier could be larger that would be fantastic. We have fought Prairie Dog encroachment from the federal lands for years. Thank you. [Letter 13]

Response: *Thank you for your comments.*

Comment: The Medora Grazing Association fully supports the selection and implementation of Alternative 4 - Expanded Control Zone *(Preferred Alternative)* for the above noted EA. We feel that the Preferred Alternative is the best route towards achieving the intent of the former Deputy Undersecretary's "good neighbor policy". The Association has endured a frustrating three years watching and hearing about prairie dogs encroaching onto the private land of our members and those non-members in our community. The encroachment has worsened greatly since this project was initialized and Alternative 4 is the only alternative in this EA that can successfully address the encroachment problem.

Not only do we support Alternative 4, we strongly encourage that it be implemented as soon as possible. [Letter 14]

Response: *Thank you for your comment.*

Comment: This is in support of measure 4. The prairie dogs aren't encroaching onto Federal Land, they are encroaching onto private. I would like to see the buffer zone at least ½ mile. Bubonic plague is also a very serious issue along with destroying a lot of wildlife habitat and rangeland. I have land in these areas so it is a large concern. [Letter 15]

Response: *Thank you for your comment. Please refer the response to letters 2 and 5 above. Note that expansion of the buffer zone to ½ mile likely would not meet the LRMP and NFMA and, therefore, has not been considered.*

Comment: I would like to see you control the Prairie Dogs. They have become a big problem for me. I have to poison the ones on my property every week, all year long. The extra work you have created for me is not appreciated.

I believe you can have anything on your acreage you want including weeds. But when it is going on to my property you need to correct your problem. **As a good neighbor you have a reasonability to do so.**

I believe measure 4 should be administered to the fullest extent. You need to take every measure you can use to keep the dogs on your property. Including multiple poisonings per year and follow up treatments each year.

This should include making the prairie dog towns smaller in size.

I am concerned for my grandkids playing on my land, and the bubonic plague getting in the prairie dog towns.

I am concerned with my cattle getting the bubonic plague in the common.

The destruction the prairie dogs do on private lands is terrible.

The extra work, poisoning and filling the holes I don't need.

The one place I am having trouble with the prairie dogs is one mile away from the nearest prairie clog town. [Letter 16]

Response: *Thank you for your comment. Please refer to the responses to letters 2 and 5 above.*

Comment: We support Alternative 4. The rangeland is being destroyed and some measure of action is necessary. [Letter 17]

Response: *Thank you for your comment.*

Comment: I am writing in favor of alternative 4 for the control of prairie dogs on the LMNG.

As a permittee in the McKenzie Ranger District I witness firsthand the devastation prairie dogs can have on valuable land when uncontrolled. Public health, land values, ag production and animal health are among the concerns when prairie dogs encroach on non-federal land.

As president of the North Dakota Board of Animal Health I am also charged with the safety and protection of our state's animals, both domestic and wild. Uncontrolled prairie dogs pose a risk to that assignment.

The ¼ mile control zone is inadequate and isn't activated on a timely basis. I respectfully request more flexibility for control of prairie dogs on the LMNG. [Letter 18]

Response*: Please refer to the responses to letters 2 and 5 above.*

Comment: I'm in support of Alternative 4. But I'm not for allowing prairie dogs outside the ¼ mile buffer zone. The destruction of healthy rangeland and chance of bubonic plague and other health issues is not acceptable. [Letter 19]

Response*: Please refer to the responses to letters 2 and 5 above.*

Comment: I am support of Alternative 4. The prairie dogs are increasing and destroying healthy rangeland. The buffer zone would protect adjacent land owners and be in the good neighbor policy. [Letter 20]

Response: *Thank you for your comments.*

Comment: I am writing a response to the LMNG Prairie Dog Management Project EA as we have adjoining lands to Pasture 8-1 in the Little Missouri Grasslands as shown in the attached

maps that are highly affected by prairie dog infestation resulting from their travel from federal lands. A rough estimate of total infestation is about 200 acres of pasture land. This is a devastating figure of our ranch headquarters and outlying pastures as is shown on the maps. This infestation is highly destructive and continues to expand exponentially on our properties.

We are seeking implementation of Alternative 4. As you can see, some of these infestations have extended further than the ¼ mile as these dog towns grow exponentially. We need control of all of these affected areas that has come about from federally controlled properties. As you are aware this situation is critical for all the above reasons and it is also fact, that prairie dogs are known carrier of Bubonic Plague and other health issues. [Letter 21]

Response: *Thank you for your comments. Please see responses to letters 2 and 5 above.*

Comment: As a land owner right against the pasture that is being run over with dogs, they keep moving on my land; we treat them twice a year. We can wipe them out and they're right back. Move in from your towns on Forest Service land. They completely destroy the land, then the cattle man gets blamed for overgrazing. So the more you get rid of the better. How long does it take to study them? Hope we get something done. [Letter 22]

Response: *Please see the responses to letters 2 and 5.*

Comment: I support prairie dog Alternative 4 to halt the expansion of prairie dogs. We need a larger buffer zone. They extend their towns too fast. This small a zone won't hold them. P.S. they are plague possibility carriers and destroy grasslands! We run cattle affected by them. [Letter 23]

Response: *Please see responses to letters 2 and 5 above.*

Comment: I am writing this letter to express my support for alternative 4 for expansion of prairie dogs. I would encourage a much larger buffer zone. I have witnessed prairie dogs starting towns 2 or 3 miles from established dog towns. It doesn't take them long to destroy good grassland. Unfortunately a stand of tall grass holding them is a lie. [Letter 24]

Response: *Please see responses to letters 2 and 5 above.*

Comment: I am a permittee on the National Grasslands in McKenzie County and have been a member of the McKenzie County Grazing Association since 1959.

I strongly oppose the expanding of prairie dog colonies on the National Grasslands as I believe that we should be good stewards of these lands. By letting the expansion of these prairie dog colonies continue we are allowing the destruction of very good healthy rangeland that everybody has a chance to enjoy. If they keep encroaching and expanding a plague will appear and serious health issues could arise. My children and grandchildren will be cut in numbers if this is allowed to continue.

I strongly support alternative number 4 and I appreciate the extension of the control barrier to 1/4 mile on federal land. Unfortunately though, 1/4 mile will not be enough and we will continue to have ongoing problems. The idea that a vegetation barrier will deter the prairie dogs from encroaching in the future is completely ridiculous as prairie dogs survive on grass and mainly live in areas where there once was lush and adequate vegetation.

Let's keep these National Grasslands healthy for everyone to enjoy and ranchers to be able to supply an excellent protein to an ever expanding population. [Letter 25]

Response: *Please see the responses to letters 2 and 5 above.*

Comment: The area that was once a vibrant grassland that could support cattle as well as a variety of wildlife is now a wasteland with holes.

This pasture that once could support 179 head of cattle for 2 months can no longer support them for 2 weeks. I support Alternative 4 as a starting point to begin controlling prairie dogs in the pasture. The rodents have moved from the original town and have expanded from an area of 400 acres to a town that composes over 1700 acres. Hunters have shot the prairie dogs for several years and have only encouraged the rodents to expand their territory.

Using the ¼ mile boundary for rodent control that is proposed in Alternative Four is a first step to helping control the expansion of the devastation. Individuals who are against controlling prairie dogs need to look at our pasture. This is possible using Google Earth as the devastation encompasses a large area. [Letter 26]

Response: *Thank you for your comment. Please refer also to the responses to letters 2 and 5.*

Comment: As a generational rancher in McKenzie County, and a part of the McKenzie County Grazing Association, we witness the devastation of a once productive portion of our summer pasture to something that resembles the surface of the moon. The grass is mostly gone and the dog mounds cover the pasture. Last fall we lost three bred cattle to the effects of being in the pasture falling in the holes and breaking of their backs. We have tried to be good stewards of the land, but due to the constant reproduction of the prairie dogs and their waste our pasture is generally useless. Somehow someway, these rodents must be contained or we will not have a pasture on which to run cattle. [Letter 27]

Response: *Please refer to the responses to letters 2 and 5 above.*

Comment: MCGA strongly supports Alternative 4 as this would be the first step in solving a large prairie dog problem on the Grasslands.

MCGA did provide a comment during the scoping process and requested a solution to the prairie dog problem outside the buffer zone. The prairie dog expansion is destroying what was once well maintain rangeland. If left unchecked plague and disease will inevitably be a factor and could completely destroy the towns.

Good range management is required on the Grasslands, since the land was repurchased in the 1930's from private ownership for agricultural projects. [Letter 28]

Response: *Please refer to the responses to letters 2 and 5 above.*

Comment: I am writing to express my support for Alternative 4 and to comment on the Little Missouri National Grassland Prairie Dog Management Project Environmental Assessment.

I own a family operated ranch in McKenzie County. We run cattle on the National Grasslands. Our private land borders the National Grasslands and I am very concerned about the "Do Nothing Approach" the Forest Service has taken concerning prairie dog and noxious weed control. I ask that the Forest Service consider controlling prairie dog populations within the prairie dog towns, as the present method of control is allowing existing towns to explode in growth. This invasion of

the prairie dog population is negatively effecting both the National Grasslands and privately owned lands bordering the grasslands.

Prairie dogs have been referred to as the “Cancer of the Grasslands”. The grasslands serve many purposes including recreation, hunting, and hiking as well as ranching. Many users of the grasslands are becoming upset with the destruction of rangeland as a result of the Forest Service’s “Do Nothing Approach”. The over growth of the prairie dog population and the lack of noxious weed control is effecting wildlife habitat, as well as the natural beauty and productivity of the grasslands. It has also imposed a heavy financial burden on private landowners who are left to attempt to control destructive weeds and prairie dogs that spread from Forest Service land onto privately owned land. A good neighbor should not inflect these difficulties on another neighbor.

I would like to see the Forest Service go back to their original agreement of keeping the size of prairie dog towns to amount of acres originally agreed upon. The size of these towns have been measured and documented. I would like to see the Forest Service and the National Grassland tenants work together to control and maintain the prairie dog population in McKenzie County. [Letter 29]

Response: *Please refer to the responses to letters 2 and 5 above. Note that noxious weed control is outside the scope of this project, though is dealt with on the DPG through a separate process.*

Comment: The Department recognizes the delicate balance of managing a species that is considered both a keystone species and an agricultural pest. The Department lists the black-tailed prairie dog as a Level 1 Species of Conservation Priority in the State Wildlife Action Plan (SWAP). The SWAP is the Department's management plan for "at-risk" species. The SWAP also lists the Little Missouri National Grasslands as a key area in the state for the management of black-tailed prairie dogs. In addition, the Department’s Black-tailed Prairie Dog Management Plan calls for the species to be managed at a viable population in the state. Black-tailed prairie dogs are essential to the sustainability of many of our other Species of Conservation Priority including golden eagles, ferruginous hawks, and burrowing owls.

In the EA, the United States Forest Service (USFS) lists Alternative 4, Expanded Control Zone, as the [preferred] alternative. The Department understands and agrees with the need to keep good relations with neighboring landowners while still accomplishing management goals. That being understood the preferred alternative would eliminate 1,828 acres or 35% of the total prairie dog acreage in the Dakota Prairie Grasslands (DPG) with the potential for more under an adaptive management plan. Reducing the total acreage from the estimated 5,257 acreage in 2012 would run counter to the desired condition of maintaining between 5,400 and 9,400 acres of active prairie dog colonies stated in the Northern Great Plains Management Plans Revisions Final Environmental Impact Statement (NGP FEIS). In addition, the DPG LRMP calls for the establishment of two, + l,000-acre complexes in both the Badland Geographic Area and Rolling Prairie Geographic Area. Elimination of prairie dog colonies without specific plans to expand other colonies would seem contrary to the Land and Resource Management Plan (LRMP) goal of increasing overall black-tailed prairie dog populations.

If the USFS is going to reduce black-tailed prairie dog acreage as proposed, the Department would like to see a committed effort on the part of the USFS to increase prairie dog acreage in areas deemed appropriate in the DPG. Specifically, the Department would suggest that Category 1 colonies be actively managing for reasonable expansion. This would include developing a detailed plan as to where these actions would occur spatially, the desired acreage, what methods would be used, a timeline as to when these actions would take place, and date for accomplishing

the goal. Developing a detailed course of action would show the USFS's commitment to managing prairie dogs populations to the levels outlined in its own plan. The Little Missouri National Grasslands provides some of the last strong holds for prairie dog populations in the state. Their continued existence on the Grassland is an important aspect of maintaining a healthy, viable population into the future. [Letter 30]

Response: *As can be seen from the comments received on this project, and as noted in your comments, management of prairie dogs is controversial and therefore challenging. Effects analysis in the EA and monitoring of prairie dog populations on the DPG indicate that the average annual rate of increase of prairie dogs on the DPG is anywhere from 5 to 10% per year. While the selected alternative is expected to reduce the total acreage of prairie dog colonies in the short term, the expansion of prairie dogs in the Category 1 areas is expected to offset control within the ¼ mile buffer zone. See EA pages 105 through 135. As described in the response to letter 5 above, and as required in the DPG LRMP and by NFMA, prairie dogs are a native species to the DPG and as such, must be maintained on the landscape. The DPG strives to balance the needs of wildlife species and appropriate human uses of the lands within our care. Thank you for your comments.*

Comment: I agree that alternative 4 is the best action to go with right now, however isn't solving the problem. It is only considering those towns which are defined as "presently encroaching or likely to encroach within two years". What about the over populated towns inside federal property, the miles of towns, the disease and or risk for disease? Alternative 4 is a good start but we need to continue the fight, contain and control numbers. This will overall benefit the prairie dogs as well. [Letter 31]

Response: *Thank you for your comments. Please see also the responses for letters 2 and 5 above.*

Comment: I am a member of the East Marmarth Common, LMGA. We have had to deal with massive prairie dog towns that keep expanding every year with no effort to control them. Neighbors on private land are extremely concerned that the towns are spreading onto their private. It has been frustrating to watch as the towns keep getting bigger, devouring all the vegetation along the way. Nothing but bare ground is left in their wake, no grass, no brush. The towns have destroyed what used to be good Sage Grouse habitat, and they are continuing to do so as they expand. If it was up to me, I would like to see whole towns eradicated, poisoning every couple years, along with dragging the ground to cover the holes up. Of the listed alternatives, #4 is the preferred option, but I strongly recommend dragging or discing the holes after treatment and I would like to see continued treatment every few years to keep the towns from expanding any more. [Letter 32]

Response: *Please refer to the responses to letters 2 and 5 above.*

Comment: Please help us eradicate prairie dogs on Section 36 T137N R103N in Golden Valley County. They are making it impossible for us to farm the land. Use alternative 2. [Letter 33]

Response: *While your comment indicates you prefer Alternative 2, Alternative 4 is the preferred alternative at this time, which means Alternative 4 is what the decision maker is thinking the decision will be unless information revealed during the process indicates that there would be undesired consequences. Alternative 4 expands the buffer zone where control of prairie dogs would occur from approximately 600 feet to ¼ mile from the boundary with non-NFS lands. As*

such, this alternative would also respond to the issue of encroachment onto your privately farmed lands. Please see also the responses to letters 2 and 5 above.

Comment: I applaud the Forest Service for taking much needed action to control the expansion of Prairie Dogs on F.S. land and adjoining private land. The adjoining private land will be "treated" under the "good neighbor" policy. Does the private land owner have to pay the cost of treatment for prairie dogs coming from F.S. land?

In 2011, LMGA hired contractors to poison prairie dogs on F.S. land, state land, and private land. As the President of the Board of Directors for the LMGA, I had to contact private land owners and the state land department and tell them they would have to pay cost of treatment on private land, or F.S. wouldn't treat adjoining F.S. land. I also told them these prairie dog colonies would be treated the following years, and certain prairie dog towns would be eradicated to stop encroachment to private lands. Treatment was done, but no follow up ensued in future years because F.S. didn't have funding. Once prairie dog towns were eradicated, we talked about future control by leveling mounds to discourage prairie dogs from repopulating. This also wasn't done. I hope Forest Service is planning and securing funding for multiple years. A one-time treatment helps control population, but doesn't solve the problem.

A major concern of mine in the plan being proposed is the expansion of, or the growth of, more prairie dog acreage in the Indian Creek and Boyce Creek Watersheds. I would like to know why these 2 sites were chosen for expansion. In further reading the proposed action, there are already 1,522 acres of prairie dog colonies in these sites. F.S. land in Boyce Creek is 25% of the watershed with 7.27% of F.S. land already infected with prairie dogs. Indian Creek has 55% of F.S. land in the watershed, and 8.61% already infected with prairie dogs. Other watersheds showed a much lower percentage of infected F.S. land. In the graph picture both watersheds were said to be functioning at risk.

The Little Missouri Grazing Association had, or possibly still has the distinction of being the only grazing association in the state of ND to have suitable habitat for the sage grouse. This suitable habitat where sage grouse exist is located in the Indian Creek and Boyce Creek Watersheds. There has been an effort by our local soil conservation district to get landowners in the watersheds to practice conservation methods that are desirable for sage grouse survival. Currently landowners in Bowman County with land in certain tributaries of the Little Missouri River are eligible for e-quip practices to enhance water quality of water entering the Little Missouri. This funding comes from the Dept. of Health. Do good conservation practices end south of Marmarth?

In reading the environmental assessment about prairie dog colonies, and the possible damage they do to the resource, one paragraph reads: "No issues were raised during scoping regarding soil erosion and potential impacts to the hydrological regime from prairie dog colonies. Although there is a great deal of literature about prairie dogs and their habitat, very little quantitative data could be found on the effects of prairie dogs with regard to soil erosion and water quality."

Our local soil conservation district does a demonstration whereby water is poured through various soils with different heights and degrees of soil cover, with various lengths of roots showing. This demonstration shows how fast water will run off or through bare or poorly grassed soil. In well grassed soil, we watch the infiltration of water, filtering through the grass and into a good root structure and being absorbed by the roots. The water coming through or running off bare soil is also much dirtier. I also attended a grass land meeting in South Dakota which showed soil blowing off a large prairie dog colony, and filling a SD highway ditch with wind eroded top soil.

We don't have to do a lot of studies, research, or demonstrations to know that prairie dogs in large numbers can do significant damage to our resources.

Also stated in the E. Assessment: "Ultimately prairie dog colonies will see increases in undesirable grasses, forbs, and bare ground." Once a plant community transition has occurred, it is difficult to revert back towards the reference state. When a threshold is crossed, major management changes and dollar investments may be required for restoration. In cases of significant soil loss and introduction of invasive species, it may not be possible to return to reference state.

Another interesting reading from E.A.: Forest Service practices should avoid or minimize impacts on sensitive species to ensure they do not become threatened or endangered because of Forest Service actions and to maintain viable population of all native species throughout the geographical range on N.F.S. lands. For sensitive species, effects are considered adverse if they contribute to a trend toward federal listing or loss of viability for the species.

We are dealing with a very controversial and emotional issue. In reading much of the Environmental Assessment, I can find discrepancies in information presented. I'm disappointed that our local Forest Service didn't take a more active role in developing a sage grouse plan. I'm appalled to think some are suggesting to increase the size and numbers of prairie dog colonies in Boyce and Indian Creek Watersheds. These two watersheds have been identified as core sage grouse areas. This plan blatantly disregards any attempt to enhance habitat for the sage grouse and other wildlife by suggesting we increase the size of prairie dog colonies in these watersheds. These two watersheds are also the two watersheds in the LMGA that may still have sage grouse existing there. Has Forest Service already violated policy with regard to sensitive species? This multiple page document that took hours to write appears to me an attempt to justify why we should allow expansion of the prairie dog colonies on National Forest Service Land. Doesn't ND century code identify the prairie dog as a pest? In implementing any plan, I think we have to consider one thing foremost: "What is best for the resource?"

We are working with a fragile eco-system. That's why it's called badlands. We don't have good quality soil. Precipitation is limited. Winds do blow here. Funds are limited. We can't please all people. We will be making decisions that could leave a major scar on the resource, or one that should enhance the resource for ranchers, hunters, and recreationalists to enjoy for many years. Our plan has to have a commitment to take care of the resource. I feel we have to limit or curtail the prairie dog expansion. ND Game and Fish will soon be doing their Sage Grouse lek counts in Bowman and Slope counties. Good conservation practices should enhance habitat for sage grouse and other wildlife species. Good conservation practices should also enhance our #1 resource, our grass. Let's be good caretakers of our resource!! [Letter 34]

Response: *Thank you for your comments. It is the responsibility of private land owners to control prairie dogs on their lands. Funding for projects on National Forest System (NFS) lands is, unfortunately, a consistent problem. Your concern is heard and noted. The NFS and DPG budget is controlled by congress.*

With respect to sage grouse and interaction with prairie dogs, please refer to the response to letter 2 above. With respect to water quality, all watersheds within the DPG are noted as being functioning at risk. With respect to water quality effects of prairie dog activity, please refer to the response to letter 5 above.

We recognize the controversial nature of prairie dogs on the landscape. The FS is committed to management of the landscape for a variety of wildlife and human uses. Sage grouse are also of importance to the DPG. The decision to discontinue the sage grouse LRMP amendment was made outside the FS by the Secretary of the Department of Interior. This decision does not mean the FS is no longer committed to protection and conservation of this species, however. Please refer to the response to letter 2 with respect to balancing the needs of sage grouse and prairie dogs. The LRMP determined that Indian and Boyce Creek areas were locations where prairie dog colonies would be located. This is presumably based on the current distribution and amount of prairie dog activity along with blocks of federal land where their management is feasible.

We appreciate your concern for protection of resources. The FS strives to do just that. The challenge of meeting the needs of multiple species while serving the needs of the public is great.

Comment: Prairie dog management is one of the most significant and controversial issues on the Little Missouri National Grassland (LMNG). We believe the U.S. Forest Service (USFS) should prioritize biological considerations related to prairie dog viability and management over lethal control measures intended to address social tolerance of the species with encroachment onto non-federal lands. Unfortunately, none of the alternatives include any effort to implement the needed expansion of prairie dog colonies on the grassland. Therefore, this EA does not include a true range of alternatives for consideration and must be amended to include a full range of alternatives for consideration. [Letter 35, comment 1]

Response: *As noted in the EA, prairie dog analysis section pages 105 to 135, expansion of prairie dogs is inherent in all alternatives. Viability is also addressed. The remaining acreage of prairie dogs meets viability requirements according to Knowles (2001) under all alternatives. Prairie dog expansion is currently occurring at a rate of 5 to 10 percent per year. Mapping of prairie dogs completed in 2015 indicates that the species is already occupying more than 5,000 acres, which means they are within the acres projected to be present within 10 to 15 years in the Northern Great Plains Management Plans Revisions Final Environmental Impact Statement (NGP FEIS). Table 34 of the EA (page 106) describes these positive rates of spread of the species.*

Comment: The LMNG is a checkerboard landscape when it comes to ownership, with a mix of public lands—federal and state—and private lands. The prairie dog is an essential keystone species of grassland ecosystems (See Ecological Background, **Appendix 1**). Prairie dogs are considered a keystone species because the habitat they create cannot be duplicated by another species and is required, either directly or indirectly by other wildlife. For these reasons, there continues to be widespread concern for the viability of species associated with black-tailed prairie dogs on the LMNG.

The first goal (Goal 1.b) of the Dakota Prairie Grasslands (DPG) Land and Resource Management Plan is to “Ensure Sustainable Ecosystems”: “to [provide] ecological conditions to sustain viable populations of native and desired non-native species.” (page 1-2, Grassland-wide Direction). Therefore, we believe federal management of prairie dogs, with the health and sustainability of the ecosystem in mind, should take precedence over control measures intended to address social issues over prairie dog encroachment by the Forest Service. Such priority grassland management is key to maintaining large complexes of prairie dogs for the health of ecosystems, and for sustaining grassland biodiversity for future generations.

Traditionally, prairie dogs have been controlled by lethal techniques including shooting and poisoning (Knowles 1982, Klukas 1987, Reading et al. 1989, Miller et al. 1994, Pauli 2005, Forrest and Luchsinger 2006). However, non-lethal prairie dog management techniques such as translocations and the creation of vegetative buffers to curtail undesirable colony expansion are of growing interest to public and private land managers alike when desired active colony acreage is well below objective.

The desire by some landowners to remove prairie dogs from boundary areas presents an opportunity to implement key wildlife provisions of LMNG's Prairie Dog Strategy by translocating prairie dogs to areas where the strategy calls for increases. Although prairie dog translocation does not remove 100% of animals from an area, it is a tool that is successfully used by many managers and biologists to reduce conflicts while simultaneously restoring or creating habitat where desired (Dullum 2001, Long et al. 2006), and does serve as an important mitigation tool for LMNG. [Letter 35, comment 2]

Response: *All alternatives in the project include conservation of prairie dogs across the LMNG. All action alternatives meet the LRMP and NFMA requirements to retain native species on the landscape (see EA pages 105-135). The adaptive management tool box (Table 2, EA page 17) includes translocation and creating vegetative buffers to discourage expansion where unwanted.*

Comment: Physical and visual barriers can serve as deterrents that impede prairie dog expansion where it is not desired. Barriers known to prevent or curtail prairie dog colony expansion usually involves one of two types—tall vegetation (i.e., grass or shrubs) and human-constructed barriers. Many studies (e.g., Snell and Hlavachick 1980, Knowles 1982, Terrall 2006) have noted the effectiveness of tall, dense stands of grass and shrubs as barriers. Establishment of taller vegetation restricts prairie dog colonization while poisoning and shooting alone usually do not prevent recolonization. Managing livestock to maintain tall vegetation in select areas can also serve as a barrier to prairie dog movement and help manage their distribution. [Letter 35, comment 3]

Response: *Use of vegetation barriers is included in all action alternatives of the project. Monitoring notes success of this measure to discourage expansion where unwanted. It should be noted that this method alone may not be effective if colonies expand around the barrier. Therefore the project utilizes an integrated control strategy for discouraging and addressing unwanted expansion of prairie dog colonies onto non-NFS lands as directed.*

Comment: Three of the proposed alternatives in the EA would impact between 66 and 103 colonies, 954 to 1,828 prairie dog acres of habitat on public-federal lands; along with what has been identified as "partial impacts." Alternatives 2-4 detail the poisoning and other lethal elimination actions of prairie dogs, with nonlethal noted merely as an applied tool to use after lethal.

We are concerned this proposed project will not properly address the encroachment issue on non-federal lands with what can be perceived as a large number of prairie dogs competing for grass with cattle, and thus a lack of social tolerance of the species. These national grasslands experienced a drought in 2017, which is a significant factor in why prairie dogs were expanding onto private lands (A Warm 2018, personal communication, 3 April). What is a misnomer, is the actual number of prairie dogs on the landscape during drought-caused colony expansions; such numbers are relative when it comes to the average number of prairie dogs in an established

colony. Food scarcity has been suggested as limiting prairie dog populations (Avila-Flores et al., 2010), and at the southern range extent of their range, low availability of food resources due to drought conditions appeared to limit prairie dog population growth (Facka et al., 2010). Increased colony expansion into suitable habitat adjacent to the colony edge has previously been correlated with high burrow density within colonies of prairie dogs (Cincotta et al., 1987). The possible mechanism behind this may be a per capita decline in food availability with increasing density forcing the expansion of edge coteries (Garrett and Franklin, 1988). Furthermore, reduced vegetation biomass had negative effects on behavior and growth rates of Utah prairie dogs (Cheng and Ritchie, 2006). [Letter 35, comment 4]

Response: *Your comment is noted. Regardless of the reason, the DPG is obligated by the former undersecretary and by the need to be a good neighbor to address unwanted encroachment of prairie dogs onto non-NFS lands.*

Comment: This science on the implications of drought suggests that prairie dogs will expand to new areas in search of grass, but their population numbers do not necessarily increase, as may be perceived by landowners advocating for control measures. The expansion of prairie dogs, due to a lack of suitable forage, can be largely attributed to drought conditions. But rather than impose control measures to wipe out these colonies—devastating coteries and family dynamics—as proposed in the EA, we believe a priority action of translocation to expand populations into areas where the plan calls for more prairie dog colonies is more conducive to managing such encroachment in a manner that follows overall LRMP standards and guidelines. Nonlethal tools are the applied management measures noted in the EA but come after such lethal actions of simply killing off the same prairie dogs the USFS should, and under LPMP guidelines, be managing for viability and for increasing acres in the 3.63 for future ferret reintroduction.

Prairie dog habitat in the 3.63 is between 500 and 600 acres (A Warm 2018, personal communication, 3 April). Increasing these acres in the 3.63 through the translocation of prairie dogs from encroachment areas should be included in the suite of alternatives in this EA. Furthermore, the current population of prairie dog habitat on the grasslands is estimated at 5,500 acres (or 0.5%) of the 1.025 million acres on the LMNG. The USFS has the ability to increase this habitat to 10,000-15,000 acres, which would then support the reintroduction of the endangered black-footed ferret onto these national grasslands. A minimum of 10,621 acres of prairie dogs at a moderate density are needed to support a self-sustaining population of ferrets (Jachowski et al., 2011). An area of 9,884 acres for a colony or complex is also cited as the minimum area necessary for a fully functional grassland ecosystem that can provide suitable habitat for burrowing owls, mountain plover and other species that depend on prairie dogs for survival (Proctor et al., 2006).

The opportunity to enhance prairie dog habitat for such ferret recovery is a very important consideration by the Forest Service, and in lieu of the LRMP objective to “develop, with the US Fish and Wildlife Service and other agencies, conservation and recovery strategies for plant and animal species listed as threatened or endangered under the Endangered Species Act, and implement established conservation or recovery strategies” (page 1-2, LRMP). Translocating instead of lethal control of prairie dogs next to private lands, as a first measure, with the aim to help supplement the habitat that has such potential to increase and to reach those ferret recovery habitat objectives, is the adaptive management strategy this agency should be prioritizing. It is also important to note that Defenders and its conservation partners, including the Prairie Dog Coalition of the Humane Society of the United States, routinely partner on such prairie dog

translocations and habitat enhancement projects for prairie dogs. We are happy to offer our expertise and resources for such a conservation partnership. [Letter 35, comment 5]

Response: *Because expansion of prairie dogs is occurring with passive management at a rate of 5 to 10 percent per year, this approach is the predominant method for reaching LRMP goals for prairie dog presence on the landscape. The offer of assistance in recovery of prairie dogs is appreciated. Considering the need to control colonies threatening to encroach on non-NFS lands, which currently number over 1,000 acres, it seems a very large task to relocate that many prairie dogs and still meet the direction to be good neighbors. This stated, it is understood that killing prairie dogs is an unpalatable option for many people.*

Comment: *"As a good neighbor, I feel prairie dogs should be controlled in some cases. I also recognize the importance of the national grasslands in increasing prairie dog numbers and improving prairie dog viability. I also recognize their importance to black-footed ferret recovery and am committed to the program" (Shannon Boehm, page 7, EA).*

The EA provides four alternatives; however, not one adequately addresses habitat recovery goals for black-footed ferrets. From the list of the four alternatives, the Proposed Action is purely an eradication alternative, discounting actions required by the Dakota Prairie Grasslands (DPG) to maintain species viability, management of four prairie dog complexes, and toward the Land and Resource Management Plan's (LRMP) objectives of Management Area 3.63 (Black-footed Ferret Reintroduction Habitat). In addition, the three alternatives, including the Proposed Action, do not include nonlethal actions as a first response to managing boundary conflicts and "encroachment" on private lands. For example, the EA should include in each alternative the priority of vegetation barriers to discourage prairie dog colonization near boundaries. As mentioned, Defenders and our conservation partners have and will continue to offer our expertise, on-the-ground labor and support, as well as dedicated resources to assist with such efforts.

Partners in conservation could effectively apply and work to support the LRMP that calls for managing for viability, the four complexes of prairie dogs. Within the alternatives, Complexes 2 and 3 would be subjected to lethal control under this EA proposal. While the project does not propose to control prairie dogs in MA 3.63, the impacts of control measures in the other areas would adversely impact the viability of prairie dog colonies within the 3.63 by limiting expanded growth from other adjacent colonies, after controlled.

Current passive management toward LRMP objectives of Management Area 3.63 has limited prairie dog growth potential and thus has prohibited the Forest Service, in earnest, from moving forward with building habitat capacity and acres for future ferret reintroduction. The USFS acknowledges that "[it] is unknown why the trend in colony acreage in MA 3.63 has been fairly flat to very slowly increasing since the LRMP was signed in 2002." Colony expansion has been slower in this area than in the rest of the LMNG. And the USFS notes that shooting "could be a factor in the lack of ability for prairie dogs to expand in this area, designated for future ferret recovery" (page 89, EA). Shooting should be prohibited in this area because of such adverse impacts and when the agency's own status report indicates such impacts. (Please see prior communications on why shooting closures are necessary in 3.63 in **Appendix 1**.) The Grasslands-wide Direction of the LRMP states **Guideline:** "Restrict prairie dog shooting where significant risks have been identified for other wildlife species or where shooting is preventing or slowing a desired prairie dog population expansion. Restrictions shall be year-long or seasonal, and dates of seasonal restrictions shall vary depending on the species at risk. Coordinate and consult with the appropriate wildlife agencies prior to implementation of restrictions". Shooting has been found to

leave prairie dog carcasses that contain high levels of lead fragments. These fragments could lead to secondary poisoning of other wildlife if consumed (Pauli et al., 2007). Prairie dogs are susceptible to hunting related disturbances and shooting has a cascading effect on population level processes (Pauli et al., 2007). [Letter 35, comment 6]

Response: *Note that the comment at the beginning of this section was signed by then Regional Forester Brad Powell in 2002. This project is focused on addressing unwanted encroachment on the landscape within a zone adjacent to non-NFS lands, and allows for expansion within Category 1 and 2 areas on the DPG. The LRMP already addresses expansion of prairie dogs and recovery of associated species; thus, a decision to facilitate expansion for the benefit of associated species is not required here. As noted in the EA and through LRMP monitoring of prairie dogs on the DPG, LRMP goals for expansion are being met. Use of vegetation barriers to discourage expansion is included in all alternatives.*

The reasons for lower expansion rates in MA 3.63 are currently not definitively known. However the proximity of this area to a more populated area (Watford City and Williston) causes the area to be somewhat of a destination for prairie dog shooting. While shooting closures are included in the adaptive management tool box, effectiveness of these closures will likely be difficult to achieve due to the challenges associated with enforcing such a closure, especially when such use is well established. While it is within the purview of the DPG to enforce such closures, it is difficult, if not impossible, and certainly unrealistic, to force such changes on the local community where there is little support for them. Such change can only realistically take place with the ***support*** *of the local populace. If Defenders and HSUS desire to make such change in the area, their efforts to garner local support for translocation and increased prairie dog presence on the landscape, including shooting closures, would go much further to recovery of prairie dogs and associated species than translocation efforts without local support. Pages 82 through 134 of the EA discuss expansion rates of prairie dogs. The EA also includes active measures to increase prairie dogs in MA 3.63 if expansion rates do not meet an annual growth rate of 5% after 10 years (EA page 112). At this time, the DPG proposes to balance the needs of prairie dogs and humans by steering already occurring expansion of prairie dogs into areas within Categories 1 and 2, and controlling expansion onto non-NFS lands through active control measures.*

Comment: Bottom line on how to better manage 3.63 and Category 1 for increased prairie dog acres and while acknowledging that "colony acres are very slowly increasing," is by applying translocation methods and sylvatic plague mitigation (application of deltamethrin into prairie dog burrows or other methods) to increase these colonies, thus using animals that inhabit borders or near non-federal lands and thereby reducing encroachment as this EA proposes. Finally, such moves would properly satisfy the LRMP standard to "[coordinate] with state and federal wildlife agencies regarding black-footed ferret reintroduction as soon as prairie dog complexes reach sufficient size." **Standard** (page 1-15, LRMP). (Please see our discussion in scoping comments on how alternatives must include providing habitat recovery goals for black-footed ferrets, **Appendix 1**.)

For proactive management, to be consistent with the LRMP, the Medora and McKenzie Ranger Districts must offer mitigation strategies for any prairie dog control proposed. The following methods (described above) to increase prairie dog colonies should be included in the EA:

- closing the Category 1 and 3.63 management area to prairie dog shooting;

- relocating prairie dogs to start new colonies in desired areas within the Category 1 and 3.63 management areas; and
- proactively preventing sylvatic plague outbreaks. [Letter 35, comment 7]

Response: *Please see the response to comment 6 above Note that very few plague outbreaks have occurred on the DPG. Thus, at this time, sylvatic plague does not appear to be limiting expansion of prairie dogs on NFS lands. Plague outbreaks that have occurred are only known from National Park Service prairie dog populations. These plague episodes occurred in 1989 and 1994. Note that coordination with state and federal wildlife agencies regarding black-footed ferret reintroduction would occur after prairie dog complexes reach sufficient size. Note also that the project allows for expansion of prairie dog populations, which is on-going even though using a passive approach.*

Comment: What this proposed project and EA does is prioritizes lethal control with the "good neighbor policy." By rejecting consideration of translocation of prairie dogs, with no such inclusion in the alternatives, this EA ignores the part of the "good neighbor" direction that requires agency officials to use the full suite of management tools available to them to reduce the potential for prairie dogs to expand onto adjacent non-federal lands. In addition, the EA prioritizes this "good neighbor" direction over laws passed by the U.S. Congress, including NEPA, NFMA, APA, and ESA. With the exception of the 'No Action' alternative, the EA alternatives must not conflict with legislation, policy and the LRMP. This EA appears to rely solely on the often repeated "good neighbor" concept (eliminating prairie dogs from areas next to private lands) rather than on the overall guidance of the DPG LRMP. [Letter 35, comment 8]

Response: *Translocation of prairie dogs is included in all action alternatives in the EA through the adaptive management toolbox as noted in Chapter 2. The purpose and need of the project (EA page 4) includes the following:*

4. *There is a need to be responsive to public concern for encroachment of prairie dogs on to non-NFS lands and comply with the good neighbor policy.*
    - *Public concern focuses on public health, agricultural production, land values, and facilities on private and other non-NFS lands.*
5. *There is a need to meet or move towards the LRMP guidance to achieve two or more prairie dog complexes in both the Rolling Prairie and Badlands Geographic Areas on NFS lands to provide habitat for prairie dogs and associated species.*
6. *There is a need to take steps to prevent future unwanted prairie dog encroachments onto non-NFS lands.*

As noted throughout the EA, the action alternatives meet the good neighbor authority and applicable laws, regulations, and policy. This project responds to the purpose and need for the project as well as direction (letter to North Dakota Commissioner of the State Department of Agriculture, dated December 27, 2017) from the Secretary of Agriculture (located in the project file) to implement the good neighbor policy as soon as possible. A portion of that letter follows:

> *"Thank you for your letter of November 15, 2017, regarding the lack of a current management plan for the U.S. Department of Agriculture's Forest Service Dakota Prairie Grasslands to address the growing number of prairie dogs on public and adjacent private land.*

The Forest Service is committed to working together with State and county officials, landowners, and other interested parties on issues such as this. Prairie dog management is vital to grassland health. Of equal concern are the significant impacts of prairie dogs on private lands.

The western part of North Dakota experienced a severe drought this past year. During periods of drought, prairie dog colonies expand in size as they seek food. We recognize the current case-by-case management approach is not working. With that in mind, and to meet our commitment to being good neighbors, the Dakota Prairie Grasslands is conducting an Environmental Assessment to analyze better, more encompassing management options related to prairie dog colony control. It will be available for public comment in early spring 2018 and (depending on the number of comments and objections) also finalized with a signed Decision Notice to address this issue. I have asked the Forest Service to prioritize this work and continue working with your office as they proceed."

Comment: Alternative 1: The No Action alternative where no action is taken to manage prairie dog colonies, regardless of encroachment status. From the alternatives offered in this EA, Defenders supports this alternative; however, we believe within the current LRMP, the USFS has flexibility to utilize nonlethal tools (vegetation and other visual barriers) to address the social issue of prairie dog encroachment while also implementing the prairie dog management goals being ignored by this EA: **(1) The USFS could resolve boundary conflicts by implementing nonlethal tools and conducting translocation of prairie dogs into Category 1, and (2) the USFS could facilitate the recovery of prairie dog-associated species, such as black-footed ferrets.** [Letter 35, comment 9]

Response: *As noted in Table 3 of the EA, the no action alternative does not meet the purpose and need for the project.*

Comment: Alternative 2: The Proposed Action. A rodenticide (zinc phosphide) would be used along with other management tools in the manipulation of the prairie dog ecosystem under the three cases outlined in the LRMP. Initial actions include management of approximately 66 colonies. Total acres of initial treatment is approximately 954 acres. After initial treatment, management of prairie dogs would be implemented using an adaptive management approach, controlling those colonies where encroachment is likely or occurring. Additional colonies may be added for control within the sideboards of the alternative using an adaptive approach detailed in this EA. Rozol® and Kaput-D poisons pose secondary poisoning threats to non-target wildlife are not being considered, we are unclear why "other management tools" were not properly listed as a priority; lethal (including trapping) would be implemented before other nonlethal tools. **Our request is to prioritize nonlethal before lethal control for this Proposed Action.**

In addition, the lethal control (use of a rodenticide) in Alternative 2 states that it "may impact individuals (undiscovered) or habitat but will not likely contribute to a trend toward Federal listing or loss of viability to the population or species for all sensitive species in the analysis area" (Table 15, page 53, EA). This is unacceptable, as the proposed action clearly could result in an impact to migratory birds and associated species dependent on prairie dogs, native wildlife such as mountain plover, burrowing owl and the ferruginous hawk. USFS mandates note that management practices should "avoid or minimize impacts" on sensitive species to ensure they do not become threatened or endangered because of USFS actions, and to maintain viable populations of all native species throughout their geographic range on NFS lands (FSM 2670.22

and 2670.32). Based on the 215 USFS LMNG sensitive species inventory, within prairie dog colony (375-2) is the sensitive species, the Missouri pincushion (*Escobaria missouriensis*). There are also two known populations of Hooker's *Townsendia* (*Townsendia hookeri*) and one Missouri pincushion population within 150 feet of prairie dog colonies 170-4, 339-1 and 333-1.

In addition, for the Alternative 2: Proposed Action, we are concerned with the language and set of priorities for the "adaptive management" tools in the EA. "If the initial actions [i.e. use of rodenticide] are shown through monitoring to not be meeting or moving toward the desired conditions [i.e. to inhibit existing and future unwanted prairie dog encroachments onto adjacent non-federal landownerships], another management tool (or combination of tools) can be selected from the Adaptive Management Toolbox" (page 79, EA). In our opinion, these actions are out of order, nonlethal actions should be utilized first and above killing prairie dogs in existing complexes currently managed for viability by the forest.

Alternative 2 would impact 66 colonies of prairie dogs, 954 acres of prairie dog habitat, with the poisoning of many thousands of prairie dogs. A combination of other management tools, nonlethal, the use of vegetation barriers and translocation of prairie dogs into the 3.63, core area of ferret habitat, is far preferred for this Alternative and Proposed Action.

Finally, listed in Table 29 of the EA is the relevant prairie dog management direction from the LRMP. Many of these directives are linked to the sensitive species status of the prairie dog, its role in providing habitat for other species, and as noted, the controversial nature of the species.

Use rodenticides to reduce prairie dog populations only in response to public health and safety risks. Mutual concurrence by the USFS and US Fish and Wildlife Service is required on a colony-by-colony basis before authorizing any poisoning. **Standard** [Letter 35, comment 10]

Response: *The DPG understands that killing prairie dogs, especially through the use of poisons, is unpalatable to many. However since the writing of the LRMP, during which time the use of rodenticides was under a moratorium (2000-2004), it was recognized that with the rates of expansion seen on the grasslands included in the NGP FEIS and ROD, such tools were necessary and the moratorium was lifted (EA page 7).*

Note that the quoted standard from the LRMP is specific to MA 3.63. No lethal control efforts for prairie dogs is proposed for MA 3.63 with this project.

Page 83 of the EA notes the following:

- *On August 18, 2004, the US Fish and Wildlife Service (USFWS 2004) issued a final rule declaring that the black-tailed prairie dog is not likely to become an endangered species in the foreseeable future and is taken off the candidate list.*

The determination by the USFWS not to list the black-tailed prairie dog as a threatened species released the Forest Service from consultation on the prairie dog. Consistency with state management plans is still necessary.

Page 10 of the EA describes why non-lethal methods only was not analyzed as an alternative in detail. As stated in the EA:

> *"**Use of non-lethal control methods only (Issue 1):** This alternative includes only control methods that do not intentionally kill prairie dogs, whereas Alternative 3, the no poison alternative, would still allow prairie dogs to be killed using methods other than poisons, and including measures such as trapping. The non-lethal control methods*

available would consist of live trapping and transporting or relocating prairie dogs to other areas; use of vegetative screening to discourage expansion where it is not wanted; and modifications to livestock grazing. Non-lethal control methods may also be used along with any other alternative.

This alternative would not be feasible because of several factors. First, translocation of prairie dogs does not appear to be necessary to recovery of the species on the DPG as evidenced by the increase in occupied area of prairie dog colonies using only passive management (see 2015 Prairie Dog Monitoring Report). Secondly, the LMNG has an intermingled land ownership pattern which causes a large proportion of the grassland to be in close proximity to private lands where, generally, prairie dogs are not wanted. This limits suitable relocation sites to a large extent. In addition, translocation is expensive and is likely to have limited success (Fischer, J., and D. B. Lindenmayer 2000). Live trapping and relocating under this scenario would likely result in high mortality rates due to predation though can be made more effective if coteries (family groups) are captured and released together (Shier 2006). While translocation has limitations if used as the sole method of control for prairie dogs on the DPG, it is one of the tools that may be used under adaptive management with any of the action alternatives."

Comment: Alternative 3: No Rodenticide Use – Control of prairie dogs without use of rodenticide. Approximately 66 colonies are proposed for various levels of treatment. Lethal trapping would be the predominant tool replacing the use of rodenticide. Total acres of initial treatment is approximately 954 acres. After initial treatment, management of prairie dogs would be implemented using an adaptive management approach, controlling those colonies where encroachment is likely or occurring. Additional colonies may be added for control within the sideboards of the alternative using an adaptive approach detailed in this EA.

For this alternative, we would ask to apply adaptive management, nonlethal tools as the sole measure for removing and discouraging colonization of prairie dogs on nonfederal lands. Lethal traps and shooting should not be included in such "other measures," as noted in the EA (page 15). Translocation and vegetative barriers should be the tools utilized and would satisfy the importance of addressing scoping comments raised and note in the EA about the concern of poisons used to kill prairie dogs and effect nontarget wildlife.

The EA notes "that the progress of implementation would be slower due to the fact that these control measures are more labor intensive and expensive to implement." In our opinion this is not a justification for opposing the nonlethal options which would achieve the overall LRMP direction for prairie dog management rather than just one portion at the expense of the rest. As noted above, the USFS has partners in conservation such as Defenders with staff who can offer expertise, on the ground support, and resources for addressing the encroachment issue.

In addition, as noted, "this alternative [in time] would fully meet the LRMP complex objectives by continuing to trend toward the LRMP goal of four prairie dog complexes of 1,000 acres each and the minimum habitat objective for MA 3.63" (LRMP page 2-14, G-38). This goal could be better achieved with such translocation efforts (and subsequent sylvatic plague mitigation), particularly since the 3.63 has approximately 500 prairie dog acres and could realize upwards of 10,000 or more for ferret reintroduction in the future. Clearly, passive management is not enough for supporting a viable prairie dog population that could then support 100 breeding adult ferrets, per USFWS recovery goals.

Prairie dog translocation is an effective tool for reducing populations in one area while increasing them in another. While translocation will not remove 100% of the prairie dogs in an area, it has successfully removed individuals from conflict areas to desired areas in many states (Arizona, Colorado, Montana, South Dakota, Utah, etc.). [Letter 35, comment 11]

Response: *Alternative 3 would implement prairie dog control measures on over 900 acres in the buffer zone (Category 2) between NFS and non-NFS lands. Translocation of prairie dogs across this size area, also requiring similar area for release of prairie dogs, is unrealistic. The desire to prevent harm to these animals is understood. It might be noted that translocation efforts are still likely to harm animals as noted on page 10 of the EA. Please refer to the response to letter 35, comment 10 above.*

Comment: Alternative 4: A rodenticide (zinc phosphide) would be used along with other management tools in the manipulation of the prairie dog ecosystem under the three cases outlined in the LRMP. Approximately 103 colonies are proposed for various levels of treatment. Total acres of initial treatment is approximately 1,828 acres. After initial treatment, management of prairie dogs would be implemented using an adaptive management approach, controlling those colonies where encroachment is likely or occurring. Additional colonies may be added for control within the sideboards of the alternative using an adaptive approach detailed in this EA. For Alternative 4 the initial control zone extends to ¼ mile from adjacent ownerships where encroachment is unwanted.

This alternative would allow control of prairie dogs with zinc phosphide out to ¼ mile onto federal lands starting from the boundary of nonfederal lands and those "likely" to encroach within two years. Rather than as noted in some cases, the use of vegetation barriers to discourage encroachment could very well apply in the areas at the 300 feet from the private land boundary. The use of nonlethal control here, again should take priority over lethal. This alternative also indicates lethal actions in both Category 2 and 3, whereas the Proposed Action (Alternative 2) proposes lethal control in Category 2.

The USFS has indicated it will address management activities in a ¼ mile buffer on a case by case basis. An arbitrary buffer would not necessarily result in non-encroachment and re-colonization of private lands adjacent to USFS lands, particularly if livestock grazing continues within the buffer and on the private lands. Prairie dogs are highly mobile and will preferentially seek to re-establish on formerly occupied landscapes if available (Knowles, 1986; Reading et al., 1989). They may bypass buffers and establish on private lands despite poisoning in the buffer if there is no visual barrier preventing them from doing so (Terrall, 2006; Gray, 2009).

We believe a more flexible approach would recognize the following: 1) non-lethal buffers work in many but not all situations; 2) any buffers, including eradication buffers, will be ineffective if livestock grazing is continued within the buffers; therefore, if lethal buffers are established then livestock grazing must also be excluded in the buffer to make it effective; 3) dispersal of prairie dogs can be checked with much narrower vegetative buffers than with poisoning throughout a fixed grazed buffer, resulting in both less acreage removed from potential prairie dog habitat and more made available for livestock grazing; and 4) that there may be instances where vegetative buffers alone are insufficient to prevent private lands encroachment and a combination of management techniques may be necessary. [Letter 35, comment 12]

Response: *The use of vegetation buffers to discourage encroachment on to non-NFS lands is included in all alternatives. Fencing out those buffers increases their success.*

Comment: Defenders supports **Alternative 1**: No Action, which would result in no net loss—in terms of quantity or quality—of black-tailed prairie dog habitat. The purpose and need of this action, as stated above, is twofold: (1) within the current plan framework to resolve boundary conflicts by implementing nonlethal tools and conducting translocation of prairie dogs into Category 1, and (2) to facilitate the recovery of prairie dog-associated species, such as black-footed ferrets.

Finally, Defenders believes that any plan that addresses boundary conflict issues must simultaneously result in maintenance of or increases to the actual acreage that the USFS has established as its target for Category 1 (which is the only habitat where prairie dogs will be allowed to persist and expand without control). Thus, any alternative must consider how occupied prairie dog acres lost on USFS lands through boundary control within Category 2 and 3 are not only made up for elsewhere but also enhanced where possible. To reduce, not increase, prairie dog population numbers and acres of habitat on the LMNG would be a clear violation of NEPA unless the best available science supports such a reduction. No credible science exists to support the reductions proposed if they are not similarly added elsewhere. [Letter 35, comment 13]

Response: *As noted on page 21 of the EA, Alternative 1 does not meet the purpose and need for the project. All action alternatives meet the LRMP and applicable law, regulation, and policy.*

Comment: We ask that the USFS adopt **Alternative 1** while allowing for nonlethal control measures that could simultaneously increase prairie dog populations where desired to achieve LRMP direction. These measures would fulfill the purpose and need of the project as stated by the USFS. [Letter 35, comment 14]

Response: *See previous responses to this letter.*

Comment: I support Alt. 4 on most prairie dog colonies, however on N 1/2 of section 8-145-98 we need to eradicate. Here are the reasons why:

1. Road is on three sides and my farm border on the north. It is very dangerous from all the shooting activity due to the influx of oil people from all over the country. It is just a matter of time before someone gets shot.
2. It scares the hell out of me when I'm working my fields plus I have had dead cattle in and around the dog town.
3. I have been fighting the prairie dog on my land for years.
4. The town is only 1.2 mile wide with private land on two sides. [Letter 36]

Response: *It is likely that, with selection of Alternative 4, this colony would be eradicated. If Alternatives 2 or 3 were selected, this colony still would be recognized as a risk to human health and safety due to the shooting hazard you mention, and would therefore likely be eradicated. The LRMP authorizes control of prairie dog colonies in this situation. Thank you for your comment.*

Comment: I am a board member of the McKenzie County Grazing Association. I am for alternative 4. Alternative 4 could go farther in its limits. [Letter 37]

Response: *Thank you for your comments.*

Comment: I am writing in support of Alternative 4 to help control the prairie dog population from destroying the grassland, as the population is increasing exponentially and the prairie dogs are carriers of the bubonic plague and other harmful diseases. [Letter 38]

Response: *Please see responses to letters 2 and 5 above.*

Comment: I am in support of Alternative 4, which creates a ¼ mile buffer zone around unwanted prairie dog encroachment. I feel that the control should go even further, to control colonies from causing disease and destruction of healthy grasslands no matter where their location. [Letter 39]

Response: *Please see responses to letters 2 and 5 above.*

Comment: I am in favor of the Little Missouri National Grassland Prairie Dog Management Project. Over the last 20 years I have seen first hand how these animals have multiplied numerous times. The amount of land that they have taken out of production since I was a kid is saddening. As a young rancher I now deal first hand with this serious issue on two different allotments….. This particular town has probably doubled in size in the last ten years. There is a buffer fence along the southwest boundary fence that has allowed the grass to grow 10 plus inches tall. I do feel this fence has a large impact in helping with controlling encroachment.

I feel at this given point in time poisoning them will push the numbers back to a controllable state. It gets mighty frustrating when a private land owner has to devote time and money to controlling issues like this. I would like to use the theory of how the rancher is supposed to graze the land with the "take half and leave half" approach. Every other animal in the ecosystem is controlled in some way; deer, antelope, buffalo, mountain lions, etc. I understand that prairie dogs are legal to shoot but hunting simply is not enough anymore. Ideally, I feel that the "take half, leave half" would be the proper approach to this situation. In taking half, the abandoned homes would allow for habitat of other animals like the black footed ferret. In leaving half of the prairie dogs, there would be plenty numbers to flourish.

I have recently acquired Allotment…. The private land attached to this permit also has encroachment on the SE ¼ Section 28. I believe these prairie dogs have moved across the fence from the enormous town on Section 33. I have watched these prairie dogs encroach quite further in the last two years. This past summer they even dug holes in the middle of xxxx Road. They are continually destroying private land here. Sometimes hunters come by and shoot a few but also leave large amounts of litter. For example; targets, old appliances, aluminum cans, and empty casings. The hunters come by and target shoot and have continually shot the wires off the fence. This is a concern when two permittees' cattle are in breeding season.

I feel if these prairie dogs were removed that litter problems would be eliminated and fence issues would be greatly reduced. The local ranchers, along with myself take great pride in caring for the land and its resources. It is sad to see things like this take place in such a negligent state. The help and cooperation from the USFS would be greatly appreciated. [Letter 40]

Response: *Thank you for the feedback on the vegetation buffer and your comments. Please see also the responses to letters 2 and 5 above.*

Comment: The prairie dog population has gotten completely out of control on Section 36 T137N R103W in Golden Valley County. It is destroying the farm land. I recommend using Alternative 2. [Letter 41]

Response: *Please see the response to letter 33.*

Comment: I am a member of the LMGA and would like to submit my comments to you regarding the prairie dogs in Slope County, North Dakota.

Most people around here are very aware of the prairie dogs and see that the land is being ruined by them. We have been fighting a losing battle to keep them from destroying our private lands because they are coming off of federal lands with no control. When the federal agency drops the

ball regarding control of these pests they suffer no consequences; however if a member of one of the grazing associations would not follow through with an obligation to control noxious weeds or other problems on the federal lands they are permitted to graze, they are held accountable.

On the Southwest ¼ of section 14, T136N R99W I noticed prairie dogs encroaching last July. By the fall, the population had grown and they were moving in at a fast pace. Once these pests get started they strip the area of grasses and what replaces the grass is, more likely than not, noxious weeds such as Canada thistle. There is an underground water pipeline running directly under this new encroachment. I am very concerned about the likelihood that the prairie dogs will cause damage to this pipeline. If the pipeline is damaged I have no backup water source for my livestock. The dam has been removed. Who will be responsible to haul water? Not the FS, it will come back on me.

The prairie dog town in the northeast ¼ of section 28 T136N R99W is encroaching both to the south and the east. There is no grass left in that area, only weeds. They are destroying a neighbor's wheat field and no action has been taken to control them for far too many years.

My neighbors and I feel as though we are fighting a losing battle and we see no relief until the FS steps up and takes action to remove these destructive pests. Federal and private funds are being poured out to try and eradicate noxious weeds on the federal and private lands within the one-mile buffer zone, but it is being wasted as long as the prairie dogs continue to be allowed to inhabit these lands uncontrolled. [Letter 42]

Response: *The project alternatives are designed to address your concerns. Please see also responses to letters 2 and 5 above.*

Comment: We support alternative 4 as we are surrounded on two ranches in the Little Missouri by Prairie Dogs in McKenzie and Billings Counties. The expansion of Prairie Dogs outside of the ¼ mile buffer zone is causing destruction of healthy rangeland. This is unacceptable and could result in a bubonic plague problem and other health issues. [Letter 43]

Response: *Thank you for your comments. Please see also responses to letters 2 and 5 above.*

Comment: The prairie dogs are destroying the grass on the east half of section 35, township 137 north, range 103 west, USA land, and also on the south half of Section 25, township 137 north - range 103 west, USA land. They are encroaching on west and north side of section 36, township 137 north - range 103 west, which is privately owned by xxxxxx. This land is used as grain field. The amount of damage done this past year to the field is remarkable. In dry years like we have had in the past, the loss of production is devastating. We have an alfalfa field in the beginning stages of production in Section 4, township 136 north - range 103 west, privately owned, of which the prairie dogs are about to encroach onto this field. Again the loss of production of hay off this field would be a hardship to us.

In 2014 we applied and used CP money to get water over to section 35 to better utilize the grass on the flat. Now the prairie dogs have almost taken over the flat. They are burrowing into the trenches going to the different water tanks.

I sincerely urge you to get this matter under control using which ever means necessary. [Letter 44]

Response: *The proposed project and preferred alternative are designed to address your concerns. It should be noted that the amount of grazing that occurs in the vicinity of stock tanks, in other*

words low structure vegetation, creates ideal conditions for prairie dog colonization. Please see also the responses to letters 2 and 5 above.

Comment: I support alterative #4 in regards to LMNG Prairie Dog Control Project EA. The prairie dog colonies in the Dakota Grasslands are currently out of control and are moving onto private lands. It is a great expense for the landowner to control these prairie dogs that are moving in from public lands. It is also a near impossible task as the prairie dogs move and colonize at a very rapid rate. I would urge the forest service to make this a priority and move forward with a good neighbor policy. I think ¼ mile is a good start but it is not enough. These colonies are out of control and there should be more conversation on better solutions to the issue. Prairie dog management needs to be a priority within the Dakota Grasslands. [Letter 45]

Response: *Thank you for your comments. The proposed project and alternatives are designed to address your concerns.*

Comment: [From a verbal comment phone call, paraphrased] Commenter stated he would like to have prairie dogs in his front yard in contrast to his neighbors. Commenter was not in favor of the control of prairie dogs. [Letter 46]

Response: *Thank you for your comment. The DPG is obligated by the good neighbor policy as directed by the former undersecretary of agriculture and by the need to be a good neighbor in a very intermingled land ownership pattern. Your perspective is noted.*

Comment: [From a verbal comment phone call, paraphrased] Commenter mentioned two specific colonies, one of which is encroaching on private farm land, causing crop damage and expenses related to eating planted grain. Forest Service contact mentioned experimenting with snow fence as a visual barrier on this colony previously. Snow fence deteriorated due to sun and wind quickly and was therefore ineffective. Commenter supports Alternative 4. [Letter 46]

Response: *Your comment is noted with regard to concerns about specific colonies. Thank you for your comment.*

Comment: [From field trip notes, May 15, 2018, Medora Ranger District]:

- Noted a population of prairie dogs that grew from a couple acres to well over 200 acres that is now encroaching in private lands. Noting that grass barrier isn't working.
    - ***Response:*** *Later discussion indicates that grass barriers often do work though sometimes prairie dogs make a run around the end of them if the colony expands. Also issues surrounding whether barriers should be fenced off so not grazed, how wide they should be, etc.*
- Ranchers feel that ¼ mile buffer zone between NFS and private/non-NFS is better than nothing, but still inadequate. Dispersal still happens.
    - ***Response:*** *FS still needs to meet and/or balance LRMP requirements both to conserve prairie dog and related species and to address encroachment on to private lands as well as protect resources on the LMNG. Though not discussed at the field trip, prairie dogs are a native species not unlike antelope. It would not be appropriate to propose removing antelope from the landscape simply because they are grazers and might disperse to private lands.*
    - ***Response:*** *Note that efforts to go beyond LRMP guidance threatens the ability of the DPG to address the immediate need to deal with encroachment of prairie dog*

towns on to private and other non-NFS lands. At minimum, action to address this encroachment would be delayed by a minimum one year.

- Some expressed a desire to remove prairie dog burrow holes after control implemented while others were not in favor of this.
  - ***Response:*** *Burrow removal is included in the adaptive management tool box. This action will require additional ID team interaction prior to implementation (EA page 17).*
- Lack of economic analysis in the EA.
  - ***Response:*** *While livestock production and grazing are a big part of what the DPG and LMNG provide, one of the purposes of these lands is also to provide for native species on the landscape (as directed by NFMA and the LRMP), of which the prairie dog, is one. This species is listed as a sensitive species as well as a management indicator species (MIS) in the LRMP. It is not appropriate or necessary to identify the economic impacts of such as species to human uses of these lands. Similarly, we would not attempt to measure the economic impacts of antelope or deer on these lands despite the fact that they may eat grass. This is not to say that the FS is callous to the concerns of grazers about forage losses. This statement is made simply to explain why a more thorough economic analysis is not offered.*
- Is the "functioning at risk" designation in the hydrology report for watersheds on the DPG related to prairie dogs?
  - ***Response:*** *The functioning at risk designation is determined by looking at 12 core indicators of watershed health. Those core factors include:*
    - *Aquatic biota*
    - *Riparian/wetland vegetation condition*
    - *Water quality condition*
    - *Water quantity condition*
    - *Aquatic habitat condition*
    - *Road and trail condition*
    - *Soil condition*
    - *Forest cover condition*
    - *Forest health condition*
    - *Terrestrial invasive species condition*
    - *Rangeland vegetation condition*
    - *Fire effects/fire regime condition*

    Many of the watersheds on the DPG have high road densities, low water crossings, or a combination of other factors that result in a finding of "functioning at risk". Note that the finding is made only considering NFS lands within a given watershed. More detail on each watershed is available at https://apps.fs.usda.gov/wcatt/ .

- Question was raised about black-footed ferret reintroduction.
  - ***Response****: This project does not address reintroduction of black-footed ferret.*
- Question also raised about capping the size of prairie dog colonies; comments made about treating prairie dog populations in the interior (Category 1).
  - ***Response:*** *LRMP objectives for including a representative amount of the prairie dog ecosystem and associated species have not been met based on the 2015*

survey of prairie dog occupancy. This may change with the 2018 survey. However control of populations in interior areas (Category 1) at this point in time likely would require an amendment to the LRMP, and may not meet law, regulation, and/or policy. In addition, consideration of interior population control at this time would jeopardize, or at minimum, delay control of perimeter populations for at least one year. Currently there is clear direction to be "good neighbors" to neighboring lands with respect to encroachment of prairie dogs coming from NFS lands. Project comments also indicate an urgency in dealing with this issue from the perspective of NFS neighbors. As a result, it is recommended to address issues and concerns of interior populations separately from this project.

- A question was raised about including a new alternative to the project, potentially including control of interior colonies of prairie dogs.
    - ***Response:*** *As explained on the field trip, at this point in the process, adding another alternative would most likely add a year to the process in order to meet legal requirements. This would delay action on adjacent lands, which is clearly required by current direction (see EA pages 6 and 7). In addition, control of interior prairie dog colonies that are not threatening to encroach on adjacent non-NFS lands may not meet current LRMP direction. This further delays project implementation at minimum and might stall the project indefinitely.*

      Specifically, as described in the EA on page 6, the LRMP states

      > *"Limit the use of rodenticide (grain baits) for reducing prairie dog populations to the following situations:*
      >
      > - *Public health and safety risks occur in the* ***immediate area****. [Emphasis added]*
      > - *Damage to private and public infrastructure or facilities, such as cemeteries and residences.*
      > - *To respond to unwanted prairie dog colonization on land adjoining the national grasslands when consistent with state-wide prairie dog conservation strategies.* ***Standard*** *(text, as modified; striking "U.S. Fish and Wildlife Service" from the direction, see p. 50, NGP FEIS Addendum). (LRMP page 1-18)"*

      Changes to the LRMP were not included in the current project and would, at minimum, cause substantial delays, and perhaps would preclude the project all together.

Appendix C – Monitoring

Item #	Resource	Objective	Timing	Methodology	Responsible Official
1	Wildlife, Prairie Dogs	Monitor prairie dog occupancy in acres on the DPG.	Every third year per the LRMP	Monitor/map prairie dog locations, active colonies, number of complexes.	DPG Wildlife Program Manager
2	Wildlife, prairie dogs	Monitor effectiveness of prairie dog control efforts	Several days before and after treatment	Pre and post treatment spot checks. Develop follow up treatments if needed. Modify treatment approach to increase effectiveness if needed.	Wildlife Biologist, grazing association or proponent
3	Wildlife, prairie dogs	Monitor effectiveness of prairie dog control efforts	Several months after treatment	Check treatment effectiveness; whether objectives were met; need for retreatment.	Wildlife Biologist, grazing association or proponent
4	Wildlife, non-target species	Monitor safety of rodenticide application for non-target wildlife species	During rodenticide application	Survey treated areas within two days of rodenticide application. Count non-target species killed by rodenticide. Modify application method as needed to avoid non-target species poisoning.	Wildlife Biologist via contract applicator
5	Wildlife	Protection of migratory whooping crane from consuming treated grain bait	During migration period annually when poison bait control of prairie dogs is taking place	Coordinate with USFWS on location of whooping crane during spring and fall migration. If threat to cranes could potentially occur, alert the contractor of the potential to shut down poison operations due to whooping crane migration pattern; If the FS determines, in consultation with the FWS, that crane migration will pass over the project area/analysis area, poison operations will be shut down and any poison grain on the surface will be disposed of immediately or permanently neutralized until it is determined the crane migration potential has passed.	District wildlife biologist
6	Human Health, Wildlife	Monitor compliance with lable restrictions for all rodenticide used.	During control contract implementation	Ensure label restrictions are followed including prebaiting, and proper disposal of any unconsumed bait and dead animals.	Contracting officer, contracting officer's representative

Item #	Resource	Objective	Timing	Methodology	Responsible Official
7	Human Health	Monitor safety of rodenticide application for human health and safety for pets and livestock	After control	Review any reports of accidental poisoning of humans, pets, or livestock in the project area. Modify rodenticide application as needed as a result of poisonings or near misses.	District Ranger
9	Vegetation Barriers	Monitor effectiveness of vegetation barriers in preventing unwanted colonization and encroachment	During range condition surveys check vegetation barriers for effectiveness in discouraging encroachment onto non-NFS lands	Visual observation of prairie dog activity	Range Conservationist and Wildlife Biologist
10	Human Health	Monitor for presence of rodent borne diseases in the project area. Monitor for transmission of any such diseases to humans and/or pets.	Annually	CDC reports	Wildlife biologist; range conservationinst, in cooperation with state health department
11	Vegetation	Provide a report of the individual status of designated R1 LMNG Forest Service sensitive species every two years and the acres of NFS lands surveyed.	Every two years though not all occurrences will be visited every year. Selection of interval of visits dependent on life history of plants.	Completed for LRMP monitoring. Occurrences (number of stems, acres of occupancy); Surveys (presence/absence)	LRMP Botanists

Appendix D – Maps

APPENDIX A

Control Areas and Maps

Appendix A contains maps of the initially affected colonies of the Action Alternatives. The order of the maps generally follows Table 42 found in the EA. It is replicated here to ease navigation. Some of the figures contain more than one colony that may or may not align with the table below.

The last 5 maps in this sequence are mid-level maps between the Project scale and the specific maps shown directly below the table. Focal area abbreviations: Boyce Creek/Indian Creek = BC/IC; Northeast Slope – NESL; North Unit Theodore Roosevelt National Park = NUTRNP; Miscellaneous = Misc.; Northwest McKenzie = NWMcK; South Unit Theodore Roosevelt National Park = SUTRNP; Southwest McKenzie = SWMcK. Gross acres are the acres initially controlled. In colonies partially controlled, this would equate to the acres out to 600 feet from private lands. Net acres would reduce gross acres by allowing colonization back to 300 feet from private land boundary.

Colony ID	Ranger District	Gross Acres	Treatment, Reason [1,2]	Net Acres	Focal Area	Remarks/ Comments	Focal Area Affected Acres	Net acres
006-2	Medora	1.0	All; UE	1.0	BC/IC	Previously treated		
007-2	Medora	1.0	All; UE	1.0	BC/IC	Isolated and small; on only isolated 160/80		
007-3	Medora	0.6	All; UE	0.6	BC/IC	Isolated and small; on only isolated 160/80		
010-3	Medora	0.1	All; UE	0.1	BC/IC	Previously treated		
019-1	Medora	12.1	All; UE	12.1	BC/IC	Previous treatment, needs to be finished		
020-1	Medora	24.0	All; UE	24.0	BC/IC	Isolated and tough to manage; Previously adj. Landowner "No"		
026-1	Medora	3.6	All; UE	3.6	BC/IC	Previous treatment, needs to be finished		
039-1	Medora	8.4	Partial; UE	1.5	BC/IC	Previously treated; fenced veg barrier; but isolated		

Colony ID	Ranger District	Gross Acres	Treatment, Reason [1,2]	Net Acres	Focal Area	Remarks/ Comments	Focal Area Affected Acres	Net acres
107-3	Medora	45.0	Partial; UE	45.0	BC/IC	Very large colony; East edge previously treated but bumps up against high/dense veg on private land – maintain this strategy and monitor; West edge impinging on State section; Propose treat back from boundary and take advantage of terrain to slow re-population of area; 45 ac just an estimate.	**Boyce and Indian Creeks**	
118-1	Medora	3.5	Partial; UE	3.5	BC/IC	Prev Treat w/Veg barrier; VB working but PDs doing end-around on both sides; kind of projected; South side somewhat constrained by creek; best option may be to extend barrier fence.	99.3	92.4
022-1	Medora	92.2	All; UE	92.2	MISC	Large colony but isolated half section		
029-1	Medora	20.1	All; UE	20.1	MISC	Isolated; Previously treated		
033-1	Medora	1.1	All; UE	1.1	MISC	Previously treated		
054-1	Medora	70.0	All; UE	70.0	MISC	Isolated and not connected to other colonies		
093-1	Medora	60.0	All; UE	60.0	MISC	Isolated and not connected to other colonies		
180-1	Medora	40.9	All; UE	40.9	MISC	Large and Isolated, little expansion opportunities except to pvt		
291-1	Medora	21.7	All; UE	21.7	MISC	Primary expansion opportunities to pvt.		
206-1	Medora	0.6	All; UE	0.6	MISC	Bock DU Dam; Previously treated – prairie dogs have returned		
306-2	Medora	2.3	All; UE	2.3	MISC	State colony to south. Not encroaching but imminent encroachment; Coordinate with state on whether control is warranted.		
365-1	McKenzie	4.3	All; UE	4.3	MISC	Small and isolated from other colonies		
430-1	McKenzie	46.0	Partial; UE	46.0	MISC	Isolated and adjacent terrain slowing expansion	**Miscellaneous**	

Colony ID	Ranger District	Gross Acres	Treatment, Reason [1,2]	Net Acres	Focal Area	Remarks/ Comments	Focal Area Affected Acres	Net acres
501-1	McKenzie	31.0	All; UE	31.0	MISC	Very isolated from other colonies; half-mile from residence: PH&S. Raised in scoping	356.2	350.2
005-1	Medora	14.3	All; PH&S	14.3	NESL	Within a quarter-mile of residence; recreational shooting issue	**North East Slope**	
031-1	Medora	0.3	All; UE	0.3		Previously treated		
034-1	Medora	10.3	All; UE	10.3	NESL	Isolated qtr section		
041-1	Medora	0.2	All; UE	0.2	NESL	Isolated half section		
059-1	Medora	39.4	Partial; UE	19.0	NESL	Well doc'ed BUOW use; constrained by Adobe Wall to South; Also, propose taking off eastern portion in #117		
075-1	Medora	4.9	All; PH&E	4.9	NESL	Very close to residence; Encroaching	69.4	49.0
412-2	McKenzie	31.3	All; PH&S	31.3	NUTRNP	May be damaging a sealed pit from an oil and gas reclaim	**North Unit Theodore Roosevelt NP**	
437-1	McKenzie	1.7	All; UE	1.7	NUTRNP	Small and isolated from other colonies		
459-1	McKenzie	30.8	All; UE	30.8	NUTRNP	Isolated from other colonies, and little fed expansion opps	63.8	63.8
332-1	McKenzie	1.0	All; UE	1.0	NWMcK	Small, Isolated, in corner		
333-2	McKenzie	4.0	Partial; UE	4.0	NWMcK	Western lobe off large colony and southern extensions that cross into Allot #339		
339-10	McKenzie	57.5	All; UE	57.5	NWMcK	339-c or -d portions - eastern side		
339-12	McKenzie	7.0	Partial; UE	3.0	NWMcK	2 separate lobes can be pulled back from boundary; 5< estimated acres		
339-13	McKenzie	3.0	All; UE	3.0	NWMcK	339-13a Only - western Portion		
346-1	McKenzie	21.4	Partial; UE	7.0	NWMcK	Partial poison and Fence		

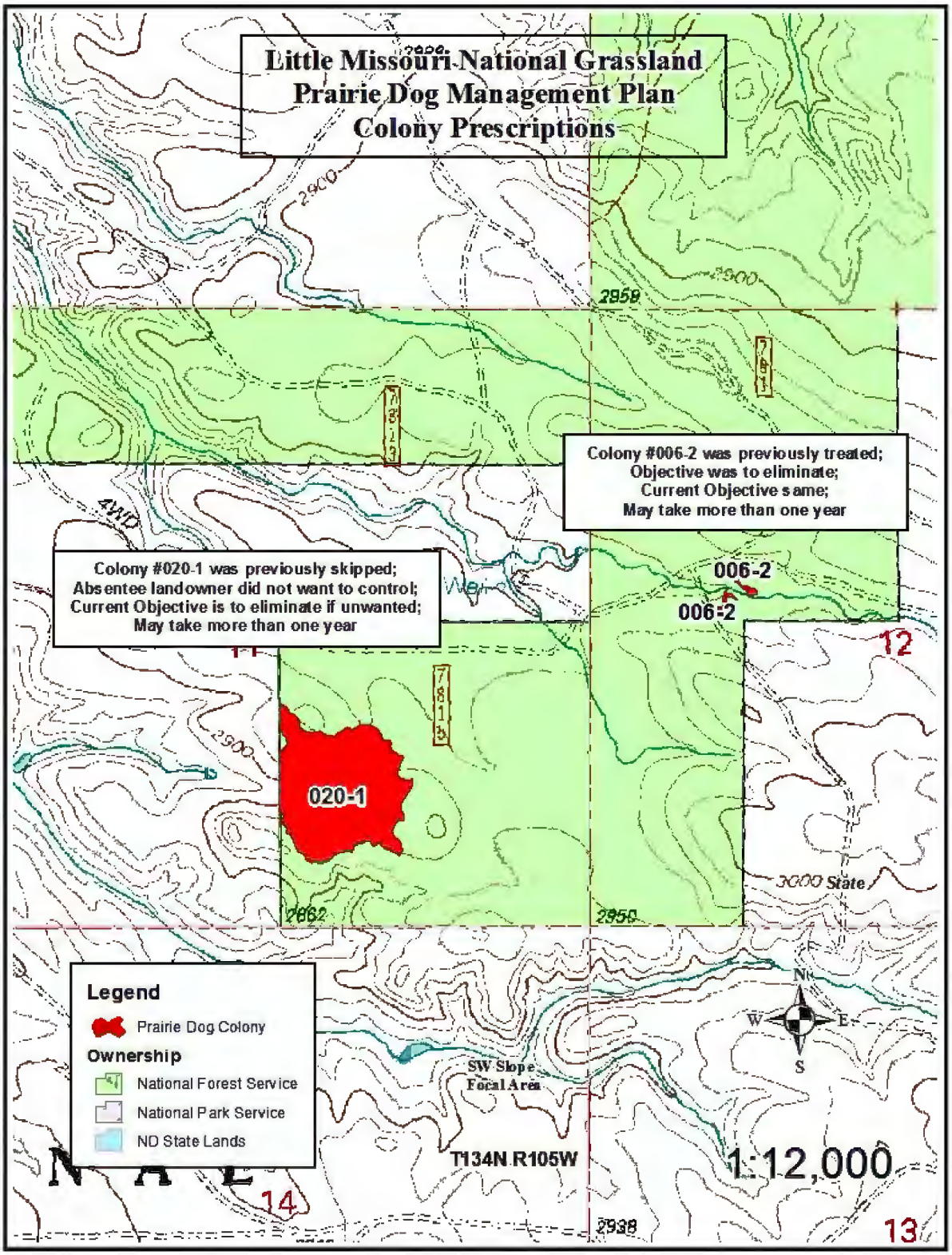
Colony ID	Ranger District	Gross Acres	Treatment, Reason [1,2]	Net Acres	Focal Area	Remarks/ Comments	Focal Area Affected Acres	Net acres
351-2	McKenzie	22.7	Partial; UE	3.7	NWMcK	Colony in isthmus between pvt/State tho exp. opp. to west: Eliminate or heavy partial on east side? Could use Alkali Creek and trib as a potential barriers and encourage colony to west.		
351-3	McKenzie	12.1	Partial; UE	5.0	NWMcK	Partial poison and fence for barrier	**Northwest McKenzie**	
358-1	McKenzie	2.0	All; UE	2	NWMcK	Small, Isolated, in corner	130.7	86.2
146-1	Medora	31.0	Partial; UE	19.0	SUTRNP	2 isolated satellites on east-side of larger colony and along the NW-SE allotment fence in NE corner of Sec 33		
146-2	Medora	3.6	Partial; UE	2.0	SUTRNP	Retreat w/veg barrier; Pds doing end around but with some small incursions into veg barrier.		
147-2	Medora	22.7	All; UE	22.7	SUTRNP	Previously treated on Portions on the southern end		
147-5	Medora	1.9	All; UE	1.9	SUTRNP	Previously treated		
147-6	Medora	2.0	All; UE	2.0	SUTRNP	Very little expansion opps		
149-1	Medora	20.9	All; UE	20.9	SUTRNP	Little expansion opps; previously GE nest adj. to this colony		
149-2	Medora	2.0	All; UE	2.0	SUTRNP	Retreat to eliminate		
152-2	Medora	13.1	Partial; UE	7.5	SUTRNP	Previously controlled but lots of expansion potential to north and east.		
160-1	Medora	4.6	Partial; UE	1.0	SUTRNP	Small acreage inside fenced barrier to "freshen up." OK to graze but monitor		
166-2	Medora	21.5	All; UE	21.5	SUTRNP	Isolated		
172-1	Medora	5.0	All; UE	5.0	SUTRNP	Little expansion opp on FS; more so the pvt side		
186-1	Medora	4.2	All; UE	4.2	SUTRNP	Previously treated on isolated FS		
186-2	Medora	20.4	All; UE	20.4	SUTRNP	3 colonies on an isolated section and qtr. If don't do something with		

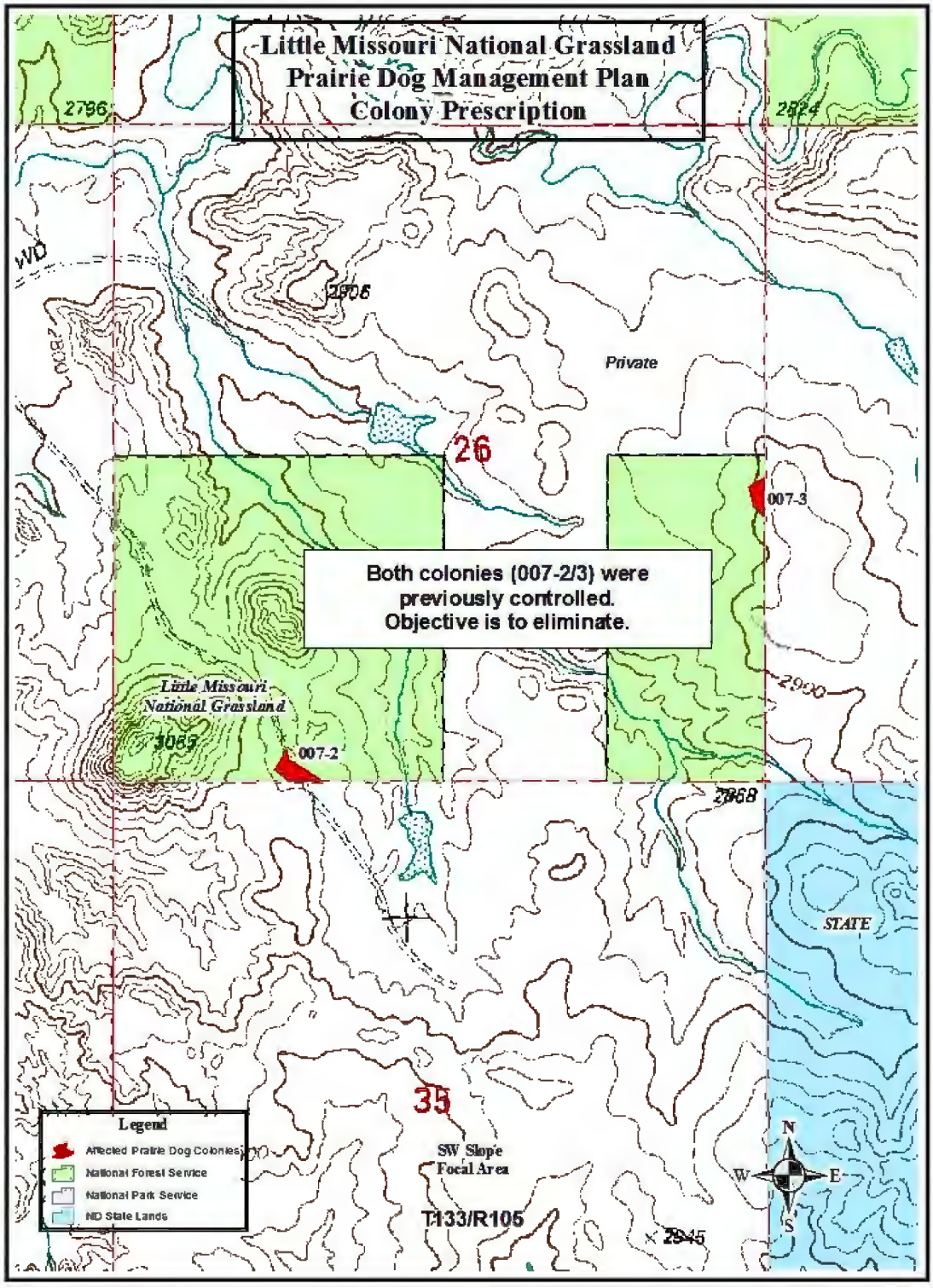
Colony ID	Ranger District	Gross Acres	Treatment, Reason [1,2]	Net Acres	Focal Area	Remarks/ Comments	Focal Area Affected Acres	Net acres
						this colony it will just recolonize 186-3		
186-3	Medora	18.3	All; UE	18.3	SUTRNP	All		
231-1	Medora	28.8	All; UE	28.8	SUTRNP	Eliminate but consider lighter touch.		
303-1	Medora	1.0	All; UE	1.0	SUTRNP	Slow expanding colony; adjacent landowner is State; Colony isolated from others		
270-2	Medora	22.2	All; UE	22.2	SUTRNP	Along admin boundary	**South Unit Theodore Roosevelt NP**	
270-3	Medora	0.2	Partial; UE	0.2	SUTRNP	Freshen up vegetative barrier due to slight incursion into vegetative barrier by prairie dogs	223.4	200.6
369-2	McKenzie	50.0	Partial; PH&S	50.0	SWMcK	Shooting concern. Treat south half of 87 acre colony (south of woody stringer) with the objective to eliminate and alleviate potential shooting interest toward residence. If safety remains issue, eliminate colony.		
384-1	McKenzie	1.5	All; UE	1.5	SWMcK	Only Western Portion; approx 1.5 acres		
387-1	McKenzie	7.0	Partial; UE	2.0	SWMcK	w/veg barrier		
398-1	McKenzie	21.3	All; PH&S	0.0	SWMcK	Shooting is raising Safety concerns to nearby residence. Treat entire colony once and monitor to see if shooting interest abates. May need to retreat occasionally if shooting interest becomes a safety issue again.		
398-2	McKenzie	1.5	All; UE	1.5	SWMcK	Only very southern Portion		
399-4	McKenzie	18.2	All; UE	18.2	SWMcK	Relatively small but isolated from other colonies		
408-1	McKenzie	3.4	All; UE	3.4	SWMcK	small and isolated	**Southwest McKenzie**	
512-2	McKenzie	30.5	Partial; UE	11.0	SWMcK	Partial w/veg barrier	133.4	87.6

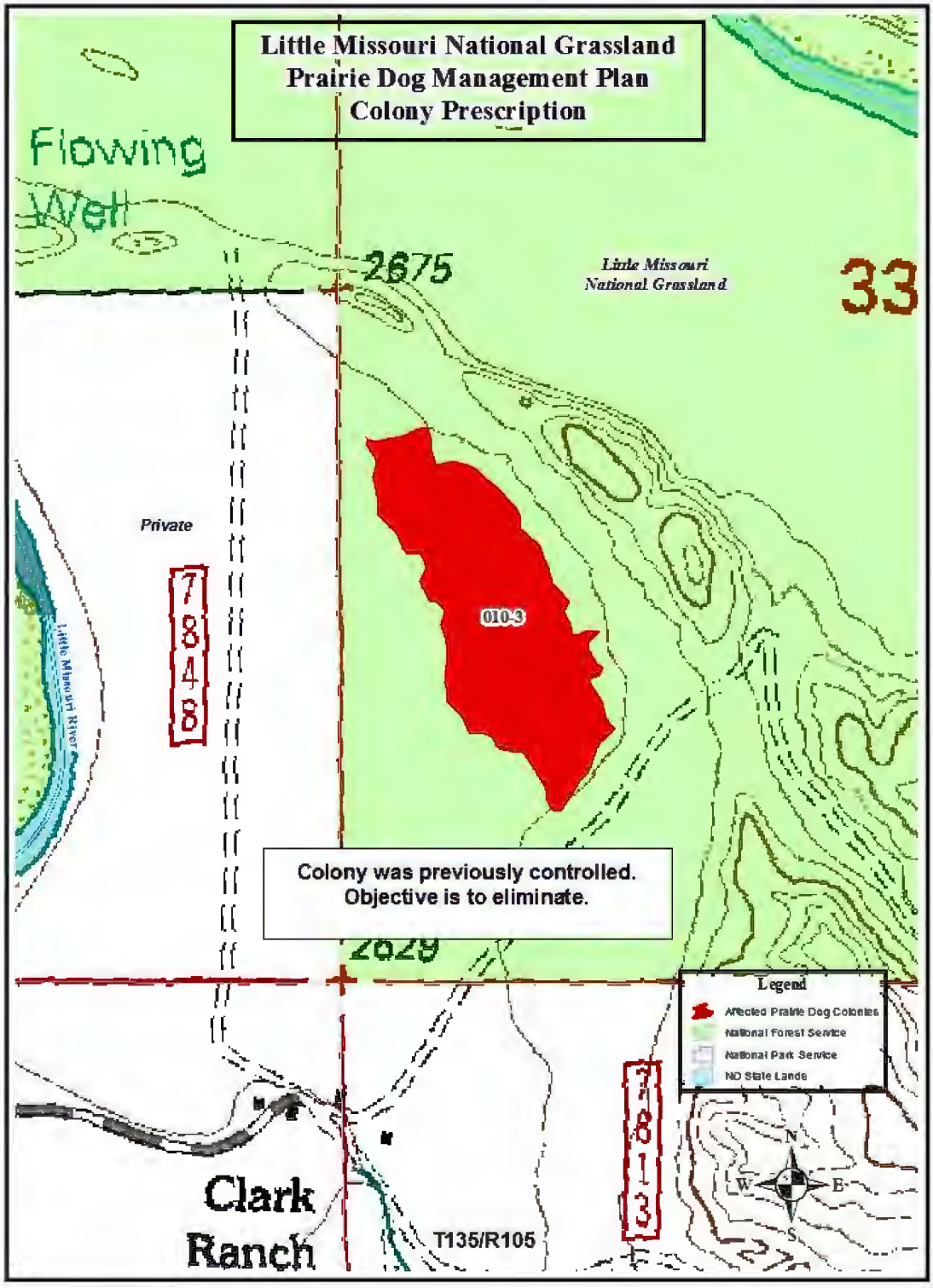
Colony ID	Ranger District	Gross Acres	Treatment, Reason [1,2]	Net Acres	Focal Area	Remarks/ Comments	Focal Area Affected Acres	Net acres
	Total	1,110.2		929.8				

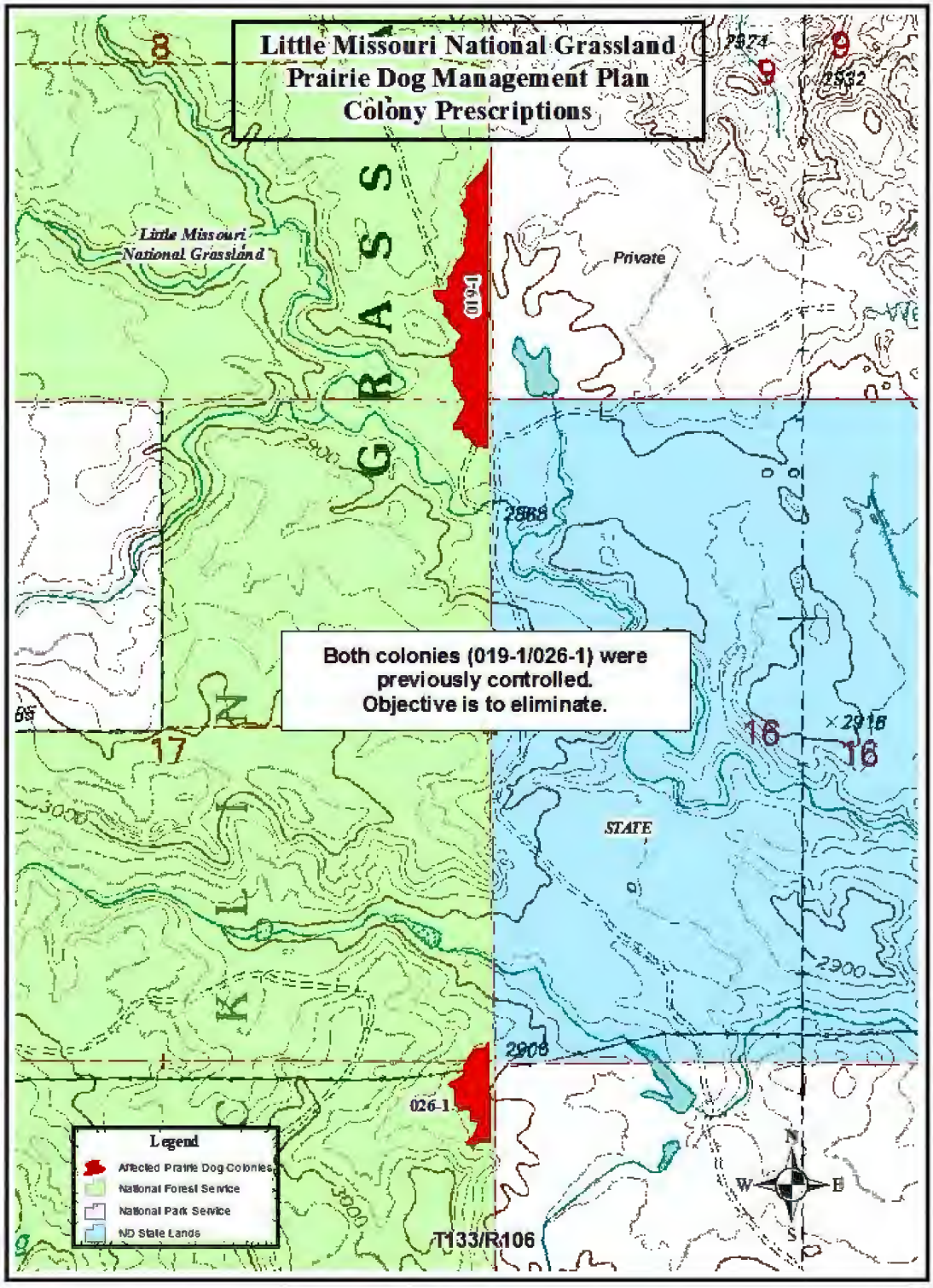
[1]PH&S = Public Health and Safety;

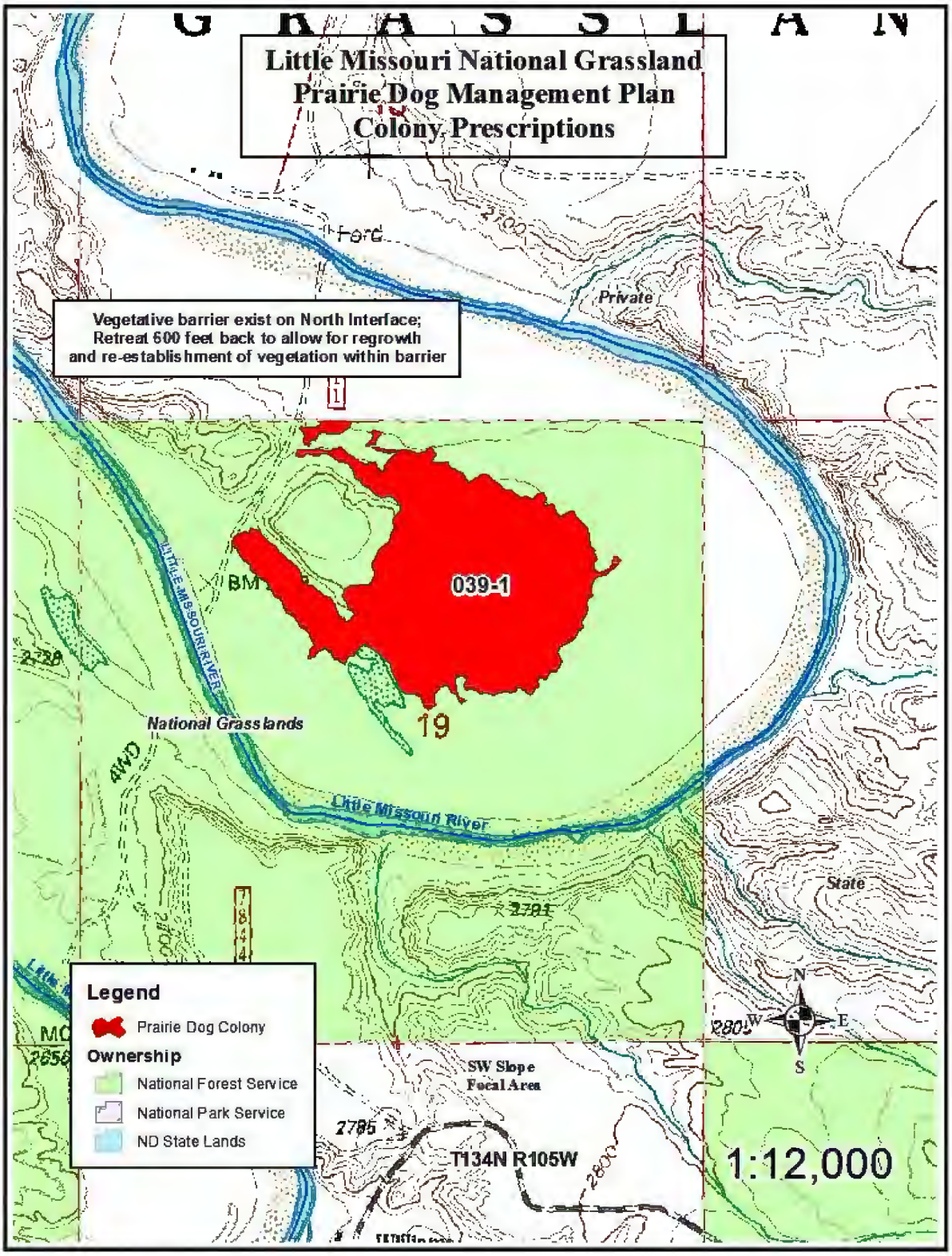
[2]UE = Unwanted Encroachment.

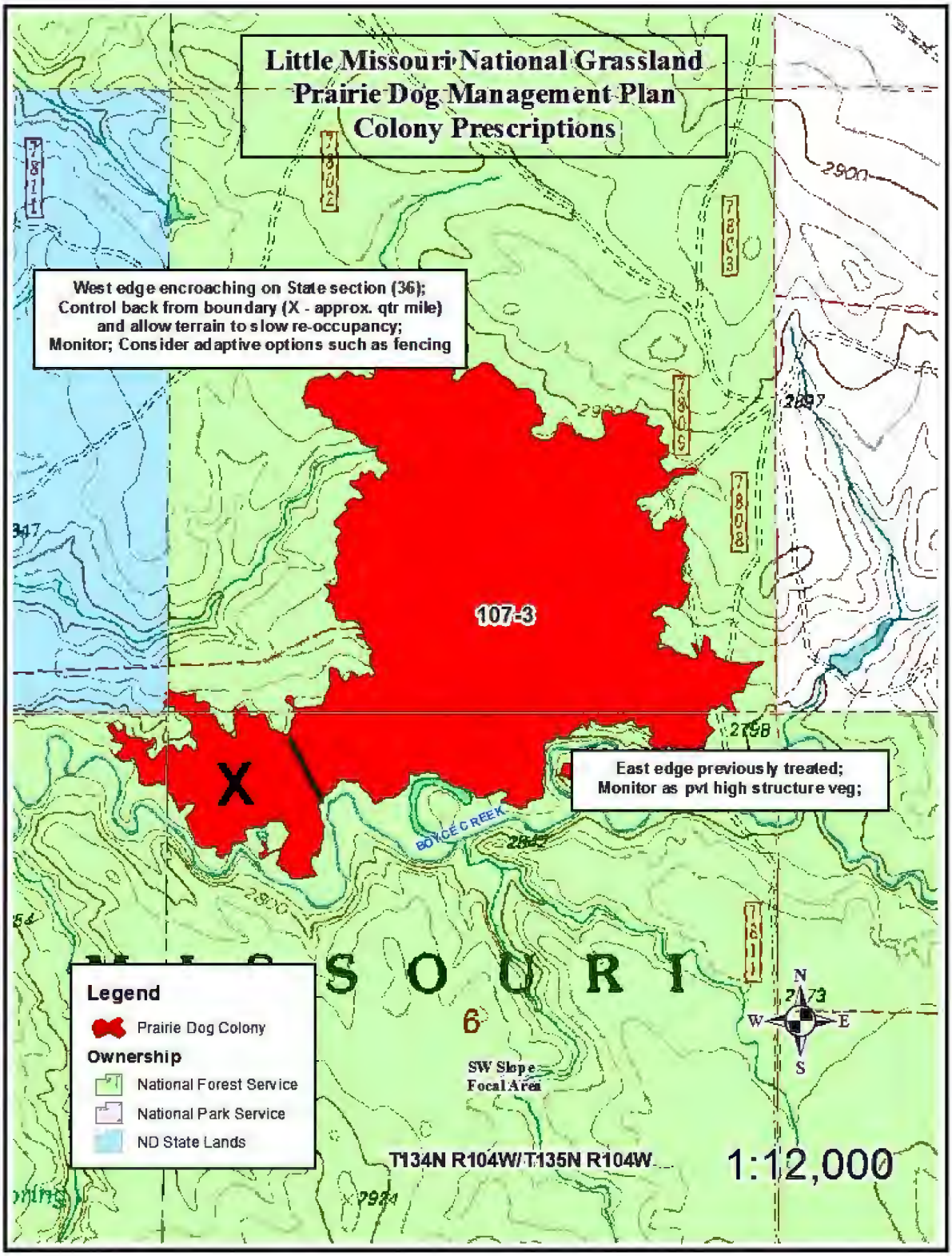

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
Colony #006-2 was previously treated;
Objective was to eliminate;
Current Objective same;
May take more than one year
Colony #020-1 was previously skipped;
Absentee landowner did not want to control;
Current Objective is to eliminate if unwanted;
May take more than one year
006-2
020-1
12
13
14
2959
2900
2862
2950
2938
4WD
3000 State
SW Slope
Focal Area
T134N R105W
1:12,000
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
N
W
E
S

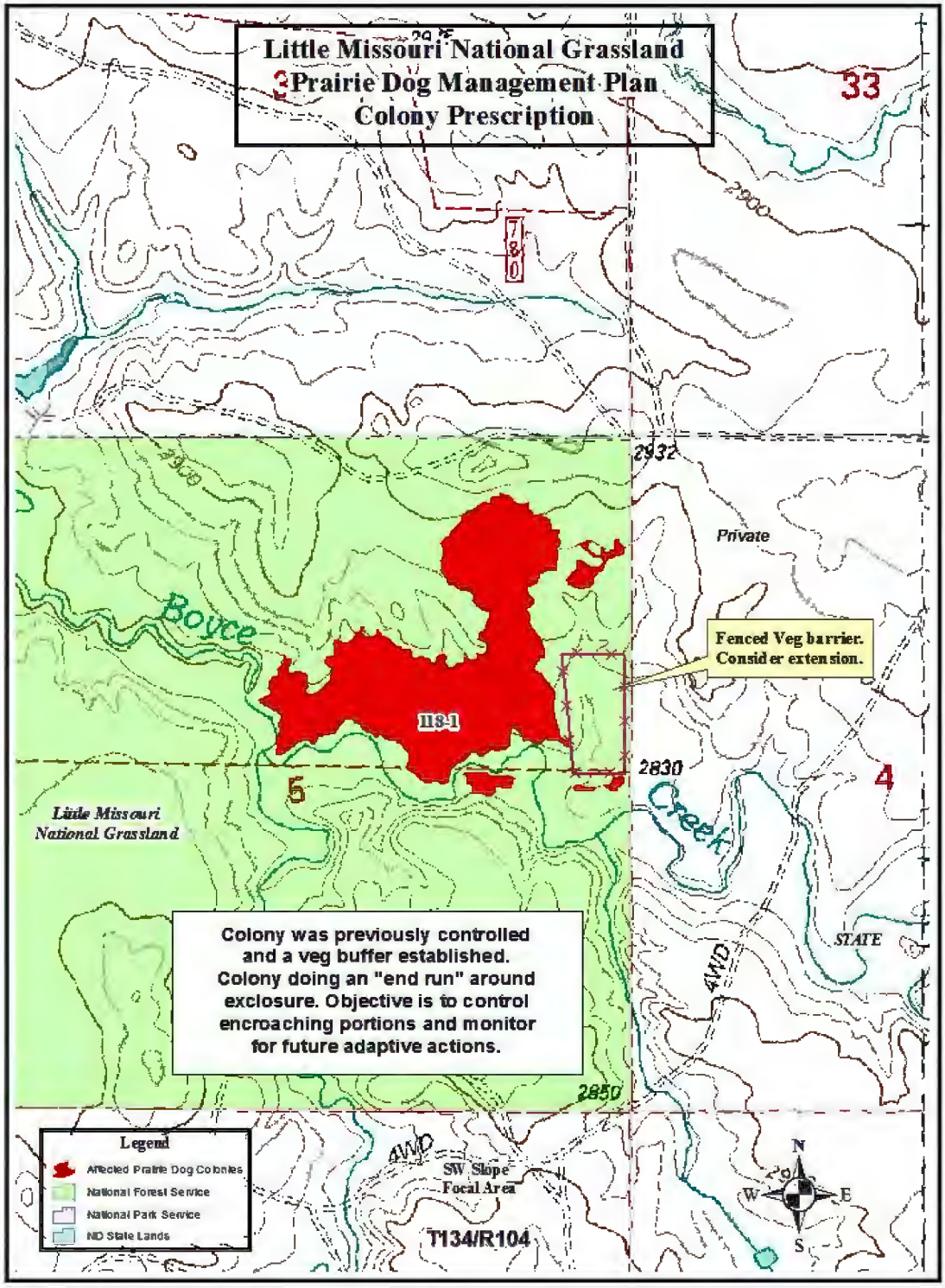

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription
2796
2824
WD
2906
Private
26
007-3
Both colonies (007-2/3) were
previously controlled.
Objective is to eliminate.
2900
Little Missouri
National Grassland
3063
007-2
2868
STATE
35
SW Slope
Focal Area
T133/R105
2945
Legend
Affected Prairie Dog Colonies
National Forest Service
National Park Service
ND State Lands
N
W
E
S

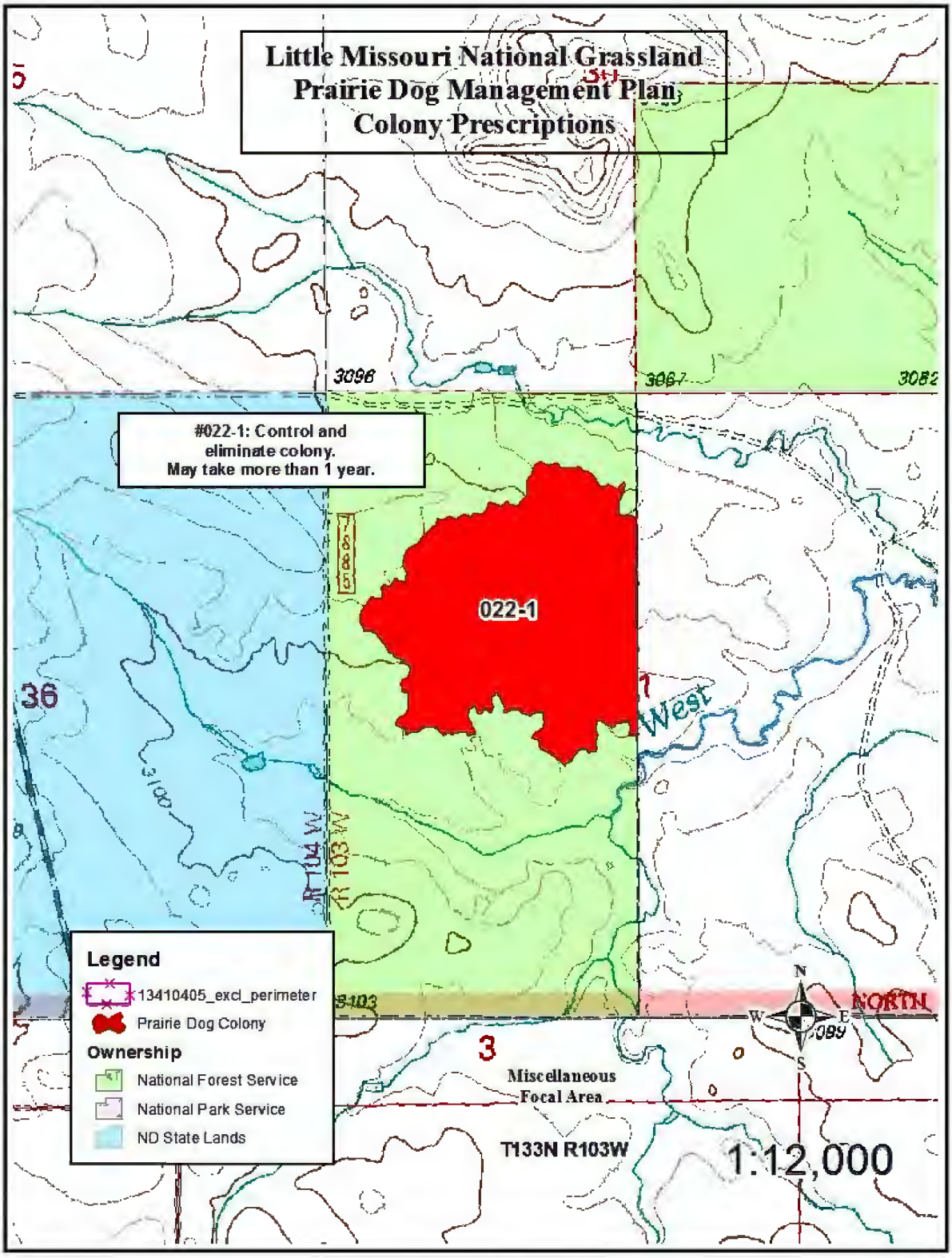

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription
Flowing Well
2675
Little Missouri National Grassland
33
Private
7848
010-3
Little Missouri River
Colony was previously controlled.
Objective is to eliminate.
2629
Legend
Affected Prairie Dog Colonies
National Forest Service
National Park Service
ND State Lands
7813
N
W
E
S
Clark Ranch
T135/R105

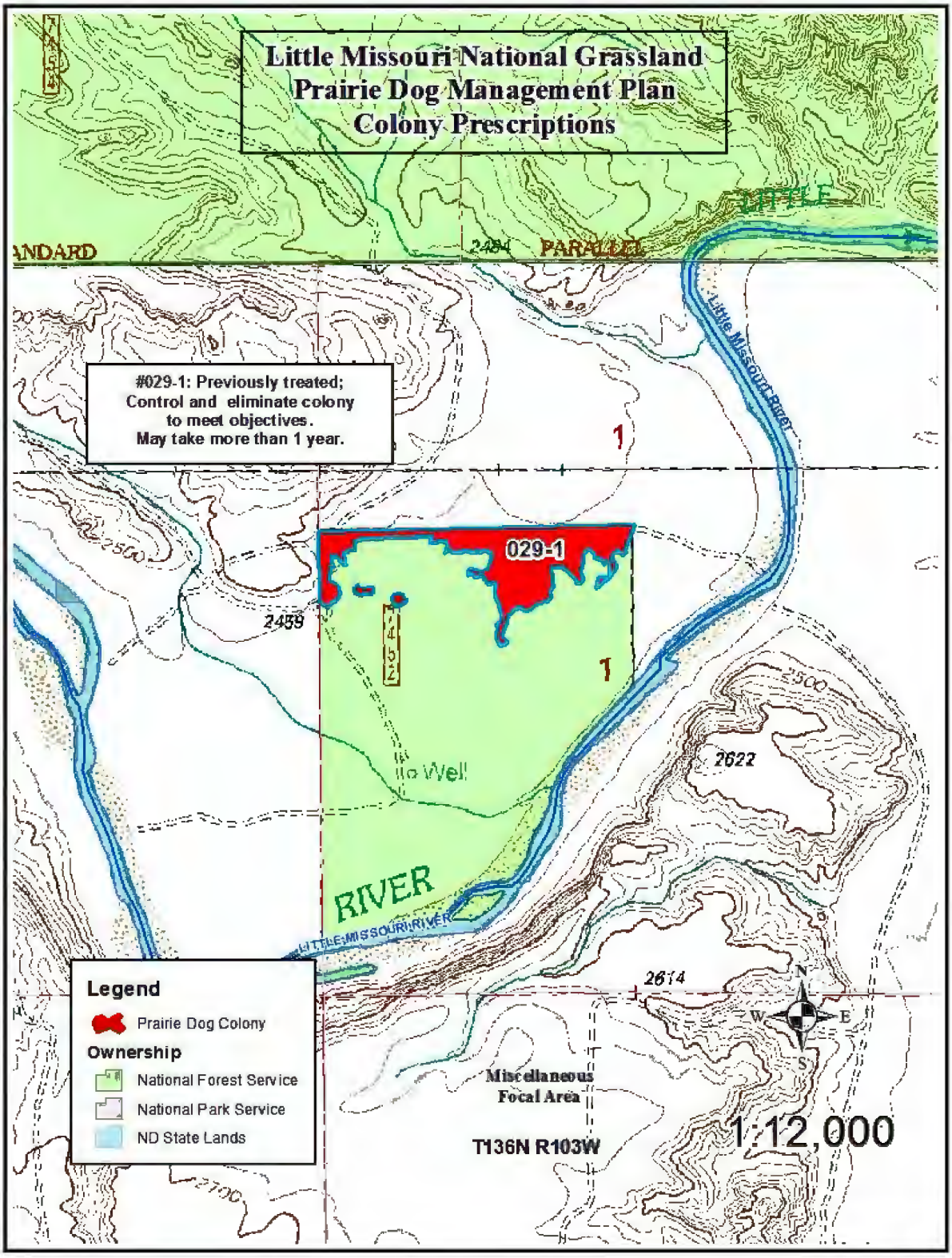

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
Little Missouri National Grassland
Private
STATE
019-1
026-1
Both colonies (019-1/026-1) were previously controlled.
Objective is to eliminate.
Legend
Affected Prairie Dog Colonies
National Forest Service
National Park Service
ND State Lands
T133/R106
GRASSY BUTTE

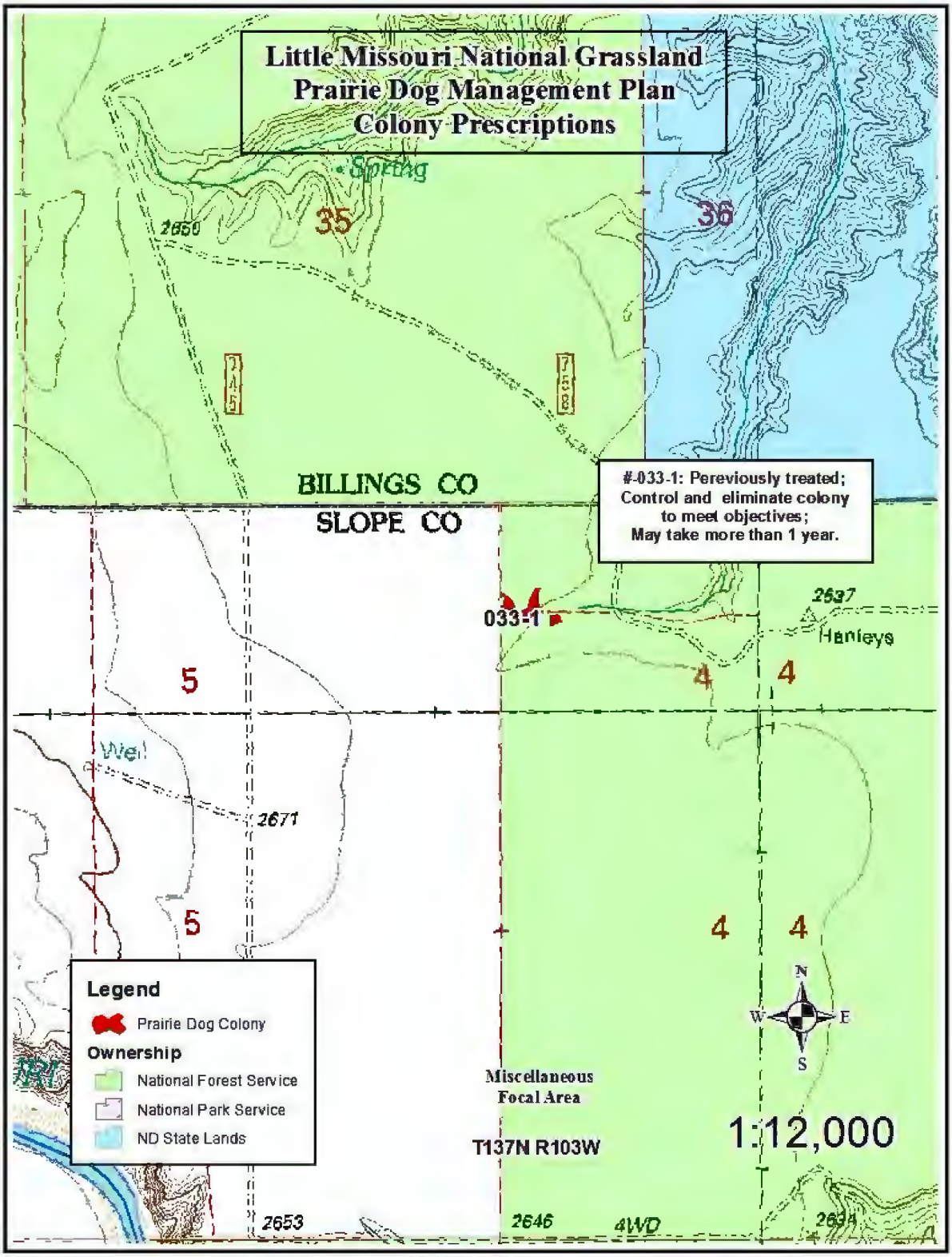

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
Vegetative barrier exist on North Interface;
Retreat 600 feet back to allow for regrowth
and re-establishment of vegetation within barrier
039-1
19
Private
State
National Grasslands
Little Missouri River
LITTLE MISSOURI RIVER
SW Slope
Focal Area
T134N R105W
1:12,000
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands

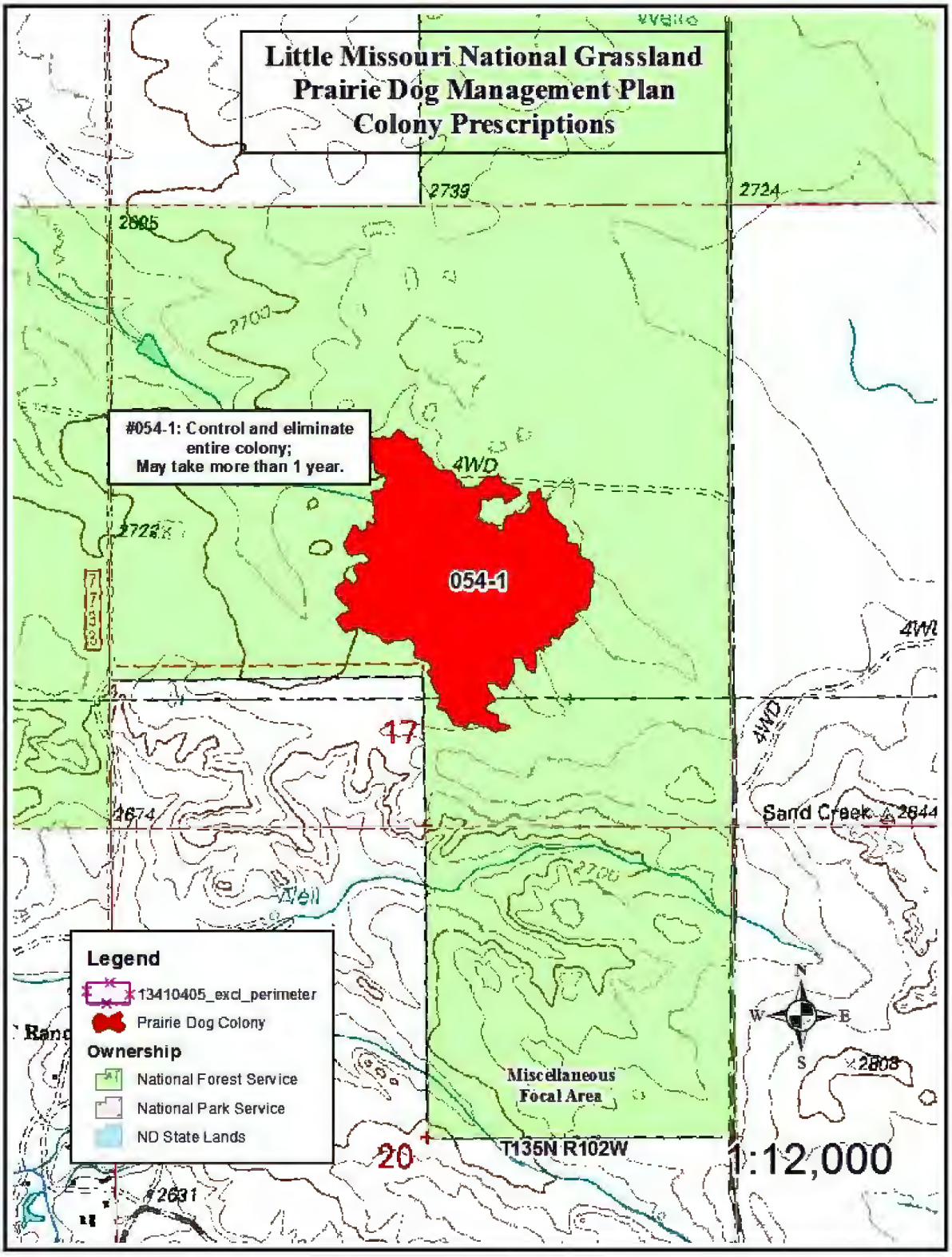

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
West edge encroaching on State section (36);
Control back from boundary (X - approx. qtr mile)
and allow terrain to slow re-occupancy;
Monitor; Consider adaptive options such as fencing
107-3
X
East edge previously treated;
Monitor as pvt high structure veg;
BOYCE CREEK
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
SW Slope
Focal Area
T134N R104W/T135N R104W
1:12,000
N
W
E
S

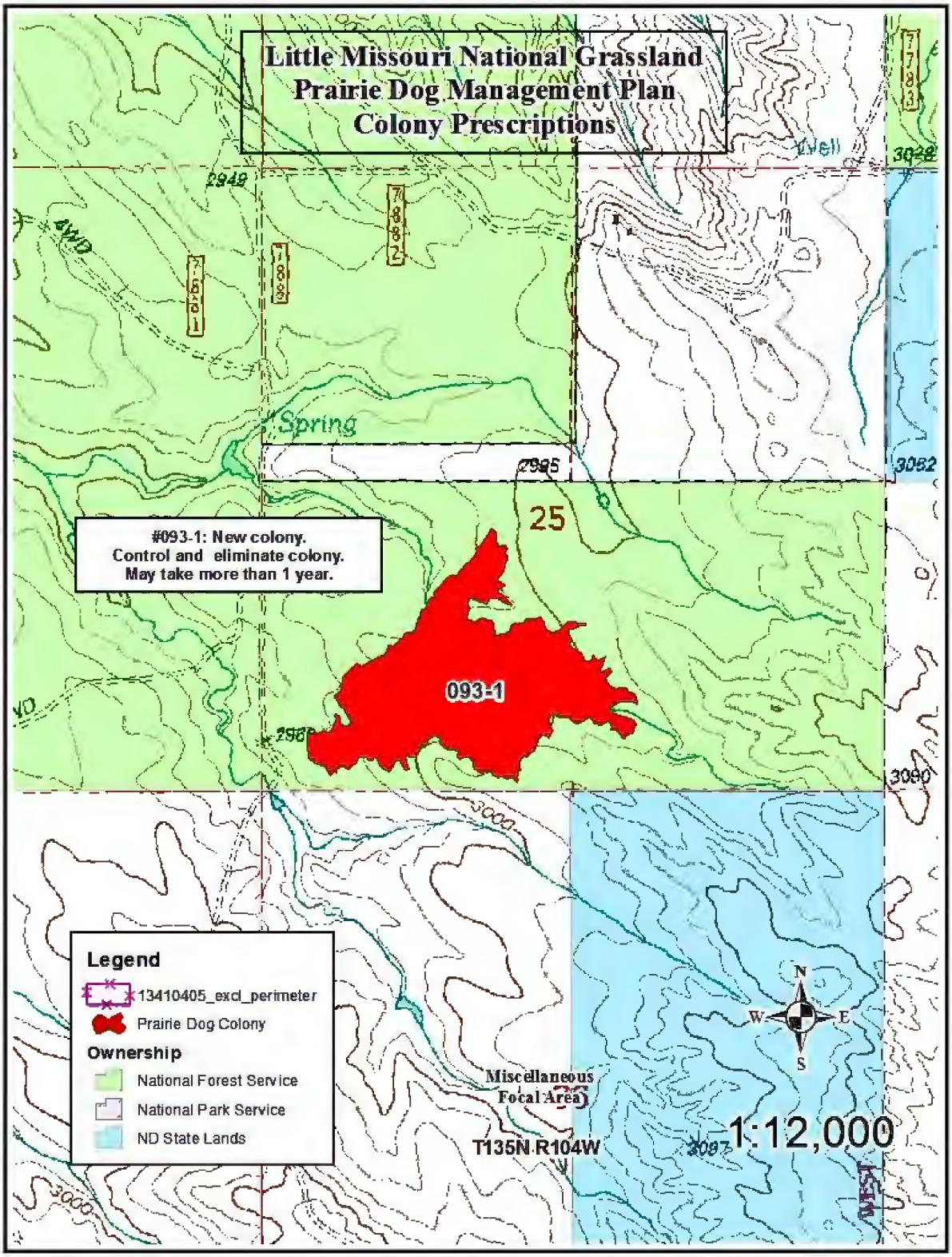

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription
33
4
5
2900
2932
2930
2830
2850
Private
Boyce
Creek
Fenced Veg barrier.
Consider extension.
118-1
Little Missouri
National Grassland
STATE
4WD
Colony was previously controlled and a veg buffer established. Colony doing an "end run" around exclosure. Objective is to control encroaching portions and monitor for future adaptive actions.
Legend
Affected Prairie Dog Colonies
National Forest Service
National Park Service
ND State Lands
SW Slope
Focal Area
T134/R104
N
W
E
S

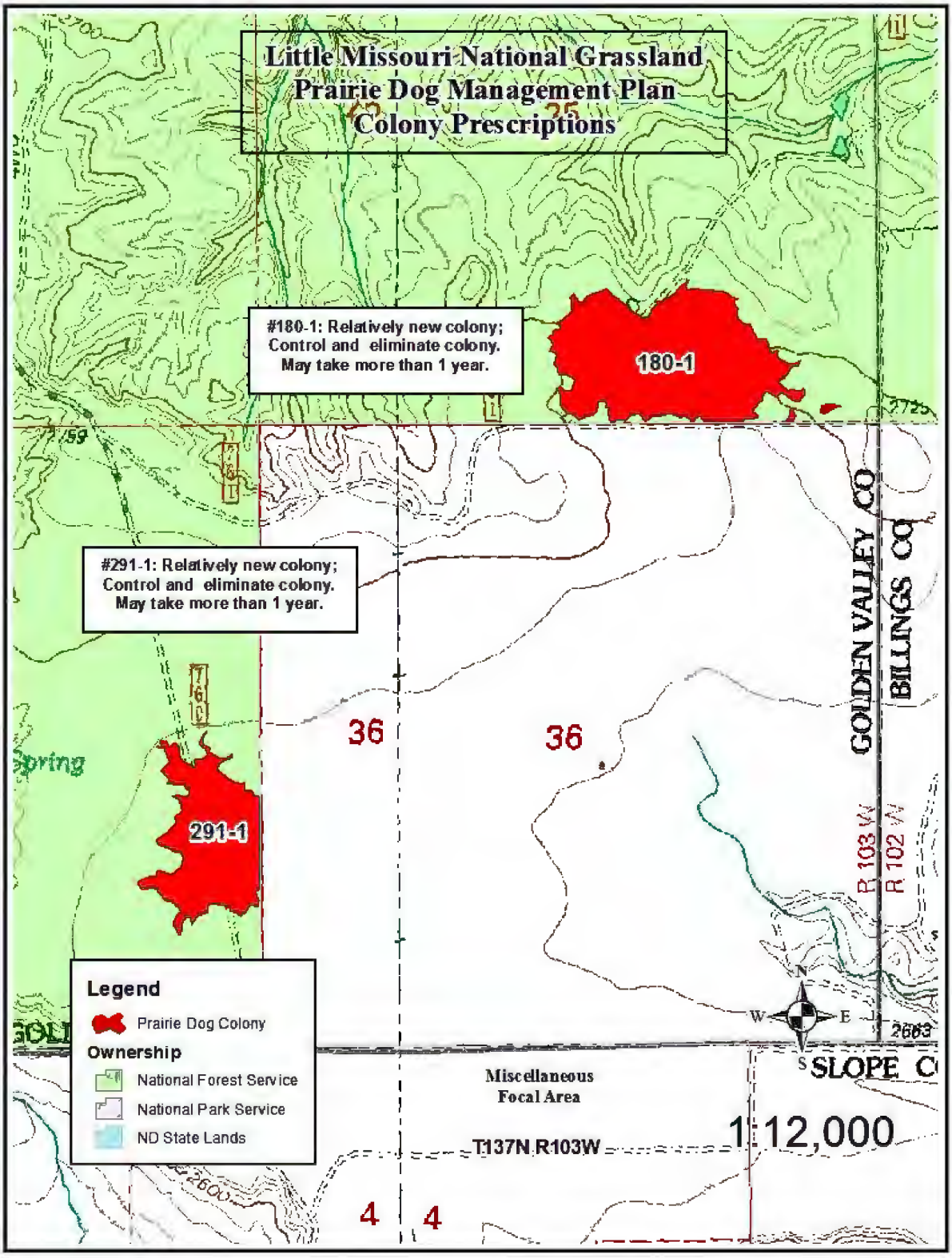

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#022-1: Control and
eliminate colony.
May take more than 1 year.
022-1
3096
3087
3082
36
1
West
3100
R 104 W
R 103 W
Legend
13410405_excl_perimeter
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
N
W
E
S
NORTH
3
Miscellaneous
Focal Area
T133N R103W
1:12,000

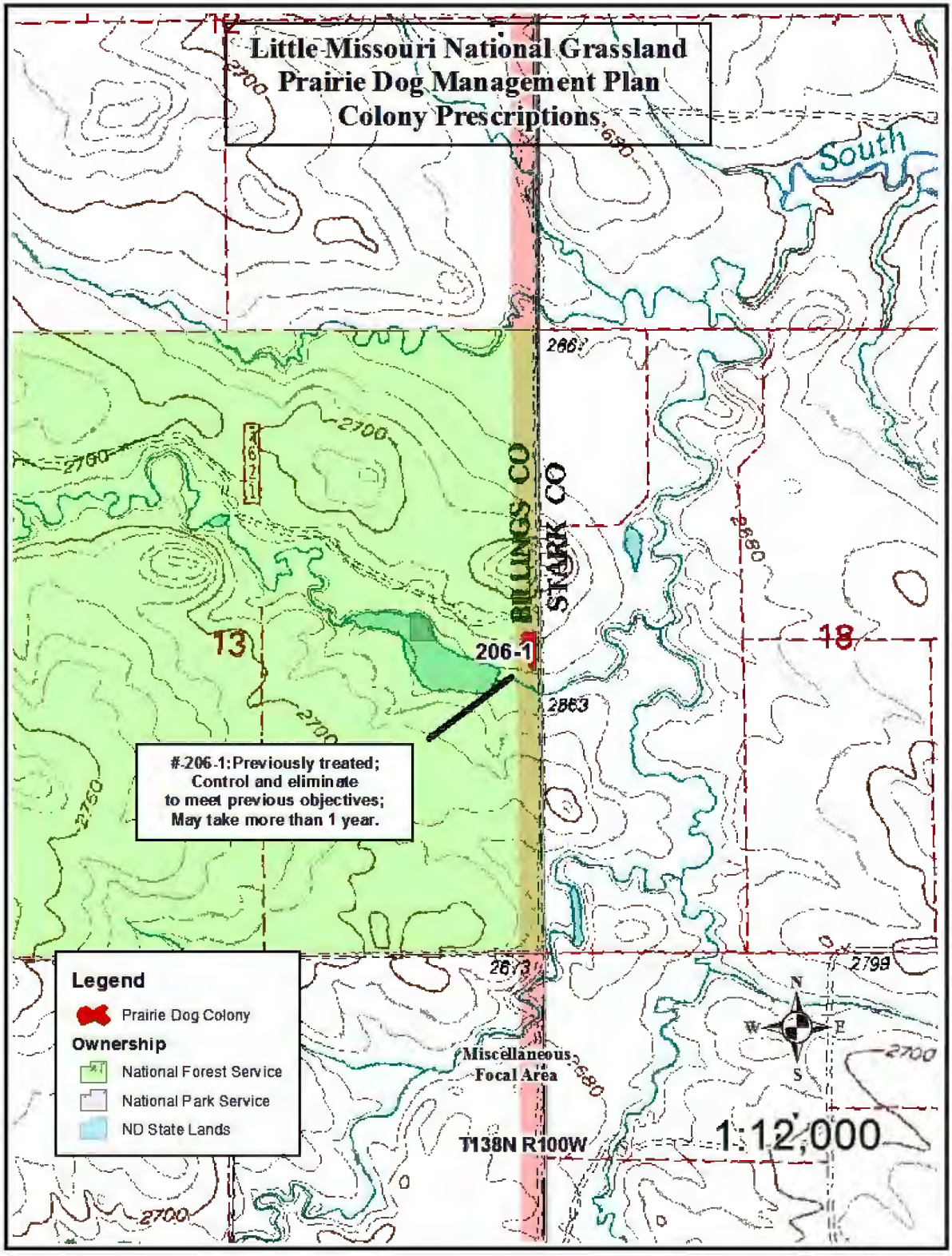

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#029-1: Previously treated;
Control and eliminate colony
to meet objectives.
May take more than 1 year.
029-1
Little Missouri River
LITTLE MISSOURI RIVER
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
Miscellaneous
Focal Area
T136N R103W
1:12,000

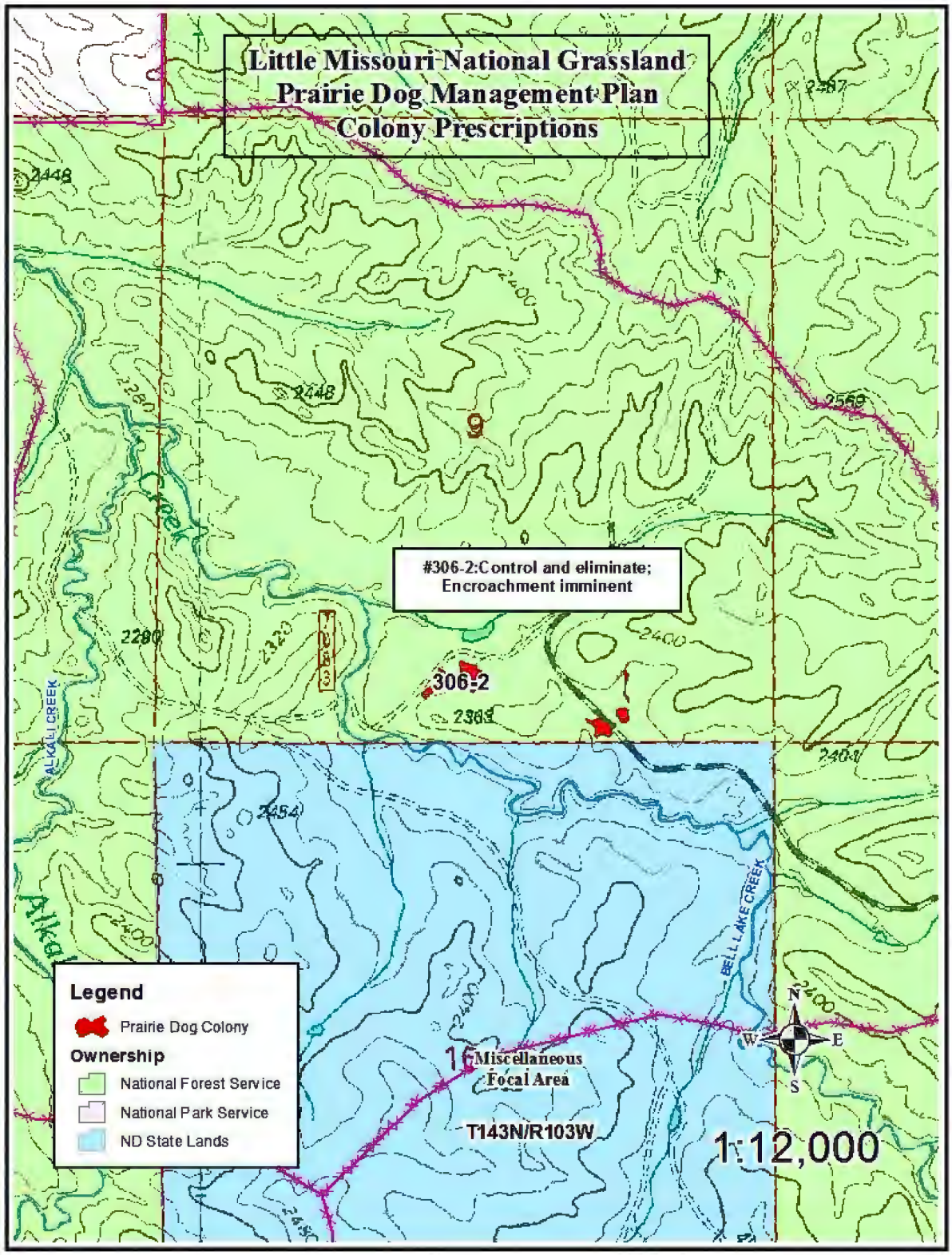

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
Spring
35
36
2650
BILLINGS CO
SLOPE CO
#-033-1: Pereviously treated;
Control and eliminate colony
to meet objectives;
May take more than 1 year.
033-1
2637
Hanleys
5
4
4
Well
2671
5
4
4
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
N
W
E
S
Miscellaneous
Focal Area
T137N R103W
1:12,000
2653
2646
4WD
2634

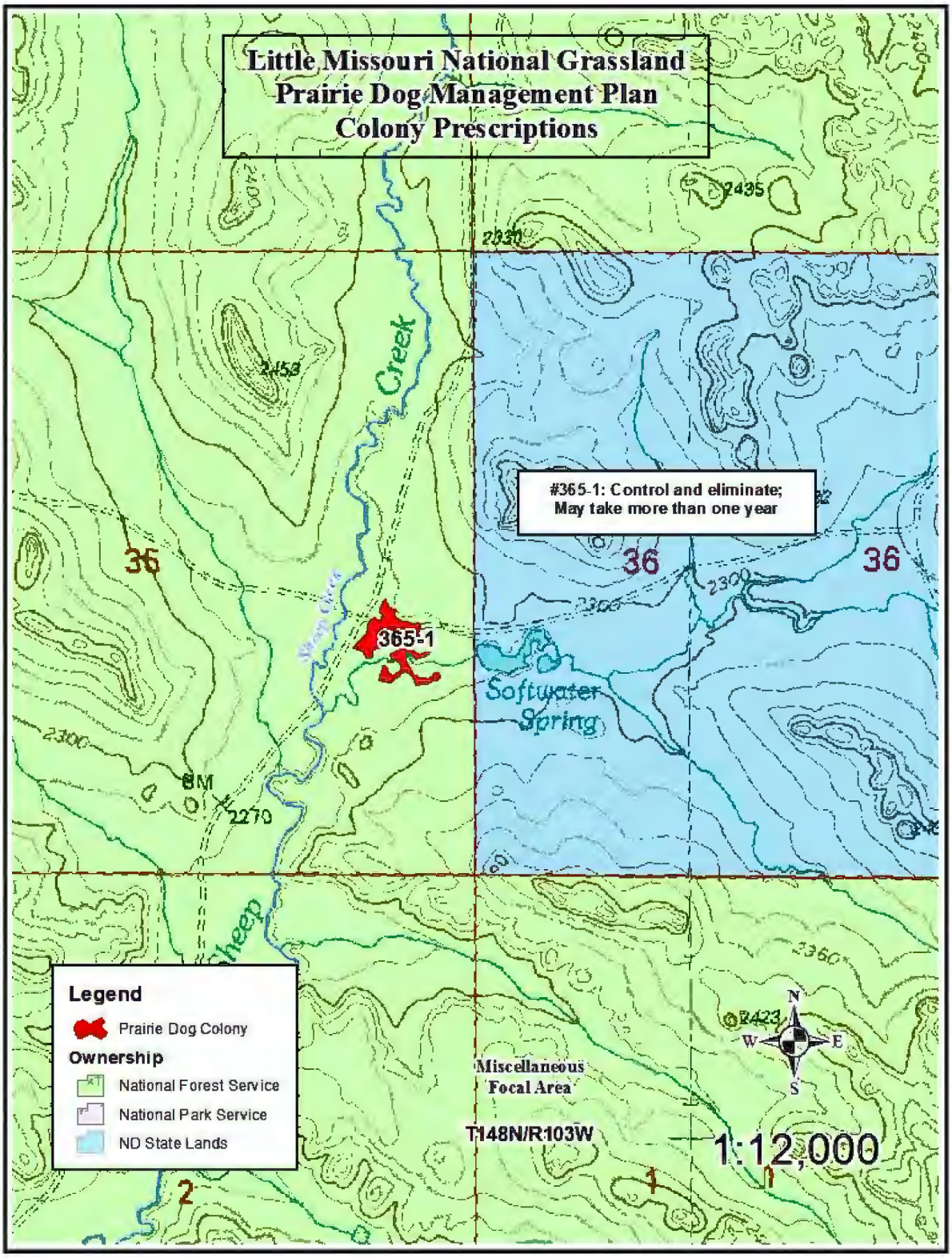

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#054-1: Control and eliminate entire colony;
May take more than 1 year.
054-1
4WD
2739
2724
2805
2700
2724
17
1674
Sand Creek
2644
2700
Well
Legend
13410405_excl_perimeter
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
Miscellaneous
Focal Area
20
T135N R102W
2631
2803
1:12,000
N
W
E
S

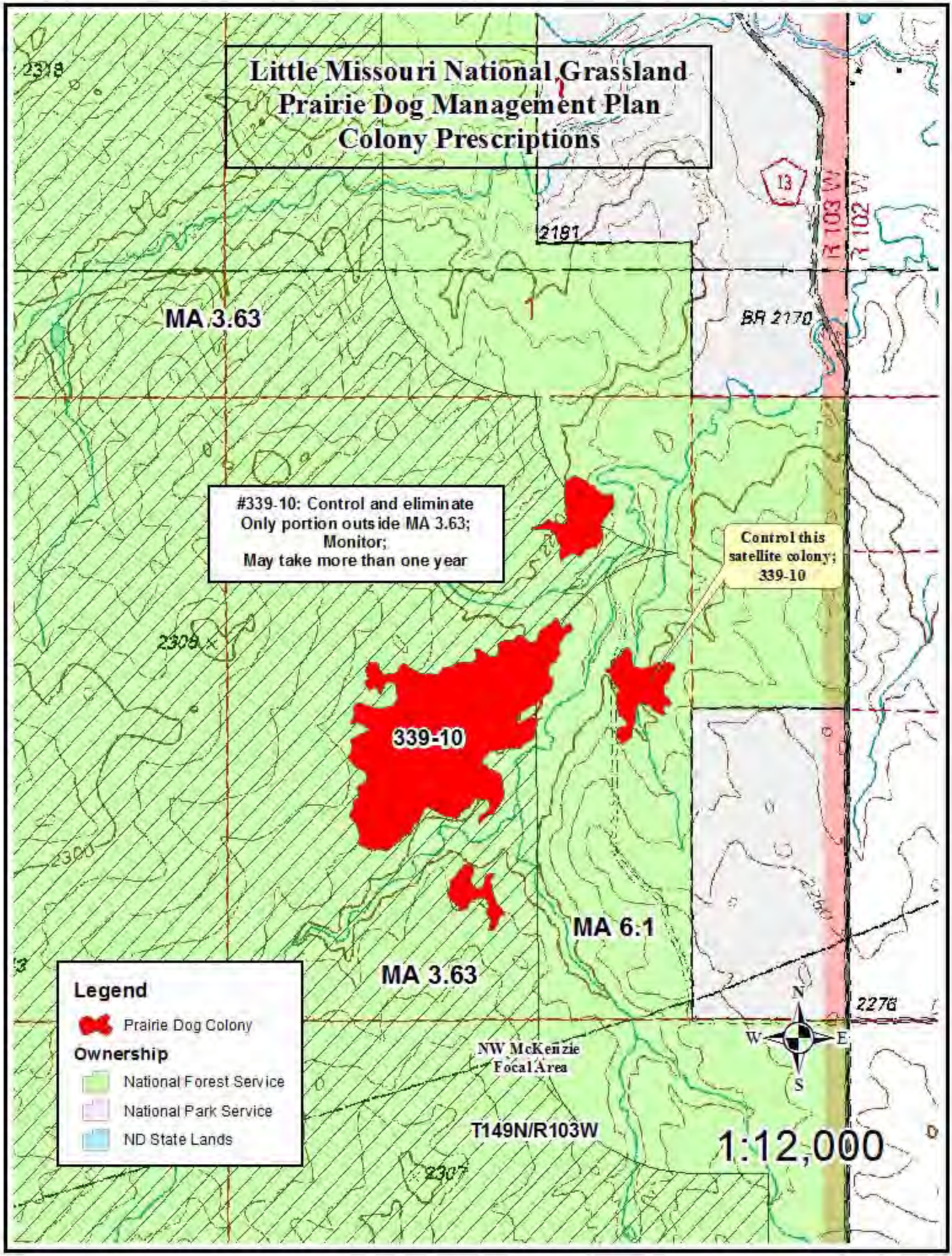

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#093-1: New colony.
Control and eliminate colony.
May take more than 1 year.
093-1
25
Spring
Legend
13410405_excl_perimeter
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
Miscellaneous
Focal Area
T135N R104W
1:12,000
N
W
E
S

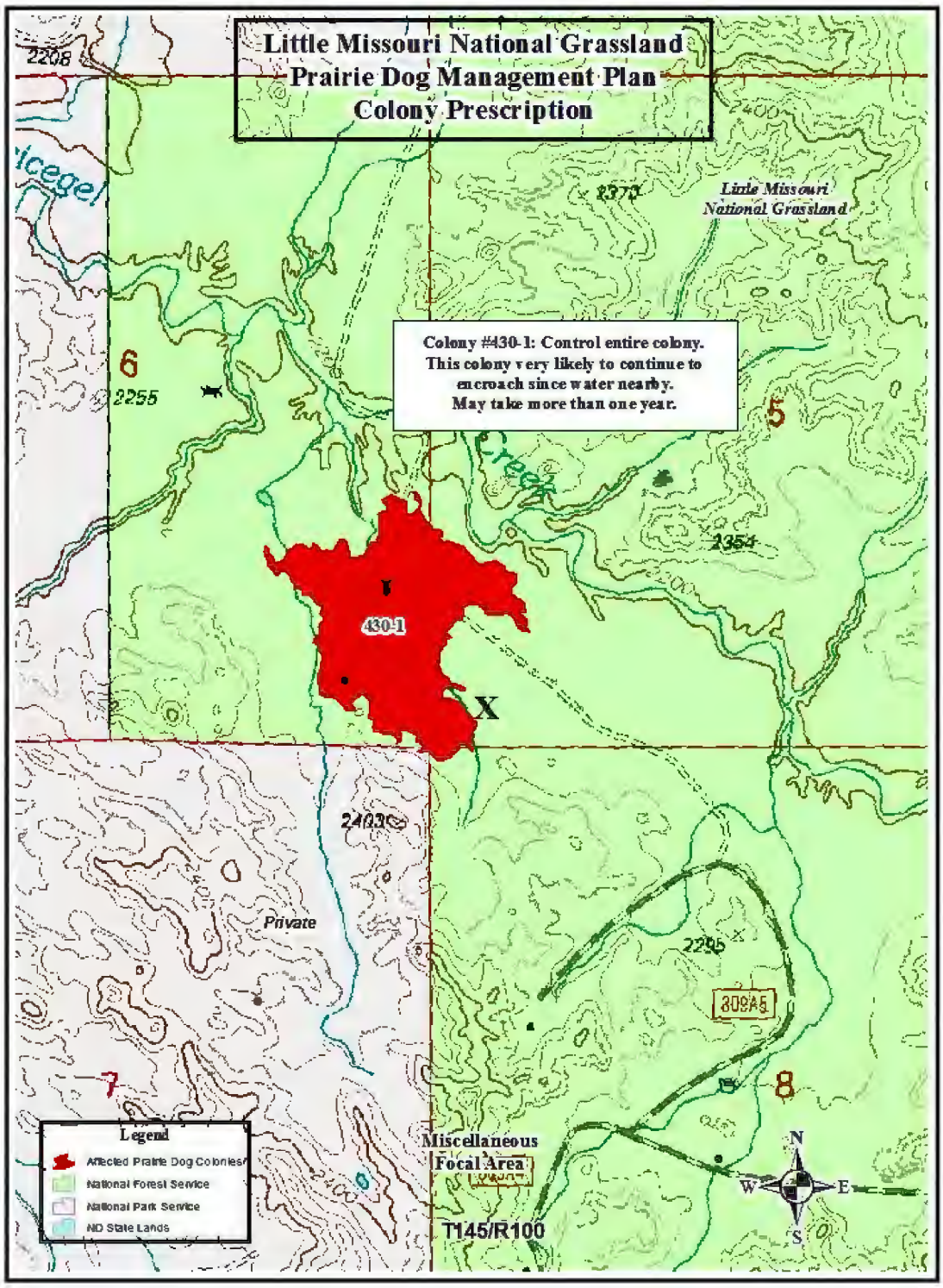

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#180-1: Relatively new colony; Control and eliminate colony. May take more than 1 year.
180-1
#291-1: Relatively new colony; Control and eliminate colony. May take more than 1 year.
291-1
36
36
GOLDEN VALLEY CO
BILLINGS CO
R 103 W
R 102 W
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
Miscellaneous
Focal Area
T137N R103W
1:12,000
SLOPE C
4
4

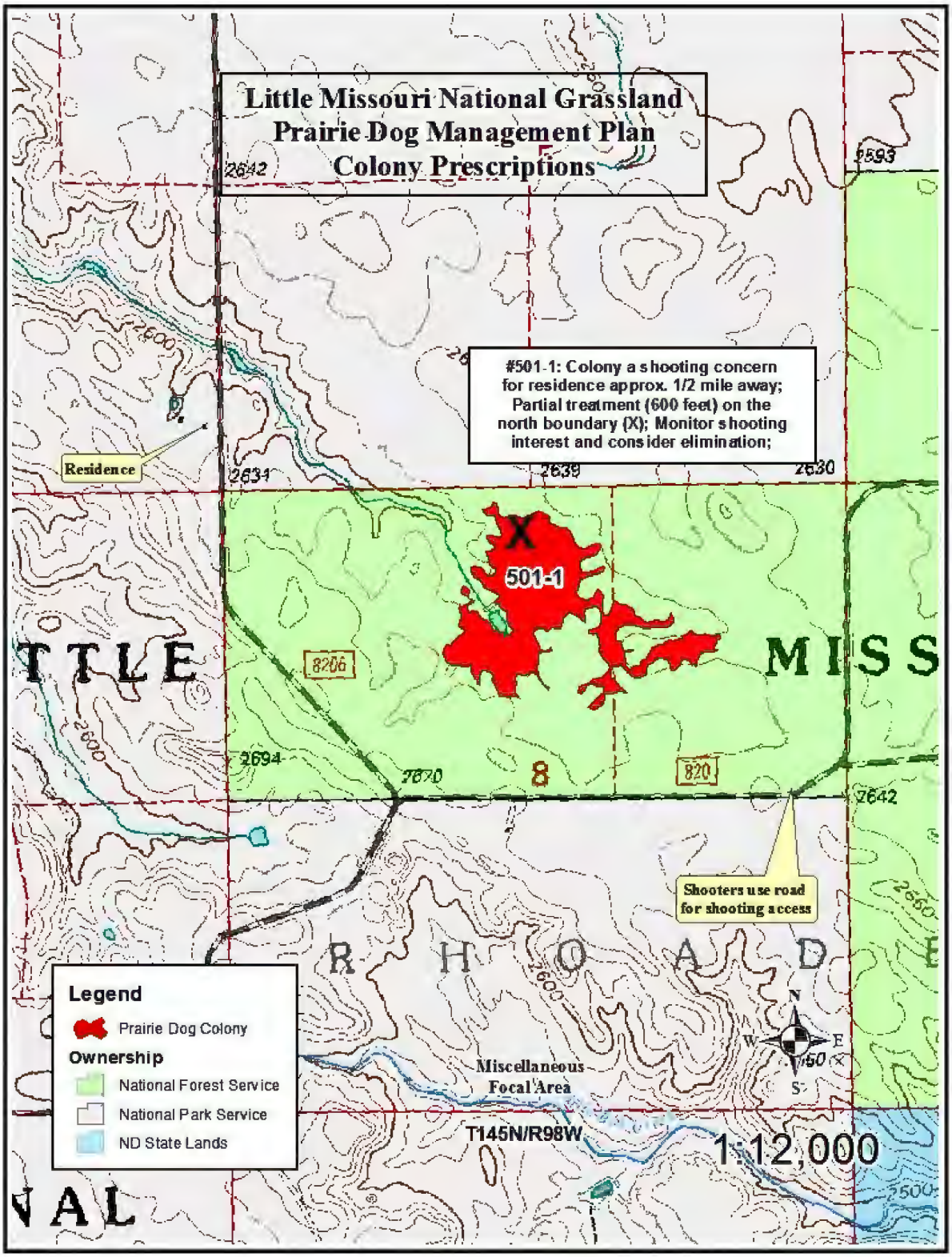

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
South
BILLINGS CO
STARK CO
T3
18
206-1
#-206-1: Previously treated;
Control and eliminate
to meet previous objectives;
May take more than 1 year.
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
Miscellaneous
Focal Area
T138N R100W
1:12,000
N
W
E
S

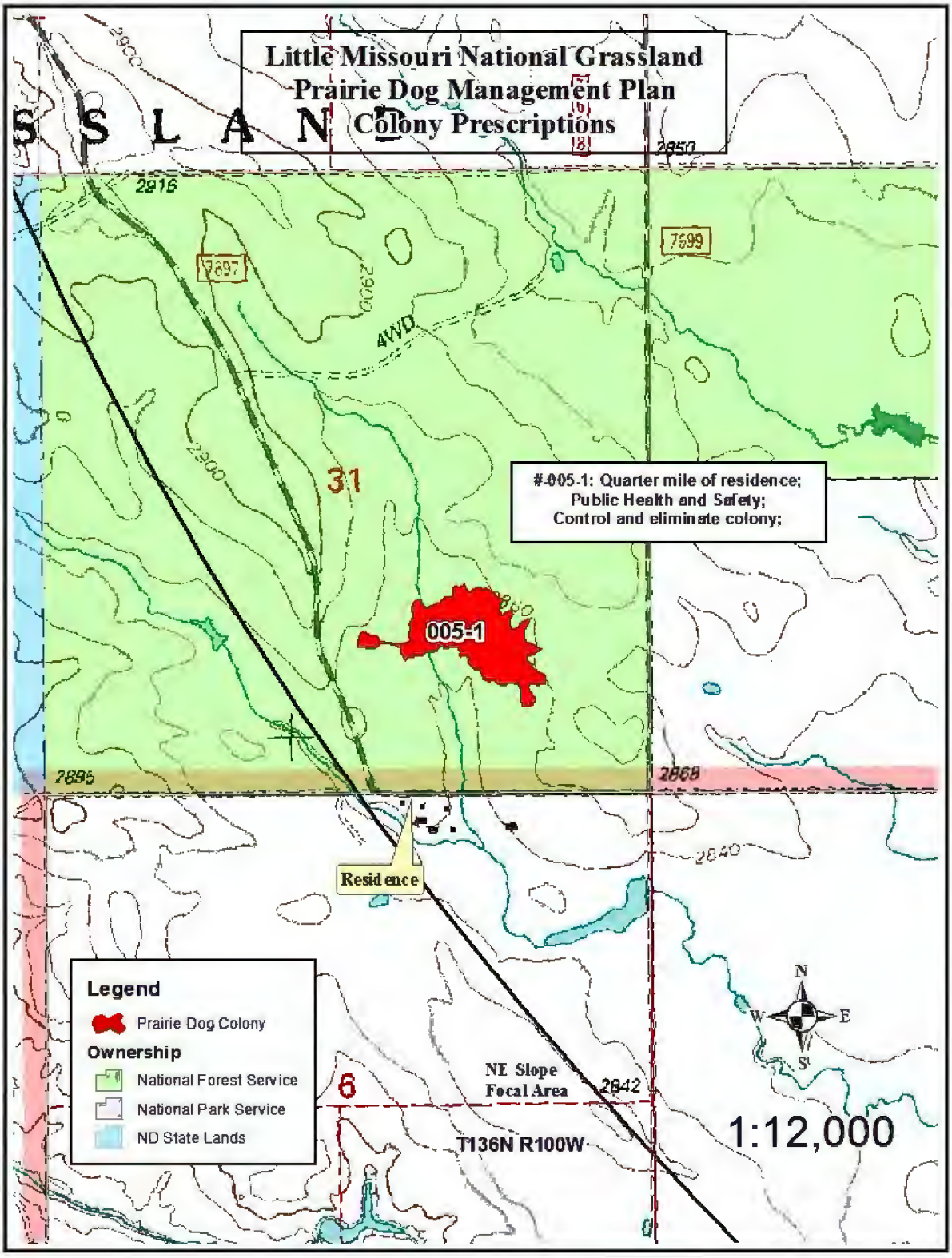

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#306-2:Control and eliminate;
Encroachment imminent
306-2
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
Miscellaneous
Focal Area
T143N/R103W
1:12,000
ALKALI CREEK
BELL LAKE CREEK
N
S
E
W

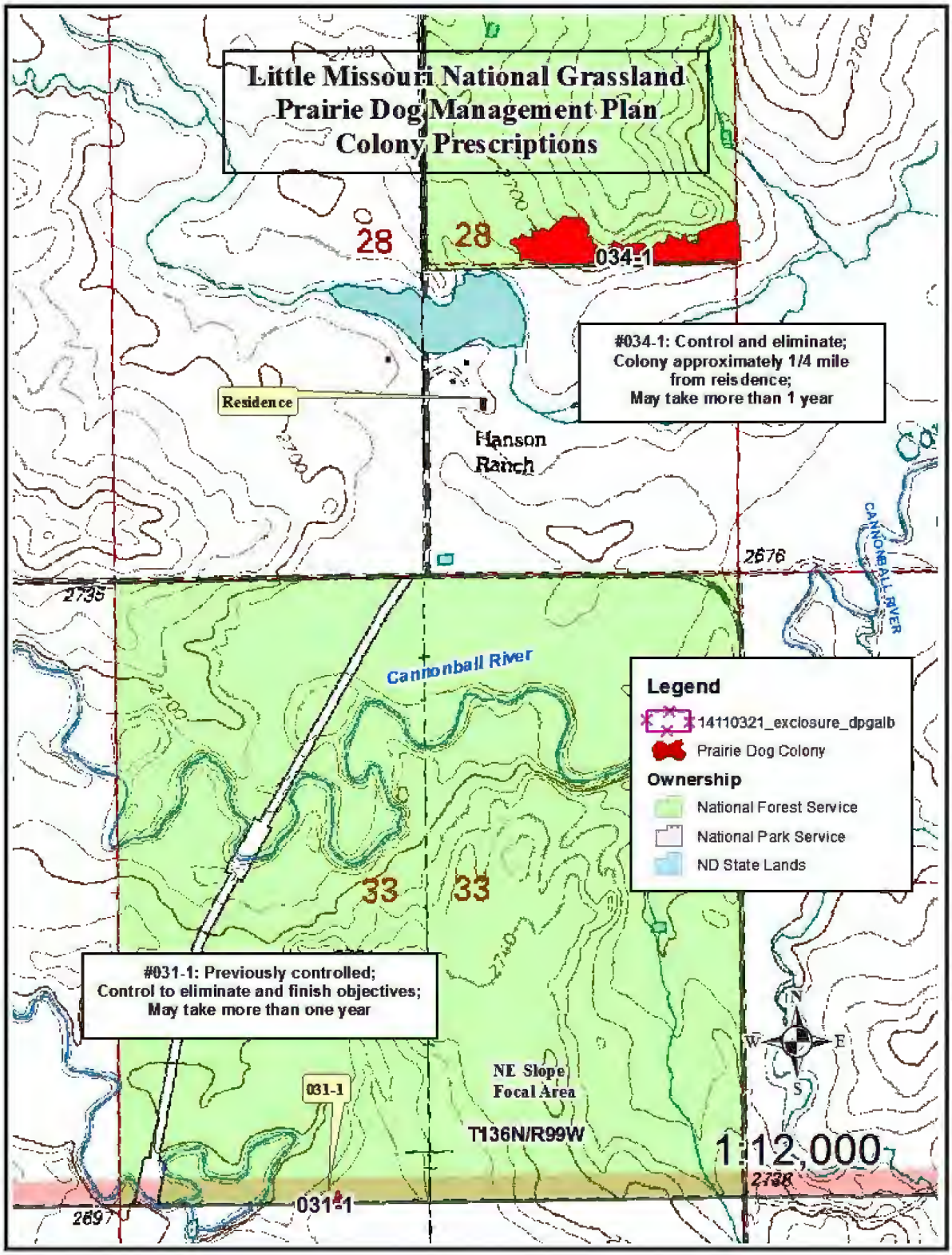

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#365-1: Control and eliminate;
May take more than one year
365-1
Sheep Creek
Softwater Spring
36
36
36
2435
2430
2458
2300
2270
BM
2360
2423
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
Miscellaneous
Focal Area
T148N/R103W
1:12,000
N
W
E
S

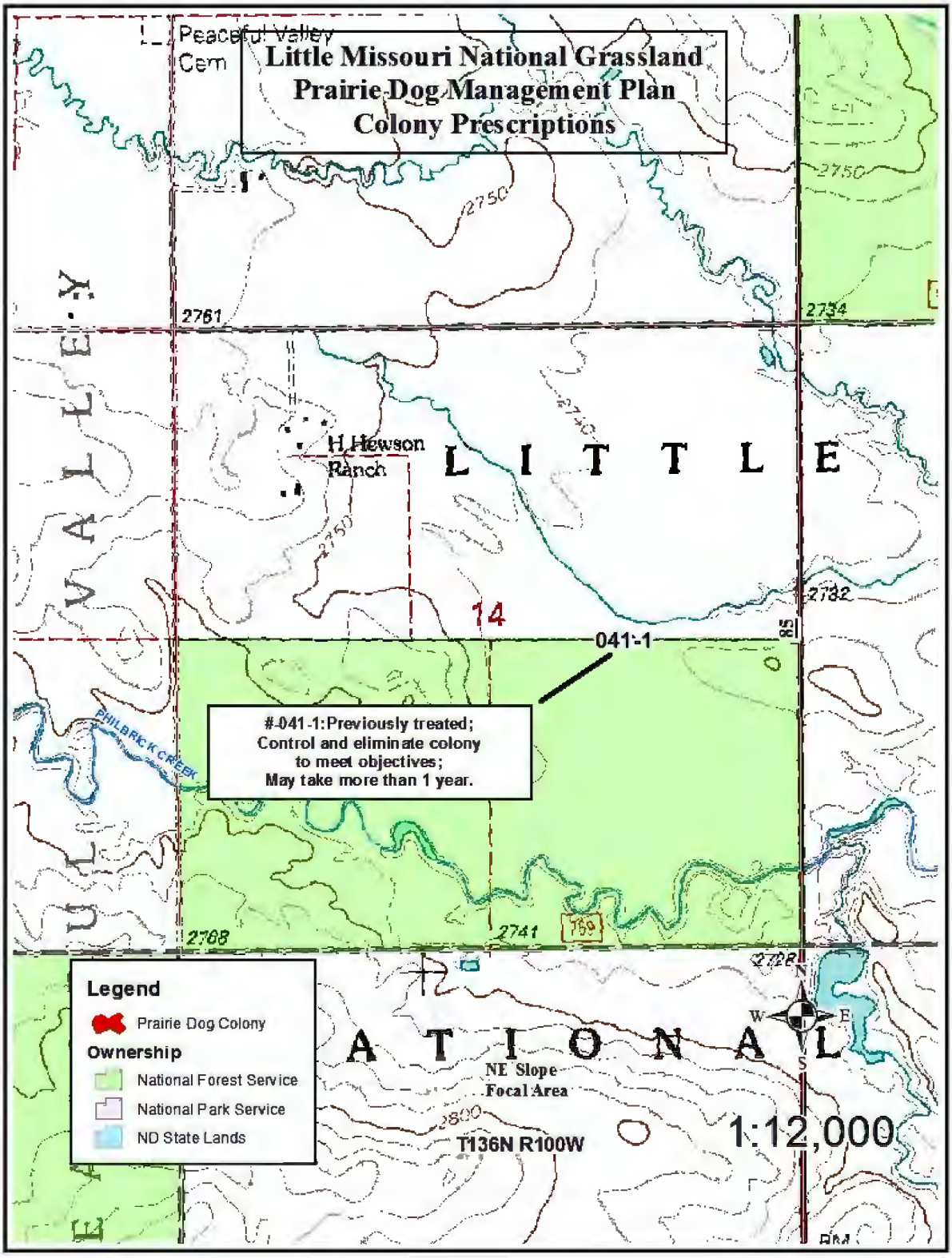

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
MA 3.63
#339-10: Control and eliminate
Only portion outside MA 3.63;
Monitor;
May take more than one year
Control this satellite colony; 339-10
339-10
MA 6.1
MA 3.63
BR 2170
2191
2276
2309
2300
2307
R 103 W
R 102 W
13
N
W
E
S
NW McKenzie Focal Area
T149N/R103W
1:12,000
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands

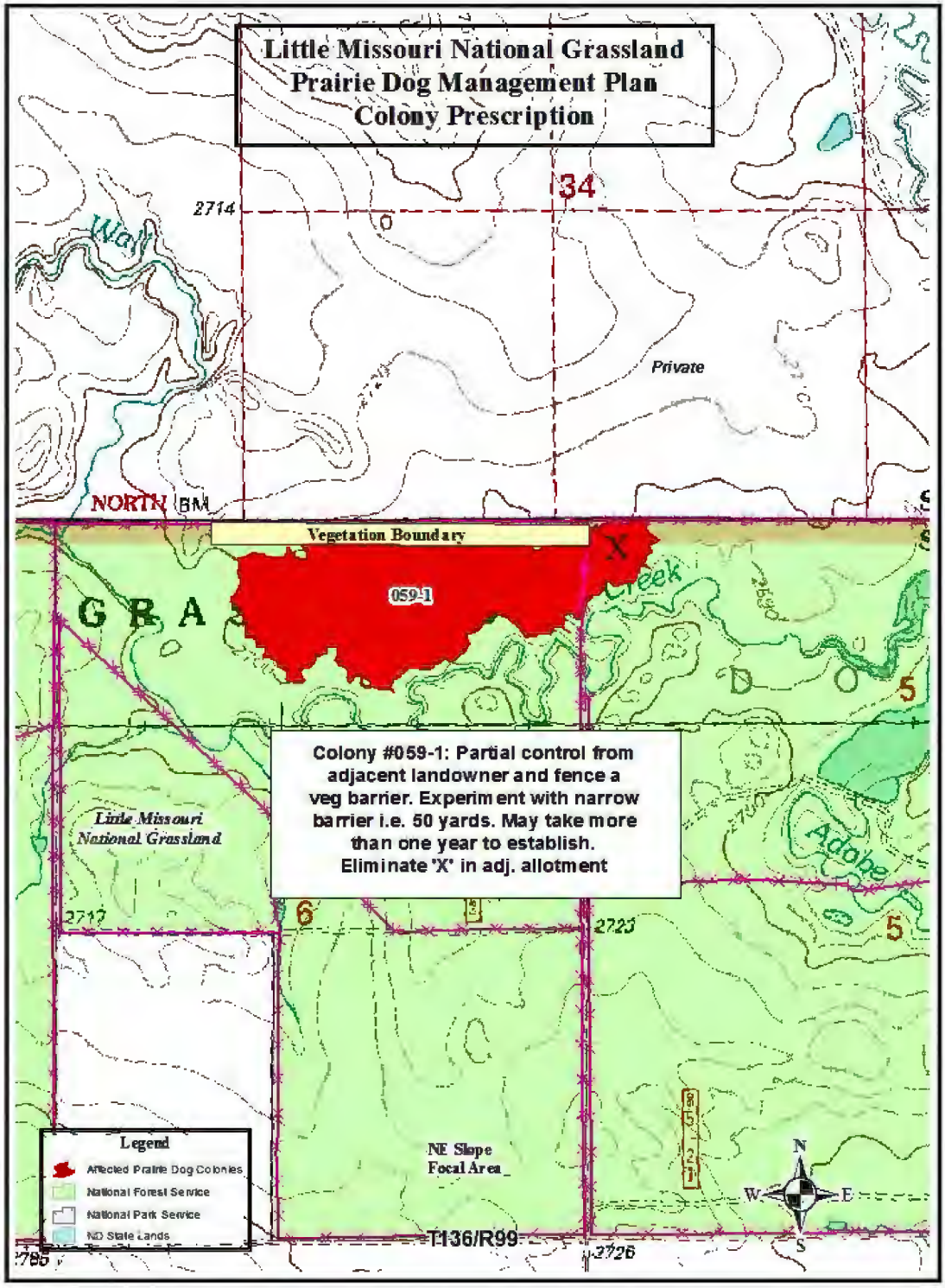

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription
Colony #430-1: Control entire colony.
This colony very likely to continue to
encroach since water nearby.
May take more than one year.
430-1
X
Little Missouri
National Grassland
Private
Miscellaneous
Focal Area
T145/R100
Legend
Affected Prairie Dog Colonies
National Forest Service
National Park Service
ND State Lands
N
W
E
S

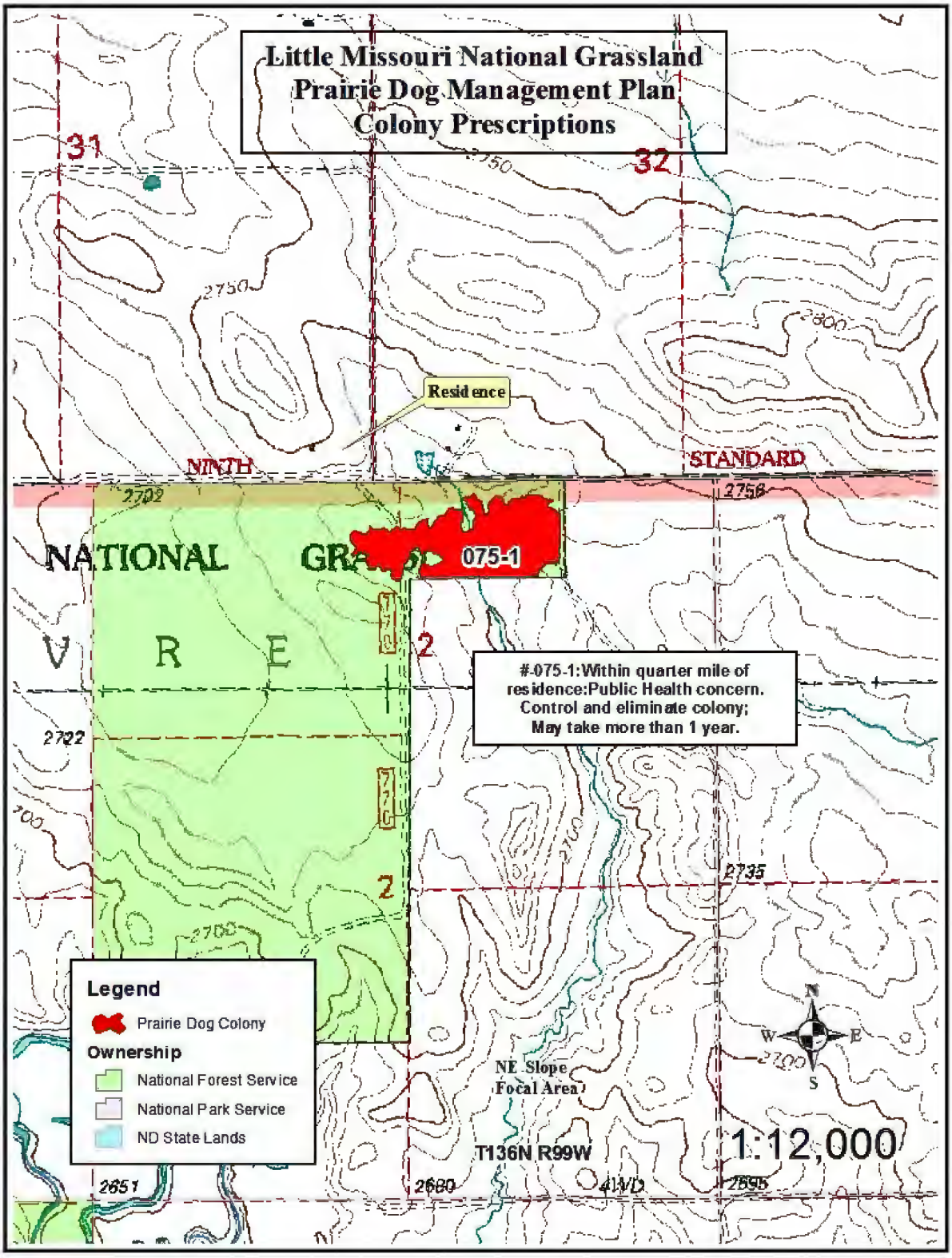

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#501-1: Colony a shooting concern for residence approx. 1/2 mile away; Partial treatment (600 feet) on the north boundary (X); Monitor shooting interest and consider elimination;
Residence
X
501-1
Shooters use road for shooting access
Miscellaneous Focal Area
T145N/R98W
1:12,000
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
N
S
E
W
8206
820
8
2642
2593
2631
2639
2630
2694
7870
2600
2500

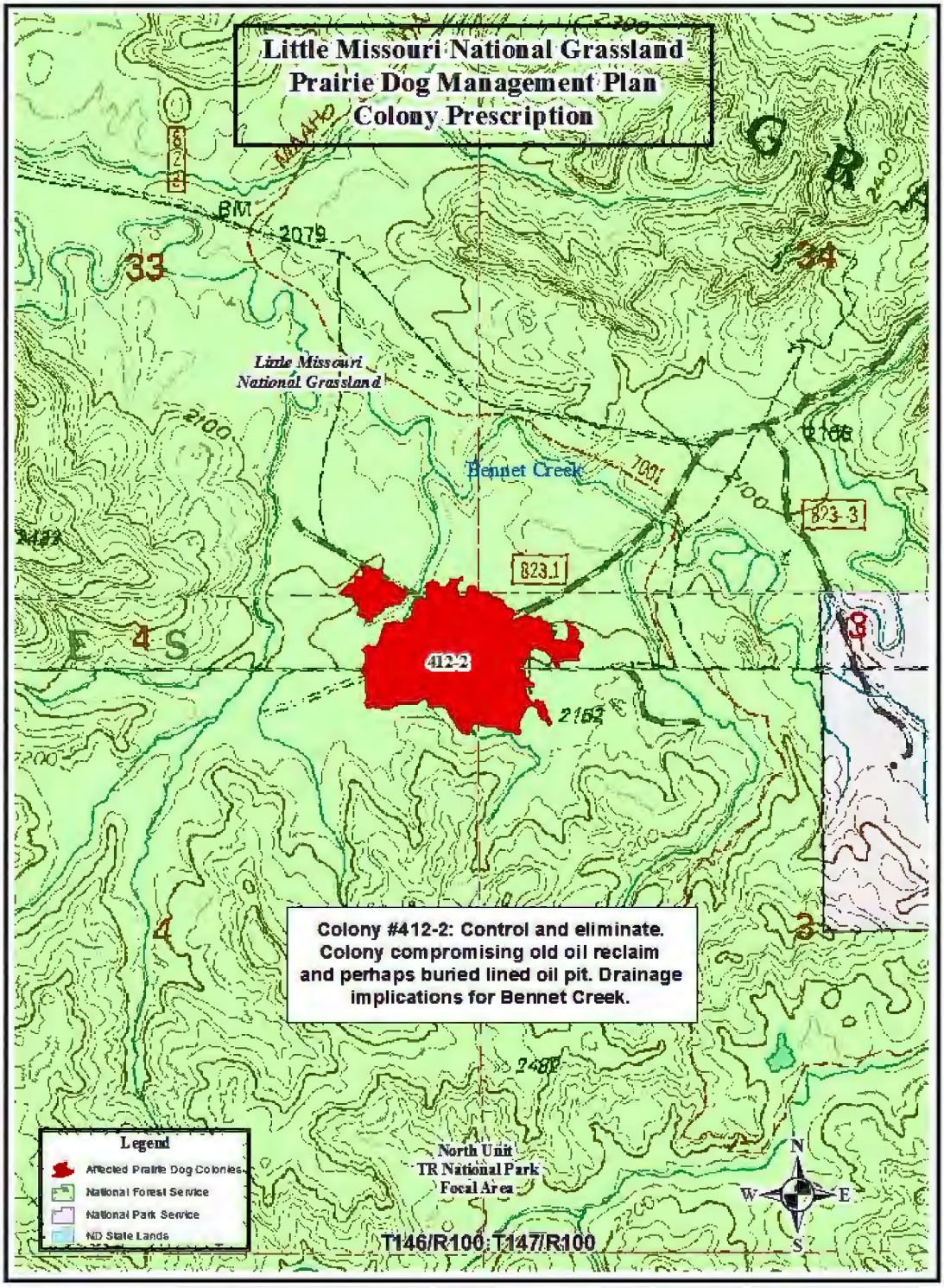

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
S S L A N
2916
2900
2850
7697
7699
4WD
31
#-005-1: Quarter mile of residence;
Public Health and Safety;
Control and eliminate colony;
005-1
2895
2868
2840
Residence
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
N
W
E
S
6
NE Slope
Focal Area
2842
T136N R100W
1:12,000

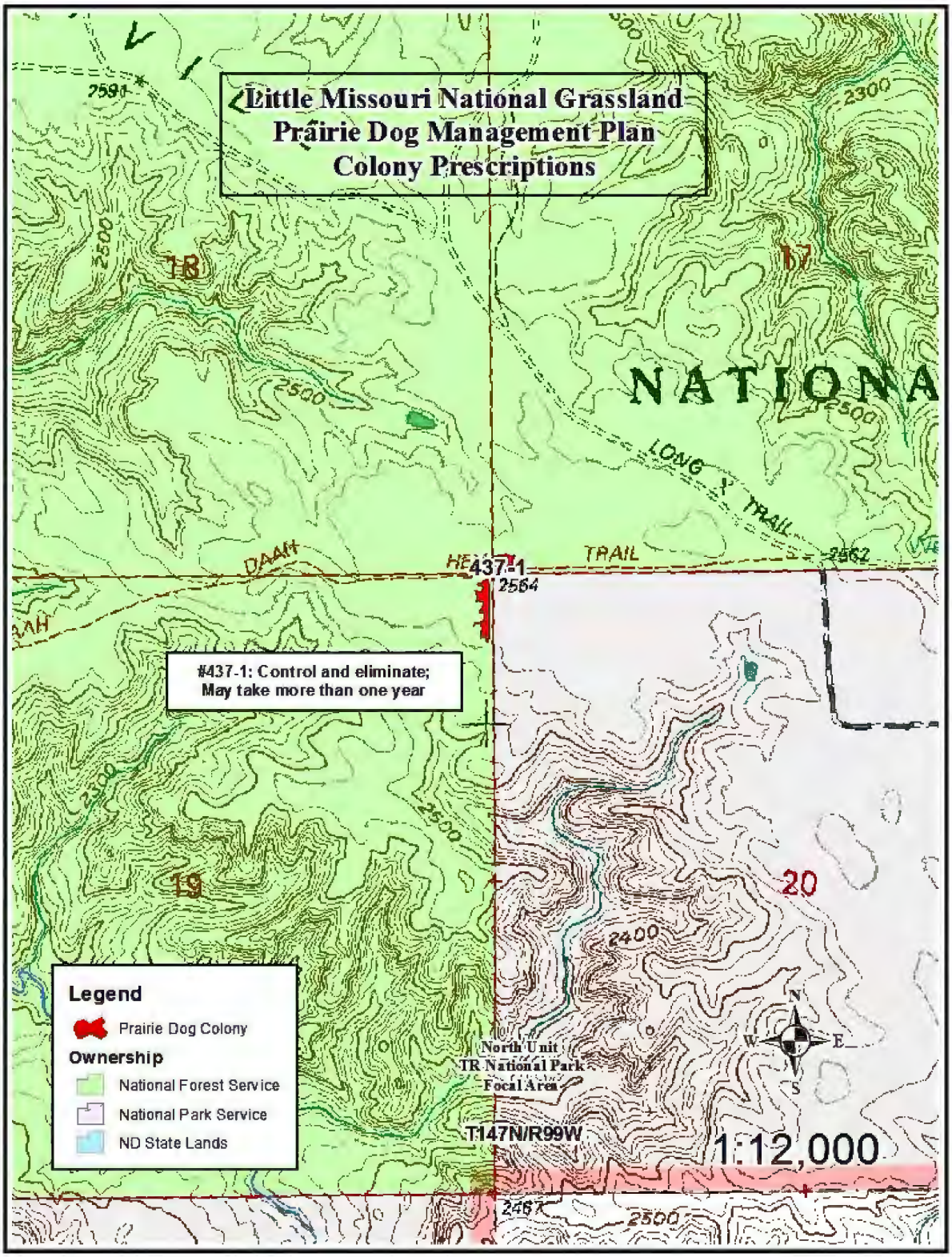

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
28
28
034-1
#034-1: Control and eliminate;
Colony approximately 1/4 mile
from reisdence;
May take more than 1 year
Residence
Hanson
Ranch
2676
2735
CANNONBALL RIVER
Cannonball River
Legend
14110321_exclosure_dpgalb
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
33
33
#031-1: Previously controlled;
Control to eliminate and finish objectives;
May take more than one year
031-1
NE Slope
Focal Area
T136N/R99W
1:12,000
N
W
E
S
031-1
2697

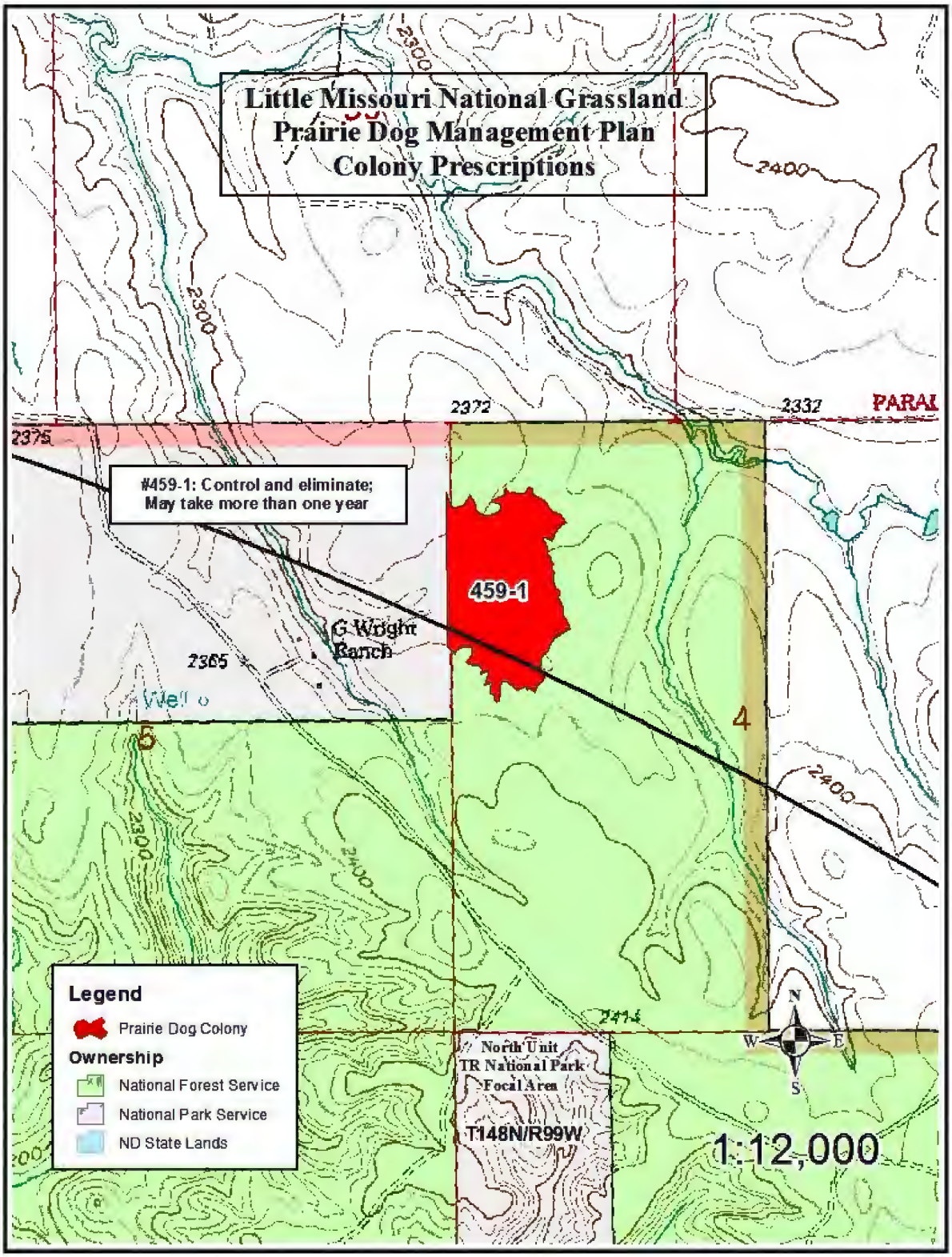

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
Peaceful Valley Cem
H Hewson Ranch
L I T T L E
V A L L E Y
A T I O N A L
14
041-1
#-041-1: Previously treated;
Control and eliminate colony
to meet objectives;
May take more than 1 year.
PHILBRICK CREEK
2761
2734
2750
2782
2768
2741
2726
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
NE Slope
Focal Area
T136N R100W
1:12,000
N
W
E
S

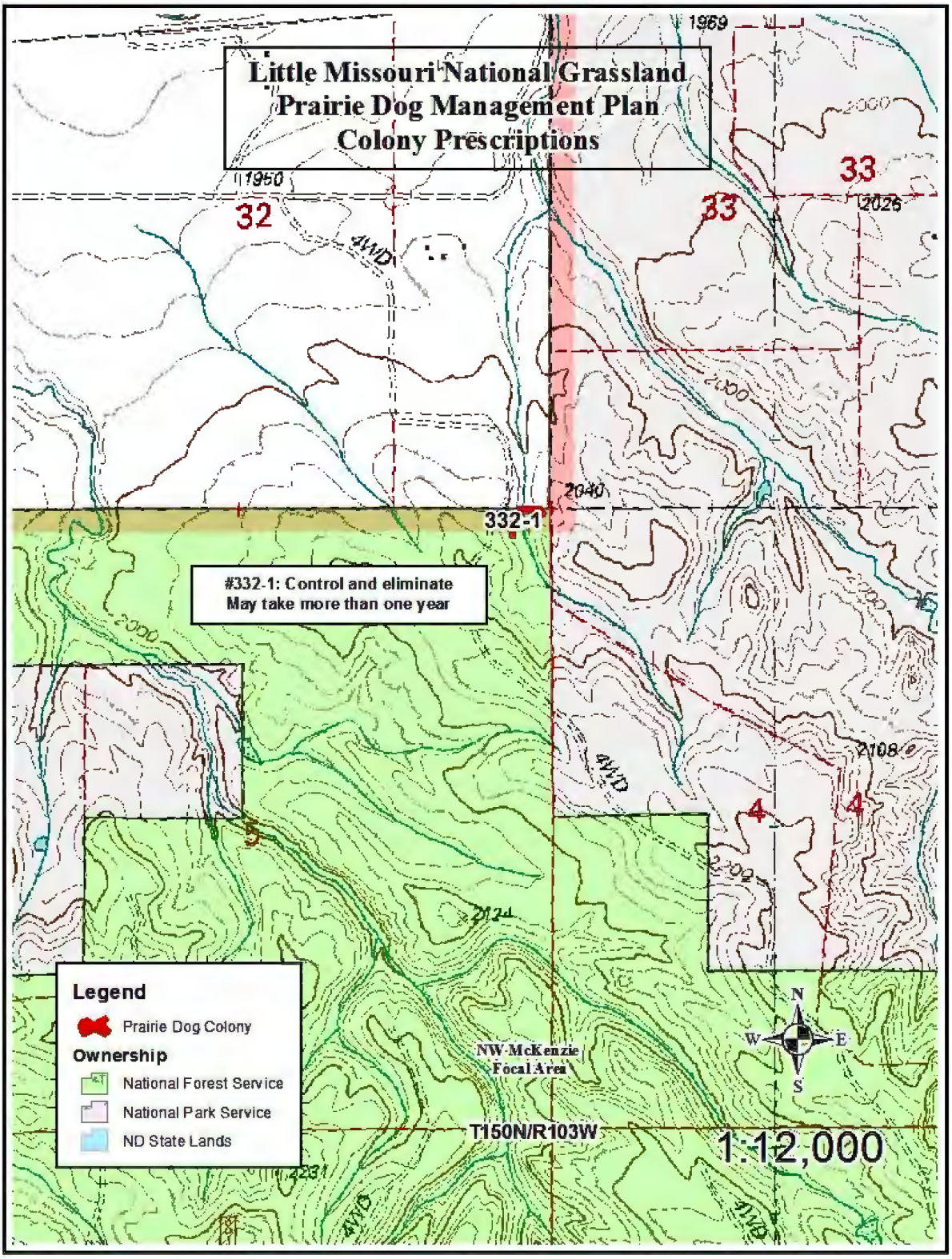

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription
34
2714
Private
NORTH BM
Vegetation Boundary
059-1
X
Creek
5
Colony #059-1: Partial control from adjacent landowner and fence a veg barrier. Experiment with narrow barrier i.e. 50 yards. May take more than one year to establish. Eliminate 'X' in adj. allotment
Little Missouri National Grassland
Adobe
2717
6
2723
5
Legend
Affected Prairie Dog Colonies
National Forest Service
National Park Service
ND State Lands
NE Slope Focal Area
N
W
E
S
T136/R99
2726

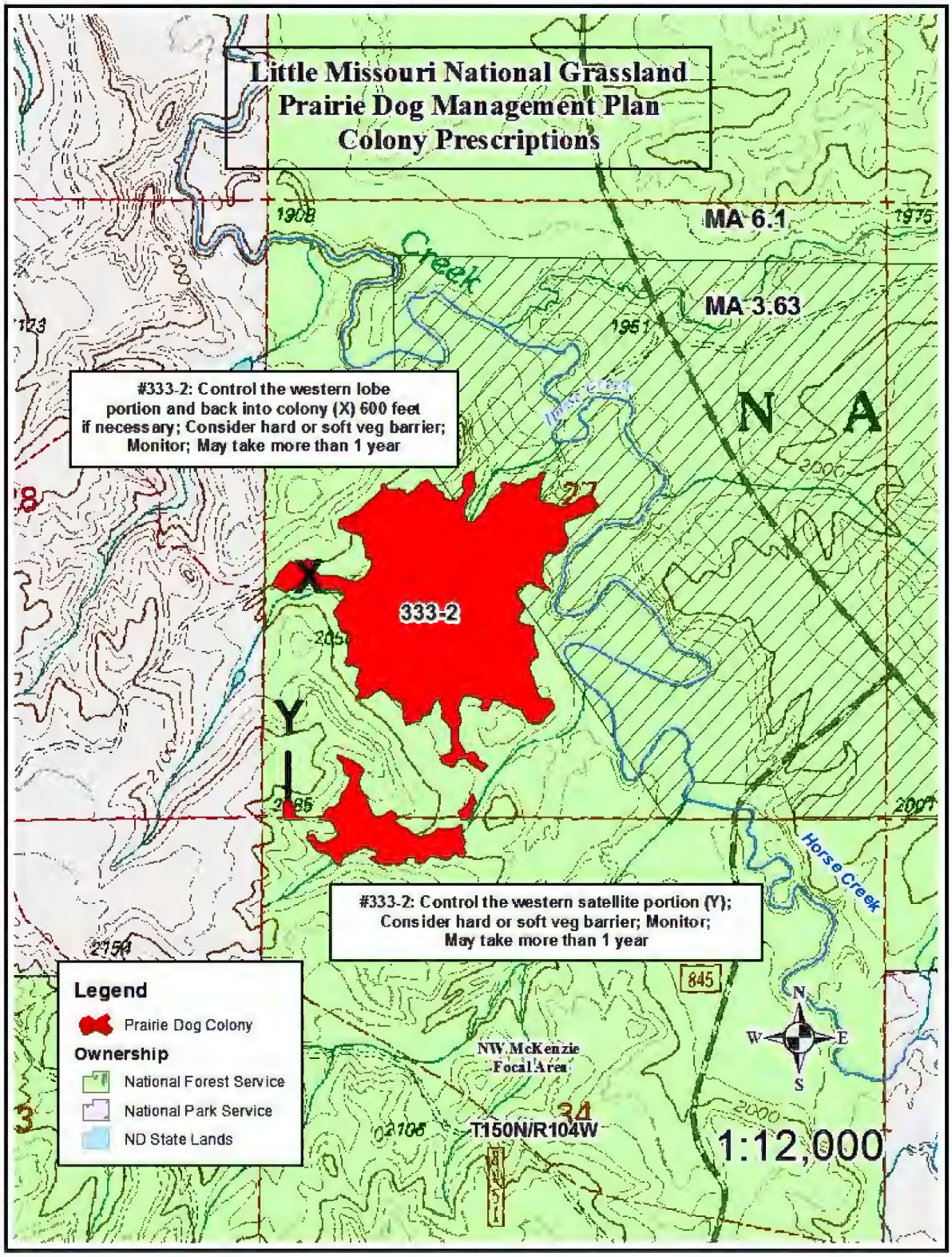

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
31
32
Residence
NINTH
STANDARD
075-1
NATIONAL
GR
V
R
E
2
#-075-1:Within quarter mile of residence:Public Health concern. Control and eliminate colony; May take more than 1 year.
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
NE Slope
Focal Area
T136N R99W
1:12,000
N
S
E
W

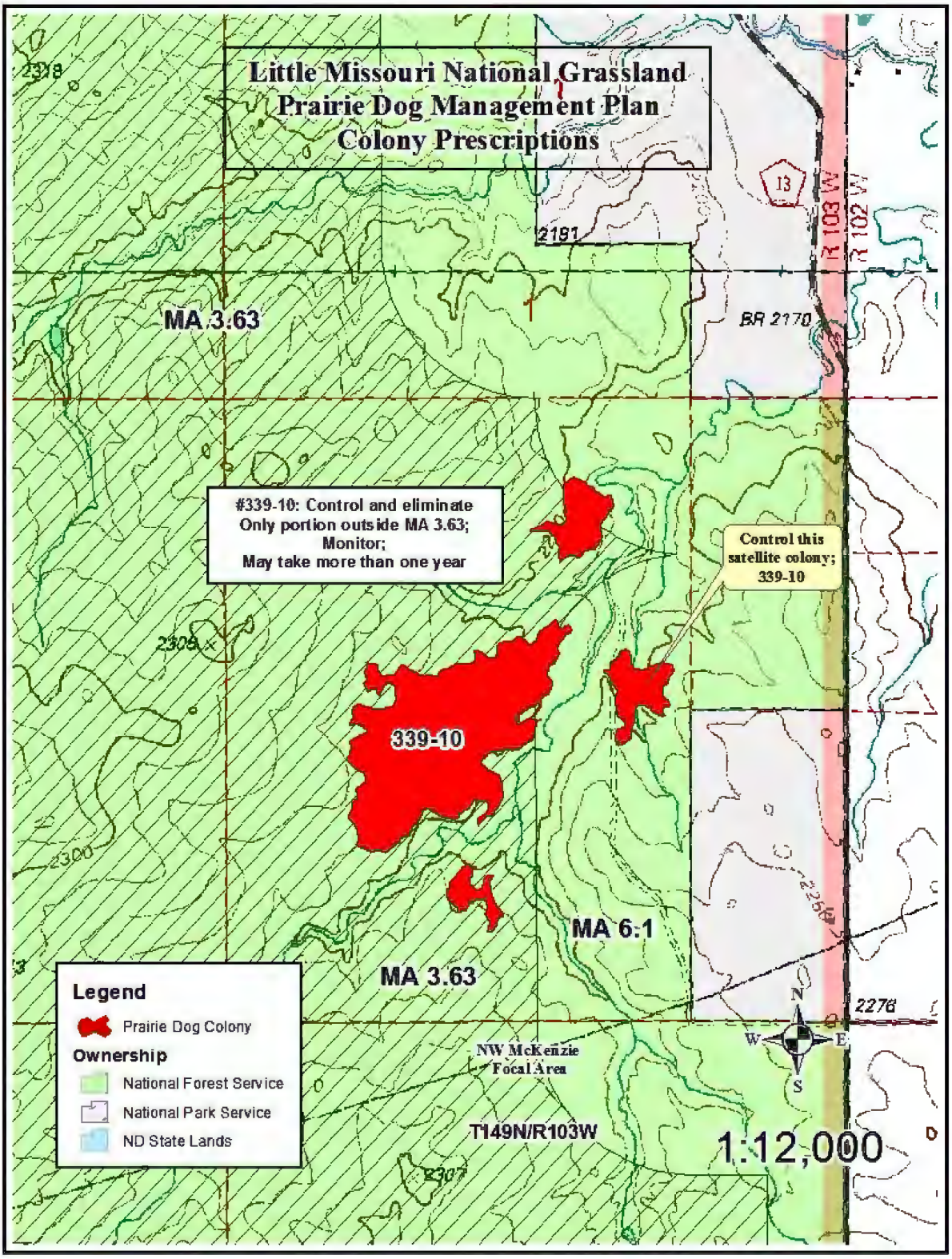

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription
Little Missouri
National Grassland
Bennet Creek
412-2
823.1
823-3
Colony #412-2: Control and eliminate. Colony compromising old oil reclaim and perhaps buried lined oil pit. Drainage implications for Bennet Creek.
Legend
Affected Prairie Dog Colonies
National Forest Service
National Park Service
ND State Lands
North Unit
TR National Park
Focal Area
T146/R100 T147/R100
N
W
E
S

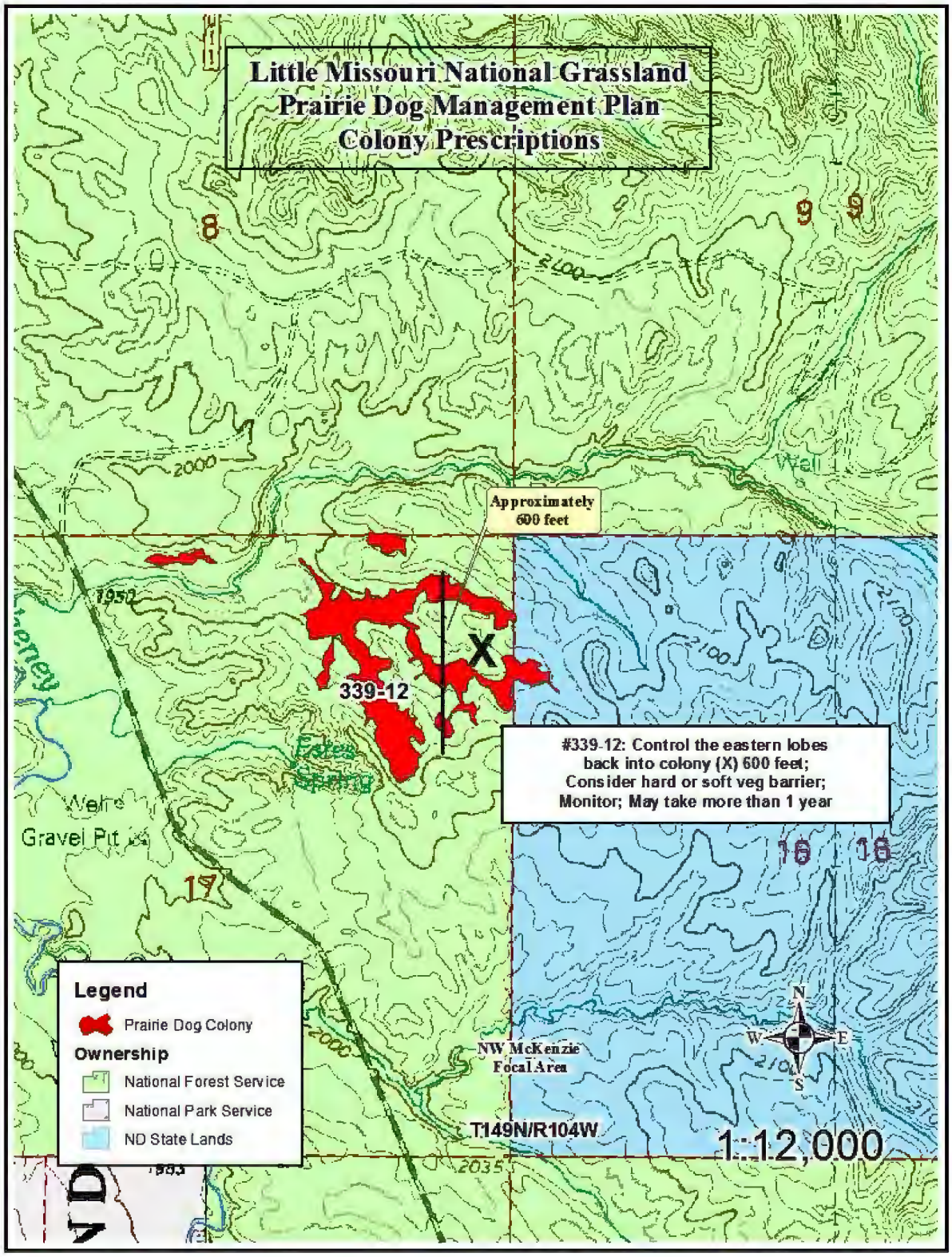

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#437-1: Control and eliminate;
May take more than one year
437-1
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
North Unit
TR National Park
Focal Area
T147N/R99W
1:12,000
N
S
E
W
18
17
19
20
2591
2500
2300
2400
2564
2562
2467
TRAIL

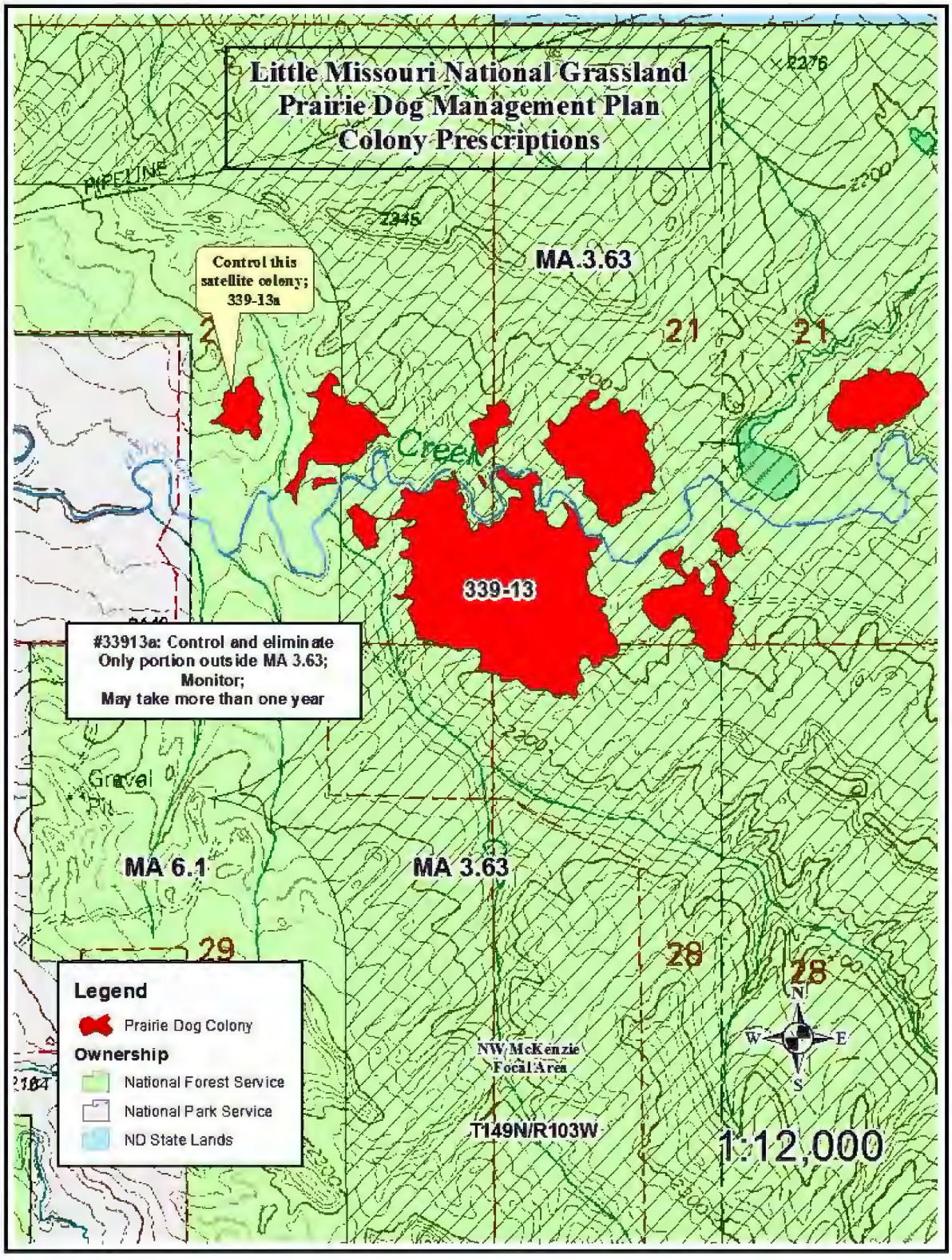

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#459-1: Control and eliminate;
May take more than one year
459-1
G Wright
Ranch
2300
2400
2372
2332
PARAI
2375
2365
Well
5
4
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
North Unit
TR National Park
Focal Area
T148N/R99W
N
W
E
S
1:12,000

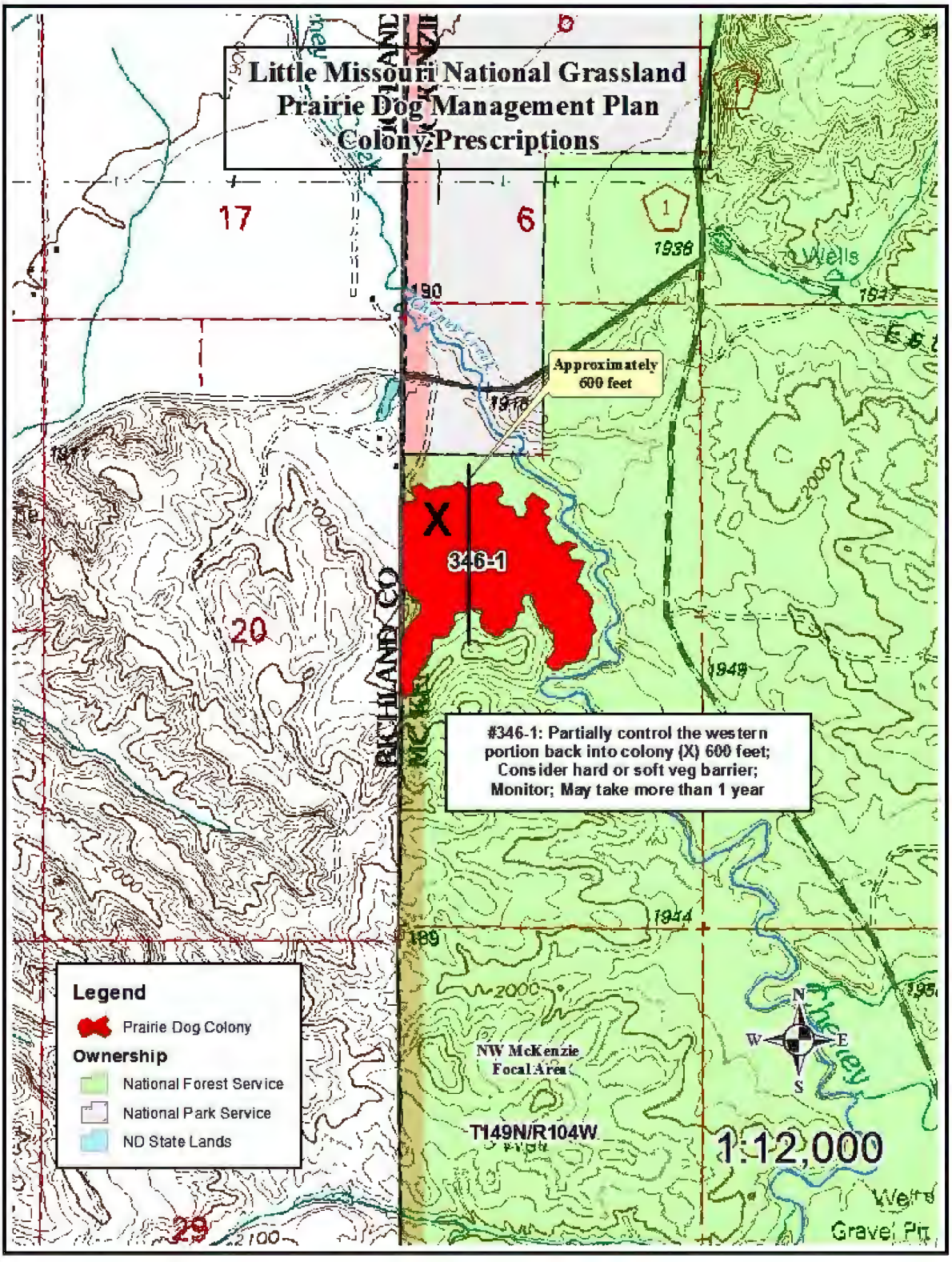

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
1969
1950
32
33
33
2026
4WD
2000
2040
332-1
#332-1: Control and eliminate
May take more than one year
2000
2108
4WD
4
4
5
2124
2002
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
N
W
E
S
NW McKenzie
Focal Area
T150N/R103W
1:12,000
4231
4WD
4WD

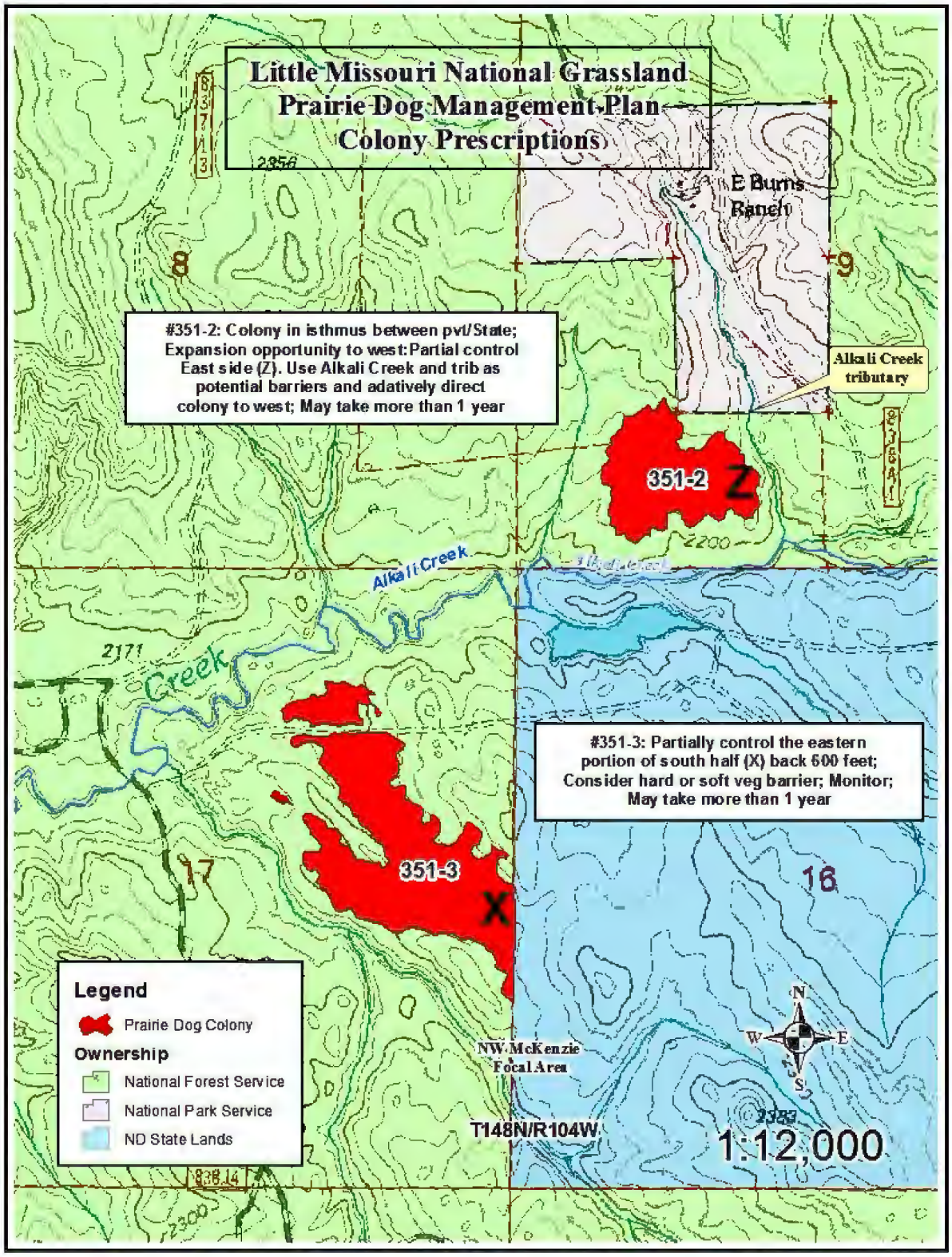

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
MA 6.1
MA 3.63
N A
#333-2: Control the western lobe portion and back into colony (X) 600 feet if necessary; Consider hard or soft veg barrier; Monitor; May take more than 1 year
333-2
X
Y
#333-2: Control the western satellite portion (Y); Consider hard or soft veg barrier; Monitor; May take more than 1 year
Horse Creek
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
NW McKenzie Focal Area
T150N/R104W
1:12,000

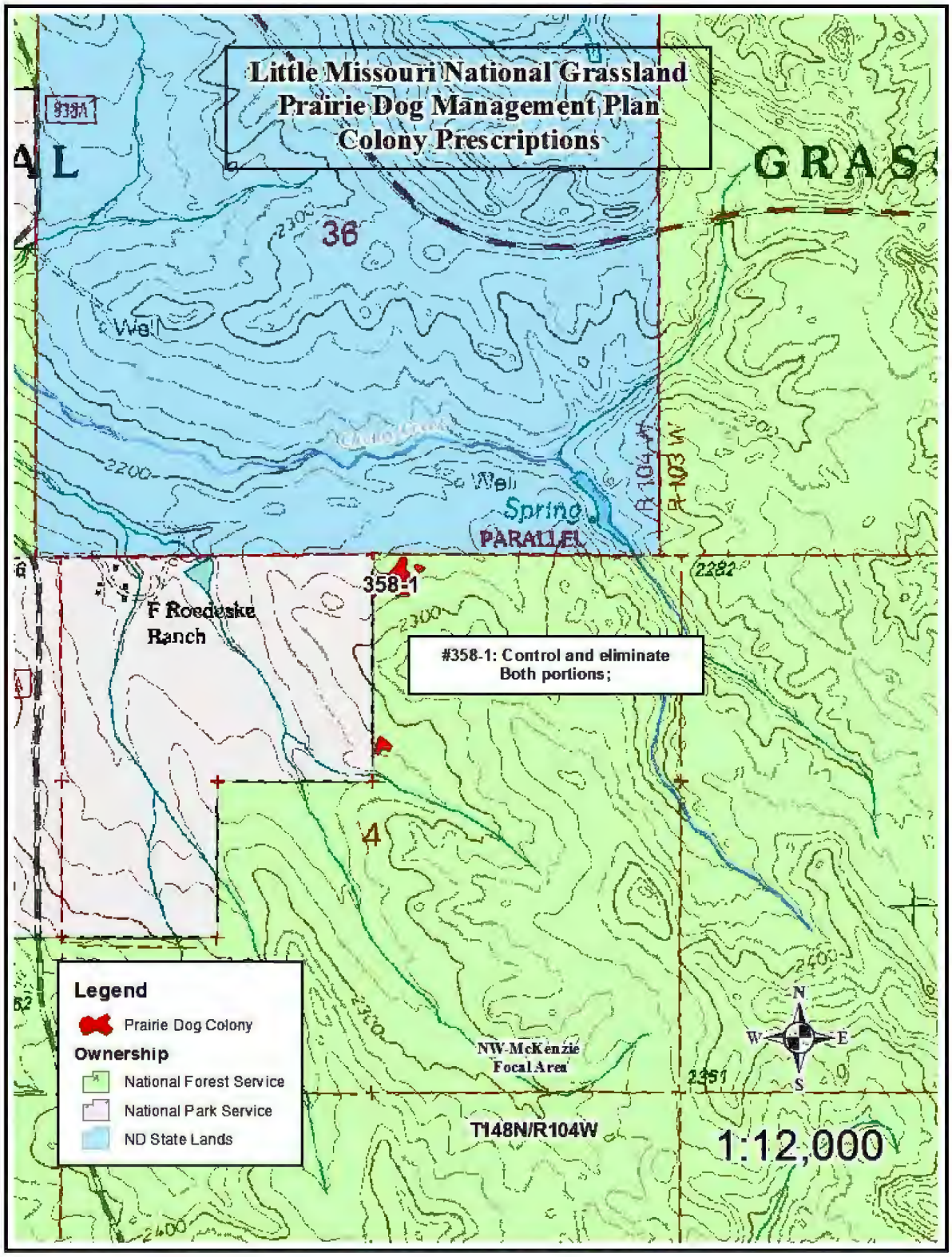

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
MA 3.63
#339-10: Control and eliminate
Only portion outside MA 3.63;
Monitor;
May take more than one year
Control this
satellite colony;
339-10
339-10
MA 6.1
MA 3.63
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
NW McKenzie
Focal Area
T149N/R103W
1:12,000
R 103 W
R 102 W
BR 2170
2181
2318
2300
2276
N
S
W
E

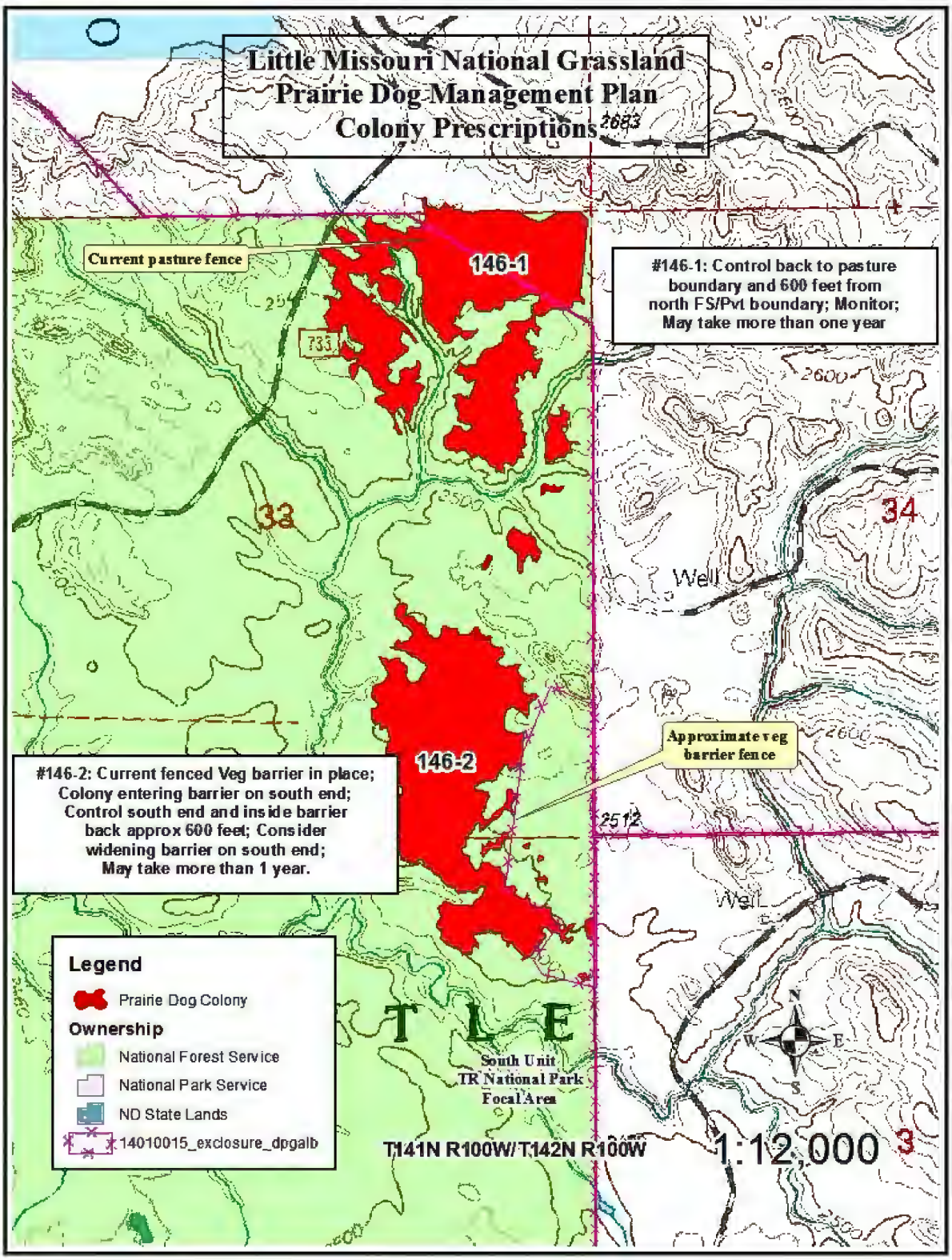

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
Approximately
600 feet
X
339-12
#339-12: Control the eastern lobes
back into colony (X) 600 feet;
Consider hard or soft veg barrier;
Monitor; May take more than 1 year
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
NW McKenzie
Focal Area
T149N/R104W
1:12,000
N
S
E
W
8
9
16
17
2000
2100
1950
2035

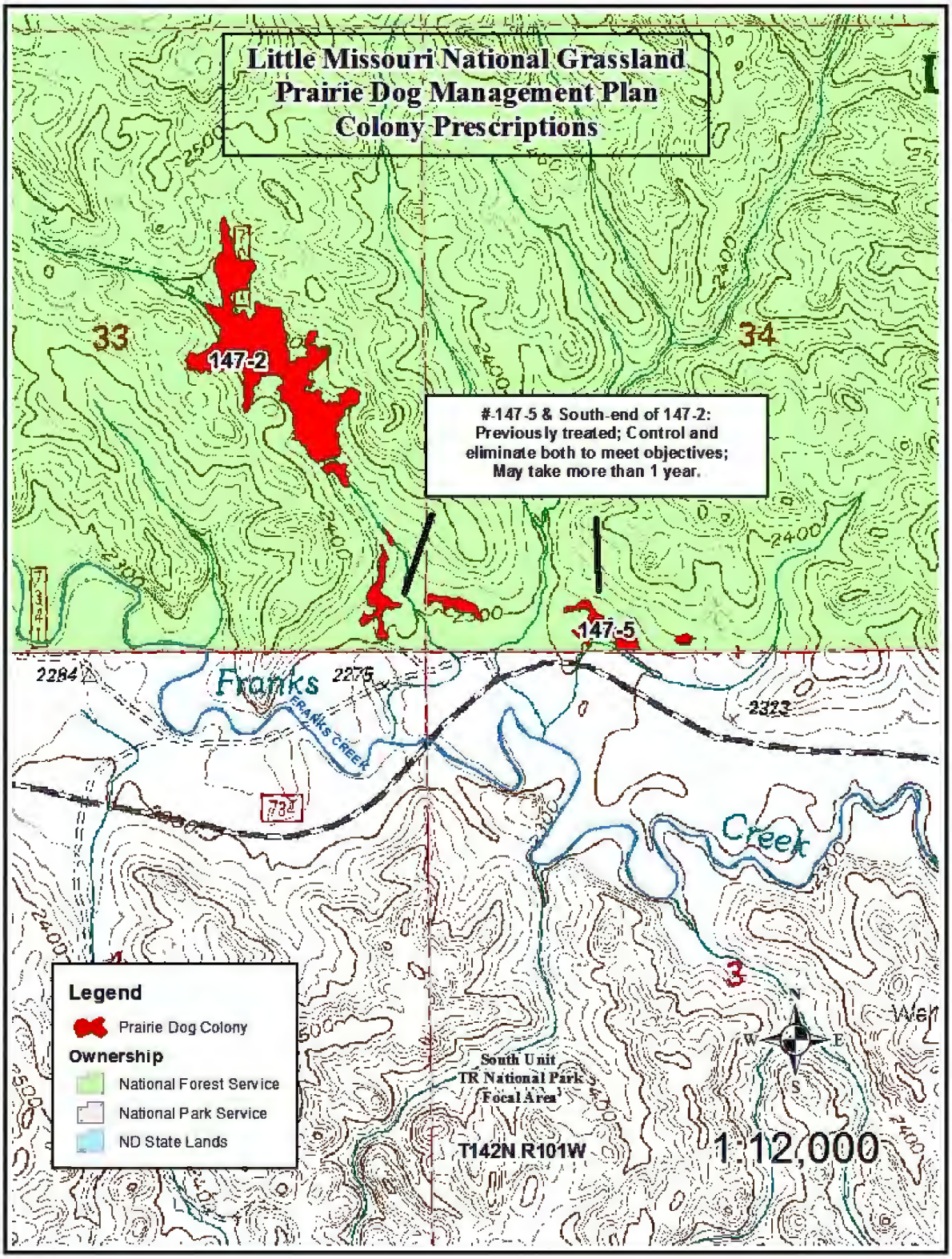

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
PIPELINE
2345
2276
2200
Control this satellite colony; 339-13a
MA 3.63
21
21
Creek
339-13
#33913a: Control and eliminate
Only portion outside MA 3.63;
Monitor;
May take more than one year
Gravel Pit
MA 6.1
MA 3.63
29
28
28
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
NW McKenzie Focal Area
T149N/R103W
N
W
E
S
1:12,000

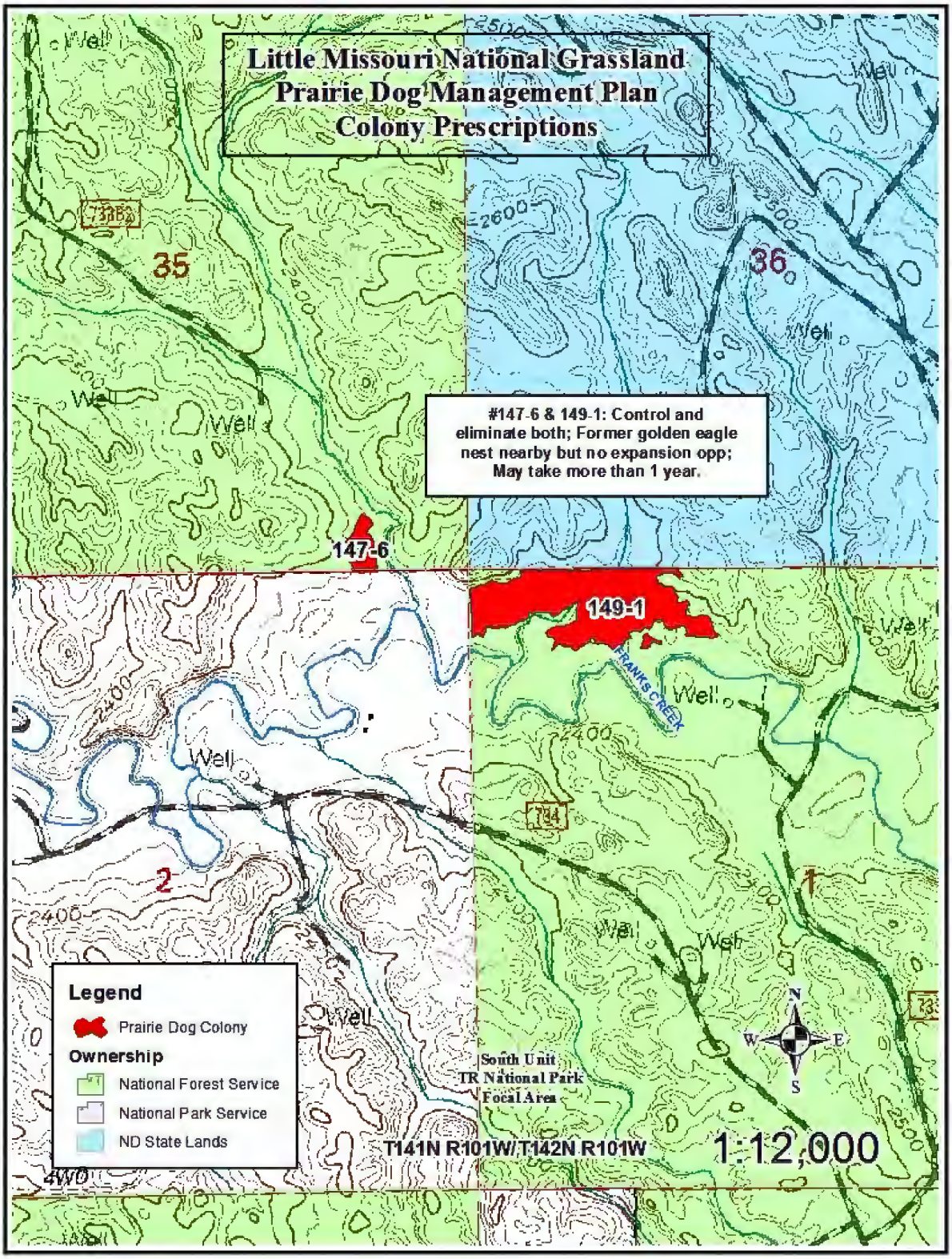

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
17
6
20
29
1938
Wells
1947
Approximately
600 feet
X
346-1
#346-1: Partially control the western portion back into colony (X) 600 feet; Consider hard or soft veg barrier; Monitor; May take more than 1 year
RICHLAND CO
1949
1944
2000
NW McKenzie
Focal Area
T149N/R104W
1:12,000
Finley
Gravel Pit
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
N
W
E
S

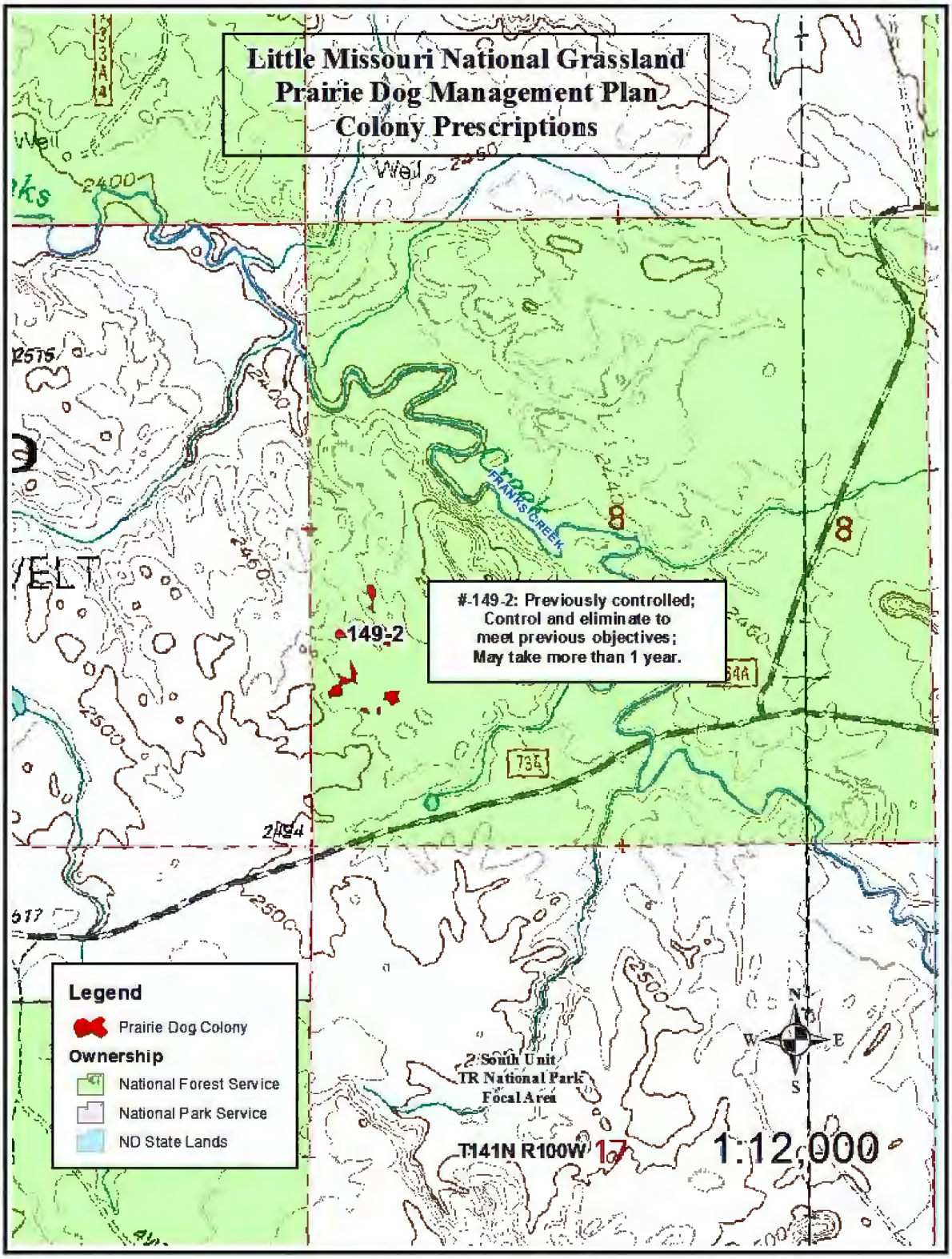

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
E Burns Ranch
Alkali Creek tributary
#351-2: Colony in isthmus between pvt/State; Expansion opportunity to west: Partial control East side (Z). Use Alkali Creek and trib as potential barriers and adatively direct colony to west; May take more than 1 year
351-2
Z
Alkali Creek
#351-3: Partially control the eastern portion of south half (X) back 600 feet; Consider hard or soft veg barrier; Monitor; May take more than 1 year
351-3
X
8
9
16
17
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
NW McKenzie Focal Area
T148N/R104W
1:12,000
N
W
E
S

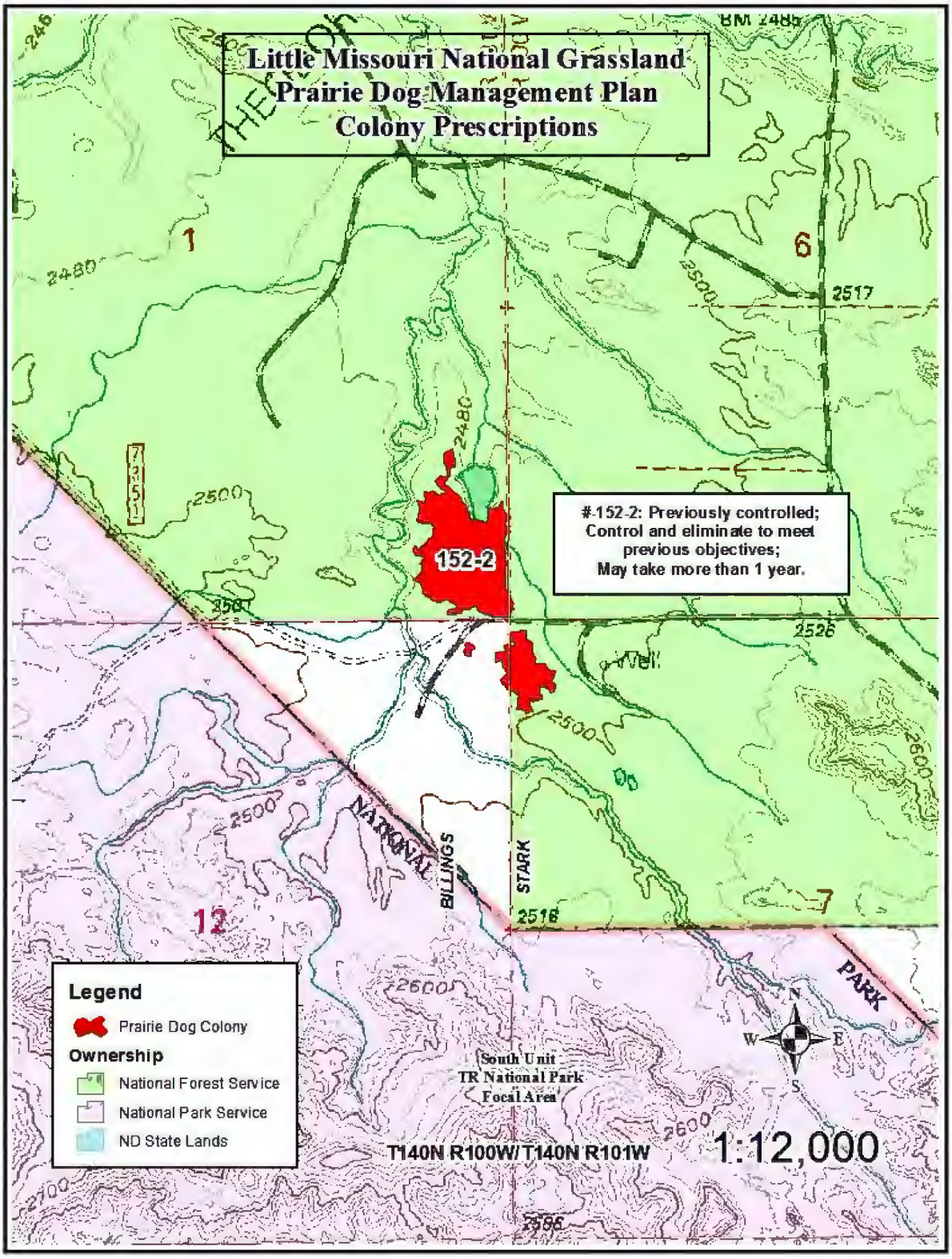

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
GRAS
36
Wet
Spring
PARALLEL
R 104 W
R 103 W
358-1
F Roedeske
Ranch
#358-1: Control and eliminate
Both portions;
4
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
NW-McKenzie
Focal Area
T148N/R104W
1:12,000
N
W
E
S

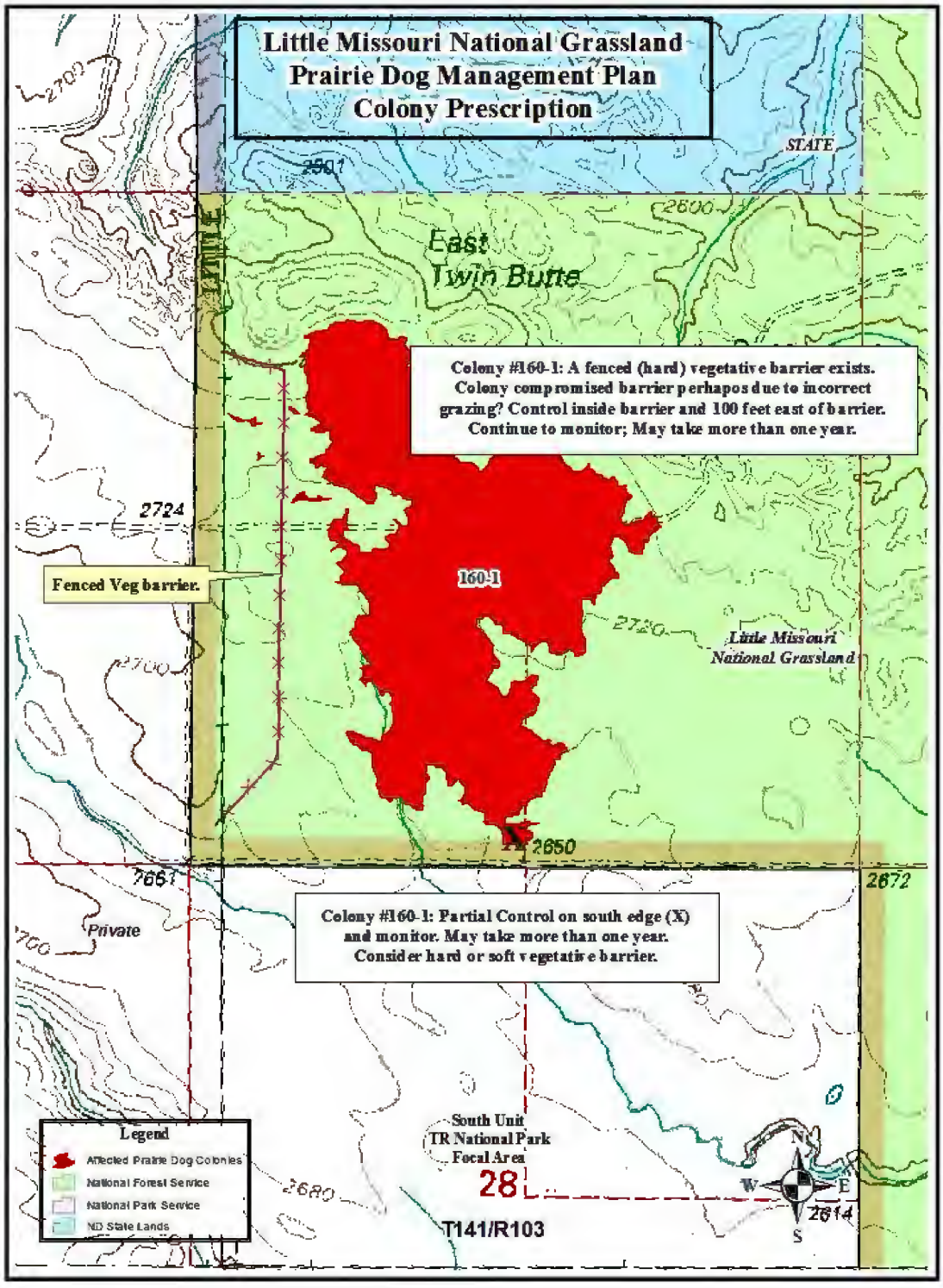

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
Current pasture fence
146-1
#146-1: Control back to pasture boundary and 600 feet from north FS/Pvt boundary; Monitor; May take more than one year
733
33
34
Well
146-2
Approximate veg barrier fence
#146-2: Current fenced Veg barrier in place; Colony entering barrier on south end; Control south end and inside barrier back approx 600 feet; Consider widening barrier on south end; May take more than 1 year.
Well
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
14010015_exclosure_dpgalb
T L E
South Unit
TR National Park
Focal Area
T141N R100W/T142N R100W
1:12,000
N
W
E
S

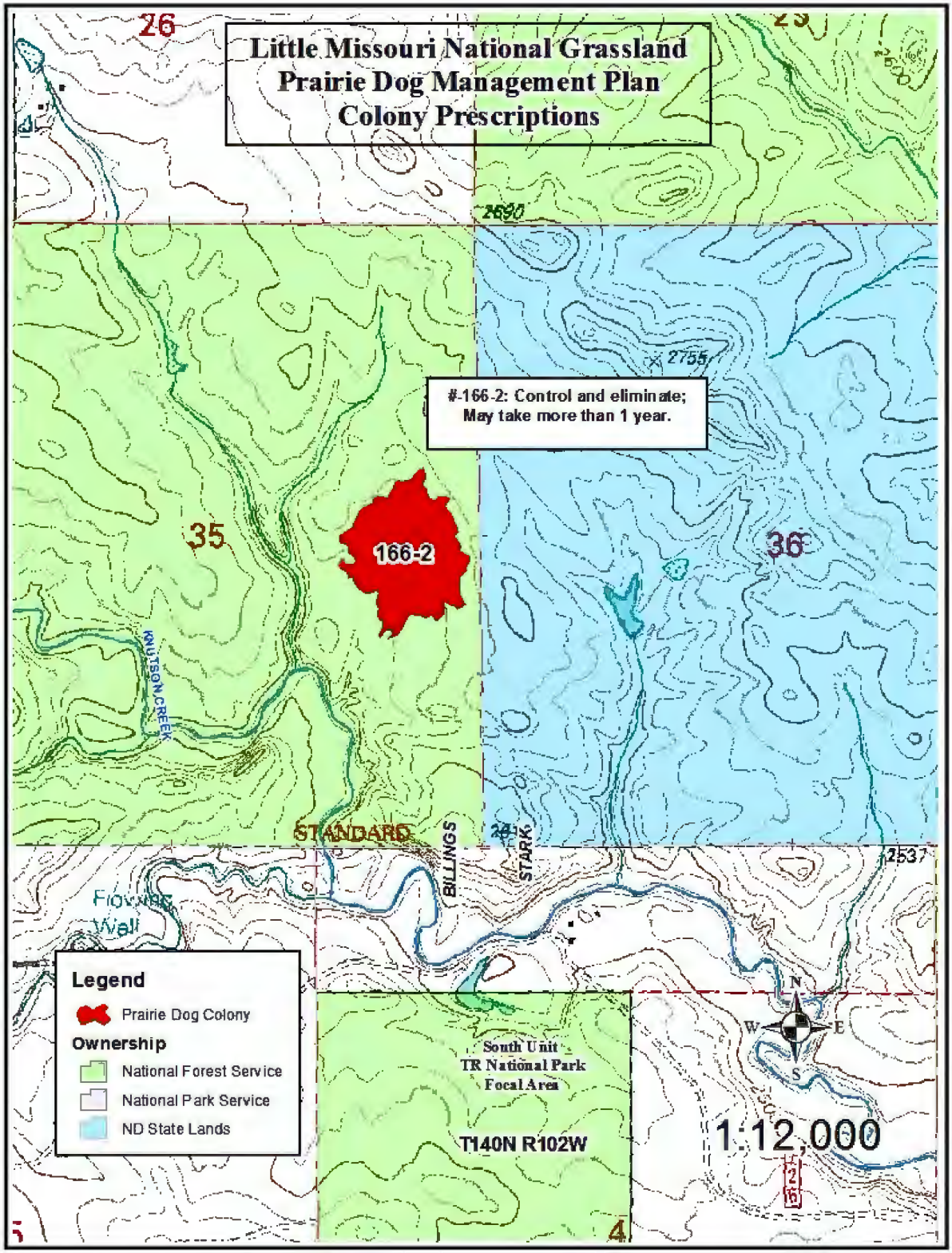

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
33
34
147-2
147-5
#-147-5 & South-end of 147-2:
Previously treated; Control and
eliminate both to meet objectives;
May take more than 1 year.
Franks
FRANKS CREEK
Creek
2284
2275
2323
3
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
South Unit
TR National Park
Focal Area
T142N R101W
1:12,000
N
W
E
S

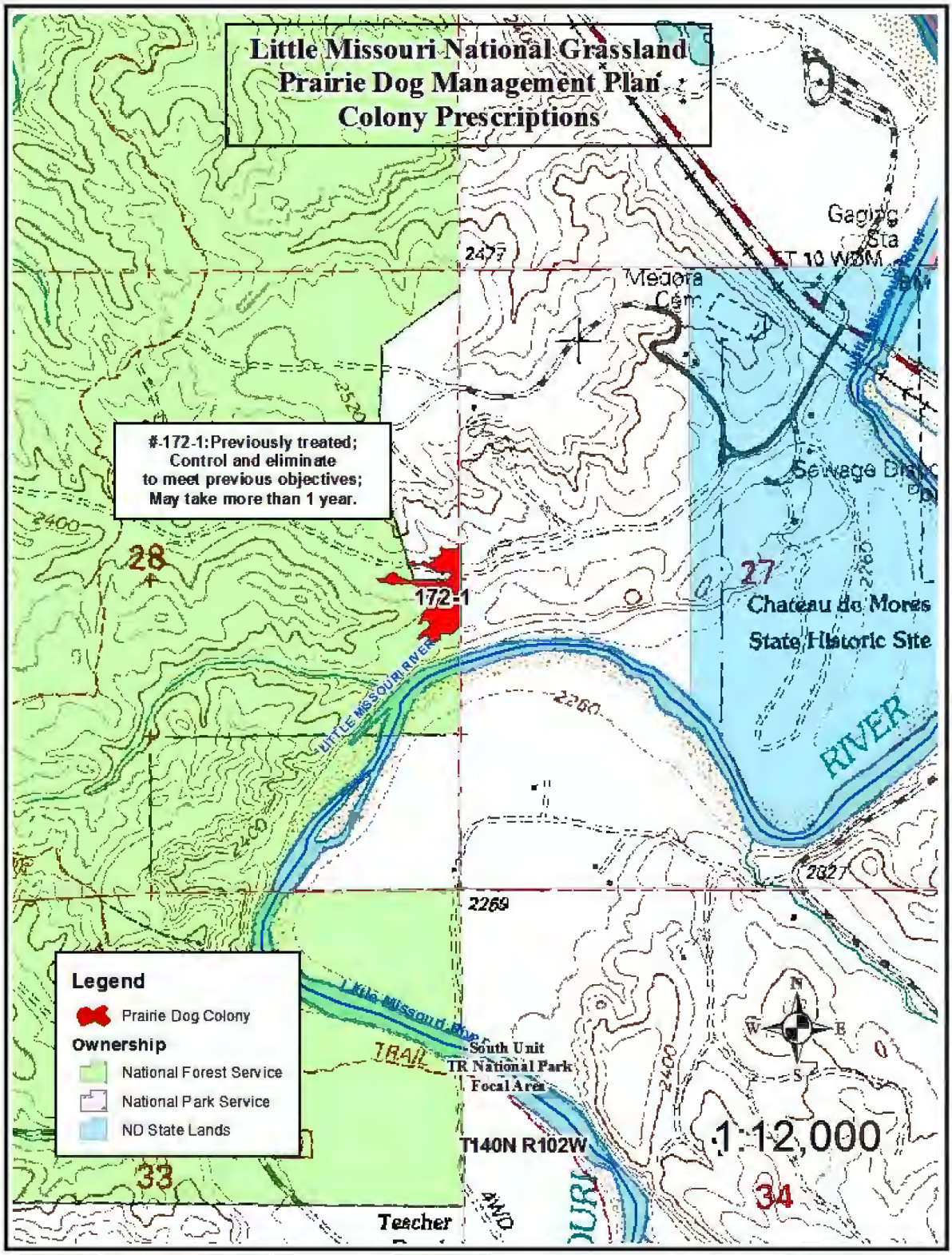

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#147-6 & 149-1: Control and eliminate both; Former golden eagle nest nearby but no expansion opp; May take more than 1 year.
147-6
149-1
35
36
2
1
FRANKS CREEK
Well
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
South Unit
TR National Park
Focal Area
T141N R101W/T142N R101W
1:12,000
N
S
E
W

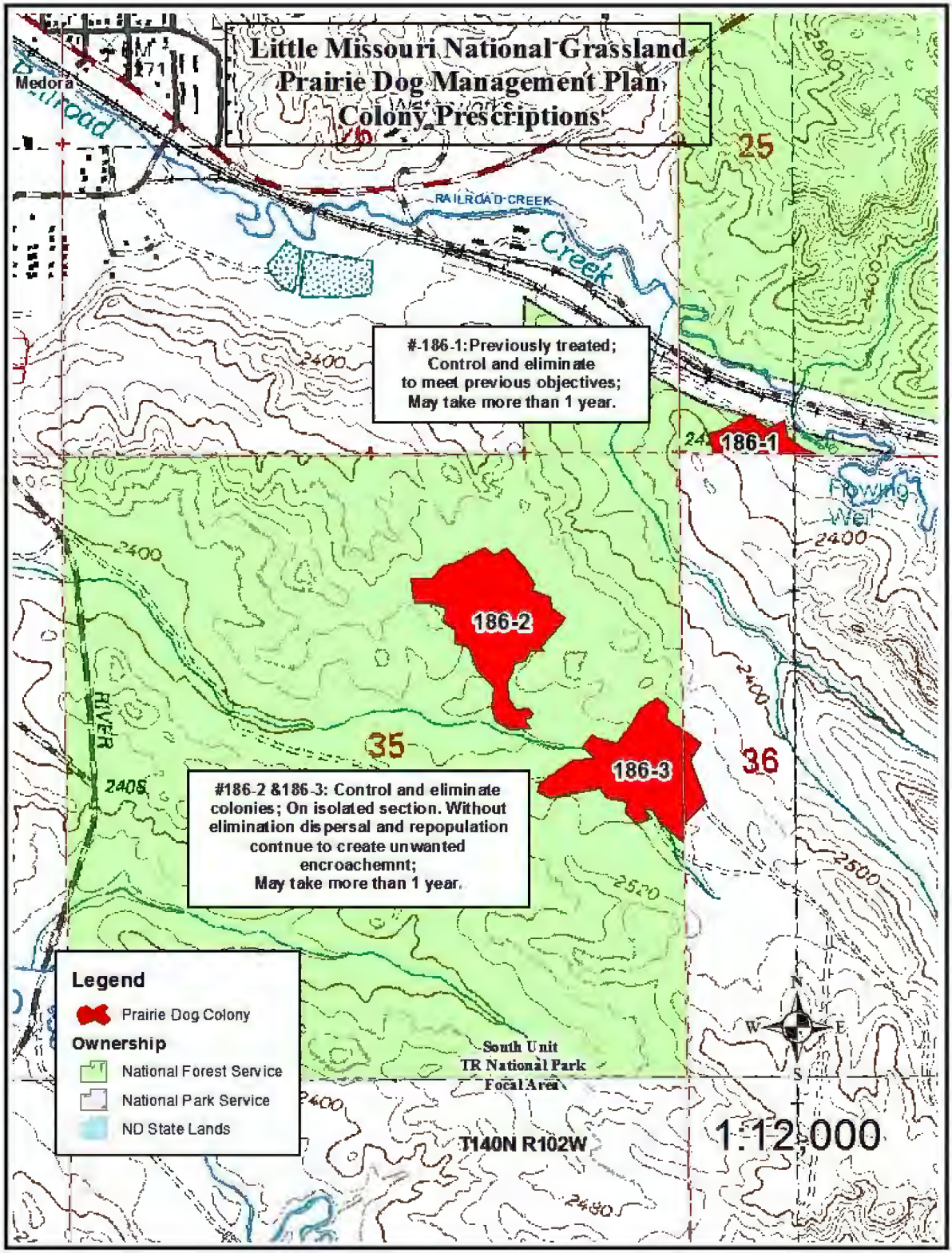

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#-149-2: Previously controlled; Control and eliminate to meet previous objectives; May take more than 1 year.
149-2
FRANKS CREEK
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
South Unit
TR National Park
Focal Area
T141N R100W
1:12,000

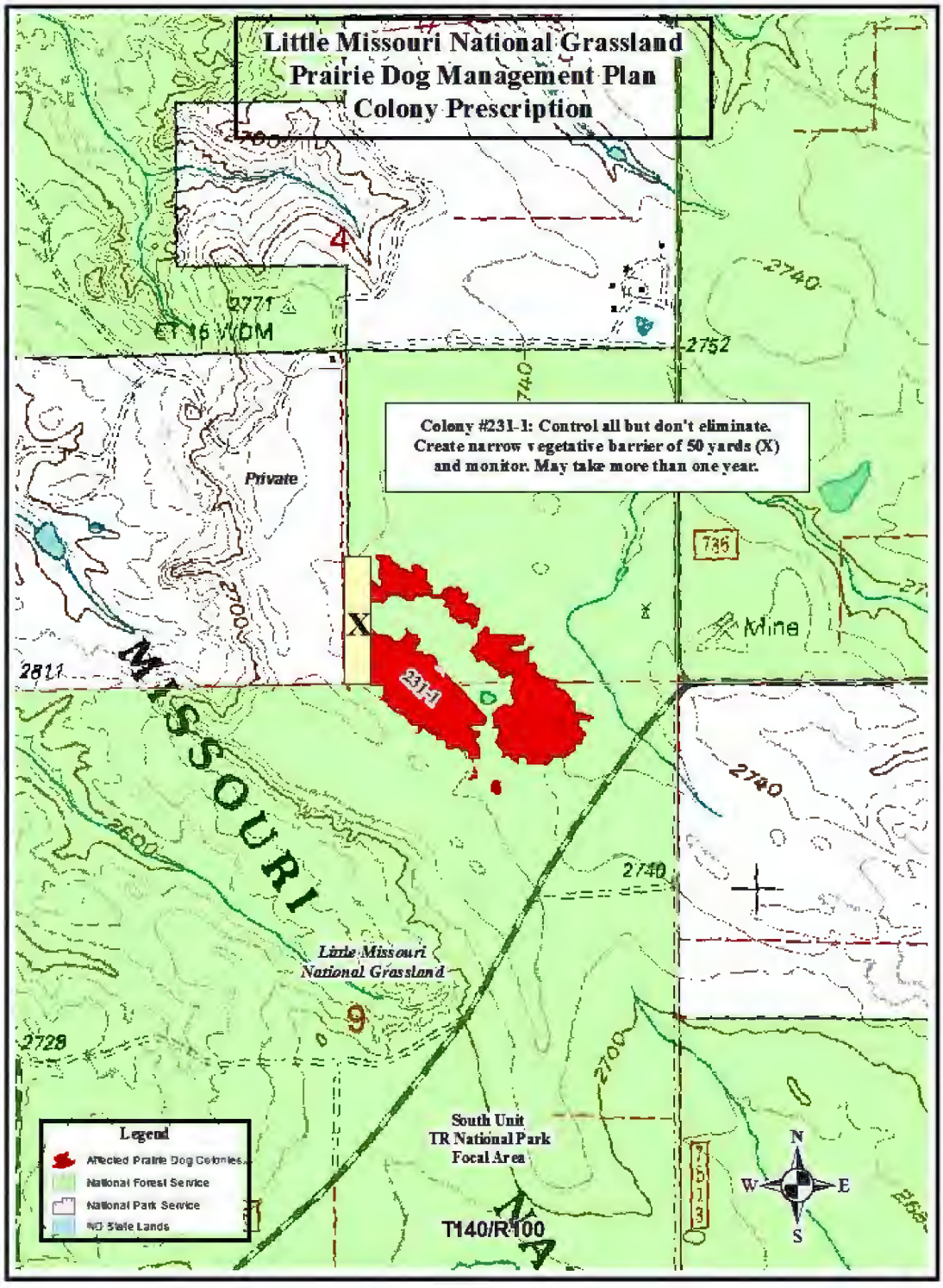

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#-152-2: Previously controlled;
Control and eliminate to meet
previous objectives;
May take more than 1 year.
152-2
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
South Unit
TR National Park
Focal Area
T140N R100W/ T140N R101W
1:12,000
NATIONAL BILLINGS
STARK
PARK
N
S
E
W

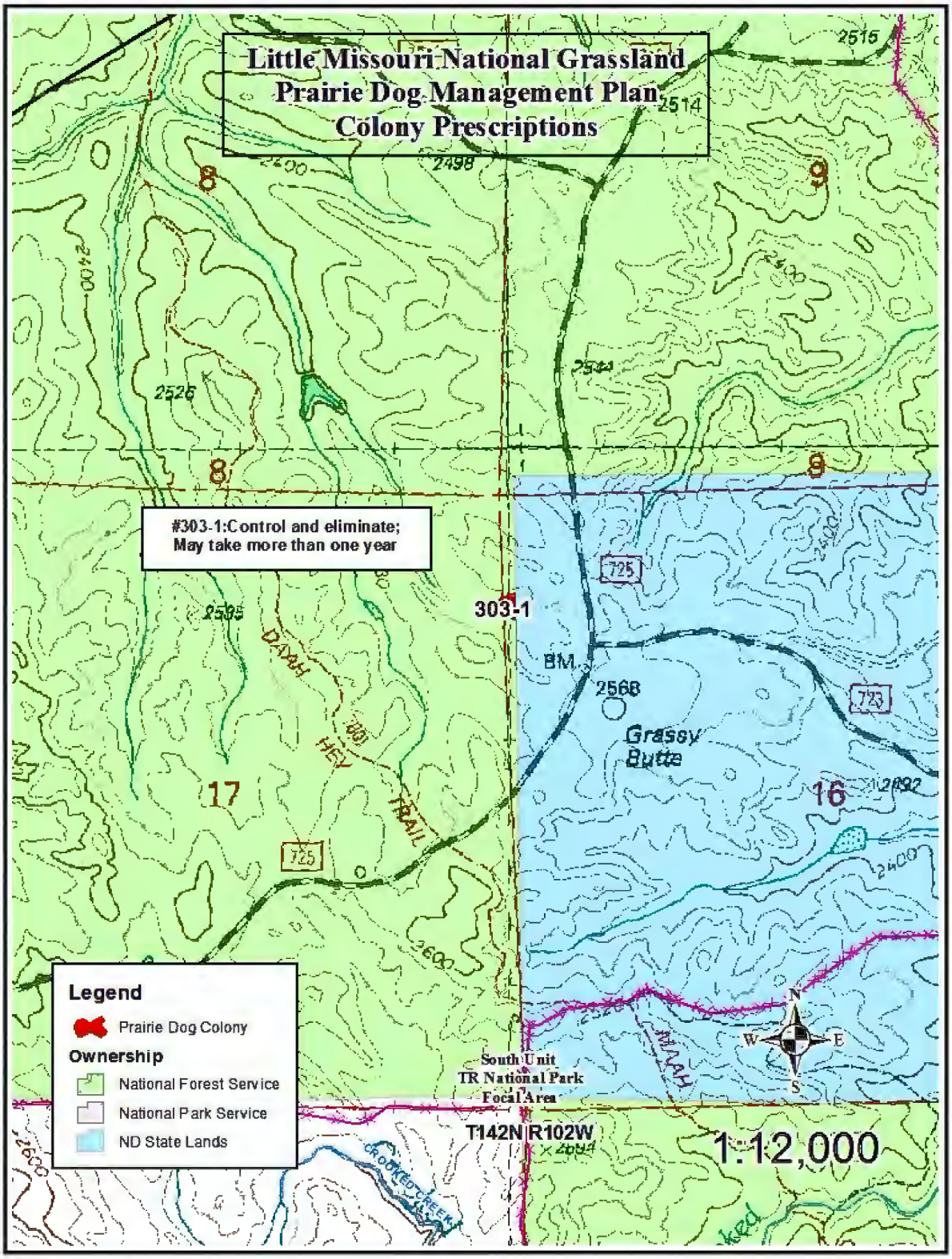

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription
STATE
East
Twin Butte
Colony #160-1: A fenced (hard) vegetative barrier exists. Colony compromised barrier perhapos due to incorrect grazing? Control inside barrier and 100 feet east of barrier. Continue to monitor; May take more than one year.
2724
Fenced Veg barrier.
160-1
Little Missouri
National Grassland
2650
2672
Private
Colony #160-1: Partial Control on south edge (X) and monitor. May take more than one year. Consider hard or soft vegetative barrier.
Legend
Affected Prairie Dog Colonies
National Forest Service
National Park Service
ND State Lands
South Unit
TR National Park
Focal Area
28
T141/R103
N
W
E
S
2614

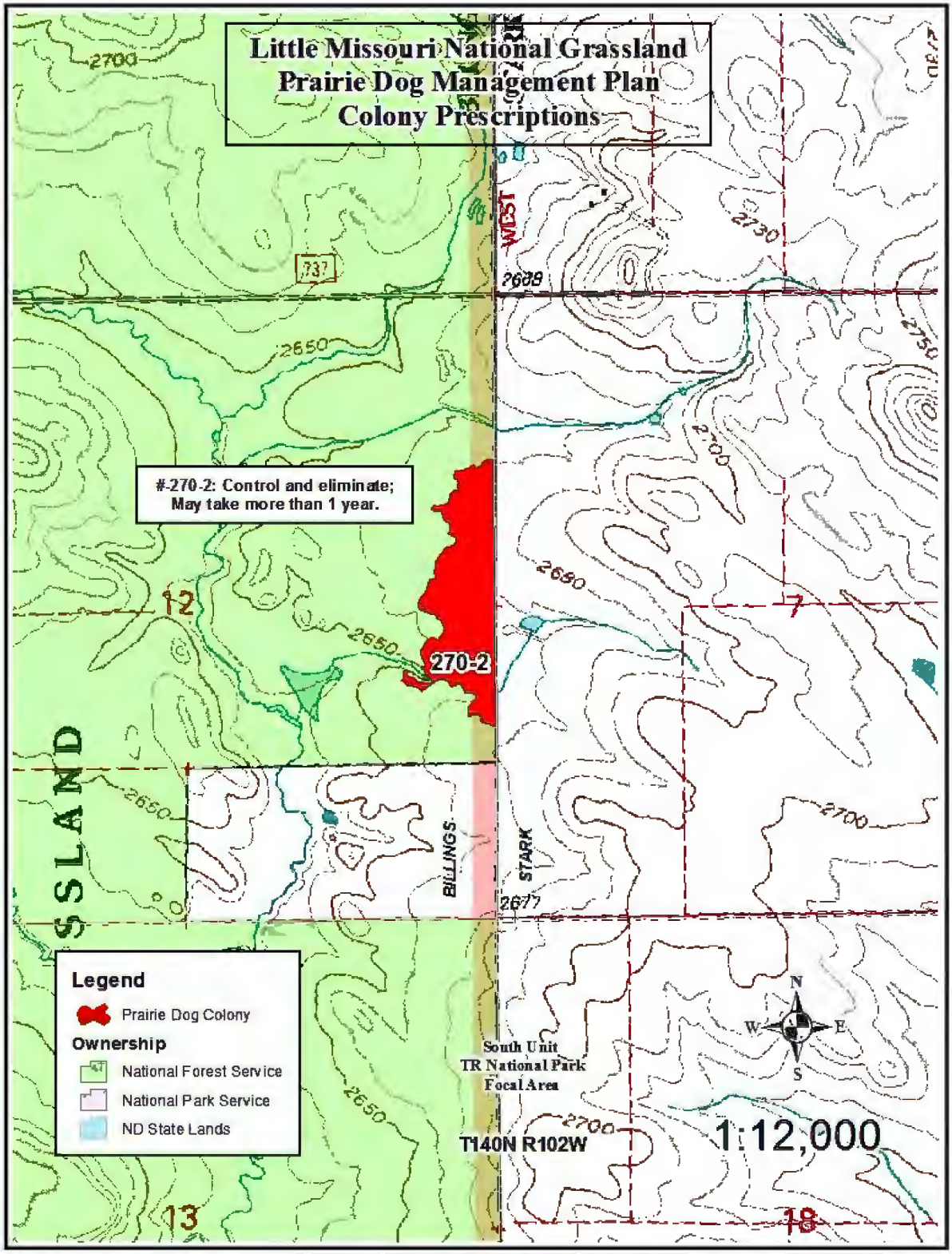

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#-166-2: Control and eliminate;
May take more than 1 year.
166-2
26
35
36
STANDARD
BILLINGS
STARK
KNUTSON CREEK
Flowing Well
2755
2537
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
South Unit
TR National Park
Focal Area
T140N R102W
1:12,000
N
W
E
S
4

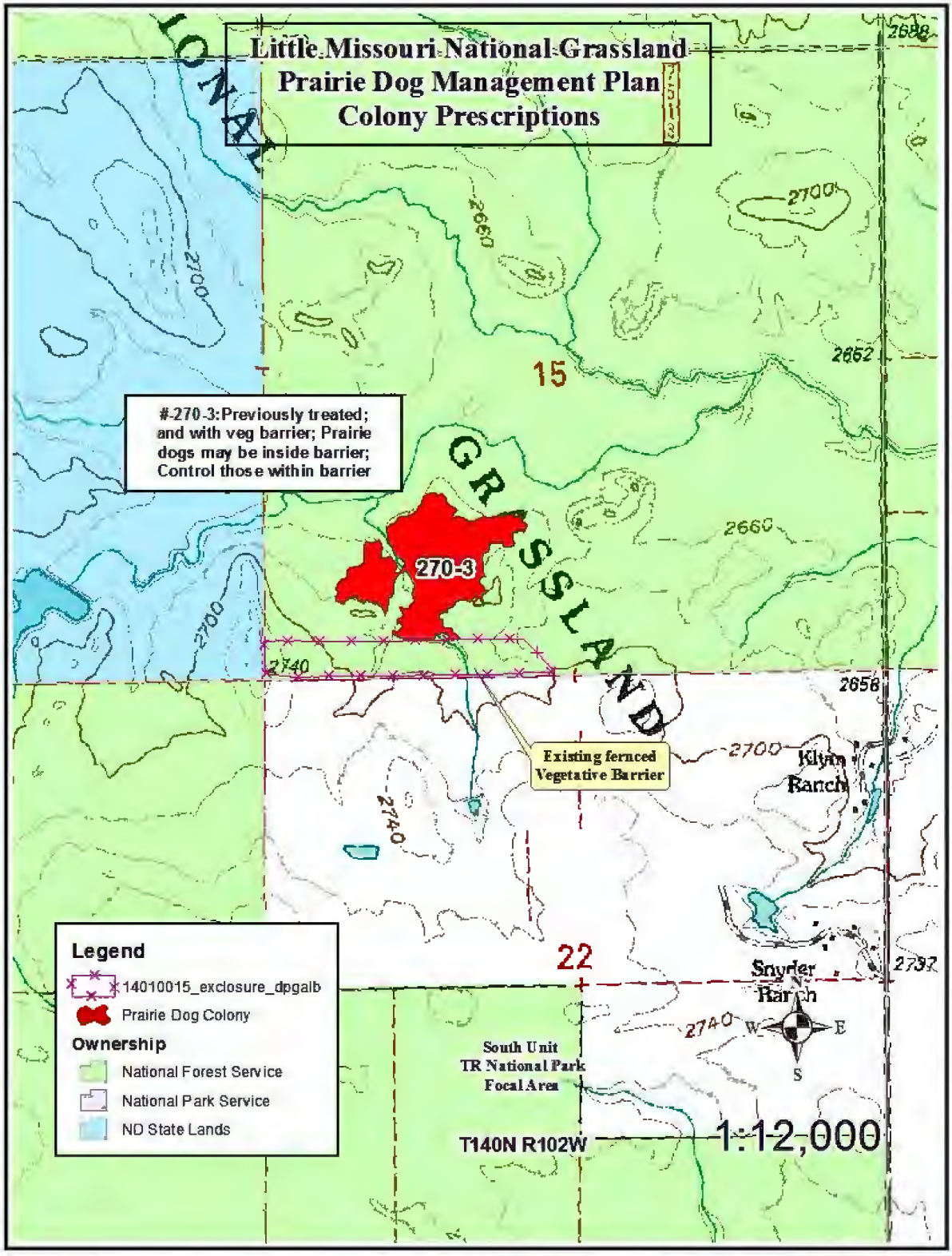

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#-172-1: Previously treated;
Control and eliminate
to meet previous objectives;
May take more than 1 year.
172-1
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
Medora Cem
Chateau de Mores
State Historic Site
LITTLE MISSOURI RIVER
RIVER
TRAIL
South Unit
TR National Park
Focal Area
T140N R102W
1:12,000
Teacher
28
27
33
34
2477
2520
2400
2260
2269
2827

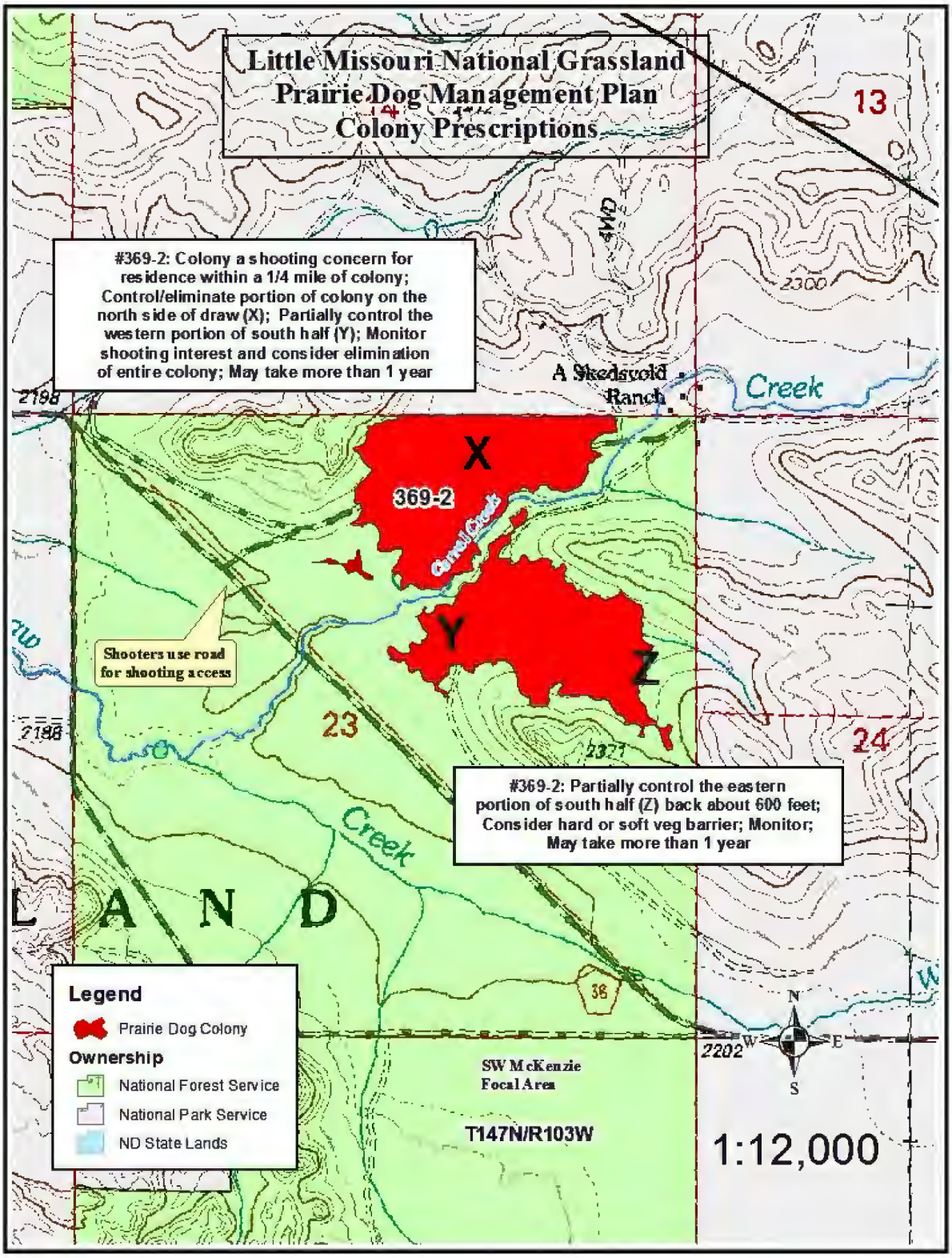

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
Medora
RAILROAD CREEK
Creek
#-186-1:Previously treated;
Control and eliminate
to meet previous objectives;
May take more than 1 year.
186-1
186-2
186-3
#186-2 &186-3: Control and eliminate colonies; On isolated section. Without elimination dispersal and repopulation contnue to create unwanted encroachemnt;
May take more than 1 year.
25
35
36
2400
2500
2520
2480
RIVER
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
South Unit
TR National Park
Focal Area
T140N R102W
1:12,000
N
W
E
S

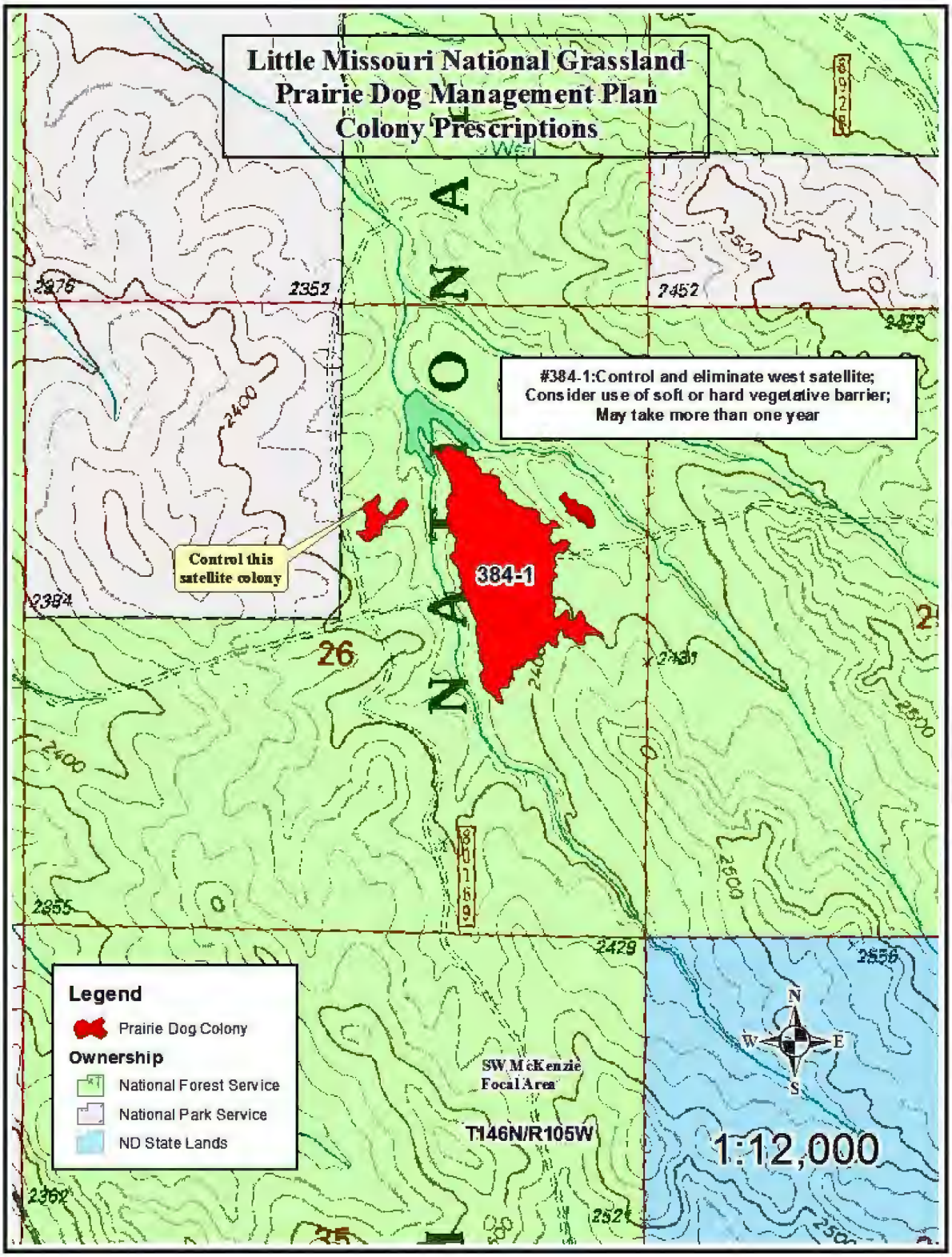

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription
Colony #231-1: Control all but don't eliminate. Create narrow vegetative barrier of 50 yards (X) and monitor. May take more than one year.
Private
X
231-1
Mine
MISSOURI
Little Missouri National Grassland
South Unit TR National Park Focal Area
T140/R100
Legend
Affected Prairie Dog Colonies
National Forest Service
National Park Service
ND State Lands
N
W
E
S

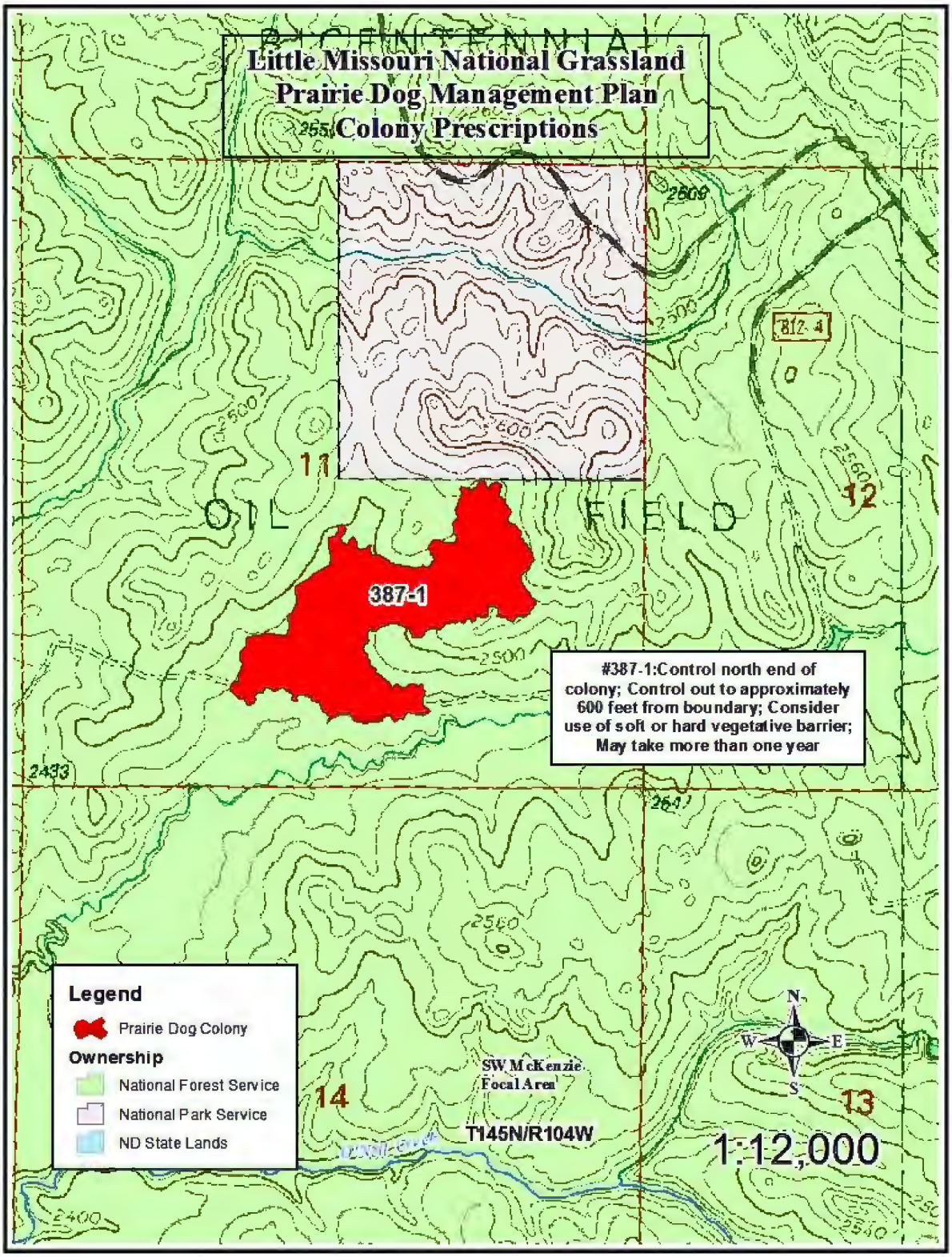

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#303-1:Control and eliminate;
May take more than one year
303-1
Grassy Butte
2568
BM
South Unit
TR National Park
Focal Area
T142N R102W
1:12,000
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
N
S
E
W

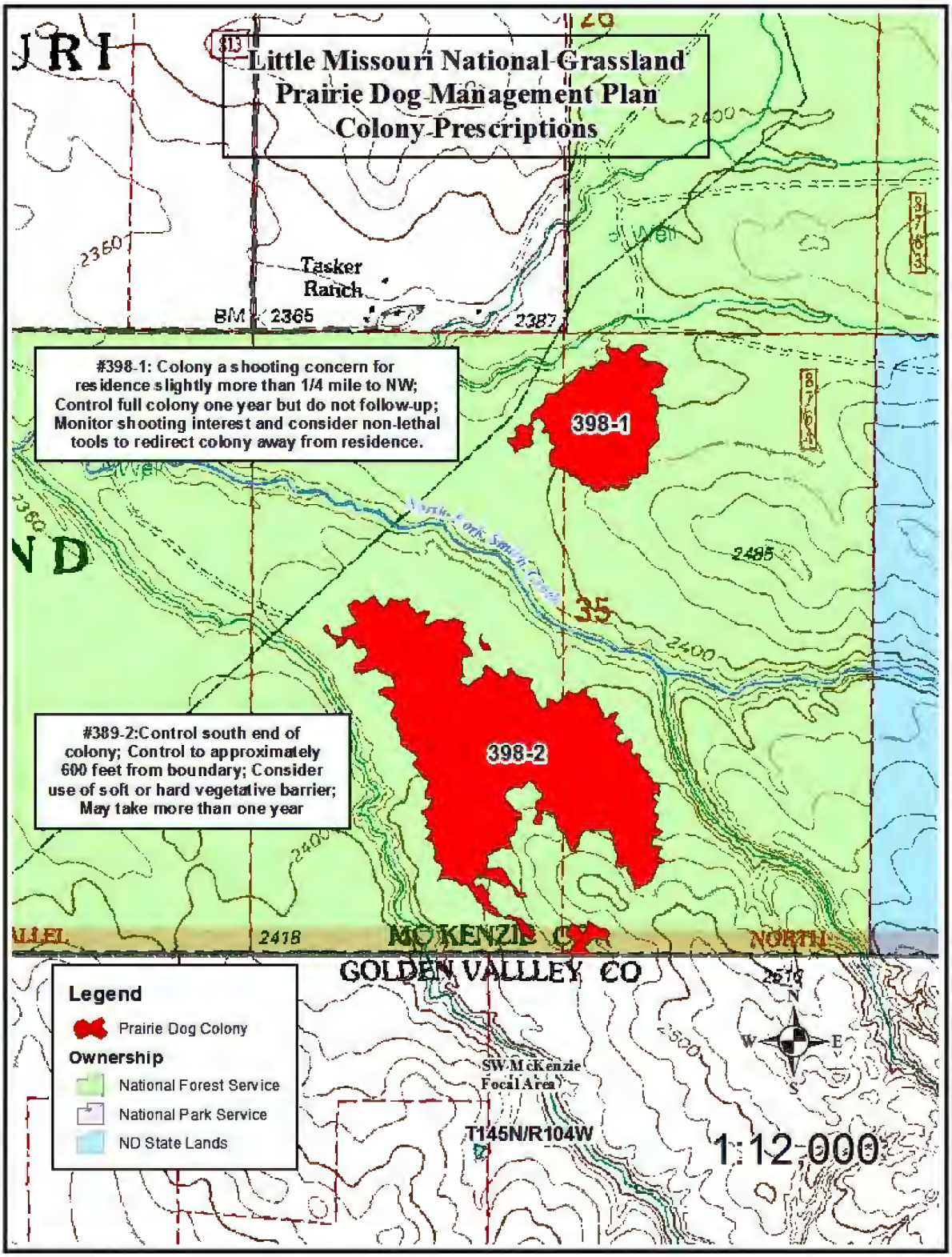

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#-270-2: Control and eliminate; May take more than 1 year.
270-2
WEST
STARK
BILLINGS
SSLAND
737
2700
2650
2730
2688
2750
2700
2690
2677
12
7
13
18
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
South Unit
TR National Park
Focal Area
T140N R102W
N
W
E
S
1:12,000

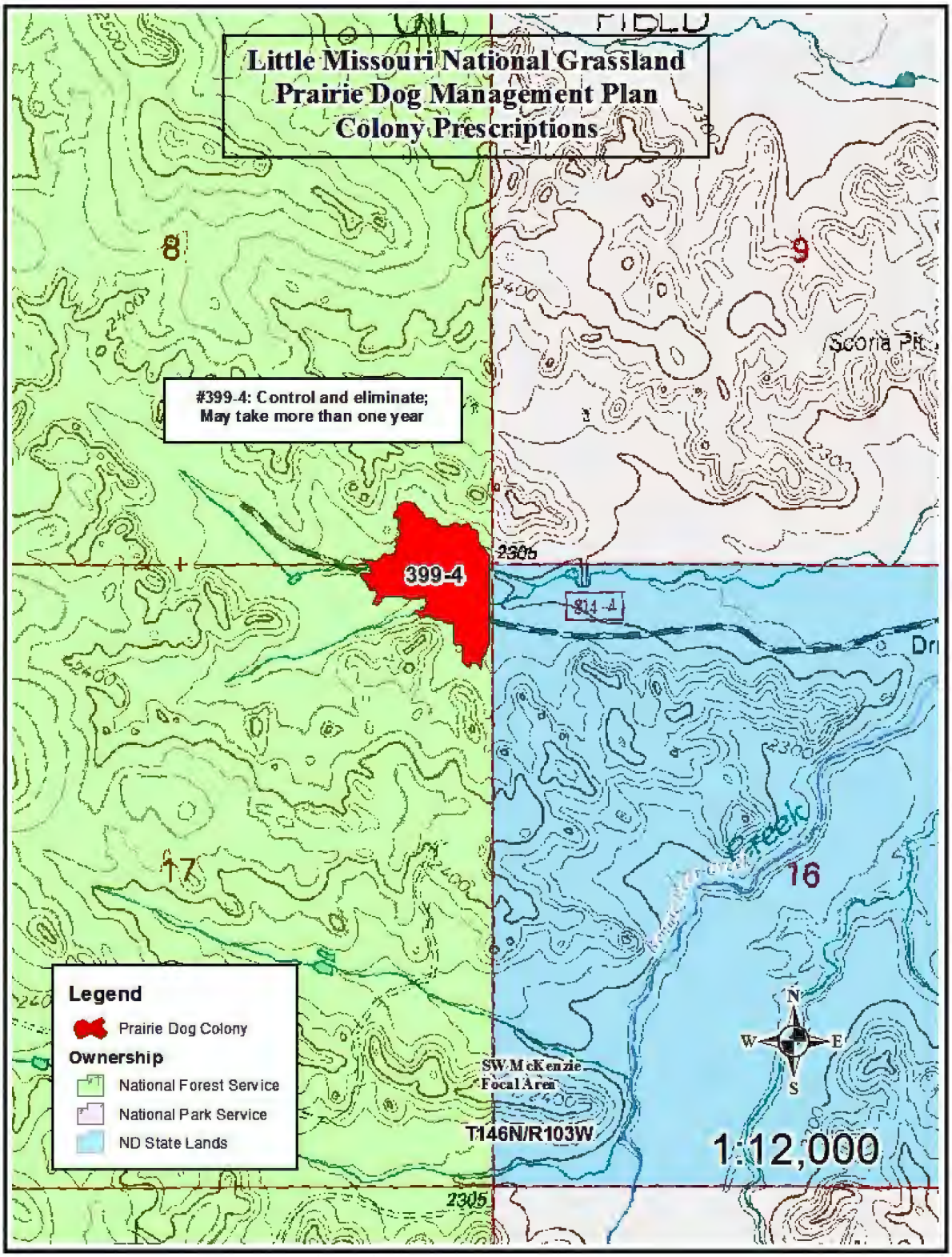

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#-270-3:Previously treated; and with veg barrier; Prairie dogs may be inside barrier; Control those within barrier
270-3
Existing fenced Vegetative Barrier
Klym Ranch
Snyder Ranch
South Unit TR National Park Focal Area
T140N R102W
1:12,000
Legend
14010015_exclosure_dpgalb
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
15
22
GRASSLAND
2700
2660
2740
2652
2658
2737

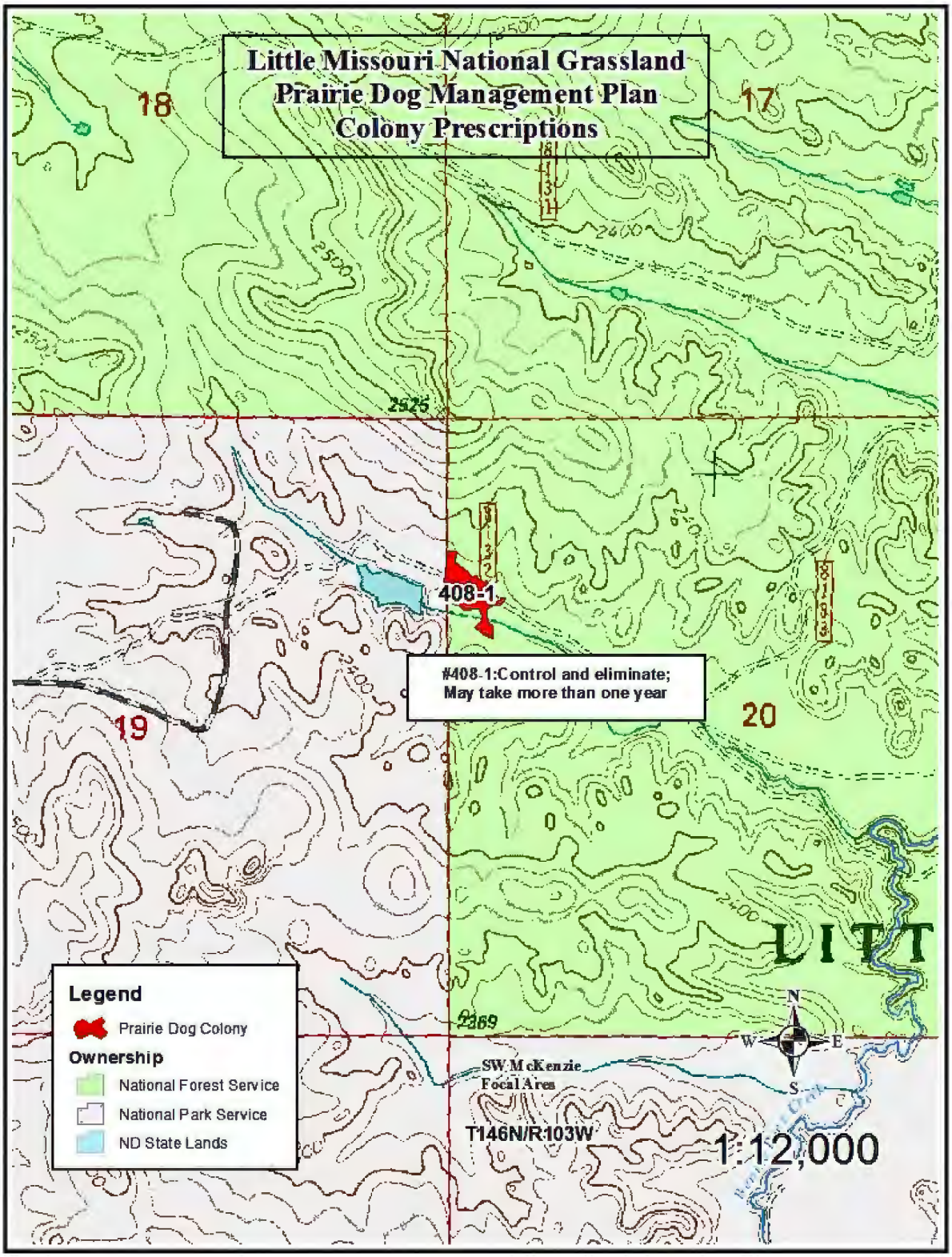

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#369-2: Colony a shooting concern for residence within a 1/4 mile of colony; Control/eliminate portion of colony on the north side of draw (X); Partially control the western portion of south half (Y); Monitor shooting interest and consider elimination of entire colony; May take more than 1 year
X
369-2
Y
Z
Shooters use road for shooting access
#369-2: Partially control the eastern portion of south half (Z) back about 600 feet; Consider hard or soft veg barrier; Monitor; May take more than 1 year
A Skedsvold Ranch
Creek
Carroll Creek
13
14
23
24
2198
2300
2377
2202
38
L A N D
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
SW McKenzie Focal Area
T147N/R103W
1:12,000
N
S
E
W

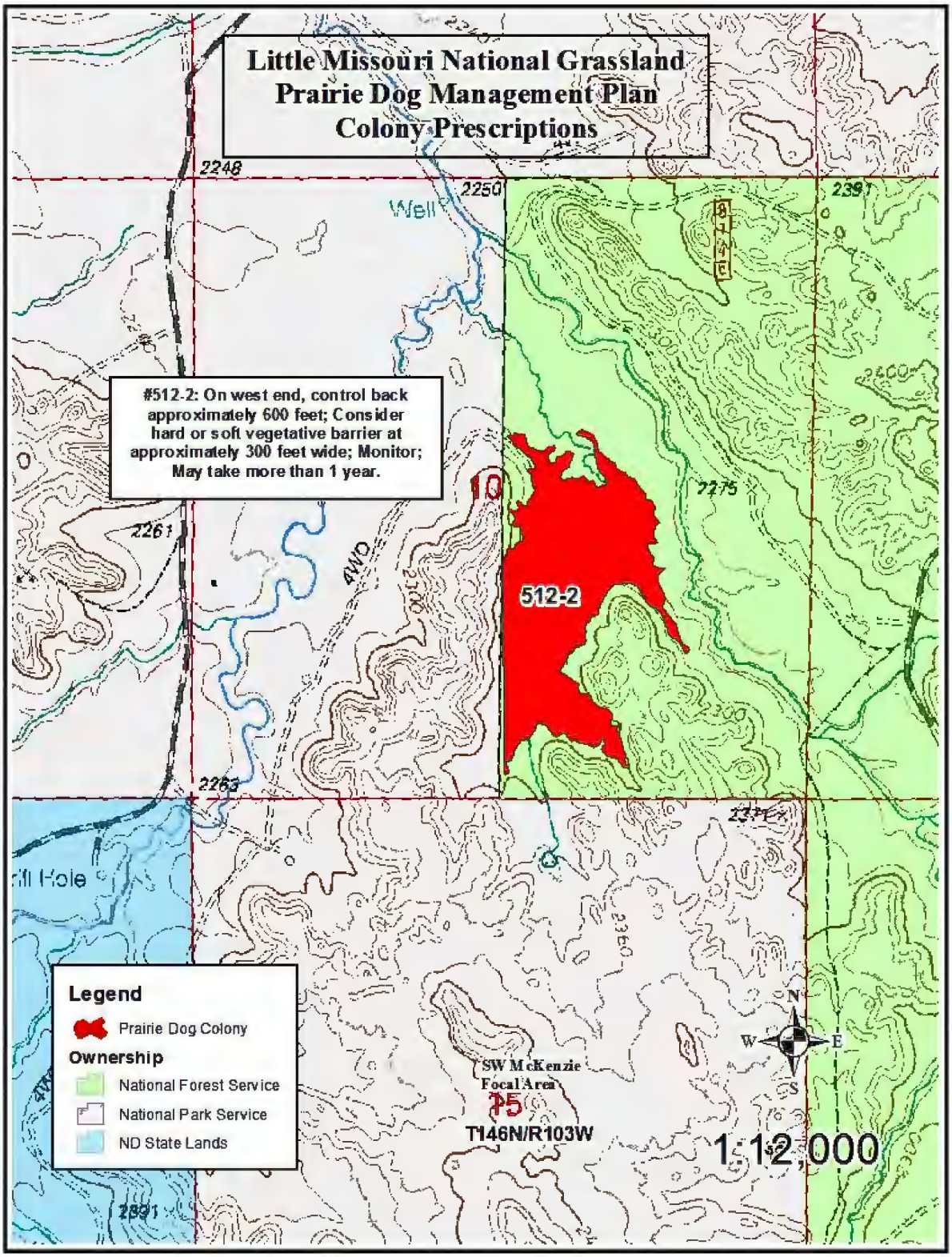

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#384-1:Control and eliminate west satellite;
Consider use of soft or hard vegetative barrier;
May take more than one year
Control this satellite colony
384-1
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
SW McKenzie Focal Area
T146N/R105W
1:12,000
N
S
E
W
26
35

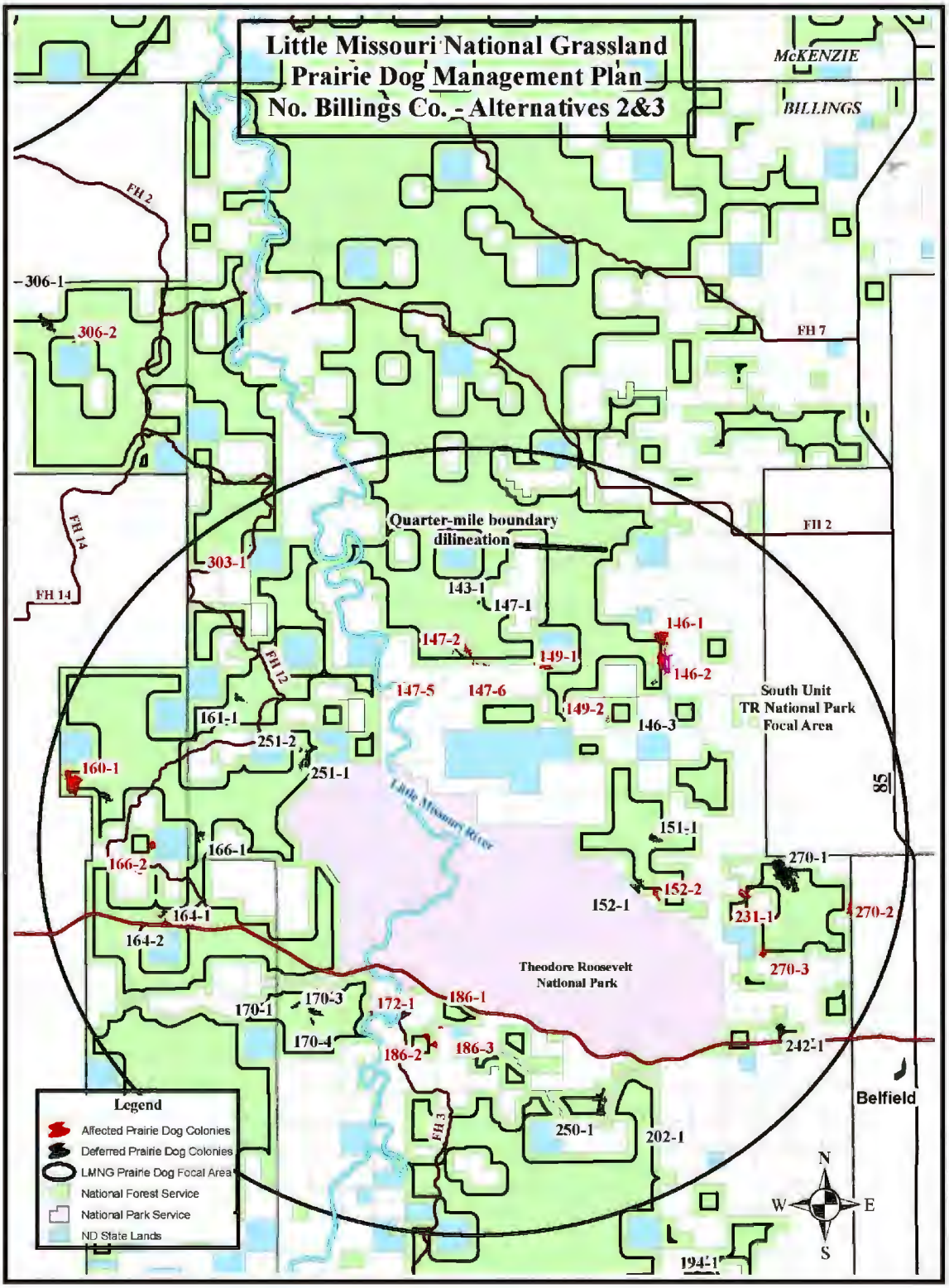

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
387-1
#387-1:Control north end of colony; Control out to approximately 600 feet from boundary; Consider use of soft or hard vegetative barrier; May take more than one year
OIL FIELD
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
SW McKenzie Focal Area
T145N/R104W
1:12,000
N
S
E
W
11
12
13
14

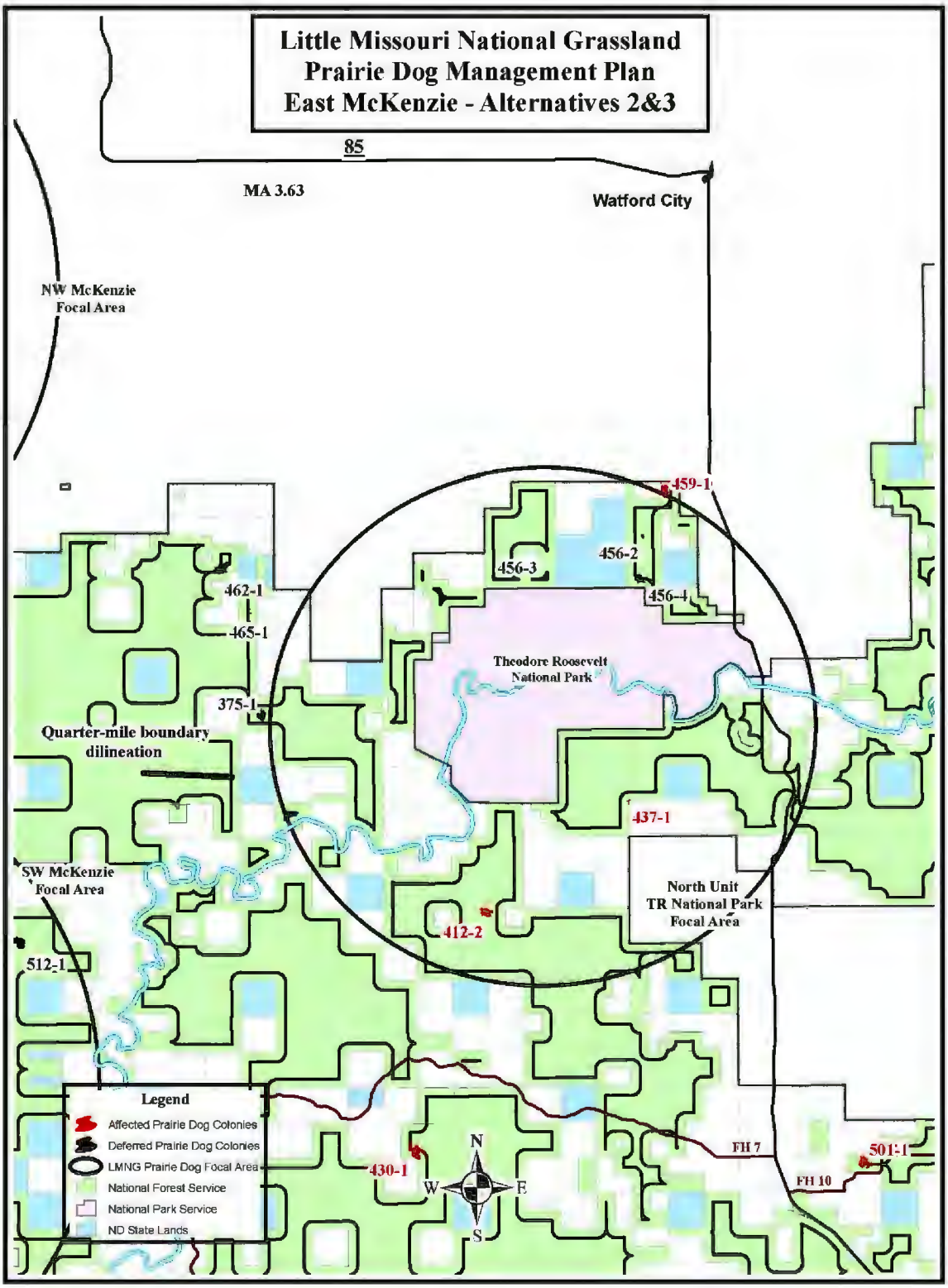

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#398-1: Colony a shooting concern for residence slightly more than 1/4 mile to NW; Control full colony one year but do not follow-up; Monitor shooting interest and consider non-lethal tools to redirect colony away from residence.
#389-2:Control south end of colony; Control to approximately 600 feet from boundary; Consider use of soft or hard vegetative barrier; May take more than one year
398-1
398-2
Tasker Ranch
BM 2365
2387
2360
2400
2485
35
2418
MCKENZIE CO
GOLDEN VALLEY CO
NORTH
SW McKenzie Focal Area
T145N/R104W
1:12,000
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands

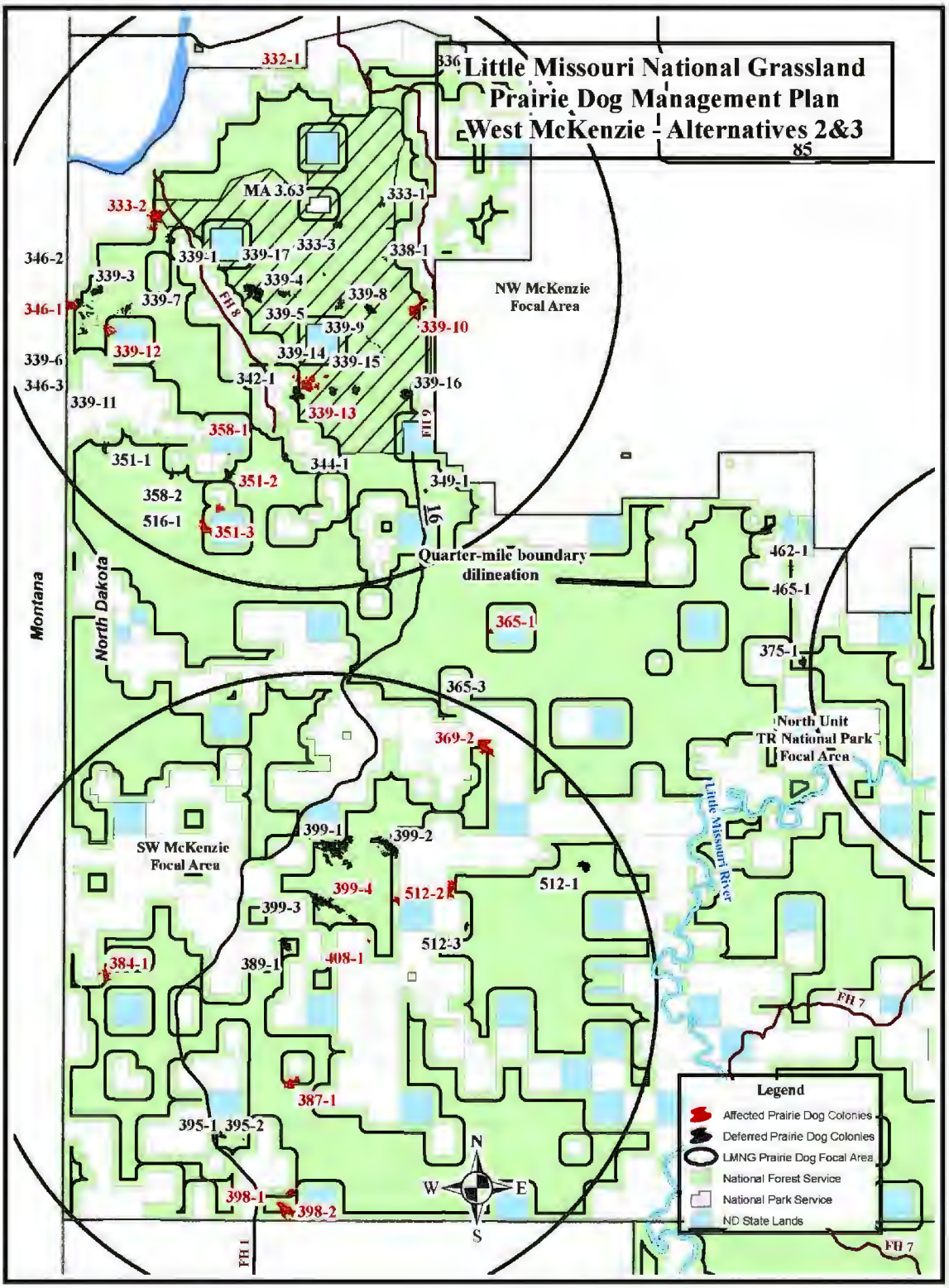

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#399-4: Control and eliminate;
May take more than one year
399-4
8
9
17
16
Scoria Pit
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
SW McKenzie
Focal Area
T146N/R103W
1:12,000
N
W
E
S

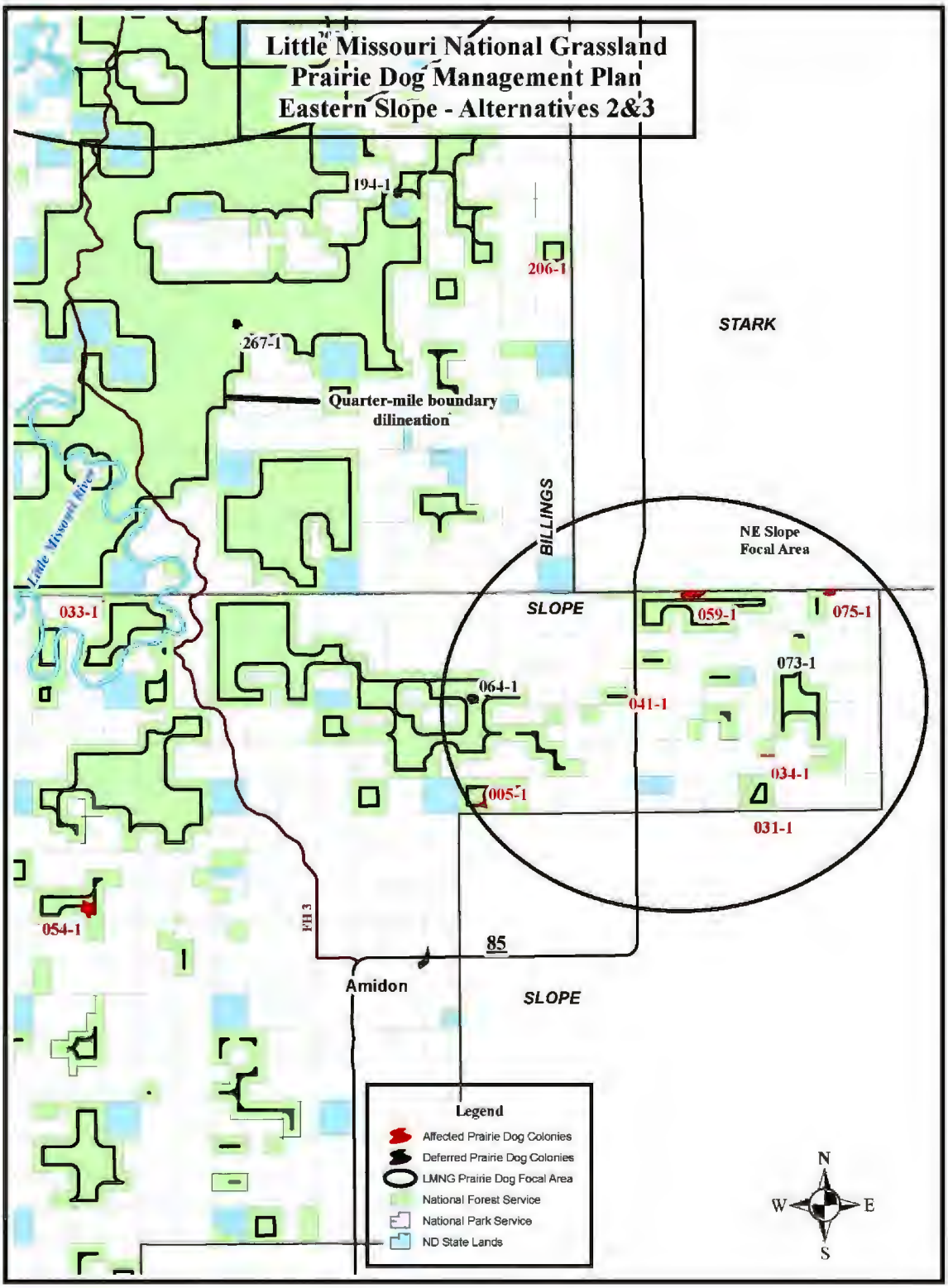

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
18
17
19
20
408-1
#408-1:Control and eliminate;
May take more than one year
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
SW McKenzie
Focal Area
T146N/R103W
1:12,000
LITT
N
W
E
S

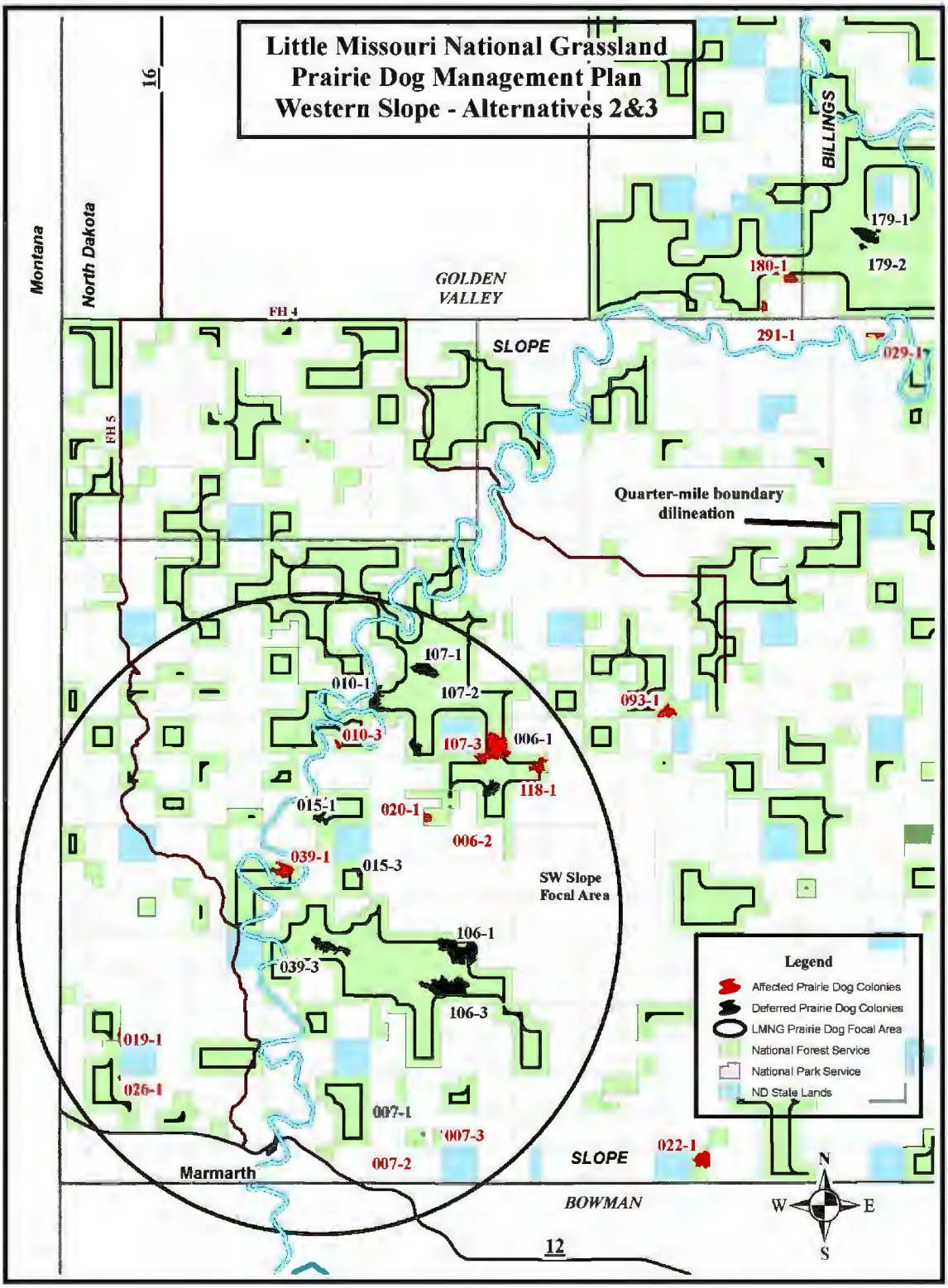

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescriptions
#512-2: On west end, control back approximately 600 feet; Consider hard or soft vegetative barrier at approximately 300 feet wide; Monitor; May take more than 1 year.
512-2
2248
2250
2261
2263
2275
2391
Well
4WD
Legend
Prairie Dog Colony
Ownership
National Forest Service
National Park Service
ND State Lands
SW McKenzie Focal Area
T146N/R103W
1:12,000
N
W
E
S

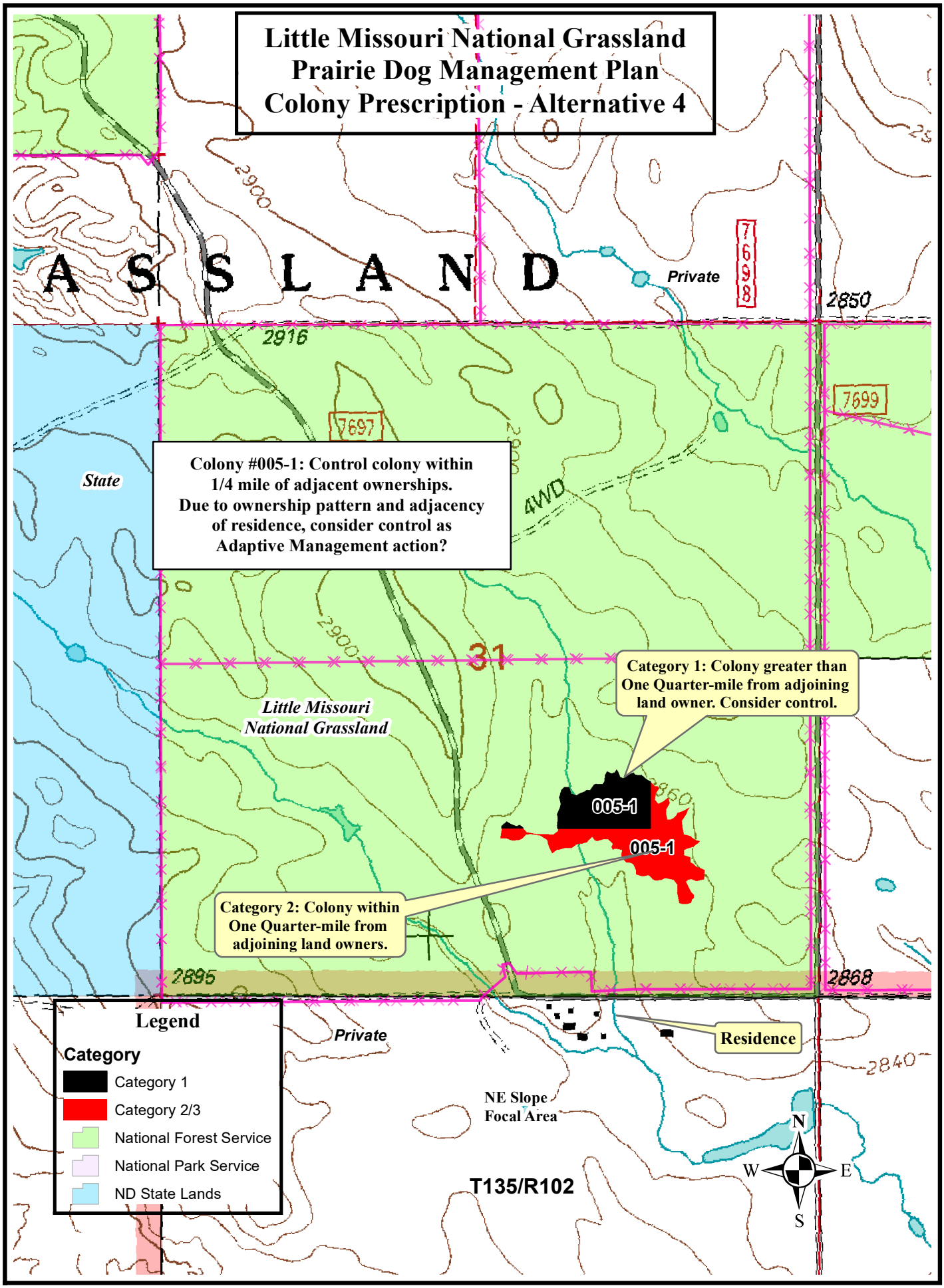

Little Missouri National Grassland
Prairie Dog Management Plan
No. Billings Co. - Alternatives 2&3
McKENZIE
BILLINGS
FH 2
306-1
306-2
FH 7
FH 14
FH 14
Quarter-mile boundary
dilineation
303-1
143-1
147-1
146-1
147-2
149-1
146-2
FH 12
147-5
147-6
149-2
146-3
South Unit
TR National Park
Focal Area
161-1
251-2
160-1
251-1
Little Missouri River
85
151-1
166-1
270-1
166-2
152-2
152-1
231-1
270-2
164-1
164-2
270-3
Theodore Roosevelt
National Park
170-3
170-1
172-1
186-1
170-4
186-2
186-3
242-1
Belfield
FH 3
250-1
202-1
Legend
Affected Prairie Dog Colonies
Deferred Prairie Dog Colonies
LMNG Prairie Dog Focal Area
National Forest Service
National Park Service
ND State Lands
N
W
E
S
194-1

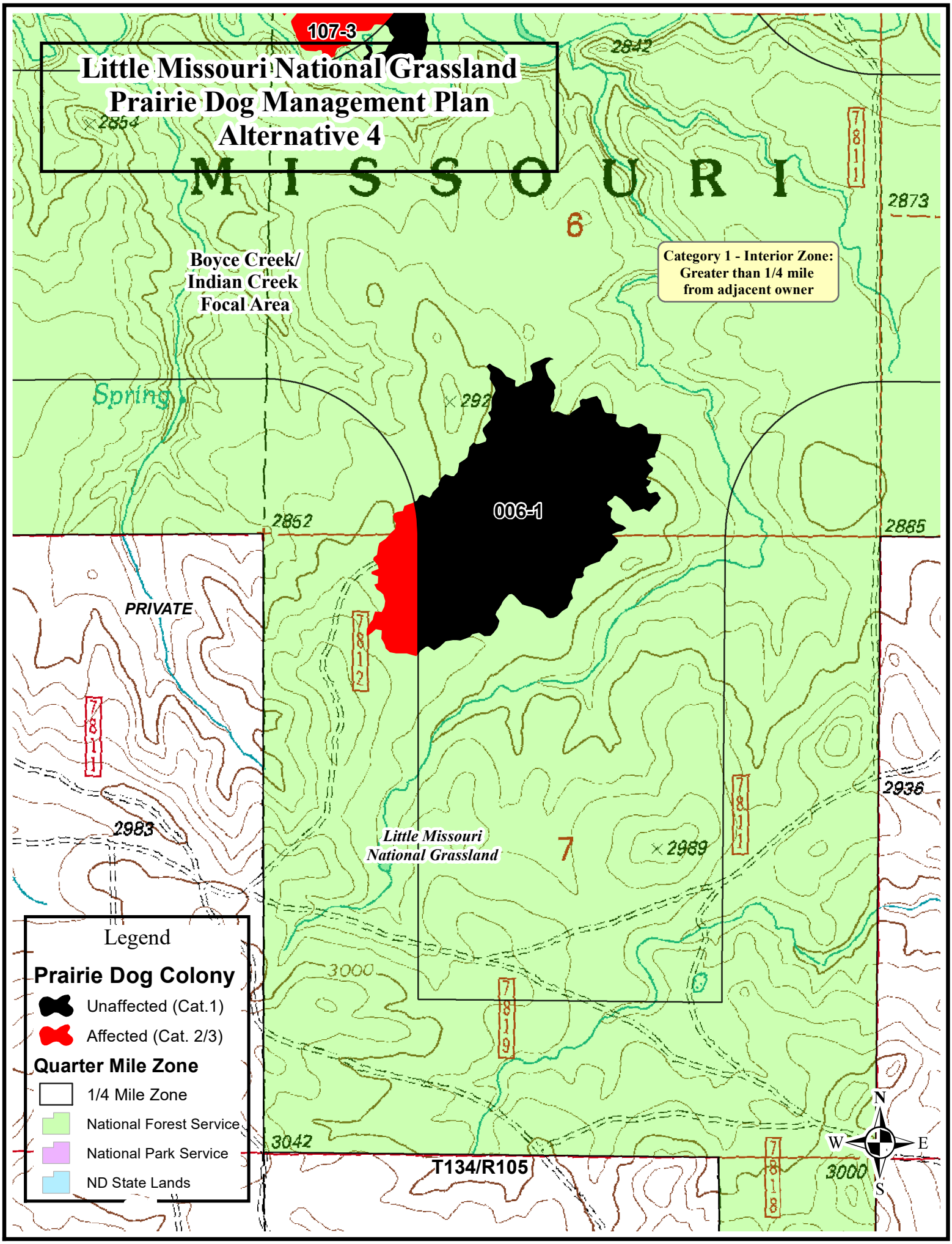

Little Missouri National Grassland
Prairie Dog Management Plan
East McKenzie - Alternatives 2&3
85
MA 3.63
Watford City
NW McKenzie
Focal Area
459-1
456-2
456-3
456-4
462-1
465-1
Theodore Roosevelt
National Park
375-1
Quarter-mile boundary
dilineation
437-1
SW McKenzie
Focal Area
North Unit
TR National Park
Focal Area
412-2
512-1
Legend
Affected Prairie Dog Colonies
Deferred Prairie Dog Colonies
LMNG Prairie Dog Focal Area
National Forest Service
National Park Service
ND State Lands
N
W
E
S
430-1
FH 7
501-1
FH 10

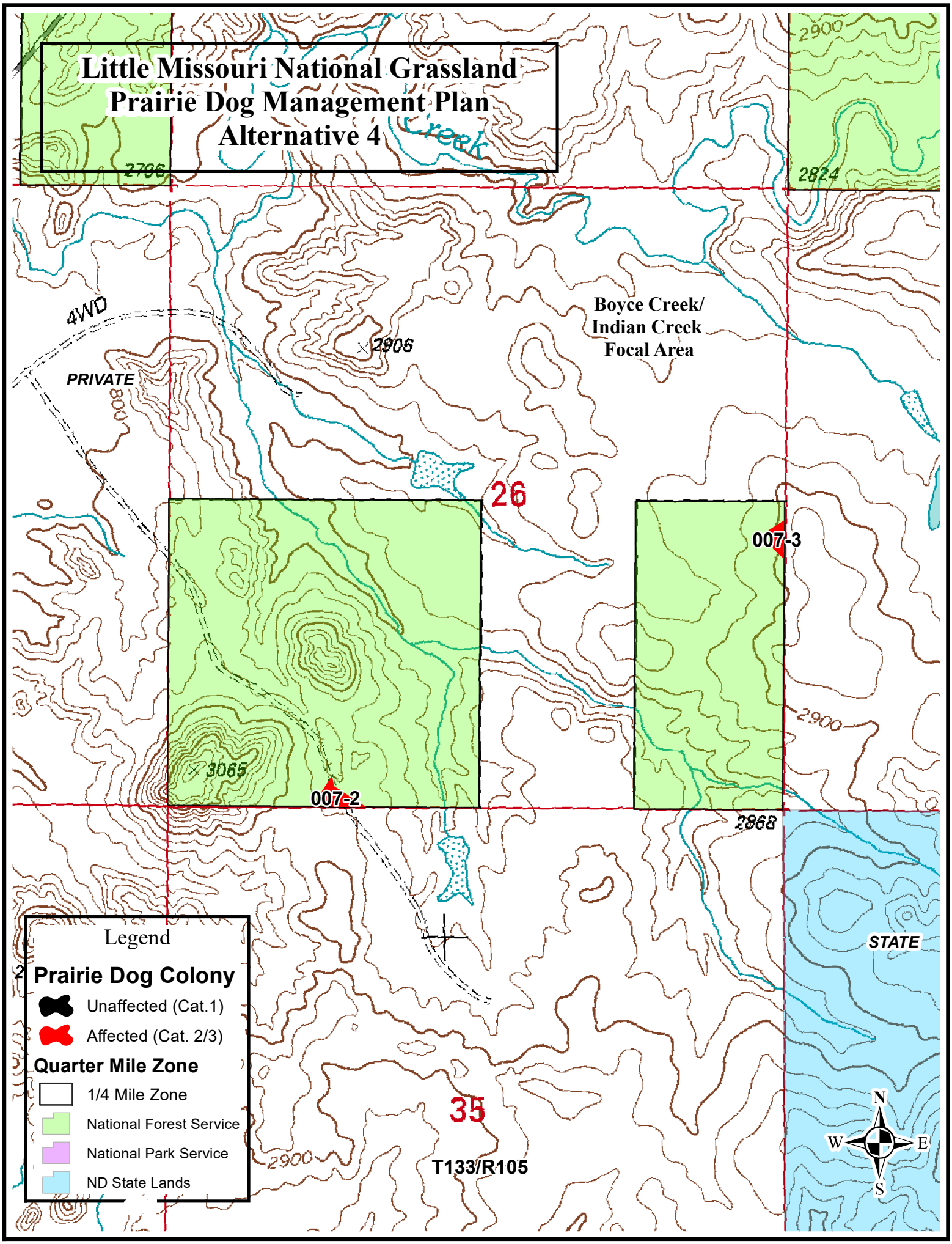

Little Missouri National Grassland
Prairie Dog Management Plan
West McKenzie - Alternatives 2&3
332-1
336
85
MA 3.63
333-2
333-1
333-3
338-1
339-1
339-17
346-2
339-3
339-4
339-8
339-7
339-5
339-9
346-1
339-10
339-12
339-6
339-14
339-15
346-3
342-1
339-16
339-11
339-13
358-1
351-1
344-1
349-1
351-2
358-2
516-1
351-3
Montana
North Dakota
Quarter-mile boundary
dilineation
462-1
465-1
365-1
375-1
365-3
North Unit
TR National Park
Focal Area
369-2
Little Missouri River
399-1
399-2
SW McKenzie
Focal Area
399-4
512-2
512-1
399-3
512-3
384-1
389-1
408-1
387-1
395-1
395-2
398-1
398-2
N
W
E
S
Legend
Affected Prairie Dog Colonies
Deferred Prairie Dog Colonies
LMNG Prairie Dog Focal Area
National Forest Service
National Park Service
ND State Lands

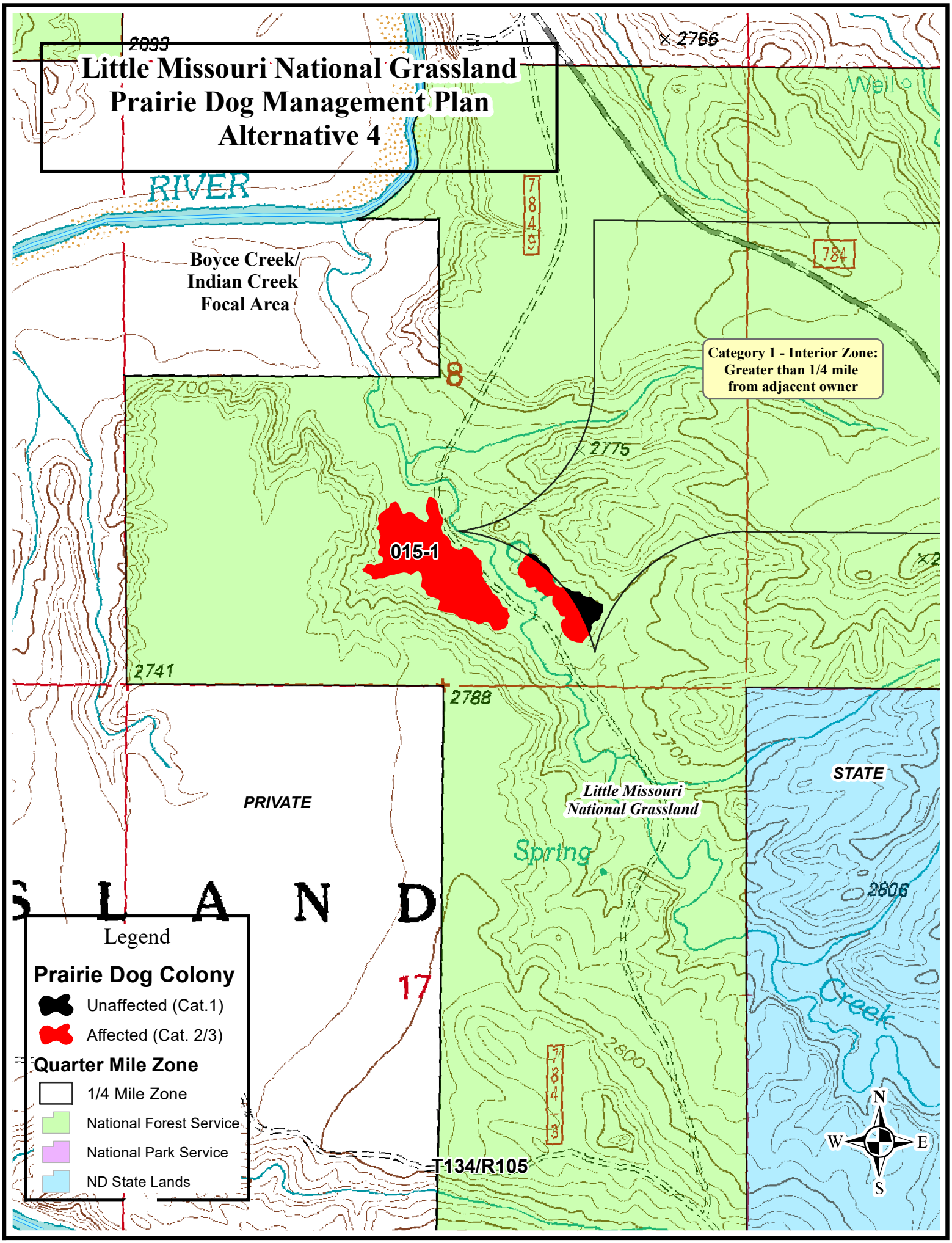

Little Missouri National Grassland
Prairie Dog Management Plan
Eastern Slope - Alternatives 2&3
194-1
206-1
267-1
STARK
Quarter-mile boundary
dilineation
Little Missouri River
BILLINGS
NE Slope
Focal Area
SLOPE
033-1
059-1
075-1
073-1
064-1
041-1
034-1
005-1
031-1
054-1
HH 3
85
Amidon
SLOPE
Legend
Affected Prairie Dog Colonies
Deferred Prairie Dog Colonies
LMNG Prairie Dog Focal Area
National Forest Service
National Park Service
ND State Lands
N
W
E
S

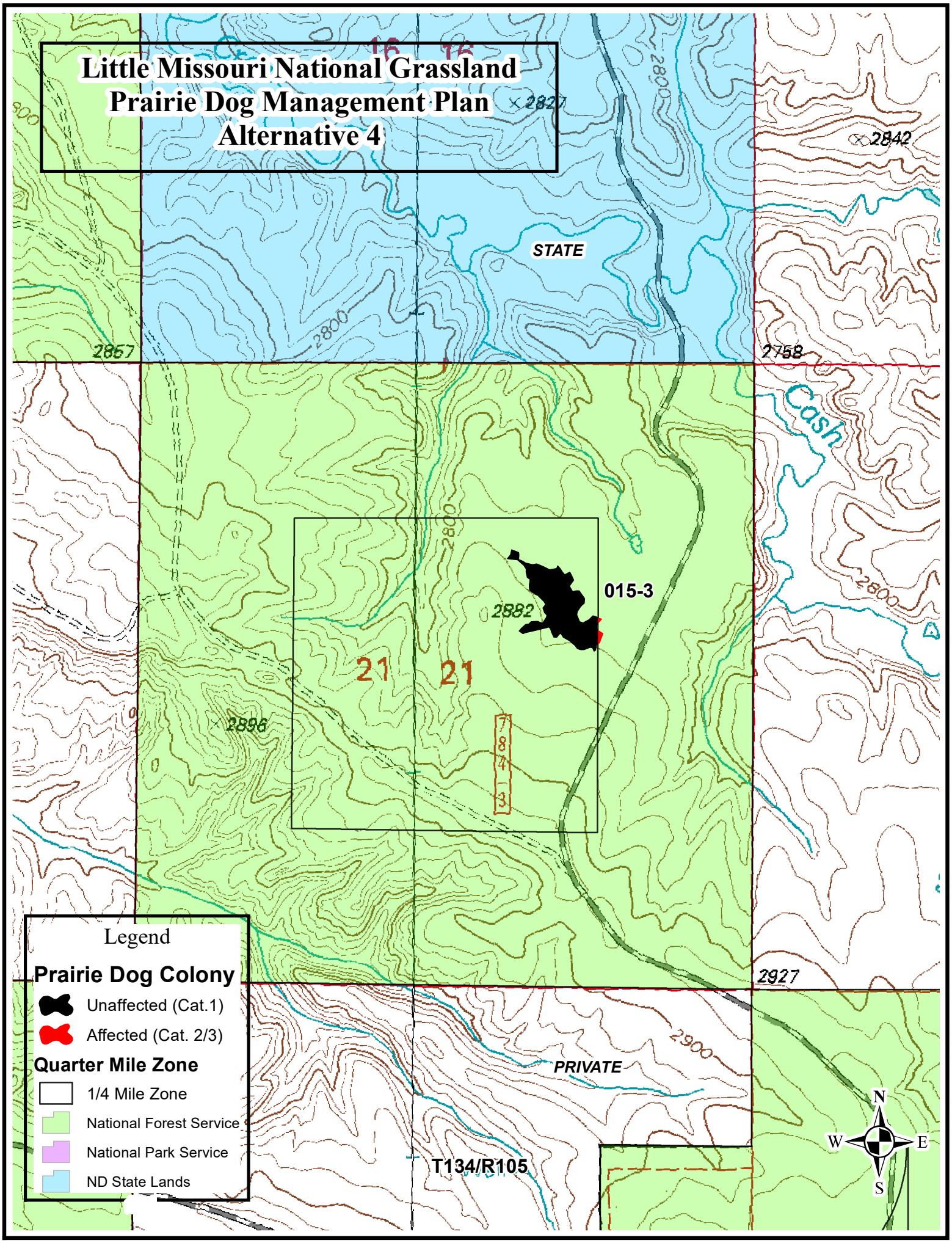

Little Missouri National Grassland
Prairie Dog Management Plan
Western Slope - Alternatives 2&3
Montana
North Dakota
16
BILLINGS
GOLDEN VALLEY
SLOPE
FH 4
FH 5
179-1
179-2
180-1
291-1
029-1
Quarter-mile boundary dilineation
107-1
010-1
107-2
093-1
010-3
107-3
006-1
118-1
015-1
020-1
006-2
039-1
015-3
SW Slope Focal Area
106-1
039-3
106-3
019-1
026-1
007-1
007-3
007-2
022-1
SLOPE
Marmarth
BOWMAN
12
Legend
Affected Prairie Dog Colonies
Deferred Prairie Dog Colonies
LMNG Prairie Dog Focal Area
National Forest Service
National Park Service
ND State Lands
N
W
E
S

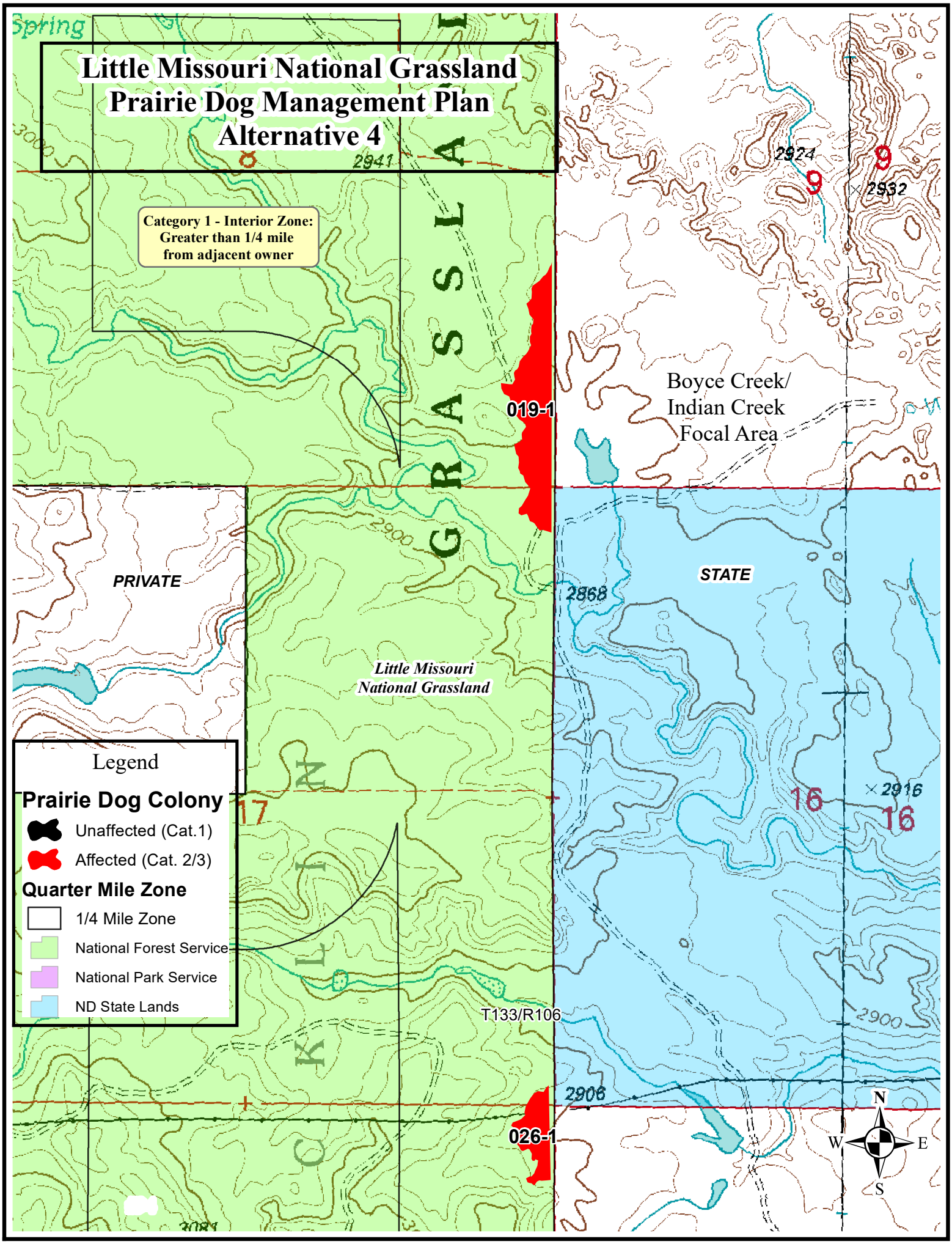

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription - Alternative 4
A S S L A N D
Private
7698
2850
2916
7699
7697
State
Colony #005-1: Control colony within 1/4 mile of adjacent ownerships. Due to ownership pattern and adjacency of residence, consider control as Adaptive Management action?
4WD
2900
31
Little Missouri National Grassland
Category 1: Colony greater than One Quarter-mile from adjoining land owner. Consider control.
005-1
005-1
Category 2: Colony within One Quarter-mile from adjoining land owners.
2895
2868
Private
Residence
2840
NE Slope Focal Area
T135/R102
N
W
E
S
Legend
Category
Category 1
Category 2/3
National Forest Service
National Park Service
ND State Lands

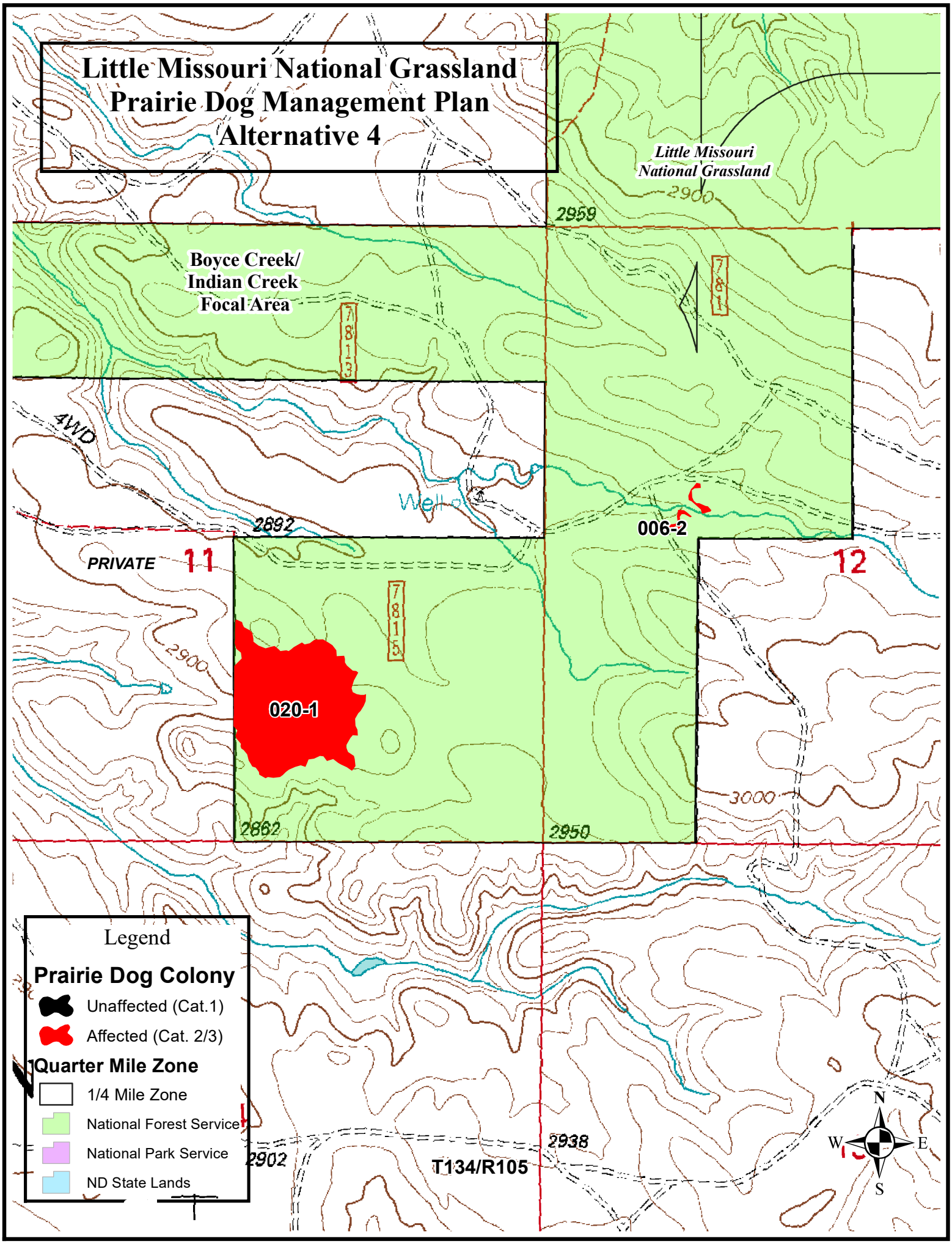

Little Missouri National Grassland
Prairie Dog Management Plan
Alternative 4
107-3
006-1
Boyce Creek/
Indian Creek
Focal Area
Category 1 - Interior Zone:
Greater than 1/4 mile
from adjacent owner
PRIVATE
Little Missouri
National Grassland
T134/R105
Legend
Prairie Dog Colony
Unaffected (Cat.1)
Affected (Cat. 2/3)
Quarter Mile Zone
1/4 Mile Zone
National Forest Service
National Park Service
ND State Lands
N
W
E
S

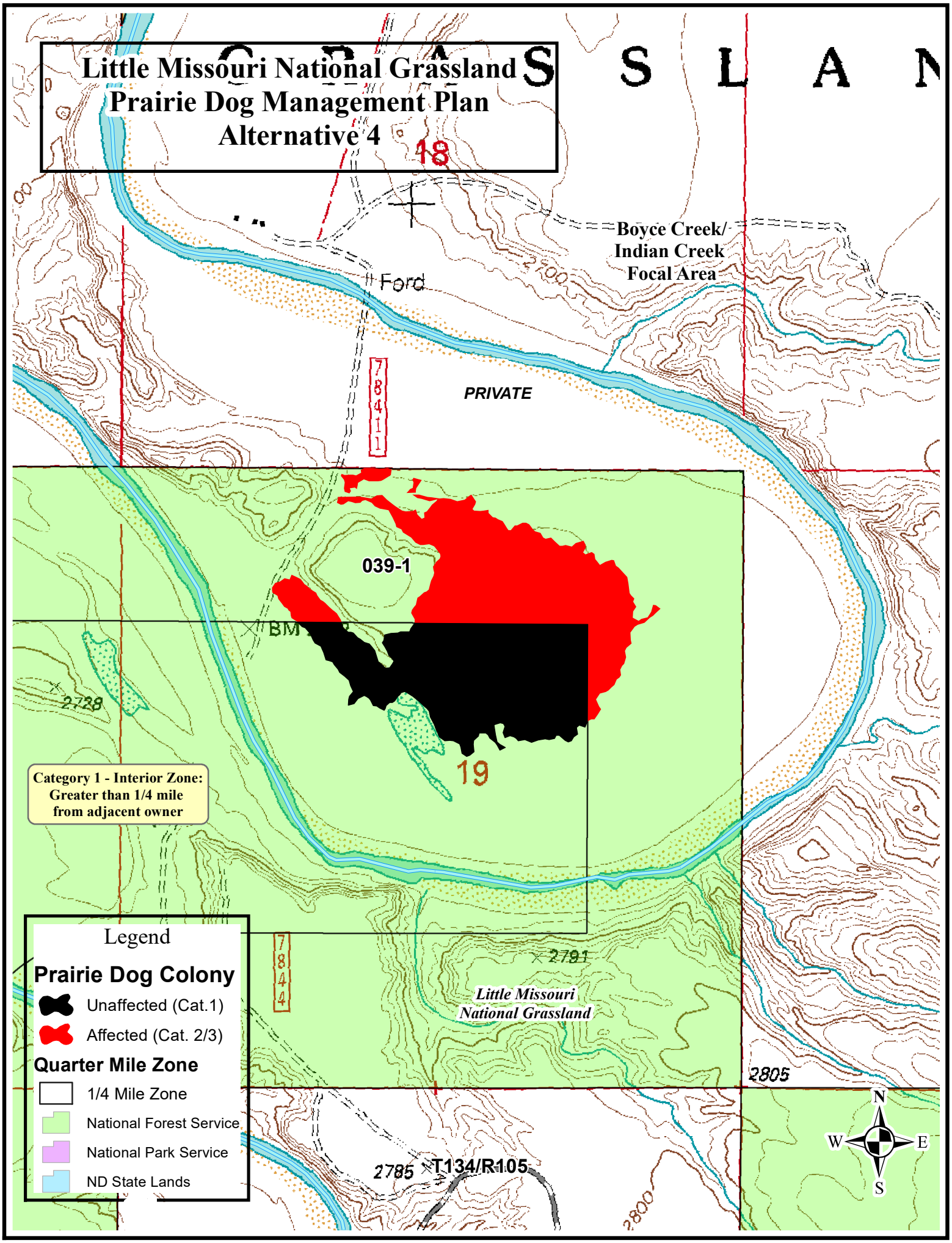

Little Missouri National Grassland
Prairie Dog Management Plan
Alternative 4
Creek
2706
2824
2900
4WD
PRIVATE
800
2906
Boyce Creek/
Indian Creek
Focal Area
26
007-3
007-2
3065
2900
2868
STATE
35
T133/R105
2900
Legend
Prairie Dog Colony
Unaffected (Cat.1)
Affected (Cat. 2/3)
Quarter Mile Zone
1/4 Mile Zone
National Forest Service
National Park Service
ND State Lands
N
W
E
S

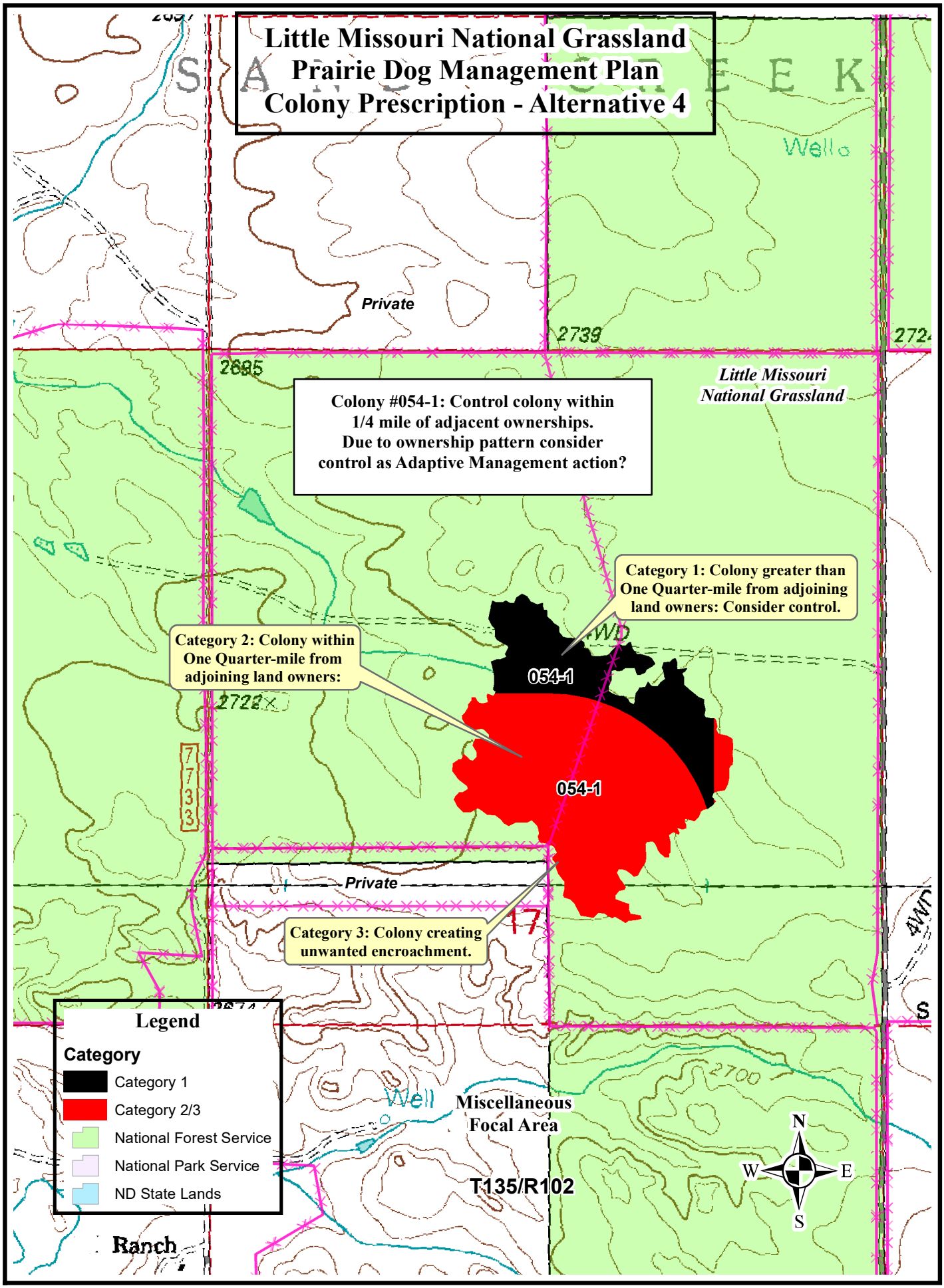

Little Missouri National Grassland
Prairie Dog Management Plan
Alternative 4
RIVER
Boyce Creek/
Indian Creek
Focal Area
Category 1 - Interior Zone:
Greater than 1/4 mile
from adjacent owner
015-1
PRIVATE
Little Missouri
National Grassland
STATE
Spring
Creek
T134/R105
Legend
Prairie Dog Colony
Unaffected (Cat.1)
Affected (Cat. 2/3)
Quarter Mile Zone
1/4 Mile Zone
National Forest Service
National Park Service
ND State Lands
N
W
E
S

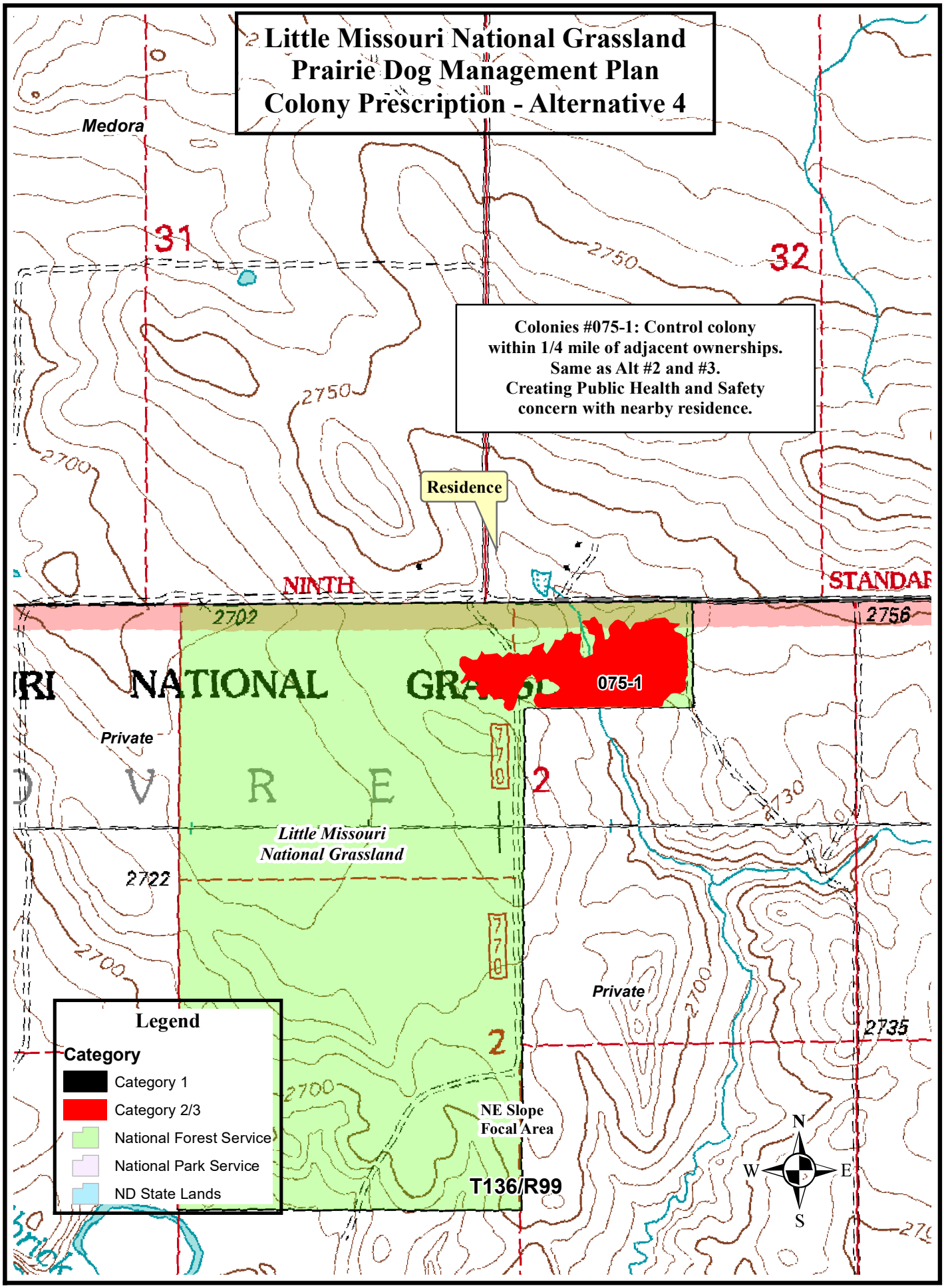

Little Missouri National Grassland
Prairie Dog Management Plan
Alternative 4
STATE
PRIVATE
015-3
Cash
T134/R105
Legend
Prairie Dog Colony
Unaffected (Cat.1)
Affected (Cat. 2/3)
Quarter Mile Zone
1/4 Mile Zone
National Forest Service
National Park Service
ND State Lands
N
W
E
S

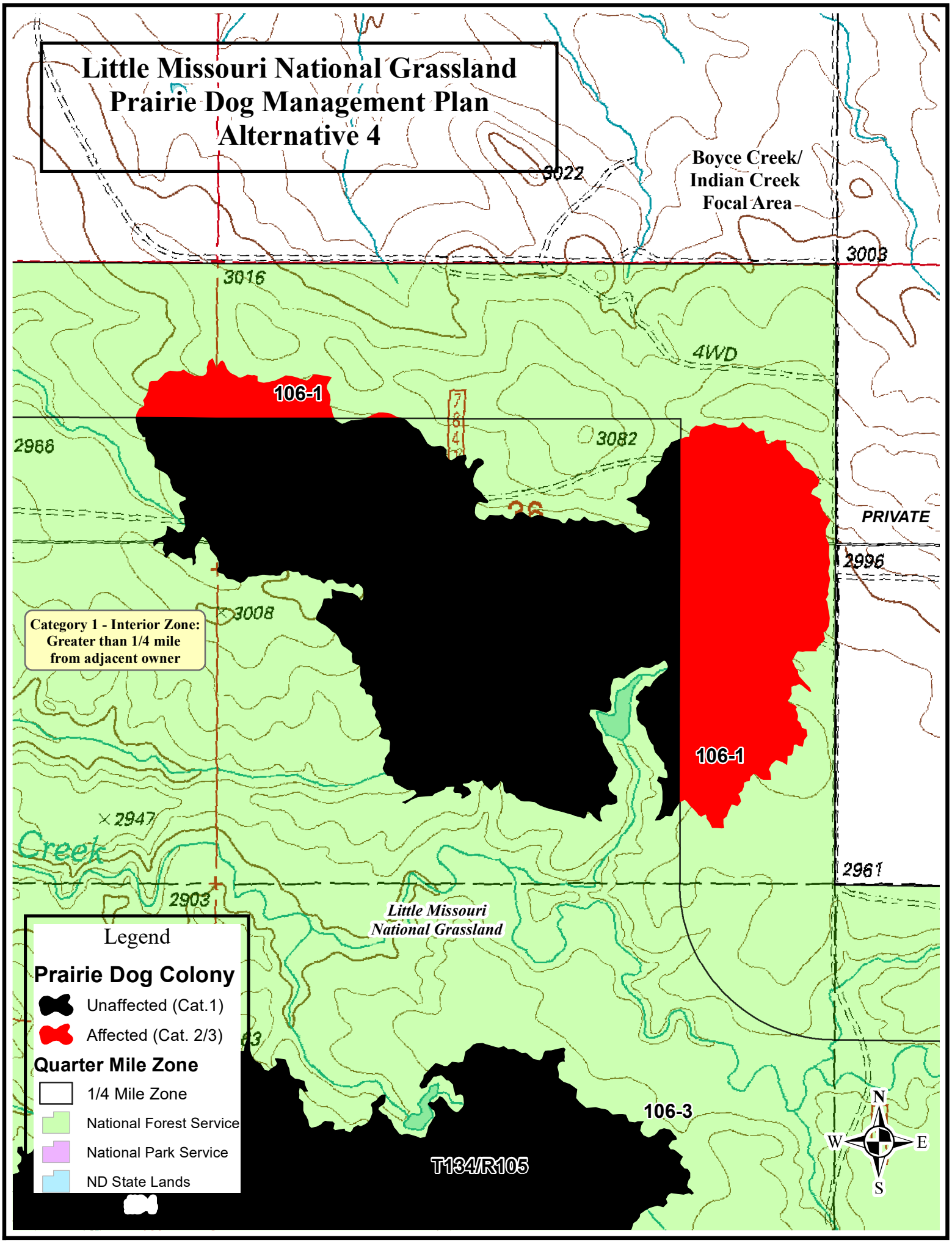

Little Missouri National Grassland
Prairie Dog Management Plan
Alternative 4
Category 1 - Interior Zone:
Greater than 1/4 mile
from adjacent owner
019-1
026-1
Boyce Creek/
Indian Creek
Focal Area
PRIVATE
STATE
Little Missouri
National Grassland
T133/R106
Legend
Prairie Dog Colony
Unaffected (Cat.1)
Affected (Cat. 2/3)
Quarter Mile Zone
1/4 Mile Zone
National Forest Service
National Park Service
ND State Lands
N
W
E
S

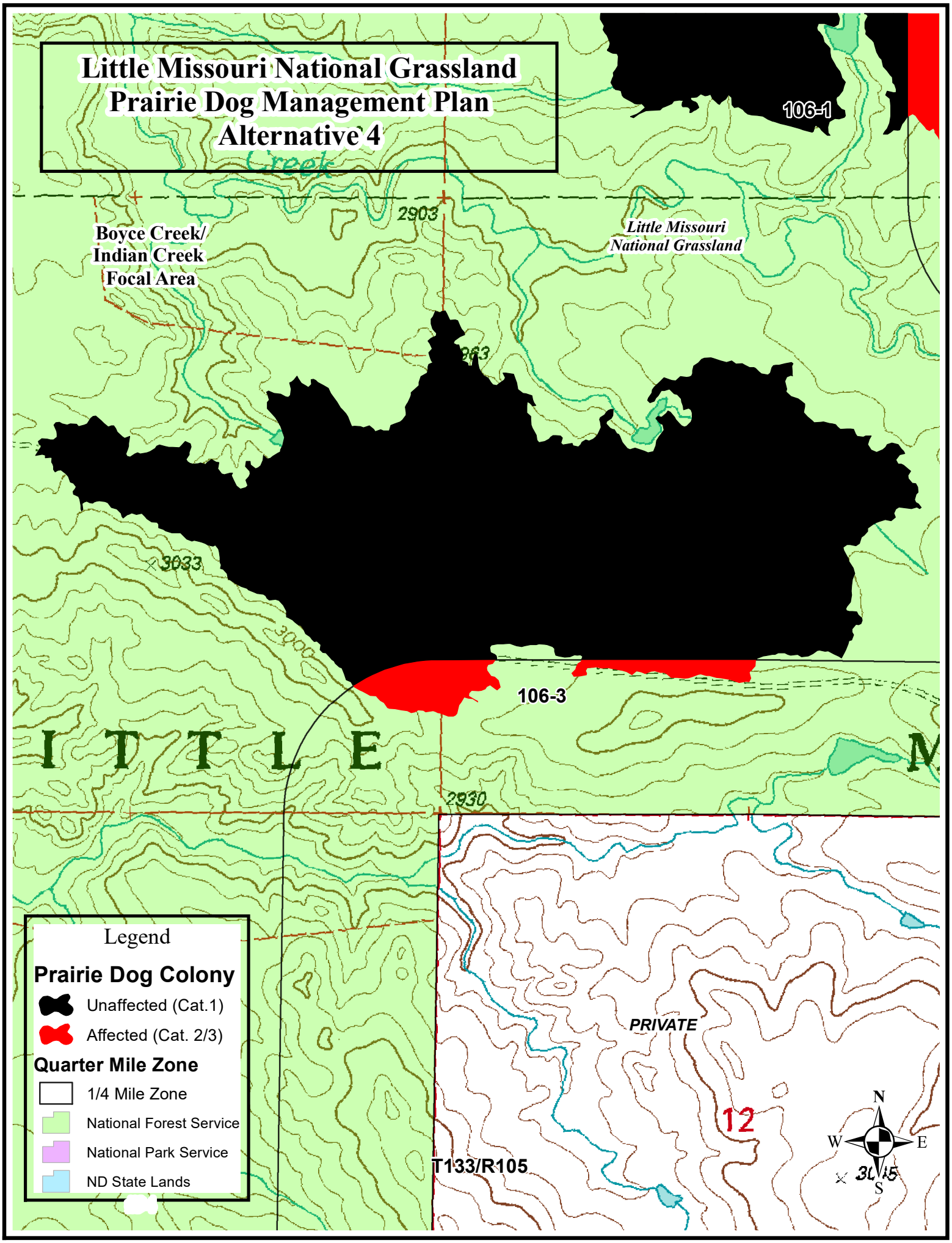

Little Missouri National Grassland
Prairie Dog Management Plan
Alternative 4
Little Missouri
National Grassland
2900
2959
Boyce Creek/
Indian Creek
Focal Area
7813
7811
4WD
Well
2892
006-2
PRIVATE
11
12
7815
020-1
2900
3000
2862
2950
2902
2938
T134/R105
Legend
Prairie Dog Colony
Unaffected (Cat.1)
Affected (Cat. 2/3)
Quarter Mile Zone
1/4 Mile Zone
National Forest Service
National Park Service
ND State Lands
N
W
E
S

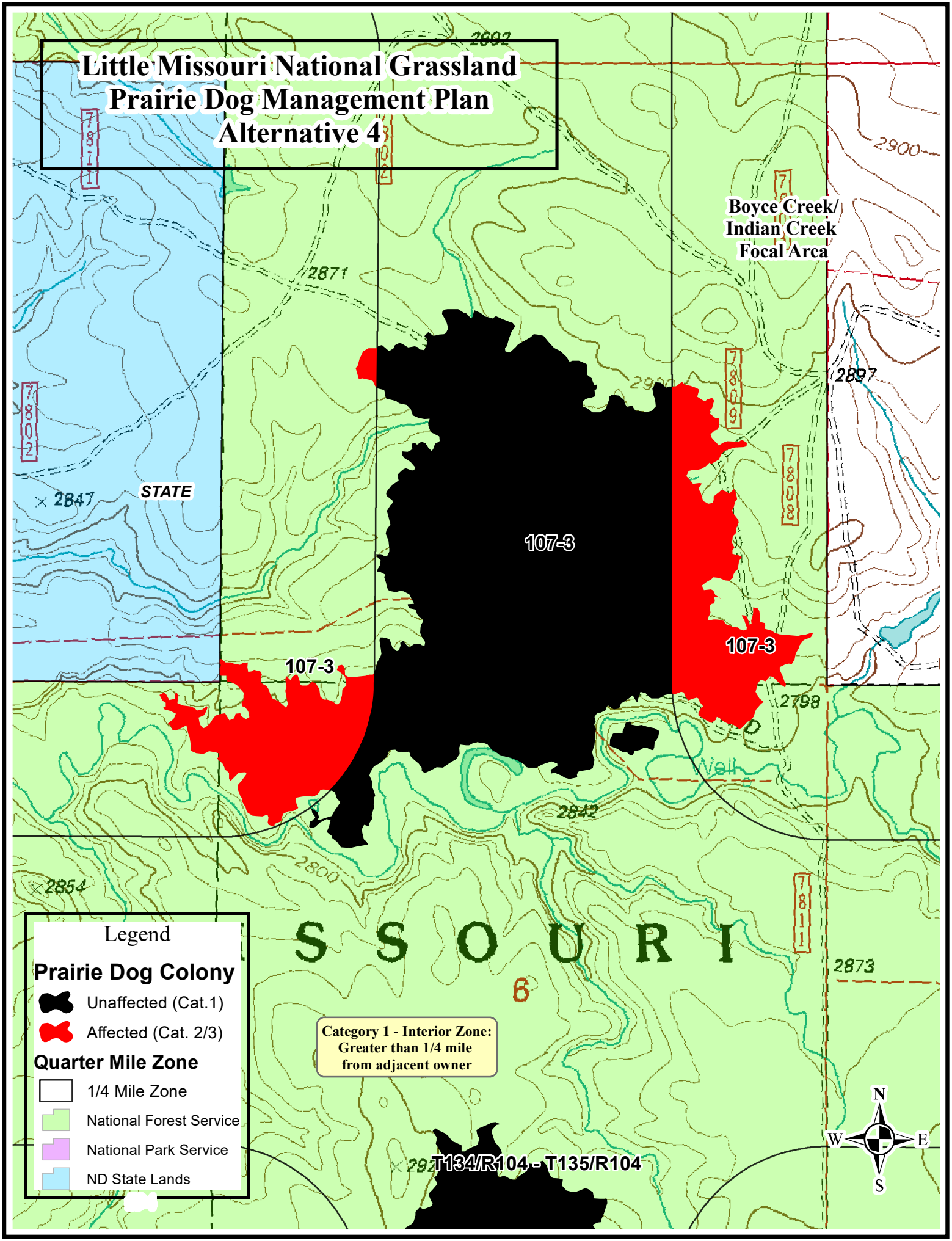

Little Missouri National Grassland
Prairie Dog Management Plan
Alternative 4
18
Boyce Creek/
Indian Creek
Focal Area
Ford
2700
PRIVATE
78411
039-1
BM
2728
19
Category 1 - Interior Zone:
Greater than 1/4 mile
from adjacent owner
Legend
Prairie Dog Colony
Unaffected (Cat.1)
Affected (Cat. 2/3)
Quarter Mile Zone
1/4 Mile Zone
National Forest Service
National Park Service
ND State Lands
78444
2791
Little Missouri
National Grassland
2805
2785
T134/R105
2800
N
W
E
S

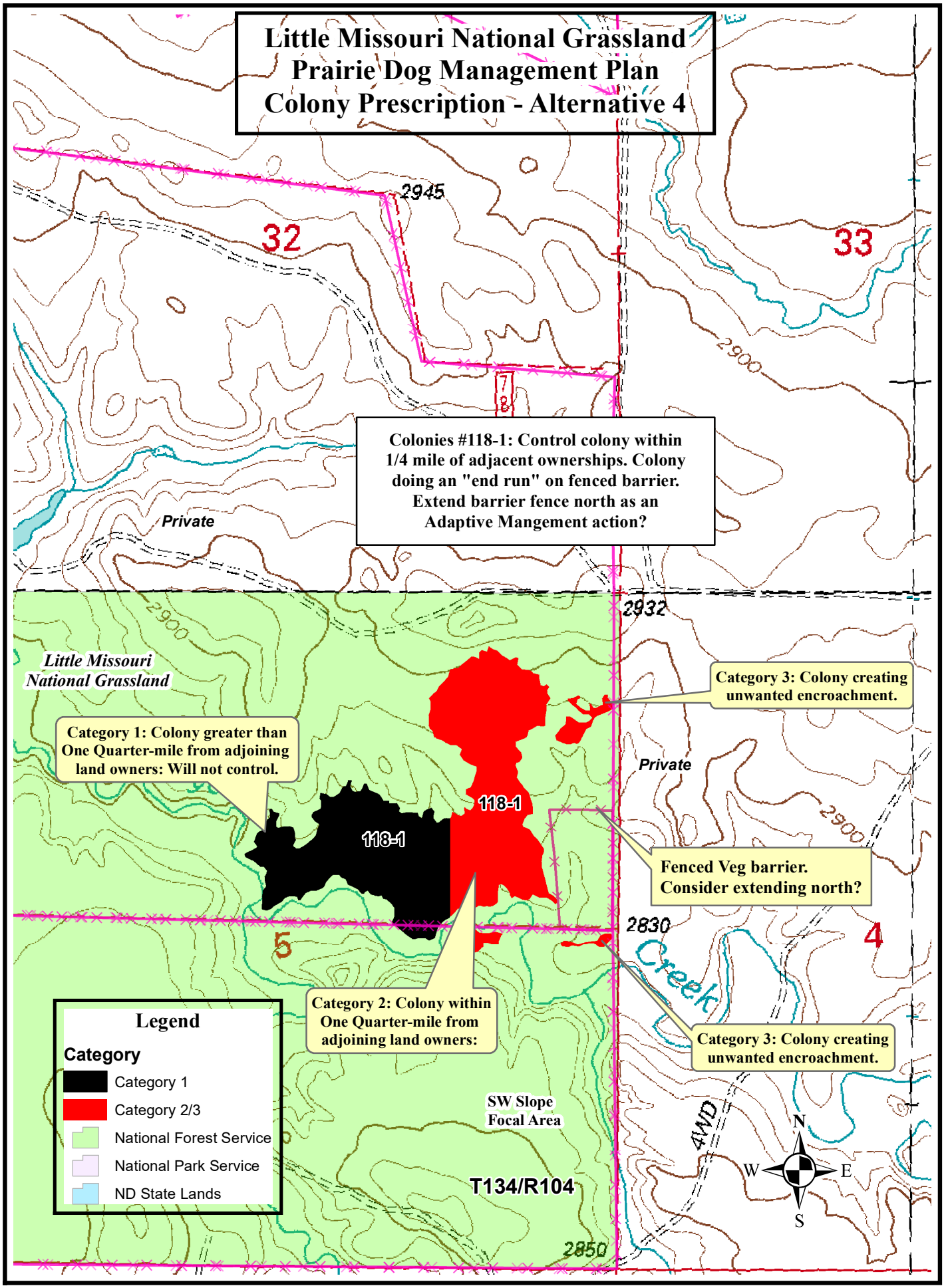

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription - Alternative 4
Private
2739
2695
Little Missouri
National Grassland
Colony #054-1: Control colony within
1/4 mile of adjacent ownerships.
Due to ownership pattern consider
control as Adaptive Management action?
Category 1: Colony greater than
One Quarter-mile from adjoining
land owners: Consider control.
Category 2: Colony within
One Quarter-mile from
adjoining land owners:
054-1
054-1
2722
7733
Private
Category 3: Colony creating
unwanted encroachment.
Legend
Category
Category 1
Category 2/3
National Forest Service
National Park Service
ND State Lands
Well
Miscellaneous
Focal Area
T135/R102
N
W
E
S
Ranch

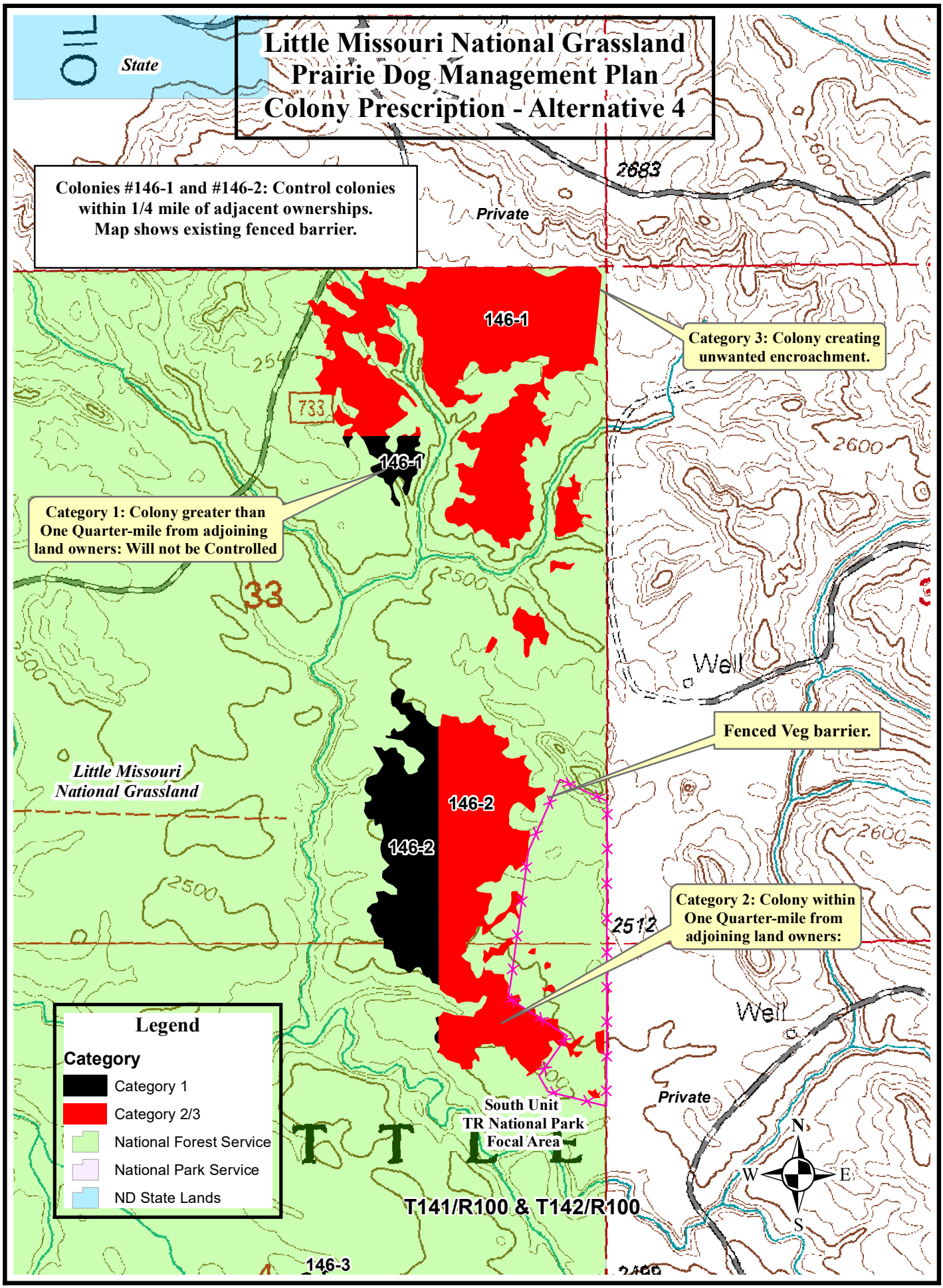

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription - Alternative 4
Medora
31
32
2750
2700
Colonies #075-1: Control colony
within 1/4 mile of adjacent ownerships.
Same as Alt #2 and #3.
Creating Public Health and Safety
concern with nearby residence.
Residence
NINTH
STANDAR
2702
2756
NATIONAL
075-1
Private
2
2730
Little Missouri
National Grassland
2722
Private
2735
NE Slope
Focal Area
T136/R99
Legend
Category
Category 1
Category 2/3
National Forest Service
National Park Service
ND State Lands
N
W
E
S

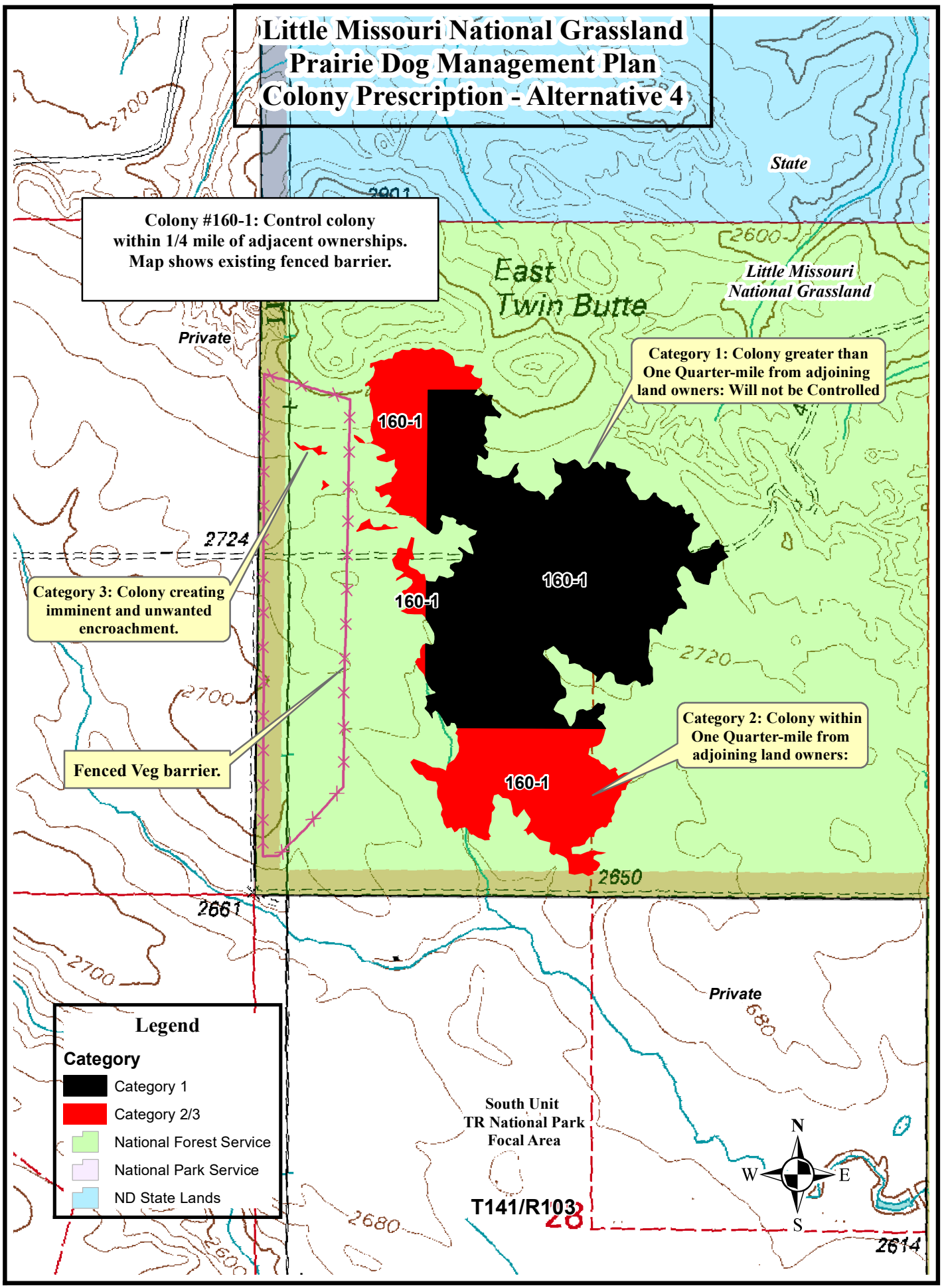

Little Missouri National Grassland
Prairie Dog Management Plan
Alternative 4
Boyce Creek/
Indian Creek
Focal Area
3022
3003
3016
4WD
106-1
2968
3082
PRIVATE
2996
3008
Category 1 - Interior Zone:
Greater than 1/4 mile
from adjacent owner
106-1
2947
Creek
2961
2903
Little Missouri
National Grassland
Legend
Prairie Dog Colony
Unaffected (Cat.1)
Affected (Cat. 2/3)
Quarter Mile Zone
1/4 Mile Zone
National Forest Service
National Park Service
ND State Lands
106-3
T134/R105
N
W
E
S

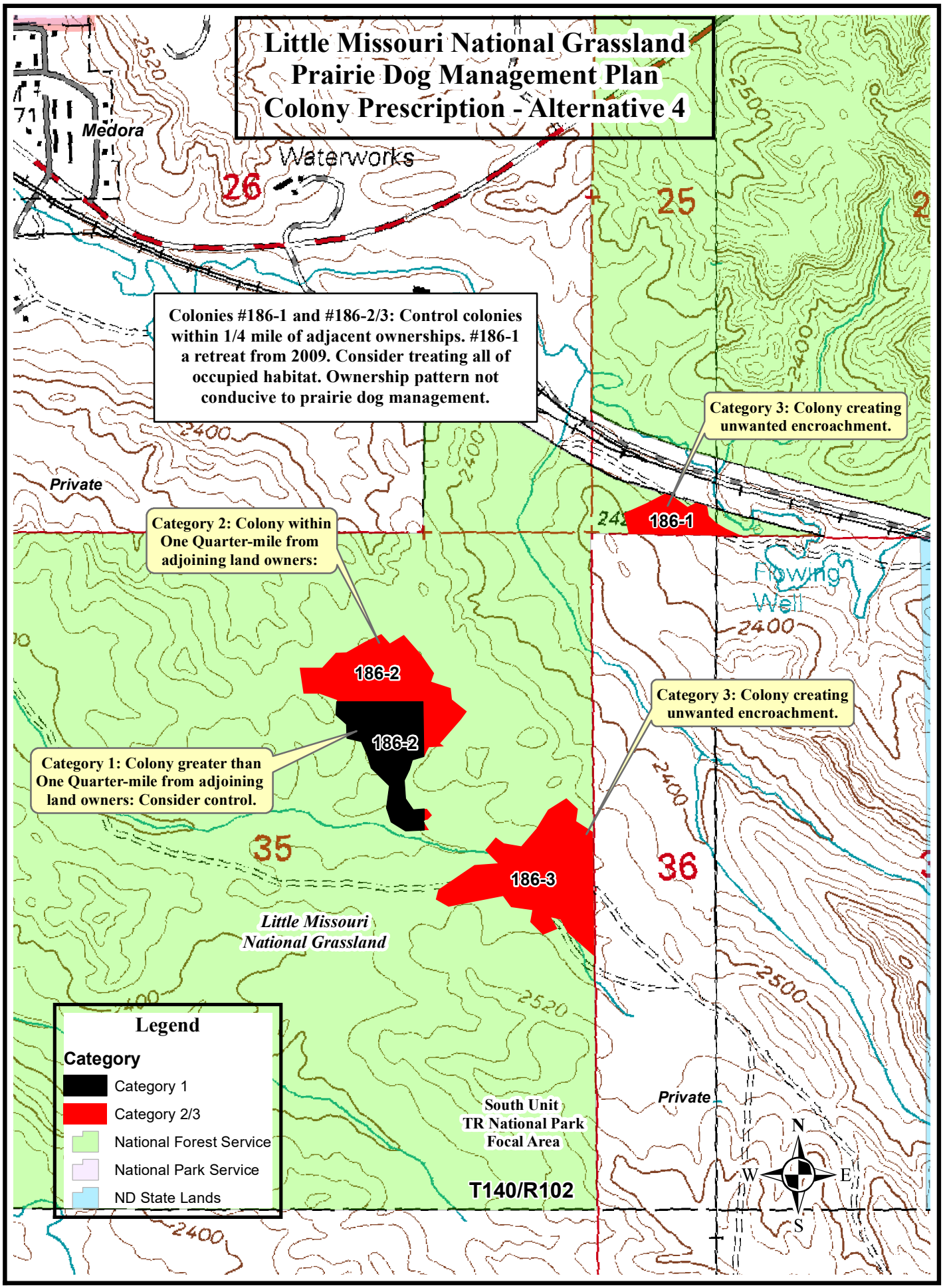

Little Missouri National Grassland
Prairie Dog Management Plan
Alternative 4
106-1
2903
Boyce Creek/
Indian Creek
Focal Area
Little Missouri
National Grassland
3033
3000
106-3
2930
PRIVATE
12
T133/R105
N
W
E
S
Legend
Prairie Dog Colony
Unaffected (Cat.1)
Affected (Cat. 2/3)
Quarter Mile Zone
1/4 Mile Zone
National Forest Service
National Park Service
ND State Lands

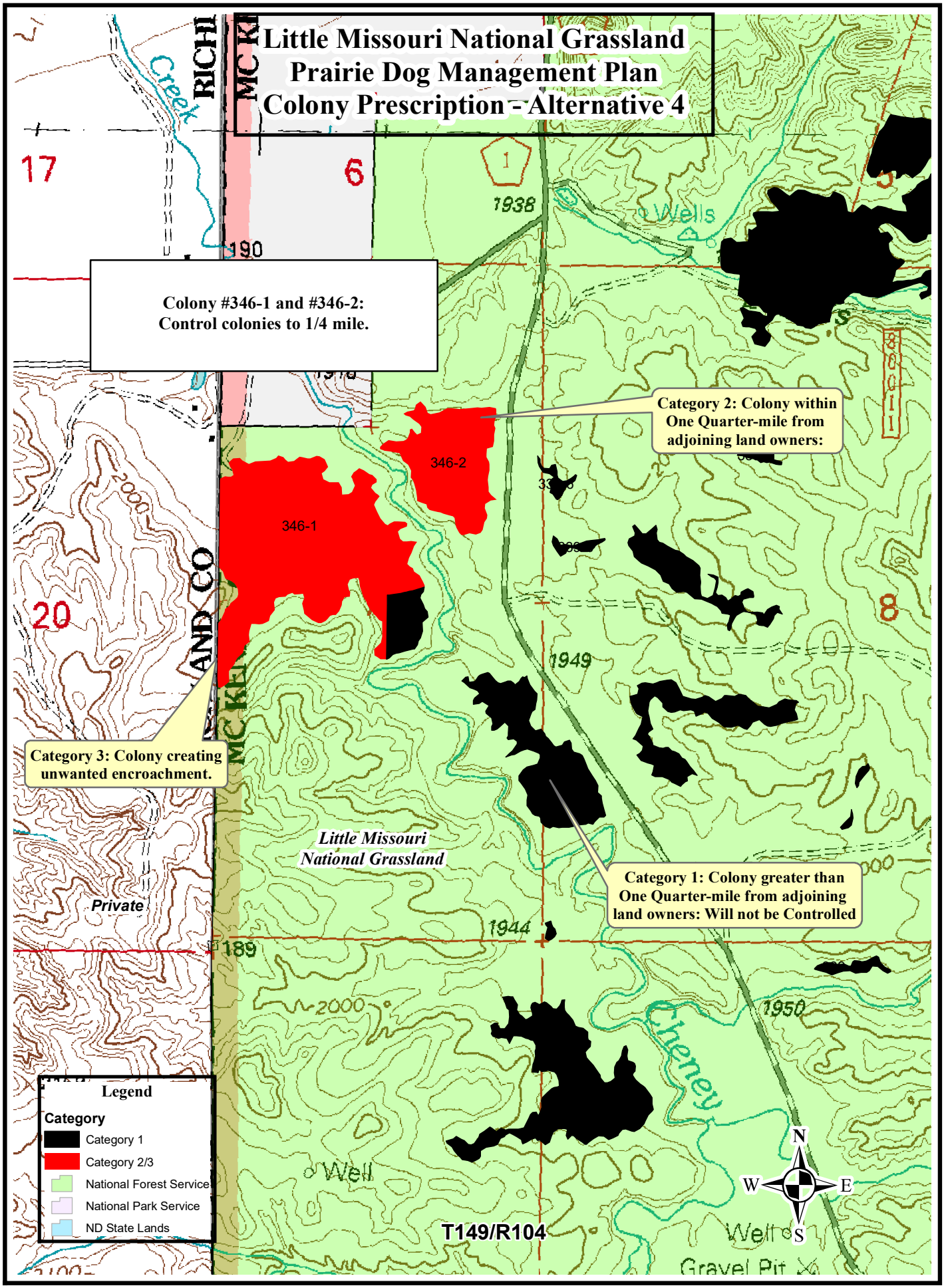

Little Missouri National Grassland
Prairie Dog Management Plan
Alternative 4
Boyce Creek/
Indian Creek
Focal Area
107-3
107-3
107-3
STATE
2902
2900
2871
2897
2847
2798
2842
2800
2854
2873
S S O U R I
6
Legend
Prairie Dog Colony
Unaffected (Cat.1)
Affected (Cat. 2/3)
Quarter Mile Zone
1/4 Mile Zone
National Forest Service
National Park Service
ND State Lands
Category 1 - Interior Zone:
Greater than 1/4 mile
from adjacent owner
T134/R104 - T135/R104
N
W
E
S

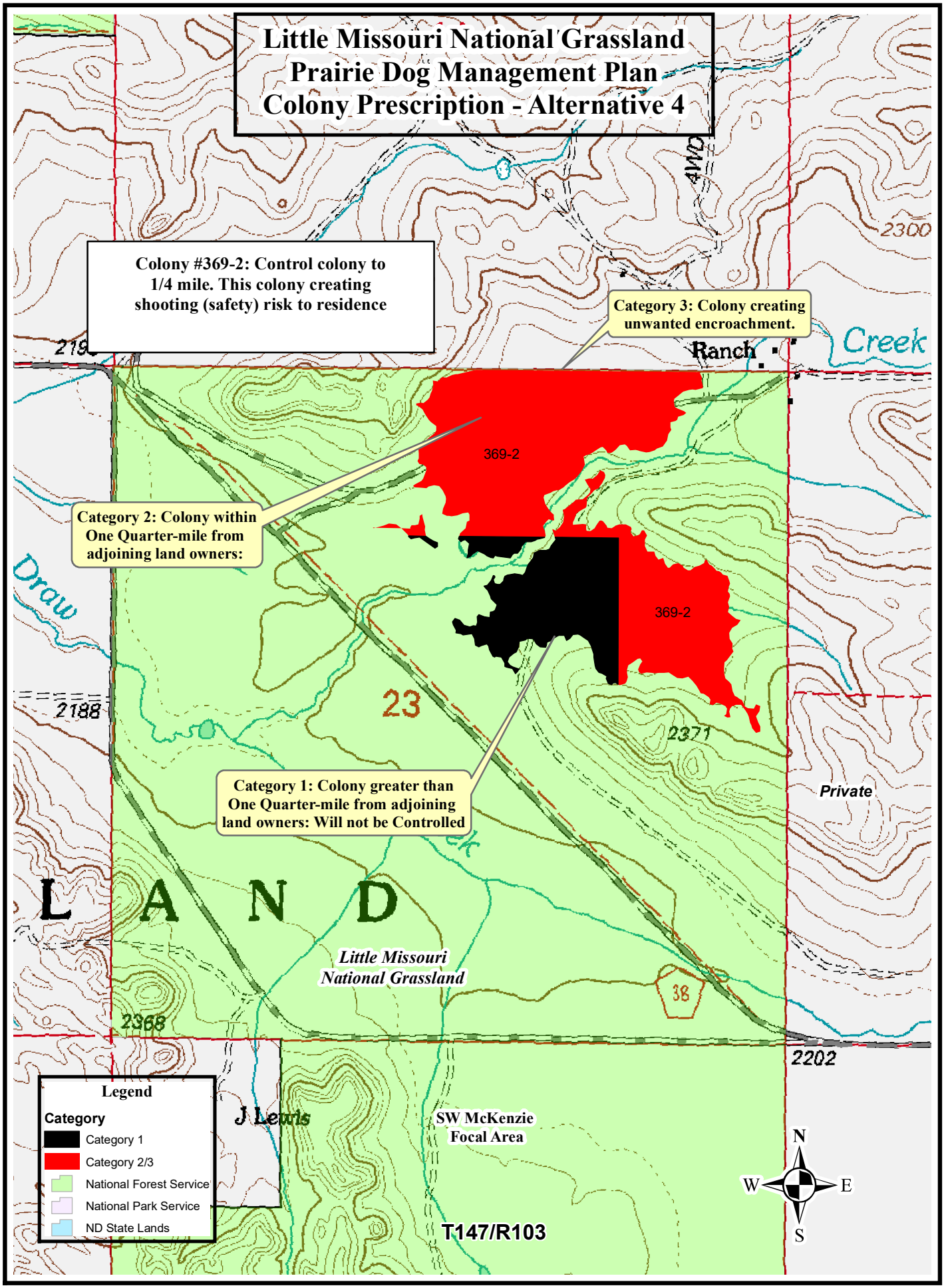

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription - Alternative 4
2945
32
33
2900
Colonies #118-1: Control colony within 1/4 mile of adjacent ownerships. Colony doing an "end run" on fenced barrier. Extend barrier fence north as an Adaptive Mangement action?
Private
2932
2900
Little Missouri National Grassland
Category 3: Colony creating unwanted encroachment.
Category 1: Colony greater than One Quarter-mile from adjoining land owners: Will not control.
118-1
118-1
Private
2900
Fenced Veg barrier. Consider extending north?
2830
5
4
Creek
Category 2: Colony within One Quarter-mile from adjoining land owners:
Category 3: Colony creating unwanted encroachment.
Legend
Category
Category 1
Category 2/3
National Forest Service
National Park Service
ND State Lands
SW Slope Focal Area
4WD
T134/R104
N
W
E
S
2850

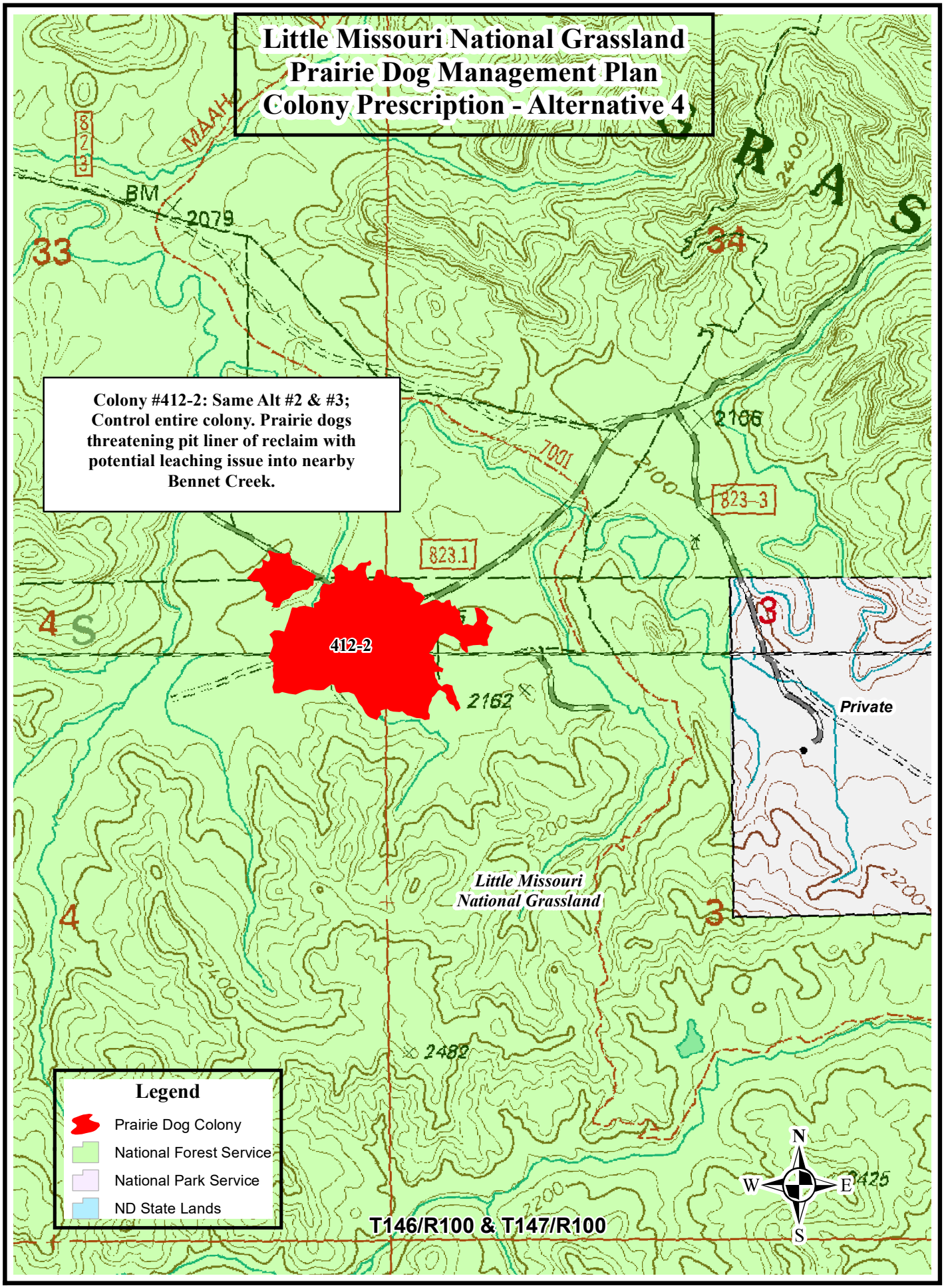

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription - Alternative 4
Colonies #146-1 and #146-2: Control colonies within 1/4 mile of adjacent ownerships. Map shows existing fenced barrier.
State
Private
2683
146-1
Category 3: Colony creating unwanted encroachment.
733
146-1
Category 1: Colony greater than One Quarter-mile from adjoining land owners: Will not be Controlled
33
Well
Fenced Veg barrier.
Little Missouri National Grassland
146-2
146-2
Category 2: Colony within One Quarter-mile from adjoining land owners:
2512
Well
Private
South Unit TR National Park Focal Area
Legend
Category
Category 1
Category 2/3
National Forest Service
National Park Service
ND State Lands
T141/R100 & T142/R100
N
W
E
S
146-3

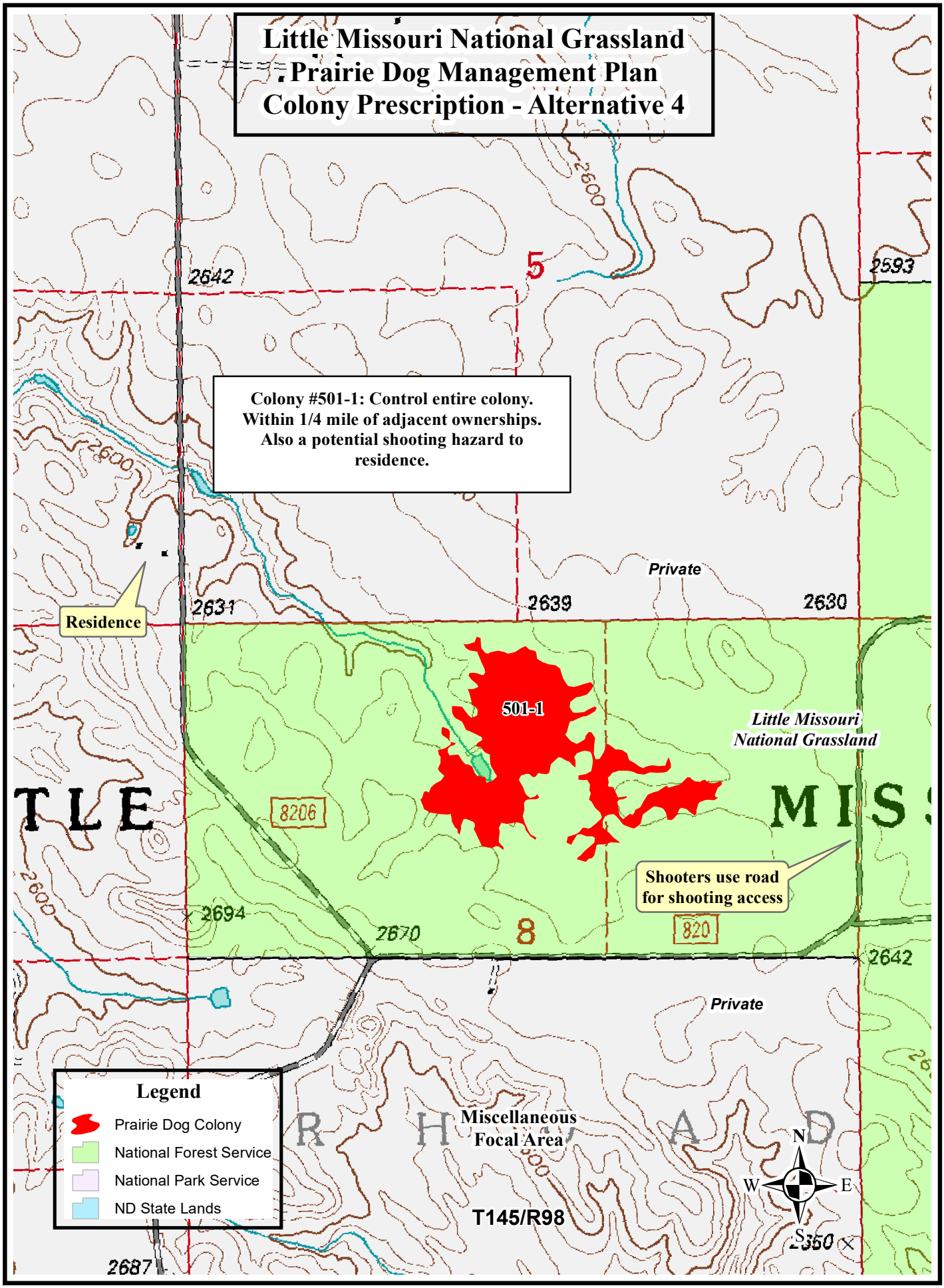

Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription - Alternative 4
Colony #160-1: Control colony within 1/4 mile of adjacent ownerships. Map shows existing fenced barrier.
State
East Twin Butte
Little Missouri National Grassland
Private
Category 1: Colony greater than One Quarter-mile from adjoining land owners: Will not be Controlled
160-1
160-1
160-1
160-1
Category 3: Colony creating imminent and unwanted encroachment.
Fenced Veg barrier.
Category 2: Colony within One Quarter-mile from adjoining land owners:
2724
2720
2700
2650
2661
2700
2680
2614
Private
680
South Unit
TR National Park
Focal Area
T141/R103
28
N
W
E
S
Legend
Category
Category 1
Category 2/3
National Forest Service
National Park Service
ND State Lands


Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription - Alternative 4
Medora
Waterworks
26
25
Colonies #186-1 and #186-2/3: Control colonies within 1/4 mile of adjacent ownerships. #186-1 a retreat from 2009. Consider treating all of occupied habitat. Ownership pattern not conducive to prairie dog management.
Category 3: Colony creating unwanted encroachment.
Private
Category 2: Colony within One Quarter-mile from adjoining land owners:
186-1
Flowing Well
186-2
186-2
Category 3: Colony creating unwanted encroachment.
Category 1: Colony greater than One Quarter-mile from adjoining land owners: Consider control.
35
36
186-3
Little Missouri National Grassland
2400
2500
2520
Legend
Category
Category 1
Category 2/3
National Forest Service
National Park Service
ND State Lands
South Unit TR National Park Focal Area
Private
T140/R102
N
W
E
S


Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription - Alternative 4
Colony #346-1 and #346-2:
Control colonies to 1/4 mile.
Category 2: Colony within One Quarter-mile from adjoining land owners:
Category 3: Colony creating unwanted encroachment.
Category 1: Colony greater than One Quarter-mile from adjoining land owners: Will not be Controlled
346-1
346-2
Little Missouri National Grassland
Private
T149/R104
Legend
Category
Category 1
Category 2/3
National Forest Service
National Park Service
ND State Lands
N
W
E
S


Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription - Alternative 4
Colony #369-2: Control colony to 1/4 mile. This colony creating shooting (safety) risk to residence
Category 3: Colony creating unwanted encroachment.
Category 2: Colony within One Quarter-mile from adjoining land owners:
Category 1: Colony greater than One Quarter-mile from adjoining land owners: Will not be Controlled
369-2
369-2
Ranch
Creek
Draw
2300
2188
2371
23
Private
L A N D
Little Missouri National Grassland
38
2368
2202
J Lewis
SW McKenzie Focal Area
T147/R103
Legend
Category
Category 1
Category 2/3
National Forest Service
National Park Service
ND State Lands
N
W
E
S


Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription - Alternative 4
Colony #412-2: Same Alt #2 & #3; Control entire colony. Prairie dogs threatening pit liner of reclaim with potential leaching issue into nearby Bennet Creek.
412-2
Private
Little Missouri National Grassland
Legend
Prairie Dog Colony
National Forest Service
National Park Service
ND State Lands
T146/R100 & T147/R100
N
W
E
S


Little Missouri National Grassland
Prairie Dog Management Plan
Colony Prescription - Alternative 4
Colony #501-1: Control entire colony.
Within 1/4 mile of adjacent ownerships.
Also a potential shooting hazard to
residence.
Residence
501-1
Private
Little Missouri
National Grassland
Shooters use road
for shooting access
Private
Miscellaneous
Focal Area
T145/R98
Legend
Prairie Dog Colony
National Forest Service
National Park Service
ND State Lands
N
W
E
S
2642
2593
2631
2639
2630
2694
2670
2687
2600
8206
820
5
8