

SECTION 2: ALTERNATIVES AND PROPOSED ACTION

In this section, a proposed action (preferred alternative) for the preserve is described along with five alternatives, including one that would not substantially change existing conditions (“no action” alternative). All of the “action” alternatives are intended to support the park’s significance and purpose, achieve desired futures, avoid unacceptable resource impacts, and provide for public enjoyment of the preserve.

Alternative A (“no action”) is presented first. Next are actions that are common to the proposal and to alternatives B through E. Following that is a short description of specific actions that were considered but not included as part of any alternative. The main body of this section includes detailed descriptions of the proposed action and the other alternatives. Finally, two alternatives that were originally considered but were rejected are described. Potential environmental impacts of the proposed action and alternatives are presented in the subsequent environmental consequences section.

ALTERNATIVE A (“NO ACTION”)

Usually, the “No Action” alternative encompasses the continuation of existing conditions and management practices of a park unit and is always considered to provide a baseline for comparison with the other alternatives. However, the NPT currently owns all the property (see Figure 2) within the preserve’s authorized boundaries, creating a set of circumstances different from those commonly addressed in general management plans.

The vast majority (98%) of the land within the authorized boundaries of the preserve will remain in private ownership. The federal government can acquire, only by donation, up to 180 acres (72.7 hectares) of real property within the boundaries of the preserve and may not acquire fee ownership of any other lands within the preserve. With the consent of the landowner, the remaining private property can be administered through a cooperative agreement and within the provisions of law generally applicable to units of the National Park System. These provisions include regulations issued by the secretary of the interior that allow for construction, reconstruction, rehabilitation, or development of essential buildings, structures, landscapes, and related facilities on private property.

The NPT is working with the NPS, through an interim cooperative agreement, to address many of the more immediate operational needs in facilities and grounds maintenance, utilities, health and safety, natural and cultural resources management, and education and interpretation.

Until the time it acquired the area that is now the preserve, the NPT had not managed properties long-term. Although land management is not part of the organizational mission of NPT, preserving nationally significant resources is. Because of this organizational mission, and because Congress has authorized the NPS to manage this land as a unit of the National Park System, it is assumed that, under the “No Action” alternative, the NPT would continue to own the land and the NPS would continue to provide minimal management in accordance with the terms of the interim agreement.

Preserve Management

The 35-year grazing lease between the NPT and Mr. Ed Bass would continue on the vast majority (98%) of the preserve. Current practices by the lessee include early intensive stocking and annual burning of all of the leased acreage. Existing developments necessary to support the lessee’s cattle operations would remain in place or be improved. Existing ranch and access roads would continue to be used by the lessee. The use of roads on the preserve outside of the historic ranch headquarters area, including visitor and NPS use, would continue to be managed by an access agreement between the NPT and the cattle lessee. Brome would continue to be grown in the fields across from the ranch headquarters to support the lessee’s cattle operations. Water and associated resources and riparian areas would be managed as they currently are. Stock ponds, seeps, springs, and riparian areas would continue to be used by the lessee for the cattle operation. Plants listed as noxious weeds by the state of Kansas would continue to be managed.

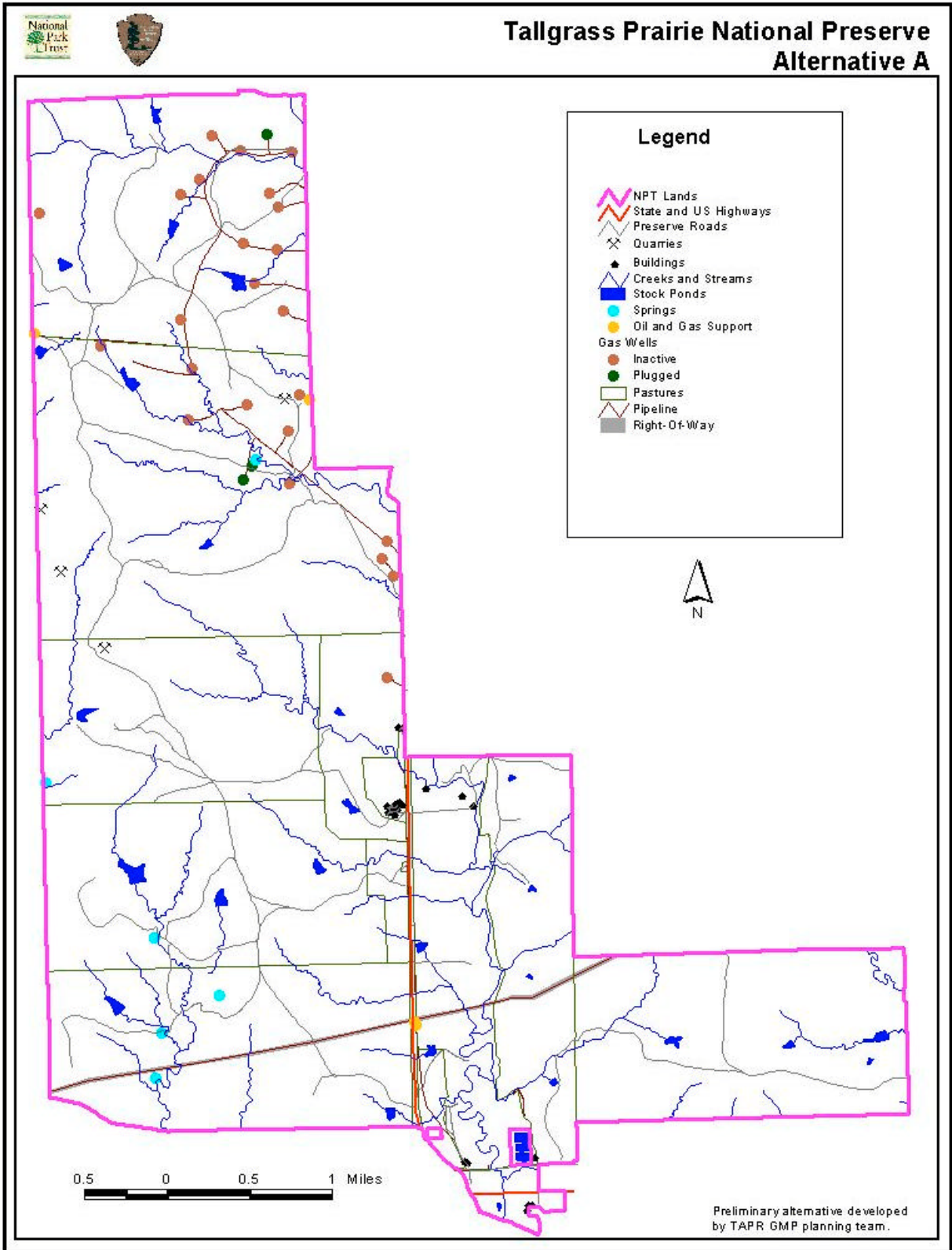


Figure 1

Forty-three acres (17.36 hectares) near U.S. 50 and the old Lantry Ranch headquarters area would continue to be leased for agricultural (crop) production. These five parcels of land would continue to be tilled, planted, and harvested annually.

Implementation

The “no action” alternative would be heavily dependent on the management direction and philosophy that NPT or future owners adopt. Unlike more traditional park areas, there is no anticipation that implementation plans, such as the Resource Management Plan and a Comprehensive Interpretation Plan, would be developed. There would be a continued NPS presence associated with the preserve. The superintendent would maintain an office, and a small staff would respond to day-to-day needs. There would be no long-range planning for the preserve, and very little or no expansion or development of additional programs and facilities.

Some of the major structures and associated developments in the historic ranch headquarters and schoolhouse areas, and portions of the landscape would receive routine or limited maintenance. The remaining structures, developments, and landscapes would not be maintained. Gas and oil lease operations and developments would remain. Structures related to the cattle operation would remain.

Limited collection or museum management programs, historic furnishings programs, or archeological and ethnographic resources management programs would be developed.

Visitation would continue to be concentrated in the historic ranch headquarters/school house area and visitors would continue to receive information and orientation in the ranch house or barn. NPT would continue operation of its sales area to provide books and souvenirs. The existing wayside exhibits and a self-guiding nature trail brochure would remain available for interpretation purposes. Prairie tours would be offered in accordance with existing access policy and the availability of equipment and personnel.

The use of portable toilets and bottled water would continue, as sewage disposal and the quality of potable water would remain inadequate for visitor use. Water supply and pressure would remain insufficient for fire protection. Visitors would continue to park in the gravel lot east of the barn and at the existing handicap parking area northwest of the barn.

Hunting and fishing would not be permitted.

ACTIONS COMMON TO ALL ACTION ALTERNATIVES

A number of actions supporting the preserve's stated significance and purpose are proposed in all of the action alternatives. These common actions are described below, and are not repeated in the descriptions of the individual alternatives.

All of the action alternatives identify "Management Areas" and "Management Prescriptions." Management areas designate appropriate locations within the preserve for specific management activities. In this way a variety of needs and desired conditions could be met within the boundaries of the preserve. For example, primary visitor services functions could be designated in an area away from prominent historic structures, so modern development would not intrude on a historic scene. Each alternative, however, contains different management areas in different configurations.

Management prescriptions identify the conditions that are desired at the preserve, given the preserve's significance, purpose, mission, and desired futures. They address resource conditions and visitor experiences, and identify the range of actions appropriate to achieve the desired conditions. Some prescriptions would apply to the overall preserve and some would apply only to specific management areas within the preserve.

Following the approval of the GMP, the NPS would enter into a cooperative agreement to formalize the relationship with NPT to manage the preserve under parameters specified in whatever alternative would be selected. Because of the 35-year cattle grazing lease between the NPT and Mr. Bass, implementation of any of the action alternatives would require the buy-back of at least some portion of the current lease.

The NPS would actively seek partnerships and opportunities for cooperation with local communities, government agencies, non-profit organizations, and other entities that may have an interest in helping to achieve the preserve's desired futures. The NPS also would cooperate and partner to help others achieve their goals outside the preserve, when such cooperation would also advance a purpose for which the preserve was created. The NPS would work with others to identify and pursue funding, staffing, and other resources in addition to the base operating funds provided through the federal budget process.

The NPS can acquire only up to 180 acres (72.7 hectares) and only through donations of land from the landowner. Initially, approximately 29 acres (11.7 hectares) would be acquired which would include the historic ranch headquarters, the school, and an area around the school (see Figure 3). The exact acreage and boundary would be established through a formal land survey. In addition to the 29 acres, other areas may be acquired for up to a total of 180 acres as development and operational plans and study recommendations are implemented. Such needs as the protection of significant, threatened, or endangered resources; safe and convenient visitor access; or the development of facilities may result in additional requests to the landowner to donate land. Before requesting additional acreage, the NPS would carefully analyze alternatives to acquisition to avoid having to use any of the 180 acres (72.7 hectares).

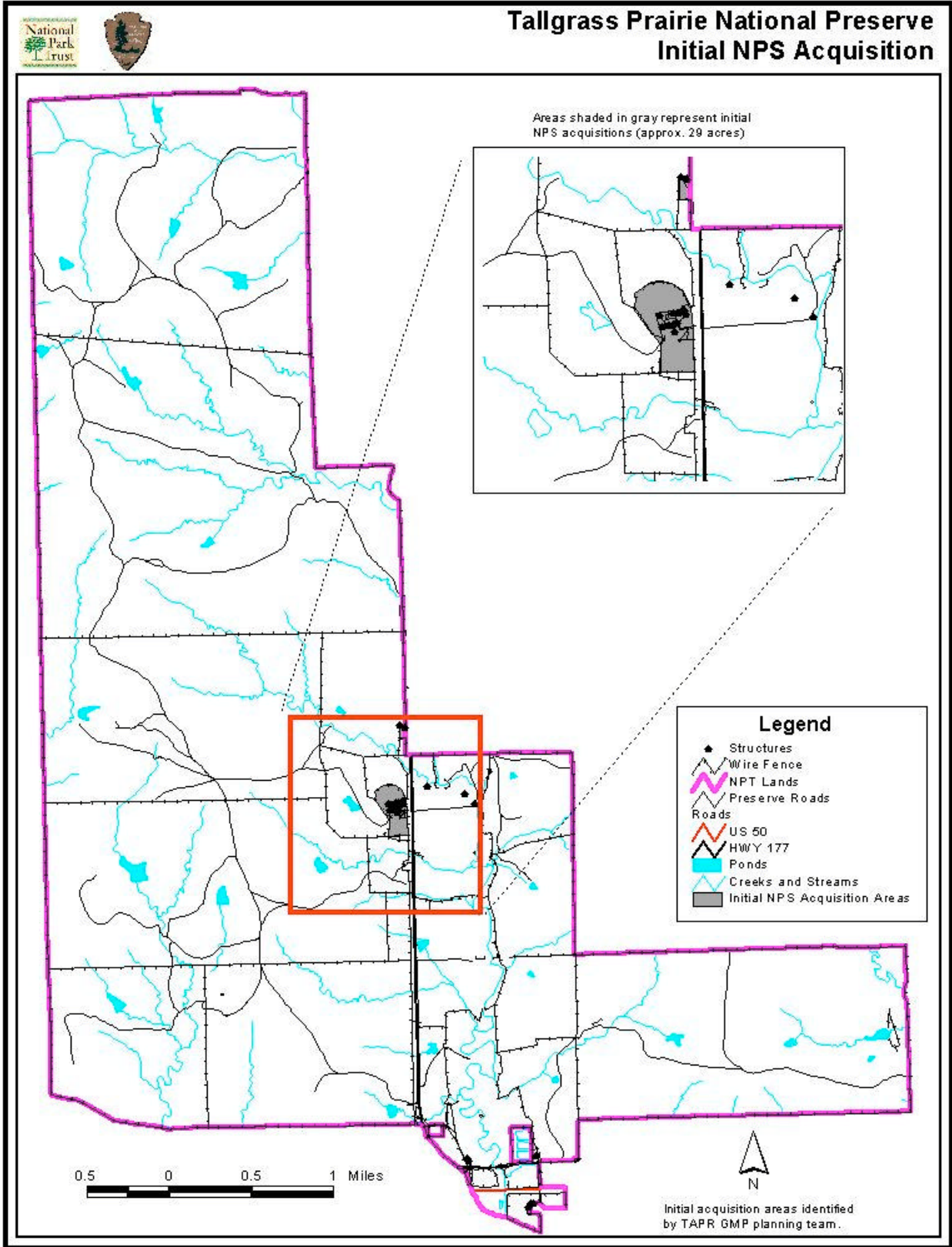


Figure 2

As part of the development of this GMP, the planning team also evaluated the adequacy of the preserve's boundaries to protect resources and provide for visitor use. It is the team's opinion that the current boundaries would be adequate. No boundary adjustments would be necessary and none would be sought.

The NPS is required by law to address carrying capacity in GMPs. Each GMP must include identification of and implementation of commitments for visitor carrying capacities for all areas of the park unit. The proposed action and each of the action alternatives assume that managers would take actions to keep visitation levels in line with the goals of the alternative and would maintain resource protection and quality visitor experiences. The management prescriptions in the alternatives describe carrying capacity in qualitative terms. Quantitative measures of carrying capacity would be determined over time through implementation of a systematic inventory and monitoring program and the development of a Visitor Experience and Resource Protection (VERP) analysis and implementation plan (See Appendix 2).

The following are those prescriptions that would apply to the preserve under all of the action alternatives, which excludes the "no action" alternative.

- The preserve would be managed to maintain and enhance the tallgrass prairie within its boundaries. This would be achieved in part through the use of fire and historic and contemporary grazing regimes in differing combinations that vary over time and location. A Fire Management Plan would be developed with public participation. It would address such topics as program objectives, fuel management, burn frequency and prescriptions, natural prescribed fire, the monitoring and researching of fire effects, safety, and equipment use and personnel needs.
- Prescribed fire applications would make use of roads, fences, stream courses, topography, and burn frequencies to create a varied landscape, or vegetative mosaic, to help maintain and enhance the tallgrass prairie, and to encourage and manage the wide variety of native plant and animal life associated with the prairie.
- Riparian areas would be protected to prevent erosion and the further loss of vegetation. Some of the associated fields within the Fox Creek riparian area would be restored to the native vegetation that once grew here. This would provide an example of a rare bottomland prairie containing species common to deeper soils and wetter sites, and would allow for the expression of tallgrass species ranging in heights of six feet (1.83 meters) or more.
- State and federal threatened and endangered species and species of concern would be considered in all management actions to meet federal and state mandates to protect or enhance the populations of these species.
- Management activities related to noxious weeds, pesticide use, animal health, maintenance and installation of fences, water, and waste disposal would be in conformity with NPS policy and consistent with applicable state laws.
- With the exception of agricultural crops that may be reintroduced to areas to recreate a historic scene, no alien, non-indigenous species would be introduced within riparian areas or areas of native prairie. Existing exotic species that would impact preserve resources in a negative manner and/or would spread rapidly would be removed or controlled where practical. Within already disturbed sites, species that are not native (for example, some agricultural plants) might be introduced for interpretation or cultural landscape restoration purposes, if the species could be easily controlled and they would not expand beyond a prescribed area.
- In accordance with Section 1005(g) (3) (G) of the enabling legislation for the preserve, the Secretary shall honor each valid existing oil and gas lease for lands within the boundaries of the preserve (as described in Section 1004 (b)) that is in effect on the date of enactment of this act.
- The owner of subsurface minerals would be encouraged to work cooperatively with the production lessee to minimize impacts such as erosion, vegetation loss, and soil compaction that are associated with oil and gas production.

Actions Common to All Action Alternatives

- When the mineral (oil and gas) lease permanently expires and/or gas wells are plugged and abandoned, the areas would be rehabilitated and tallgrass prairie restored. Rehabilitation would include removing the visual signs of production such as aboveground pipe and wellheads, eliminating the effects to vegetation caused by salt water disposal from the wells, and reclaiming areas of soil erosion and compaction. Visual impacts associated with gas and oil operations would be minimized and mitigation measures would be implemented where impacts remain unavoidable.
- Systematic block inventories would be conducted throughout the preserve to identify the range of archeological and ethnographic resources present. Significant archeological and ethnographic sites would be preserved and protected, and public access to these sites would be controlled. Sensitive archeological and ethnographic sites requiring additional protection would not be accessible to visitors, and transportation routes would be directed away from them.
- Artifacts, archival material, natural history collections, and oral histories relating to and directly associated with the preserve would be collected, preserved, and managed for use in museum exhibits, interpretation programs, and public and scholarly research in accordance with an approved Scope of Collections Statement.
- A variety of visitor activities and facilities, appropriate for a national preserve, would provide for a range of opportunities, time commitments, and levels of physical exertion. “Appropriate” is defined as an activity or facility that (1) is consistent with the purposes for which the preserve was established, (2) has no more than nominal impact on the natural and cultural resources of the preserve, and (3) does not conflict with another appropriate visitor use.
- A range of on-site interpretive and educational programs would be available, focusing on the natural history of the tallgrass prairie, Flint Hills ranching legacy, and American Indian history and culture. These stories are represented by the interpretation themes of the preserve and would be developed further through the Comprehensive Interpretation Plan.
- New development would be minimal and designed to avoid intrusion into and degradation of important views and cultural landscapes. Development of support facilities would be sufficient to meet visitor experience goals, and health and safety requirements.
- During preservation treatments, the necessary infrastructure, such as water, sewer, and mechanical and electrical systems would be upgraded, rehabilitated, and/or replaced to meet all applicable county, state, and federal codes and guidelines.
- Ethnographic resources would be identified and monitored. Specific resources may be made accessible to culturally affiliated tribes or traditionally associated groups by request. Any identified American Indian sacred sites would be protected, with access for sacred ceremonies allowed to appropriate Indian tribes.
- A Vegetation Management Plan would be developed that would utilize current science and resource management knowledge to guide vegetative management restoration within the preserve. After suitable public review and comment, this document would address specific goals and objectives for those vegetative restorations such as brome fields within the Fox Creek bottomlands, areas impacted by gas operations, erosion sites, and areas subject to noxious weed control; it would also address grazing regimes and stocking rates.
- Grazing animals would be cattle and bison separated by adequate fencing.
- A Bison Management Plan would be developed with public participation that is consistent with laws, policies, and procedures applicable to the NPS. The plan would address such topics as initial herd size, location and size of the reintroduction area, bison health and ecology, and the distribution of surplus animals.
- In areas of higher visitor use, such as the historic ranch headquarters area, visitor movement and access would be controlled to ensure resource protection while accommodating high-density use; these controls may include limited improvements such as walkways, barriers, benches, and interpretive and informational signs.
- Using existing roads and roadbeds, a public transportation system, such as a shuttle, would provide transportation to various points within the preserve, interpretive tours, and access to the prairie.
- The NPS would work with the landowner to determine and evaluate what encumbrances are on the property such as existing special uses, including rights-of-way, easements, and agreements. Encumbrances would continue so long as they do not become detrimental to the resource and to visitor experiences. They may be eliminated if the NPS and the landowner find it desirable and as opportunities present themselves.

- Access to all areas may be restricted during periods of extremely high fire danger. Restrictions on the use of fire and smoking may be required during portions of the year.

Note: Implementation Plans listed in Appendix 2 of the GMP such as the Bison Management Plan (BMP), Fire Management Plan (FMP), etc. may be single plans for one or more activities. For example, the FMP plan might discuss wildfires and prevention as well as use of prescribed fire to achieve resource management objectives. Such plans may also overlap with each other in details or action items. For instance the FMP might discuss range conditions and fuel loads (amount of grass in tons/acre) while the BMP may outline similar topics as part of forage concerns. Differing dates of completion may require these plans be separate while recognizing the commonality of their subject matter, as in the above example. (National Park Service Management Policies: 2000 draft). The need for separate implementation plans for the purpose of tracking program priorities and budgets is also a continuing need. However, with the advent of the National Park Service Restructuring Plan, park-wide goals for the Government Performance and Results Act, and the flattening of service-wide budgets, the need to make major programming decisions on a park-wide basis requires some integration of such plans. (NPS Director's Order 2, Park Planning)

POSSIBLE ACTIONS ELIMINATED FROM FURTHER STUDY

Certain potential actions identified during public scoping and other early phases of the planning process were given no further consideration. This section highlights a few of those actions, and outlines why the actions were not included within any of the alternatives.

Reintroduction of Other Native Ungulates: A number of comments were received favoring the reintroduction of other native ungulates, especially *Antilocapra americana* (pronghorn antelope) and *Cervus canadensis* (elk). Historically, the dynamics of fire, grazing, and climate were played out on a much larger scale and these animals moved over great distances and very large open spaces. Such conditions no longer exist. The presence today of fences, developments, different land uses, and individual properties pose particular problems for managing these species.

The preserve lies in the eastern most part of the pronghorn antelope's natural range. The climatic conditions are marginal for their health and successful reintroduction. Previous attempts to reintroduce pronghorn antelope in the region have been hampered by both climate and high rates of predation, primarily from coyotes. It would be very difficult to establish and maintain a herd and to keep them within the boundaries of the preserve (Sorensen, personal communications).

It is recognized that elk help maintain diversity due to their grazing patterns, and such alteration of vegetation benefits rodents and birds. The prairie would provide adequate forage for elk, as the majority of their diet is grasses or forbs, but the habitat may be marginal due to the size of the pastures. Most of the trees and shrubs that would provide cover are in the riparian areas and one management objective of the GMP is to provide protection for these areas; therefore, the amount of shelter available for the elk would be limited. While elk could be kept in small areas, such as pastures, it would be important to treat elk as a component of the ecosystem and avoid a zoo-like environment. In addition, it would be necessary to get staff in place to manage the bison, monitor their effects and their health, and conduct necessary research; to introduce and manage elk at the same time would be extremely taxing on personnel and fiscal resources. There would be significant additional costs for the fencing and other developments needed to manage the elk herd and to protect neighboring property. Such developments may be intrusive on the landscape. Frequency of escape through areas like water gaps and the difficulty of maintaining fences are concerns in protecting neighboring properties. The costs and procedures for monitoring the elk for disease and parasites while trying to establish a bison herd were evaluated as well as the concerns for stress on elk when they must be moved for health evaluation and vaccinations.

PREFERRED ALTERNATIVE (PROPOSED ACTION)

NOTE: To fully understand this alternative, the reader should remember that the alternative consists of those actions described below *in addition to* the actions described in the “Actions Common to All Action Alternatives” section. We also suggest that the reader review the Mission Statement and Desired Futures to ensure a clear understanding of the goals of the alternative.

Two fundamental ideas formed the basis of this alternative: 1) the preserve is a unit in the National Park System established to preserve, protect, and interpret for the public a remnant of the once vast tallgrass prairie ecosystem; and 2) this remnant exists today because of a complex history of interaction between people and land.

The focus of this alternative is the integrated management of the natural and cultural resources of the preserve, which reflects the intertwining of these resources. The management of the natural resources at the preserve would focus on the ecological, educational, and inspirational values of the tallgrass prairie, and on understanding and facilitating the processes that would permit the prairie to fully express itself.

Many of the cultural resources within the preserve are clustered in sites and complexes that represent more than one historic period, and have associations with more than one major historic theme. Two completed studies, the Historic Resource Study (HRS) and the Cultural Landscape Report (CLR), evaluate cultural resources as they relate to the local history of the Flint Hills, the regional history of the Plains, and national trends. The HRS agrees with the National Historic Landmark designation’s national level of significance (1878--1904). Additionally, the report finds that the built and natural resources of the property are important for their ability to represent the convergence of the environmental, economic, and cultural factors that transformed the American West in the years between 1878-1993. The HRS suggests that both 19th and 20th century resources are significant at a local level according to National Register of Historic Places criteria for Chase County and the State of Kansas (Hal Rothman and Associates 1999, National Register Appendix).

Phase I of the draft CLR also supports the national level of significance by identifying many landscape resources associated with the property’s National Historic Landmark status. The CLR notes that the environment of the Flint Hills both constrained and sustained ranching and agriculture carried out on the property. Additionally, the CLR determined that many cultural landscape features illustrate a broader evolution of cattle ranching at a local level of significance. The ranch represents one pattern of agricultural development in Chase County through the mid-20th century. The railroads played a critical role in this local economic development, first enabling, then sustaining the larger cattle operations of the area until cattle shipment shifted to trucks in the 1960s-1970s (Quinn Evans 1999:3-1 to 3-5)

The HRS, CLR, and additional studies and plans will guide management decisions and help determine the focus of interpretation at the various complexes in the preserve. Such studies and plans include a Resource Management Plan, a Comprehensive Interpretation Plan, ethnographic studies, and archeological studies.

Under this alternative, the preserve would not be managed as a research facility. However, decisions regarding natural and cultural resources would be guided by information generated through research and by ongoing inventory and monitoring programs. These programs would examine the effects of various resource management approaches, such as fire, and historic and contemporary grazing regimes, and the impacts of visitor use and associated activities. Research conducted by other agencies and at other facilities such as the Konza Prairie Biological Station near Manhattan, Kansas could be applied to the preserve and refined by experience.

Four management areas would be specified in this alternative: Visitor Information and Orientation Area, Flint Hills Ranching Legacy Area, Day Use Area, and Prairie Landscape Area (see Figure 4).

Preserve Wide

The following proposed management guidelines would apply to the entire preserve.

- Small plots would be used to demonstrate alternative prairie management practices for public education and interpretation purposes. These areas might be cut for hay; they might be managed through a fire regime only, without grazing; or they might be removed from a fire regime over a long period of time. These areas would help demonstrate the effects of various management actions on the tallgrass prairie and would help to satisfy visitor experience goals.
- Springs, seeps, and their associated streams would be provided additional protection if found to contain unique or rare native plant or animal species. Impacts by visitors, cattle, and bison would be minimized. These areas would be monitored and may be restored with vegetation; they may be stabilized; or they may have cattle, bison, or visitor access restrictions placed on them, depending on the level of additional protection required.
- Many spring boxes, dams, and stock ponds would be maintained and would continue their original use after an inventory, evaluation, and determination of operational value and historical significance. Criteria for this evaluation would include National Register of Historic Places criteria, flood control value, plant and animal species present, potential use in control of grazing patterns, and whether or not there is a connection to perennial springs (springs that flow all year). Some stock ponds found to be of low value based on this evaluation may be removed and, where feasible, the areas restored to prairie. Such restorations would allow spring hydrology to be restored.
- Some species, such as white-tailed deer, lack sufficient natural predators to adequately control the population. If they become overpopulated they may threaten preserve resources. These species would be monitored, and if resource impacts are recorded, control actions (hunting or controlled reduction) may be implemented. A management plan would be prepared, and would involve public review and comment, prior to any control actions. Hunting would be used only as a tool to achieve specific resource management objectives.
- Some existing features may be removed and non-essential uses may be terminated. Infrastructure development would be minimal to protect natural and cultural resources and cultural landscapes, and to maintain important views.
- During preservation treatments, full consideration would be given to historic fabric, landscapes, adaptive use, and visitor needs and safety.



Tallgrass Prairie National Preserve Preferred Alternative

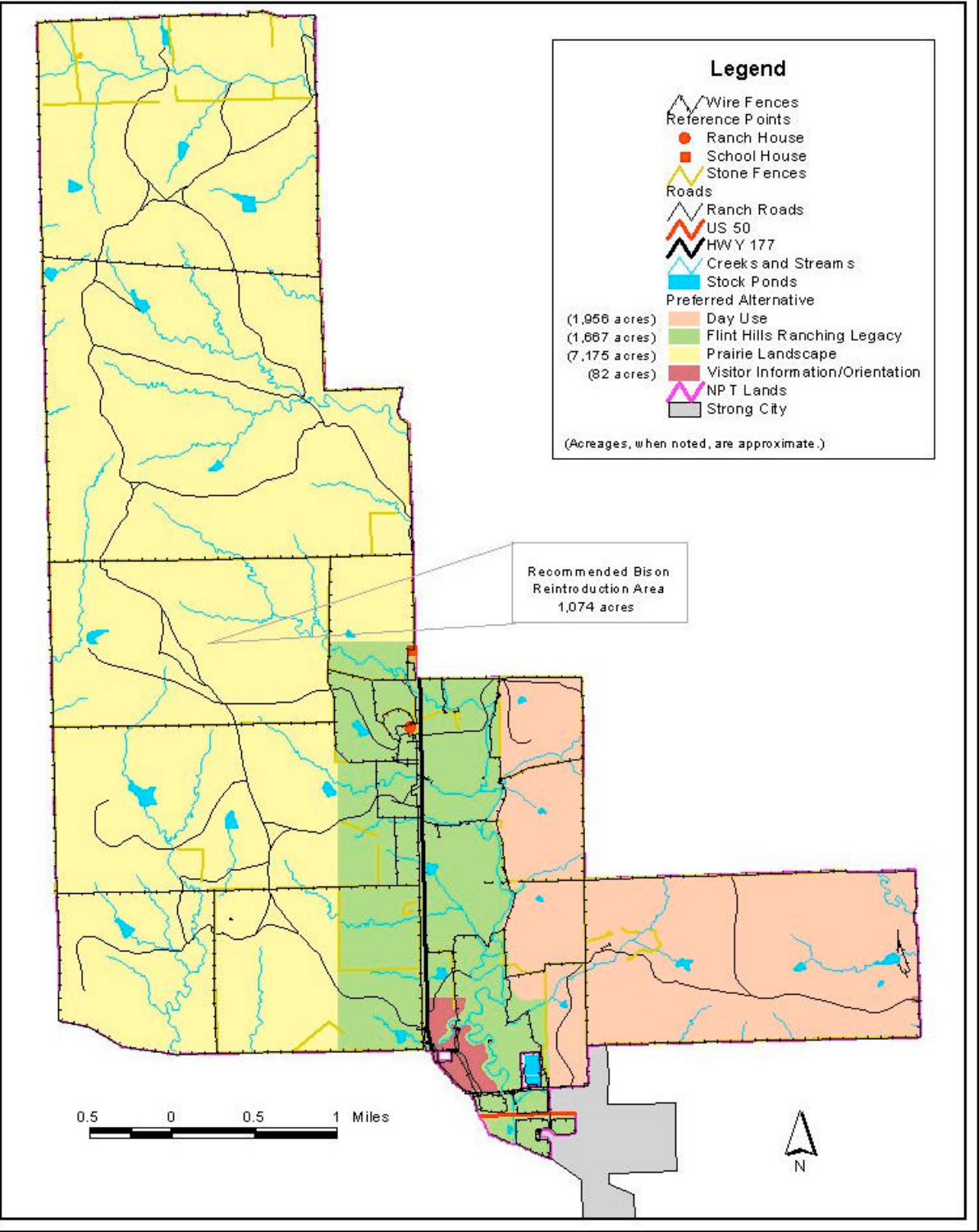


Figure 3

- No vehicle-accessible campgrounds would be provided in order to reduce impacts on the preserve's natural and cultural resources, and views.
- Existing roads that contribute to the historic character would be used for management purposes and for non-motorized access to all areas of the preserve in order to minimize the need for additional trail development.
- Site specific standards would be developed for the evaluation, placement, and maintenance of roads within the preserve, in order to retain historic character, minimize erosion and the loss of prairie, and avoid intrusion into important views. While some roads may be part of the historic landscape, they may be removed or relocated where necessary to protect important resources, historic character, or views.

Visitor Information and Orientation Area

Primary visitor information and orientation would be offered in this management area, with a visitor center located near the junction of State Route 177 and U.S. 50, or in closer proximity to Strong City. This would provide the initial “first stop” for visitors, allowing them easy access to basic information about the preserve and nearby community resources and services, and enabling them to orient themselves and plan their visit. It would also serve as a primary staging area for the public transportation system and for basic education and interpretation efforts. This area would be located out of the floodplain and would be expected to receive the greatest concentration of visitor use. In this management area, visitors would have little need to physically exert themselves or make a long time commitment in order to learn about the preserve.

- This management area would include visitor and administrative facilities such as offices, museum collections and archives storage, a maintenance area, parking areas, and a public transportation center.
- A multi-purpose visitor center would take advantage of existing or proposed utilities. It would complement visitor services located in and near Strong City and Cottonwood Falls. The exact location would be selected to minimize impact on the prairie, retain aesthetic views, and preserve natural and cultural resources.
- Development within the preserve would be located near the boundary; it would be minimal and the design would be sensitive to the cultural and natural environment. New development would maintain harmony and continuity with the special visual qualities of the landscape and with the natural and cultural features that create a sense of time and place unique to the preserve. If primary visitor facilities are located outside the preserve, limited and sensitive development would be allowed in this area to create an inspiring and efficient portal to the preserve.
- Interpretation and education efforts in this management area would focus on orientation, information, primary interpretive stories, and bookstore sales.

Flint Hills Ranching Legacy Area

The boundary of this area would be largely determined by the landscape as it is viewed from primary points such as the ranch house, the barn, and the area between the historic ranch headquarters area and the Lower Fox Creek School. Within this management area, existing fences (stone and wire), and topography would be used as the physical boundaries for implementation of management actions. This management area would serve as the primary focal point for interpreting the story of ranching in the Flint Hills region. The cultural resources would be the primary resource of concern here.

Protection of the cultural resources would be emphasized and sound range management practices would be employed. Effects of grazing, applied fire, and visitation would be monitored to ensure resource sustainability. Visitation to this area would be heavy, and would result in heavy use of the resources, particularly those in the ranch headquarters and schoolhouse areas. Visitor

physical exertion would be easy to moderate and include opportunities to walk through historic structures and the landscape. Time commitments may range from one to several hours.

- Historic breeds of domesticated livestock would be the predominant grazing animals in this area. Domestic livestock activities, such as cow/calf operations, would afford visitors an opportunity to observe ranching in all seasons. Historic grazing regimes and breeds would be used to interpret the historic ranching practices.
- The ranching character of the historic Z Bar/Spring Hill Ranch headquarters would be retained to the greatest extent possible. The ranch house, barn and associated outbuildings, and landscape features would be restored, rehabilitated, and/or preserved according to the recommendations made in the CLR and HRS. Preservation of cultural resources would be supplemented by interpretive activities so visitors would understand the broad history of ranching in the Flint Hills from the mid-19th century through the late 20th century. Some non-contributing buildings may be removed after the completion of the HRS and CLR, and after proper consultation with appropriate agencies. Some structures, or portions of structures, may be managed as historically furnished interiors.
- The Lower Fox Creek School and its associated landscape features would be preserved according to recommendations made in the HRS and CLR, and their association with rural education of the late 19th and early 20th centuries would be interpreted.
- The Lantry Deer Park Place outbuildings located within the preserve boundary represent the evolution of ranch management from the mid 19th century through the late 20th century. The structural tile barn, stone chicken house, frame barn, and associated landscape features would be preserved according to recommendations made in the HRS and CLR. The structures may continue to be adaptively used. This area would not be actively interpreted onsite and would not become a major visitor site. Other significant historic structures and landscape features important to the interpretation of the preserve's cultural history would be identified and preserved.
- Historic structures and landscape features (such as fences, roads, trails, bridges, drainage structures, sheds, and barns) would continue their historic uses, or would be adapted for modern uses for interpretation and preserve operations, if such actions would not damage those resources. Some structures may be rehabilitated for other uses.
- Significant fencelines associated with historic agricultural areas would be restored and preserved. Historic crops may be planted to help interpret the agricultural and ranching history.
- Interpretive and educational programs within this area would focus on those activities associated with ranch operations, such as livestock grazing or the demonstration of historic farming and ranching practices in the Flint Hills. Programs may include staff-guided tours of historic buildings, self-guided activities such as walking nature trails, and organized activities for school groups and bus tours. Some seasonally-oriented programming related to ranching activities may be presented here as well. Wayside exhibits and publications might also be used to interpret these stories.
- Along Fox Creek, a remnant of the rare bottomland prairie community would be restored to provide examples of species extirpated from the area (species previously removed by plowing and the planting of non-native species), and for interpretation of this rare plant and animal community and the pre-agricultural prairie. Trail development may be considered.

Day Use Area

This area would include the lands east of the Fox Creek bottomland. It also would include the agricultural areas adjacent to the east/west county road. This area would offer day use opportunities for visitors to experience and learn about the tallgrass prairie, its associated ranching history, and American Indian cultures through a variety of visitor activities. Visitation to this area would be expected to be moderate to heavy, which has the potential to impact cultural resources, such as archeological sites and historic fencelines. While these resources would be protected as needed, and the prairie would be maintained in good condition, the focus of the area would be on providing opportunities for visitors to experience the preserve and explore its resources.

- Cattle would be the dominant grazing animals in this area. Grazing regimes, including placement of cattle and pasture use, would not interfere with the dispersed visitor use of this area.
- Significant archeological sites, historic structures, and landscape features would be documented, stabilized, and protected as needed.
- A range of non-motorized day use activities such as hiking, horseback riding, or fishing, would be permitted if impacts to natural and cultural resources could be managed and conflicts among users minimized. Some of these activities may be limited to guided group activities.
- The proximity to Strong City would allow flexibility for private partnerships and concessions to be developed. This flexibility could allow visitor related services to be developed outside the preserve.

Prairie Landscape Area

The emphasis in this area would be the management of the prairie through the use of both cattle and bison, while providing a variety of opportunities for the visitor to experience the prairie and prairie landscape. Opportunities for the visitor to experience quiet and solitude, the views, the relationship of earth and sky, wildlife, the multitude of flowering and other native plants, and the effects of various regimes of fire and grazing animals would be the focus. Bison would be an important element not only for their historic role within the tallgrass prairie ecosystem but also in meeting the visitor's expectations and thoughts about the prairie. Visitors would be required to spend more time and energy to engage in opportunities in this area, either by foot or on a guided tour by shuttle or bus.

- Historic and contemporary grazing regimes would allow for the interpretation of the continuum of ranching in the Flint Hills and may include historic breeds, and a variety of regimes such as season long and early intensive stocking.
- Bison (certified disease free and genetically pure) would be introduced into this area. Prior to this action, a Bison Management Plan would be completed, with public participation, that would provide a review of the current state of scientific and resource management knowledge related to bison management. Under the direction of this plan, long-term objectives and goals would be developed for bison management within the preserve. The location of the suggested bison reintroduction area would be refined and possibly adjusted. Actual numbers of animals for the initial reintroduction area would be identified, and additional management concerns such as budget, personnel, and safety/health issues would be addressed. The preserve would begin with a small herd of bison. The Recommended Bison Reintroduction Area, as identified in Figure 4, is believed to be the best location pending the development of a Bison Management Plan. The population would be managed to maintain effective social and behavioral interactions and dynamics. Visitors would be able to see bison in a tallgrass setting and to observe their effects on the prairie.
- A dual purpose handling facility and improved fencing would be developed for the bison and cattle operations. A handling facility for use by both cattle and bison would reduce construction costs and help reduce and manage impacts to the cultural, natural, and visual resources.
- Significant archeological sites, historic structures, and landscape features would be identified, documented, and evaluated; recommended treatments would complement the primary use in this area. Following documentation, those resources not identified for stabilization and/or protection would be allowed to deteriorate. Most existing fences would remain to delineate pastures and provide flexibility for preserve operations; where practicable, rock fences would be rehabilitated as needed.
- Interpretation and education efforts would consist primarily of staff-conducted shuttle or bus tours of the prairie and non-personal services such as publications. Tours may result in moderate to heavy visitation in a localized tour corridor. Other interpretation and education efforts would be minimal in the backcountry portions of this area. Occasional staff-guided activities into the backcountry may be offered, and low-profile way-sides exhibits, unobtrusive on the landscape, might be developed.
- Limited cross-country hiking and horseback riding may be permitted if impacts to natural and cultural resources could be managed and visitor/livestock conflicts avoided.
- Limited overnight backcountry camping may be allowed to offer a high quality primitive experience on the prairie, if impacts to natural and cultural resources could be managed and visitor/livestock conflicts avoided.

- Visitor access to the prairie would be by existing roads. Ranch roads would provide foot access where feasible, or access for tours when appropriate. No hiking trails would be developed. Hardened or improved stream crossings would be provided where necessary.
- All roads would be surveyed to determine their historical significance, condition, usefulness, and impact on the resources prior to a determination of their continued use or removal. Roads not necessary for management, foot and/or horse access, or interpretation would be removed and the areas rehabilitated. New roads would be developed only for access to and from the orientation areas or to the livestock handling facilities.

See Appendix 2 for a partial list of the implementation plans that would follow this GMP.

ALTERNATIVE B

NOTE: To fully understand this alternative, the reader should remember that the alternative consists of those actions described below *in addition to* the actions described in the “Actions Common to All Action Alternatives” section. We also suggest the reader review the Mission Statement and the Desired Futures to ensure a clear understanding of the goals of the alternative.

In Alternative B, the cultural resources of the preserve would be the primary focus of preservation, protection, and interpretation. The majority of the preserve would be designated a cultural area, with smaller areas designated as a natural area, a development area, and a special use area. This alternative would maximize visitor access to the cultural resources. It would optimize opportunities for direct interpretation of the continuum of human interaction with the prairie over the broad span of time, from pre-European contact to when the preserve was placed in trust with Boatman's First National Bank (now Bank of America). To accomplish this, most of the cultural resources would be restored, stabilized, or preserved, and the open and expansive character of the cultural landscape would be protected. Enhancement of the prairie would be achieved through the use of native ungulates and historic breeds of domestic livestock. The presence of native ungulates would serve to help interpret the pre-contact and early post-contact landscape.

Within the small natural area, natural resource protection and prairie enhancement would be the primary focus. The development area would include administrative and visitor facilities. The special use area would include developments by other interests, such as rights-of-way (see Figure 5).

Preserve Wide

The following proposed management guidelines would apply to the entire preserve.

- New development would be minimal and designed to avoid intrusion into the historic scene. Non-traditional, non-historic uses would be removed or limited to those deemed essential for preserve operations.
- Where practicable, historic ranch management practices would be used to facilitate interpretation of the evolution of agricultural and ranching practices in the Flint Hills.
- Livestock would be excluded from springs and seeps where sensitive native plant and animal species are found.
- Livestock would be excluded from riparian areas; which would be restored to native vegetation.

Cultural Area

This management area, encompassing the majority of the property, would include all known significant historic structures, buildings, objects, sites, cultural landscapes, features, views and vistas. This area would be managed to preserve significant cultural resources and their settings, and to interpret these resources to the public. Through direct contact and through varied interpretation efforts, visitors could understand the daily and annual activities of people who have lived in the Flint Hills of Kansas through time.

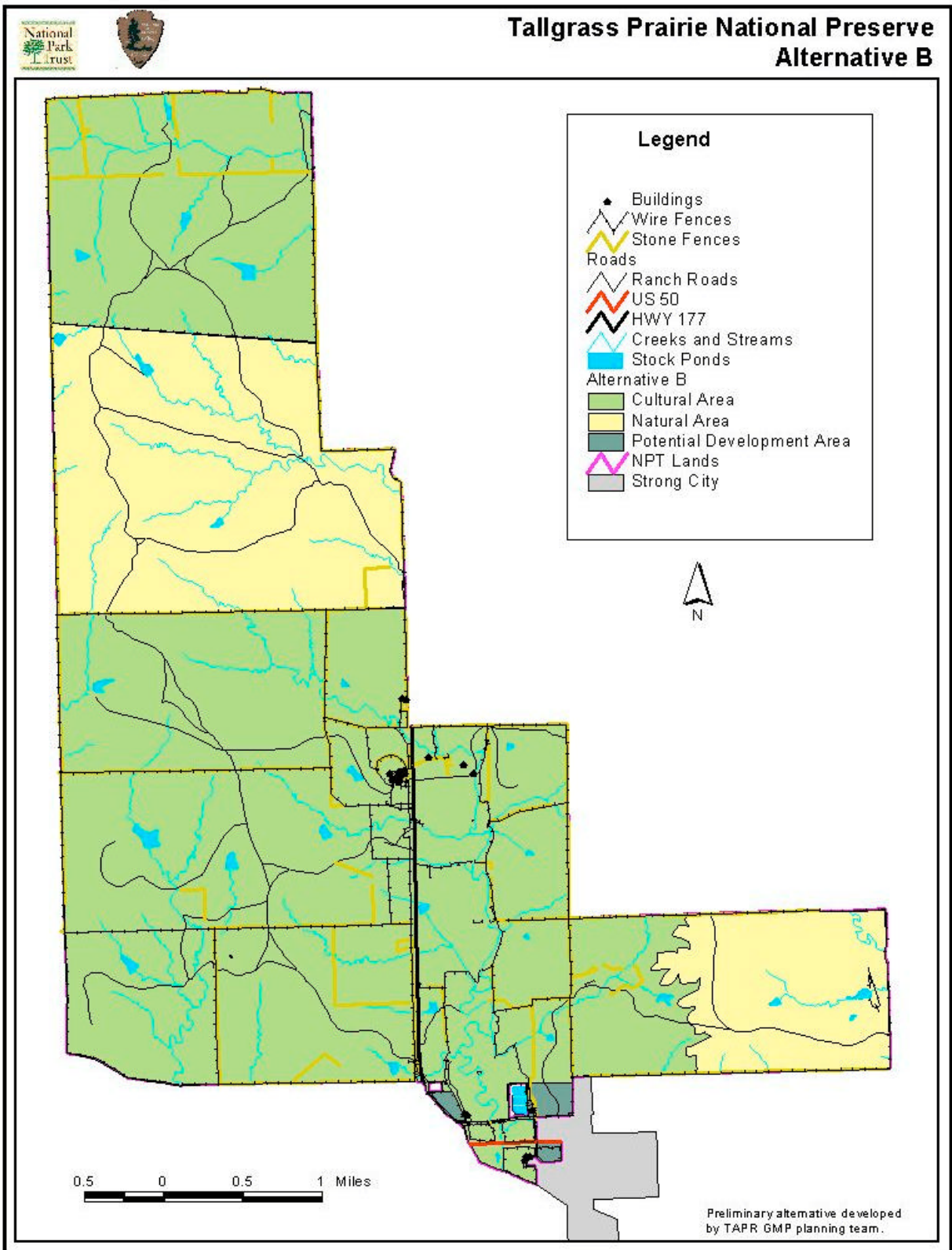


Figure 4

- Visitor access to, and interaction with, the cultural resources would be on a day-use basis. Visitor exertion would be easy to moderate and include opportunities to walk through physical historic structures and landscapes.
- Many of the cultural resources within the preserve are clustered in sites and complexes that represent more than one historic period and more than one contextual theme. All would be preserved and interpreted to explain the continuum of human interaction with the landscape from pre-contact to when the preserve was placed in trust with Boatman's Bank (now Bank of America).
- The ranching character of the Spring Hill Ranch headquarters would be retained. The ranch house and associated domestic-use outbuildings, landscape elements, and historic vegetation would be restored and preserved to represent their primary period of significance, with possible significant historic alterations. The stone barn and associated enclosure areas would be restored to represent the evolution of farming and ranching activities from the late 19th to middle 20th centuries; the ranch livestock handling facilities would be preserved to represent late 20th century ranching activities; the Quonset hut would be restored to its post-war era of construction to represent the evolution of ranching technological practices; and the ranch hand's quarters would be restored to their middle 20th century period to represent the evolution of ranch management at the preserve.
- Agricultural use areas, orchards, and gardens associated with Spring Hill Ranch, Deer Park Place, and other habitation sites would be accurately restored and on their original sites. Thus, they could serve as essential elements for public understanding of the preserve's 19th and 20th century farming and ranching operations, as well as support the preserve's current operation.
- The Lantry Deer Park Place outbuildings within the preserve's boundary represent the evolution of ranch management from the middle 19th century to the middle 20th century. The structural tile barn, stone chicken house, frame barn, and associated landscape features would be restored to their respective periods of original construction.
- Significant elements representing ranch management and ranching technology would be stabilized, restored and preserved; these include historic pastures and field enclosures, fencelines, corrals, sheds, and historic plantings.
- Significant water retention features, such as the spring box near the Red House Ruin and the stock ponds, would be maintained and continue their original use.
- The Lower Fox Creek School, its associated landscape features, and its outbuildings would be restored to their primary period of significance; their association with rural education of the late 19th and early 20th centuries would be interpreted. Other historic structures and landscape features significant to the interpretation of the preserve's cultural history would be preserved relative to their respective periods of significance.
- Historic structures such as roads, trails, bridges, enclosures, sheds, and barns would be used for their historic purposes to the extent possible without impacting the resources' character-defining features.
- Where practicable, significant historic circulation patterns would be rehabilitated and maintained as the primary access routes for visitor access and for park operations.
- Motorized traffic would be limited to that necessary for preserve operations. In areas not under cultivation, a heterogeneous disturbance regime would be accomplished via documented historic methods and currently recognized best management practices to maintain and promote prairie enhancement and help restore the historic scenes.
- Hunting and fishing would not be allowed.

Natural Area

The natural area would be a small area. Here, natural resource protection and prairie enhancement would be emphasized. This area would be managed to promote landscape heterogeneity. Native ungulates would be the dominant grazers, with historic breeds of domesticated livestock also present.

- Visitor opportunities would be limited to low-impact activities. Motorized traffic would be limited to park staff, and the gas and oil lessee. Visitor physical exertion would be moderate and require greater time commitments to engage in opportunities in this area.

- Improvements would be minimal; primarily those needed to manage the native ungulates. Trails would not be maintained and no new trails would be developed.
- Bottomland areas that are not documented to have been under cultivation historically would be restored to tallgrass prairie.
- Low density, dispersed, and regulated camping opportunities might be made available; such camping would provide for a more solitary experience.
- Visual impacts associated with gas and oil operations would be minimized and mitigation measures would be implemented where impacts remain unavoidable.
- Significant historic cultural resources would be stabilized; interpretation would be minimal.

Development Area

The development area would be restricted in size and would be the primary area for the administrative, maintenance, and curatorial storage functions, as well as for visitor facilities. This area would be located out of the primary views, either on the edge of the preserve or outside the preserve boundaries.

- Likely impacts to resources would be mitigated through facility design and placement. Visitors would have little need to physically exert themselves or make long time commitments.
- The location, design and placement of structures and other improvements would be accomplished in such a way that they would be visually removed from the cultural and natural areas of the preserve.
- Design of new development would be sensitive to the cultural and natural environment. It would maintain harmony and continuity with the special visual qualities of the landscape, and with the natural and cultural features that create a sense of time and place unique to the preserve.
- Camping facilities could be included in this area.

Special Use Area

This management area would comprise the portion of the preserve that includes those developments, such as rights-of-way, which are used by other interests.

ALTERNATIVE C

NOTE: to fully understand this alternative, the reader should remember that the alternative consists of those actions described below *in addition to* the actions described in the “Actions Common to all Action Alternatives” section. We also suggest the reader review the Mission Statement and the Desired Futures to ensure a clear understanding of the goals of the alternative.

In Alternative C, the visitor experience goals would be the primary focus of management activities. In this alternative, the preserve would be divided into three management areas: a development area, a moderate use area, and a dispersed use area. Impacts on natural and cultural resources would be considered, and likely impacts to resources would be mitigated through appropriate design and placement measures.

The small development area would support the most concentrated use and would include the visitor center, support facilities, and a transit station for public transportation. The use of personal vehicles would be restricted to this area.

The moderate use area would accommodate less intense, but still relatively high levels of visitor use. More staff involvement would be required in this area to provide interpretation, visitor management, and administrative activities such as event organizing. The historic ranch headquarters house and associated buildings would be included in this area. Domestic livestock would be the only grazer, and would provide an opportunity for the interpretation of the ranching legacy. Visitor transportation would include public transportation and trails.

The dispersed use area would be managed for prairie enhancement through fire, varying the frequency and season to promote heterogeneity, and through the grazing of native ungulates. Visitor activities in this area would be more dispersed to provide greater opportunities for solitude and personal experience with the prairie. Visitor access within this area would be restricted to non-motorized means (see Figure 6).

Preserve Wide

The following management prescriptions would apply to the entire preserve.

- Physical controls on visitor movement and access would provide for resource protection while accommodating high levels of use.
- Development of campgrounds would not occur inside preserve boundaries.
- Cultural resources representing “best examples” for the interpretation of the continuum of human interaction in the Flint Hills Region would be restored and preserved; other structures and buildings would be stabilized.
- Archeological sites would be preserved and protected; public access to these sites would be limited.
- The level of protection afforded seeps and springs would be based on the uniqueness of native species present, potential impacts by visitors, and the presence of grazers.
- The riparian areas impacted by past land use practices would be restored.



Tallgrass Prairie National Preserve Alternative C

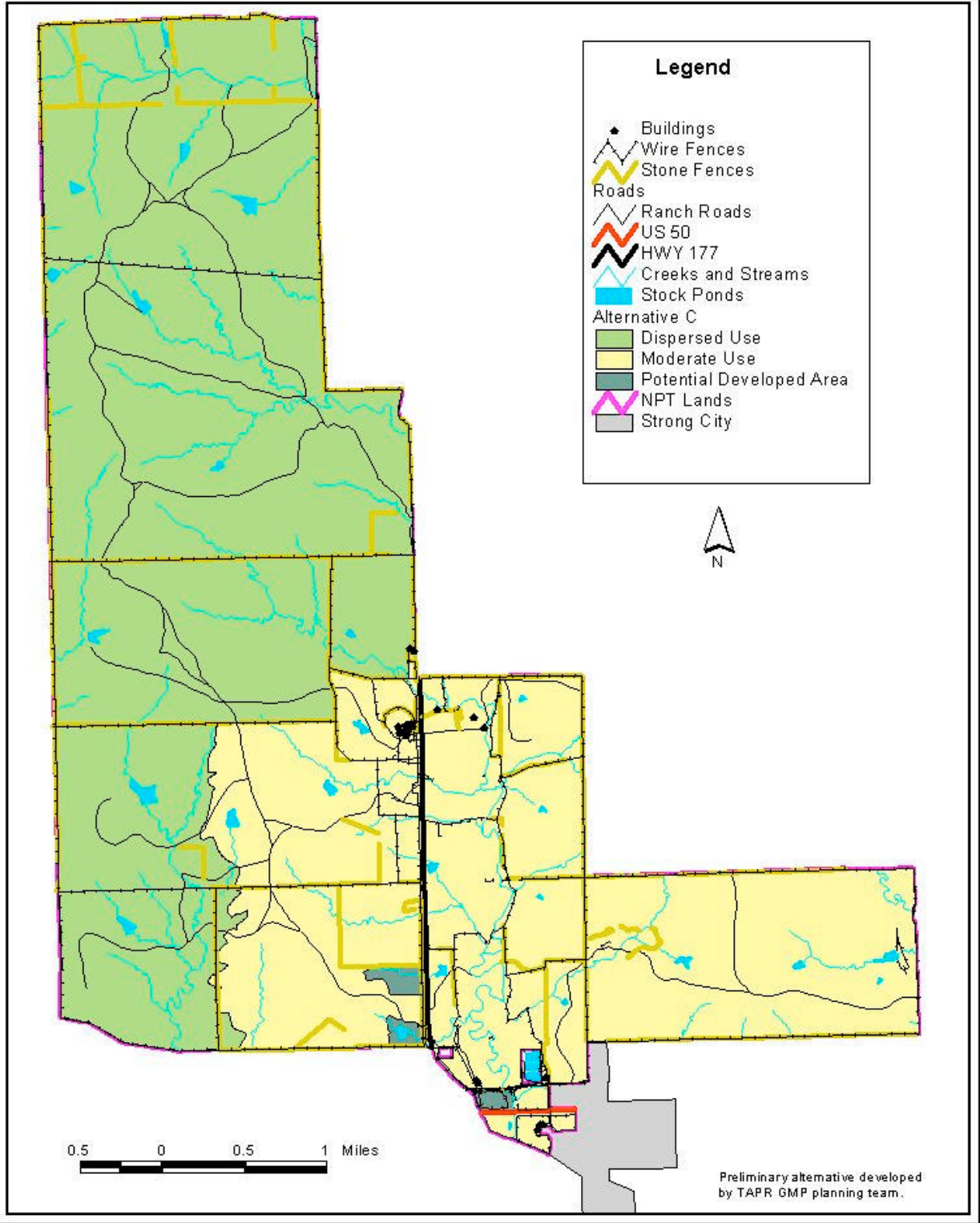


Figure 5

- Management decisions regarding natural and cultural resources would be guided by an ongoing inventory and monitoring program, with a primary focus on the visitor impacts on the resources.

Development Area

The development area would be relatively small and located away from sensitive natural and cultural resources, and views. It would be designed to provide convenient and easy access to the preserve in such a way that visitors would have little need to physically exert themselves or make a long time commitment. This area would include visitor and administrative facilities such as a visitor center, maintenance areas, parking areas, a transportation transfer station, and possibly, concessions. In this area, new development, including buildings, structures and other signs of human activity would be fairly obvious, but natural elements would also be present.

- Development would be located near or adjacent to the preserve boundary. Non-traditional, non-historic uses would be removed or limited to those deemed essential for preserve operations.
- Visitor facilities would provide orientation, information, and education about the tallgrass prairie.
- Hardened paths connecting the facilities within this area and to trails in the moderate use area would be appropriate.
- Visitor use would be controlled to reduce potential impacts.

Moderate Use Area

This area would include natural and cultural features of special interest, such as the historic ranch buildings, the Lower Fox Creek School, and demonstration plots restored to their historic agricultural uses. Day use, interpretation, and educational opportunities focused on the prairie and Flint Hills ranching would be emphasized. This area would offer a fairly structured visitor experience in a natural and cultural setting. Facilities, activities and programs would be designed for visitors with a short time commitment, and would require minimal outdoor skills and little physical exertion. While opportunities for solitude would be available in this area at certain times of the day or year, visitors would likely encounter other visitors and preserve staff. No overnight use would be permitted.

- Cattle would be excluded from the Fox Creek riparian area. The prairie would be restored and historic agricultural demonstration plots would be established in the Fox Creek bottomland.
- Cattle operations in this area would include cow-calf and season-long grazing, which would afford visitors an opportunity to observe ranching operations in all seasons. Animal management facilities would be located to optimize visitor education opportunities and minimize impacts on the cultural landscape.
- Interpretation and education activities would include programs of a more social nature, e.g. ranger led walks and talks, yet would be designed to minimize impacts on the more sensitive areas of the preserve.
- Management of resources would allow for self-guided visitor activities by providing public transportation, transportation transfer sites, and hardened trails.
- Facilities, developments, and signs would be designed to accommodate high levels of visitation, yet minimize impacts on natural and cultural resources.
- Off trail uses would be restricted to protect natural and cultural resources.
- Significant cultural features, such as the barn, school, and ranch house would be restored to their periods of significance and would be made accessible to visitors.

Dispersed Use Area

This area would offer visitors an unobstructed experience in the natural setting of the tallgrass prairie. Activities in this area would be more challenging and adventurous, requiring visitors to commit a block of time, have some outdoor skills, and exert themselves. A relatively high level of management would be provided for resource protection and visitor safety.

- Prairie enhancement would be obtained through the use of a heterogeneous fire regime and grazing by native ungulates.
- Visitor activities would be dispersed to offer the opportunity of more solitude and personal experience with the prairie. Low density, dispersed, and regulated primitive camping opportunities would minimize resource impacts.
- A wide range of non-mechanized recreational activities, such as trail use, hunting or fishing, would be permitted if impacts to natural and cultural resources could be managed and major visitor conflicts avoided.
- No trails or facilities would be developed or maintained; signs would be minimal.
- Existing roads not necessary for resource management or oil/gas operations would be removed and the areas rehabilitated. No motorized access would be allowed, except for administrative purposes or oil/gas operations.
- Water impoundments would be removed where feasible. Native ungulates would in part rely on streams, springs, and seeps for water.

ALTERNATIVE D

NOTE: to fully understand this alternative, the reader should remember that the alternative consists of those actions described below *in addition to* the actions described in the “Actions Common to all Action Alternatives” section.

We also suggest the reader review the Mission Statement and the Desired Futures to ensure a clear understanding of the goals of the alternative.

In Alternative D, two primary thrusts would form the focus for management activities at the preserve: the story of the tallgrass prairie ecosystem, including native grazing animals, and the story of ranching in the Flint Hills. Interpretation and education would focus on the tallgrass prairie ecosystem and the subsequent human interaction with the prairie including both American Indian histories and cultures, and ranching history. The ranching component would include interpretation on how ranching produces market goods. Demonstrations of ranch activities would provide some of the recreational opportunities as well as interpretive and educational efforts at the preserve.

In this alternative, the tallgrass prairie ecosystem would be managed to promote diversity of native species and to maintain a functioning ecosystem. This alternative would require intensive management, including close monitoring to ensure the integrity of the prairie is not compromised through over-utilization that might cause a shift toward undesirable species, including noxious weeds (see Figure 7).

Preserve Wide

The following proposed management guidelines would apply to the entire preserve.

- The opportunities for community partnerships would be great in the area of recreation. The proximity to Strong City allows for flexibility; visitor related activities could be conducted in the southern reach of the preserve without on-site facility development.
- Enhancement of prairie diversity would occur to the extent that it represents the biological conditions of the historic tallgrass prairie.
- Riparian zones along Palmer Creek and other drainages would be protected from livestock impacts to ensure water quality and streambank stability. They would be maintained to provide visitors with an understanding of prairie riparian areas.

Grazing Area

- The grazing area would constitute the majority of the preserve acreage and would be devoted to the enhancement of the diversity of the tallgrass prairie. Grazing and prescribed fire would be used to manage the tallgrass prairie. Native ungulates would occupy most of the acreage, while cattle (both cow-calf and yearling operations) would occupy a smaller portion of this area. The cattle would enhance the story of the site’s ranching history. Physical exertion in this area would be moderate to heavy and depend on the time allotted and route chosen. For example, a walking route along Fox Creek to the historic ranch headquarters area would be on developed trails over relatively flat terrain and could be accomplished in one to two hours. However, a hike to the more remote areas would require the visitor to be in good physical condition, carry some provisions, and make a lengthy commitment of time.
- Recreational opportunities would include such activities as bus or shuttle tours on hardened roads. Dispersed use, such as trail rides, wagon rides, or hiking, would be allowed in pastures containing livestock herds composed of “docile” animals or when pastures were out of a grazing cycle. This could minimize human/animal conflicts.
- Existing fences would remain to delineate pastures and provide flexibility for preserve operations; where practicable, rock fences would be rehabilitated for continued use but improved fences might be needed.

- Distribution of native ungulates and livestock would be done in such a way as to be compatible with respective settings or surroundings. The majority of grazing acreage would be native ungulates.
- Having livestock in this area would reflect their historic presence for nearly a century.
- Significant cultural resources would be identified and evaluated. Principle structures would be documented, evaluated, and recommended for treatment to complement use in this area. Cultural sites along those routes used for interpretation purposes would be recorded and stabilized. Other cultural sites would be recorded and allowed to deteriorate.
- Ethnographic resources would be maintained and accessible for traditional practices; non-sensitive historic and ethnographic resources would be interpreted onsite and access to sensitive areas would be restricted.
- Visitor activities in this area would be more structured and subject to closer control when grazing animals were present.
- Ranch roads would provide foot access to pastures when feasible, or access for bus and shuttle tours when appropriate for viewing the landscape.
- Impoundments not associated with either Fox or Palmer Creek drainages would provide recreational fishing opportunities.
- A limited number of roads would be developed to accommodate controlled visitor access; minimum tread standards would be used for walking trails, and hardened or improved stream crossings would be provided.
- Where appropriate and practical, stock ponds would be removed and sites restored to preconstruction conditions to protect significant native aquatic species.
- Managing wildlife populations through hunting would be appropriate if offered in such a way that conflict with other visitor uses could be avoided.

Ranch Operations Area

The resources in this area would include the existing Southwind Nature Trail, between the school and the ranch house, and a windbreak surrounding the ranch headquarters complex. Management of the landscape would include appropriate fire prescriptions. Special attention would be given to both the windbreak, and to treatments necessary for the protection of the structures and for ease of operation. The ungrazed prairie adjacent to the trail would support a more diverse assemblage of species. This area would receive the highest visitor use and provide visitors with an “up close” prairie experience. Physical exertion in this area would be easy to moderate as visitors would

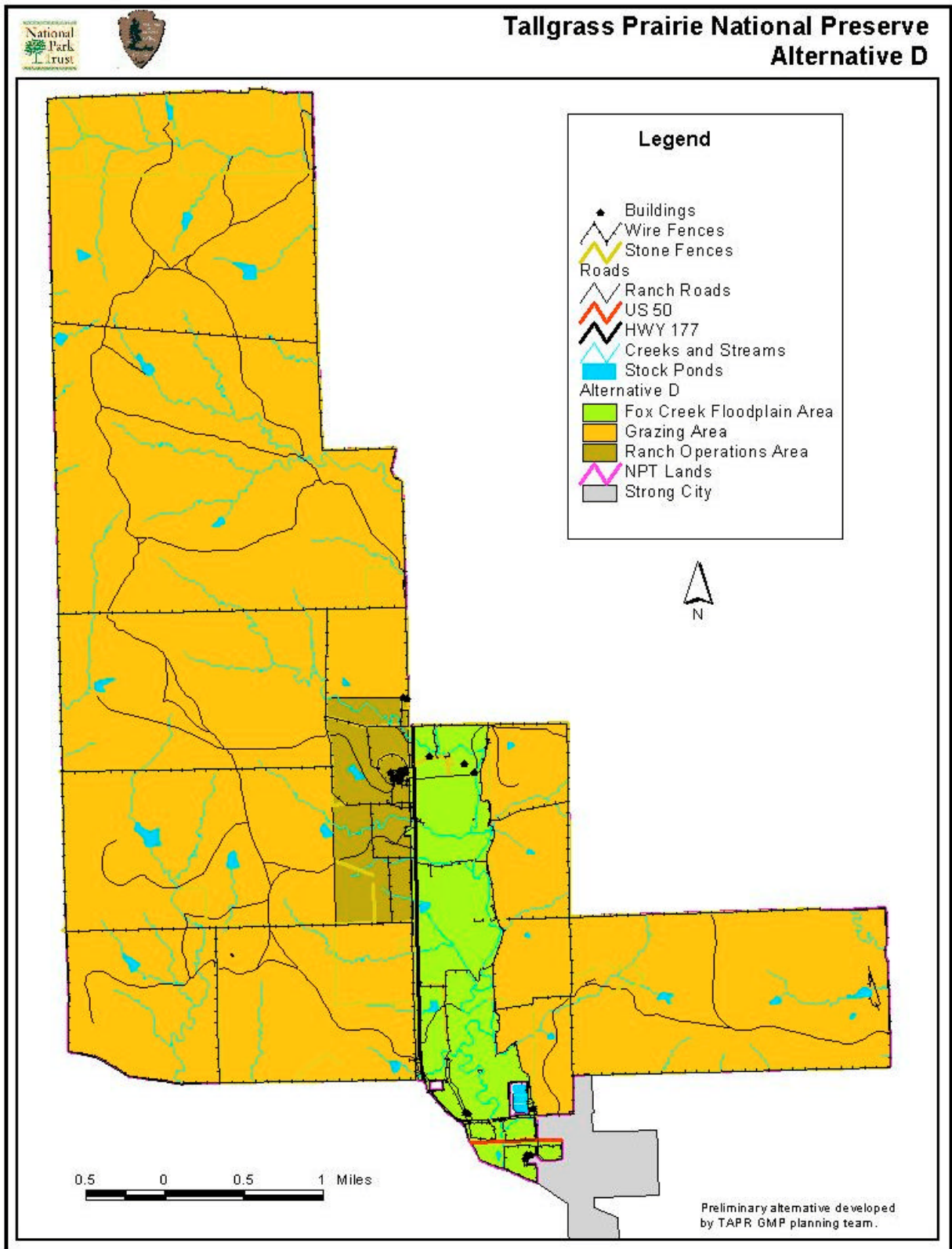


Figure 6

have the opportunity to walk through the historic structures and along the trail to Lower Fox Creek School. Visitors may stay two to three hours.

- Existing cultural resource such as the barn, stone fences, ranch house, and subsequent outbuilding would be maintained and used adaptively, to the extent possible, for ranch operations, visitor demonstrations, and visitor facilities.
- Demonstrations of ranch activities (stock use, cattle movement, etc.) would originate out of the barn.
- No modern structures would be added to this area; preservation actions and rehabilitation would be applied to the structures for health/safety reasons only.
- The ranch house would remain open for limited interpretive activities. Associated infrastructure would be upgraded, rehabilitated, and/or replaced to meet all applicable codes and guidelines with consideration to historic fabric, landscape, and adaptive use.

Fox Creek Floodplain Area

The first agricultural crops that supported ranch occupants were planted in the deep sediments of the bottomland; currently the area supports brome grass, which is used as cattle forage. This area once supported a unique complex of prairie and riparian species. A portion of the floodplain would be identified for restoration to prairie. Physical exertion in this area would be moderate with foot travel along undeveloped trails. Time commitment would be two to three hours.

- Traditional row crops would be planted to supplement cattle grazing activities and recreate the historic agricultural and ranching scene.
- Significant cultural resources would be documented and would receive preservation treatment; those along trails would be interpreted.
- A remnant of the rare floodplain prairie, which is the largest feature in this area, would be restored to provide an example of native plant species extirpated from the area. Visitors would have access to the floodplain prairie on unimproved trails with appropriate wayside exhibits.
- Limited trail access would be provided to the floodplain prairie and to significant cultural resources, with connecting routes through the Fox Creek riparian community to the area near Strong City.

ALTERNATIVE E

NOTE: to fully understand this alternative, the reader should remember that the alternative consists of those actions described below *in addition to* the actions described in the “Actions Common to all Action Alternatives” section. We also suggest the reader review the Mission Statement and the Desired Futures to ensure a clear understanding of the goals of the alternative.

In Alternative E, the primary focus of management activities would be a landscape dominated by unplowed tallgrass prairie with associated creeks, intermittent streams, springs, and seeps. In this alternative, the natural prairie would be a dynamic mosaic of successional stages resulting from the interaction of climate, fire, and grazing. Heterogeneous fire and grazing regimes would be key elements in the creation of that mosaic; actions such as varying fire times, seasons, and techniques, and introducing native ungulates as the dominant grazers would be employed to enhance prairie diversity. Visitor experiences and opportunities for access would be directed toward an understanding of what constitutes a diverse prairie and those processes that enhance prairie diversity. Traditional ranching practices would be present but would be restricted to smaller portions of the preserve. Cultural resources would be the focus of management and interpretation within the ranch headquarters area, the school area, and in traditional cattle demonstration areas.

This alternative would consist of a large native ungulate management area where limited visitor access may be imposed for visitor safety. The smaller ranching demonstration areas and cultural sites would allow for more direct visitor contact. A small agricultural area, where the cultivation of traditional crops would occur, would enhance the story of ranching history.

Cultural resources would be documented and those sites that are integral to the interpretation of the continuum of human interaction with the Flint Hills would be protected. Areas impacted by exotic species, erosion, and historic or current land use practices would be restored to reflect a more natural prairie scene (see Figure 8).

Preserve Wide

The following proposed management guidelines would apply to the entire preserve.

- Impacted sites such as springs, seeps and riparian areas would be protected and restored in order to complete missing components of the tallgrass prairie ecosystem.
- Selected stock ponds would be removed and the areas restored to prairie where feasible.
- Access would be limited and managed with no overnight camping. Recreational activities would be permitted if potential impacts to natural and cultural resources could be mitigated. No trails would be developed or maintained outside ranch headquarters area. Existing roads not necessary for site management would be rehabilitated.

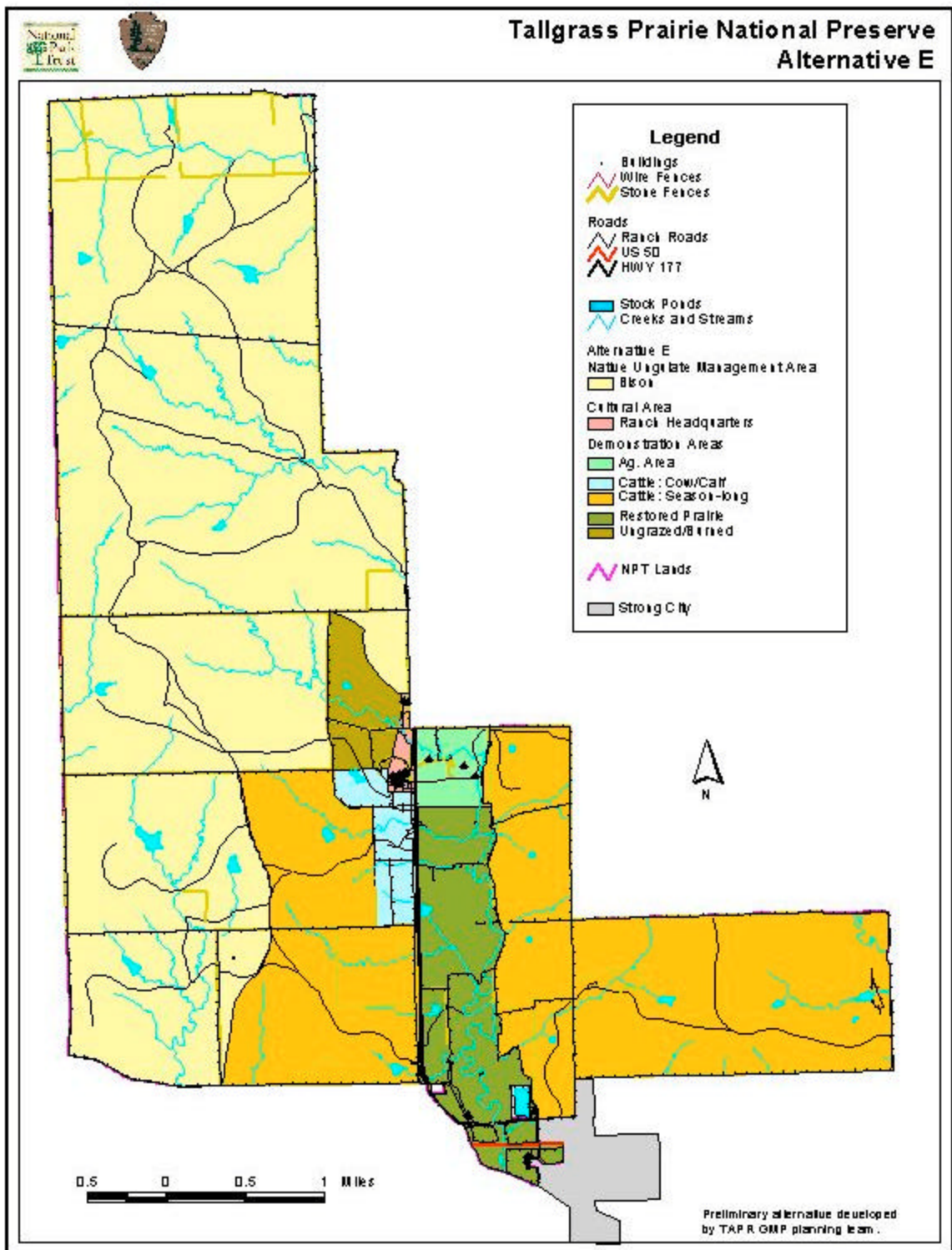


Figure 7

- A separate area to provide the main visitor services and support facilities would be developed, minimizing impacts to the cultural and natural resources of the preserve.
- Hunting would not be excluded and could serve as a management tool. Fishing would not be permitted.

Native Ungulate Management Area

This management area, consisting of most of the land area within the western half of the preserve, would contain the large native ungulates. Fire and grazing regimes would be designed to enhance the tallgrass prairie. Visitor access may be limited or restricted at times for safety reasons. Visitor experience within this area would be under more controlled conditions through ranger-led walks or the viewing of animals from outside fenced enclosures. Programs would stress the historical and present-day role of native ungulates in perpetuating the diverse prairie ecosystem.

- Native ungulates, on an ecologically sufficient land area, would be used to enhance the tallgrass prairie ecosystem. These animals would be introduced and the populations managed in such a way as to maintain effective social and behavioral interactions and dynamics.
- No exotic species would be introduced to protect the native prairie ecosystem.

Demonstration Areas

These smaller areas would provide sites for demonstrations related to prairie management and traditional land uses. They would also provide a primary focal point for interpretation of these stories. Self-guided visitor activities would visually explain the role of fire in the prairie ecosystem, and demonstrate facets of traditional ranching practices these activities would also demonstrate the use of restoration techniques to recreate missing components of the prairie such as bottomland tallgrass prairie species.

- Traditional cattle ranching practices would be used to demonstrate historic land use practices. Both season-long grazing and cow/calf operations would be present, in order to maintain activity throughout the year.
- Development to support cattle operations would be minimal.
- Cattle might be excluded from more sensitive aquatic resources to allow for physical habitat recovery.
- Areas would be provided to demonstrate alternative prairie management practices to the public.
- A crop area would be restored to depict historic agricultural land use and practices, and to help support other operations.
- Populations of native plants and animals would be protected from impacts by exotic species. Large areas dominated by potentially invasive exotic species would be converted to cultivation, hay fields, or native grass species.

Cultural Area

This area would encompass the ranch building, school, and associated structures. Cultural resources would be emphasized within this area. Visitor access would be on a day-use basis with emphasis on an understanding of the daily and annual activities of people who lived in the Flint Hills of Kansas through time.

- Cultural resources, including the historic ranch headquarters area, Lower Fox Creek School, and the best representative examples of other landscape character-defining

features, would be preserved, protected, and interpreted to reveal the story of the continuum of human interaction with the landscape over time. Those buildings not integral to this story could be rehabilitated for use in preserve operations; others would be documented and allowed to deteriorate.

Development Area

This small area would contain the main visitor services and support facilities. It would be designed to provide convenient and easy access to the preserve in such a way visitors would have little need to physically exert themselves or make a long time commitment. Facilities would provide information, education, and orientation about the tallgrass prairie.

ALTERNATIVES CONSIDERED BUT REJECTED

Originally, the planning team developed six alternative management scenarios for the preserve, in addition to the “no action” alternative. They were developed as a range of possibilities, given the enabling legislation, the significance and purpose statements, and the desired futures for the preserve. However, after careful consideration, the following two options were removed from further consideration, as the team felt they did not meet the legislated mandates or the visitor experience goals for the preserve. The remaining four alternatives became the preliminary alternatives.

Alternative F – A Modern Working Ranch. Under this alternative, the preserve would have been managed as a modern working ranch. The focus would have been on allowing the visitor to experience how cattle are raised today. The historic structures would have been adaptively used and other structures, such as the present corral system, would have been updated and improved to meet modern needs. Under this alternative, the prairie would have been managed as range and to maximize beef production. Development would have been guided by the ranching activities and by the need to manage the cattle operation in a cost efficient and effective manner. Interpretation would have centered on ongoing ranch activities and current ranching practices.

This alternative would have limited visitor use and access to the prairie and to the ranch headquarters area for safety and liability reasons. With the emphasis on profitability and modern ranching, it would have been more difficult to implement varied fire and grazing regimes. Actions to protect riparian areas and seeps and streams would have affected profitability and ranch operations, making such protection more difficult to achieve. While effective range management would have occurred under this alternative, opportunities to fulfill the legislated requirements to maintain and enhance tallgrass prairie and to provide opportunities for visitors to experience tallgrass prairie would have been limited.

Rehabilitation, restoration, and maintenance of the cultural resources and visitor access to those resources would have been very limited due to safety, liability concerns, and costs. Important elements of preservation and interpretation would be missing, including many of the cultural landscape elements. Significant changes might have been necessary to make the structures and facilities usable and efficient for ranching operations. These changes could have conflicted with the needs for interpretation, historic preservation, and visitor use.

It was felt that elements of the legislation, purpose, mission, desired futures, and visitor experience goals could not have been met under this alternative, because of safety, liability, and costs. The need to provide for operational efficiencies and profits in a modern ranching operation also could not be met. However, elements of this alternative were retained in the preferred alternative. Under the preferred alternative, the visitor will have opportunities to see and experience different elements of ranching history and operations.

Alternative G – A Prairie Wilderness. Under this alternative the majority of the preserve would have been managed as a wilderness area. The focus of this alternative was the restoration of all of the natural processes and the enhancement of the prairie with the reintroduction of native ungulates, such as bison and elk, and the return to a varied fire regime. Development would have been minimal, with most of the present developments being removed. Visitor use would have been limited to non-motorized and dispersed activities. The cultural resources would have been documented with the more significant ones stabilized. The ranch headquarters area, school, and Lantry areas would have been restored to represent the evolution of ranching in the Flint Hills. Cultural landscape would have been managed to enhance the natural processes. Interpretation would have stressed the tallgrass ecosystem and the evolution of ranching in the Flint Hills, but the focus would have been on allowing the visitor to experience a wild prairie environment with natural vistas.

Alternative G placed the greatest, almost exclusive, emphasis on the natural resources. Therefore, important elements associated with the restoration, rehabilitation, and maintenance of the cultural resources, including the cultural landscapes, would have been lost through this alternative. Visitor understanding and appreciation of the history of human use of the preserve area would not have occurred with this alternative,

particularly in relationship to the ranching resources. However, elements of this alternative were retained in the preferred alternative. Under the preferred alternative, the dispersed recreational opportunities and the restrictions on motorized access in the prairie landscape area would help to emphasize the “wilderness” aspects of the prairie, and would provide visitors with opportunities to experience portions of the prairie as they might have under this alternative.