

Broken Wheel Ranch Special Use Permit Wilderness Working Paper

Introduction

The following section is provided as an introduction to the laws, regulations, and policies which guide the Forest Service management of congressionally designated wilderness areas. In this introduction, we highlight the key portions of the laws, regulations, and policies that set the sideboards for wilderness management. We have used these laws, regulations, and policies to focus our analysis.

The Wilderness Act and the Illinois Wilderness Act

The Wilderness Act of 1964 is the enabling legislation for the management of the National Wilderness Preservation System (NWPS). In 1990, the Illinois Wilderness Act designated seven areas of the Forest as units of the NWPS. Two of these seven wilderness areas, Bald Knob and Clear Springs are located in the project area. There are about 10,575 acres of wilderness within the project area (Table 1).

	Bald Knob	Clear Springs	Total Acreage
Acres	5,786	4,789	10,575

Within the Wilderness Act, there is language which both defines wilderness and describes how wilderness is to be managed. Section 2 (c) states,

“A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which:

- (1) Generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work being substantially unnoticeable;*
- (2) Has outstanding opportunities for solitude or a primitive and unconfined type of recreation;*
- (3) Has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and*
- (4) May also contain ecological, geological, or other features of scientific, educational, scenic or historical value”* (The Wilderness Act of 1964).

Section 4(b), which addresses use of wilderness, states that *“each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area for such other purposes for which it may have been established as also to preserve its wilderness character”* (The Wilderness Act of 1964).

Section 2(a) of the Act specifically states that such areas, *“shall be administered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character”* (The Wilderness Act of 1964).

Wilderness Act Prohibitions

Section 4c of the 1964 Act also defines uses considered to be prohibited within wilderness:

“Except as specifically provided for in this chapter, and subject to existing private rights, there shall be no commercial enterprise and no permanent road within any wilderness area designated by this chapter and, except as necessary to meet minimum requirements for the administration of the area for the purpose of this chapter (including measures required in emergencies involving the health and safety of persons within the area), there shall be no temporary road, no use of motor vehicles, motorized equipment or motorboats, no landing of aircraft, no other form of mechanical transport, and no structure or installation within any such area” (The Wilderness Act of 1964).

Finally, although Section 4(c) of the Act states that no structure, installation or commercial use enterprise is allowed within wilderness, Forest Service policy further clarifies this language. Trails, for example, are considered an acceptable improvement even though a trail is considered a permanent improvement and is clear evidence of man’s work. Other temporary and permanent structures and installations considered to be appropriate include bridges, signs, outfitter and guide operations and recreation stock structures, when they are designed to minimize the impact on wilderness, and when they are deemed to be necessary for managing the wilderness resource (FSM 2323.13f, 13g, 2324.33). Outfitter and guide services are also considered appropriate when they existed prior to wilderness designation or when they provide services that are deemed necessary to meeting the purpose of the act.

Forest Service Wilderness Regulations

Wilderness is to be made available for human use to the optimum extent consistent with the maintenance of primitive conditions (36 CFR 293.2). A key section of the Forest Service wilderness regulations (36 CFR 293.6.c) concerning use of wilderness is tied to the language used in Section 4(c) of the Wilderness Act:

Except as provided in the Wilderness Act, there shall be in National Forest wilderness no . . . structures or installations

The Chief of the Forest Service may authorize use of National Forest land to carry out the purposes of the Act and will prescribe conditions under which motorized equipment, installations, and structures may be used. Such uses must meet the minimum requirements for authorized activities in the administration of wilderness (36 CFR 293.6.c).

Forest Service regulations (36 CFR 293.8) also provide direction with regard to permanent structures in wilderness:

Motels, summer homes, stores, resorts, organization camps, hunting and fishing lodges, electronic installations, and similar structures are prohibited in National Forest Wilderness. The Chief, Forest Service, may permit temporary structures . . . within National Forest Wilderness to the extent necessary for realizing the recreational or other wilderness purposes, which may include, but not limited to, the public services offered by packers, outfitters, and guides.

Forest Service Policy

Forest Service policy (Forest Service Manual 2320.1 – 2323.26b and Forest Service Handbook 2709.11, 2309.18) and the 2006 Forest Plan provide direction for the management of the two wildernesses within the project area. The intent of the Wilderness Act of 1964 and the Illinois Wilderness Act of 1990 are incorporated into both Forest Service policy and the 2006 Forest Plan. The overall goal of wilderness management is to maintain or improve wilderness character from its state at the time of wilderness designation.

Policy directs the agency to consider the wilderness resource as the overriding value when a choice must be made between wilderness values and visitor or any other activity, in order to preserve wilderness. Because uses and values on each area will vary, management and administration should be tailored to meet the need of each area (FSM 2320.6). The Forest Service may authorize the use of motorized equipment and mechanical transport to meet minimum needs for administration of wilderness where “[a]n essential activity is impossible to accomplish by nonmotorized means because of such factors as time or season limitations, safety, or other material restrictions” (FSM 2326.1).

Commercial Equestrian Outfitter/Guide Services

Comments on the project proposal in the Shawnee National Forest’s Schedule of Proposed Actions focused on one question relative to compliance with The Wilderness Act. The appropriateness of commercial equestrian outfitter/guide services offered in wilderness was the primary concern raised relative to the proposed action. The Wilderness Act generally prohibits commercial enterprises in the wilderness but it does allow for commercial services to be provided to the extent necessary to meet the recreational purpose of the Act. The interdisciplinary team considered several factors in assessing the need for commercial services in the wildernesses.

While an in depth assessment of visitor use has yet to be conducted in the Bald Knob and Clear Springs Wilderness Areas, the observations of Forest Service personnel, gathered over numerous visits each year since designation, indicates that overall use is relatively low. These observations point to peak use on spring and fall weekends and low to virtually no use on most summer weekdays. Access for hikers is available at several points where area trails intersect public roads. Access for equestrians pulling horse trailers is limited by the unavailability of places to park. Limited trailer parking does exist on the east side of the Bald Wilderness at the Godwin River to River Trail trailhead although using this space virtually eliminates any possibility for other trail users to use the trailhead.

Since the mid-1990’s, the Broken Wheel Ranch has been the safest place to park a trailer without occupying the entire adjacent public trailhead. Equestrians who wish to ride into the area have parked at the Broken Wheel and begun their trip from there. The property remains an important link to public lands for these users. Without the Broken Wheel, most of these users would not have a place that could accommodate them and their stock. Furthermore, the permit proposal includes the operation of overnight lodging, a critical consideration, and one not offered locally on public lands, for equestrians and hikers from outside the local area. For these reasons the Broken Wheel Ranch is integral to linking people to a wilderness recreational experience.

An important aspect in allowing for commercial services to be provided in wilderness is the extent to which these services are necessary. The private equestrian campgrounds serve as hosts for most of the non-local equestrian users that visit the national forest; without these services many equestrian tourists would not be able to enjoy our wilderness resource. Working together to educate people to the proper use of the trail system is potentially the biggest benefit that we can provide for resource management. If, in

the future, a limit on the total number of users is determined to be needed, then the equestrian outfitter/guide permits will provide a mechanism for limiting commercial use. Until use limits would be necessary, the current permitting process should be adequate to enhance and protect wilderness character. The interdisciplinary team concluded that commercial equestrian outfitter/guide services were necessary to meet the recreation purpose of the Wilderness Act.

Congress clearly intended that wilderness areas were to be administered to protect wilderness character. However, Congress unquestionably also directed that these same lands be administered to ensure future use and enjoyment by the American public, and that such use and enjoyment includes recreational activity. The Wilderness Act does not mandate federal agencies to pursue a limited or single purpose regarding wilderness. Instead, the Act requires agencies to administer wilderness areas to serve many public purposes and facilitate “recreational, scenic, scientific, educational, conservation, and historical use” (16 U.S.C. 1133(b)). The Forest’s wilderness management decisions must encompass and consider all of these purposes, and as one court said, “must undertake a minimum of administration, in order to make the Wilderness accessible to those Americans who wish to use it.” Forest Service policy states that “[t]rails are an acceptable improvement.” Compliance with the Wilderness Act must be viewed in terms of the purposes and intents of the Act as a whole. In summary, the interdisciplinary team determined that the commercial outfitter services provided by the Broken Wheel Ranch are considered appropriate because they provide services that are deemed necessary to meeting the recreation purpose of the act.

Wilderness Character

The Wilderness Act identifies four qualities of wilderness character: “untrammled,” “natural,” “undeveloped” and offering “outstanding opportunities for solitude or a primitive and unconfined recreation (United States Congress, 1964). Although there is no definition of wilderness character provided in the Act and the meaning is not discussed in the legislative history, it may be described as a combination of biophysical, experiential and symbolic ideals that distinguish wilderness from all other land.

In addition to the range of biophysical conditions found within wilderness, each wilderness has its own unique character due to the relationships people have with the area. The values visitors have, and the experiences visitors associate with an individual wilderness, has been considered for determining the Bald Knob and Clear Springs wilderness character. (Landres, et al., 2005)

In 2005, the USDA General Technical Report (RMRS-GTR-151) *Monitoring Selected Conditions Related to Wilderness Character: A National Framework* (Landres et al. 2005) was published to provide managers a way to select indicators which could be used to more effectively monitor changes to wilderness character. This monitoring framework, which is consistent with Forest Service policy, is expected to be implemented on all National Forest System Wilderness in 2006 and 2007. The guidelines provided in this framework have been used to choose the appropriate indicators for wilderness character. For this analysis, the four qualities of wilderness (untrammled, natural, undeveloped and outstanding opportunities for solitude or a primitive and unconfined recreation) are used as indicators to determine baseline (time of designation) conditions, establish existing conditions and compare the effects of the proposed action.

Regarding wilderness character, many of the wilderness areas in the eastern United States bear the imprint of substantial past human influence. However, this does not preclude their management as wilderness. It is not imperative that all such areas possess wilderness qualities in equal measure. What is important is

that management of a given area serves to improve its wilderness character (FSM 2320.2). The presence of fallow fields or old roadbeds within the project area may detract from the undeveloped or untrammelled quality of wilderness. However, the primary stewardship challenge is to manage both the natural systems and the opportunity for primitive recreational experience - to ensure that these attributes improve over time.

The ideal baseline for determining changes to wilderness character would be the conditions that existed at the time of the 1990 wilderness designation. However, the conditions at the time of wilderness designation are not readily or reliably identifiable for the Bald Knob and Clear Springs Wildernesses. Baseline conditions have been inferred from analyses completed prior to designation, from historical travel route maps and from discussion included in the 1992 Forest Plan. Where no prior data exists, information gathered post-designation has served as the baseline for this analysis.

In accordance with the Forest Plan, wilderness areas on the forest are managed under the Recreation Opportunity Spectrum (ROS) class Semi-Primitive Non-Motorized. This class is made up of lands characterized by a “predominantly natural or natural appearing environment of moderate to large size”, where “interaction between users is low but there is often evidence of other users”. The area is managed in such a way that minimum onsite controls and restrictions may be present but is subtle. As mentioned previously, motorized use is not permitted (Forest Service ROS Guide 1982). The wilderness character indicators are described below. Additional wilderness-specific character information follows this discussion.

Wilderness Indicators

Untrammelled Condition

“A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain” (Wilderness Act of 1964, Section 2c).

“Untrammelled” is defined as unconfined or unhindered, and is a measure of the control or manipulation that modern human activities exert over the components or processes of ecological systems inside wilderness. The object of managing for an untrammelled condition is neither to stop ecological change nor to return an area to some historical condition, but rather to let change progress to whatever outcome might occur if unhindered by human influence (Landres *et al.* 2005). Some examples of management-related manipulation within wilderness includes actions such as igniting fire, mechanically reducing fuels, introducing plants or animals or applying herbicides and pesticides. An example of human manipulation that is not management-related would be the creation of multiple trails that negatively affect ecological processes.

It is recognized that in the short term, all actions diminish the untrammelled quality of wilderness - even though they are intended to restore natural conditions and support the concept of natural quality of wilderness. However, in the long term, these actions may eventually lead to reduced trammeling. The intent of monitoring is to track significant manipulations such as reducing fire-accumulated fuels over a large area and not track small-scale manipulations (Landres *et.al*, 2005).

Many past land uses have contributed to the untrammelled condition of wilderness within the analysis area. Surveys conducted pre-designation indicate that some bottomland portions of the wilderness were fallow crop or pasture lands planted to sweetgum and poplar during the first decades of Forest Service management. Most of the buildings and other improvements that were once common throughout these areas are gone, but many wire fences, stone walls, roadbeds, cisterns and piles of fieldstones remain.

Road-building and logging developed openings, as did the management of numerous small clearings and ponds for wildlife. Autumn olive, Japanese honeysuckle and other non-native species are common. At the time of wilderness designation, there was an average of 2.6 miles of old road per square mile in the Forest wilderness areas.

In both wilderness areas, there has been no road-building, timber-cutting or management of wildlife openings since designation in 1990. The portions of the old road network not being used as trails are naturalizing. Direct management actions have been concentrated on discouraging motorized use, protecting known populations of listed plant species and maintaining the designated trail system.

Fire management policies in wilderness have the potential to limit natural processes. As no fire management plans have yet been completed for these areas, any wildfire would be suppressed. In the time since designation, few fires have occurred with little effect on the conditions within project area wildernesses.

Natural Condition

The natural condition of wilderness is a measure of the effect that human activity has on the individual components of the natural community (Landres *et al.* 2005). This indicator examines the impairment of soil and water, wildlife, aquatic organisms and native and non-native plants. It is recognized that when natural conditions are manipulated for the purpose of restoring ecological systems, both anticipated and unforeseen impacts can occur (Landres *et al.* 2005). By monitoring natural condition, managers can assess the physical effects of recreational use in wilderness.

Past and present land use and management have affected the natural condition of the project area wildernesses, which were in private ownership prior to acquisition by the forest. Land use prior to acquisition included primarily small homesteads with networks of roads, some plowed fields in the bottoms and grazing of the woods on the ridges. These activities resulted in erosion, sedimentation into streams, disruptions in the distribution of native plant species and the introduction of non-native invasive species.

When acquired by the Forest Service, road construction and maintenance continued, timber harvesting occurred on some acres, wildfires were suppressed, and some non-native pine and hardwood was planted. All of these activities had effects upon the natural conditions in the areas that would become wilderness. In addition to the about 15 miles of old roads, there were about 16 miles of trails, for a total of about 31 miles of travel routes in these two wilderness areas. The old road system, the non-system trails and the designated trails combined to develop an extensive network where equestrians could ride in the wilderness. Equestrian use has been low relative to many other areas of the Forest.

Since designation in 1990, the greatest changes to natural conditions within the Bald Knob and Clear Springs Wilderness Wildernesses have come from recreational use. Recreational uses in wilderness include horseback riding, hiking, hunting and fishing and occasional camping.

Perceptions of the impacts to natural condition vary among visitors. In the landmark work *Wilderness Management* it is reported that often what land managers perceive as degradation, soil loss or the introduction of non-native plants, is often less important to wilderness users who most often cite littering and noise as their chief concerns (Hendee, *et al.* 1990). For example, a visitor survey was conducted in 2000 that included visitors in all seven wildernesses on the forest. Overall, wilderness users were satisfied (good to very good ratings) with: scenery (100 percent satisfied), condition of the natural environment (92 percent) and condition of the trails (74 percent) (USDA Forest Service, 2000).

Wilderness-wide, the following activities and/or conditions are currently affecting, or have the potential to affect, natural processes:

- Soil and water resources are affected. Sources of sediment on forest lands in the project area are likely the facilities associated with transportation systems, mainly unimproved roads and trails (Soil and Water Resources Working Paper, Case File).
- Equestrian and hiker use of unimproved roads and trails can expose bare soil which can lead to accelerated erosion (Soil and Water Resources Working Paper, Case File).
- Existing trails with a steeper gradient have a greater erosion potential than trails with a lower gradient and steep trails have higher potential for erosion (Soil and Water Resources Working Paper, Case File). Some steep gradients do exist on area trails. Trail conditions in these areas will require monitoring to ensure that they do not degrade to the point where they impact wilderness character.
- Some of the trails and roads cross ephemeral, intermittent and perennial streams. These crossings are direct points of sediment delivery. Localized disturbance to banks and channel substrate can occur. Trail crossings at larger stream channels can cut the banks causing them to become unstable and erode (Soil and Water Resources Working Paper, Case File).
- Under wet soil conditions trails are more vulnerable to rutting, compaction and erosion. Water is less likely to infiltrate the trail tread causing excess water to run off (Soil and Water Resources Working Paper, Case File).
- Non-native Invasive species are found along travel corridors. Cross country travel would result in the greatest spread of NNIS and extirpation of botanical individuals, populations and habitat of one or more of sensitive and forest listed botanical species may occur from the continuation of this use (Botanical Resources, Case File).
- Unauthorized motorized use (mostly ATV use) into wilderness is occurring.

The environmental consequences displayed throughout the resources that comprise the natural condition (soil, water, botany, aquatic and wildlife) indicate that monitoring of wilderness trails will be necessary to ensure that wilderness character does not degrade due to impacts from trail use.

Undeveloped Condition

“...an area of undeveloped Federal Land retaining its primeval character and influence, without permanent improvements or human habitation...where man himself is a visitor who does not remain...with the imprint of man’s work substantially unnoticeable...” The Wilderness Act of 1964, Section 2c

The undeveloped quality of wilderness monitors the presence and development level of trails, campsites and other structures that were built before wilderness designation - as well as those built since designation. A concern with this type of physical evidence is the impact on the opportunity visitors have to experience a primitive environment since wilderness is a place where the evidence of man is substantially unnoticeable (Landres *et al.*, 2005, pp. iii, 15).

At the time of wilderness designation, development included a network of old roads, designated trails and non-system trails. In addition to the about 15 miles of old roads, there were about 16 miles of trails, for a total of about 31 miles of travel routes in these two wilderness areas. Nearly all of the trails in both wilderness areas existed first as a road. In a few instances roads have been connected together with a non-system trail to form a loop. For the most part, the acceptance by management of cross-country riding in these two wilderness areas has not resulted in the profusion of user-created trails seen elsewhere on the Forest.

Currently, management-related developments within wilderness considered to be necessary for the administration of wilderness are Trail Class 2 and 3 trails, old road beds being used as trails, directional signs, regulatory (trail or area closures) signs, and natural area boundary signs. Other evidences of man, not related to the management of wilderness include a small number of user-created trails, deer stands and spray-painted rocks and live trees and graffiti (which have been used for directional purposes). In addition, unauthorized motorized use is occurring. Monitoring the size and extent of these recreational improvements indicate how the undeveloped aspect of wilderness character may be changing.

While Forest Service policy considers trails to be an acceptable improvement in wilderness, the standard of trail development and the extent of the system throughout an area can have an effect on visitors' perceptions of development (Landres *et al.* 2005). There are currently about 44 miles of inventoried travel routes in the project area wildernesses (Table 2) that are primarily low-standard, minimally developed trails and former roads.

Bald Knob and Clear Springs Wilderness	Acres	System Trail Miles	Non-System Trail Miles	System and Non-System Trail Miles
Total	10,593	20	24	44

Regarding trail development, the 2006 Forest Plan directs that trails within wilderness be managed at Trail Class 1, 2 or 3. Such trails would characteristically be narrow, native surface paths and, at times difficult to follow, steep and rough. Such standards offer a measure of challenge to the wilderness recreational experience. Research into trails in the eastern United States, on fine-textured soils similar to those on the Shawnee, shows that these routes often show signs of braiding, muddiness and erosion even at low to moderate levels of equestrian use (Marion 1994, Marion 2004, Aust *et al.* 2005). While some evidence of trail muddiness and erosion is occurring within the analysis area, it has not reached a level where it adversely impacts wilderness character. The Broken Wheel Ranch, if operating at full capacity during times of wet and muddy trail conditions could adversely affect trails. Because the proponent does not plan to operate for equestrian use in winter, and because it is unlikely that off weekend use in fall will be heavy it is less likely that the added increment of use will have a deleterious effect to wilderness character. Potential impact would be further diminished by setting a benchmark for trail muddiness that would be used to determine when trail conditions are too wet to ride. On these occasions use would be deflected to other, non-wilderness areas of the Forest.

Solitude or Primitive and Unconfined Recreation

The wilderness conditions, untrammled, natural and undeveloped, all relate to the ecological condition of wilderness. The opportunity for solitude or a primitive and unconfined type of recreation is the condition related to the human experience of wilderness. While all wilderness visitors do not seek solitude or primitive and unconfined recreation, it is implicit in the law that managers should provide and protect these opportunities. Bald Knob and Clear Springs are small compared to many western wilderness areas. The fact that they can't offer the days of solitary travel and vastness of scale found in more remote

country is not material to this analysis. Instead, it is the change since designation in the opportunity to find solitude or primitive and unconfined recreation and the effects of the action upon these opportunities that our analysis focuses.

Solitude is defined as the “state of being alone or remote from society.” The monitoring framework (Landres *et al.* 2005) elaborates: “Given the content of early wilderness writings, it is likely that solitude was viewed holistically, encompassing attributes such as separation from people and civilization, inspiration (an awakening of the senses, connection with the beauty of nature and the larger community of life) and a sense of timelessness (allowing one to let go of day-to-day obligations, go at one’s own pace and spend time reflecting).”

Primitive recreation is both reliance on non-motorized and non-mechanized means of transport and reliance on personal skills to travel and camp in an area rather than relying on facilities or outside help. Primitive recreation in wilderness has largely been interpreted as travel by horse, foot and canoe which reinforce the connection to our ancestors and our heritage (Landres *et al.* 2005).

The term “unconfined” is freedom from societal or managerial constraints. It is the opportunity for physical and mental challenge associated with adventure and the opportunity to make mistakes, face and overcome obstacles (Landres *et al.* 2005). There is a management dilemma when the objective is to have unrestricted and unconfined recreation while providing outstanding opportunities for solitude – when the demand for access to wilderness is high and supply is limited (Cole and Hammit 2000).

In terms of recreational use within wilderness, the direction in both Forest Service policy (FSM 2323.12, 1.3) and the 2006 Forest Plan is to maximize visitor freedom within wilderness and minimize direct controls and restrictions (USDA Forest Service, Shawnee Forest Plan, 1992, IV-113). Controls are to be applied only when they are essential for the protection of the resource and when indirect measures (such as educational programs) have failed. However, a minimum of adaptations should be employed in order to accommodate recreation within wilderness (FSM 2323.12, 3.).

Considerable research has examined the impact of large groups upon visitor wilderness experiences. Wilderness visitors generally say that encountering large groups reduces the feeling of wilderness. Numerous studies have been completed on group size limits as it relates to the wilderness experience. However, there are few studies on the influence group size has on the areas extent or intensity of ecological impact” – other than firewood use.

Monz et al (2000) found that regarding management controls, limiting party size is an established and accepted visitor management technique used in wilderness. Reasons for limits are typically environmental impact, conflict between groups, conflict within groups, facility or site constraints, overall high use of the area, public complaints or pressure and consistency with neighboring wilderness areas. Monz et al (2000) also found that if the goal was to emphasize resource and experience protection, wilderness managers often impose group size limitations which emphasize smaller group size numbers. If the goal is to maximize access to wilderness, group size limitations would favor moderate to higher numbers. Finding the middle ground between the two, protection of resources while providing for opportunities, is the overall objective of this analysis.

Current trends suggest that more managers are adopting party size restrictions and that the maximum allowable group size is getting smaller. In 1981, research indicated 46% of Forest Service and 43% of National Park Service wilderness had a maximum group size. Research in 1993 indicated that the percent had increased to 62%. In 2000, research by Monz et al. found that given the perception that larger parties have disproportionately high impacts, managers throughout the NWPS have moved towards more

stringent group size restrictions. As of 2,000 about 52% of wilderness areas had established some type of group size limit. Numbers of people vary from 6 to 60 with 10 being the most common limit. Horse and packstock limits range from 5 to 35 with a median of 15. Heartbeat limits range from 8 to 25 with a median of 15.

In accordance with the 2006 Forest Plan, less restrictive methods should be tried prior to the resorting to the type of system that limits all use. A more restrictive type of system is commonly referred to as a permit or quota system. This management strategy issues a set number of permits to control the number of visitors entering or utilizing wilderness on any given day. The forest believes a group size limitation is the better option for maintaining and improving the opportunity for solitude or primitive and unconfined recreation.

It is important to note, that throughout much of the year, ample opportunity for solitude also exists on the trail system. The opportunity for primitive recreation could likewise be affected by the level of trail experience and the presence of structures or amenities designed to accommodate recreation. Unconfined recreation could be affected by the level of management restriction placed upon users.

Wilderness Existing Condition

Presently there is little development of the trail system and no structures exist in the wilderness to support recreation. There are about 20 miles of designated trail in these two wildernesses. A long loop is available for equestrians in the eastern portion of the wilderness. Shorter loops are also available. Trails are generally single tracked although at times wider than the 24 inch width standard for wilderness. Sections of braided trail do exist along with areas of muddiness and excessive steepness. Currently, there are few management restrictions and there is ample opportunity for primitive and unconfined recreation. Few directional signs exist, there are trails with steeper grades and water crossings are un-developed which enhances the opportunity for challenge.

Effects on Wilderness Character

Untrammled Condition

For each wilderness within the project area, the signs of past land-use would continue to fade into obscurity. The fallow fields and wildlife openings would be allowed to progress without management intervention to whatever vegetative characteristics they will assume. Roads would be allowed to continue to naturalize through the growth of vegetation and leaf-fall. Any impacts that the proposed permit would have on the untrammled nature of wilderness are likely to occur from the management activities incumbent in managing wilderness for recreation. Equestrian use of the area is currently light. It will increase after the issuance of the permit but it is unlikely that this increase would happen quickly or extensively enough to add additional, discernable impacts to the wilderness. Non-native invasive species will continue to have to be detected and controlled, and trail maintenance and reconstruction on the designated trail system will continue. These activities occur in the project area now. Because of the requirements enumerated in the operating plan: riding on permitted trails only, seasonal closure, soil saturation restrictions and policies on stopping and resting locations it may be that the overall portion of the wilderness effected by recreation may actually be reduced. However, the wilderness will continue to be open and available year-round to non commercial recreation. Any improvement to the untrammled condition from the permit resource protection measures would likely be obscured by the continued use by local people.

Natural Condition

Visible remnants of past land use and management, such as recovering farmlands, roadbeds and pine plantations, have an adverse effect on the natural condition of wilderness. Erosion is evident on some miles of old roads. Non-native plants and trees are present in old homesteads. Over time, many of these effects would fade into the landscape as trees mature and vegetation becomes re-established within the old roadways. The proposed permit with a potential increase in equestrian use would not have much of an impact on the natural condition because this use will be restricted to the permitted trails. Additionally the other permit restrictions (seasonal closure, soil saturation restrictions and policies on stopping and resting locations) will minimize the impacts.

Undeveloped Condition

The proposed action proposes to allow commercial equestrian use to about 17 miles of trail. In the short-term (one-year) of the permit there will not be a substantial change to the undeveloped condition in the wilderness. The restriction of Broken Wheel equestrian clients to the permitted trails should lessen the level of impact to the undeveloped condition of the wilderness areas. However, the wilderness will continue to be open and available year-round to non-commercial recreation. Any improvement to the undeveloped condition from the permit resource protection measures would likely be obscured by the continued use by local people.

Solitude or Primitive and Unconfined Recreation

In the proposed action, group size restrictions would apply to Broken Wheel equestrian clients. While this restriction increases management control and reduces the unconfined nature of wilderness (free from restrictions), the size restrictions should improve the feeling of solitude for those visitors who believe that large groups diminish their experience. The group size limitations combined with improved trail conditions should indirectly improve experiences by reducing environmental impact and conflicts between groups. Minimal adverse effects to the opportunity for primitive and unconfined recreation are expected.

Extraordinary Circumstances

Using the categorical exclusion to cover the National Environmental Policy Act compliance for this project requires that the decision consider the effect of the proposed action on resource conditions that could result in extraordinary circumstances, one of which is the wilderness resource. Based on the effects described above, we do not anticipate there will be substantial impacts to the wilderness character from permit issuance. While use may increase during the term of the permit, this increased use will be restricted to the permitted trails. Seasonal and wet-weather closures should also minimize any impact associated with that increase in use. Similarly the group size limit will limit impacts on solitude. Overall, restricting equestrian use for clients from the Broken Wheel Ranch may result in a slight improvement to wilderness character. No effects to the wilderness resource conditions that would result in extraordinary circumstances are anticipated.