

Appendix C

Trails Designation Project, Phase 1

Final Environmental Impact Statement

Comment Summary

INTRODUCTION

The Shawnee National Forest (Forest) received 795 comment letters, containing 1,786 unique comments, on the Draft EIS on the Trails Designation Project Phase I. Over 95% of the total letters were form letters containing a total of 38 unique comments. A total of 643 unique respondents provided comments.

Fifteen organizations submitted comments, including federal and state agencies the US Environmental Protection Agency, Illinois Department of Natural Resources, and Illinois Nature Preserve Commission. Comments were received from individual respondents in 14 states; 94 % of the comments were from Illinois.

Comments addressed 14 issue areas, and were coded as follows:

Issue Area	Code	Number	Percent
Aquatic Resources	AR	52	3
Botany Resources / Natural Areas	BR	54	3
Commercial Use	CU	31	2
Economics	EC	44	3
Enforcement	EN	55	3
Heritage Resources / Education	HR	3	<1
National Environmental Policy Act	NEPA	23	1
Other	OS	21	1
Private Lands	PL	44	2
Recreation Resources	RW	937	53
Resource Management	RM	169	10
Soils / Watershed Resources	SW	127	7
Visual Resources	VR	6	<1
Wildlife Resources	WL	4	<1
Wilderness Resources	WR	197	11
TOTAL		1,786	100

METHODOLOGY

1. Comment letters were received and numbered by the Shawnee National Forest (Forest) staff; names and addresses were entered into a Microsoft Access 2000/2003 table at this time. Persons requesting to not be on the mailing list had their names entered, but no address information.
2. A copy of each letter was forwarded to Environmental Training & Consulting International, Inc. (ETCI) for comment coding (using the above codes), data entry, and analysis.
3. Form letters were coded by Forest Service included in the comment data base. These letters were reviewed by ETCI for validation; two comments were added as a result of this process.
4. Non-form letters and those form letters with additional substantive comments were then coded and entered into the comment data base.
5. Analysis eliminated duplicate respondents, duplicate letters, and duplicate comments.

RESULTS

Three topics received the majority of overall comments: recreation resources, Wilderness resources, and general resource management. In general, those who opposed Forest Service actions tended to be more detailed in their discussions and provided more specific comments than those who had no clear position pro or con.

Recreation Resources

Half of the total comments addressed various aspects of recreation resource management. Many of these comments included lengthy suggestions for specific trails to be added, designated, maintained, upgraded, closed, restricted to horses or to hikers, or simply monitored. Other recreation resource topics included opinions on whether designating trails at all is a good idea or not, and if it is, what kind and how many trails should be designated. A few letters asked about accommodations for disabled recreationists.

The topic of “user created trails,” their impacts on the forest, their legality and their desirability was addressed in several letters. The need for, problems with, and effects of being able to ride out from private land without a special use permit were addressed. Cross-country horseback riding in general received a number of comments both pro and con. Wet weather and other trail closures (including during construction and for the least brook

lamprey) were also strongly supported by some responders and strongly opposed by others.

Wilderness Resources

Wilderness resource topics were the second most numerous among the substantive comments, garnering 11 percent of the comments.

Some respondents cited the Wilderness Act and subsequent legislation for their suggestions to either use, or not use mechanical equipment to maintain and enhance Wilderness character. Group size requirements were both strongly supported and strongly opposed. Some requested additional analysis has been conducted to support discussion of the need for facilities in wilderness areas, and mechanized equipment to create them.

Resource Management

General Resource Management concerns received the next largest number of comments. Most of these comments relate to an opinion about a specific alternative analyzed in the DEIS. Some of these comments suggested a slight change to an alternative to bring it in line with the person's preference or need. Others were concerned with the management of resources for the future.

COMMENTS AND RESPONSES RELATED TO THE TRAILS DESIGNATION PROJECT PHASE I

Aquatic Resources	337
Botanical Resources and Natural Areas.....	346
Commercial Use	352
Economics	359
Enforcement	363
Heritage Resources/ Education	365
National Environmental Policy Act	367
Private Lands.....	372
Recreation Resources.....	377
Resource Management.....	420
Soil and Watershed Resources.....	430
Visual Resources.....	446
Wilderness	451
Other/General	490

Aquatic Resources

1. The proposal to construct a reservoir on Sugar Creek was listed several times in this document under Aquatic Resources. Sugar Creek is outside of this project area and should not have been mentioned in this document. Includes: 154-019-12, 742-337-24, 1773-711-15.

RESPONSE: The construction of a reservoir on Sugar Creek would reduce the populations and distribution of least brook lamprey and Indiana crayfish within the state of Illinois. The status of these populations was included in the affected environment for aquatic resources to emphasize the relative importance of populations and habitat found within the four watersheds being analyzed.

When referenced in the DEIS, we noted that Sugar Creek was outside the project area and as an example of how impoundments directly affect species populations. Consequently, the proposed reservoir construction was not considered when analyzing the cumulative effects on Indiana crayfish and least brook lamprey. After reviewing National Environmental Policy Act (NEPA) regulations we determined that the proposed action on Sugar Creek should be considered in the cumulative effects analysis for least brook lamprey and the Indiana crayfish. Although the proposed project is outside the project area, it is a reasonably foreseeable future action that might significantly impact these species. When assessing the cumulative effects of the proposed project on these species, we must include other reasonably foreseeable future actions that may affect the species. Thus, the spatial boundary of analysis for cumulative effects was amended in the Final EIS to include not only the project area, but also the area of the proposed reservoir construction.

2. Least brook lamprey are not federally threatened or endangered. Lampreys have done well in the forest with hikers and equestrians for the last 70-75 years and are still surviving. Seasonal closures for lamprey spawning are not necessary. Includes: 155-019-13, 216-098-02, 533-324-02, 651-482-01, 744-337-26, 802-376-02, 813-391-04, 919-540-02, 1018-486-04, 1293-693-04, 1350-707-28, 1369-709-11, 1452-724-04, 1469-729-02, 1774-711-16, 1777-711-19, 1823-542-10.

RESPONSE: Although least brook lamprey is not federally listed, the species is listed as threatened by the State of Illinois. The least brook lamprey has a relatively narrow distribution in Illinois, which includes three of the four watersheds in the project area. All state listed species are categorized as Forest Listed Species on the Shawnee National Forest. Under

Forestwide Standards and Guidelines the 1992 Amended Land and Resource Management Plan (Forest Plan) states that “An analysis will be done for each project where a Forest Listed species may be affected. This analysis will be done prior to project implementation and will evaluate the effects of the proposed management activities on the species.” Following the 1992 Forest Plan and NEPA and Council on Environmental Quality (CEQ) guidelines, we analyzed potential effects from the project on the species and found that there could be both direct and indirect effects from project implementation (see pages 90-91 of DEIS). In order to mitigate these effects, some stream crossings would be closed during the spawning period (see page 84 of the DEIS).

There is no evidence that lamprey populations have increased or decreased over the last 70-75 years within the project area; however, they continue to live within the project area where equestrian/hiker use is occurring. We do know, however, that the level of recreation, e.g. equestrian use, on the Forest in the past 10 years is at its highest since the Forest was formed in 1933. This present level of recreation use is quite different compared with 70 years ago, as the comment suggests. We need not wait until the species population has sharply declined to take action; mitigation of the effects of this increased level of use of the Forest is warranted. The seasonal closures mitigate any adverse effects to habitat and populations as required by NEPA regulations, and the Forest Plan.

The EIS analyzed an alternative that did not include seasonal closures to protect lamprey (Alternative 1). The adverse effects on the species are likewise noted, in comparison with other action alternatives that include a seasonal closure to mitigate adverse effects.

3. As the DEIS states, stream crossings are "direct points of sedimentation." Since, as the DEIS states, an area 15 feet downstream of a crossing would be most affected, we oppose any crossing within 15 feet of a least brook lamprey spawning area. We do support and appreciate closing of such crossings during the lamprey spawning period. However, heavy accumulation of sediments in a spawning area prior to the spawning period could also affect the eggs. If the eggs settled down into a thick layer of sediment, they could conceivably be smothered.

Includes: 155-019-13, 744-337-26, 1012-614-01, 1369-709-11, 1774-711-16.

RESPONSE: The DEIS (page 79) discusses the general effects of sedimentation on fish habitat and fish populations, including the potential for reduced spawning success. Specific to the least brook lamprey, direct and indirect effects from sedimentation are discussed on pages 90 and 91. The direct effects of sedimentation (i.e., sediment accumulation within 15 feet downstream of a crossing caused by bank erosion at the crossing) on

spawning is mitigated by closing the crossing during the spawning period. During the spawning period there is potential for sediment to accumulate upon eggs that are deposited in the spawning pits. We feel that the seasonal closure mitigates any potential effects from sedimentation.

The second part of the comment (“However, heavy accumulation of sediments...”) concerns the accumulation of sediment prior to the spawning period. Some sedimentation may occur prior to spawning from erosion and sedimentation at the crossing, a direct effect, as well as throughout the drainage, an indirect effect. While sedimentation may occur, we believe that any sedimentation prior to spawning will have less of an effect compared to sedimentation that occurs after eggs have been deposited. Least brook lamprey are known to spawn in riffle areas, which are consequently areas that accumulate less sediment because of higher velocity flow. Spawning pit preparation by the least brook lamprey would also alleviate potential sediment impacts. Field observations clearly show that the least brook lamprey clean the spawning pit by moving stones and fanning the area to remove sediment prior to laying eggs.

Indirect effects from erosion and sedimentation throughout the drainage could also impact least brook lamprey spawning success. As stated in the DEIS (page 91) there is a relationship between the number of trail miles and the potential for indirect effects from sedimentation (i.e., an increase in trail miles would be accompanied by an increase in sediment, or vice versa). In alternatives where trail miles are reduced (Alternatives 2 and 4) and the prohibition on cross-country riding precludes new user-created trails, a beneficial effect is expected. The opposite is true for alternatives where trail miles are not reduced and cross-country riding is allowed (Alternatives 1 and 3). Although there are differences in direct and indirect effects among alternatives, no significant adverse cumulative effects to least brook lamprey are expected in any alternative because specific mitigation measures will be implemented. As stated on page 93 of the DEIS, “Current models suggest that less than ten percent of sediment entering streams can be attributed to trail erosion. The incremental contributions of these alternatives may have some beneficial or adverse affects on habitat and individuals; however, activities on private land surrounding the Forest will continue to exert the greatest effect on stream habitat within the project area.” In addition, the DEIS describes the current condition of the aquatic resource on pages 79-80, these streams are rated in “full support” of aquatic resources according to the IL EPA.

As noted above, we are concerned that water quality and aquatic habitat resources be maintained given the increased levels of recreational use. Thus, based on the best scientific information, we developed mitigation to protect lamprey at the point in its life-cycle where it faces risk from recreational use on the Forest.

4. There is no scientific proof that crossing the streams is causing any damage to the lamprey spawning. Much of the information gathered is not current and not site specific.

Includes: 743-337-25, 928-541-04, 1184-672-02, 1293-693-04, 1452-724-04, 1774-711-16, 1823-542-10.

RESPONSE: The DEIS (pages 83 and 84) provides a summary of scientific investigations concerning least brook lamprey, including surveys conducted by the Shawnee National Forest in 2005. During March and April of 2005, surveys were conducted to determine locations of spawning lamprey populations. These surveys included all proposed stream crossings within the project area where the least brook lamprey is known to occur (i.e., Bay Creek, Big Grand Pierre Creek, and Lusk Creek). Thus, the information should be considered current and is very site specific. The 2005 surveys found that spawning was occurring at some crossings or in the near vicinity (within 15 feet) of these crossings.

The crossing of a spawning riffle by a hiker or equestrian will interrupt spawning activity and offers the real potential for damaging spawning “pits” (constructed for egg deposition) or crushing eggs that have been deposited in these pits (DEIS pages 90 and 91). In addition, movement across the stream is likely to stir up sediment, which would impact survival of any incubating eggs that might be present. Numerous studies have shown that sedimentation does impact survival of other fish species. While we are not aware of any scientific studies specific to sedimentation effects on lamprey egg viability, the effects will likely be similar regardless of species. As noted above, the risk to lamprey is exacerbated by the limited distribution in Illinois. The Biological Evaluation (BE) for Aquatic Species provides more detail on past surveys and a discussion of potential effects to least brook lamprey. The BE is part of the project record and is available to the public. The lamprey information contained in the record is the best available scientific information on the species.

5. The DEIS claims that most of the streams in the analysis area are rated "full support" and that this proposal won't change anything in that regard. However, has the FS cooperated with and got the proper approval from the right state agencies for corroborating these findings?

Includes: 970-545-17.

RESPONSE: Illinois Environmental Protection Agency (IEPA) Water Quality Ratings (2004) were used for the analysis. These ratings are listed in Tables 21 and 22 (page 50) of the DEIS within the Soil and Water analysis. Consultation took place with the IEPA during this project.

6. Why doesn't the DEIS consider construction of bridges at the designated crossings?

Includes: 651-482-01, 889-535-07, 915-538-14, 1022-486-08, 1032-486-18, 1039-486-25, 1184-672-02.

RESPONSE: The construction of bridges at trail crossings was considered as an alternative, but was not included in the proposed action. Most stream crossings are located where the substrate is comprised of hard materials (i.e., bedrock or gravel/cobble). Approaches to the stream crossings will be constructed as needed to reduce impacts (i.e., erosion and sedimentation) from trail use. Under the minimum requirements concept of wilderness management, the agency strives to ensure the lowest level of disturbance is adopted. Forging of the stream over hard substrates is a viable crossing method, offers more of a challenge to the wilderness user, and is consistent with the minimum requirements concept. Bridge construction and maintenance would result in environmental effects of a greater magnitude than providing managed stream crossings, and would make the action alternatives very costly, if not prohibitively expensive.

7. There is no analysis of how low the population of lampreys can get, how fragmentation of habitat due to the creek crossings will affect the genetic stability of the population, or to what degree the increased sediment and pollutant load into the high quality waters, over the long term, will affect the population.

Includes: 1806-545-13.

RESPONSE: The concern about genetic viability of lamprey populations is valid, but not applicable to effects expected from this project. In order for genetic flow to occur, populations must be spatially interconnected. As part of our analysis, we surveyed streams within the project area to document present day locations and compared these to historic locations, see discussion on pages 83 and 84 of the DEIS. Based upon all available information, this species is now known to occur at numerous locations within the Lusk, Bay and Big Grand Pierre drainages. These populations (or sub-populations) are well connected, with the exception of populations above the Bay Creek Number 5 impoundment. As described in the DEIS (page 85), impoundments isolate previously continuous populations and restrict gene flow. Conversely, stream crossings do not prevent movement of individuals between populations and do not restrict gene flow. This project could affect genetic viability if there were direct or indirect effects that resulted in a substantial decrease in the number of individuals within populations. Because relative abundance data (i.e., an estimate of the number of individuals present) is currently not available, the analysis of sedimentation

effects in the DEIS (pages 91-93) was based upon the viability of known populations. A more detailed description of this analysis, including definitions for a significant effect and threshold for significance can be found in the Biological Evaluation for aquatic species. While the analysis found that there will be some effects upon individuals, there will be no direct, indirect, or cumulative effects upon the genetic viability of the lamprey as a result of implementation of the Selected Alternative. Recent confirmation of the 15 historic locations, combined with discovery of new locations (totaling 31), suggests that the population is stable and distribution is more widespread than previously thought.

8. We are concerned about the use of unverified field data computer models about the impacts of the proposal on the management indicator species, the rainbow darter. There seems to be no baseline field data at all about how many rainbow darters per area of creek should be expected in the various watersheds. How can the Shawnee assess the impact of the project on MIS, which is required in the 1982 regulations, if it doesn't have any baseline data to compare to? A valid NEPA document is to rely on accurate, up to date scientific data. The MIS analysis, as well as most of the scientific analyzes in the DEIS, is not referenced or backed by any referenced scientific documents. There are no figures provided as to where rainbow darters were actually found and what the population figures are. How can an impact analysis be accurate in the absence of such data?
Includes: 1805-545-12.

RESPONSE: Baseline data for the MIS can be found in the *Fishes of the Shawnee* (Dr. Brooks Burr, Southern Illinois University 1979), which listed all known locations on the Forest at that time. *Using Fishes of the Shawnee* information as the baseline, we compared these historic locations within the project area to present day locations. In 1979 there were eight locations for the rainbow darter. Surveys conducted by the Forest from 2001-2005 found that rainbow darter were still present at or in the near vicinity of locations documented in 1979. In addition, these surveys identified four other locations where the rainbow darter occurs in the project area. The effects disclosure in the EIS (Chapter 3, under Aquatic Resources) is based upon the best available information. The inventory and survey information is collected by trained personnel under the supervision of a professional fisheries biologist. There is no evidence to support the supposition in the comment that the information is flawed or inadequate. To the contrary, we have expended considerable funds over the past 5 years to ensure that we have high quality fisheries information based upon comprehensive resource monitoring, including collection of fish population and habitat information. The comment does not provide

any evidence that collection of additional information by another method would have resulted in a different decision.

Thus, we can make a determination based upon population viability. Given that populations in different streams continue to persist, there does not appear to be any concern with population viability. An assessment of impacts for this project was completed with the knowledge of 1) locations of darter populations within the project area and 2) the factors likely to impact darter habitat, individuals, and populations. More detailed information for all species can be found in the Biological Evaluation for Regional Forester Sensitive, Management Indicator, and Illinois State Threatened and Endangered Aquatic Species.

In response to the portion of the comment regarding up to date scientific data, the References Chapter has been added to the FEIS. The Reference Chapter was inadvertently left out of the DEIS. A complete list of citations for scientific publications can be found in the Biological Evaluation.

9. Limit the number of stream crossings of the four creeks in the project area, and support the closing of stream crossings during the spawning period for the least brook lamprey.

Includes: 1022-486-08, 1423-721-01, 1611-705-44, 1652-714-21, 1749-706-09.

RESPONSE: There are differences in the number of stream crossings between alternatives (DEIS page 70). In Alternative 2, there are 220 intermittent and perennial stream crossings. These crossings affect a minimal amount of habitat within the four drainages (1.1 acres; DEIS page 80), while providing for a well-maintained and well-marked trail system for recreational use. The DEIS discusses potential effects to all Forest Listed Species (pages 86-97). This analysis concluded that 2 of the 220 crossings had the potential to affect spawning populations of least brook lamprey, necessitating a seasonal closure on the two crossings. No adverse effects on other Forest Listed species were identified.

Under the No Action Alternative (Alternative 1 with 380 stream crossings; see Table 10), adverse effects to water quality and aquatic resources are expected without trail designation. The alternatives disclose the trade-offs associated with various numbers of stream crossing possibilities. Eliminating stream crossings is tantamount to eliminating equestrian use in these watersheds (an alternative considered by not analyzed in detail). The Selected Alternative has 220 crossings. The Forest took a hard look at the effects of these crossings and documented that analysis in the EIS. Thus, the Selected Alternative has a beneficial effect, compared with the No Action alternative.

Read also response 2 discussing seasonal closures.

10. The damage a dozen or so horses can do at a stream crossing, bank erosion is irretrievable and habitat and destruction not too far behind. The plan is not clear on how FS will construct or rehabilitate stream crossings. Includes: 123-006-11, 177-023-13, 1291-693-02.

RESPONSE: Trail maintenance to control stream crossing and bank erosion is discussed in the DEIS (page 23-24). Rock and gravel would be used as necessary to create steps and other structures to reduce erosion at stream crossings. The well-designed and well-maintained trail system set forth in the Selected Alternative will result in reduced erosion and minimize the effects of sedimentation on aquatic resources compared to the current situation, *i.e.* No Action Alternative. Proper design, trail construction, monitoring and maintenance will alleviate the concern in this comment - damage at stream crossings. Thus, compared with the No Action alternative, the Selected Alternative will benefit the environment. Specific information concerning stream crossing design is available to the public and in the record.

Read also response 6 concerning the use of bridges.

11. In Alternative 2, we [IDNR] are very concerned about the number of crossings in Lusk Creek and high use levels which occurred over the past several years. Again, a good monitoring plan is especially important to detect impacts and provide remedial measures to ensure proper management of LCNA. Includes: 1153-791-10.

RESPONSE: The aquatic resources monitoring plan is presented in Appendix B of the DEIS. This plan discusses specific monitoring for the least brook lamprey; the only State of Illinois listed species found in the Lusk Creek Natural Area. This monitoring plan will be supplemented by standardized Forest stream surveys. Standard Forest stream surveys include assessments of fish populations and stream habitat at specific sites in the LCNA. These sites are sampled on a 4-5 year rotation. In addition, data is collected within the Lusk Creek Drainage by the Illinois Environmental Protection Agency and the Illinois Department of Natural Resources. The monitoring plan, combined with additional standardized monitoring by State and Federal agencies, is adequate to detect any effects to habitat and fish populations within the Lusk Creek Natural Area.

12. I support the seasonal closures to equestrians of stream crossings where least brook lampreys were found spawning. I do not however, support

closing the crossings to foot traffic. I know of no evidence that shows foot traffic has or will have a detrimental effect on the species. Likewise, other areas closed to equestrian use like Saltpeter Cave and the prickly pear cactus site in Lusk Creek Wilderness should not be closed to foot traffic unless evidence shows that hikers are having a detrimental effect on the sensitive species.

Includes: 1717-792-15.

RESPONSE: The direct effects of hikers and equestrians crossing streams at known spawning locations are listed on pages 90-91 of the DEIS. While the impacts from hikers may be less severe than impacts from equestrians, there is still potential for disruption of spawning activity, alteration of spawning habitat, and damage to spawning pits.

Common sense dictates that a person, as well as a horse, that steps into an occupied lamprey spawning pit will cause adverse effects to the individual spawning lampreys. The mitigation included in the Selected Alternative is designed to avoid adverse effects on the spawning lamprey from either source, people or horses. While some hikers may exercise great care and caution, others, less knowledgeable, may not be able to, and, despite good intentions, harm sensitive aquatic species. It is unclear what evidence the responder would require to prove that hikers have potential to harm resources, as do equestrians. Based on monitoring, mitigation is warranted for both uses in order to provide for protection of resources.

The short-term seasonal closures during the spawning period are necessary to mitigate for these effects. Relatively few crossings are affected by this closure (2 of 220 in Alternative 2) and alternate crossings are only a short distance away.

Botanical Resources and Natural Areas

13. Designate and protect those fragile areas of the Shawnee National Forest (Forest) and limit access to foot traffic only. Trails should be rerouted around natural areas (NA). Due to the past failures of the agency to effectively restrict equestrian use, I presently do not support designating any additional trails in NAs. This includes additional stream crossings. There is good reason to believe from past evidence that stock animals will not remain on the designated trail. That could spell disaster for the sensitive flora and fauna found in natural areas. Hitching posts or high lines might be placed adjacent to hiker trail heads leading to some of the better known Illinois Natural Area Inventory (INAI) sites. No new designated trails should be placed in NAs that have been identified by the INAI. One respondent stated a preference for a feature of Alternative 4, namely that there be no new trails in Natural Areas and that existing Natural Area trails in Garden of the Gods be abandoned. Another said that they thought that trails should be routed around the natural areas in Garden of the Gods rather than through them. Includes: 172-023-08, 202-094-02, 226-099-06, 605-436-01, 1247-685-08, 1482-733-05, 1602-705-35, 1629-705-62, 1637-714-06, 1647-714-16, 1711-792-09.

RESPONSE: The 1992 Forest Plan directs certain management for natural areas including the prohibition of activities that could be detrimental to an area. Natural areas are managed and protected under the natural area management prescription, which is designed to preserve, protect or enhance the unique scientific, educational or natural values found within natural areas. The DEIS adequately addresses equestrian use in natural areas in all alternatives, as well as in an alternative that was considered but eliminated from detailed study (DEIS page 39; Eliminate Equestrian Use in the Project Area). In Alternative 1, equestrian use in natural areas will continue to be prohibited (DEIS pages 25-26); though riding will continue to be permitted on an existing system trail in the Garden of the Gods Ecological Area. Alternative 4 does not designate any new trails in natural areas, and it removes the approximate 2 miles of trail in the Garden of the Gods Ecological Area (DEIS pages 34-35). Additionally, mitigation measures incorporated into all action alternatives will be used to reduce or eliminate potential effects on rare plant resources including Alternatives 2 and 3 (DEIS p.99).

14. DEIS states there are 36 rare species in the four watersheds - with 27 of them unprotected in NAs and Research Natural Areas (RNAs) – these would be adversely affected by the cross-country riding allowed in Alternatives 1 and 3. This is another reason we oppose Alternatives 1 and 3. We support the re-routing of trails to avoid TES species in Alternative 4. We

can only hope that these two globally threatened, rare species (*Cimicifuga rubifolia* [Appalachian bugbane, aka black cohosh] and the *Dodecatheon frenchii* [French's shooting star]) will recover in this area (Lusk Creek Wilderness), and that the soil laid bare by horse's hooves has not just allowed more non-native invasive species (NNIS) to spread to that area. This newly closed area should be monitored in order to keep track of the possible recovery of these two species. Does the FS have recovery monitoring plans for these two species? Support the proposal by the FS to restrict horse riding to designated trails in the four watersheds in the project. Cross country horse riding causes too many user-trails in the forest and also threatens rare species and native plant communities. We are concerned that the rare plants be protected. We are concerned that there are trails proposed in Jackson Hollow. The trail proposed in Alternative 2 that parallels the railroad track is in the floodplain and is too close to an area of *C. rubifolia*. Includes: 81-081-01, 1316-706-01, 1608-705-41, 1626-705-59, 1609-705-42.

RESPONSE: *Cimicifuga rubifolia* and *Dodecatheon frenchii* are Regional Forester's Sensitive Species (RFSS). The forest will avoid any actions that may impact these species and result in a trend to federal listing or a loss of viability. The DEIS has an adequate range of alternatives addressing the management of rare plants with Alternatives 2 and 4 avoiding adverse effects (DEIS pages 25-38, 97-107). In addition, mitigation measures will be used to reduce or eliminate potential effects on rare plant resources (DEIS pages 38 and 99). The monitoring plan addresses botanical resources as well (Appendix B-5). The Forest Service has conservation assessments for these species and others that are available through the R9 Website at <http://www.fs.fed.us/r9/wildlife/tes>. The Jackson Hollow Ecological Area trail segment proposed in Alt 2 is not close to the *Cimicifuga rubifolia* populations nor is it near any other known rare plant resource that may be impacted by its use. The trail segment running east-west (through the middle) in Jackson Hollow, which is proposed in Alternative 3, has also been surveyed for rare plant and animal resources.

15. Horses should be excluded in the future from NA's even if it's presently allowed. I do not concur with providing a three mile trail in Jackson Hollow unless it is for hikers only. This is a pristine NA and I have seen first-hand the damage that has occurred within this area. I want NA's to have the strictest possible protections from equestrian use. In Alt 2, we are very concerned about the number of crossings in Lusk Creek and high use levels which occurred over the past several years. It is imperative to prevent cross country use, by hikers and equestrians; as such use will degrade the plant and animal communities by the introduction of exotic species and increased erosion. Make sure that the special qualities of Illinois NAs are not compromised. The first priority must be the protection of areas identified in the INAI then other wilderness areas. The monitoring plan in the DEIS is

inadequate for protecting NAs. At a minimum, the FS should adopt the monitoring plan submitted by Illinois Department of Natural Resources (IDNR). We have attached a copy. The proposed creek crossing near the Saltpeter Cave confinement area in the Preferred Alternative would result in equestrians not just crossing Lusk Creek Zoological Area but, due to the topography, of the area, the boundary of Lusk Creek North Ecological Area. The public needs guidelines to prevent both negligent and ignorant abuse of NAs. We do not support trails in any NAs. The designated NAs in Forest are part of .07 of 1% (that is 7 acres out of every 10,000 acres) of the state of Illinois that is close to being in its original natural state. Thus, we support the proposed trails in Alt 4 for the NAs. We note that the proposed trail system while staying out of NA's does follow the boundary. Our concern here is in some areas placement of trail along the boundary might encourage encroachment into the NA. We suggest that during the construction phase that these factors are taken into consideration.

Includes: 68-068-01, 520-262-02, 639-470-01, 854-481-02, 1023-486-09, 1228-681-05, 1265-688-02, 1266-688-03, 1419-718-03, 1603-705-36, 1688-791-08, 1607-705-40, 1684-791-06, 1732-792-30.

RESPONSE: The DEIS included four watersheds and the 26 natural areas within them. The alternatives and their impacts are discussed in chapter 3, pages 150-156. The Monitoring Plan found in Appendix B (pages B1-B10) covers the majority of suggestions in IDNR's proposed monitoring plan. In all but one case, the IDNR's plan suggests closing trails when trail damage is evident and certain corrective actions are not successful. In some cases the Forest Service believes that a trail must be re-routed when corrective actions to the original trail are not successful; closure of the entire trail should not be done if there are infrequent segments that require attention. Through the monitoring and management of the natural areas, detrimental uses will be identified and corrected. Please also read the response to comment number 13 above.

16. Need a trail through Hayes Canyon and Jackson Hole near or within good view of rocks and bluffs. Open the trail through the "squeeze".
Includes: 186-036-02, 789-341-15, 1000-602-01, 1188-672-06.

RESPONSE: Natural areas are managed and protected under the NA management prescription, which is designed to preserve, protect or enhance the unique scientific, educational or natural values found within NAs. The DEIS adequately addresses equestrian use in NAs in all alternatives, as well as in an alternative that was considered but eliminated from detailed study (DEIS page 39; Eliminate Equestrian Use in the Project Area). Please also read the response to comment number 13 above.

17. As long as maintaining signs marking the NAs within Wilderness Areas is the minimum tool, we support the marking so that recreationists will know that they cannot camp or build fires or engage in any activities that are incompatible with the management prescription for the designated NAs. The number of signs should be reduced, but there must be enough so the NAs are clearly marked. Natural appearing signs, rather than the yellow Carsonite posts, would be more in keeping with the wilderness experience. Any person on foot is welcome to visit the NA's and the signs should reflect this. Need signs for backpackers or horse riders to keep the horses out of the cave, no fires or camping at the site. These people ruin it for the rest of us and they need to carry out their trash, *etc.*
Includes: 1301-695-06, 1508-749-04, 1605-705-38.

RESPONSE: The signs marking the NAs within Wilderness Areas are required by a 1999 Court Order to mark boundaries conspicuously. Natural area boundaries were marked consistently with similar signage throughout the Forest. As for the signs and preference of stickers depicting what is or is not allowed within NAs, the Forest selected signage that is nationally recognized and most appropriate for the Code of Federal Regulations that is being enforced.

18. The DEIS states that horse riders can ride on any of the public forest roads in the project area, and that there are no public roads in the Wilderness Areas. What about any public roads in NAs, RNAs, and National Natural Landmarks (NNL)? If there are any public Forest Roads in these areas, they should be closed, with the exception of the road leading to the parking lot in Bell Smith Springs NNL. Also, the definition of a public forest road is not clear. Does this include all Level 1 - 5 Forest roads?
Includes: 1606-705-39.

RESPONSE: There are no open public roads in NAs (which include RNAs). All roads are excluded from within the NA boundaries, including Bell Smith Springs. The NA boundary and the NNL boundary are the same in the case of Bell Smith Springs. Definitions related to forest transportation system are found in FSM 7710 as well as the descriptions of Road Maintenance Levels. Within the Manual there is no term 'public forest road' rather public road (Any road under the jurisdiction of and maintained by a public authority and open to public travel) or forest road or trail which would include all maintenance level roads 1-5 (As defined in 36 C.F.R., Part 212; a road or trail wholly or partly within or adjacent to and serving the National Forest System that the Forest Service determines is necessary for the protection, administration, and utilization of National Forest System and the use and development of its resources).

19. All of those miles of trails closed due to some plant could be reopened for recreational use. Develop and maintain good trails in NA's. Horseback riders should have the right to have designated trails in NAs. I am in favor of the construction of six additional crossings of Lusk Creek, two new trails in Jackson Hollow Ecological Area and the trail along the top of the bluff in Double Branch Hole Ecological Area. I would like the promised trails in the NA's designated and I would like to see the Cave Hill (RNA) trail that is on your maps and has been a trail for over 100 years designated. If there are no hiking trails in the NA's how will anyone ever be able to see the beauty of the species and natural features? It would be unfair to allow only a chosen few from IDNR or FS to be in these areas if the public can't. The existing trail is at the bottom of the hill of the Gyp Williams Ecological Area. There was not a Bear Track NA. The trail is actually in Bear Track at the edge of Gyp Williams NA. The existing trail was not in the NA until a new map came out showing an enlarged NA. To decrease the numbers in Lusk Creek Wilderness, it would work very well to open trails in the NA's which was stated in previous plans.

Includes: 459-332-01, 536-324-05, 710-541-01, 882-516-04, 892-535-10, 984-598-01, 1144-665-14, 1287-691-09, 1334-707-12, 1366-709-08, 1435-721-04.

RESPONSE: The DEIS included four watersheds and the 26 natural areas within them. The alternatives and their impacts are discussed in chapter 3, pages 150-156. Trails in NAs were never promised to anyone although trails were proposed within a corridor in the 1992 Forest Plan. Those trails required an environmental analysis prior to designation as part of the Forest's trail system. This DEIS analyzes trails within four watersheds. The Cave Hill RNA was established by the Chief of the Forest Service on September 26, 1990. The establishment record (USDA, 1987) specifically states on page 21 "Recreation will be discouraged. Existing trails will be closed. Regulations which prohibit use of the area will be enforced." Hiking trails do not generally add to the protection of many NAs and therefore, are not proposed for the most part. Hiking cross country is allowed and will be monitored within NAs for excessive use to particular sites, NNIS introductions, and impacts to various plant and animal community types. This monitoring has been and will continue to be part of the normal visitations to NAs. Results from this monitoring are presented in the Forest Monitoring Report produced annually. Bear Track Hollow is part of the Gyp Williams Hollow Ecological Area. Since the hollows and ridges are immediately adjacent to each other, one name is sufficient for the NA. In order to decrease miles of trails in wilderness does not mean that increasing the number of trails in protected NAs is the rational or appropriate solution. Please also read the response to comment number 13 above.

20. Our concern here is the movement of non-native species along trails is well documented and could be of real concern if trails are located on boundaries. We suggest that during the construction phase that these factors be taken into consideration. Horses and other domesticated animals introduce weed seed from their feces. These trails are in deplorable shape and exotic garlic mustard now lines the trail between Saltpeter and Natural Bridge. We are also concerned that any trails near populations of rare plants will allow more NNIS to be spread by the manure and hooves of stock animals. NNIS are a real threat to native species. Garlic mustard is a real threat to native plant species across the Forest. What plans does the FS have to deal effectively with NNIS along trails, streams and other areas? The trail through the middle of Jackson Hollow (Alternative 3) is unacceptable. The risks of off-trail riding and its ensuing damage, as well as the increased threat of NNIS introduction is too great. We do not support locating trails upslope from NA boundaries. Since horses readily spread NNIS through their waste and on their hooves, any time rainfall runs off the trails, it could easily end up in the adjacent NA. If any trail is located adjacent to a NA, the FS should make sure that the trail is engineered to drain away from the NA and require monitoring to ensure there is not a problem.
Includes: 567-398-01, 809-389-02, 1604-705-37 (formerly Sub-code D), 1610-705-43, 1626-705-59 (formerly Sub-code A), 1684-791-06 (formerly Sub-code D), 1731-792-29.

RESPONSE: We agree that NNIS are a real threat to native species and recognize that hikers, equestrians, ATV's, and other motorized vehicles can contribute to the spread of NNIS. We recognize that NNIS already exist on most of the non-system and system trails on the Forest and may also be carried by other animals, wind, and water currents. As part of Forest Plan Revision, additional monitoring and detection procedures along with response measures will be developed during Plan Implementation. In response to the threat from NNIS in this project, the Forest will incorporate NNIS management into the trail maintenance program (DEIS p. 10). All alternatives will include an educational program focusing on reducing the spread of NNIS (DEIS p. 21). Mitigation common to all action alternatives concerning NNIS can be found on page 38. An herbicide treatment for kudzu is a reasonably foreseeable future action (DEIS p. 52). The Forest is currently implementing the eradication/control of Garlic Mustard Forest-wide through hand-pulling and propane torching. The Saltpeter Cave to Natural Bridge trail is included within this program of work. In addition, implementation of weed prevention practices (Guide to Noxious Weed Prevention Practices – <http://www.invasivespecies.gov/toolkit/prevention.shtml>) addresses NNIS (DEIS p. 99). Appendix B of the DEIS, pages 6-7 presents a monitoring and implementation schedule for all action alternatives.

Commercial Use

21. Commercial tourists would destroy southern IL the quickest. Of course it would be ATV's and other off the road equipment but careless horse owners could at certain periods of time do almost as much damage and almost as quickly as off road vehicles. Equestrian use of Forest has developed as a commercial enterprise. The Forest should be protected from commercialism.

Includes: 92-92-1, 143-18-4

RESPONSE: We disagree; the United States Congress has passed numerous laws and regulations directing that commercial uses of the National Forest be considered, analyzed, and if appropriate permitted. Commercial outfitting and guiding on the Shawnee National Forest is governed by these laws and regulations (*e.g.* 36 CFR part 251, subpart B) as well as the policies found in the Forest Service Manual and Handbook (*see, e.g.* FSM 2320, 2700 and FSH 2709.11). In regard to the impacts from visitor use read responses under specific resources and analysis found throughout Chapter 3 of the DEIS. A number of comments similar to this are discussed in numbers 37, 72 and 80.

22. The Forest Service must follow its own regulations and court orders to cite and stop unauthorized commercial use of the forest Equestrian campground customers must not be allowed to use the forest unless the campgrounds have valid special use permits and abide by all restrictions contained in the permits. Charge fees to campground owners based on rides or law.

Includes: 164-22-4, 208-94-8, 1049-486-35, 1718-792-16

RESPONSE: Permits are required for commercial uses of the National Forest, including outfitting and guiding (*see* 36 CFR 251.50 (a), 251.51; *see also* Forest Service Handbook 2709.11, 41.53d). Commercial outfitting and guiding on the Shawnee National Forest is governed by the applicable requirements of 36 CFR 251, subpart B, as well as Forest Service policy set forth in FSM 2370, 2700 and FSH 2709.11 and the applicable provisions of the 1992 Forest Plan. Permitting on the Shawnee National Forest is also guided by the February 2000 Court Order in Glisson v. Forest Service, as well as the April 2004 Forest-specific (Shawnee Supplement) FSH supplement developed to implement that order [see also the transcript to hearing on Motion for Sanctions, November 18, 2004 (pages 47, 82) where the Court noted that “the fact that these campgrounds are not on the Shawnee National Forest, but yet they invite people in to ride on the Shawnee National Forest . . . is a distinction without a difference as far as my interpretation.” Based upon the Judge’s analysis of the situation on the Shawnee National Forest, he concluded that “there are going to be special use permits period”].

Compliance with the terms and conditions of the permits is mandated and fees are based on a percentage of gross receipts associated with the use of National Forest land. Currently permit management on the Forest is under court order as described on pages 5 and 6 of the FEIS.

23. Overuse of the areas by commercial horse camps for their own profit, areas that belong to all, Wilderness Areas, is to blame. They profit, our loss. Includes 418-291-1

RESPONSE: Although, some areas of certain wilderness exhibits signs of equestrian use, the proposed trail system will limit impacts and provide for protection. As documented in the FEIS (pages 167-196) the Selected Alternative will have beneficial effects on Wilderness, especially the Lusk Creek Wilderness, relative to the current situation (No Action Alternative). The reduction in miles of trails, relocation and redesign of trails and prohibition of cross-country riding have positive environmental effects with regard to soils, water, wildlife, plants and other resources. The Forest has taken a hard look at the effects of equestrian use in wilderness and disclosed the trade-offs associated with various levels of use. Elimination of equestrian use in wilderness was also explored as an option (FEIS page 43). Mitigation of effects was a key concern in project development (see mitigation at page 41). Monitoring of equestrian and other uses in wilderness, especially Lusk Creek, has been ongoing and will continue under this decision, guided by the input from the Illinois Department of Natural Resources, Illinois Nature Preserves Commission, and other interested parties.

24. Partnership is a two way street. Start implementing your words of partnership with commercial businesses in the region. Private group has hold of it for private ventures - its National. Includes: 446-319-01, 1309-698-3

RESPONSE: We assume this response is referring to the 1992 Forest Plan, several decisions and obligations that were specified in that plan, but not implemented because of court orders, budget limitations, and other factors, beyond agency control. See response to comment 62 describing the role of partnerships and “friends of the Forest” groups. The Forest values the contributions of volunteers and seeks to utilize volunteers in an effective and efficient manner. Projections and goals stated in the 1992 plan are just that, statements of intent, and not binding commitments. The comment appears to have misunderstood the nature of the programmatic 1992 plan.

25. Specific user fees for specific user amenities, such as hardened trails, have a strange way of becoming incentives to further commercial interests over resource protection.
Includes 1300-695-5

RESPONSE: The FEIS (pages 200-221) discusses the potential effects on levels of recreation use as a result of the actions proposed in the various alternatives. Our trail hardening and design plans were developed to protect resource as discussed throughout the FEIS, the issuance of future commercial use permits is discussed on page 6 of that document. Continued monitoring will ensure resource protection, especially in special areas such as wilderness and Natural Areas. The mitigation adopted by this decision to protect resources is based on the best scientific information available, as well as consultation with other resource managers. We anticipate an increase in use level under the Selected Alternative, and have designed trails to accommodate this use. The Selected Alternative will have beneficial effects on the environment by beginning the process of regulating recreation that has to this point seen little management.

26. Maps of the new trail system should be displayed and available on all commercial horse camps and trailheads.
Includes 773-340-4

RESPONSE: The Operation and Maintenance Plan for the Outfitter and Guide Permits issued on the Hidden Springs District require permittees to address various public health and safety concerns including the identification of the trail system. A discussion of maps and trail signing is found under response 64.

27. We support the requirement of Outfitter-Guide Permits for where commercial use of the Forest is allowed. These permits should include a fee or a percentage of profits that would be used on the Forest for trail maintenance (not go to any general fund).
Includes: 164-22-4, 175-23-11, 775-340-16, 1215-676-10, 1224-680-5, 1260-686-9, 1269-684-4, 1483-733-6, 1525-752-8, 1613-705-46,

RESPONSE: Regulation requires that Special Use fees associated with outfitter-guides permits, be deposited in the Federal Treasury. Regulations require the fee be charged for this type of use and based on the gross income rather than the other factors (FSH 2709.11). For response to law enforcement see response 42 and employees for trail maintenance refer to response 69.

28. Commercial campgrounds with O/G permits should not be required to obtain access permits.
Includes 907-538-6

RESPONSE: Access provisions are normally included as part of the O/G permits.

29. A provision for additional designated trails that may become necessary for future permitted campgrounds should be included in the trail designation. All campgrounds need more trails on the west side of Lusk Creek north of Blanchard Church.
Includes: 762-337-44, 1433-721-2

RESPONSE: This comment implies that additional new campgrounds area reasonably foreseeable. The FEIS addressed this issue at pages 87 and 88, along with pages 216-244. We do not attempt to direct or project specific changes in the use of privately owned land, but do conclude that when areas of stock confinement, such as campgrounds catering to equestrians, are developed, the amount of nutrients entering surface water could be increased. We acknowledge that “other camps in the area will likely seek outfitter-guide permits in the future on FEIS page 230. Informal consultation with campground owners, identified on FEIS page 231 revealed that many customers were attracted to camps that had numerous options for full and half-day rides. Table 50 shows the opportunity for trails near each permitted campground. Similar analysis could occur upon the receipt of application for new outfitter-guide permits.

The trails designated in the Selected Alternative provide a logical and comprehensive system for recreation access. Additional trails are not needed at this time, however new trails may be designated at any time, after appropriate site specific NEPA compliance and public involvement.

30. Both the use of horses and their confinement causes impacts I don't believe can be adequately mitigated. I urge you to prohibit commercial use of stock and eliminate or reduce the private use of stock.
Includes: 1485-734-2

RESPONSE: We disagree. The mitigation adopted in the decision was developed using the best available scientific information and in consultation with State and other resource experts. Resource surveys, monitoring data and over a decade of experience in managing the Forest under the 1992 plan helped shape the alternatives and the decision. We have visited areas with similar resources that already have horse trails similar to those being designated in the Selected Alternative. Our confidence in the efficacy of the

mitigation measures adopted here is founded in the scientific work that supports them, as well as practical, on the ground (local) experience we have developed in arresting adverse effects and restoring the environment. Monitoring of recreation use (including the efficacy of mitigation) will ensure that we adapt to changing circumstances, should that be necessary. All forms of recreation on the Forest have the potential to effect the environment. The comment expresses a global opinion regarding the mitigation proposed here, but provides not specific evidence regarding any particular inadequacy associated with the mitigation measures. Resource impacts can be limited or mitigated by hardening trails and confinement sites. See discussion under the wilderness and soil and watershed analysis found within Chapter 3 of the DEIS. An alternative to eliminate these uses was considered but eliminated from analysis as stated on pages 39 and 40 of the DEIS.

31. The Forest Service needs to demonstrate commercial use is “necessary.” We request that the FS send us a copy of the Commercial Services Needs Assessment for the project area. If such an assessment has not been done, we insist that it be done before any trails are designated within the Wilderness Areas inside the project area. Any use that exceeds the carrying capacity of the wilderness or that degrades the wilderness character is clearly not “necessary.” Likewise, any use that could occur without commercial use is not allowed, as it would not be necessary.
Includes: 1586-705-19

RESPONSE: The preparation of commercial service needs assessments suggested by agency guidance (FSM 2341.21) usually occurs when the agency identifies new sites or areas for the development of commercial recreational activities (i.e. ski areas, boating sites, etc) in the Forest Land and Resource Management Plan. The purpose of this assessment is to (1) determine the desirability and suitability for the intended purpose, (2) determine the nature and extent of needed development and services, (3) determine the social, economic and environmental effects of use, (4) determine the required mitigation measures, (5) identify prospective applicants, (6), determine the likelihood of a sufficient return on investment, if the development is to be commercially operated and (7) determine other such qualifying factors. The Forest already has information regarding (1) the desirability and suitability of trail use, (2) the nature and extent of developments and services needed by trail users, (3) the social, economic and environmental effects of trail use, (4) mitigation measures associated with trail use, (5) prospective applicants for equestrian outfitters and guides, and (6) other qualifying factors. Considering that much of the commercial development will occur on privately owned land, a sufficient return on investment is not applicable to this analysis. The preparation of a commercial needs assessment would simply duplicate information already known to the decision maker. The comment does not explain how commercial service needs assessment would

change the decision or provide additional information that is useful to the decision maker. As the Supreme Court's noted in *Public Citizen v. Department of Transportation*, NEPA focuses upon providing information that is useful to informing the decision maker. *See also* 40 CFR 1500.1(b), (c). There is no indication here that a needs assessment would provide useful information. A commercial services needs assessment for the project area is not necessary because commercial equestrian facilities were present on privately owned land prior to the preparation of the Forest Land and Resource Management Plan and the designation of Wilderness Areas. The Congressional Committee that analyzed the 1990 Wilderness Act encouraged the Forest Service to consult with horse users and groups in the development of regulations, policies and management plans. This EIS is a continuing part of that Congressional direction and special uses management. The demand for commercial services is evident in the widespread use of commercial camps adjacent to the Forest. Common sense dictates that there is a need for outfitting and guiding services, as evidenced by the role the campgrounds play in providing access to the Forest and support to recreation users. Few would dispute the evident needs for the services supplied by the campgrounds.

32. Respondents think there should be a limit on the number of Outfitter and Guides permitted by the Forest within the project area, one respondent thinks the current number should be the limit. Also respondents think that the number of horses leaving private campgrounds should be limited. Includes: 1614-705-47, 1719-792-17

RESPONSE: The equestrian outfitters/guide assessment (September 2003 incorporated by reference) provides information on the number of outfitter guides operating with the project area. No evidence is before the Forest from this comment or otherwise that suggests that the current number of equestrian campgrounds in the project area should be the maximum number of campgrounds. The Record of Decision will authorize commercial outfitting and guiding special use permits for existing campgrounds currently operating under the Court-order interim permit (10 permits). Additional permits may be issued after additional appropriate NEPA compliance, with public involvement. The issue of additional resource effects from additional campgrounds can be addressed in future analysis. The FEIS addressed the potential for additional equestrian campgrounds in the project area at FEIS page 230.

33. O/G permits should be issued only to cooperative, qualified individuals. Permits should be revocable when regulations are not followed. A commitment should be added to the DEIS that allows the Forest Service to

suspend permits the following year to permit holders who blaze new trails or go on non-system trails.

Includes: 471-344-1, 1027-486-13b

RESPONSE: Issuance of special use permits is guided by 36 CFR 251 Subpart B. As noted previously, issuance of permits to equestrian campgrounds on the Shawnee National Forest stems from the February 2000 Court Order and subsequent developments (see response to comment 22). Forest Service regulations and policy set forth clear provisions governing inclusion of terms and conditions for use of the Forest and process for terminating, revocation, or suspension of permits (see, e.g. 36 CFR 251.56, 251.60). These provisions are reflected in the text of permit documents signed and agreed to by each permittee. It is unclear from the comment how any additional provisions would affect the choice between alternatives or decision being made at this time, (i.e. additional provisions re. suspension or termination) would not add useful information to inform the decision maker). Permit administration is already comprehensively covered by agency regulations and policies. Blazing trails and using non-systems trails would be a violation of permit terms and conditions. Suspension and or revocation are clearly permit administration activities.

34. Closing the wilderness in effect shuts down the campgrounds in that area for 1/3 of the year. That will make a severe impact on the economy in Pope Co and will jeopardize the camps. I still have many costs and payments involved in keeping my camp going through the winter and you will be effectively taking away my ability to get income if customers can only ride for a day.

Includes: 1762-711-4

RESPONSE: These closures should have minimal impact upon commercial campgrounds since most currently close from November to March. There are many riding opportunities outside of the wilderness during the proposed winter period. The Forest considered an alternative without any seasonal restrictions on wilderness use (FEIS, page 34). Other areas of the Forest are available year around. The economic effects of the closure were examined in the FEIS (page 259). Based on scientific information as well as local expertise regarding wilderness use, we have balanced the need for access and the recreational use of the Forest with the needs of other resources. We selected an alternative that is sensitive to the needs of the public for recreation access, but also allows for a lengthy period (when equestrian use is very low) to rest the land, vegetation and waters. This management approach will allow for sustainable use of the wilderness areas on the Forest.

Economics

35. The Forest could do a better job of maintaining equestrian trails if they charged fees, utilized more volunteer help, and made more use of State and other alternative funding sources. There are concerns that the Forest will not be able to find funding to maintain the entire trail infrastructure described in the proposed action. There are concerns that costs of maintaining hiker-only and equestrian-only trails are too expensive.

Includes: 108-1-7, 149-19-7, 163-22-3, 220-98-6, 530-315-03, 704-535-1, 806-376-6, 1263-687-3, 1456-724-8, 1545-772-01, 1565-792-1

RESPONSE: Comments related to maintaining trails by charging fees and the use of volunteer time are true for all alternatives. Analyses in the EIS are done to estimate the differences between alternatives and to reveal possible environmental effects of a proposed action. If something is equally the same for all alternatives, then there is no difference in impacts between alternatives. Utilizing more fees, volunteer help, and seeking alternative funding sources can be done for any of the alternatives. The Forest will endeavor to maintain equestrian trails in the most cost-effective way possible. Construction timeframes have been extended to account for possibility of less money. Based on current budget information, the Forest believes the work can be accomplished as scheduled. A detailed response in regard to the use of volunteers is in response 67.

While the proposed action will result in limiting trails available for equestrian use, only between one and two miles of additional hiker-only trails are proposed. By minimizing the number of trails designated for a single exclusive use, such as hiking or equestrian, limited trail maintenance dollars can be spent where they will benefit the most users and do the best job of protecting the environment.

36. Designating trails would restrict access to the trail system by people living adjacent to the Forest. Loss of this access would result in lower property values. There are also concerns about the amount of time it would take the Forest to process requests and allow the trails to be created.

Includes: 133-15-3, 138-17-5, 829-472-2, 865-485-03, 1284-691-6, 1332-707-10, 1363-709-5, 1675-779-2, 1816-542-3.

RESPONSE: The preferred alternative recognizes that special use permits could be issued for land owners to develop their own access trails to the designated trail system. While each access-trail permit would require site-specific considerations of potential resource impacts, there is clearly an opportunity for land owners to maintain access to the Forest. With adequate

access to the trails system, property values should not be impacted. Our analysis shows that from 80 to 90% of private landowners live within ½ mile of a trail designated trail access. It is possible to ride on public roads or apply for special use permits from their property.

37. Designating trails would result in fewer Forest visits for equestrian-based recreation. There is also concern that temporary and seasonal trail closures will result in a reduction in equestrian visitation to the area. This loss would, in turn, result in significant loss of tourist-based revenue in adjacent areas and cause some horse-camps to close due to lack of demand for their services.

Includes: 59-59-1, 138-17-4, 455-328-1, 519-256-2, 543-326-5, 646-477-1, 661-492-1, 669-500-1, 673-504-1, 681-512-1, 720-337-2, 839-478-4, 996-599-4, 1169-669-13, 1560-787-1, 1663-713-7.

RESPONSE: Due to concerns in the equestrian community, documented in the FEIS, and difficulties associated with trail conditions, the EIS discloses that the Forest projects a decline in equestrian use of the Forest and an associated decline economic benefits under the No Action Alternative. Although the comment implies otherwise, failure to designate trails and develop a mapped trail system has detrimental economic consequences. Over time, the Forest projects that the selected alternative, with its trail designations and other measures to ensure sustainable recreation use, will arrest the decline in economic benefits that is likely to otherwise occur.

Recreation visitation to the Forest is projected to increase for both equestrian and non-equestrian categories through 2015 for the selected alternative. While a conflict between hiker use of trails and equestrian use of trails is described in the DEIS, no sound science is available to predict a tradeoff between the two. In other words, we do not have a method to predict that if equestrian use increases 15% that hiking use would only increase 10%, or vice versa. Based on our best estimates of demand and trail capacity, we feel that tourism will continue to grow on the Forest.

Based on this analysis, equestrian tourist-based revenue is expected to increase through 2015. This analysis recognizes the highly important contribution of equestrian visitors to the local economy. A well-marked, well-maintained trail system, as proposed, will enhance the recreational opportunities and will result in increased tourism and the associated revenue.

38. Concerns are expressed that horse camps are inappropriate or illegal commercial use of public resources. Further, there is concern that the

government is subsidizing the commercial horse camps by not charging them appropriate fees for using the public forest lands.

Includes: 18-18-1, 1804-545-11.

RESPONSE: National Forests are managed for multiple-use and both hiking and equestrian riding have long been among those uses. In many places throughout the country, outfitters charge for their services in helping people enjoy the outdoors by providing guides, supplies, equipment, and rentals. See 36 CFR 251.50 for authorities and definitions for granting special use permits on National Forest lands. This commercial activity often includes rental of such things as horses, canoes, and bicycles. Services often include food, lodging, stall space, and other needs of the recreating public. The Forest provides a wide variety of recreational opportunities to the public, guided by the programmatic framework set forth in the 1992 Plan. Recreation management, like other uses of the Forest, strives to ensure that the use is sustainable and provided for in a multiple use context. The National Forest Management Act and the Multiple Use Sustained Yield Act provide local Forest managers discretion to determine appropriate use of particular areas of the National Forests. Based upon the analysis contained in the FEIS, the selected alternative will provide a managed approach to equestrian recreation in the project area, ensuring that such use is sustainable over the long term. If monitoring indicates changes circumstances or new information becomes available, the Forest can respond and adapt its management to again balance competing uses and protect the environment. More information related to the Special Use Permit program may be found in response to commercial use numbers 21, 22, and 27.

39. Economic impact estimates should include expenditures on tack, trailers, and other items labeled “capital” in the DEIS.

Includes: 156-19-14, 680-511-1, 807-376-7, 998-600-1, 1306-696-4, 1457-724-9.

RESPONSE: Recreational economic impact analysis throughout the country involves estimating amounts or inflow of new money spent inside an impact area by people traveling to that area. Money spent by people who already live within the impact area, even though associated with recreation on the National Forest is not normally counted. This does not mean that it is not important. That is why the Forest went further in characterizing both inflow of new money and spending by local residents in the EIS. Durable items such as tack, trailers, and other things which may be used over long periods of time and for trips to other areas represent a problem for this estimation. They impact the economy where they are purchased and can only be counted as economic impact for the part their useful life dedicated to use on the Forest.

It is not appropriate for us take credit for the purchase price of a horse trailer in Saline County if 50% of the use of the trailer will be for hauling horses to camps in Missouri and Kentucky. A survey would have to be undertaken to find out where all durable goods were being purchased, what part of their normal lifetime they were used on the Forest and what part they were used elsewhere. Of course, 100% of the purchase of that trailer is a positive economic impact in Saline County, associated with equestrians. It is just not appropriate for the Forest to claim the purchase as part of this environmental impact statement. While recognizing this spending is important, we have to ask the question that if such a study were undertaken, involving significant time and cost, would we be able to see a difference between alternatives to improve our decision? In this case where we clearly recognize the importance of this spending, where it would not be dramatically different from one alternative to the next, undertaking the costly and time consuming study would not benefit our decision. By dramatically different, we mean that we would have to find out whether or not equestrians would change decisions about purchasing durable equipment and change the amount of time spent on the Forest as compared to riding on other lands in Illinois, Missouri, and Kentucky, for each EIS alternative. The comment does not indicate how this information would have been useful to the decision maker in considering the environmental effects and trade-offs between alternatives. The purpose and need for the project focused upon providing a sustainable recreation opportunity. Economic effects from capital expenditures are a socio-economic concern only tangentially related, at best, to the nature of the decision being made. Adequate information concerning expenditures by equestrians was considered in reaching the decision. It is unclear, based on the information provided in the comment, how information on the socio-economic factor would have altered the choice between alternatives.

There were concerns about the dates of information used to develop the spending profiles used in impact analysis. A spending profile is a representation of how each dollar of a recreation visit is spent: a part for accommodations, a part for food, and so on. Proportions of spending do not change a great deal over time and new profiles need not be developed for each year. However, the total spending does change with inflation. That is why all spending was reported in year 2000 dollars for purposes of comparing alternatives. Inflating all dollars to 2005 is done by applying a single multiplier across the board to all dollars. In doing this, the relative difference between alternatives will remain the same. Spending profiles used in this EIS were developed by Eric White, Larry Leefers, and Daniel Stynes at Michigan State University. These are some of the leading recreation impact researchers in the country and they were using the latest survey information available. They further applied their experience and expertise to improve on National Visitor Use Monitoring information, making their estimates even more applicable to Southern Illinois equestrian spending.

Enforcement

40. A Law Enforcement plan should be part of this decision. Violators should be punished and stiff penalties should be set.

Includes: 27-27-1, 62-62-1, 110-1-9, 126-10-3, 165-22-3, 174-23-10, 203-94-3, 227-99-7, 398-271-1, 442-315-1, 428-301-1, 441-314-1, 569-400-1, 600-431-1, 613-444-01, 774-340-5, 800-344-2, 811-391-2, 820-399-2, 841-478-6, 848-479-8, 902-537-4, 1216-678-2, 1249-685-10, 1257-686-6, 1267-688-4, 1279-686-8, 1420-718-04, 1493-739-2, 1523-752-6, 1612-705-45, 1638-714-7, 1713-792-11, 1812-545-19.

RESPONSE: Law Enforcement within the trail system will be part of the larger Law Enforcement plan for the Forest. Law Enforcement issues such as enforcement of regulations and fines are not part of project level decisions. Law Enforcement is an administrative procedure, separate from the land management planning process, which follows existing statutes, regulations, and Forest Service Policy (FSM 5302, 5309.11 and others). Currently the Forest with working with the Office of General Counsel and the Department of Justice to revise the schedule of fines. It is the responsibility of the public to know the trail locations, rules, and regulations of any area which they visit on federal lands. This is especially true within Wilderness Areas as the management for this recreation experience includes minimal signing and controls on users.

41. A number of people commented the need for monitoring of trails both within and outside of the wilderness. In addition some respondents thought Appendix B, monitoring plan was comprehensive while others felt it lacking. Includes: 120-6-8, 371-244-1, 378-251-1, 379-252-1, 846-479-6, 849-479-9, 1050-486-36, 1182-671-8, 1533-760-1, 1573-705-6, 1592-705-25, 1621-705-54, 1638-714-7, 1645-714-14, 1681-791-3, 1712-792-10, 1810-545-17.

RESPONSE: The Monitoring plan is designed to inventory trail and signs of use to see how well mitigations measures and designed trails stand up to use (DEIS page 19). See Appendix B for specific information on the Monitoring Plan for the proposed trail system. Trail use has been monitored in the past, monitoring of specific improvements such as stream crossings was used in the design of this project.

42. A number of respondents complained about law enforcement techniques used in the past on the Shawnee National Forest. Includes: 36-36-1, 127-12-2, 1152-666-04.

RESPONSE: It is the responsibility of the public to know the trail locations, rules, and regulations of any area which they visit on federal lands. This is especially true within Wilderness Areas as the management for this recreation experience includes minimal signing and controls on users. Law enforcement policy and procedures are found within Forest Service Manual 5300 and Forest Service Handbook 5309.11.

43. Cross country riding gives the Forest Service and Law Enforcement more eyes and ears. Drug labs and poachers otherwise can set up shop without fear of detection.
Includes: 1132-665-2.

RESPONSE: Even though more users within the forest can be a deterrent to unauthorized activities, in this case the resource needs outweighs the benefit for cross-country equestrian travel within the four watersheds studied.

Heritage Resources/ Education

44. Direct and indirect effects section on Heritage Resources, as written, is flawed in that the impacts are based only on “current inventories” of archaeological sites. In essence, the Forest Service does not really know whether the proposed trails in any alternative, will impact “unrecorded” heritage resources, unless an archaeological survey was conducted already. If the analysis is only for the recorded and known heritage sites, it is unclear what the real “Direct” Impacts will be to heritage resources as a result of the implementing the proposed new trail network under any of the build alternatives identified in this DEIS. The DEIS is silent on the potential Direct impacts that the proposed trail networks, identified in any Alternative, will be.

Includes: 1045-486-31.

RESPONSE: The DEIS page 183 clearly states: “A heritage resource inventory was conducted on federal lands included in the project area to determine whether significant historic properties were present that could be adversely affected by the implementation of the proposed project.” The area of inventory was also defined as follows: “The area in which resources could be potentially affected was determined to be the clearing width of the trail of trailhead. This is the areas in which trail construction and maintenance activities could directly affect heritage resource sites.” In this instance “current inventories” refers to our present knowledge of heritage resource locations within the project area, including both previously recorded sites as well as the heritage resources recorded during the present inventory.

Between June 2003 and November 2004, the Trails Designation Project study area was inventoried for heritage resources. The inventory followed recommended Illinois Historic Preservation Agency standards. A total of 334 archaeological sites were recorded in the project area, including 94 prehistoric sites and 232 historic sites. In addition eight sites included both prehistoric and historic components. Of these sites 138 were previously recorded during heritage resource inventories for other projects. A total of 196 new sites were recorded during the inventory specifically conducted for the Trails Designation Project. Of the 334 sites included in the present inventory, 185 are considered to be eligible for inclusion on the National Register of Historic Places (NRHP). The remaining 149 sites are not considered to be eligible for inclusion on the NRHP.

45. Horse riders and all other uses must be educated to realize the true meaning and value of the wilderness designation. The FS should use signs, brochures and other means to help educate the public to the true meaning and significance of wilderness. Educational programs should be of the

highest priority and cooperation with organizations such as Back Country Horsemen, other equestrian groups and educational institutions could be helpful.

Includes: 909-538-8, 1751-706-11.

RESPONSE: We agree. On page 21 of the DEIS we wrote: “All alternatives would include an educational program designed to communicate standards for responsible equestrian use and standards of civility and etiquette among various users of the Forest. The program would also inform the public of the penalties for violating Forest Service rules and regulations. Trail maps will be a key element of this education program. Wilderness education programs explaining congressionally designated wildernesses and their benefits would also be implemented. In addition, an educational program focusing on reducing the spread of non-native invasive species would also be implemented.” In addition, on page 56-57, “Mitigation Common to Action Alternatives” includes posting heritage resource education and preservation signage, non-native invasive species prevention and control signage, a timber rattlesnake awareness program, and the development of wilderness values educational programs and brochures.

National Environmental Policy Act

46. The purpose and Need section of the DEIS fails to list the specific “Purpose” or “Needs” of the project. When you put the pieces of the EIS together, it appears that the purpose of the project is to allow commercial, industrial strength, relatively unlimited equestrian use both in wilderness and non-wilderness areas of the Shawnee. While equestrian use is a legitimate activity on national forest lands, it must not be allowed to degrade the resources involved. The protection of wilderness areas and natural areas should be included in the purpose and need for the project. Wilderness and resource protection (*e.g.* soil, water, recreation) were identified as “significant” issues for the proposed action (as per 40 CFR 1500.1(b), 1500.5(d), 1501.7(a)(3)) and given considerable attention through-out the development of the EIS.

Includes: 655-486-1, 714-545-1.

RESPONSE: We agree that further clarification in the purpose and need section would emphasize the protection needed for our unique management areas. We have added a reference to wilderness and natural areas to the purpose and need discussion found in Chapter 1 of the DEIS. This chapter includes an extensive discussion on the background, purpose and need for the project, and issues that were developed from our original scoping process. The background section includes discussion about wilderness and natural area management concerns that are addressed as part of the alternatives considered in the EIS.

47. The Forest should make certain editorial and/or format changes and/or corrections to the text of the DEIS.

Includes: 1025-486-11, 1029-486-15, 1034-486-20, 1036-486-22, 1038-486-24, 1041-486-27, 1042-486-28, 1051-486-37, 1148-665-18, 1175-671-1, 1326-707-4, 1437-721-6.

RESPONSE: Suggestions for editorial changes to the DEIS were reviewed and appropriate edits were made to the FEIS.

48. The DEIS is inadequate and should be supplemented, as information is lacking in many areas, notably the monitoring section.

Includes: 853-479-13, 1052-486-38, 1509-750-08, 1577-705-10, 1640-714-9.

RESPONSE: The DEIS presented a thorough analysis of the proposed action. We disagree that additional analysis is needed that warrants a

Supplemental EIS. Supplementation of an EIS is required only when the agency makes a significant change to the proposed action or new information or changed circumstances presents the agency with a seriously different picture regarding environmental effects, 40 CFR 1502.9(c) . The comment does not explain why additional monitoring is necessary, would improve the decision, or presents a seriously different picture to the agency. The comment does not provide specific information as to what elements of the monitoring provisions are inadequate or flawed. The agency is provided considerable discretion under National Forest Management Act (NFMA) and NEPA with regard to monitoring. The comment has not informed the agency as to how its monitoring plan could be improved. Even if this were the case, it is not clear that additional monitoring provisions would trigger the needs to supplement the EIS pursuant to 40 CFR 1502.9(c).

49. The FS did not adequately address the cumulative effects of all the FS activities being conducted on the Forest in these watersheds. For example, the effects of ATV/OHV use (unauthorized and handicap permit system), proposed logging, old roads, and oil and gas leasing were not adequately addressed.

Includes: 1623-705-56.

RESPONSE: The respondent failed to explain how the analysis did not adequately evaluate the cumulative impacts. Several resource areas did include ample information on cumulative effects relative to road system management and ATV/OHV use (whether authorized or unauthorized). In response to this comment additional information was added to the wilderness and recreation cumulative effects sections.

Soil and Water Cumulative Effects (Pages 73-78),
Road System Management (P. 74),
ATV/OHV use (P. 75-76 – Recreation),
Botanical Resources Cumulative Effects (P. 106-107),
ATV/OHV use (P. 106 – Recreation),
Wildlife Resources Cumulative Effects (P. 123-125),
Trail and Road Maintenance (P. 124),
ATV/OHV use (P. 125 – Recreation),
Cumulative Effects on Wilderness (Pages 148-149),
ATV/OHV use (P. 149 – Recreation),
Cumulative Effects on Natural Areas (Pages 154-156),
ATV/OHV use (P. 155 – Recreation),
Cumulative Effects on Recreation and Trail Resources (Pages 178-181),
ATV/OHV use (P. 179 – Recreation).

There are no proposed logging projects or oil and gas leasing projects in the reasonably foreseeable future within the project area; therefore, these were not discussed in the effects section.

50. On page 149 of the document under E. Wilderness Designation, it is stated that there has been an increase in/of use, "particularly in the Lusk Creek Wilderness, (which) has led to the adverse effects on wilderness character...." This is a misrepresentation of the well-documented facts that state there has been an increase in equestrian use that has led to the adverse effects on wilderness character. The impacts are from unregulated commercial equestrian use and this document should clearly state that fact. Includes: 1721-792-19.

RESPONSE: The overall analysis presented in the FEIS is clear regarding an increase in equestrian use in the Lusk Creek Wilderness and resulting resource impacts. The specific paragraph identified has been edited to clarify the information in question.

51. One respondent indicated that in order for the public to continue to enjoy the beauty of the Forest, no trail should be closed until the public had received notice and had a chance to comment. Includes: 707-538-01.

RESPONSE: One of the oft-cited "twin aims" of NEPA is informing the public as to the potential environmental effects and trade-offs associated with a proposed action and alternatives. This principle was followed in the development of this project EIS. The Forest has engaged the public repeatedly on the issue of equestrian recreation in the project area and Forest-wide over the past several years. The public involvement for this most recent planning effort is documented in the FEIS at page 13. NEPA does not prescribe any particular level of public involvement, but allows federal agencies considerable discretion in informing the public.

The considerable public comments received on the draft, including comments concerning adding and deleting certain trails from the system proposed for designation, evidence the extraordinary effort the Forest undertook to engage the public in site specific decision making. Although it is always possible to publish more notices and hold more meetings, time and agency resources are limited, especially in circumstances where action is urgently needed to begin much-needed resource protection and restoration.

Clearly, the public had the opportunity to review and comment upon trails that would be closed when the DEIS was published. The agency hosted public meetings to explain the various trail systems (including closures)

under consideration. It is not clear from this comment how yet another comment opportunity would have altered the decision or provided any useful information that was not already before both the public and the decision maker.

Many miles of trails remain available within this project area for the public to enjoy the beauty of the Forest. The selected alternative focuses upon sustainable resource management, i.e. managing recreation access while protecting resources. Compared with the No Action Alternative, the selected alternative will provide greater resource protection to ensure that many future generations will also be allowed the opportunity to experience the beauty of the Forest noted in this comment.

52. I find many inconsistencies throughout the document, i.e. trails will be closed, trails will not be closed, special use permits will be issued, special use permits will not be issued and phrases that are just possibilities, i.e. such as could cause, could increase, could be expected tom could be opened, it is anticipated, there are potentially, it could be affected. And much of the data is outdated.

Includes: 1785-476-1.

RESPONSE: The comment does not provide specific information as to the alleged inconsistencies in the document. It is unclear what specific aspects of the EIS are incorrect or need improvement. The general nature of the comment does not inform the agency as to the specific concern regarding the analysis.

Nevertheless, between publication of the DEIS and development of the FEIS, the agency has reviewed the entire environmental analysis to ensure that it is complete, accurate, and based upon high quality scientific information. The analysis presented is, to the best of our ability, both accurate and consistent. It appears that the comment is based upon a misconception of the nature of the analysis, namely, the presentation of trade-offs between alternatives, but again, we cannot tell based upon the cursory suggestion that the document is inconsistent in many places. Lacking any guidance from the comment to help us, the Forest has not identified any such inconsistencies.

The tables on FEIS pages 47-51 succinctly describe the alternatives and disclose the trade-offs associated with various alternative approaches to the proposed action. This disclose is tied to the “significant” issues identified by the public during NEPA scoping, 40 CFR 1501.7(a)(3). Clearly, the agency took a hard look at the effects of No Action and various levels of equestrian access to the 4 watersheds of the project area.

Finally, the comment takes issue with the use of anticipatory language, e.g. terms such as “could, should, or it is anticipate that.” NEPA requires analysis prior to action and therefore must, to a degree, involve such terms. The EIS analysis documents our best understanding of what is likely to happen under the various alternatives, based upon science, consultation with other resource experts, local monitoring data, field observations and surveys, public involvement, experience in implementing the 1992 plan, etc. Projecting environmental effects into the future that may result from complex management actions in a dynamic ecosystem is a very difficult undertaking. The interdisciplinary team based its effects disclosure on the best science available. The use of such terms is common and acceptable in NEPA environmental analyses. There is no indication in the comment that the use of such terms in any way altered the outcome of the decision. Again, it appears from the comment that the respondent misunderstood the nature of the analysis process. Refer to tables found on pages 47-51 of the FEIS to compare differences among the alternatives. Words or phrases such as could, should, it is anticipated that, and other similar statements are used when presenting the expected effects of the proposed alternatives.

53. The Shawnee's website was down from at least Friday, November 4 through Monday November 7, and possibly before. This is a critical time for the public to be able to access the website. The website being unavailable at the close of the comment period could be having an impact on the public's ability to comment.
Includes: 1786-545-1.

RESPONSE: It is true that our website was not available for several days at the close of the comment period. All comments received including those submitted throughout the week following the end of the comment period were accepted.

Private Lands

54. Many respondents are opposed to any restrictions being imposed on adjacent landowners in both Alternatives 2 and 4. Some feel the requirement for special use permits or the use of roads and trailheads does not provide them adequate access. Others have concerned that concentrated use will damage the trail. Many of the adjacent landowners purchased their property due to its location next to public lands.

Includes: 15-15-1, 16-16-1, 17-17-1, 109-1-8, 130-14-2, 541-326-3, 641-472-1, 644-475-1, 654-485-1, 678-509-1, 769-338-2, 860-482-5, 863-484-3, 878-510-3, 895-535-13, 1149-665-19, 1156-666-8, 1167-669-11, 1209-676-4, 1282-691-4, 1403-712-4, 1446-723-3, 1653-714-22, 1661-713-5, 1667-713-11, 1768-711-10, 1769-711-11, 863-484-3, 1209-676-4, 1362-709-4, 1653-714-22, 1615-705-48, 1782-711-24, 895-535-13

RESPONSE: Federal laws such as the Multiple Use Sustained Yield Act (MUSYA), the National Forest Management Act (NFMA) and the implementing regulations for NFMA direct that the National Forests be managed for multiple uses in a manner that is sustainable. As the Seventh Circuit noted over a decade ago, the Shawnee National Forest is not a National Park in which the status quo must be preserved. However, the resources of the Forest must be managed in a manner consistent with the NFMA and the MUSYA.

Over that past decade or so, trails leading to private land adjacent to the National Forest have proliferated. Some of these user-created trails are not properly located, designed, or constructed. They were made by individuals primarily to serve their limited need and in many instances do not serve the broader public interest. These user-created trails are not required or mandated by NFMA, MUSYA, or any other federal law or policy. They have in the past, and continue in the present, to result in unacceptable resource damage to soil, water, and vegetation. The Forest Service cannot continue to allow this unmanaged recreation from adjacent private land to harm public resources. These user created trails leading to private land must be closed to prevent ongoing, chronic resource damage. And yet we recognize the value of access to the trail system from adjacent private lands.

For this reason, the FEIS analyzed the trade-offs between various alternatives and developed a balanced management approach that will allow access at or near current levels, after further site specific analysis, on a case by case basis. This approach allows trails segments leading to adjacent private land to be properly located, designed, constructed, and monitored. This decision does not commit the Forest to any particular level of access, or authorize any such access to any particular location (i.e. the proposed designated trail system for the Selected Alternative).

Forest access is not being denied, only controlled under Alternative 2. Access from private land is available by permit in Alternative 2.

Up to 10 miles of trail connecting the designated system to private land have been analyzed in the FEIS under Alternatives 2. The analysis of up to 10 miles of trail accessing adjacent private land is based upon a survey conducted in 2005 and an inventory of potential access points. This projection provides a reasonable basis for estimating complex environmental effects and does not authorize any particular level of use or use at any particular site (*see* maps of designated system in the FEIS, Appendix A). If the demand for access to private lands exceeds 10 miles (*i.e.* the effects of such use as disclosed in this EIS), this analysis will have to be re-visited. The 10 identified miles does not represent a programmatic decision. For more on trail access from private land read responses 92 and 103.

55. Respondents do not feel that adjacent property owners should pay a fee to enter the forest and that public forest land should be freely accessible. If permits are required to access the forest from private land the process to obtain a permit should be liberal.
Includes: 876-508-2, 906-538-5

RESPONSE: Every National Forest has some limitation on access. Some limits are based on agency direction or regulation though most are locally developed to protect resources. Adjacent landowners will have the opportunity to request access to the trail system. The fee required for a special use permit is not an entry fee; rather it is associated with developing, monitoring and administering controlled access to National Forest System land.

The application for non-system trail permits will be evaluated on case-by-case bases, blanket authorization of use will not be given. Some owners of private land do not currently ride horses, while others may prefer accessing the trail from one of the many road junctions that currently exist. Consequently they do not desire trails leading to their property. See also the response to comment 54 and 81 in regard to limit of access for local residents, 81 in response to the requirement for special use permits, 98 discussing the need to restrict equestrian use, and 102 which describes the trail connectors.

56. Respondents express concerns that limiting access to the Forest will reduce current property values.
Includes: 812-391-3, 1451-724-3

RESPONSE: Resource effects from the user-created trails serving adjacent private lands are well-documented and unacceptable (*i.e.* unmanaged recreation has produced un-sustainable effects). The Forest acknowledges the importance of recreation access from private lands, and will work on a case by case basis to provide trails under permit to adjacent private landowners that are well located, designed, constructed and monitored. The FEIS analyzed access to adjacent private lands. There is no proof, in this comment or otherwise, of the alleged cause and effect relationship between having a poorly designed, ill-maintained and perhaps hazardous access trail and increased private property values. There simply is no evidence that a user-created trail influences property values in the first place. The Forest has diligently sought out information to confirm this alleged cause and effect theory, but no one has been forthcoming with any credible, quality information in support of the theorized relationship. Regardless, it is important to note that the private property, of course, remains adjacent to the Forest, and the opportunity for trail access – properly constructed and maintained – also remains under the Selected Alternative. Common sense suggest that managed access under the Selected Alternative will be a benefit to both landowners and Forest, compared to the No Action Alternative.

Based upon the comments received on the DEIS, there appears to be at root an underlying anxiety about the Forest’s willingness or ability to complete environmental reviews for private land access permits. This is mere speculation, or a “straw man” criticism constructed to oppose regulation of a use that currently has little management control, but much documented adverse environmental effect. In the past two years, the Forest Service has diligently prepared an environmental assessment for outfitting and guiding, issued permits, administered these permits, monitored use and closed localized areas where monitoring indicated that it was prudent to do so. The Forest Service has solicited public input at every stage of development of this analysis. All of this occurred concurrently with a major Forest-wide analysis of plan revision. Clearly, the Forest Service is actively working towards managing a complex and controversial use of the Forest in a balanced and deliberative fashion. The depth and thoroughness of this analysis is further evidence that the Forest is committed to timely review and completion of case by case applications for private land access permits.

57. Access restriction unenforceable.
Includes: 1468-729-1, 1815-542-2

RESPONSE: When equestrian users are restricted to system trails, under the Selected Alternative, non-system or user-created trails will be monitored. Non-system and/or user-created trails leading to privately owned land will obviously be suspicious, when the landowner doesn’t have a permit. We

believe that access restrictions are enforceable, but similar to all Forest Service regulations our goal is voluntary compliance, not enforcement.

58. Should the private landowners desire a designated trail to their land, they can apply for a special use permit for a trail. I have a dirt roadway that crosses national forest land that has been used for at least forty years to access the private land from a county road, long before I owned it. The road's only destination is my land but it is not on the FOREST road inventory, and I now have had to apply for a SUP to use it. While I would rather not have to go through the SUP process, this road's existence and use needs to be authorized by the agency. The same should be true for horse access as both uses are relatively high impact, which the agency needs to regulate. Includes 1706-792-4

RESPONSE: You describe the situation in which an existing road or trail crossing National Forest System land should be authorized by special use permit for access from private property. We agree that the road use permit to access private land is similar to the private trail permit identified in Alternative 2 of the DEIS.

59. The Hoosier National Forest in Indiana evidently has already lost open riding with local landowners having to obtain special access permits if they are lucky, pay a fee for the permit, and pay for maintaining those permitted access trails. Just like the Alternative 2 proposal in the Forest Plan Draft for the Shawnee. Now the forest service in the Hoosier National Forest has taken away many miles of good trails because the forest service doesn't have the funds to maintain them. Does that not sound familiar? Includes: 1670-713-14

RESPONSE: As noted in the FEIS the Shawnee and Hoosier share many similar resource concerns in regard to cross-country horse travel which have resulted in some changes in the management of trails within both National Forests. The environmental analysis of the designation of the Hoosier trail system, and associated monitoring data, are in the record for this analysis and speak for themselves. The Forest Service disagrees with the comment's interpretation that "many miles of good trails" were taken away on the Hoosier (and by implication, on the Shawnee as well). The record for this trails designation FEIS is replete with well documented information from Shawnee National Forest experts, State resource experts, and the public as to unsustainable use and resource damage associated with unmanaged user-created trails. The proposed designated system in the Selected Alternative is a balanced management response to a scientifically complex and socially controversial situation. As a compromise between opposing views, no one individual, group, or organization received all that they have sought in the

development of this FEIS. Monitoring data and field observation clearly show that the *status quo* is untenable and un-sustainable. We have worked collaboratively with interested parties to craft a trails system plan that produces a well designed and logical trail system to replace the current failing system of ever-changing, unmapped user-created trails. It is in all parties' best interest to devote their time and energies to implementing a well-mapped and well-maintained system of trails set forth in Alternative 2. We have observed that the Hoosier National Forest has developed an exemplar trail system and thereby avoided wasted resources in appeals and litigation concerning equestrian issues and devoted its energies to on-the-ground trail work. This is the lesson learned from personal observation and discussion with the Hoosier National Forest resource professionals, as well as State of Illinois resource experts familiar with resource conditions and recreation on the Shawnee National Forest.

60. We are concerned with recommendations in the draft that call for the closure of trails on private property that border the Forest. There should be continued use of trails on private properties that are contiguous with the Forest.

Includes: 1166-669-10

RESPONSE: There is no recommendation in the DEIS to close trails on private property. As stated in the Forest Plan the Forest Service does not have jurisdiction over management of adjacent private lands.

61. We suggest that all designated forest trails be constructed, non-system trails be eliminated, and the new trail system be completed and accessed for a period of 1-2 years before any energy is expended in going through the permit process to allow access from private land. This will allow Shawnee Forest personnel time to see how much maintenance and enforcement will be required to maintain the designated trails before allowing even short segments of non-system trail to connect to private land.

Includes: 1643-714-12

RESPONSE: Special use by permits will specify permit holder maintenance consequently; impacts Forest personnel are limited. Further discussion of the issuance of permits is found in response 81.

Recreation Resources

62. A number of respondents felt that a group should be formed between the Forest Service and user groups. This group could develop a spirit of cooperation between the regulators and the users. Suggested groups included an advisory committee, an equine advisory board, Friends of the Forest, or other types of partnerships.

Includes: 539-324-8, 840-478-5, 1251-693-7, 1251-685-12, 1296-693-7, 1296-693-07, and 1576-705-09.

RESPONSE: The Shawnee National Forest would welcome the formation of a “Friends” group, for a number of reasons, not the least of which is to better be able to serve the public. Under the National Forest Management Act of 1976, Section 14 “(b) In providing for public participation in the planning for and management of the National Forest System, the Secretary, pursuant to the Federal advisory Committee Act (86 Stat. 770) and other applicable law, shall establish and consult such advisory boards as he deems necessary to secure full information and advice on the execution of his responsibilities. The membership of such boards shall be representative of a cross section of groups interested in the planning for and management of the National Forest System and the various types of use and enjoyment of the lands thereof.” (16 U.S.C. 1612)

There are other “Friends” groups that have similar objectives, including interpretive associations (FSM 2393). The objectives of this type of organization is to: 1.) to support and enhance the interpretation and management of natural resources of the National Forests; 2.) to further the goals and objectives of the National Forest System, and 3.) to make available to Forest visitors the interpretive, educational, and informational materials and services that would add to the visitor's enjoyment and understanding of the natural, cultural, historic, and recreational resources of the National Forests.

63. I find streams are a lot like women, no matter what angle or side you look at, you can always find beauty. Keep the extra trail.

Includes: 1135-665-5

RESPONSE: Alternative 2 was chosen as the Preferred Alternative because it offers the maximum designated trail system and the greatest amount of flexibility for non-commercial users while continuing to protect and preserve the natural and heritage resources within the project area.

64. Many comments were received related to the need for good maps and trail signing. Official trails need to be mapped, published and posted at

trailheads and at commercial outfitters. Trails should be clearly marked. Maps, guidelines and rules for trail use should be required at each horse camp and at trail heads and stock confinement areas.

Includes: 168-23-4, 901-537-3, 1505-749-1, 1521-752-4, 1549-776-1

RESPONSE: Comments we received during the initial scoping for this project indicated that the most important facets of the equestrian recreational experience revolved around a “marked, mapped and maintained” trail system. The designation of system trails within these four watersheds will alleviate the problem of undesignated and unmarked trails. Designation indicates the Forest has reviewed their function and sustainability and has made a conscious decision to invest public resources in their maintenance. Alternative 2, 3 and 4 would provide a system of marked and maintained trails that connect most of the places where people want to go to the commercial camps and the Forest trailheads.

Designation of trails built with appropriate techniques and on appropriate landforms will provide recreation users with a maintained, well-marked trail system. The closing and rehabilitation of unmarked trails not included in the designated trail system will minimize the confusion of trail users on the braided network of system and non-system trails. In addition, the Operation and Maintenance Plan for the Outfitter and Guide Permits issued on the Hidden Springs Ranger District on the Shawnee National Forest require permittees to address issues of public health and safety, resource protection, and public relations, including route identification.

Lastly a detailed route map derived from Alternative 2 maps included in Appendix A of the DEIS will be generated for public use.

65. Some users were concerned about the security and stability to the local area. Other thought trails were a threat to personal safety based upon poor condition.

Includes: 626-457-1, 836-472-9

RESPONSE: The Shawnee National Forest is also concerned with the safety of our visitors. The lack of signs on non-system trails and accurate maps, as well as inconsistent trail conditions made use of the forest’s trails an unpleasant experience for many forest visitors; people unfamiliar with the area might get lost or disoriented in the maze of system and non-system trails that existed on the ground. Although the goals of the Trail Designation Project are to maintain or improve management of natural and cultural resources within the project area, providing quality recreational opportunities and experiences was also included. Part of providing pleasant trail-use experiences is maintaining a reasonably safe environment given the nature of outdoors recreation, and providing an adequate and reliable sign

system is critical to success. In addition, according to the FS Trail construction and Maintenance Notebook, “the first priority for trail work is to correct truly unsafe situations. This could mean repairing impassable washouts along a cliff, or removing blow-down from a steep section of a pack-tock trail” (199: pg 5).

Also, the Operation and Maintenance Plan for the Outfitter and Guide Permits issued on the Hidden Springs Ranger District of the Shawnee National Forest require permittees to address issues of public health and safety, resource protection, and public relations, including route identification. It outlines procedures for violations including notification of Forest Service Law Enforcement personnel. The Permittee will also request assistance from the Sheriff’s Office for those State and County regulations, which apply.

The Forest Service public website also offers outdoor safety tips to help keep the public safe while recreating on Forest Service managed lands (<http://www.fs.fed.us/recreation/safety>).

66. Separate trails will demonstrate clearly which parties are responsible for use. The horse groups should maintain trails if they want to use them. Includes: 1546-773-1, 187-49-2

RESPONSE: The Forest Service will be responsible for all trail maintenance on designated trails, although we would welcome any offers of assistance that are tendered. The use of volunteers is discussed in the following response to comments.

67. A number of respondents offered to help with FS sponsored trail maintenance on user created trails proposed for designation. Other groups might like to help with trail maintenance as well. Other suggested students or other groups volunteer their time to help with some of the maintenance of the park (forest). Suggestions were made that all contractors and employees involved with trail design, construction and maintenance take training. Includes: 188-55-2, 191-59-2, 1077-617-11, 1168-669-12, 1186-672-4, 1223-680-4, 1235-683-5, 1294-693-5, and 1348-707-26,

RESPONSE: The Shawnee National Forest welcomes all offers to help maintain the Forest trails. Volunteers can significantly reduce the cost of maintaining the Forest’s trail system. The Shawnee will endeavor to work with volunteers to help accomplish vital trail maintenance work. Shawnee National Forest employees will continue to take advantage of trails training courses hosted by the Forest Service and other organizations offered around the country.

68. I would tend to support a more extensive trails system if the agency had already shown its ability to maintain high quality trails.
Includes: 1709-792-7

RESPONSE: Many of the trails within these four watersheds were “non-system” trails meaning that they were not designated by the Forest Service. Poor location and the absence of design combined to make many of these trails difficult, if not impossible to maintain. Moreover, budgetary policy dictated that the Forest was not able to expend trail maintenance funds on user-created trails. The trail maintenance issue was also affected by the unforeseen increase in the level of equestrian recreation in these watersheds over the past decade.

Trail designation indicates the Forest has reviewed trail function and sustainability and has made a conscious decision to invest public resources in their maintenance. Through the analysis of the Trails Designation Project, the Forest Service has reviewed all trail locations and by designating them is willing to commit public resources to their maintenance.

69. We support having permanent trail crews to fulfill the ambitious promise of trail construction and maintenance in the Preferred Alternative.
Includes: 207-94-7, 1214-676-9, 1222-680-3, 1524-752-7, 1596-705-29

RESPONSE: Personnel decisions and actions are administrative procedures as such these actions are not part of the Record of Decision for the trails designation project. However, both districts currently have a trail technician who is responsible for planning, trail construction, reconstruction and maintenance. In addition, each district has a trained cadre of recreation technicians who spend a part of their time working on trail projects. Both districts also hire crews made up largely of university students each summer, as well other temporary help such as dozer operators to assist in trail projects. And lastly, the Mississippi Bluffs Ranger District has a Youth Conservation Corps (YCC) trail crew made up of high school students and a supervisor who are also assigned to trail maintenance. In addition, the Forest would welcome all offers to voluntarily help maintain the designated trail system. See response 67 regarding the use of volunteer to accomplish work.

70. Many people use horses to access the forest to visit the many natural features within the project area, specifically those located within Wilderness Areas where motorized use is not allowed. Age and physical disabilities are

factors in user's dependence on horses and need to walk short distances to view natural features of the project area

Includes: 454-327-1, 666-497-1, 670-501-1, 703-534-1, 733-337-15, 877-510-2, 897-535-15, 1283-691-5

RESPONSE: The Forest has taken these comments into consideration when selecting trails to be designated and in the location of confinement areas. To fulfill the agency's mission-based responsibilities to protect the environment and provide sustained multiple use of the lands, certain recreation uses are restricted or prohibited in some areas.

As numerous federal courts have recognized, sustainable multiple use management under the National Forest Management Act and the Multiple Use Sustained Yield Act often requires compromise between competing uses of the Forest. These trade-offs are clearly set forth in the EIS. The Selected Alternative strikes a balance to respond to the existing land and recreation condition, based upon consideration of physical, biological, economic and social considerations. The use of horses for recreation in wilderness is an excellent example of the trade-off and balancing the agency must do to first, preserve wilderness, but also honor the intent of the Wilderness Act to allow for recreation in these areas. This issue is especially complex as we consider the use of horses for recreation access by those whose health would not allow them to access the wilderness in any other way. Those persons with special needs have not been ignored or forgotten in this analysis and decision. We have listened to the public's views with regard to equestrian recreation in the project area, and taken a hard look at the potential environmental effects and benefits from taking measures to regulate recreation. Compared to the No Action Alternative (Alternative 1), all of the action alternatives allow equestrian recreation, but improve upon existing resource conditions.

Areas, roads, and trails on national forests and grasslands that restrict or prohibit equestrian use under Forest Plan Management Area Prescriptions or under a Forest Travel/Transportation Plan are restricted or prohibited to all equestrians, including those with disabilities. An exception is the use of a wheelchair that meets the legal definition, which may be used wherever foot travel is permitted. A wheelchair is a device that is designed solely for use by a person with a mobility impairment for locomotion and that is suitable for use in an indoor pedestrian area. Further it is "Designed solely for use by a mobility-impaired person for locomotion," means that the original design and manufacture of the wheelchair was solely for use for mobility by a person with a disability. Thus, this term does not include after-market retrofit of a motorized unit to make it useable by a person with a disability. "Suitable for use in an indoor pedestrian area" means useable inside a home, mall, courthouse, or other indoor pedestrian area.

Federal laws, regulations, and policies that apply to Federal agencies, including Section 504 of the Rehabilitation Act of 1973, as amended, do not require areas restricting or prohibiting equestrian use for all people to make exceptions to such use because a person has a disability. Restrictions on equestrian use that are applied consistently to everyone are not discriminatory. Federal agencies are under the Architectural Barriers Act of 1968 (ABA) and Section 504 of the Rehabilitation Act of 1973 (Section 504) that requires federally conducted and federally assisted program and services to be accessible. There is no requirement to construct facilities solely because a person with a disability might go to a Wilderness Area.

While new or reconstructed facilities are to be in compliance with the current accessibility guidelines, at some locations the need to protect the resource and the natural setting will prevent full compliance with technical provisions for accessible routes between facilities. In those situations the Forest Service will follow the Forest Service Outdoor Recreation Accessibility Guidelines (FSORAG) and Forest Service Trails Accessibility Guidelines (FSTAG) specifications for routes and trails.

71. Barger Branch Parking Area—This parking area encourages more foot traffic to Saltpeter Cave, which could trample the forest sensitive plants in the Saltpeter Cave area the Forest Service and others work so hard to protect. This parking area should not be constructed saving money, time and new construction. If built the only place to construct the parking area is in the wilderness.

Includes: 1345-707-23

RESPONSE: The Barger Branch Hiker-Only parking area location is currently used by hikers to access this portion of the wilderness. The upgraded area envisioned will hold four or fewer cars and will not entail major amounts of development cost or complexity. Nevertheless, the interdisciplinary team took a hard look at the site specific environmental effects of the proposed upgrade to the Barger Branch Parking Area. Contrary to the assertion in the comment, the parking area will not be constructed within the Wilderness Area. At the proposed location along Pope County Road 1628, the legal description for the Lusk Creek Wilderness reveals that the wilderness boundary is 150 feet south of the centerline of the road. The proposed four-car parking area would be constructed without impacting the wilderness boundary.

The comment also suggests that sensitive plants might be indirectly harmed by users that come from the parking area. The upgrade will not increase use to an extent that sensitive plants in Lusk Creek Wilderness face a greater degree of risk. Adequate mitigation is included in this decision to allow for protection of sensitive plants from trampling by people or horses. There is no

evidence of a cause and effect relationship between the upgrade of a parking area and the risk of harm to sensitive plants some distance away by people that used the parking area. The few more people that may use the parking area simply do not add up to a greater threat of harm to plants, given the design of trails and mitigation measures.

72. One respondent encouraged the management of areas for hiking suggesting that doing so would encourage tourism and benefit the economy of southern Illinois.

Includes: 439-312-01

RESPONSE: We agree that opportunities for hiking are popular among visitors to the National Forest. The marked and maintained trails that will result from the implementation of this proposal will be beneficial to hikers and equestrians alike. The amount of hiker-only trails, discussed in the *Recreation and Trails* section of the FEIS will increase slightly upon implementation of this decision.

73. One respondent stated that closing trails when it rains (wet-weather closures) was a hardship to people who have traveled from long distances to ride on the Forest. Another stated that there should be a toll-free number that could be called to find out if trails were closed due to weather.

Includes: 883-516-05, 1261-687-01

RESPONSE: We realize that many people plan their vacations to ride trails within the Shawnee National Forest. For the next few years trip planning will need to take into account that during certain months of the year, the Lusk Creek Wilderness may be closed to riding for 24 hours following a precipitation event of 1 inch or more. It is important to note that during these periods of closure other adjacent areas of the Forest will remain available for riding. In the meantime, trails in and out of wilderness will be maintained to a standard that will accommodate wet-weather use. The rationale for these closures is discussed in the DEIS.

In response to public comment, the Forest will utilize various means of providing public notice. Notice will be posted on the Forest website, and at trailheads. The equestrian campgrounds will be notified. A toll-free number is redundant and unnecessary, as telephone call or email to the Forest Supervisor's or Hidden Springs District Office can provide closure information. Likewise, a call to the equestrian campgrounds could be used to inform potential visitors who are distant from the Forest. If additional methods of providing notice become necessary, we will give consideration to other methods of providing notice of the wet weather closure. The more trails that are designed and constructed for all-weather use, the less this is an

issue. The wet weather closure only applies to Lusk Creek Wilderness Area, so there are other places to ride, even if the wet weather closure is in effect.

74. Several respondents mentioned that they favored the use of seasonal closures as a way to lessen impacts to wet trails. One respondent suggested that the closure be extended to the entire project area rather than just those portions within congressionally designated wilderness. One respondent said that trails should be closed in bad weather if necessary, while another simply stated that the weather is against horse people.

Includes: 423-296-01, 1225-681-02, 416-289-01, 407-280-01, 523-271-02, 1092-630-01, 70-070-01, 32-032-01

RESPONSE: Seasonal closures will be used as a method to lessen the impact that some trails in the analysis area receive during typically wet times of the year. Seasonal closures will be used in wilderness in order to protect specific wilderness values until these values can be protected by a properly maintained trail system. Long-term protection of soils, both in and out of wilderness, will be accomplished through the reconstruction and maintenance of trails to a standard that accommodates the use they receive. The imposition of a seasonal closure throughout the entire project area was not necessary to ensure sustainable recreation use in the area. A seasonal closure was part of the March 2005 Court order but applied only to the Lusk Creek Wilderness Area. A key purpose of this mitigation was to allow for a time period in which solitude was enhanced in Lusk Creek Wilderness.

The major effect of a complete closure of the most important equestrian recreation area on the Forest during several months of the year must be balanced with the benefits that might be realized by such a measure. First, there is no legal mandate to provide solitude or manage for other wilderness character attributes outside of designated wilderness. Since the seasonal closure primarily protects solitude, an attribute of wilderness, there was no need to extend the closure outside of wilderness to the entire project area (*i.e.* areas where solitude is not a key management concern). Second, other resources such as soil and water are adequately protected during the interim period where trails are being designed and constructed to meet the Handbook trail standards. There is no need to take the drastic measure of extending the seasonal closure to the entire project area, nor evidence that this would provide additional protection beyond that already incorporated into the decision. Such a dramatic closure is contrary to the sustainable multiple use paradigm set forth in NFMA and MUSYA.

75. One respondent stated that seasonal closures were upsetting because they would restrict people who want to ride in winter. It was suggested that

restrictions should apply only to the commercial campgrounds rather than to all equestrians.

Includes: 105-001-04

RESPONSE: Having separate regulations that apply to commercial versus non-commercial users is difficult to enforce. Limiting the restrictions to commercial equestrian camps would simply mean that anyone could begin riding from anyplace *except* one of these businesses. The opportunities to circumvent this regulation could result in the additional impacts to wilderness that we are trying to avoid. Applying the seasonal closure to riders from the permitted camps would not achieve the purposes for which the seasonal closures were adopted in this decision. The seasonal closures are a measured, specific, and balanced response which provides protection but does not overly constrain recreational access.

Many areas of both the project area and the Forest have no seasonal restriction. There is no undue hardship here to local riders who wish to access the Forest during the winter months. Many miles of beautiful, challenging riding remain available on the Forest year-around. The Forest thoroughly considered the issue of seasonal closures, and documented the trade-offs of this mitigation in the EIS.

Congress delegated to the agency considerable discretion in determining the appropriate uses of various areas of the National Forests; the agency must strike a balance between protection and use. The balanced, conservation-oriented approach here to sustainable multiple use management is consistent with NFMA and MUSYA and well within the agency's discretion. As noted in the two previous responses and within the DEIS these temporary measures will be taken only as long as they are needed. Read also response to 73 above on how visitors can get information on trail closures.

76. One respondent reminded that equestrians were precluded from many areas when the undesignated trails in the Natural Areas were closed and that restricting them to designated trails throughout the analysis area would cause further restriction of access to the national forest in the name of resource protection. Another respondent specifically mentioned the Lusk Creek and Hayes Canyon areas, mentioning that the majority of users there (equestrians) had been closed off from much of the beautiful scenery. This respondent believed the intent of the proposal was to preclude equestrians from accessing areas of spectacular scenery. A third respondent held that the DEIS did not consider the impact of re-routing trails away from scenic areas and Natural Areas. Another respondent opposed the change in the status of the trail near Saltpeter Cave to "ride through" only.

Includes: 722-337-04, 1662-713-06, 896-535-14, 1655-714-24

RESPONSE: The 1992 Forest Plan excluded undesignated trails in Natural Areas in order to protect the resources within. Subsequent closure of those undesignated trails did not preclude all visitations. Many people have chosen not to leave their horse and walk into these favorite spots. Read also the response to 13.

Congress has provided considerable discretion under NFMA and MUSYA to determine the appropriate uses of particular areas of the National Forests. There is no legal requirement to provide a particular type or level of recreational access to various areas on the Shawnee National Forest. Considerable effort was made to work with the public to identify those trails and sites that were of most importance. The current low levels of recreation management have resulted in resource concerns in various areas. The current situation is not sustainable recreation; there are simply too many miles of trails created with too little thought for proper location and design. If the agency were to include all of these existing trails into the designated trail system, it is highly unlikely that the Forest would be able to maintain these trails to the Handbook standard. Appeal, litigation, and dissatisfaction would continue as a result of deteriorating resource conditions.

Within the discretion delegated by Congress, the Forest has collaboratively developed a trail system that both reasonably protects the environment and provides access. Most interested parties support equestrian access to the project area (*see* Sierra Club, Illinois Chapter, comment letter dated November 7, 2005, page 3, “We are not against horse use.”). This decision embodies a compromise founded upon the best science available, as well as agency experience with equestrian recreation elsewhere. Many scenic areas of the Forest are accessible by horseback, some are not. Although some people are not likely to be content with this compromise, the balance and type of uses is the agency’s to strike under NFMA and MUSYA.

While the Trails Designation decision does designate trails into scenic places, including Jackson Hollow Natural Area and additional crossings of Lusk Creek, it does not include every trail that currently exists within the analysis area. Some restrictions will also be placed on favorite destinations within the Lusk Creek Wilderness. Equestrian access to Saltpeter Cave and Natural Bridge will be ride-through only, and highline facilities at Saltpeter Cave, Indian Kitchen and Owl Bluff (High Point) will be moved further from the main trail. While these actions do not preclude equestrians from visiting these areas it will mean that if they wish to stop there they will have to walk from the nearest confinement area (DEIS p175). The DEIS does acknowledge that changes to the confinement areas will impact the recreational experience for some equestrians. Furthermore, the DEIS predicted that impacts to user satisfaction could reduce use of the analysis area by equestrians if trail mileages were cut too drastically in a key location such as the Lusk Creek Wilderness (DEIS pp162-163).

77. Several respondents referred to the difficulty they experience trying to use muddy, rutted, or washed-out trails. They mentioned their expectation that the trails be improved to enhance the hiking or backpacking experience. One respondent added that in the Lusk Creek area the numerous trails made it very confusing to hike. Another thought that the trails should be kept in better shape for safety reasons. In some areas, one respondent held, horses have made trails 20 feet wide. One cited places where horses had caused big ruts, another wrote of muddy ditches.

Includes: 438-311-01, 74-074-01, 1543-770-01, 1501-746-02, 626-457-01, 617-448-01, 397-270-01, 389-262-01,

RESPONSE: Maintaining trails will only serve to enhance the user's experience. Under Forest Service policy only designated system trails can be maintained with federal funding. This decision provides this designation (Chapter 1, *Purpose and Need*, FEIS) so that these routes can be maintained, signed, and an accurate map can be developed for visitors.

The poor condition of some trails in the project area described in this comment was a key element of the purpose and need for this project. Consider, for example, the comments of the Illinois Department of Natural Resources:

Unregulated equestrian use on the Forest has long been a major concern of the Illinois Department of Natural Resources Unrestricted use has negatively impacted threatened and endangered plant species and has degraded lands managed by the Shawnee NF including high quality natural areas. Our own surveillance support your assessment and give us cause to suggest that continued unrestricted use will without question, result in further resource damage.

Based upon field observation, consultation with recreation experts, public comments like that quoted above, and lessons learned in previous lawsuits, the Forest concluded that continuation of the *status quo* was untenable. Thus, recreation experience and erosion and sedimentation, *i.e.* trail quality and condition, as well as location and length, were the focal point of this analysis (FEIS, chapter 2).

A reasonable designated trail system, properly designed, constructed, maintained, mapped, and monitored, is in the public's best interest. We examined alternatives that would increase the level of access or prohibit it. The effects, consequences, and trade-offs of these extreme alternatives are severe. Working with the public, a system of recreation access has been designed with will protect and improve the environment relative to the

existing condition. After review of the Preferred Alternative for regulating equestrian recreation, the Illinois Department of Natural Resources concluded:

We applaud the Forest for taking this bold step toward what IDNR hopes is going to be implemented on the entire Forest, namely, equestrian use on a well planned, designed, constructed, maintained, and monitored trail system which will protect the natural values which all user groups expect when visiting our national forest system lands.

With the help of all of our partners and interested parties, we will work towards on the ground improvements that will, over time, eliminate the poor quality trail conditions described in the comment and found in some places within the project area. The trails that are closed will fade over time into the landscape, so that many situations (like that described in this comment) where trails conditions have deteriorated will be remedied over time. This ecological restoration, as well as the enhanced recreation experience presented by improved quality trails, is clearly in the public interest.

78. One respondent commented that use of the trail by horses has served to keep some trails open and available to hikers.
Includes: 1738-787-04

RESPONSE: There are numerous trails that but for use by equestrians, would have grown over and disappeared. One element of this decision, as discussed within the Purpose and Need found in Chapter 1 of the FEIS is to close non-designated trails by restricting cross-country riding to a system of designated trails. It is intended that the trails that are closed will revert back to a more natural state and that they will not be used by hikers or equestrians.

Although equestrian use has in some cases helped keep trails free from brush, this is not an overriding justification to retain any particular trail segment. The designated trail system is limited in scope so that it can be properly maintained. Whether or not equestrian use retards brush on trails was not a major factor in deciding where or how many miles of trails should be designated in any particular location. The Forest has discretion under NFMA and MUSYA to determine the appropriate use of particular areas of the Forest. Numerous different levels and locations for trails were analyzed in the EIS. The balance of protection and access is the agency's to strike. The decision here protects the environment, but provides sustainable multiple use (recreation) opportunities within the agency's discretion.

79. One respondent indicated a desire to have wagon trails. Another asked that the River-to-River trail be made wide enough for wagons
Includes: 492-365-01, 493-366-01

RESPONSE: The Trails Designation Project was designed to select a system of trails managed primarily for a hiking or riding experience. Though most of the trails will be too narrow, there will be opportunities to drive a wagon on the old road beds designated as trails. The ability to connect these into a loop trail or in sequence to facilitate a long distance wagon ride (such as the River-to-River Trail) will be limited.

80. One respondent indicated a desire to see the Shawnee NF become a trails destination for the nation.
Includes: 424-297-01

RESPONSE: Trail designation and maintenance is expected to improve the user experience sufficiently to encourage the increases in visitation predicted in the socioeconomic discussion in Chapter 3 of the FEIS. This increase is expected to come from Illinois and much of the Midwest.

81. One respondent stated that limiting the recreational experiences for local residents was not acceptable. Another mentioned that the restriction to designated trails would be a significant change for equestrians and that the need to do so was not supported by scientific facts. Another stated that if the analysis area is closed to cross country use local would have to access the forest through trailheads or obtain special use permits (which would entail additional analysis and a yearly fee). This respondent requested that the requirement for special use permits be waived until the trailheads are built.
Includes: 147-019-05, 838-478-03, 727-337-09

RESPONSE: The limitation of equestrians to a designated trail system does represent shift in recreation management of the Shawnee National Forest. For landowners who live close to one of the nearly 240 intersections of the proposed trail and existing public roads (DEIS pp 172-173) the changes will be less noticeable. Those who live farther from these intersections will have a choice between a longer ride on a road, transporting their horses to a trailhead or applying for a special use permit to access the designated trail system. Many parcels of National Forest System lands are too small or isolated to connect to the designated trail system. Here too, it would be necessary for users to obtain a special use permit in order to continue riding within in these lands.

Forest managers analyzed allowing cross country use to continue outside of wilderness as a component of Alternative 3 in the DEIS. This alternative was

not selected in part since cross country riding in the past has continued to create new trails. These unauthorized trails have resulted in impacts to botanical (DEIS, p105) and to soils and water resources (pp 55-62, DEIS) throughout the analysis area. Read also the response to 96.

There is no federal law, regulation, or policy that mandates private land interspersed with the Shawnee National Forest must be guaranteed unrestricted equestrian access to adjacent Forest land. Regardless, the Forest understands that some landowners do use the Forest in this way, and have done so for many years. The Forest is sensitive to the needs of these neighbors, but must weigh the environmental effects and needs of local landowners' desiring equestrian access, together with many other resource and practical factors. The decision embodies a compromise: the special use permit process will ensure wise stewardship of public resources for all citizens, while meeting the needs of adjacent landowners. Most, if not all, adjacent landowners' access needs will be met by trailhead, road access, or trailering horses to a parking area. We anticipate relatively few landowners will need or want a special use permit for access to the designated trail system, but that option remains available. We will assess access applications, including consideration of public input and environmental effects, in a timely fashion to minimize disruption and inconvenience for our neighbors who seek a permit.

82. Two respondents stressed the importance of loop trail opportunities. One expressed a desire to have 2-or 4-hour rides without having to return on the same route. A third respondent added that to enjoy riding it was necessary to have a large trail system. Additionally, a desire was expressed for one-lane trails that went to pretty spots.

Includes: 985-599-01, 999-601-01, 501-374-01, 927-541-03

RESPONSE: Almost all of the equestrian use within the analysis area is day-use with some people riding much farther than others. During the development of alternatives an effort was made to identify loops of various lengths that could be combined to offer a variety of trail opportunities. Based on public input from scoping as well as experience in managing equestrian recreation over the past decade, the loop trails were a focal point of the analysis and a key element of the purpose and need statements.

Loops were proposed that are available from the commercial equestrian campgrounds as well as the proposed trailhead locations. The number of miles of trail available within proximity of the commercial equestrian camps is displayed in the recreation and Trails section of Chapter 3 in the FEIS. The trail system selected in the Record of Decision will add 161 miles of new designated trail to the existing 69. Additionally, nearly 150 miles of maintenance level 1 and 2 roads also provide riding opportunities. In all,

nearly 400 miles of trails and roads would be available for riding in these four watersheds. The width of the trails will vary. Those on old road beds may allow two people to ride side-by-side. Others will be single-width, especially in congressionally designated Wilderness Areas. Along this 400 miles of roads and trails users will continue to have the opportunity to visit or view a variety of forest settings and scenery including many that are unique to the Forest.

83. One Respondent stated that the Shawnee should be available for all to enjoy in their own way without being overwhelmed by any other group.
Includes: 1417-717-06

RESPONSE: The Shawnee National Forest provides a variety of forest settings and facilities for the many types of recreation opportunities. The 1992 Forest Plan outlines the types and location of recreational activities found within the Forest based upon the Recreation Opportunity Spectrum (ROS). However the Purpose and Need for this project is limited to just two: hiking and equestrian trails.

The concern in this comment about being “overwhelmed” by others while using the Forest is also seen in the EIS analysis of group size and solitude in wilderness, (see Wilderness section of FEIS). The ability to enjoy the Forest, apart from large groups of people or disturbance, was part of the decision-making here. From a more general point of view, user conflict issues (incompatibility of equestrian and other forms of recreation in some instances) were also taken into consideration in the development of the alternatives.

84. One respondent suggested that it did not make sense to amend the Forest Plan to change trail Experience Levels.
Includes: 1458-724-10, 221-098-07

RESPONSE: The 1992 Forest Plan states that trails in the Bay Creek, Lusk Creek and Garden of the Gods Wilderness areas should be managed to Experience Level 2 or 3. Both of these guidelines have desirable attributes for wilderness trails—narrow, single-track, low-development trails of native surface. The 1992 Plan did not contemplate the increase in equestrian use currently existing in these wilderness areas. With the limited equestrian use occurring during that time (14 years ago) graveling was neither necessary nor feasible given the budget policy restriction on maintenance of user-created trails. The 1992 Plan is not premised, as some believe, upon a prohibition of native-source gravel use on trails in wilderness. To the contrary, there is no such prohibition in the Wilderness Act or agency regulations or policy.

When many of the trails in the analysis area are wet, as they often are in winter or after periods of heavy rain, they can be impacted by stock use. These impacts cause unnecessary damage to soils and vegetation that could be mitigated by adding gravel to create a firm surface. If trail muddiness is abrogated by the addition of gravel users will not be tempted to walk to the side of muddy sections. Graveling a trail is a feature of Level 1-type trail maintenance. Without the application of gravel however the only way to ensure that additional damage will not occur is to limit use when the trail is wet. The addition of gravel will have a short-term visual impact on the wilderness but the protection it affords for adjacent resources makes the trade-off appropriate. Graveling is the only feature of Experience Level 1 trails that will be employed in wilderness. It is consistent with Recreation Opportunity Spectrum guidelines for trails in the Semi-Primitive Non-Motorized recreation setting. Other Experience Level 1 attributes such as paving, widths wider than two feet and handrails are not being considered.

The amendment of trail experience level to allow some limited gravel use on trails in wilderness is both rational and reasonable, given existing condition and trail design parameters. The Forest performed analysis which shows that use of gravel on some trails in wilderness is necessary to administer the wilderness for recreational use (see Recreation and Trails section, Chapter III, FEIS) The analysis shows that gravel use is simply proper and reasonable maintenance of trails, an inextricably connected part of year-around trail use in this area, given resource conditions. Gravel use is minor, unobtrusive, and naturally-appearing. It is the minimum requirement maintenance or mitigation required to administer the wilderness.

After several years, the visual effect is greatly reduced, in some respects differing little in appearance than the trail as it appears today. One key difference is that the current appearance of some wilderness trails - eroded, muddy, gullied - is eliminated by gravel and reconstruction. Remember, the existing trail condition in wilderness is not pristine in many cases. Thus, in the sense that poor quality existing trails are restored, the graveled trails over time improve the visual resource. The Forest also analyzed the prohibition of equestrian use from wilderness, as well as continuation of the status quo (some deteriorating wilderness trails, no gravel). The trade-offs in foregoing the amendment are clearly set forth in the EIS.

85. Several respondents indicated that they would rather not hike on a trail that is used by horses. Some stated that horses damaged the trails and made them difficult to hike. One thought that horse use left trails unsightly. Another preferred hiker-only trails because they were quieter and did not have horse manure on them. Respondents stated that some trails should only be for hiking and backpacking. Another respondent wished to see the hiker-only trail network expanded. One person thought hiker-only trails

more appropriate because they were easier to maintain than those used by horses or vehicles. One respondent specifically requested that the trail to Indian Kitchen be hiker-only, another that they did not oppose this trail. Finally, one respondent expressed little confidence that the Forest Service has the ability to follow through with the plan of mitigating equestrian-related impacts to the trails and ensuring quality recreational experiences for users on foot.

Includes: 1535-762-01, 1557-784-01, 176-023-12, 370-243-01, 1244-685-05, 97-097-01, 20-20-01, 1016-486-02, 91-091-01, 3-003-01, 390-263-01, 409-282-01, 435-308-01, 75-075-01, 26-026-01, 1733-792-31, 1651-714-20, 1707-792-05.

RESPONSE: The hiker-only trail system is being expanded by the addition of two trail segments in the Lusk Creek Wilderness and one near Jackson Falls to benefit those who do not wish to share trails. In order to offer the greatest amount of recreational opportunity on the designated trail system it will be necessary to manage it for both hikers and equestrians. Although it might be less costly to manage a hiker-only trail system doing so would serve neither the recreating public nor the Purpose and Need for this analysis.

Single purpose or hiker-only trails are used where resource conditions and recreation use combine to create a situation where user-conflict deems it necessary. Expansion of a hiker-only trail system is possible in the future, after additional site-specific analysis. In the meantime, unlike equestrians, hikers may travel cross-country and thereby avoid, if they choose, contact with equestrians. This decision increases hiker-only trails by one-fourth. Moreover, in Lusk Creek Wilderness Area, the temporary seasonal closure ensures another 25 miles of trails will be available only to hikers while the closure remains in effect. Recreation experience for both user groups was the focal point of this analysis and decision (FEIS, chapter 2).

No federal law or policy mandates establishment of any particular type of recreation or recreation-related improvement in the project area. Generally speaking, single use trails are the exception, rather than the rule in recreation management for administrative as well as multiple use management reasons. The Forest has considerable discretion to manage for sustainable multiple use in this area. Equestrian and hiker recreation has existed in the area for decades; this decision is intended to begin restoring amiable relations and balance between competing uses.

86. One respondent asked that if a separate trail was built for hikers to Indian Kitchen that the existing trail be left open for equestrians. Two others asked that the hiker only designation be delayed until the new trail was constructed.

Includes: 1771-711-13, 1072-617-06, 1338-707-16

RESPONSE: The Selected Alternative described in the Record of Decision no longer contains separate hiker and equestrian trails to Indian Kitchen. Instead the existing trail will be replaced by a new route south of the existing trail and closer to the edge of the Ramsey branch drainage. Hikers will have the first mile of the trail to themselves to a junction with a hiker-equestrian trail coming from the Indian Kitchen area and going to the Ramsey Branch Ford. The hiker-only portion of the trail to Indian Kitchen was chosen for such separation of users because visitor use demonstrates that hikers visit the area in larger numbers. The alternative to have separate trails for the entire distance was dropped to reduce the amount of trails designated within the wilderness. Equestrians will have a route to Indian Kitchen via Bear Branch with the option of continuing around the south side of the wilderness via Ramsey Branch and Regan Ford. This hiker-only designation will begin once the new trail has been constructed.

87. Two respondents were not in favor of additional hiker-only trails. One stated that trails should be shared while the other pointed out that there are already hiker-only trails at Bell Smith Springs, Pounds Hollow, Garden of the Gods and all Natural Areas within the Forest. This respondent believed that since hikers are not the largest user group in the Forest these existing hiker-only trails should be adequate for the need.
Includes: 1784-711-26, 731-337-13

RESPONSE: Scoping comments received on the Trails Designation Project proposed action requested additional hiker-only trail. While developing the alternatives these comments were considered, this public involvement was an important tool in determining the demand for, and feasibility of additional hiker-only trails. The quality of the recreational experience of hikers makes it appropriate that hiker-only trails be considered as part of this project. Although trail use by hikers and equestrians varies widely across the Forest, in general there are five times as many people walking as riding (NVUM 2002). Many of these hikes are probably of very short duration. Data regarding the number of trail miles logged by each group was not gathered as part of the NVUM survey so the results do not indicate if the available mileage is sufficient. Therefore, the scoping process for this analysis is an important tool in determining the demand for, and feasibility of additional hiker-only trails. See also response to comment 85.

88. Several respondents commented that no trails should be closed until work to construct or maintain the designated trail system has been completed. One respondent predicted that closing trails prior to the completion of work on the remaining system would place too much use on trails ill suited to handle the increase. Another person predicted that doing

so would precipitate the creation of additional, new user-created trails. Additionally, one respondent wished that no action be taken to close any trails until the Forest Service had the funding to implement all work on the remaining designated trails in a short period of time, such as one riding season. One respondent thought that maintenance may cause more resource damage than the use of the trails. This person also thought that nothing should be done until the necessary funding had been obtained. One respondent thought that brushing and closing of non-designated trails should be the first priority, and the second priority marking and mapping of the designated system. Another respondent was concerned that the time that had been projected for closing non-designated trails was too long (4 years) and that it should be a priority.

Includes: 1443-722-06, 1765-711-07, 885-535-03, 1187-672-05, 884-535-02, 1155-666-07, 1594-705-27, 1811-545-18

RESPONSE: The DEIS, pages 9 through 11 discusses the need for Forest managers to provide quality recreational opportunities for hikers and equestrians while mitigating adverse impacts to soils, water quality, plants and animals, and wilderness character. Restriction of equestrian use to designated trails coupled with seasonal and wet-weather restrictions in wilderness are incorporated in the Record of Decision to protect resources while trail work is implemented. Though the option of leaving non-system trails open until all work is completed on the designated system may help satisfy recreational demand and alleviate use on degraded trails, it will do so at the expense of those resources in some locations. Other options exist such as rearranging priorities for maintenance of specific trail segments, entering into maintenance agreements with volunteer or other organizations, or as a last resort, administratively closing that segment of trail.

The DEIS estimates that work on the trail system under the Preferred Alternative (page 30) would require six years. During the first two years priority work inside of wilderness would be conducted. Six years for construction and maintenance of over 200 miles of trails is an ambitious schedule. Compressing this schedule down to a period of less than a year is unrealistic. A one-year infusion of funding sufficient in quantity to mend all existing trail damage would be difficult to spend efficiently. Following the initial activities the trails must be maintained on some annual or semi-annual basis to insure their durability over the long term. While, per mile, the cost of trail management is expected to decrease after the trails are maintained to standard, there will continue to be a need for funding over the long term. The benefits of a one-time infusion of funding would inevitably be temporary and could result in reduction in future funding.

It is anticipated that in areas outside of wilderness there will be a minimum of interruption to riding while trail work is conducted. Non-designated trails will be closed to riding and hiking immediately with an exception of trails

that are moving to a new alignment. In such cases the old trail will remain open pending the completion of the new route. Those trails being maintained in place will be open for riding while work is conducted unless the work presents unacceptable hazards to riders at which time the trail will be closed temporarily until those activities are complete.

Lusk Creek Bay Creek and Garden of the Gods Wilderness Areas will be closed seasonally until trail work is completed on the primary trail system in these wildernesses. These closures are designed to limit further impacts within wilderness until a system of trails is in place that will accommodate the use these areas receive. All three areas are being closed so that all are protected simultaneously. For instance, no primary trail is to be designated within the Bay Creek Wilderness yet it will be closed so that use displaced from Lusk Creek does not create adverse impacts.

Many variables exist that will make establishing and adhering to a schedule for trail activities impossible. In general however, primary trails within the Lusk Creek Wilderness will be treated first, followed by primary trails in Garden of the Gods and areas outside of wilderness, and then non-primary trail based upon need and priorities.

89. Several respondents thought that the proposed additional trailheads would be inadequate for the influx of use they would receive due to the cessation of cross-country riding. One respondent considered the 50 additional parking spaces proposed in the Preferred Alternative to be inconsistent with the investment being proposed in the trails themselves. Additionally, it was stated that the trailheads should be sized to accommodate the large truck/trailer combinations that many people are now using. Another respondent thought that the trailhead/parking lot used by rock climbers near Jackson Falls needed work.

Includes: 1275-696-02, 869-485-07, 134-016-02, 1176-671-02, 1759-793-07

RESPONSE: Forest managers anticipate some increase in use at trailheads due to the restriction on cross-country riding. That is why alternatives were developed identifying new locations for trailheads as well as upgrading and expanding existing facilities. At this time we do not anticipate that Forest Service provided facilities will become the most important trailheads within the analysis area. Instead it is anticipated that riders will access the system through one of the 240 intersections with a public road or from a trailhead located at a commercial equestrian camp. Several commercial campgrounds are currently permitted across the analysis area, offering day-use parking for a nominal fee. A survey conducted in May of 2005 revealed that as many as 200 additional trailers could be accommodated at these locations. The largest trailers currently used by many equestrians often contain campers, tack storage and stalls for horses all in one unit. It is anticipated that most

owners of these trailers will use commercial campgrounds rather than Forest service trailheads.

The Jackson Falls trailhead is overcrowded because climbers camp there in addition to trail users. The decision to construct camping facilities to reduce congestion at this facility is not a part of this project analysis or the Record of Decision.

90. One respondent mentioned that the trailhead for Burden Falls should not be considered suitable for equestrian use as it is the only such facility available for all users.

Includes: 1304-696-02

RESPONSE: The trailhead near Burden Falls is a small, undeveloped pull-off from the adjacent gravel road. It is too small to accommodate more than one or two horse trailers. It is possible that demand to use the facility is greater than what can be reasonably accommodated. This analysis contains no proposal to expand this facility or to restrict use at this site.

91. One respondent stated that if trail riders were forced to all begin at a few trailheads it will lead to increased impacts in the vicinity of those areas. Another thought that the trailheads would create unnecessary congestion and expense.

Includes: 137-017-03, 1137-665-07

RESPONSE: Forest managers are aware that there will be additional use of some trails that begin at equestrian trailheads. Thirteen of these trailheads will be linked by the primary trail system. The primary trail system will be graveled as necessary to withstand all-season use. We expect this increased level of trail maintenance will mitigate the additional impact of increased trail use.

Access to the designated trail system was a key part of the design of the overall trail system in the project area. We identified how users were currently accessing trails in the area. We analyzed numerous new locations for trailheads, and considered what a reasonable number of trail access points would be. Access to the trails in the project area is greatly facilitated by the public roads which cross through and intersect with the trails in many locations. Moreover, the equestrian campgrounds in the area are access points for the trails. Some equestrians will access trails through private land special use permits they obtain in the future, while others will use the expanded trailheads and parking areas. The issue of congestion at access points was foremost in mind as we surveyed the system. The ability to access the system was in tension with the potential adverse environmental effects

from over-developing a trail system, beyond what was sustainable and maintainable. Weighing management and administrative factors with reasonable opportunities to access trails, considering environmental effects, proved a complex undertaking. With the existing condition as a backdrop, the Forest has included a reasonably conservative number of trailheads and parking areas. If access proves to be a chronic problem over time, additional access points may be proposed for additional site specific analysis.

Within the analysis area very little federal funding has been invested in construction and maintenance of trailheads. The ability to ride cross-country for local residents and the private investment in equestrian camps has largely met the public's need for access. The restriction on cross country riding will change the present situation. We expect increased use from specific existing public or private trailheads. Additional trailheads and parking areas are being proposed to provide a wide variety of locations to access the trail system in an effort to reduce crowding at any one location. See also response to comment 89.

92. Several respondents questioned the need for additional trailheads either because day-use parking is currently available, or because the number of trailheads seems incommensurate with the proposed trail mileage. Includes: 1642-714-11, 925-540-08, 908-538-07

RESPONSE: The restriction on cross-country riding within the analysis area is expected to increase the need for trailhead parking facilities for horse trailers. Commercial equestrian camps are expected to remain the principal trailheads but other locations have been analyzed to provide additional parking in popular areas or to provide more choices in access points for riders. Several locations have been analyzed for trailhead construction. Trailheads could be developed at any or all of these locations at the discretion of the District Ranger. See also response to comments 89 and 91.

93. One respondent requested that the trailhead off of Pope County Road 100 across from the Circle B horse camp not be expanded. It was suggested that the proposed trailhead at Frank's Tract, off of Pope County Road 1628 be developed instead. Includes: 1424-722-01

RESPONSE: Both locations have been analyzed. At this time it is unclear if either area is necessary as a large amount of parking is available at nearby commercial equestrian camps.

94. One respondent expressed concerns that the proposed Raum Road parking area would invite additional unauthorized ATV use and that the area could develop a problem with refuse being dumped. Furthermore it was pointed out that the old road leading from there to the Rock House is in bad need of repair and that the private land boundary in the area has not been established by a reliable survey.
Includes: 452-325-01

RESPONSE: Observations across the Forest reveal that most unauthorized ATV use originates from adjacent private lands and these unauthorized users generally do not drive to trailheads to begin their rides. Dumping is a persistent problem on the National Forest. Trailheads have not been any more susceptible to this problem than have other areas of the Forest.

The old road bed to the Rock House Crossing will receive maintenance to mitigate the impacts associated with its use as a trail. Prior to construction the Forest Service will ensure that the parking lot and trail are located on public rather than private land.

95. One respondent inquired as to the availability of overnight camping at trailheads.
Includes: 107-001-06

RESPONSE: Trailheads are intended as a day-use facility only. The capacity will be limited and minimal facilities will be provided. Overnight camping will be prohibited at these sites. Overnight camping with stock is available at the commercial equestrian camps trailheads will not serve as an alternative to these private facilities.

96. Many people responded in favor of additional trail designation. Some felt that the proposed system did not contain enough miles of trail.

Numerous respondents requested that

- all trails currently used be retained,
- all trails in Alternative 3 be retained, or
- all user-created trails or old road beds existing at the time of the 1992 ALRMP be retained.

One respondent pointed out that the 1992 ALRMP allowed use on then-existing user-created trails and that an effort should have been made to identify and designate these routes. Respondents reasoned that trails should be left open to disperse use and alleviate crowding on the system, to lessen impacts on trails that will otherwise be heavily used, to allow access to more areas of scenic interest, and to allow access to adjacent private lands. One person advocated trails on both sides of streams, stating that the recreational experience available on each side is unique. Another respondent thought

that the proposal would benefit the commercial equestrian camps but would be detrimental to those wishing access to areas that would allow them to avoid crowds. Others were unconvinced that the user-created trails are detrimental to the health of the Forest, or that the DEIS adequately proved that the majority of the Forest is being damaged by equestrians. It was also stated that the access to interesting places they provide makes the Shawnee unique. One respondent pointed out that many of the non-system trails had been around for a long time and thus it is unfair not to include them into the system. One respondent believed that no action was necessary as horses have no effect on trails. Finally, one respondent thought that closing trails without notice to hikers was a misuse of Forest Service mission and regulations, while another thought that trails closed should be off-limits to all users rather than simply singling out equestrians.

Includes: 1407-712-08, 1160-669-04, 1321-711-01, 1158-669-02, 1162-669-06, 1429-727-01, 1135-665-05, 1286-691-08, 874-485-12, 1444-723-06, 1325-707-03, 103-001-02, 886-535-04, 1404-712-05, 763-337-45, 792-341-18, 1231-683-01, 1272-693-01, 1295-693-06, 104-001-03, 1739-787-05, 1190-672-08

RESPONSE: As discussed in the DEIS the Forest Service has determined that increased equestrian recreation is having an impact on the Forest. In the case of many resources the impacts are limited and local; erosion occurring on a steep section of trail, plants being trampled at the edges of a constantly muddy stretch, or siltation into a creek from a stream bank that has been ridden down where a trail enters a ford. Such incidents are not occurring on all of the Forest as, of course, most of the Forest lies between the trails. However, these impacts are frequent and widespread there are very few trail segments in the analysis area without some localized problem. Refer to response 123.

The Forest has discretion under NFMA and MUSYA to determine the appropriate uses of particular areas of the Forest. There is no legal requirement to provide trails to any particular site in the project area. Trails or areas may be closed as a result of adverse resource conditions. Public comments are polarized, both strongly for and against, additional trails. Literally hundreds of permutations of various trails to places in the project area were suggested over the course of developing the alternatives. The Forest analyzed a broad range of reasonable alternatives, and was not mandated by statute to provide any particular type or level of recreational access. The existing condition, created by years of increase use with low levels of management, greatly influenced the purpose and need, as well as the range and development of alternatives. User conflict is an ever-changing and difficult to evaluate area of scientific complexity, but was evaluated based upon the best available information, and was an important consideration in the analysis (*i.e.* location and development of trail options). Forest personnel walked every mile of user created trail in the project area that they knew of.

Each stock confinement area was individually assessed. Trailheads and parking areas were visited. To the extent practicable, the Forest spent time on the ground, doing field work to make sure modeling, inventories, surveys and other information were accurate and made sense. We listen to the public concerning their desires regarding trail locations, design, and mileage. Inventory and survey of user trails, soils analysis, plant inventories, biological assessments, and other studies were compiled in the interdisciplinary hard look at the effects of equestrian recreation. We have no evidence of scientific information that the agency overlooked or ignored in reaching its conclusion regarding the location of trails. Some will contest the amount and location based on their preferences or concerns, but the discretion as to where and how many trails was given by Congress to the agency

Research that has been conducted in various locations, including those of similar soil type have shown that impacts begin at very modest levels of use (DEIS, page 7). It takes very few users to create a new trail. Once created, new trails tend to experience some erosion and the site is incrementally and unnecessarily diminished. While some respondents have observed that through leaf fall and new plant growth the Forest has the capacity to mitigate such impact, operating a trail system in this manner is inconsistent with Forest Service policy (FSH 2309.18, 4.12b). Leaving the Forest available to cross-country travel all but guarantees additional user created trails will be found throughout the analysis area with impacts to adjacent resources.

Research has also shown that there are methods by which trail systems can be managed, even in the fine soils. In their study on the Hoosier National Forest Aust and Marion (2005) discovered that trail design and drainage were critical. Where stock is allowed, graveling the surface is an important tool to stop erosion. Most of the trails in the analysis area are not currently receiving such treatment. This decision will identify a system of trails in which to make investments for the work needed to sustain equestrian use.

Non-system trails will be closed to all users since it is the intent of closures that these trails disappear. They will not be maintained for use by hikers. The environmental impact statement that has been prepared regarding this decision has included public notification and opportunities for comment, for hikers as well as equestrians.

97. Several respondents thought that horses should be restricted to designated trails and that no new user-created trails should be allowed. They cited impacts from poorly located and designed user-created trails and degradation of the land caused by indiscriminate off-trail riding. One respondent stated that they supported the designation of additional trails and the discontinuation of cross-country riding.

Includes: 529-315-02, 711-542-01, 1479-733-02, 650-481-01, 23-023-01, 1704-792-02, 1680-791-02, 199-085-02, 1315-705-01

RESPONSE: It is a mission of the Shawnee National Forest to provide outdoor recreation of a type and at a level that is sustainable over the long term. It is the determination of the Trails Designation Project analysis that to ensure the long-term protection of soils, plants, water quality and other resources, including opportunities to trail ride on the National Forest, that equestrian use needs to be confined to a managed trail system.

98. Several respondents commented that it was inappropriate to restrict equestrians to designated trails, discontinuing their ability to ride either cross-country or on non-system trails. Others thought restrictions would be appropriate only inside of wilderness or near the commercial equestrian camps where use is higher. Another thought that only commercial use should be restricted while local residents be allowed to ride cross-country anywhere. Local residents, it was postulated, would not cause enough impact to be of concern. Another respondent believed that eliminating cross-country use would promote congestion on the designated trails.

Includes: 1552-779-01, 1154-666-06, 682-513-01, 1164-669-08, 926-541-02, 1078-617-12, 159-019-17, 1360-709-02, 837-478-02, 1283-691-05, 1212-676-07, 903-538-02, 653-484-01, 861-482-06, 1331-707-09, 1353-707-31, 1664-713-08, 1280-691-02, 709-540-01, 1127-665-01, 770-339-01, 1133-665-03, 1817-542-04, 1281-691-03

RESPONSE: Field observations confirm that variable amounts of equestrian related impacts are found across the analysis area. Lands closest to the commercial equestrian camps tend to have the greatest density of non-system trails and these tend to exhibit the highest degree of impact. Attempting to establish zones where cross-country riding is allowed outside of these areas is difficult. One factor is the ability to easily identify boundaries on the ground without excessive signing or other controls.

A new commercial equestrian camp would create the potential for new, non-system trails and increased use in that specific area.

Cross-country riding is being discontinued as described in the Record of Decision. No federal law or policy requires that the Shawnee National Forest allow cross country riding in the project area. The determination of the appropriate type and level of equestrian recreation in the project area is left to the discretion of the agency under NFMA and MUSYA. In large part, the Trails Designation Project is the consequence of environmental effects from cross country riding. Years of tension and polarization on this issue must be resolved. The Forest's resource professionals - biologists, soil scientists, recreation experts, botanist, and others spent a great deal of time on the

ground in the project area examining trails and seeing, first hand, the result of a low level of management and cross country riding. It is untenable to allow the status quo to continue. Equestrians may ride cross country in areas outside the project area and outside natural areas. Further site specific analysis will evaluate whether any management changes must be made in other areas of the Forest.

The Forest gave careful consideration to the possibilities of retaining some level of cross country riding. While many riders are careful and do practice Leave-No-Trace techniques the nature of the soils, location of Natural Areas and volume of riders may negate the effectiveness of those practices. Not all locations exhibit the same impacts but enough do to cause concern.

Without on the ground management action, the agency faces more years of unproductive litigation. It is time to move management out of the courtroom and onto the ground, restoring areas that have experienced the effects of overuse, and improving the quality of the recreation experience in these watersheds.

This Decision seeks to identify the best designated trail system available to the greatest number of riders, provide reasonable access to that system and, maintain the recreational opportunities on those trails over the long term. It is understood that some equestrians will now have to drive to a trailhead and that some portions of the analysis area will no longer be available for riding without a special use permit. Read also response to 96, 122, and 147.

99. Some respondents stated that too many trails were being proposed for designation. One recommended 122 miles or less. One respondent felt that incorporating most of the non system trails, such as in Alternative 3 (DEIS), was excessive. Another respondent thought that the proposed system of 234 miles was excessive because it is twice the trail density of the Hoosier National Forest in Indiana. One respondent stated that they would have supported the designation of additional miles of trail if the Forest Service had demonstrated the ability to maintain quality trails.

Includes: 1019-486-05, 1650-714-19, 1708-792-06, 1709-792-07

RESPONSE: The first step in maintaining quality trails is to have them designated so that they can receive maintenance. The trails selected for the designated system will provide a quality of recreational experience for equestrians and hikers. Numerous trails are in the vicinity of commercial equestrian camps resulting in a higher trail density than the average of the Shawnee National Forest. Although the system proposed for designation contains 234 miles, this is approximately half of what is currently used for cross-country riding. The Forest examined a reasonable range of alternatives with regard to the amount of trails, ranging from 191 to 263 miles of trails

plus cross country riding. Federal law and policy delegate the discretion to the Forest to determine the appropriate location and amount of trails in these watersheds. Based on the best available site specific information, including field observation of every mile of trail at issue here, the Forest designed a logical trail system that provides reasonable access but closes 165 miles of trails and protects the environment. Although some would prefer fewer miles of trails, no one has presented credible scientific evidence to the agency that would indicate that the number of miles of trails will cause irreversible, irreparable harm to forest resources. The EIS discloses the hard look taken to evaluate the impact the Preferred Alternative. We have no evidence of effects that were ignored or inadequately considered. The public comment opposed to the amount of trails expresses a preference, but provides no reasons or scientific information that would alter the disclosure of effects or tradeoffs between alternatives. The differences between various amounts of trails are clearly set forth in the EIS. Alternative 4 is markedly different from Alternative 3 in effects; this is the comparison sought by the comment and required by NEPA. Although we tried diligently, we have been unable to develop consensus on what the level of trails should be. The Forest has based its decision on the best information available.

100. Several respondents commented in support of trail maintenance and that the lack of maintenance rather than use by horses that has caused trail degradation. One supported giving top priority to maintaining trails in wilderness areas, rehabilitation of non-designated trails and signing and mapping of designated trails. This respondent also thought that the Shawnee should post maps and GPS data on its website.

Includes: 1208-676-03, 1595-705-28, 1186-672-04, 745-337-27, 647-478-01, 880-516-02, 618-449-01, 1521-752-04, 185-035-08, 168-023-04, 901-537-03, 905-538-04, 705-536-01, 502-375-01, 1243-685-04, 1744-706-04, 686-517-01, 223-099-03, 1549-776-01, 1505-749-01, 212-095-02, 49-049-01, 464-337-01

RESPONSE: Many trails in the analysis area have become difficult to use because their surfaces have become wide or rutted. It is the intention of this decision to identify from among these trails a system that will be designated and receive maintenance. Trails within wilderness will receive priority for trail maintenance. Some trails will be reconstructed along a different alignment than where they now are, while others will be maintained in place. Forest Service employees supervising trail activities have been receiving training and will continue to do so in the future.

Budget policy restricts the Forest's ability to expend funds on user-created trails, thus a maintenance-only option would be in conflict with this policy. Equally important, the user-created trails are often (from a sustainable resource management point of view), poorly located and lacking in both

design and proper construction. In many cases, expending maintenance funds on these existing user-created trails would be futile, a waste of scarce funds. The Forest walked every mile of user-created trail in the project area known to us, evaluating the condition, location, and status of these trails. Based on field observation, as well as consultation with other experts, it was determined that the response to the existing resource and recreation conditions required more than simply maintenance. Simply trying to maintain the existing user-created trails - even if there were ample time and money - would not meet the purpose of the project: sustainable resource management and a quality recreation experience for Forest visitors. In response to public comment, based on our field observation of resource conditions, and to initiate restoration of past effects, wilderness areas will receive attention first in the implementation of this decision.

Maps and signing are also discussed in response 64. Trail difficulty levels are listed for each trail on the Shawnee National Forest website and could be included on the maps. In general, most of the trails in the analysis area are listed as moderate.

101. One respondent thought that the DEIS misrepresented the conflicts that exist between horses and hikers on the Indian Kitchen Trail. Another stated that the nature of conflicts between users was not sufficiently documented in the DEIS and that it was wrong to restrict equestrians from certain areas without documenting the dangers or safety issues involved. Another respondent stated that there was no tally of how many user conflicts had been reported and that the Forest Service was discriminating against equestrians. Another questioned why it was not reported that the equestrians had conflicts with hikers, ATV users, or rappellers rather than the other way around. This respondent went on to predict that confining equestrians to designated trails will increase hiker/equestrian conflicts while it limits recreational opportunities.

Includes: 1044-486-30, 894-535-12, 148-019-06, 1770-711-12,

RESPONSE: During the scoping period and in response to the DEIS a number of comment letters were received from hikers who do not like sharing trails with horses. While the Indian Kitchen trail was not identified as the location of conflict, the trail was chosen for a hiker-only designation due to the number of hikers known to use the area. Some respondents mentioned conflicts between horses and hikers.

The Forest has monitored for user conflict and is aware that Indian Kitchen is one place that needs attention. The best available scientific information, Chilman 2005, indicates that the vast majority of visitors in this area are satisfied with their experience. User conflict is an ever-changing, difficult to evaluate area of great scientific complexity. This is particularly true since

hikers may avoid conflict with equestrians by hiking cross country to reach scenic areas of the Forest or hike in Natural Areas where no horse use is allowed. The Forest has monitored trails and used the Chilman study in analyzing the existing condition of trails and recreation in the project area. Given the highly contentious air surrounding recreation in the project area, it may well be that complete elimination of user conflict is impossible.

We are not aware of any credible user conflict information that has not been considered, nor does the comment suggest that any exists. Given existing resource conditions, ongoing litigation, and the strong public demand for action, we have no reasonable basis for delaying to gather additional user conflict information. Indeed, an important component of the FEIS Appendix B monitoring for this decision is further monitoring to identify user conflicts, if any. We do not expect hiking to substantially increase within the analysis area therefore we do not anticipate an increased opportunity for conflicts between trail users.

In the Jackson Falls area climbers expressed concern about the proximity of climbing pitches and the trail at the base of the bluffs. Realignment of the trail to mitigate this conflict are minor and not anticipated to significantly affect the quality of the equestrian experience.

Other responses related to this comment are found under 85 and 86.

102. One respondent expressed a desire for low standard trails to connect to private land.

Includes: 658-489-01

RESPONSE: The potential for addition of a limited number of trail segments to connect private lands to the designated trail system was considered in the analysis of effects in the EIS. Accordingly, the Selected Alternative contemplates the availability of special use permits for short connector segments. A maximum of 10 miles of trail was analyzed in each watershed (40 miles total) that could be allowed under special use permit. These short segments will normally have low use and their design and maintenance standards will be appropriate to mitigate resource impacts, *e.g.* none will be permitted in wilderness or natural areas. Site specific environmental analysis will be prepared prior to issuance of permits, including a No Action Alternative, so the public will have opportunity to be involved in this decision-making. No site specific proposal for a trail connection to private land is included in this EIS. No site specific proposal for trail connection to private land is authorized by this decision.

The 10 mile value analyzed in the EIS is not a commitment or obligation to provide this or any particular level of access from private land. It is a

maximum value assumed for purposes of cumulative effects analysis. It may well be that there are very applications for special use permits, and very few miles of connecting segments, given the numerous access points on public roads, campgrounds, and Forest Service trailheads and parking areas. The actual on the ground effect is not certain at this time, though, in an abundance of caution, the Forest considered a maximum of 10 miles per watershed for purposes of analysis in this EIS. The actual number of miles of connecting segments depends upon the applications received by the Forest and the outcome of site specific environmental analysis. At this time, it is not certain where or exactly how many connecting segments will finally be designated - that decision is deferred until the future, following additional environmental analysis.

Like all trails designated as part of the trail system, any short segments of trail that connect private land will be properly located, designed, and constructed. These trails must be maintained to standard, like any other. The environmental effects of connecting segments will be considered before a decision is made on any particular special use permit application. Environmental effects of these segments will be mitigated, as appropriate. As noted above, environmentally sensitive areas (*e.g.* wilderness, natural areas) are not available for any connector segments. Monitoring of the use of these short trail segments is part of the overall monitoring strategy in these watersheds.

103. Two respondents held that ATV use was incompatible with resource preservation and degraded the experience of other recreationists using the Forest. These respondents desired the cessation of all ATV use on the Forest both permitted and unauthorized.
Includes: 1618-705-51, 1752-706-12

RESPONSE: This Decision is focused on the designation of trails for hikers and equestrians within the analysis area and proposes no changes to current policies regarding use of ATVs on the Forest. This decision does not authorize any ATV use in the project area. The Forest Service has considerable discretion pursuant to NFMA and MUSYA to determine the appropriate type of recreational opportunities in particular areas of the National Forest. Chapter 1 describes the genesis of the purpose and need statement for this site specific analysis, and documents the Forest's rationale for not addressing ATV recreation proposals at this time. These reasonable determinations are ground in fact and analysis of existing recreation needs and demands. The Forest's process and consideration of ATV use is consistent with the agency's discretion.

See response 49 for cumulative effects of ATV use within the DEIS and ATV use in response 206.

104. One respondent stated that there are too few hiking trails on the Shawnee especially with the possibility of long scenic loops. This respondent felt that past requests for additional trails that would enhance recreation in the Shawnee National Forest had been ignored.

Includes: 1737-787-03, 1736-787-02

RESPONSE: Currently there are 24 miles of hiker-only trails within the Forest, many of which are loop trails or connect with other multiple user trails to form loops. This decision authorizes an additional 4 miles of hiker-only trails (an increase of nearly one-fourth). The Forest has considerable discretion under federal law to determine the amount and type of recreation in particular areas of the National Forests (including the amount and location of hiker trails). The Forest has listened to the public, analyzed new hiker trails, and responded by adding opportunities for hikers to improve their recreation experience. Trail maintenance and the limited demand for hiker-only trails, as well as the narrow focus of these single-purpose trails, are all factors that must be taken into consideration.

The designation of over 230 miles of additional trails and the signing and mapping of these trails will improve the loop trail opportunities and the quality of the recreational experience for both hikers and equestrians. Requests for additional trails have been addressed over the past several years in the Natural Area Trails Environmental Impact Statement (2003) and within this project analysis.

Read also response 85 for discussion of additional hiker-only trails within the Hidden Springs District.

105. Numerous respondents expressed reservations at seeing the Forest Plan trail density standards amended to increase the amount of designated trail in wilderness. Many felt that density standards were necessary to preserve wilderness character and to prevent unreasonable levels of trail density. Others felt that increasing the number of trails in wilderness might result in more equestrians choosing to ride there as opposed to other areas of the forest. One respondent requested that they be changed rather than eliminated.

Includes: 94-094-01, 1581-705-14, 1685-791-07, 1649-714-18, 1020-486-06, 1237-684-02, 619-450-01, 822-409-02, 1227-681-04, 1464-728-03

RESPONSE: The trail density standards described in the 1992 Forest Plan were not intended to limit equestrian access to wilderness. The Plan does specify that in wilderness the density of designated, system trails will average 1 mile of trail per square mile of wilderness, generally lower than what is

prescribed for other Management Areas. However, the Forest Plan averages this density across all wildernesses on the Forest with no prescribed maximum for any individual area. One wilderness could have five miles per square mile while others have none. Furthermore, the Plan acknowledges that equestrians will use an estimated 2.6 miles per square mile of existing old road bed, as well as an unknown quantity of existing, non-designated trails. Secondly, the Forest Plan authorizes cross country riding in wilderness providing it is not done with the intent or result of creating new, non-designated trails. In the presence of such a variety of access options setting a density standard for one type of trail would not limit the extent or frequency to which riders or hikers penetrated various portions of wilderness.

As presented in the 1992 Forest Plan the trail density standards relate only to the amount of trail that would be designated within the Wilderness Management prescription. Trail density standards are not mandated by federal law or policy. The density standards in the 1992 Plan have not contributed meaningfully to sustainable recreation management in the project area. Over time, the basis for establishing particular density values has been challenged, and now appears antiquated. Consequently, in recognition of their limited usefulness, the Shawnee National Forests like many other Forests is gradually moving from density standards to more effective and tailored measures to protect wilderness. There is no evidence that density standards have worked well in these watersheds, and the Forest is committed to using proper design and construction to effectively mitigate recreation effects. There is considerable evidence that proper trail design, location, and construction does effectively mitigate effects and achieve the goals underlying the density standards in the 1992 Plan.

The Trails Designation Project proposes specific actions to protect and enhance wilderness character by: 1) choosing a system of trails to designate that uses topographic and vegetative screening to preserve solitude, 2) eliminating redundant trails and four, five and six way trail junctions to decrease encounters and the appearance of development and 3) maintaining trails to a standard for the intended users while protecting resource values, including wilderness values, 4) closing non-designated trails and limiting the likelihood that new, non-designated trails will be created, 5) restricting group sizes in wilderness and relocating some substantially noticeable stock confinement areas. These measures will ensure that wilderness attributes are enhanced even though the designated trail system will exceed the 1992 Forest Plan standards

Read also responses 114 and 186.

106. One respondent thought that to meet resource standards and guidelines it would be better to reduce the size of confinement areas rather than relocate them. Relocating them out of sight would mean that horses would have to be left unattended which could be dangerous for the animal. Another respondent indicated that the confinement area for Sand Cave needed to be relocated. A third respondent thought that having a confinement area on both sides of Lusk Creek at the Rock House Crossing was unnecessary.

Includes: 732-337-14, 755-337-37, 1628-705-61

RESPONSE: Confinement areas adjacent to popular features in wilderness do allow equestrians to visit interesting sites while still keeping a close watch on their stock. Moving them out-of-sight is a way in which they can be made less apparent to other visitors. While they can be reduced to meet Forest Plan guidelines for bare area within filter strips of creeks much of their visual impact would remain. They are being moved to mitigate this visual impact. Equestrians concerned about the safety of animals left on highlines can take turns watching their horses, as is currently done at off-site areas such as Indian Kitchen. See also the response concerning visual management in NEPA. Additional discussion of visual resources are found within the DEIS pages 184-187.

The Forest has considerable discretion under NFMA and MUSYA to determine the proper amount and type of recreation that may occur on particular parts of the Shawnee National Forest. There is no legal requirement to provide any particular type of recreation support measure, e.g. stock confinement areas, in any particular area of the Forest. With regard to the stock confinement areas in the project area, the Forest has carefully considered the existing stopping areas and potential environmental effects from various alternatives regarding confinements. The Forest took a hard look at stock confinement area effects, including much on the ground survey and observation. Many, as suggested in the comments above, would seek more confinements while others would eliminate them entirely. Most people recognize that equestrian riders need areas along trails to pause and rest, and agree with properly located confinement areas. Based upon field observation, as well as the experience of other similarly situated Forests, the Forest determined that a reasonable number of minor, unobtrusive, properly located, designed, and constructed confinement areas would mitigate environmental effects of equestrian recreation in the project area. The location and number of confinements is within the agency's discretion under NFMA and MUSYA. The EIS documents the thorough analysis that underlines the decision to include a number of confinements, though nearly all are reduced in size, and some relocated to mitigate effects.

The confinement area at Sand Cave will be moved, though only slightly. It will connect with a trail that approaches from the south and will allow access

to Sand Cave via the existing trail near the base of the bluff line. The power-line right-of-way that had been suggested seemed to offer little advantage unless the confinement area was placed within the natural area. Doing so would however, raise concerns for the possible spread of non-native invasive species in the Natural Area and would precipitate the need for an additional trail from the tie-up to the cave. This confinement area will be within sight of the trail but, as it is outside of a wilderness area, the objectives for the management of visual quality are less stringent.

There are two confinement areas at the Rock House crossing. The area on the west side of the creek is above the bluffs and has been used by those wanting to stop for a rest or drop down to visit the Rock House on foot. The crossing at the Rock House has been closed for several years and so visitors approaching from the east would have to tie-off their animals at the confinement on that side of the creek if they wished to explore on foot. This confinement area on the east bank will be eliminated as it will no longer have a trail leading to it. The creek ford it served will be moved approximately one-half mile to the north and the trail moved with it. The Rock House itself will be a side trip along the trail on the west side of the creek. The existing confinement area on the west die of the creek will be moved up the hill to the west, where it can be better sustained on a site with deeper soils.

107. One respondent enquired as to whether non-primary trails near commercial equestrian camps would also be hardened to accommodate riding in wet-weather and freeze-thaw conditions.
Includes: 1599-705-32

RESPONSE: Non-primary trails may receive gravel to stabilize problem areas.

108. One respondent stated simply that equestrian use should be prohibited. Another stated that just as anglers and hunters have limits, so to should limits be established for equestrian use of the Forest. One respondent thought that equestrian access to the area should be greatly limited; another thought that restricted areas should be set aside for equestrians. One respondent requested that a daily limit of riders be established for each commercial equestrian camp as a way of limiting the total number of riders [*presumably in wilderness*]. Several other respondents believed that limiting equestrians in general was a good idea. Another respondent thought that 122 miles of trail (Alternative 4, DEIS) could be maintained if there was a limit on the amount of horse traffic. One respondent asked that we consider the long-term damage that horses are causing on the Forest and stated that options were available to serve equestrians and preserve resources.

Includes: 201-092-02, 405-278-01, 1198-679-01, 393-266-01, 1635-714-04, 190-057-02, 584-415-01, 76-076-01, 522-265-02, 532-320-02, 1413-717-02, 426-299-01

RESPONSE: Equestrian use of the analysis area predates the establishment of the national forest. As a recreational activity it is authorized on National Forest by law, by agency policy and by Forest Plan. The appropriateness of equestrian use is acknowledged in the in the Purpose and Need chapter of the DEIS (pages 9-11) and this proposal seeks to secure the long-term sustainability of this activity. The prohibition of equestrian use was an alternative that was eliminated from detailed study as discussed in the DEIS pages 39 and 40.

Although recreation is an acceptable multiple use on the National Forests, it must, like other uses, be sustainable, or managed in such a way that resources are not permanently impaired. The existing condition and recreation situation in the project area has caused much public concern, as well as litigation and court-ordered direction to the Forest. Congress delegated to the agency the discretion to determine the appropriate multiple uses of particular areas on the National Forests. Equestrian use is a long-standing, traditional use in the project area, but given the increase in use over the past 15 years or so, it is clear that it is a use that must be regulated to be sustainable. Existing conditions, monitoring, a court-led field trip, and counsel from other experts (including the Illinois Department of Natural Resources) all suggests that the existing management approach is not facilitating sustainable recreation. Neither NFMA, nor MUSYA or other applicable federal law dictates any particular use in any particular area; this is left to agency discretion. Time and events have overcome the paradigm in which the 1992 Plan was developed. Existing conditions, public comment, and lessons learned in previous lawsuits call for new management decisions to be made.

This Decision will restrict equestrians to designated trails and provide a system of trails where impacts will be mitigated. Equestrian use will be further limited in wilderness areas by prohibiting overnight camping. These measures are designed to provide adequate protection for adjacent resources.

109. Two respondents opposed any proposal to limit equestrian camping in wilderness. A third person asked if camping on forest service roads would be permitted in the future.

Includes: 817-391-08, 859-482-04, 106-001-05

RESPONSE: Camping with stock in wilderness areas will be prohibited. Confinement areas will not be designed for overnight camping, rather for short-term use while visiting area attractions. Outside of wilderness camping

with stock is allowed in most of the forest unless otherwise posted. Campsites should be located at least 100 yards from the bank of any perennial stream.

Given field observation of existing conditions and based upon counsel from other Forests and recreation experts, it was determined that camping with stock would not be compatible with resource objectives for the project area at this time. The existing condition and limited opportunity for providing additional camping areas (allowing stock to remain in areas for extended time periods) constrains the Forest in this regard. NFMA and MUSYA allow considerable discretion to the agency to identify those multiple use activities that will occur in particular areas of the Forest. In the case of camping with livestock, environmental as well as administrative concerns dictate that camping with stock not be allowed in the project area at this time. The demand for such recreation is low, and the investment in management to allow for this use is great, beyond the Forest's ability and means at this time. Other areas of the Forest (outside the project area) allow for camping with stock opportunities.

110. One respondent wanted to see reinforcement bar removed from the wilderness.

Includes: 181-035-04

RESPONSE: The rebar marks locations along trails at which measurements are taken as part of a research project being conducted by Southern Illinois University within the Lusk Creek Wilderness. With the designation of system trails any safety concerns with the marking of these research points should be mitigated. The rebar is minor, temporary, and unobtrusive and will help us better protect the wilderness. It will be removed at the end of the experiment and no evidence will remain of it having been in the wilderness.

111. One respondent thought that Lusk Creek should have additional crossings.

Includes: 1660-713-04

RESPONSE: Stream crossings have been selected to support the designated trail system described in the Record of Decision. Trails within the wilderness areas have been selected to provide opportunities for solitude and minimum development to enhance wilderness character.

Two additional crossings of Lusk Creek (in addition to the River to River designated crossing) were included in the March 2005 Court Order in recognition that the adverse effect of the crossings was very low relative to the great need for additional access. In this analysis the Forest has

considered may suggestions for Lusk Creek Crossings. Some want more crossings, others seek to eliminate all crossings. The fact that Lusk Creek itself (from stream bank to stream bank) is a designated Zoological Area, part of the Natural Area system, suggests that great care is in order in considering use and access to the area. The Forest took a hard look at the environmental effects, especially water quality and aquatic resources, in the analysis of Creek crossings. The Selected Alternative identified five additional crossings, in addition to the existing River to River crossing, for a total of six crossings. This decision provides reasonable access, but greatly constrains environmental effect. The seasonal closing of crossings protects lampreys. The Forest has taken reasonable approach to Lusk Creek crossings, given the existing condition of the watershed, high demand for recreation, ongoing litigation and threats of further contempt proceedings, and polarized public views on how the Zoological Area should be managed.

112. Two respondents thought that fees or a percentage of profits from equestrian outfitter/guide permits be earmarked for trail maintenance. Two others supported a user fee for equestrians through the use of bridal tags. One respondent added that the money should be used only for trail maintenance while the other thought that numbers could be controlled through the number of tags issued.

Includes: 209-094-09, 1248-685-09, 1414-717-03, 1748-706-08

RESPONSE: Fees collected from recreation special use permits are submitted to the United States Treasury. A portion of these fees (15%) is returned to the national forest of origin these funds can be used only for administration of permit rather than facility maintenance.

In the national forest system user fees such as bridal tags are associated with the Recreation Enhancement Act. The Forest's participation in a fee program is an administrative decision not being made at this time. Nor is the Forest planning to institute a permit system to reduce visitation. At this time the Forest does not have the information needed to establish such limits.

113. Several respondents commented that they supported the establishment of permanent trail crews on the Forest to accomplish the trail construction and maintenance.

Includes: 1524-752-07, 1214-676-09, 1222-680-03, 207-094-07, 1596-705-29

RESPONSE: Since the trails budget for the Shawnee National Forest varies from year to year, and since it must cover all aspects of trail planning, NEPA compliance and litigation, as well as maintenance and reconstruction it is unjustified to assume that funding will always be sufficient for a permanent trail crew. The Forest is however, hiring one full-time trails technician and

will increase the amount of work accomplished through contracting and the use of part time, seasonal employees.

114. Two respondents felt that trail density standards should be eliminated to allow trails in the locations that people want to ride.

Includes: 1365-709-07, 1211-676-06

RESPONSE: The purpose for the 1992 Forest Plan's trail density standards for wilderness has been largely misinterpreted. They established expectations for the amount of managed and maintained trail one would expect to find in wilderness. See response to 105 for a discussion on current designated trail density standards.

The Trails Designation Project Decision eliminates these standards, choosing rather to identify those trails necessary to meet recreation requirements consistent with wilderness management goals. In order to meet provide for the recreational purposes of wilderness it is necessary that additional trail be designated. Wilderness values will be protected and enhanced protected and enhanced by eliminating unnecessary junctions, using topographic and vegetative screening between trails, limiting group sizes and providing a variety of loop lengths. No doubt some interesting areas will not be featured on the new trail system in order that a natural, undeveloped appearance and opportunities for solitude be established and preserved.

115. Several respondents commented on how the Trails Designation Project could be implemented with an eye toward minimizing resource impacts or disrupting recreational opportunities. One respondent thought that trails designation could be staged, gradually increasing equestrian access as trail work is implemented, mitigation is proven successful and compliance with regulations regarding trail use is satisfactory. Another respondent did not believe that the Forest Service would be able to work on more than one wilderness area at a time and therefore should not seasonally close them all at the same time. Other respondents lacked confidence that the Forest Service had the necessary resources to implement the proposal. These respondents wished to see a schedule for when trails would be maintained and what trails would be closed while maintenance ensues and when the areas would be reopened.

Includes: 1710-792-07, 1763-711-05, 1317-707-01, 1067-617-01, 1436-721-05

RESPONSE: This comment does not challenge the analysis or decision, but rather suggests various ways in which the Forest can schedule its implementation of the decision. These suggestions are valuable and will be considered as part of the scheduling of the various actions involved in the decision. The comment does not, however, provide information that is

relevant to the disclosure of effects of the alternatives, or the trade-offs between them. Based upon public comment, hours of public meetings, and the lessons learned in previous lawsuits, we know that management action on the ground is needed to address recreation and resource conditions. The actions included in the Selected Alternative will be scheduled to expeditiously address the most urgently needed resource conditions. We value our neighbors, partners, and visitors and are concerned about disruption of recreation opportunities in this project area. We will schedule our work accordingly. It is important to remember, however, that 70 percent of the Forest area is not included within this decision and remains available for equestrian and other recreation.

Restriction of equestrian use to designated trails along with seasonal and wet-weather closures in wilderness is part of the Trail Designation Project Decision to protect resources while trail work is being completed. It is not anticipated that additional restriction of equestrians will be necessary to achieve our objective of protecting resource values after this project is completely implemented.

Outside of wilderness there should be minimal interruption to riding opportunities while trail work is completed. Non-designated trails will be closed to trail users immediately. . In cases of relocation the old trail will remain open until the new alignment is finished. Trails being maintained in place will remain open to trail users unless work presents safety hazards to riders. In that instance the trail will be closed temporarily until those activities are finished.

Lusk Creek, Bay Creek, and Garden of the Gods Wilderness Areas will be closed seasonally until trail work is completed on the primary trail system (DEIS, p 28). All three areas are being closed so that all are protected simultaneously. For instance, no primary trail is to be designated within the Bay Creek Wilderness yet it will be closed so that use displaced from Lusk Creek does not create adverse impacts.

Many variables exist that will make establishing and adhering to a schedule for trail activities impossible. In general however, primary trails within the Lusk Creek Wilderness will be reconstructed first, followed by primary trails in Garden of the Gods and areas outside of wilderness, and then non-primary trail based upon need and priorities.

116. Brushing in non-designated trails may deplete some areas of their small trees and brush.
Includes: 1811-545-18

RESPONSE: The Forest has gained considerable experience in managing trail use over the past three years. Whereas in the past some closed trails were extensively brushed to ensure they would not be used, this will not be necessary for trails closed under this decision. First, designated trails will be signed open, mapped and easily followed, therefore there will be little incentive for riders to use closed trails. Second, we worked collaboratively with the public to identify popular trails. Third, monitoring and years of experience with equestrians has proven that nearly all riders seek to abide by use restrictions, even voluntary ones. Finally, closed trails fade very quickly into the landscape in most instances with natural re-growth into the closed trail areas and leaf-fall in the autumn. Erosion and sediment is sharply reduced as trail use is ended and plant growth commences. If necessary, minor remedial action (*e.g.* erosion traps) to arrest degradation and begin site recovery, or accelerate it. Experience and monitoring has shown that ecological recovery begins in the first growing season after trail use ends and is well advanced within 3-5 years.

For these reasons, brushing of closed trails will be employed only on the first few feet of each junction between closed trail and designated trail. This minor level of cutting of common brush will occur over a large area over time and will not result in adverse effects on plant populations or plant and animal community diversity. Given the benefits associated with effective trail closure, the minor effect in placing brush on trails for one season is understandable. The overall context of this action is environmentally beneficial, which in many instances begins naturally and immediately after poorly located trails are closed and unused. Field observation indicates that even the higher levels of past brushing did not adversely affect the common plant species that are used to facilitate trail closure. These common species re-seed from adjacent sites and little observable effect is noticeable within two growing seasons. The use of small amounts of brush from the project area was considered in the EIS analysis.

117. Adding new trail crossings to candidate Wild and Scenic Rivers without new structure will degrade and impact these streams. There doesn't seem to be any analysis as to how this proposal might affect future wild and scenic river status.
Includes 1040-486-26, 1808-545-15

RESPONSE: Management activities within Wild and Scenic river corridors focus on effects to the Outstandingly Remarkable Values for each specific stream. Any trail or stream crossings within these corridors would be compatible with the identified recreational values of these creeks. Within the Trails Designation Project DEIS pages 156-159 effects to Candidate Wild and Scenic Rivers are discussed stating there would be no effect on the eligibility of the streams. The three streams that are potentially eligible for inclusion in

the National Wild and Scenic River System within the project are Bay, Big Grand Pierre and Lusk Creeks. All three contain segments classified as recreational though the segment of Lusk Creek within the Wilderness is scenic. In the Forest Plan Revision DEIS Appendix D (January 2005), Outstandingly Remarkable Values were identified for each stream which included horse-trail riding. Thus, stream segments affected by the decision will be protected so as to not impair the values for which they were identified. The EIS documents the hard look the Forest took on the potential effects on stream crossings, especially the eligible river segments. Mitigation will ensure that eligibility is not impaired. Field observations and experience (based in part on lessons learned from other Forest's work) indicate that equestrian stream crossings can be compatible with good, sustainable resource management. User-created, unmanaged crossings often have detrimental effect on streams.

118. Over 110 comments were received concerning specific trail segments the majority being those within the Lusk Creek Wilderness Area. A complete list of these comments and specific response are found in the project file. Includes -035-01,182-035-05, 461-334-01, 494-367-01,500-373-01, 547-326-09, 548-326-10, 550-326-12, 551-326-13, 552-326-14, 553-326-15, 554-326-16, 555-326-17, 556-326-18, 557-326-19,751-337-33754-337-36, 756-337-38, 757-377-39, 758-337-40, 760-337-42, 761-337-43, 776-341-02, 777-341-03, 779-341-05, 780-341-06, 782-341-08, 783-341-09, 786-341-12, 788-341-14, 790-341-16, 791-341-17, 794-341-20, 795-341-21, 832-472-05, 831-472-04, 833-472-06, 834-472-07, 835-472-08, 870-485-08871-485-09, 872-485-10,873-485-11, 912-538-11, 913-538-12, 918-539-03, 986-599-02,1068-617-02, 1070-617-04, 1071-617-05, 1076-617-10, 1125-663-11, 136-665-06, 1328-707-06, 1333-707-11, 1334-707-22, 1335-707-13, 1339-707-17, 1340-707-18, 1341-707-19, 1342-707-20, 1343-707-21, 1347-707-25, 1349-707-27, 1371-709-13, 1372-709-14, 1373-709-15, 1374-709-16, 1375-709-17, 1376-709-18, 1377-709-19, 1378-709-20, 1379-709-21, 1380-709-21, 1381-709-23, 1382-709-24, 1384-709-26, 1385-709-27, 1386-709-28, 1388-709-30, 1389-709-31, 1390-709-32,,1439-722-02, 1440-722-03, 1442-722-05,1566-793-01,1627-705-60, 1629-705-62,1754-793-02, 1755-793-03, 1756-793-04, 1758-793-06, 1780-711-22, 1781-711-23, 1783-711-25,,151-019-09-02, 151-019-09-04, 151-019-09-05 151-019-09-06, 151-019-09-07, 151-019-09-08, 151-019-09-09, 151-019-09-10, 151-019-09-11, 151-019-09-12, and 151-019-09-83.

RESPONSE: The selected trail system was modified in response to some of these comments. Many will create loop trails or add a segment of trail to improve the quality of this recreational opportunity on the Forest. Some additions were made to the trails in Alternative 2 to mitigate impacts to specific resources or private lands. See the Record of Decision for a more detailed description. In a project of this scale it is difficult to present all alternative trail systems. The Interdisciplinary Team presented a range of

alternatives designed to meet the Purpose and Need of the Trails Designation Project.

Trail segments were not selected for a number of reasons including the following

- crossed private land requiring the Forest Service to obtain an easement;
- grade was too steep to maintain or allow safe travel
- duplicates the function of another segment;
- connected the designated trail to private land;
- very little use of the trail segment
- some segments were outside of the project analysis area;
- need to close trail to improve solitude within wilderness areas;
- the effects of using some segments of trail would be analyzed as a special use permit application;
- potential impacts to State listed or Regional Forester Sensitive species;
- new trail alignment will replace the existing trail segment while still allowing access to a specific area;
- was within a Natural Area; and
- reduce trespass on private lands.

Resource Management

119. We received statements of opinion related the preference of one alternative or another, ranging from praise to criticism. In addition, respondents expressed reasons why certain alternatives would accomplish various goals or objectives. We have summarized the general reasons for support of each alternative below:

- Alternative 1 would provide the greatest opportunity for equestrian recreation. There is no need for change or action. The logical thing to do would be to keep the 92 plan in place and implement all the proposed plans that are discussed in the plan.
- Alternative 2 provides a good balance of meeting the recreational needs of stakeholders and protecting resources. We commend the elimination cross-country riding, partnering with stakeholder groups, and educating forest visitors to help reduce environmental impacts.
- Alternative 3 is the best choice because it allows the maximum public recreational use of the forest and according to your analysis would only produce minimal to undetectable cumulative effects to the soil, water resources and aquatic life. Most of the user created trails would become designated, marked, and maintained, especially where equestrian traffic is highest, near the horse campgrounds.
- Alternative 4 provides the most protection to the resource, including the best protection for natural areas and wilderness, while still providing an excellent system of trails for hiker and equestrian use.
Includes: 5-5-1, 47-47-1, 61-61-1, 99-99-1, 194-72-2, 204-94-4, 406-279-1, 467-340-1, 521-262-3, 527-308-2, 596-427-1, 631-462-1, 706-537-1, 810-389-3, 821-401-2, 1080-619-1, 1170-670-1, 1196-677-1, 1199-680-1, 1200-681-1, 1220-679-2, 1236-684-1, 1256-686-5, 1264-688-1, 1370-709-12, 1408-714-1, 1411-717-1, 1412-718-1, 1460-725-3, 1487-736-1, 1569-705-2, 1572-705-5, 1598-705-31, 1644-714-13.

RESPONSE: Many people wrote in and voiced an opinion in clear support or opposition to one or more of the alternatives presented in the DEIS. The alternatives were structured to present a range of management options and display the effects of each proposed management scenario. We carefully considered the comments and made adjustments in some areas to improve our analysis. The Selected Alternative was modified in response to comments as stated in the Record of Decision under the discussion and rationale for the Selected Alternative.

120. Compliments for the thorough study to produce the DEIS for trails designation on the east side of the forest. I support the FS proposal to have horses allowed on designated mapped trails including incorporation of the some current non-system trails and the closure of others. Equestrian use on a well planned, designed, constructed, maintained and monitored trail system should protect the natural values which all user groups expect when visiting our Forest. Action is needed now to preserve the forest for the enjoyment of all users. Because of the degradation of existing trails, the formation of numerous illegal made trails and erosion has caused damage to plants, animals and streams. Preserve natural resources within the wilderness areas while making accessible the pleasures of riding through the beauty of the Forest.

Includes: 1-1-1, 2-2-1, 4-4-1, 215-97-2, 382-255-1, 388-261-1, 440-313-1, 764-337-46, 771-340-2, 1087-619-2, 1173-670-4, 1240-685-1, 1250-685-11, 1252-686-1, 1497-743-1, 1500-746-1, 1529-756-1, 1530-757-1, 1547-774-1, 1550-777-1, 1633-714-2, 1687-791-10, 1740-787-6, 1741-788-2, 1745-706-5.

RESPONSE: The Trails Designation Project is the culmination of several years' effort on the part of the Forest and our interested publics. This analysis will lead to improved management of our natural resources and improved opportunities for quality recreational experiences.

Years of experience in dealing with equestrian issues on the Forest as well as the recent public comment show that the public is in favor of allowing equestrian recreation on the Forest, but expects resource protection. This decision takes into account existing condition and lessons learned, as well as the best scientific information available and examples of management actions that have been successful elsewhere under similar conditions. The limitation of equestrian use to trails, as well as trail location and amount, represent an overall balance or compromise between competing Forest uses. Resource protection, however, will not be compromised.

Many people, like the comment above, wrote of their support for this action, and we appreciate this support and encouragement. Others seeking more trails, fewer trails or no trails remain unhappy. The process used to identify and evaluate trails and their effects is sound. No one has brought evidence of effects that have not been analyzed and disclosed. Nor has anyone provided a compelling reason that the designated trail system will not provide a reasonable recreation experience. The public and agency are fully informed concerning the tradeoffs and effects of a reasonable range of alternatives to meet the agency's goals (purpose and need). Our primary goal in this analysis and decision-making has been sustainable resource management.

121. Local property owners are being lumped in with the commercial use riders. We suggest you concentrate on the commercial use areas and leave the local people's trails alone.

Includes: 14-14-1 and 1319-709-1.

RESPONSE: It is true that there are differences in use patterns between commercial use and local riders. However, these uses are mixed together in most of the analysis area. It is important to manage horse-use as a single use and not differentiate between commercial and local use. Different rules for each type of trail user would present a complex management situation and be confusing to our publics. In implementing the court-ordered settlement agreement we have found that commercial users will often trailer to trailheads to avoid being managed under that court order. Therefore, the proposed plans manage all horse use similarly and do not attempt to differentiate among user-types. Effects to the resource are similar whether from local or commercial trail users, though the location of use may vary.

122. Action is needed now to preserve the forest for the enjoyment of all users. Because of the degradation of existing trails, the formation of numerous illegal made trails and erosion has caused damage to plants, animals and streams. Preserve natural resources within the wilderness areas while making accessible the pleasures of riding through the beauty of the Forest.

Includes: 87-619-02, 388-261-01, 660-491-110, 1173-670-04, 1497-743-01, 1500-746-01, 1529-756-01, 1547-774-01, 1550-777-01.

RESPONSE: We appreciate all of the interest expressed in the need to preserve and protect Forest resources. We acknowledge that the current resource conditions need to be enhanced to ensure resource protection while at the same time improving the opportunity for an outstanding recreational experience.

One of the main purposes of this project is to provide a broad range of enjoyable recreation opportunities and experiences which include: wilderness use, hunting and fishing, forest scenery viewing, hiking, camping and horseback riding. We have no wish to detract from your enjoyment of the Forest; however, one result of the extensive network of unmaintained non-system trails presently in place was a poor recreational experience for many trail users. The lack of signs on non-system trails and accurate maps, as well as inconsistent trail conditions made use of the forest's trail and unpleasant experience for many forest visitors. People unfamiliar with the area often get lost or frustrated in the maze of system and non-system trails. In an attempt to aid users, several unauthorized methods of signing have appeared, including the unsightly practice of spraying paint on trees and

rocks. Trail-surface conditions can be seasonally muddy and difficult to traverse for both hikers and equestrians.

In order for trails to be maintained with public money, trails must be designated as part of the Forest's system of trails. Designation indicates the Forest has reviewed their function and sustainability and has made a conscious decision to invest public resources in their maintenance.

123. A single recreation activity should not destroy the land on which it occurs or ruin the enjoyment for others. It seems like 95% of equestrian people I talk with have been and are willing to abide by a good trail design plan.

Includes: 392-265-1, 636-467-1, 718-330-2, 997-599-5, 1531-758-1, 1532-759-1, 1534-761-1, 1548-775-1.

RESPONSE: It is true that cross-country horse use can have an impact on the soils found within the project area. The selected alternative will limit these impacts to the designated trail system. The addition of hiker only trails to many popular areas should reduce user conflicts.

Monitoring and years of talking with the public, including field trips and field monitoring work support the statement above that equestrians generally are willing to abide by use restrictions. This is very clearly seen, for example, in the voluntary closure in the Saltpeter Cave area. Equestrians have abided by the Forest's request for their cooperation with favorable environmental results. Additionally compliance with the natural area closures has been very good and these areas have responded very well to the decrease in use. Resource conditions have improved substantially in Jackson Hole, Jackson Hollow and other natural areas where equestrian use was prohibited.

We worked collaboratively with the public to identify trails and areas that they wished to access. Balancing environmental effects and the needs of other Forest users, the Forest developed options for recreation access. The action alternatives will all improve resource conditions relative to existing conditions (No Action Alternative). There is every reason to believe that the majority of equestrians will honor the restriction to designated trails. A well marked, mapped trail system is in everyone's interest, both hikers and equestrians.

124. Northern Illinois never has advertisements to visit the Shawnee because you don't want us and your policies show.

Includes: 531-319-02.

RESPONSE: Information on recreation and other activities on public lands managed by the Forest Service can be found by all on www.fs.fed.us. The Forest provides visitor information in a number of different forums though does not usually advertise in any media.

125. Every time there is a change in the plan there are more restrictions on the horseback riders. Designated trails and seasonal closure are the next steps toward eliminating horseback riding in the Forest.
Includes: 112-1-11, 671-502-1, 881-516-3, 1163-669-7, 1401-712-2, 1406-712-7, 1427-725-1, 1450-724-2, 1459-725-2, 1671-713-15.

RESPONSE: With the increase in equestrian use that we have experienced in the last ten to fifteen years, the logical ways to limit resource impacts are by regulating equestrian use. However, the increased regulation is designed to ensure that resources are protected. Our goal (as set forth in the purpose and need) is sustainable multiple use management. This includes recreation that does not degrade forest resources. The existing resource conditions have generated great concern among many in the public, the Federal District Court for the Southern District of Illinois, the Illinois Department of Natural Resources and the Forest. We have noted these concerns and developed a balanced decision to arrest resource degradation while at the same time providing the quality recreation the public demands.

From the public comment received it is clear that Forest users want better quality trails and less user conflict. The National Forest management Act and the Multiple Use Sustained Yield Act provide the agency with considerable discretion in regulating uses of particular areas to protect resources of the National Forests. This is particularly true where measures are needed to mitigate threats to resource conditions to avoid future, more drastic emergency measures. The reasons for designated trails and seasonal closures are documented in the FEIS on pages 60-65 and 216-222 , respectively. The need for regulations and restrictions on equestrian use is presented throughout the document. The purpose and need (pp 10-12 of the FEIS) clearly displays the need to provide for high quality recreation and protect the resources that are important to all users.

126. Neither scientific evidence nor peer review is listed as part of the IDNR “surveillance report”. This report lacks the scientific evidence necessary to be used as a basis for any action.
Includes: 724-337-6 and 726-337-8.

RESPONSE: The report, Lusk Creek, A Surveillance Report (IDNR 1999), was a document produced by the State of Illinois to display the impacts of equestrian use of State lands that are adjacent to the project area. These

impacts are similar to those reported by our resource specialists. The report has scientific credibility.

There is no evidence in the comment or otherwise that impinges upon the credibility or correctness of the findings in the 1999 report. Nevertheless, we also note that this report is but one piece of evidence assessed by the Forest over years of planning and decision-making concerning equestrian recreation on the Forest. Our own monitoring, field observations, user survey (Chilman, 2005), consultations with regional recreation experts, and the study of other Forests' work have also informed this decision. This comment suggests that the 1999 Illinois Department of Natural Resource report somehow unduly influenced the agency, but is not in fact the case. The report was considered, along with hundreds of other reports, consultations, scientific articles and data sources during the development of the FEIS.

127. It is increasingly felt that the FS is so mired in studying and analyzing projects that it rarely accomplishes anything on the ground.
Includes: 685-516-1, 1131-669-1, 1161-669-5, 1165-669-9.

RESPONSE: It is true that environmental documentation can divert time and money that could be spent on the ground. However, we are required to complete a thorough analysis, as is presented in the FEIS, to comply with the National Environmental Policy Act of 1969, and other applicable federal laws. This analysis and comment process is an important step toward making rational decisions about land management.

Soliciting, understanding, and responding to public comment is also an important part of the decision-making process. The Forest has made an extra-ordinary effort to understand public views on how recreation in the project area should be managed. This is a complex task, given the contentious nature of the equestrian use of the area, years of litigation and multiple court orders, and deep and abiding mistrust among user-groups. The Forest has worked collaboratively with the public, received many good comments and suggestions, but it appears that no consensus has been achieved. Comprehensive, thorough analysis and meaningful public involvement have taken time and much energy. It is the public interest for the Forest to do a diligent, thorough job of considering the effects of its management proposals.

128. If trails had been maintained during the past 2 decades, we would not be in the present situation.
Includes: 1277-698-1, 1646-714-15.

RESPONSE: Many of the trails discussed in the DEIS are created by cross-country use and are not maintained under current Forest Service policy to allow for unconfined recreation. The low level of management is a trade-off with allowing unrestricted equestrian access in the four watersheds. With very few equestrians, this made sense, as the effects of riding quickly faded as a result of natural processes. With an increase in use, the effects have likewise escalated and compounded over the years to create the existing resource condition. Maintenance of poorly located trails, lacking in proper design and construction, is futile and often a waste of effort. This decision properly locates trails and ensures they are designed and constructed to standard. Maintenance will be effective as the trails have more resilience, given their location and construction. Money and resources are not available to maintain all user-created trails. Simply maintaining the user created trails would not meet the purpose and need which is to address these concerns as outlined on pages 10-12 of the FEIS.

129. Is work only to be done in the Hidden Springs RD? Is there a separate plan for the rest of the forest?
Includes: 6-6-1.

RESPONSE: As explained in the purpose and need for the proposed project, the current analysis is focused on the four watersheds, which are all on the Hidden Springs Ranger District. These watersheds encompass most of the commercial horse use and are thus the current focus. Trail planning on a watershed basis for the entire Forest is scheduled to occur over the next 10 or 15 years.

130. 1500-2500 people attend the 9 Day Trail Ride near One Horse Gap. If this event were to occur during nine rainy days it could be a disaster for the Forest and its users.
Includes: 210-094-10, 1073-617-7.

RESPONSE: The Nine-Day Trail Ride is a recreation event that is covered under a special use permit and is an event specific analysis that is not a part of this proposal. The Nine-Day Trail Ride proposal is not before the agency, and this decision does not authorize a special use permit for this or any other event. Special equestrian events that are reasonably foreseeable (such as the 9-day ride) were included in the cumulative effects analysis for this decision. However, the implementation of this decision will include a trail system in the area of that event that includes some primary (wet-weather) trails. It is true that impacts from the event are greater when the trails are muddy. However past experience has shown us that when the trails are muddy attendance tends to be lower and many of those attending this event do not

ride the trails. The event occurs in August, a usually a dry month, and it is of relatively short duration.

131. All parties have to get together at a meeting and talk about a plan that will work for all concerned. Community based collaboration seems to be missing from the document. Stake-holder concerns are nibbled on, and are some instances just ignored.

Includes: 55-055-1, 1183-672-1.

RESPONSE: The current document is the result of much community-based collaboration. Through the Trails Master Planning Project, Natural Area Trails Project, and our current efforts we have heard much input from interested parties. Many of the proposed measures are similar to a settlement agreement that resulted from a lawsuit discussed on pages 5 and 6 of the DEIS. The federal court involvement in this issue has moved resource management forward and helped give the equestrian campgrounds some financial security. We are working with the campgrounds and the environmental community to develop a trail system that accomplishes resource protection and provides a quality recreational opportunity. We will continue to listen to all groups and incorporate as many suggestions as possible and protect resources while providing outstanding opportunities for recreation. More discussion of friends and partnerships are found in response 62.

132. We have a duty to future generations to protect and preserve our unique and special natural resources for them to appreciate and enjoy just as we do. Equestrian use of the Forest needs to be managed to ensure that my grandkids have the opportunity to ride through the scenic wonders of southern Illinois.

Let's not allow this to become a case of yet another wild area being "loved to death" by a recreation use plan that does not manage for long-term eco health. Many of our members are local horse riders who remember what special scenic areas and trails were like before the forest was overrun. I implore you to restrict horses to designated trails so that the fragile environment of the Forest is protected.

Includes: 24-24-1, 28-28-1, 29-29-1, 34-34-1, 41-41-1, 48-48-1, 64-64-1, 71-71-1, 79-79-1, 128-13-2, 136-17-2, 162-22-2, 193-68-2, 215-97-2, 369-242-1, 383-256-1, 385-258-1, 440-313-1, 609-440-1, 625-456-1, 630-461-1, 667-498-1, 771-340-2, 764-337-46, 879-511-2, 1124-662-1, 1494-740-1, 1495-741-1, 1530-757-1, 1633-714-2, 1742-706-2.

RESPONSE: Our planning is done with the long-term protection of natural resources and to provide quality recreational opportunity as the basis for the

proposed action. These two issues are not mutually exclusive but instead are very much intertwined.

133. Let's not allow this to become a case of yet another wild area being "loved to death" by a recreation use plan that does not manage for long-term eco health. Many of our members are local horse riders who remember what special scenic areas and trails were like before the forest was overrun. I implore you to restrict horses to designated trails so that the fragile environment of the Forest is protected.

Includes: 24-24-1, 29-29-1, 34-034-01, 41-041-01, 64-064-01, 71-071-01, 79-079-01, 128-013-02, 136-017-02, 162-022-02, 193-068-02, 369-242-01, 440-313-01, 764-337-46, 771-340-02, 1495-741-01, 1530-757-01, 1633-714-02, 1742-706-02.

RESPONSE: The EIS presents four alternatives for managing equestrian/hiker trails within the four watershed project area. Each has a varying degree of restriction and regulation on equestrian use. The preservation and conservation of Forest resources through the restriction of horse-use is thoroughly discussed throughout the document. We appreciate all of the interest expressed in natural resource management.

134. In Chapter 3, Items D-F you contradict the restriction to designated trails by stating "dispersed use is less harmful to the environment and resources. Designated trails need to be only within a few mile radii of the horse camps.

Includes: 1767-711-09.

RESPONSE: The statement quoted in the comment does not contradict the limitation of equestrian recreation to designated trails. This statement was made in the context of availability of access to the trail system. Dispersal of use on the trail system will reduce congestion at trailheads and access points. This statement about dispersal in accessing the trail system does not support unrestricted, random creation (not construction or design) of trails by users. The effects of cross country riding are seen in the degraded existing resource condition in some parts of the project area. Under the 1992 Plan (cross-country riding opportunities), equestrians have not dispersed their use, but concentrated it onto user-created trails. With only a few equestrian riders, as was seen 20 years ago, dispersal was not a key issue. The effects of a few riders easily fade away each year. The increase in use in the past decade has made dispersal of use an issue.

The EIS discusses the reasons for restricting horses to designated trails within the Forest on pages 217-222. The environmental effects of the increase in non-system (user-created) trails are the greatest resource impact

that has been observed from allowing of cross-country riding. These trails have increased throughout the four watershed project area, though most significantly in the vicinity of the private horse campgrounds. There are many more local riders today than there were fifteen years ago. The potential for increased use in the project area, coupled with the trend of increasing non-system trails miles, makes designated trails a prudent management action.

135. Comments concern funding for trails reconstruction and maintenance. Includes: 1323-713-1, 1593-705-26, 1597-705-30.

RESPONSE: Federal budgeting is a multi-year process. Adequate funds are available to implement the project in the current budget. The Forest has made changes to priorities over the past few years with more of the Forest budget being directed toward recreation, especially trails management. Implementation of the trails designation process will be phased in taking several years to complete. The contingency plan asked for is already built into the planning with the longest timeframes representing the lowest funding scenario. The response to comment 62 are related to use of partnership and volunteers.

Soil and Watershed Resources

136. Some people would like to see the confinement areas stay in their current location and condition. One individual pointed out that these areas occupy less than 1% of the project area. Others would like hitching posts or tie lines a short distance away from the areas of interest, or within sight of the attraction because they do not want to leave their animals or in case of emergency.

Includes: 217-098-03, 652-483-01, 784-341-10, 803-376-03, 814-391-05, 899-536-02, 920-540-03, 930-541-06, 1147-666-09, 1453-724-05, 1470-729-03, 1507-749-03, 1676-779-03, 1778-711-20, 1818-542-05.

RESPONSE: Stock-confinement areas were addressed on page 67-69 of the DEIS. Some of the confinement areas, in their current location and condition are located near a stream and exceed Forest Plan Standards and Guidelines for bare soil exposure in the riparian filter strip. We addressed resource concerns and Forest Plan compliance by moving a few of the areas out of the riparian filter strip and proposing to move them to the next closest, suitable location. We proposed in Alternative 2 to relocate five of the 22 stock-confinement areas. Many would be reduced in size but remain in their current location. Most of the stock-confinement areas that are proposed to be relocated would be moved to a more suitable site (flat, out of the middle of the trail, out of the riparian filter strip) only a couple hundred yards away from the existing site. In the case of the stock-confinement area at Saltpeter cave, the narrow riparian area, bluffs, and steep topography did not lend itself to an alternative location within sight. At the sites that would be further away, someone from a party may need to stay with the animals until the group returns. Overall, we feel that the relocated stock-confinement area, in combination with the proposed trail east of Saltpeter Cave would allow equestrians and hikers to enjoy the sites while better protecting riparian resources at Saltpeter Cave. These areas may only total about 3.5 acres across the four-watershed project area, or less than 1% of the Forest area, but this is included only for reference, and should not be the focus of this discussion.

137. Some respondents see the need for confinement areas, but would like to reduce the number of tie-up locations in the wilderness. One respondent would like to see only 2 tie-up areas in the pines in the Lusk Creek Wilderness and no high lines. Several individuals would like to eliminate the Saltpeter Cave and Natural Bridge confinement areas. Another respondent supports a reduction of confinement areas in wilderness from 9 down to 4 (proposed in Alt. 2). Some did not think that confinement areas are necessary in the wilderness, while others see permanent highlines as inappropriate.

Includes: 1582-705-15, 1601-705-34, 1729-792-27, 1801-545-08

RESPONSE: The Forest engaged in a thorough and comprehensive review of the existing approximately 25 user-created stock confinement areas. The Forest visited and evaluated, on the ground, the location, status, size, and demand for each of these existing areas. In reviewing these areas, soil and water effects (in addition to visual and wilderness character) were of paramount concern. Consultation with other resource experts informed this analysis. Table 7 page 24 in the FEIS indicates that most of these areas will be modified to provide better environmental protection. Based on field observation, consultation and the best scientific information available, the Forest concluded that four confinements are necessary to meet the minimum requirement for administration of Lusk Creek Wilderness Area. Other means of preventing environmental harm (*e.g.* personal tethering) were considered, but found impractical or less effective. The location of these four areas is optimal, and is unobtrusive in the Wilderness (FEIS, 145). Resource condition (including soil and water and other resources, assessed by interdisciplinary field evaluation) and user conflicts were considered. The natural appearance and visual effects, including mitigation, were of key importance to this decision. We conferred with regional experts, as well as recreation experts on other Forests, seeking a minimum level of management that would allow recreation access but preserve the wilderness.

The Forest also analyzed elimination of equestrian access to the wilderness areas in the project area altogether (which would of course make stock confinements in wilderness unnecessary). Likewise, elimination of the 4 stock confinements in Lusk Creek is tantamount to eliminating a quality equestrian recreation opportunity in this Wilderness Area. Rather than take the drastic measure of eliminating these stock confinements, the Forest determined what was minimally necessary, reducing and relocating the existing areas. The record documents that the Selected Alternative will improve environmental conditions compared with the existing situation (No Action Alternative). The record demonstrates that the Forest took a hard look at this complex and contentious issue to ensure compliance with both the spirit and letter of the Wilderness Act.

In general, the Forest has considerable discretion to determine the appropriate uses of the Forest. The stock confinements modified by this decision, a part of a designated trail system, will provide sustainable recreation access with very low level of environmental effect. The trade-offs between greater and lesser amounts of stock confinements are disclosed in the FEIS.

Public comment indicates that people understand that stock confinements are necessary, but there is debate over the size, location of these areas. We have listened to opposing views on this issue, and made a reasonable

decision, given existing conditions and recreation needs. We discussed on page 67 of the DEIS that we designed the proposed stock-confinement areas to minimize the negative effects of tying up animals. We recognize the fact that equestrians will need to get off their animals from time to time. Further information on how the Forest is addressing structures within wilderness can be found in response 179. Additional discussion concerning stock-confinement areas is found under response 106.

138. Several individuals would like to eliminate the Saltpeter Cave and Natural Bridge confinement areas. Some would like to see confinement areas within sight of the attraction regardless of whether the confinement area is in a riparian area. To control erosion, several people would like the stock-confinement areas to be located away from the attraction, streams, floodplains, and fragile habitats. Several respondents suggested relocating them to pine stands.

Some do not think that equestrians would use the proposed relocation of the Saltpeter Cave and Natural Bridge confinement area and would cause harm by tying to trees. They also believe that there is little runoff into Lusk Creek from the existing confinement area. One respondent mentioned that the areas are already compacted, and this has not caused any riparian damage so it is not a good idea to move them.

Includes: 122-006-10, 153-019-11, 170-023-06, 224-099-04, 868-485-06, 911-538-10, 920-540-03, 1024-486-10, 1145-665-15, 1180-671-06, 1213-676-08, 1367-709-09, 1522-752-05, 1600-705-33, 1640-714-09, 1686-791-09, 1772-711-14.

RESPONSE:

In determining proposed changes to the size, number, and location of the stock-confinement area facilities, we considered the distance to the attraction, riparian filter strips, floodplains etc. It is true that the areas that we are proposing to relocate are already compacted. For example, the confinement area at Saltpeter Cave is currently about 0.2 acres of bare compacted soil adjacent to Lusk Creek. There is a bit of a natural levee along the edge of the bank, and the runoff from the stock-confinement area does not drain directly into the creek unless the water overflows the bank. The bare area is larger, however, than Forest Plan Standards and Guidelines allow for the protection of riparian resources. The confinement of stock has damaged this portion of the riparian area, though not irreparably (as discussed on page 67-69 of the DEIS).

Although these are small areas of riparian filter strip that are damaged, the benefit of allowing equestrians to confine their animals directly adjacent to Saltpeter Cave is not worth the visual damage or damage to the riparian resources. The proposal in Alternative 2 should satisfy the desire of both

equestrians and hikers to view Saltpeter Cave from the trail and explore on foot, while following Forest Plan Standards and Guidelines and protecting riparian habitats.

Outside of wilderness, we propose to reduce the size, but still keep a few existing stock-confinement areas in the riparian filter strip. This was proposed because reducing the areas would bring them into compliance with Forest Plan Standards, and most of them are located at trail junctions, not scenic attractions. We scouted for alternative locations, but where suitable alternatives were not available nearby, we decided to use the existing locations in non-wilderness.

139. Some respondents would like to see confinement areas, including hitching racks or highlines at trailheads for hiking into Natural Areas. One respondent particularly mentioned Jackson Hole NA.
Includes: 173-023-09, 910-538-09

RESPONSE: We are proposing a stock-confinement area with highlines at Jackson Hole, Owl Bluff, Garden of the Gods, Sand Cave, Indian Kitchen, and Crow Knob. These areas would all serve as acceptable locations to tie a horse before entering a Natural Area on foot. The interdisciplinary team diligently considered the existing stock confinement areas and the addition of other such areas in the context of the location of designated trails. The areas chosen were determined by many factors, but sustainable resource management was an over-arching concern. We cannot allow deteriorating resource conditions, or plan for new confinements that we cannot maintain, or that might have unacceptable, irreparable adverse effects on soil, water, visual, plant, wildlife or other resources. An analysis of the effects of this has been added on page 75-77 in the FEIS.

140. Some respondents would like to see a limit of 10 animals at each stock-confinement area in the wilderness. One person mentioned limiting the confinement areas outside of wilderness to 20 animals. Others disagree with a proposed limit of riders in the wilderness.
Includes: 373-246-01, 524-280-02, 578-409-01, 818-397-02, 827-449-02, 1171-670-02, 1226-681-03, 1238-684-03, 1246-685-07, 1351-707-29, 1489-737-02, 1582-705-15, 1600-705-33, 1641-714-10, 1729-792-27.

RESPONSE: The rationale for the group size limit in the wilderness can be found on page 28 of the DEIS. Outside of the wilderness, we are not trying to manage for solitude, and we feel that a group size restriction would be unnecessary. Federal law and policy do not require the Forest to manage non-wilderness areas of the Forest for wilderness attributes such as solitude. We are concerned about user conflict, have evaluated this issue in the

development of this analysis and will monitor and adapt recreation use to mitigate user conflict as practicable.

141. Some respondents would like to see the stock-confinement area at Sand Cave moved to the power line right-of-way, or just closer to the cave. Another wants to remove the Indian Kitchen confinement area. Still another would like to see the confinement area at Rocky Top moved away from the scenic edge of the bluff and the one at Big Grand Pierre Creek moved out of the floodplain. There was also a suggestion to eliminate one of the two confinement areas as Rock House.

Includes: 183-035-06, 787-341-13, 917-539-02, 1601-705-58, 1630-705-63, 1734-792-32,

RESPONSE: The Forest has considerable discretion to determine the type, nature, and location of recreation opportunities on the Forest. Federal law and policy do not require stock confinements at any particular location. Instead, the agency has discretion under NFMA and MUSYA to determine the appropriate uses for particular portions of the National Forests. We have listened to the public with regard to their desires for stock confinement areas, and are guided by past use and lessons learned by allowing user-created confinements to develop. The Selected Alternative provides for improvement (compared to the environmental status quo) while still allowing reasonable recreation access. This balance, providing for sustainable recreation use of the project area, is in the public interest. Neither the elimination of use, nor the continuation of the current low level of management with regard to stock confinements, is justified by the facts, analysis and comment received during the development of the EIS.

We considered the possibility of relocating the existing stock-confinement area at Sand Cave to the power line corridor. We have decided to propose a designated stock-confinement area at Sand Cave, and have added this to the action alternatives (Alternatives 2, 3, and 4). More discussion can be found under response 106.

The stock-confinement area at Indian Kitchen is a mitigation measure for the effects of recreational use. In the action alternatives, we propose to relocate it to a more suitable site. At Rocky Top, the confinement area is in compliance with Forest Plan Standards and Guidelines for riparian areas and was built with considerable time and effort by volunteers. We do not plan to move this site. The action alternatives propose to reduce the size of the confinement area at Big Grand Pierre Creek to comply with Forest Plan Standards and Guidelines. The floodplain is wide at this location, and moving it out of the floodplain would be difficult. We will monitor this site and adapt our management as needed. We considered the suggestion to eliminate one of the two stock-confinement areas at Rock House, and we

decided to eliminate the confinement area in the riparian area and relocate the other area to a nearby location in the pines.

142. Some think that reducing the area and capacity of confinement areas in the wilderness by 40%, as proposed in Alternative 2, would be a safety hazard if the same number of horses are confined in the reduced space and tied too closely.

Includes: 1772-711-14.

RESPONSE: We are proposing, in Alternative 2, to reduce the wilderness trail miles compared to the existing conditions by about one third. The stock-confinement area capacity is proposed to be reduced by about 40%. This reduction accounts for the elimination of some sites that would no longer be located near system trails or trail junctions and the increase in size of the stock-confinement areas at several popular locations (page 22 in the DEIS). We would provide highlines at the proposed confinement areas that would hold a capacity of about 80 in the Lusk Creek Wilderness. The proposed highlines would keep the animals safely spaced, and if a confinement area was full, riders would have to move on to another site.

143. In regards to the proposed “ride through” trail at Saltpeter Cave, one respondent opposes it because it would result in an additional crossing of Lusk Creek, and another supports making the trail on the east side of Saltpeter Cave and to Natural Bridge and the proposed (Alternative 2) confinement area “hiker only”.

Includes: 1625-705-58, 1640-714-09.

RESPONSE: The mitigation measures proposed for the “ride-through” trail in Alternative 2 would protect the resources while allowing equestrians the opportunity to view the scenic attractions from the trail.

The ride-through only trail is an example of a balanced compromise between unrestricted use and elimination of use. The existing resource condition demands a change in the management of the heavily used Saltpeter Cave area. In the past three years, the District Ranger and many others from the Forest have spent time on the ground at the Cave site analyzing resource use and the options for mitigating the effects of heavy recreational use. This decision is informed by hours of on-the-ground work at Saltpeter Cave.

We have also solicited public views and considered public comments (including a field trip with a federal district court judge) in the development of this decision. Some would eliminate equestrian use, some increase it, others leave the situation as it is. Our analysis indicates that user conflict and resource conditions require change in management of Saltpeter Cave area.

The comment suggests that the Forest should not, or cannot not, restrict recreation access. Federal law gives the Forest Service a great deal of discretion to act to manage the National Forests, especially in situations such as this, where action is clearly needed to restore resources. The decision to limit recreation at this time to a ride-through-only trail is intended to forego the need for further, more drastic or emergency resource protection action. This decision (as well as the decision to relocate the nearby stock confinement area) is well within the Forest's authority to act to protect resources. As noted above, the decision is balanced, allowing some equestrian recreation access to continue at this popular recreation location.

144. An editorial correction was submitted. Page 168 (bottom of the page) states that Alternative 4 would not provide any hiker-only trail in the Lusk Creek Wilderness. This is not true.
Includes: 1640-714-09.

RESPONSE: Read response to 47 in regard to edits to the DEIS.

145. Several respondents want provisions for the Forest to (some temporarily) close trails if conditions reach a point of unacceptable erosion, braiding, widening, and vegetation damage. One respondent was supportive of the FS proposal to close trails that are poorly located, in a floodplain, are duplicative, or pass through an area of rare plants. Objective, observable criteria for mitigating or closing trails must be established and available for use by Forest Service employees or citizens. Required actions should be taken when defined limits for increased trail width, trail braiding, depth of erosion, etc are exceeded.
Includes: 85-085-01, 167-023-03, 570-401-01, 622-453-01, 634-465-01, 638-469-01, 772-340-93, 824-410-03, 855-481-03, 1578-705-11, 1579-705-12.

RESPONSE: The monitoring plan in Appendix B of the DEIS describes the types of trail damage we would be looking to identify and mitigate. This includes trail width, alignment angle, grade, gravel, drainage structure spacing and clearing width. We reviewed the trail condition benchmarks that the IDNR uses, including the study by J. Marion in the Great Smokey Mountains, which is the source of the language used in the Illinois DNR trail monitoring protocol (though not the threshold numbers). We have already included several of these mitigations in our monitoring plan, for example, the TES mitigations.

In response to public comment, the interdisciplinary team reviewed the monitoring plan set forth in Appendix B and provided more specific terms. However, the Forest must have flexibility to adapt monitoring over time. The

monitoring framework of Appendix B will provide key indicators of trail use and resource condition. It is a realistic monitoring proposal which will tell us what we need to know to evaluate conditions and prevent resource degradation. Other monitoring may be undertaken that is not part of this framework, as needed.

The Forest, does, however, have considerable authority to quickly close trails temporarily to arrest resource degradation or prevent irreparable resource damage. The Forest has implemented - successfully - voluntary closures to protect resources from excessive recreation use. These measures can and will be taken as necessary.

We have disclosed in the DEIS that many of the trails that we are proposing for designation in the action alternatives are user-created trails that have problems. These problems range from the occasional wet spot, to sections with excessively steep grade and lack of drainage. We do not think that a numeric threshold of acceptable damage will provide the flexibility that we need at this time. While we are aware of the condition of the trails we are proposing for designation, the best way to remedy these problems is to identify the current condition and specific needs to bring the trails to standard. Details of these trail standards were added in the FEIS on p. 189 and B4-B5. This will include both an initial investment and ongoing monitoring and maintenance that will meet the purpose and need for this project.

146. Some respondents want the trails closed when conditions are too wet, with respondents pointing out that erosion and compaction are increased during wet-weather traffic, that hoof prints fill with water and take forever to dry, and that roads are closed to vehicle traffic when wet, so why not a similar closure for trails? Others were more specific and wanted conditional closures for the periods when soils are saturated, rather than for 24 hours after a 1” or more rainfall, and to continue this restriction Forest-wide until the trails are hardened. Another respondent also did not like the proposed seasonal closures based on averaged weather data, and thought that the closures should be based on actual conditions. Others disagreed with the need for a seasonal closure because of the low number of riders that use the Forest in the winter months, and the small area (less than 1% of the Forest) that the trails occupy. They fear that the temporary seasonal closure will not be temporary because the hardening the trails will take longer than expected. Some did not think that trail maintenance and reconstruction should close a trail. They also question the location and effectiveness of the rain gauge the Forest is using to accurately measure rainfall in the Lusk Creek Wilderness. Includes: 40-040-01, 189-056-02, 516-389-01, 735-337-17, 736-337-18, 1242-685-03, 1467-728-06, 1659-713-03, 1715-792-13, 1799-545-06.

RESPONSE: The rationale for the wet-weather closure can be found on pages 62-64 of the FEIS. In general, the goal is to limit use only during periods of wet trail conditions to eliminate or reduce resource damage. Trails hardened with gravel will not be as easily damaged by wet-weather use, so this is why a temporary closure is proposed until trails can withstand the impact. The proposed wet-weather closures were designed to cover the wettest periods, while limiting the complexity and challenge of implementation. The proposed closures would reduce impacts to wilderness resources without adversely affecting recreation. Further information on the minimum necessary can be found in response 175. The location of the rain gauge will be the warehouse in Eddyville, IL.

Both wet weather and seasonal closures were part of the March 2005 Court Order. These mitigation measures were included in recognition that resource damage is more likely - especially under the current user-created trails system - when trails are wet. The user-created trails were neither designed nor constructed with wet-weather resource concerns in mind. These user-created trails favor recreation access at the expense of wet weather resource protection. However, sustainable recreational use in the project area, given the particular mix of recreation, climate, soil, and topography here, requires trail design and construction that will stand-up to wet weather conditions. Our purpose is to increase the resilience of the trails to allow sustainable recreation access so that further, more drastic restrictive measures do not have to be implemented. In the short term, the temporary mitigation closures are required to regulate environmental effects of equestrian recreation. Once primary trails are designed and built to standard, the mitigation should no longer be necessary. Monitoring of trail use and condition should confirm this, and mitigation (wet weather and seasonal closures) would then no longer be applicable.

If trail conditions do not improve, the Forest has the authority and responsibility to act appropriately to ensure that irreparable harm to resources, especially soil and water in this instance, do not occur. The public (and the Federal District Court) has strongly indicated that it does not want muddy, eroding trails, sediment in streams, or irreparable adverse effects to wilderness and we have listened. Our decision is responsive to resource, as well as recreation, concerns in the project area.

147. Some people stated that the wilderness is being destroyed by unregulated horse use and that the soils can not sustain the abuse. Another stated that horse trails do not harm anything in the watersheds, and the Forest is developing into even more of a wilderness with high water quality under the existing conditions that occupy less than 1% of the Forest. Others offered that equestrian use should be managed in a manner that minimizes erosion, ruts and trampling of vegetation.

Includes: 67-067-01, 101-101-01, 192-067-02, 381-254-01, 415-288-01, 466-339-01, 516-389-01, 525-281-02, 1322-712-01, 1330-707-08, 1467-728-06, 1502-746-03, 1658-713-02.

RESPONSE: Perhaps more than any other issue in this analysis, the public has polarized views concerning recreation use in wilderness areas in the project area. Despite decades of equestrian use of these areas (long before the Forest was established), some would immediately and permanently exclude horse-riding in the wilderness areas. Some assert that a prohibition of equestrian use is the only solution that is in compliance with the Wilderness Act. Most persons who commented on the DEIS, however, recognized equestrian use as a legitimate aspect of recreation on the Forest. The public also wants recreational access in wilderness to be tempered by protection of wilderness characteristics. We agree with this comment; unrestricted equestrian use in wilderness in this project area is not in the public interest. This decision embodies many different elements to protect and restore wilderness, while allowing for reasonable access that will not impair wilderness values. The experience of other public lands indicates that equestrian use is compatible with sustainable resource management. Equestrian recreation can be managed so as to not impair resources for future generations.

This EIS analyzes various mixes of use and protection. In wilderness, paramount attention is given to preservation of wilderness attributes. The amount and location of trails is based on field work with an eye towards what will preserve wilderness traits. It is not necessary to completely eliminate equestrian use from wilderness, nor even to reduce it to the pre-1990 levels considered in Alternative 4 (12 miles, *see* FEIS chapter 2, Table 10). The 49 miles of trail distributed across 13,484 acres will not irreparably impair wilderness attributes. Indeed, the 25 miles of designated trails in Lusk Creek (reduced by over half from the present 60 miles) will roughly equal the amount of trails that were present in 1990. Moreover, these trails will be located, designed, and constructed so as to protect wilderness, an improvement over the current user-created web of unplanned trails.

Opinions on the resource impacts of equestrian use vary greatly. Our job is to sort out opinions and deal with the issues and concerns objectively. The concerns and issues related to soil erosion and sedimentation are addressed within the Soil and Water resources section of Chapter 3 of the DEIS. Our analysis of the project area has included inventorying the existing trails, researching literature, and considering public comment. Conclusions on soil and water resources can be found on page 78 of the DEIS. The Forest is not being destroyed and the streams have good water quality. We agree, however, that equestrian use should be managed in a manner that minimizes erosion, ruts and the trampling of vegetation. The percentage of Forest occupied by the trail system should not be the focus. The focus should be

meeting the purpose and need for this proposal, which is explained in Chapter 1 of the DEIS. The question is not how much or little of the Forest is directly occupied by the trail system, this fact was included only to address the scale of the proposed project. Instead, we are trying to best meet the purpose and need and be good stewards of the National Forest.

148. Some respondents supported the FS plan to maintain trails. Includes: 1242-685-03, 1743-706-03.

RESPONSE: Comment in support of this project is noted.

149. Several respondents did not think the EIS adequately addressed the effects of trail in the floodplains, and others thought no trails should be in the floodplain.

Includes: 1046-486-32, 1047-486-33, 1416-717-05.

RESPONSE: The effects of trails in the floodplain are addressed on pages 66-67 of the DEIS. There is no evidence, in the comment or otherwise, that the Forest failed to take a hard look at the effects of a limited number of trails in floodplains. Overall, the Selected Alternative will be an improvement in environmental protection of floodplains and streams compared to the existing condition. In developing the alternatives the Forest walked the existing user created trails and observed the condition and location of trails in floodplains. Many trails in floodplains will be closed by this decision. Segments of trail where resource condition may be an issue will receive attention to ensure that the trail is located, constructed, and designed to standard. There is no legal prohibition on locating trails in floodplains, especially when this is necessary to connect other trails segments, and a trail is already in existence in the floodplain. The record documents the hard look the Forest took regarding the issue of trails in floodplains. Consistent with this comment, many trails in the floodplains will be closed, some moved. The effects of the remaining trails in floodplains were disclosed in the EIS. The decision includes mitigation of water quality effects, as well as monitoring of soil and water quality and trail condition.

The preferred alternative proposes to reduce the number of miles of trail that currently exist in the floodplain mainly because of the proposed total reduction in trail miles in the project area. The proposed trail system provides access by traversing ridges, descending into the lowlands, crossing streams and climbing hills. This is simply a function of the topography, and there is no reason, when mitigation is followed, to avoid designating some trail in the floodplain. Much of the floodplain trail segments are located on the narrow, well-drained, relatively flat floodplains characteristic of the headwater streams in the project area watersheds. Some segments are in

poor condition, and/or excessively cross a stream channel, but these problems would be mitigated. Designation, maintenance, and spot graveling of trails in compliance with Forest Plan Standards and Guidelines for riparian filter strips would improve these trail segments and floodplain function would not be adversely affected.

150. One respondent stated that the wetlands were not field verified following Corps of Engineers Manual, therefore the analysis is flawed, and it is not clear whether the Corps of Engineers was sent a copy of the DEIS for comment.

Includes: 1048-486-19.

RESPONSE: The Forest Service addressed wetlands on page 202-203 in the DEIS and sent a copy to the Corps of Engineers for review. The areas with wetland values in the project area were identified in the US Fish and Wildlife Service National Wetland Inventory. The identification criteria that the US Fish and Wildlife Service uses is more inclusive than the Corps of Engineers. They consider areas with one or more of the three criteria (wetland soils, hydrology and plants), whereas the Corps of Engineers definition requires all three. We field checked every trail that had the potential to impact any of these areas, and did not foresee any adverse impact on the wetland/ floodplain function.

151. One respondent suggested rewording a sentence on Page 73 of the DEIS. They recommend that the wording should be “high” adverse effect from trail erosion because they have seen major erosion during high precipitation events within these watersheds.

Includes: 1033-486-19.

RESPONSE: Our description and analysis of the effects is accurate. Excessive erosion has occurred on many trails, which could be referred to as a high level of erosion on many of the steep trails. The cumulative effects on soils are described on page 78 of the DEIS, and the erosion is resulting in a generally minor adverse effect to soil resources in the watershed.

152. The DEIS claims that most of the streams in the analysis area are rated “full support” and that this proposal will not change anything in that regard. However, one respondent questioned whether the FS cooperated with and got the proper approval from the right state agencies for corroborating these findings.

Includes: 1809-545-16.

RESPONSE: We cited the Illinois EPA Water Quality Reports as the source of the information in tables 21 and 22. The Forest worked with and valued the State of Illinois participation and assistance in the development of this EIS. A number of State agencies were involved, and we are thankful for their support and assistance. The State water quality data at issue in this comment is high quality data. There is no evidence of any inaccuracy in this data, or that there is more current information. IEPA water quality data was used appropriately in the analysis (personal communication with M. Fertaly from the IEPA). The Forest does have water quality monitoring information in the Aquatics section of the FEIS that was used in this analysis. Our information confirms the State water quality data conclusions.

In response to this comment, we contacted Illinois EPA to discuss their reports and confirmed that this information is of high quality and appropriately used in this analysis. Although the comment suggests that the Forest Service should have done more, there is no legal requirement to do so. We verified that the State water quality information was the best available information, and know of no other source of credible water quality data for the project area.

153. The FS should include more recent precipitation data, rather than data that is over 40 years old (1931-1964).
Includes: 1030-486-16.

RESPONSE: We used precipitation data from the NRCS because it was a locally collected, already compiled and averaged, 30-year data set that was readily available. Thirty years of precipitation data is generally accepted as a long enough record to establish a rainfall pattern. The purpose of including the data was to show when the majority of the rainfall occurs, and the data is adequate for this purpose.

154. Some people thought that the information on soils was weak and too general. They noted that the soils in Lusk Creek are very erodable, and questioned the appropriateness of horse use.
Includes: 648-479-01, 1031-486-17.

RESPONSE: The soils information is based upon established soil surveys for the counties where the project area is located. Additional information was gathered for this project based upon site-specific survey and field observations. Of particular concern were soils in areas that are prone to erosion. The data is current, of high quality, and site specific (as confirmed by on-the-ground work). Although the comment suggests that additional information was required, it does not specify what kind of information was

lacking, nor does it say how the decision might have been influenced by additional soil information.

The interdisciplinary team consulted with the Natural Resources Conservation Service regarding soil resources and effects. The Forest observed trail conditions, and researched the effects of trails (erosion, sedimentation, soil structure (*e.g.* porosity)). Based on the analysis and record, the public and decision-maker was fully informed as to the potential soil and water effects of the various alternatives considered. Of course, there is always more information that could be gathered, more study that could be made. Here, resource conditions, the existing large amount of soil data, ground work, limited time and funds, and the public concern and desire for management action to arrest existing eroding user-created trails influenced this decision. The analysis of alternatives rests upon high quality, comprehensive soil information.

For more detailed information, please reference the soil and water working paper and cited materials. The information in the working papers and cited materials was available to the public at the time the DEIS was published. We received excellent public comments on the soils analysis, including the working papers, and clarified the soils and water quality discussion in the FEIS.

Equestrian use, as outlined in the action alternatives, along with the mitigation measures listed on pages 37, 38, and 61, and the monitoring in Appendix B of the DEIS, would protect Lusk Creek while accommodating a variety of trail users.

155. The more trails open, the less damage will occur to each trail. Restricting equestrians to designated trails has no scientific study or peer review to support such restriction. This restriction is an arbitrary and capricious action with limited, if any, merit. Another respondent also stated that there is no scientific proof that damage is being done by cross-country riding or the existing user-created trails.
Includes: 497-370-01, 723-337-05, 1324-707-02.

RESPONSE: We did consider the idea that spreading use over more trails would result in less damage, but research findings contradict this theory. Researchers have found that the majority of resource impacts from trail use result from low-moderate levels of use, followed by minor additional impacts as use increases. This concept is illustrated on page 4 of the DEIS in Figure 2. Researchers have also noticed that resource impacts from trail use in the Hoosier National Forest in Indiana (similar soils and topography) are also due more to poor location of the trail than type or amount of use (Aust, Marion, and Kyle 2005). This research also suggests that a moderate amount

of properly located trails, as proposed in Alternative 2, would result in less damage than, for example, Alternative 1 that would spread the use over many more trails.

156. One respondent stated that horse manure and urine is diluted to the proverbial drop in the bucket by rainwater (respondent cites Envirohorse website). Other respondents suggested requiring equestrians to scoop-up and pack out any animal waste because hiking through it is unpleasant. One respondent wanted to know in more detail how the FS plans to avoid contamination during such events as the Nine Day Trail Ride and compared the event to those on the Jacks Fork of the Current River in Missouri. They also asked if specific mitigation measures would be listed in the permit issued for the event.

Includes: 67-067-01, 576-407-01, 741-337-23, 1466-728-05, 1624-705-57.

RESPONSE: We realize that manure on the trails can cause conflict between groups of Forest recreationists. The article cited by the respondent states that the manure is diluted by rain and is only a drop in the bucket. This statement is probably true in many, but not all, situations (as illustrated at the Jacks Fork in MO).

The Nine Day Trail Ride is an event covered under a Special Use Permit (SUP) for which the Forest Service prepared an Environmental Assessment (EA) in 2002. The comments regarding this permit are beyond the scope of the Trails Designation EIS. The Nine Day Trail Ride Special Use Permit EA will be renewed in 2-3 years, at which time these comments would be considered. Although this specific event is not a decision to be made as part of the Trails Designation, the proposals in Alternative 2, as described on pages 70-72, would reduce the effects of manure on water quality through better maintenance and drainage of system trails.

We are familiar with the USGS study of microbiological contamination in the Jacks Fork of the Current River in Missouri. The Illinois EPA collects data at Big Grand Pierre Creek, which drains the majority of the trails used by attendees of the Nine Day Trail Ride. They rated this creek and nearby One Horse Gap Lake in “full support” of aquatic life (IEPA, 2004). We will continue to consult the appropriate state agencies to see if microbiological contamination becomes a concern in the Big Grand Pierre Creek, and reassess data and monitoring needs for this event.

157. One respondent stated that all trails, except designated trails, should be marked closed and brushed immediately and closures should be enforced. Includes: 1415-717-04, 1705-792-03.

RESPONSE: The DEIS states (page 27) that in the first year or two (Alternative 2) after the decision the trails not chosen for designation would be closed. This is a large amount of work, including 60-80 trail junctions to be closed in Lusk Creek Wilderness alone. This work could not reasonably be done immediately, and the effects of this have been disclosed in the analysis. It will be more efficient to brush in trails as other work is taking place, and there would also be a better chance for trail closures to be followed.

158. Please confirm that the statement that “horse riders can use all of the roads in the project area” does not include any old roads in the three Wilderness Areas.

Includes: 1327-707-05, 1588-705-21, 1616-705-49, 1617-705-50, 1656-714-25.

RESPONSE: The old road beds within the wilderness boundaries that were decommissioned at the time of wilderness designation are no longer considered roads. Some sections of these routes, however, might be part of the designated trail system. Equestrians will continue to be allowed to ride the roads that are part of the Forest transportation system unless the route is specifically closed to that use.

159. Some people oppose allowing blanket permission for horse riders to use all roads in the four watersheds without evaluating the condition, placement, and appropriateness of the “roads.” Many of the Level 1 “roads” are old roads that have not been maintained as roads for decades. Some Level 1 roads are overgrown with large trees now growing in the middle of the so-called “roads”, and hardly recognizable as roads. Some of these “roads” probably should be officially closed, especially if they are causing erosion problems or if they have largely already returned to nature. Some think that a few of these roads should be designated as trails rather than roads and be maintained as trails, with equestrian and hiker use allowed, but not motor vehicle use. Several oppose riding on Forest Service roads that are not maintained as roads and have grown up in vegetation. They especially oppose this riding in natural areas. Others wanted to be sure that as roads are decommissioned, they would become designated trails, to keep the trail system intact. Some also worried that if some roads were not designated as trails there would be no money for maintenance, monitoring or trail markers. Includes: 1327-707-05, 1616-705-49, 1617-705-50, 1656-714-25.

RESPONSE: Equestrians have been and will continue to be allowed to ride the roads. The appropriateness of this activity is not a decision to be made in this EIS, and is outside the scope of this document. We will designate the road connections that are obvious as trails, so that if we are using it as a trail, it is maintained as a trail.

Visual Resources

160. Some respondents do not want to see, hear or smell horses at the stock confinement areas at the scenic attractions. Others commented that the DEIS did not address ways to visually enhance the confinement areas and suggested ways, such as planting native cedars to obscure the area, and ground coverings such as wood chips, leaves, and pine needles. Another recommended moving the confinement areas to pine plantations so that the pines would naturally provide some screening while having an open understory.

Includes: 734-337-16, 893-535-11, 1226-681-03, 1246-685-07, 1351-707-29, 1600-705-33.

RESPONSE: The visual effect of stock-confinement areas is addressed by relocation when in sight of a scenic attraction or along the trail. Alternative 2 proposes the relocation of four confinement areas to flat-gently sloping ridges with a pine overstory and limited understory vegetation. These areas would provide screening, shade, and seasonal needle cover which address impacts discussed in both the visual and soil and watershed sections in Chapter 3 of the FEIS along with public comments. We recognize that relocation may not allow equestrian users to keep an eye on their equipment and increase the distance to walk to a scenic attraction but the need to mitigate resource concerns guided the decision to move these areas. In rare cases, graveling of confinement areas may be appropriate.

Monitoring and field observation, as well as common sense, indicate that the sight, sound, and smell of horses in wilderness is by nature temporary and transitory. The effects of manure smells on recreation opportunities were considered. These effects are likewise temporary and do not have a long term effect on wilderness. During some periods it may be common to see a horses and riders in wilderness, at other times this will not occur. Horses will now be limited to trails, thus Forest users will not see or smell horses in nearly all natural areas (almost all lack trails) and wilderness and other Forests areas away from trails. Likewise, in the short term, during the temporary seasonal closures, horses will not be present at all in wilderness. Thus, the Selected Alternative was developed to ensure that there are many opportunities for hikers and other Forest users to recreate free from the sights and smells of horses. User conflict such as this, though nearly impossible to quantify, was taken into consideration in the decision making. Provision was made in the Selected Alternative (*e.g.* creation of 25 percent more hiker only trails, reduction and relocation of stock confinement areas) to mitigate and lessen user conflict in the Selected Alternative.

Seeing, hearing, or smelling horses does not trammel wilderness character, or adversely alter its natural condition. Equestrian recreation can be

compatible with wilderness values. Horse-riding is common in many wilderness areas nation-wide. On the Shawnee National Forest, the majority of Forest users are satisfied with their recreation experience in wilderness (see Chilman 2005). Chilman's survey sampled both riders and hikers to determine their satisfaction of their wilderness experience. About 81% were highly satisfied with the experience provided. Likewise, there is no suggestion in the Wilderness Act, or in the litigation thus far concerning Lusk Creek Wilderness area, that the ephemeral sights, sounds, or smells of horses in wilderness areas are a violation of federal law. The Forest is sensitive to the desires of competing recreation users and attempted to meet the needs of both hikers and equestrians in a sustainable manner that preserves wilderness.

The sight, sound, or smell of horses may affect a person's feeling of solitude; measures have been taken in designing and locating trails and confinement areas to respond to this concern. Likewise group size limits were adopted in the Selected Alternative to lessen the effect of noise and other adverse effects that may occur if larger groups were in wilderness. Small groups of riders, spaced or dispersed on the trail system, lessen the visual effect of equestrian recreation. The natural resources of the wilderness are not adversely affected by the transitory effects associated with the sight or smell of horses. The record documents that the Forest analyzed these effects and adopted measures to mitigate the social aspects of these effects (FEIS, p. 167-196). The Forest also analyzed the effects of eliminating and drastically reducing equestrian access to wilderness (FEIS, chapter 2.)

Wildlife

161. Until we know the chances of spreading canine influenza, caution is warranted.

Includes: 819-398-2.

RESPONSE: At this time, there is no evidence of transmission of canine influenza from dogs to horses, cats, ferrets, or other animal species. According to the American Veterinary Medical Association, canine influenza is a highly contagious respiratory infection of dogs that is caused by a virus. The canine influenza virus is new virus, first reported in 2004 in Florida. It is closely related to the virus that causes equine influenza and it is thought that the equine influenza virus mutated to produce the canine influenza virus.

162. I question the wildlife resources mitigation measure (page 38) that requires informing the public of non-game species issues. While a nice-to-do project, it should not be tied to this. Mitigation measures should mitigate the effects of the project, not simply further some other objective.

Includes: 1181-671-7.

RESPONSE: The Forest Service's mission is to integrate recreational and wildlife needs to provide multiple uses from the National Forests. Providing information for protection of non-game species is part of this mission and an appropriate part of this project.

163. Also, the DEIS assumes that major equestrian use through these areas will not disturb the Indiana bat, even if they are roosting and foraging in the area. Yet, again, there are no scientific studies to back up this claim. How does the Shawnee know that a roosting Indiana bat might not be disturbed by a hundred or six more equestrian users advancing through their roosting area?

Includes: 1807-545-14.

RESPONSE: We thoroughly evaluated potential impacts to the Indiana Bat in the Biological Evaluation (see record). Even with the increase in recreation use of the area over the past decade, monitoring data has not revealed any adverse affect on the bats. Nor have field observations over the past year in the survey of user created trails revealed any potential risk to Indiana bat conservation or recovery. We are not aware of any evidence that Indiana bats (foraging or roosting) are disturbed by equestrian recreation, nor is any provided in the comment. It is not clear that a cause and effect

relationship exists between equestrian recreation and bat disturbance, or if such a relationship might exist, it would be any different than other forms of recreation, such as hiking. The broad supposition in the comment is simply not supported by any science or field observation. Though the Forest has searched diligently, we have found no scientific information that suggests that Indiana bats are adversely affected by equestrians.

In an abundance of caution, we have considered the possible presence of Indiana bats in the design and location of trails and stock confinement areas. The Selected Alternative will lessen the potential effect on Indiana bats, compared to the No Action Alternative. The limitation of equestrian recreation to trails lessens the chances that riders will disturb bats and other wildlife, as much of the project area (nearly all natural areas, for example) is not accessible to equestrian recreation. Areas a very short distance from trails will be undisturbed by the minor and ephemeral effects (sounds, presence of horses) of equestrian recreation. Stock confinements have been reduced in size to lessen their effect on the environment. Where it was necessary to relocate stock confinements to benefit the environment, the effects of Indiana Bats have been considered and disclosed. The very low potential for even minor effects from relocation of stock confinements, trail construction, and maintenance area well documented (FEIS, p. 133-137 and in the Biological Evaluation 21-27).

The U.S. Fish and Wildlife Service concurred with the agency's findings regarding potential Indiana bat effects. The record discloses that the Forest was cognizant of the potential effects upon Indiana bats, though it is not certain the bats will be adversely affected in either foraging or roosting by the regulation of equestrian recreation relative to the current condition. No known roost trees will be affected by any alternative. There are many suitable potential roost trees in the project area; however, the potential habitat will be managed according to USFWS guidelines. Removal of potential roost trees would only occur if the tree poses a safety hazard or blocks the only suitable route for a trail. If it is found necessary to cut a dead or living tree which exhibits bat roost tree potential (presence of exfoliating bark or cavities) during the Indiana bat maternity and tree roosting periods (April 1 through September 30 if greater than 5 miles from a known hibernacula, April 1 through November 15 if less than 5 miles from a known hibernacula), that tree will be evaluated for the presence of roosting. Potential roosting trees that need to be cut during the summer season will be checked either by exit surveys in the evening immediately prior to cutting or checked in the morning prior to cutting to see if bats enter or leave the trees. If bats are found in a tree, that tree will not be removed or damaged by project activities until the bats leave the tree after the maternity period for hibernation or migration and after further consultation with the Fish and Wildlife Service. When no bats are found, the tree can be removed.

164. The attention given to protecting the T&E species by routing trails away from areas containing these species is especially to be commended. Includes: 1253-686-2.

RESPONSE: We agree with and appreciate the support for our efforts in this comment. The Forest takes its responsibility for conservation of resources very seriously. With the public's help, we have developed a balanced, sustainable approach to regulating recreation in the project area. Recovery and conservation of federally-listed threatened and endangered species are a top priority on the Forest. Where possible, we have worked to avoid or lessen the potential effects upon threatened and endangered species in the project area. Congress has not mandated that the National Forests to be preserved as National Parks or restored to some pre-settlement condition. Consistent with our responsibilities under the Endangered Species Act, the Forest developed a designated trail system that, if anything, poses less risk to threatened and endangered species relative to current conditions. It is not necessary to eliminate equestrian recreation in the project area to comply with the ESA, although some would prefer little or no equestrian recreation be allowed on the Forest. As this comment notes, much attention was given to conservation and recovery of threatened and endangered species, especially in consideration of trail and stock confinement area locations.

Wilderness

165. Several comments suggested the Forest use mechanized and motorized equipment in wilderness to reduce the time needed to complete trail reconstruction for the purpose of reducing the wilderness-wide closure periods. In addition, some comments linked the use of this equipment to a reduction in costs.

Includes: 117-6-5, 144-19-2, 1140-665-10, 1191-672-9, 1764-711-6, 7374-337-19.

RESPONSE: We carefully considered whether there was a need to request the use of mechanized or motorized equipment to complete trail activities. We found no demonstrated need to request the use of mechanized or motorized equipment (in wilderness) to accomplish this project. If, however, contractors are not found that can fulfill trail maintenance and construction needs the Forest may consider the use of mechanized equipment in the future. This would require a minimum tool analysis and approval from the Eastern Region of the Forest Service.

However, the DEIS does display (DEIS, p. 23) that mechanical equipment would be used as needed and appropriate outside of wilderness. All action alternatives address the objective of completing the trail related activities in the shortest time in the “Measures Common to all Alternatives section of the DEIS (DEIS, p. 28). Regarding trails within wilderness, the DEIS displays that trails in the and around the Lusk Creek Wilderness would have the highest priority for reconstruction, construction and maintenance activities with those trails within the Bay Creek Wilderness (Bay Creek Watershed) and Garden of the Gods (Eagle Creek Watershed) being the next priority, respectively (DEIS, pp. 28, 33, 35-36). In all alternatives, the DEIS displays (DEIS, pp. 28, 33, 35 - 36) that as these trail sections are brought up to standard, use on those trails would be allowed (even though the remainder of the area may still be subject to the closure). In addition, past experience with using a combination of Forest Service work crews, partners, and volunteers (DEIS, p.9) can provide additional means to complete the proposed trail work in an efficient and cost-effective manner. See also comment # 180.

166. Many comments were received on the proposed seasonal and wet weather closures. Some comments questioned the need for the closures given the low amounts of use that occur during the winter, some questioned the enforceability of the wet weather closure and there were concerns that temporary closures would become permanent. A few comments suggested a variation to the seasonal closure that included the month of April and the entire month of November while others suggested excluding September and October. Other comments concerned how the closures would affect the

recreation and wilderness experience. Many responders did not support the closure if alternative trails would not be available. Many comments questioned the need for closing all three Wilderness Areas while trail activities were in progress.

Includes: 19-019-01, 45-045-01, 116-006-04, 166-023-02, 219-098-05, 451-324-01, 462-335-01, 463-336-01, 546-326-08, 568-399-01, 805-376-05, 816-391-07, 857-482-02, 858-482-03, 862-484-02, 864-485-02, 867-485-05, 888-535-06, 891-535-09, 916-538-15, 922-540-05, 923-540-06, 931-541-07, 933-541-09, 1081-620-01, 1138-665-08, 1141-665-11, 1147-665-17, 1153-666-05, 1159-669-03, 1179-671-05, 1185-672-03, 1207-676-02, 1234-683-04, 1285-691-07, 1289-691-11, 1305-696-03, 1448-723-05, 1455-724-07, 1472-729-05, 1488-737-01, 1519-752-02, 1574-705-07, 1639-714-08, 1665-713-09, 1678-779-05, 1714-792-12, 1716-792-14, 1746-706-06, 1760-711-02, 1802-545-09, 1821-542-08, 1492-739-1.

RESPONSE: The temporary seasonal closure and wet-weather closure are designed to prevent resource degradation from use of trails when they are most susceptible to impact. Most damage to our soil and water resources, from equestrian use, occurs when the soil is wet. Soils in southern Illinois tend to be saturated during the late fall through early spring. During much of the winter we have conditions of frozen ground early in the morning and thawing conditions in the afternoon. The restriction of equestrian use to a designated trail system will concentrate this use on fewer miles of trail. Use of wet trails would increase resource impacts and trail maintenance needs.

Wilderness trail maintenance is difficult because of the primitive tools available and the manual nature of wilderness trail work. It makes sense to limit use while trails are vulnerable, in order to limit the amount of degradation and subsequent maintenance needed. It also makes sense to apply these closures to all wilderness areas because wilderness management dictates a higher level of protection than general forest areas. Past experience, including the current wet weather closure for commercial equestrians, has shown that compliance has been very good.

In addition, while use during the winter can be relatively low, use increases during warm years, such as this year. The available use data covered just one year and does not reflected the diversity of weather patterns in southern Illinois. In March we generally see an increase in use from northern riders coming down to avoid cold weather and get a jump on their riding season. Equestrian use when trail conditions are wet causes a disproportionate level of impact and these closures are designed to work together to minimize these impacts in wilderness.

Many of the comments received on the DEIS argued that closures for the construction of trails were not necessary. There was some confusion on this point. We are not closing trails down for construction or maintenance.

Usually when trail crews or contractors are working on a trail, equestrians can still ride through. However, there may be times we need a section of trail closed to prevent injury to the public. Once that activity is over the trail would once again be opened.

We also need to clarify that these closures, are by design, temporary. A Forest Supervisor Order would be issued annually to close those portions of wilderness where trail work has not yet been accomplished. Each year the order would be updated to open trails where trail work has been accomplished and trails are up to standard.

The FEIS also displays the effect to wilderness character by discussing the relationship of closures to the natural condition indicator of wilderness character. Alternatives 1, 2, and 4 reduce adverse effects on natural condition (FEIS, p. 170-174).

The relationship between the closures and the opportunity for solitude or primitive and unconfined recreation is also displayed in the FEIS. The FEIS discusses the short and long term effects of the closures, in terms of wilderness experience for both hikers and equestrians. In terms of the overall recreational experience, the FEIS acknowledges that in the short term, the seasonal closures would affect the winter recreational experiences. However, trails outside of wilderness would be available for use so the impact would be minimal. In the longer term (beyond the 2 or 3 years these closures are expected) all users would benefit from the proposed all-weather trail system (FEIS, pages 224-227).

167. I am opposed to the seasonal closure of the three Wilderness Areas from Dec. 1 to April 1. This will force riders from Hayes Canyon, Bear Branch and Circle B campgrounds to ALL come to the Hayes Creek area. This will over- impact these trails during times when the soil is wet and most fragile and will cause resource damage along Hayes Creek because of concentrated use. I am opposed to the closure of Lusk Creek Wilderness following a 1” rainfall for 24 hours during April, May, Sept., Oct. and Nov. for the same reason.

Includes: 1368-709-10.

RESPONSE: The seasonal closure of the three wilderness areas would only be in place until trails are brought up to standard. The seasonal closure will avoid concentration of use in wilderness areas during the wet winter and early spring months. Monitoring data show that these areas are not frequently used during the winter and early spring months. However, it is true that most use from the listed campgrounds would be directed toward the Hayes Creek and Bay Creek watersheds. We anticipate focusing our non-wilderness trail work in these areas as soon as possible. Trail work outside

wilderness can be accomplished with equipment and most of these trails should be maintained in the first couple of years. Over the few years we would have these seasonal closures as trails are reconstructed, the seasonal closure will diminish in effect.

The Forest Service has considerable authority under the Organic Act, NFMA, MUSYA, and Wilderness Act to condition uses of the Forest to protect resource values. The effects of unrestricted equestrian use in the project area are well documented. The seasonal closure is a short-term, reasonable management measure to protect wilderness resource values. As the deteriorating, problematic non-system trails are replaced by a well constructed and designed designated trail system, the effect of the seasonal closure on recreation opportunities would be diminished.

The wet weather closure applicable to Lusk Creek Wilderness Area is a continuation of the measure set forth in the March 2005 Court Order. The purpose of this closure is resource protection. Any adverse effects to recreation opportunities are mitigated by the abundant other riding opportunities. This closure, like the seasonal closure discussed above, is within the Forest's discretion to protect resources from non-sustainable use. Monitoring for the past year has shown no adverse effects upon Hayes Creek as a result of this closure. The very short term nature of the closure (24 hours after a 1-inch rainfall) limits the overall effect upon equestrian recreation opportunities. The limited months of application of this closure (April, May and September, October, November) are likewise reasonable, balancing the potential for adverse soil and water effects due to rainfall (derived from 3 decades of data) verses the short term effect on recreation opportunity in a small area of the Forest. As noted above, this closure will also be phased-out as the trails are constructed and maintained, so the effects upon recreational opportunities will be greatly diminished over the next few years. The short term effects on recreation would be offset by the resource protection provided by the wet weather closure. Nevertheless, equestrian use of Hayes Creek will be closely monitored.

We considered the potential cumulative impacts to the Hayes Creek area and has determined if it is pertinent to their resource. Hayes Creek would receive additional attention during project implementation because it has trails which are considered to be high priority for reconstruction efforts. The Forest would be able to determine if displacement is occurring, would evaluate the resource impacts and would take action as necessary.

168. Several comments suggested alternative dates to the December 1 – March 31 wet weather seasonal closure. Suggestions ranged from starting the closure in December while others suggested the closure extend into April or mid-May.

Includes: 1021-486-7, 1037-486-23, 1368-709-10, 1465-728-4.

RESPONSE: The closure dates included in the alternatives display a range of possible closures, from no closure to a temporary closure in wilderness areas from November 1-May 15. A comparison of the effects of the different alternatives on soil and water resources can be found on page 71, 72 and 78 in the DEIS. In response to your comments, a comparison of alternatives specific to wet-weather closures was added in the FEIS.

The temporary closures proposed in Alternative 2 are designed to increase resource protection in the wilderness during wet conditions until designated trails are maintained, while limiting restrictions to recreational access. Recreational use on non-system trails during wet conditions can cause increased soil rutting, erosion, and compaction (pages 60-64 in the FEIS). This is why this closure is an important mitigation measure. Although the closures in Alternative 4 would potentially provide more protection, the temporary seasonal closure in Alternative 2 will adequately protect wilderness resources and provide more protection than a continuation of the existing conditions. Monitoring will be key to determining the effectiveness of a closure (see monitoring plan for soil and water resources in Appendix B). If monitoring data suggests that we should extend a closure, management would be adapted to respond to these resource concerns.

169. Page 166, 4. Wet-Weather Trails. Even if there are wet-weather trails, the trails should be closed to equestrians November 15th-to April 15th each year to reduce resource damage.

Includes: 1043-486-29.

RESPONSE: The Forest Service has considerable authority under the Organic Act, NFMA, MUSYA, and the Wilderness Act to condition recreation access to the National Forests to protect resources. The existing condition has caused much public concern, as well as years of litigation, due to deteriorated resource condition in portions of the project area resulting from over-use. Poorly located non-system trails lacking in design or proper construction are un-sustainable and often un-maintainable. The on the ground situation calls for management decisions to be made now to arrest effects to soil, water, and plant resources.

The Forest proposes to restrict equestrian use in the project area to a designated trail system that will be constructed and maintained to meet standards. While the maintenance process is ongoing, two temporary closures are in effect to protect resources, while still allowing ample recreational access for equestrians. These closures will be effective in mitigating adverse environmental effects during wet trail conditions, but are tailored so as to not unnecessarily constrain recreational access to the Forest.

Various options with regard to the duration of the closures were considered (see response to comments 166-170). A closure of all trails in the project area from November 15 to April 15th would be a draconian measure with significant adverse effects on the public, including many of the Forest's neighboring landowners who ride infrequently during this period. Based upon the closures adopted in the March 2005 Court Order, the Forest tailored its closure to adequately protect the environment without unduly closing the Forest to the public. Monitoring of trails in the project area will identify if there is a need for some level of seasonal or wet weather closure after the trails are constructed and maintained. We do not anticipate having to close areas due to wet weather after trail construction, but the Forest will take action if necessary to protect resources and trails from over-use during wet periods.

170. We support seasonal and wet weather closures during trail establishment, but request the closures be extended throughout the entire project area as needed. The seasonal and wet weather closures should be in effect from Dec. 1 – March 31 for trails under construction. As mentioned above, the lifting of the seasonal/wet weather closures should be conditioned upon monitoring to ensure they are no longer needed. If damage occurs without the closures, the restrictions need to be reinstated. Includes: 1591-705-24.

RESPONSE: Various options for the geographic scope of the temporary closures were considered. The genesis of both temporary closures is the March 2005 Court Order, which applied these closures only to Lusk Creek Wilderness Area. By its very nature, wilderness has a higher standard for resource protection than applies to the general forest area.

The Selected Alternative applies the seasonal closure to all three wilderness areas in the project area. The comment suggests that the seasonal closure be extended to the entire project area. This would be tantamount to prohibiting equestrian recreation access in the four watershed project area for four months of the year (December through March). The purpose of the seasonal closure is to avoid over-concentration of use in wilderness during the wet months. It is not necessary to extend this closure to the entire four watershed project area to achieve this goal. Mostly local riders use the Forest during this time and equestrian use during these months is relatively low. Equestrian use is a traditional recreational use in the area and to close the entire project area for this length of time would be unduly burdensome and unwarranted.

The Selected Alternative adopts the Lusk Creek Wilderness Area wet weather (24 hour closure after 1-inch of rainfall) closure of March 2005 Court Order

on a temporary basis. In essence, the decision continues the environmental *status quo* with regard to this mitigation measure: it neither expands nor contracts its geographic scope.

Under the March 2005 Court Order, the application of the closure was limited to Lusk Creek Wilderness Area. The Forest considered expanding the geographic scope of this closure to the entire project area, but chose not to do so because it was not deemed necessary. Monitoring has shown that the closure has a minor adverse effect upon recreational opportunities, while achieving a measure of benefit to the environment where equestrian use is moderate to heavy.

The interdisciplinary team determined that there was no need to expand the wet weather closure to other wildernesses, or the entire project area, because the level of use did not warrant that expansion. No other wilderness area receives near the same levels of equestrian use as the Lusk Creek Wilderness. Based on field observation of trail conditions and the amount of use, the wet weather closure is not needed in the Garden of the Gods or Bay Creek Wilderness Areas to protect natural condition or other wilderness attributes. Following the logic and example set by the Court, we retained the tailored closure only in Lusk Creek Wilderness because of the physical characteristics and use of that particular Area.

These carefully-tailored wilderness closures meet the objective of protecting wilderness resources while trails are being brought up to standards. Outside of wilderness the environmental status quo will prevail while the Forest relocates and reconstructs the trails. These measured closures allow use in non-wilderness to continue in order to balance the effects of this decision on recreational opportunity. Additionally, we will monitor non-wilderness trails to ensure that the trails can withstand the use. Any further remedial management action would be taken based on resource impacts. If necessary, the seasonal closure could be imposed anywhere in the project area.

With implementation of the proposed trail activities, resource damage should be minimal and there should be no need for a seasonal closure. However, the Monitoring Plan (Appendix B) does include trail monitoring to ensure that primary, graveled trails withstand wet-weather use. Monitoring will also determine if other trails are being impacted by the wet weather use and determine if remediation should include additional gravelling or temporary closure (FEIS, Appendix B).

171. Primary trails are surfaced for wet weather use, however not all primary trails are connected and available. There are no primary trails in the east half of Lusk Creek Wilderness. This leaves a gap in the trail system not allowing access to trails.

Includes: 1336-707-14.

RESPONSE: The primary wet-weather trails are designed to bring these particular trail segments up to a standard that would sustain all weather use. The primary trails include the most popular trail segments because the level of use is highest in these areas. We did not intend to connect all primary trails together into a wet-weather trail system. Riding would be allowed on the entire trail system but we would encourage the use of primary trails during wet trail conditions. Use of trails that are not primary trails does not warrant the added expense associated with primary trails.

There are no primary trails in the eastern portion of the Lusk Creek Wilderness because the trails in that portion of the wilderness receive much less use than the trails in the western portion of the wilderness. Therefore there is no “gap” in the trail system.

172. I support the seasonal closures to equestrians of stream crossings where least brook lampreys were found spawning. I do not however, support closing the crossings to foot traffic. I know of no evidence that shows foot traffic has or will have a detrimental effect on the species. Likewise, other areas closed to equestrian use like Saltpeter Cave and the prickly pear cactus site in Lusk Creek Wilderness should not be closed to foot traffic unless evidence shows that hikers are having a detrimental effect on the sensitive species.

Includes: 1717-792-15.

RESPONSE: The potential effects of hikers and equestrians crossing streams at known spawning locations are listed on pages 90-91 of the DEIS. While the impacts from hikers may be less severe than impacts from equestrians, there is still potential for disruption of spawning activity, alteration of spawning habitat, and damage to spawning pits. The short-term seasonal closures during the spawning period are necessary to mitigate for these effects. Relatively few crossings are affected by this closure (2 of 220 in Alternative 2) and alternative crossings are only a short distance away.

Although the comment objects to this minor restriction of hiking access, there is no evidence in the comment or otherwise that the minor inconvenience to hikers is such that the restriction is unreasonable. The Forest has documented and disclosed the minor effect of the limited closure upon recreation opportunities for hikers. Area closures mentioned at Saltpeter Cave and prickly pear cactus site were found to be warranted for both hikers and equestrians. While it is true that hikers tend to have less impact than horses, it is also true that foot traffic can trample plants, compact soils and trigger erosion. All area closures examine the potential for impact from all users. Ample data exists on the impact of hikers on resource

conditions. Where impact from hikers to sensitive resources is likely it only makes sense to exclude that use. Such is the case with potential impact to French's shooting star at Saltpeter Cave. Hiker use along the bluff could clearly trample plants and keep the trail compacted; therefore the closure to hikers is warranted.

Regardless of how careful hikers (or equestrians) may try to be, common sense indicates that spawning lampreys may easily be harmed by physical contact. The comment suggests that studies are required to show that hikers may cause harm to sensitive plant and aquatic resources. The Forest has broad discretion to restrict recreation activity where resources are at risk. The Forest is not required to wait until plants or spawning lamprey are crushed (by foot or hoof) in order to limit use. Nor is the Forest required to study what is obvious - through crushing or other disturbance, sensitive resources may be disrupted or harmed by recreation access. Thus, the Forest imposed a reasonable limit on hiking as well as equestrian recreation.

173. A clear, well implemented management plan will be the best thing to happen to these wilderness areas since they were originally designated. Includes: 161-20-3.

RESPONSE: We agree with this comment and acknowledge the supportive thoughts. The Forest has invested a significant amount of resources in data collection and analysis of wilderness issues. The potential environmental effects upon wilderness were a "significant" issue from the beginning of this analysis (see FEIS, page 16). For the most part, there was strong public support for management action to restore, enhance and protect wilderness character. Most people agree that equestrian use is a traditional form of multiple use recreation in wilderness. The Forest considered excluding equestrians from wilderness (equestrian recreation is currently prohibited in almost all Natural Areas). Informed by public involvement as well as *Glisson vs. Forest Service* (see, e.g. transcript of 2004 hearing; record incorporated by reference), the Forest examined a broad range of alternative measures to manage equestrian use in wilderness. Preservation of wilderness attributes was the guiding principle in this analysis.

In response to the Preferred Alternative in the DEIS, the Forest received a large number of comments concerning management of equestrian recreation. The interdisciplinary team reviewed these comments carefully, and reconsidered the location, amount of trails, stock confinements, wilderness mitigation measures and proposed monitoring. As before, the potential effects upon natural condition, undeveloped condition, untrammelled condition and solitude were fundamental considerations.

The development of trails that protect wilderness character, instead of potentially threaten it (as is currently the case), was a primary concern for the interdisciplinary team. We examined reductions in trail miles, relocation of trails, reduction and modification of stock confinements, and the imposition of closures to protect wilderness attributes. We also balanced the need for wilderness protection, with allowing the reasonable recreational access envisioned under the Wilderness Act. Some argued that equestrians should be forced to ride through wilderness without dismounting. This view is not supported by the Wilderness Act, nor is it necessary. With proper management, equestrian use can be compatible with wilderness attributes.

Every effort has been made to ensure that the Forest properly preserves wilderness character. The Forest's desire is that wilderness use is sustainable, non-obtrusive, and compatible with resource protection. The Selected Alternative, as noted in the comment, is management action needed for wilderness protection. Informed by alternatives that would have allowed more or less recreation, the Selected Alternative balances a myriad of resource, social, and economic factors involved in the tradeoff between protection and access. Although the Forest sought consensus in its dialogue with the public, this proved unattainable in the time available. The Selected Alternative was, however, fashioned from the lengthy public involvement process, as well as field work and consultation with other resource experts.

174. A few comments were received regarding the issue of cross-country equestrian use. One comment supported a continuation of cross-country equestrian use within wilderness primarily to retain the ability to experience solitude and achieve visual quality. One comment implied the restriction on cross country equestrian travel was not necessary as this type of use had not resulted in resource effects (up to this point). A related statement indicated that the current condition of the east half of Lusk Creek Wilderness is similar to the current condition in the Garden of the Gods and Bay Creek Wilderness Areas.

Includes: 158-19-16, 1075-617-9.

RESPONSE: We considered but eliminated from detailed study an alternative that would designate a trail system while allowing the continuation of cross-country riding. The DEIS displays that the rationale for this as inadequate protection of resources. "Because it has no bounds, cross country riding can have adverse impacts on unknown locations of threatened, endangered and sensitive species, as well as on the character of wilderness" (DEIS, Chapter 2, p. 39).

While cross country travel would not be permitted within wilderness, Alternative 3 does provide for the continuation of cross country travel outside of wilderness as well as the incorporation of most non-system trails into the

system. The DEIS displays the effects from cross country travel. For example, soil and water environmental consequences state for Alternative 1, “A decline in erosion and sedimentation from closed trails would likely be counter balanced by an increase in erosion and sedimentation from new trails that appear due to open cross country riding” (DEIS, p. 71). Effects noted in the aquatic section state, “Once many existing non-system trails are closed, some beneficial effects of reduced sedimentation would be expected. However, development of new non system trails caused by cross country riding could adversely affect stream habitat until the new trails are closed” (DEIS, p. 91). Cross country riding is of concern for botanical resources. The effects of Alternative 1 state “Continued cross country use could lead to the extirpation of individuals, populations and habitat of one of more of these species within the Upper Bay Creek, Lusk Creek, Big Grand Pierre and Eagle Creek watersheds (DEIS, p. 100).

175. Many comments were received regarding wilderness character. References to three of the four wilderness character indicators, (1) opportunity for solitude and primitive and unconfined recreation, (2) natural condition, and (3) undeveloped condition were specifically mentioned. In addition, some comments asked whether a Minimum Requirement Analysis had been completed for each wilderness.

Includes: 52-052-01, 57-057-01, 84-084-01, 96-096-01, 146-019-04, 195-074-02, 376-249-01, 399-272-01, 402-275-01, 447-320-01, 448-321-01, 526-288-02, 528-313-02, 535-324-04, 537-324-06, 542-326-04, 565-397-01, 574-405-01, 579-410-01, 586-417-01, 587-418-01, 599-430-01, 728-337-10, 730-337-12, 739-337-21, 808-376-08, 851-479-11, 890-535-08, 900-537-02, 1151-666-03, 1172-670-03, 1274-695-01, 1297-695-02, 1298-695-03, 1477-732-01, 1478-733-01, 1481-733-04, 1484-734-01, 1490-738-01, 1510-750-01, 1511-750-02, 1512-750-03, 1513-750-04, 1514-750-05, 1515-750-06, 1516-750-07, 1570-705-03, 1575-705-08, 1580-705-13, 1583-705-16, 1584-705-17, 1587-705-20, 1674-772-02, 1722-792-20, 1725-792-23, 1730-792-28, 1750-706-10, 1766-711-08, 1795-545-02, 1796-545-03, 1797-545-04, 1820-542-07, 1590-705-23.

RESPONSE: The common thread through these comments is a concern about the protection of wilderness character in the three wilderness areas in the project area. One of the central mandates of the 1964 Wilderness Act is that agencies administering the wilderness areas do so in a manner that allows these areas to be:

Administered for the use and enjoyment of the American people in such 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 wilderness character, and for the gathering and dissemination of

information regarding their use and enjoyment as wilderness . .
. . The Wilderness Act of 1964.

With regard to the three wilderness areas involved in this project, the Selected Alternative is in accord with these goals. The FEIS analysis of wilderness effects is centered upon existing condition, effects of the proposed alternatives and mitigation to protect key elements of wilderness character. The Wilderness Act goals are set forth as qualities of wilderness character in the recently published scientific study, Monitoring Selected Conditions Related to Wilderness Character (Landres 2005). This seminal work provides the framework for evaluating existing resource condition and potential changes to wilderness character. Based upon the statutory definition of wilderness, four qualities of wilderness character are evaluated. Using these four qualities as focal points, the interdisciplinary team documented in detail its hard look at the potential environmental effects of the alternatives, with an eye toward what is needed to administer the project area wilderness so as to leave them unimpaired for future use and enjoyment as wilderness.

Before reviewing the four qualities of wilderness character for the specific wilderness areas at issue here, it is important to remember that these areas became wilderness in 1990. The FEIS (pages 155-166) describes in detail the use of these lands prior to acquisition and wilderness designation. Roads, houses, cemeteries and other development are found within wilderness boundaries, and agriculture, logging, grazing were common land uses. These areas are not pristine old growth forest, but instead represent lands in transition from a heavily-used past, gradually reverting back to more primitive conditions.

Additional language was added to the FEIS in response to public comment on the DEIS to clarify how the proposed activities affect wilderness character. This explanatory information responds to questions in the public comments regarding compliance with the Wilderness Act. This rationale sets forth the underpinnings of the alternatives developed for the DEIS. Our intent in formally documenting this information is to improve the public's understanding of the rationale for the alternatives, and the methods used by the agency to address complex resource management issues that were before the public in the DEIS. The Wilderness Working Paper further explains the thoughts and rationale behind the alternatives.

Undeveloped and Untrammelled Condition

Many comments stated the proposed trail activities such as hardened trails, upgraded trails, increased trail mileage and stream crossings would increase the evidence of man (development) within wilderness and would not preserve

wilderness character. Many people expressed that wilderness is a place they seek to get away from crowds and development. In development of the action alternatives, the forest considered how each action would affect the undeveloped and untrammelled nature of wilderness.

Options to using gravel on trails within wilderness were considered. It was determined that other methods such as using planks or boardwalk over wet areas would be, in the long term, more evidence of man's work than the use of gravel - given the trail miles that need this type of treatment. The evidence of hardened trail is likely to be a short term effect. After one or two seasons of use, the gravel would work into the trail surface and appear to most users as a native surface (FEIS, p. 150-151).

Additional directional signing and improved stream crossings would be evidence of man and affect the undeveloped character of wilderness. We considered other options to signing such as tree blazing as the sole means of indicating visitors were on an established trail. However, we did not feel this would adequately address and eliminate the informal methods of signing that some forest visitors are using – spray painting live trees (FEIS, p. 3). The FEIS also displays that by designating trails, the number of trail junctions would be reduced. For example, in Alternative 2, the number of trail junctions (where directional signs would be placed) would be reduced by one-third.

The type and design of stream crossings is another example of how the interdisciplinary team, in the light of the existing resource and recreation context, fully analyzed the necessity and minimum required method of administering the wildernesses in the project area for recreation access. Formal crossings, *e.g.* bridges constructed of native materials, were considered. The interdisciplinary team visited many stream crossing in the project area, and spent much time in on-the-ground evaluation of necessity and minimum requirements. The team concluded that a stream crossing consisting of native rock and wood to control erosion protected water quality, aquatic life, soil and other resources without an engineered structure. Stones and other native, on-site materials may be place inconspicuously and unobtrusively at crossings, where necessary, and in a minimum amount, to prevent erosion and rutting. This method was determined through site-specific field evaluation to be the minimum required method for administering wilderness for recreation, and protecting wilderness character. As noted in the record, the Forest has experience in using native materials to prevent stream bank deterioration. The effectiveness and aesthetic quality of this method of stream crossing has been proven effective through monitoring.

Alternatives to the use of highlines in the stock-confinement areas were also considered and included the use of pickets, hobbles, fences, hitching racks

and portable electric fences. However, it was determined that most of these methods would require a much larger area and would impact more vegetation. Highlines were preferred over the more intrusive hitching rack and were determined to be a method that addresses resource needs while remaining less conspicuous. Finally, we did consider allowing equestrians to carry their own highlines. However, we felt this would leave too much uncertainty as to what trees were to be used as highline trees. This could result in more resource damage (root exposure, cribbing) as previously undisturbed vegetation is indiscriminately used for highline purposes.

Natural Condition

The FEIS discloses in detail the relationship between natural processes and this wilderness character indicator. This documentation was informed by an extraordinary on-the-ground effort to survey and understand existing resource conditions and the operation of natural processes under these altered conditions. As discussed above, the three wilderness areas in the project area were only designated as wilderness in 1990. Prior to acquisition by the Forest Service in 1933, agriculture, grazing, roads, houses and other buildings were common. Since 1990 the Forest has managed these areas as wilderness, and natural processes are gradually re-asserting themselves within the wildernesses. It is important to remember that these wildernesses are not old growth forest ecosystems, but rather areas that have been developed and are now in transition to a more primitive state. The natural processes in these areas are accordingly in transition as well.

Opportunity for Solitude or Primitive and Unconfined Recreation

Many comments stated that wilderness was important as it offered a place to get away from crowds and development. One statement indicated that upgrading the trail system would diminish wilderness by designating trails that would increase use which would affect the opportunity for solitude. Many comments stated that designating trails and eliminating stock camping reduced their opportunity for primitive and unconfined recreation.

The FEIS took a hard look at potential effects to solitude or primitive and unconfined recreation for both hiking and equestrian-use. For hikers, Alternative 1 offers the least opportunity for solitude because cross country trail use would continue. Conversely, this alternative would offer the most opportunities for equestrians as this is the only alternative where cross country use would be allowed in wilderness.

In the action alternatives, the remote trail-less acreage is increased for hiking forest visitors. All action alternatives restrict equestrian use to designated trails. The FEIS readily acknowledges that Alternatives 2 and 3 may diminish the experience for some and be perceived as a high degree management control.

Alternative 4, because it proposes the least miles of trail, may increase the potential for encounters (FEIS, pp. 181-190). However, opportunities for solitude should be readily available in one of the three Wilderness Areas - particularly during week days and winter months. Table 36 on page 165 of the FEIS displays the distribution of equestrian use in the Lusk Creek Wilderness. Weekdays have substantially less use than weekends during the months of March – November or a 9 month period.

Regarding the correlation between constructed and reconstructed trails and the potential for over-use (which would affect the opportunity for solitude), please refer to Table 51 in the FEIS on page 221. Alternative 1 has the potential to affect solitude and primitive or unconfined recreation as trail closures are established and the degree of management control increases. Equestrian use is projected to be 15% less by 2015. Increases in equestrian use in Alternatives 2 and 3 projects a 1% increase per year as a result of good access and well managed trails. Alternative 4 would also impact the opportunity for solitude and ability to have a primitive and unconfined recreation experience – particularly in the Lusk Creek Wilderness as most of the trail miles would be reduced or eliminated. The projected reductions in use are similar to Alternative 1, a reduction of 15% by 2015.

Long-term Effects to Wilderness Character

Please refer to page 154 of the FEIS. References are made regarding the need to improve wilderness character, “What is important is that management of a given area serves to improve its wilderness character (FSM 2320.2)...the real stewardship challenge is to manage the natural systems and the opportunity for primitive recreational experience to ensure that these attributes improve over time”. With this statement in mind, the action alternatives were designed to reduce and confine resource impacts to a designated trail system. In addition, attention to trail location, design and maintenance should protect wilderness and other forest resources for future generations. Several monitoring items identified in Appendix B of the FEIS (such as soil and water, stock confinement, user conflict, wet-weather ride-ability) should determine whether these objectives are being met.

The importance (from a wilderness perspective) of closing the system of deteriorating non-system trails should not be underestimated. The wilderness areas are gradually becoming more primitive as the evidence of human development of these lands fade away. Natural processes are re-asserting themselves. Eroding trails, however, run counter to resource recovery. In development of alternatives and choosing the Selected Alternative, the Forest is looking to the long term restoration of these three areas: quality trails without rutting and erosion, protection of plants and animal communities, elimination of non-native invasive species. The Selected Alternative is an active

management approach to further the recovery of native plants and natural processes in wilderness.

Minimum Requirements

While a Minimum Requirement Analysis (MRA) is not required by law, regulation or Forest Service policy, all the components of a MRA were completed in the development of the Purpose and Need and the action alternatives. The entire wilderness analysis is based on describing the wilderness character for each wilderness within the project area and disclosing the environmental consequences to the four indicators of wilderness character: untrammelled condition, natural condition, undeveloped condition and solitude or primitive and unconfined recreation (FEIS, pp. 167- 196).

In response to public comments, additional documentation of the interdisciplinary team’s thoughts and determinations in development of the alternatives was added to the Introduction to the Wilderness section in the FEIS, Chapter 3. The issues and alternatives are the same as before, but the rationale and underlying views of the interdisciplinary team are described to better explain the Forest’s compliance with the Wilderness Act.

176. I am not sure, nor do I concur with the Forest Service stating that Alternative 2 would result in beneficial effects on the undeveloped character of wilderness in the project area. This is a subjective statement, not supported by facts.
Includes: 1035-486-21.

RESPONSE: This statement is based on the actions specific to Alternative 2 such as the closing of non system trails, (DEIS p. 138), using trail techniques (gravel which is similar in color to the existing trail tread (DEIS, p. 139), the relocation, reduction in size or elimination of stock-confinement areas (reduction from 9 to 4 in Alternative 2) and the removal of these areas from viewing proximity to scenic features (DEIS, p. 140), constructing and maintaining the designated trail system to lessen the visual effects on the undeveloped indicator (poorly designed trails which are muddy and heavily eroded cause visual impacts) (DEIS, p. 140) and providing a minimal amount of signing using native materials (while removing the existing evidence of spray-painted trees and rocks (DEIS, p. 140)). When considered in this context, there should be beneficial effects to the undeveloped character of wilderness. While having “no evidence of man’s work” is not realistic in this case, actions are being taken to reduce the impact and evidence of man’s imprint.

177. The FS has not described what the wilderness character is for the Lusk Creek Wilderness and other wilderness areas.
Includes: 850-479-10.

RESPONSE: The attributes for each wilderness (natural condition, opportunity for solitude, undeveloped condition and untrammelled condition) can be found through out the DEIS in various resource sections. In response to the comments received on the draft EIS, the Forest added cross references to the Wilderness section of the EIS which point the reader to the discussion of wilderness character in each of the resources sections. The Forest also added text which clarified and summarized the attributes for each wilderness in the project area for the reader's convenience. The Forest refined its description of wilderness character for each wilderness area in the project area to respond to this and other comments (FEIS 146-166).

178. You have to get horses out and leave wilderness alone.
Includes: 597-428-1.

RESPONSE: The comment expresses a preference or viewpoint without supporting information. Cognizant that some members of the public would prefer no equestrian use in wilderness, the Forest gave thorough consideration to this alternative. However, an alternative that prohibited equestrian use in wilderness was eliminated from detailed study because it would not meet the purpose or need.

Equestrian use of the project area, including the areas that are now wilderness, predates the establishment of the Forest. Equestrian recreation was also well established at the time the wildernesses were designated. Our decision concerning continuation of managed equestrian recreation in wilderness (*i.e.* elimination of an alternative that prohibited equestrian recreation in wilderness) was informed by congressional intent.

Equally important, one wilderness within the project area, Lusk Creek Wilderness Area, has been the subject of litigation concerning equestrian recreation since 1999. At a recent hearing, the Court likewise acknowledged that although preservation of wilderness was paramount, equestrian recreation was a valid use of the Wilderness. (*See, e.g.* November 2004 Transcript of Hearing at page 35 (speaking of equestrian use of Lusk Creek Wilderness Area, the Court noted: "I was glad to hear Mr. Wallace stand up and say he's not against equestrian use in the Forest because it's going to happen. It's a multi-use national forest, and that's just a fact of life." *See also* pages 46, 78, 80, 82). Our decision to eliminate an alternative that prohibited equestrian recreation in wilderness was guided by the lessons learned (*i.e.* interpretations of law) from *Glisson vs. Forest Service*.

The 1992 Forest Plan considered the issue of whether equestrian use was allowable in wilderness at the programmatic level, and allowed equestrian recreation in wilderness areas (FEIS, p 10; *see also* 1992 Forest Plan at page IV-109).

179. Both overhead lines and posts at Indian Kitchen are structures and installations under Section 4 (c) of the Wilderness Act which are not allowed. Includes: 843-479-3.

RESPONSE: The comment is concerned that overhead lines and posts at Indian Kitchen are “structures” authorized by the Forest but prohibited by Section 4(c) of the Wilderness Act. First, as a factual matter, the Selected Alternative does not include any installation or maintenance of the posts at Indian Kitchen. The existing remnants of the hitching rack will be removed and the area rehabilitated. The hitching racks that existed at Indian Kitchen have been allowed to deteriorate and are no longer functional. The concern expressed in this comment does not account for the fact that the existing place used to confine horses at Indian Kitchen will be abandoned and recovered. A properly designed stock confinement area will be relocated into a less environmentally sensitive area to serve Lusk Creek Wilderness. (*See* map of confinement areas in Selected Alternative, Appendix A Map C; *see also* FEIS Table 7). The Selected Alternative mitigates or reduces the effects of equestrian recreation relative to the existing condition.

The Wilderness Act Section 4(c) mandates that no structure be located in wilderness “except as necessary to meet minimum requirements for the administration of the area for the purpose of this chapter” The Act does not specifically prohibit high-lines in wilderness, but allows federal agencies discretion to determine, based upon the factual context of each particular situation, what is necessary to meet the minimum requirements for administration of any particular wilderness area. The Act expresses a preference against structures in wilderness, but does not prohibit them. The use and enjoyment of wilderness is a key purpose of the Act, as well as preservation of wilderness attributes.

Forest Service regulation 36 CFR 293.6 mirrors the language of the Act. Section 293.8 provides greater detail as to the agency’s interpretation of “permanent structures,” citing examples such as motels, summer homes, resorts, camps, hunting and fishing lodges and electronic installations. Agency regulations likewise acknowledge that site specific facts and particular resource circumstances must be taken into consideration in determining what is minimally necessary to meet administer wilderness for the purposes of the particular area.

The Forest took a hard look at the necessity of high-lines in the newly-located stock confinement area near Indian Kitchen. An equine resting area in this

area is essential to the use and enjoyment by the large percentage of the public that visit this portion of the Lusk Creek Wilderness. Likewise, the Forest's considerations of whether high-lines are the minimum required measure to administer the Lusk Creek Wilderness Area for the purpose of the area (including recreation) are documented in the FEIS in the Introduction to Wilderness Resources in Chapter 3. Various constraint methods were considered. Public input on this issue (both suggesting constraint methods and condemning them) was of particular importance. Based upon public involvement, the facts of the situation surrounding the use and purpose of this particular (and popular) portion of Lusk Creek Wilderness Area, the Forest properly analyzed the necessity of temporarily restraining livestock.

The Forest then rationally determined the minimum method of constraint was an inconspicuous, rope stretched between two trees. This method of constraint will be unobtrusive and compatible with the wilderness. The environmental protection (soil and water) benefits outweigh the minor visual effect. Allowing the Forest to choose the area for the restraint lines is better than allowing riders to randomly pick and choose sites. The Forest's determination in this regard is anchored in on-the-ground resource surveys and field observation. Consultation with other experts, as well as diligent field work in the project area by the interdisciplinary team and supporting Forest staff, formed the basis for informing this aspect of the Selected Alternative. Monitoring will evaluate the effects of stock confinement areas (FEIS, Appendix B). Further management action, including area closure, may be implemented if wilderness attributes are at risk.

In response to public comment (like this one) on the DEIS concerning compliance with the Wilderness Act Section 4(c), the Forest improved its analysis and documentation of what is necessary to meet the minimum requirements to administer wilderness. The FEIS, in the Introduction to Wilderness Resources in Chapter 3, explains the rationale of the interdisciplinary team underlying the development of the DEIS alternatives. The Forest devoted considerable effort to reducing the effects of equestrian recreation in wilderness. The record documents the review of prohibition of equestrians, as well as development and evaluation of various measures to regulate recreation, given the current high demand for access and resource conditions.

180. Top priority should be given to construction and maintenance of trails in wilderness areas.

Includes: 206-94-6.

RESPONSE: We agree. The FEIS displays that in Alternatives 2-4 that trails in the Lusk Creek Wilderness, other wilderness areas and natural areas would have the highest priority. The Bay Creek Watershed would be the next

priority and routes in the Eagle Creek watershed and Big Grand Pierre Creek would follow (FEIS, p.33).

The Forest has funding and resources available to begin restoration work in these wildernesses in 2006. The benefits to the environment (relative to current conditions) will at least begin to be evident after the next growing season. The priority on preservation of wilderness attributes reflects the Forest's concern about regulating recreation use in a manner that gives deference to protection of wilderness character. The priority on trail work in wilderness evidences the Forest's determination that equestrian recreation in wilderness will be compatible with the character and attributes of these special areas.

181. I feel that the restrictions on the campground users from the court order of Judge Gilbert should remain in effect. Local users should be able to continue using the forest as they always have.
Includes: 538-324-7.

RESPONSE: The court-ordered permits are temporary and will expire on March 31, 2006 or when replaced by permits resulting from this analysis (FEIS, p. 6). The alternatives include, to varying degrees, all the terms and conditions of the court-ordered interim outfitter-guide permits. We did not include an alternative that proposes the permitted trails and strict implementation of the order because that was not the intent of the remedy imposed by the court. The trails currently authorized under the interim court order are, for the most part, included in Alternative 3 of this analysis (FEIS, pp. 34-37).

The purpose and need statement sets forth the Forest's view of the focal point for this project. The March 2005 Court Order was primarily intended to provide management parameters in the interim period while the Forest completed this analysis of the four watershed area. A considerable amount of new information, public comment, consultation with other resource experts, and field observation and resource survey work has occurred since March 2005. The development of alternatives in this analysis was informed by the hearings, negotiations, site visit and other aspects of the *Glisson* litigation. There is no suggestion in the March 2005 order or elsewhere that the Court intended to constrain the Forest's analysis of options for sustainable recreation management in this analysis. It was understood by all parties that this analysis was ongoing. In large part, this analysis builds upon, but has moved forward from, the interim measures imposed by the Court Order.

Based upon monitoring of resource conditions and recreational use, this decision will likely also be adapted over time. Management of dynamic ecosystems is not static; there is no one answer or management decision for

all time. The measures associated with the 2005 Court Order were appropriate for the purpose and time in which they were promulgated, but events have transpired that require change in management direction. That change over time would occur was anticipated and understood to be true in the negotiations that resulted in the interim special use permits. The Selected Alternative remains in accord with the broad intent of the March 2005 Court Order, balancing recreation access and use with environmental protection. Irreparable harm of natural resources, especially wilderness, is unacceptable. The Selected Alternative sets forth a reasonable next step, moving forward from the interim measures of the 2005 Court Order.

The Forest is cognizant and sensitive to the desires of all its neighboring landowners, including those who use the Forest for recreation access. Since local versus non-local horse riding produces the same type of environmental effects, the environmental protection measures apply to equestrians generally, not just those that use the permitted equestrian camps. There simply is no basis for discriminating against one type of rider versus another. It would be very difficult to monitor and administer a designated trail system that is based upon the location where the horse originated from. We are willing to consider special use permits (after further site specific analysis) for landowners adjacent to the Forest. Although the local equestrians' access is no longer unrestricted in the project area, many high-quality riding opportunities remain. After analysis of the on the ground conditions and similar circumstances on other National Forests, the Forest reasonably determined that due to environmental resource concerns it was necessary to place some restrictions upon all equestrian use in the project area.

182. Many comments suggested leaving alternative trails, such as the River to River Trail, open while all 3 Wilderness Areas are closed. In addition, many comments were concerned that the elimination of camping with stock within wilderness would reduce their opportunities for primitive and unconfined recreation or would affect their ability to use the River to River Trail. Some respondents felt backpackers should be subject to the same restriction.

Includes: 729-337-11, 749-337-31, 924-540-07, 932-541-08, 1013-614-02, 1017-486-03, 1139-665-09, 1177-671-03, 1218-678-04, 1473-729-06, 1474-729-07, 1761-711-03, 1819-542-06.

RESPONSE: Please refer to responses 166-170 for a complete discussion on the wet weather and seasonal closures. Regarding alternative trails, the Forest considered leaving trails, such as the River to River Trail open. We concluded the River to River Trail itself is in need of reconstruction on at least 2 miles and it would not be appropriate to leave it open during wet conditions. Additional use would be promoted on a trail that is, in many

ways, substandard. However, to address the concern, the primary trail within the Lusk Creek Wilderness would be the first trails to be reconstructed.

The FEIS states that camping could only be allowed where stock could be confined for extended periods. Such confinement would cause unacceptable impacts to wilderness character if done outside of designated confinement areas. Since the capacity of the confinement areas is limited and the use of the areas tends to be high, camping with stock would no longer be feasible. In addition, if this use were allowed to develop, it would likely degrade the natural appearance of wilderness, because equestrian campsites tend to be similar in appearance to concentrated use areas (FEIS, p. 22).

We recognize that eliminating camping will diminish opportunities for primitive and unconfined recreation within wilderness (FEIS, pp. 181-190) and would increase the perception of management control. However, given the nature of the wilderness use patterns, camping with stock does not often occur. Most camping occurs outside of wilderness in dispersed areas (where road access is readily available) and from commercial equestrian campgrounds.

The Forest has considerable discretion under NFMA, MUSYA, and the Wilderness Act to condition recreational use to protect resource conditions. Here the restriction on camping with stock is both rational and necessary at this time. The FEIS documents the sound reasons for this measure as well as the beneficial effects resource restoration (FEIS, page 151). We understand the preference of some to have this experience in the 3 wilderness areas in the project area, but also note the abundant camping with stock opportunities elsewhere on the Forest. In order to protect wilderness, camping with stock will be prohibited under this decision. If conditions change over time, the Forest will reconsider this recreation opportunity (after further public involvement and environmental analysis, as appropriate).

Much of the equestrian use is landowners who ride from private property. Even hunters who utilize the wilderness typically use camps outside of wilderness. In addition, the use of pack stock animals (which indicates some level of overnight use) is not common. It is not likely that the elimination of stock camping within wilderness would affect an equestrian's ability to utilize the River to River Trail. There are numerous access points along this route which offer ample non-wilderness camping options.

With regard to prohibiting hikers from camping in wilderness, monitoring data, field observation, and differences in environmental effects indicate that this is not warranted. The differences in potential environmental effects are readily apparent. Similar to the equestrian wilderness use patterns, there appears to be minimal use of wilderness for backpacking and camping. A wilderness resource monitoring element has been added to Appendix B to

collect baseline information on existing campsites within wilderness. Annual monitoring will indicate whether resource conditions are changing as a result of this type of use. Should further management actions be needed, they would be taken.

183. Limit stock-confinement areas to ensure a quality wilderness experience, as well as trail closures to horses in fragile, wet conditions.

(General comment)

Includes: 825-425-2.

RESPONSE: In response to comment received on the DEIS, the Forest has clarified and better articulated its rationale for design, location, and purpose of the stock confinement areas (response to 106). We agree that changes in the location and management of these areas are warranted. The Forest took a hard look at the condition, need, design, location, necessity, and minimum management requirements for stock confinement areas in wilderness in the project area (FEIS, page 151, *See also* Wilderness Working Paper). Consultation with other Forests with experience in wilderness management of equestrian recreation was influential in developing the alternatives. Based upon this analysis, the Forest moved stock confinements from fragile, wet sites (in agreement with this comment). There is less than 1 acre of stock confinements in Lusk Creek Wilderness Area. Consistent with the desire of many (as reflected by this comment), there are no stock confinements in the other two wilderness areas in the project area. Stock confinements outside of wilderness will not be located in fragile or chronically wet areas. Monitoring will ensure that the mitigation is effective as anticipated (based on consultation and field observation of other Forest's confinement areas, as well as published scientific information).

184. The agency's Preferred Alternative calls for 58 miles of designated equestrian trails, nearly twice as much as the Deam's 31.4miles. It should be noted that the Charles Deam also has a Wilderness Ranger that regularly patrols the area.

Includes: 1720-729-18.

RESPONSE: The Selected Alternative now proposes a total of about 49 miles of wilderness trail. While this level of development is higher than that found in the Charles Deam Wilderness, it is not unreasonable. The Charles Deam is one large area. The proposed 49 miles of trail are spread out among three separate wilderness areas. The interdisciplinary team recommended and analyzed the potential environmental effects from the trail system and these are displayed throughout the FEIS.

The Forest has had Wilderness Rangers for each of the last two years and we intend to continue with this position in the future. Wilderness Rangers patrol Forest wilderness areas and gather monitoring information. They also act as information and education sources for wilderness users. A further discussion of this position is found under response 69.

The Shawnee National Forest has studied conditions and practices on the Charles Deam Wilderness on the Hoosier National Forest and applied lessons learned. Not all aspects of the equestrian trails located in the Deam Wilderness are directly applicable to the situation in the project area. However, the trails and management practices on the Hoosier National Forest and Illinois State Parks provide evidence that equestrian recreation can be managed to preserve wilderness attributes. We take note of other experts' experience in address similar equestrian recreation issues, and the decision here is informed by the lessons learned from those experiences. The references in the record to the Hoosier National Forest or other situations are not intended to imply that every aspect of recreation management is the same on the Shawnee National Forest.

Indeed, there are some important differences between the Deam Wilderness and the wildernesses in the project area. First, the demand for equestrian recreation on the Hoosier National Forest is a fraction of what it is on the Shawnee National Forest. Unlike the Shawnee, the Hoosier National Forest only has one major equestrian campground operating adjacent to the Forest. The number of loop trails and desire to reach certain scenic features is another major difference. The comment implies that the number of miles in the Deam Wilderness is the maximum number that could be located in that area in compliance with the Wilderness Act. This is an incorrect assumption. As noted above, the location and design of trails takes into account not only wilderness attribute preservation, but also recreation access. The miles of trails in the Deam Wilderness were determined to be the appropriate balance for that area, but are not intended to be a quasi-standard against which other wildernesses should be measured.

The reference to the Deam Wilderness in the record merely documents the interdisciplinary team's effort to develop alternatives that will work on the ground: effective mitigation, proper trail location and design, options for stock confinements. This coordination with others was not to suggest that the project area on the Shawnee was to be treated in an identical fashion. Equestrian recreation management in the Deam Wilderness holds many valuable lessons; the interdisciplinary team took advantage of their expertise and adapted it to the social, physical, and biological conditions in the project area.

185. The standards and guidelines for activities allowed in wilderness are generally so restrictive that it limits the Forest's ability to cost-effectively manage resource damage and maintain trails. IDNR is concerned with the amount of trail proposed in wilderness and the Forest's ability to manage trail in wilderness. IDNR recognizes the benefits of wilderness area designation to the people of IL and supports protecting the valued wilderness resources.

Includes: 1682-971-4.

RESPONSE: The Forest has sufficient funds budgeted to implement the decision, focusing first on those trails in the wilderness areas that are in need of attention because of resource conditions. No one can predict with certainty what future budgets will be. Lack of maintenance funds could trigger further management action, including temporary closure of trail segments, if necessary, to preserve wilderness attributes. It is worth noting, however, that properly designed and located trails are generally easier and cheaper to maintain compared with the current system of user created trails. With the help of our partners, sufficient resources will be available to maintain the reconstructed wilderness trails. The fact that a portion of these trails are located within wilderness would not make operation and maintenance cost prohibitive or unrealistic. We do realize that Table 61 in the economics section of the DEIS does look daunting. However, this table does not consider the value of partnerships which would help leverage and offset these projected costs. Partnerships for routine maintenance are readily available and have been used successfully in the past. They do increase the cost-effectiveness of operation and maintenance. In addition, there are numerous opportunities for developing additional partners. More discussion of partnerships is found under response 62.

186. Many comments suggested that trail density should not be eliminated, should not increase or should not exceed 1.3 miles.

Includes: 171-23-7, 225-99-5, 1418-718-2, 1636-714-5, 1728-792-26, 1800-545-7.

RESPONSE: The proposal to eliminate trail density standards in the wilderness is addressed on pages 178-181. The four alternatives display a range of trail densities, and the analysis and comparison of the effects of these alternatives on different resources is discussed in the DEIS. We did not identify a specific trail density threshold for wilderness. Instead, we proposed a reasonable amount of well-located, maintained trails for designation. The combined effect of restricting equestrian use to designated system trails, then properly locating and maintaining those system trails will provide more protection for soil and water resources than the continuation of existing management. The proposal in Alternative 2 would result in a net decrease in currently used trail miles within wilderness and the four watersheds.

The proposals in Alternatives 2 and 4 will provide the best management control of the number and location of trails used in the project area. Restricting equestrian use to designated system trails will provide that control. Additionally, any future trail proposals would require appropriate environmental analysis, which would include an analysis of cumulative effects. Such cumulative effects analysis would take into consideration any trails that would be in the area at the time of a possible future proposal and would consider the cumulative effects on forest resources.

187. Several comments suggested a restriction on the number of stock animals. Includes: 847-479-7, 1491-738-2, 1585-705-18, 1622-705-55, 1634-714-3, 1727-792-25, 1803-545-10.

RESPONSE: The interdisciplinary team considered limits on stock animals, but recognized the Chilman 2005 study indicated that most wilderness users were satisfied with their recreation experience. The team also acknowledged that equestrian recreation in the project area has been a traditional use for several decades. Only recently (in the past 7-8 years) has recreation use caused concern. The Forest is collecting use data, and seeking further information upon which to make a scientific-based decision on whether use must be restricted. It will take several years to collect and evaluate data. Management action to respond to management concerns must occur sooner.

The Selected Alternative responds to resource concerns, mitigating and improving regulation of equestrian recreation, while further work concerning use levels is ongoing. It is also worth noting that the issue of use levels was brought before the Court by plaintiffs in *Glisson vs. Forest Service*, but not adopted as part of the March 2005 order, for the same reason: there simply is no science or data at this time upon which to base a rational user limit. The FEIS Appendix B sets forth the monitoring, building upon what we already know, to resolve this matter.

188. Many comments were received regarding the group size limitations which are found in Alternatives 2, 3 and 4. Some wondered if this limitation was necessary for hikers. Many responders stated this action was not necessary because it would not affect (change, reduce or eliminate) resource conditions. Other comments stated this action would be arbitrary and was unsupported by science or peer review. Others noted the restriction would place a hardship on forest visitors and would affect their ability to experience several scenic sites. Some comments noted it would be difficult to comply with any size number at stock-confinement areas (tie up areas) or when having lunch. Finally, some comments questioned whether requiring a distance between groups was feasible.

Includes: 1074-617-8, 1352-707-30, 1666-713-10, 1262-687-2, 1620-705-53.

RESPONSE: The EIS examined a reasonable range of alternatives in accord with the purpose and need. The genesis of group size limits is found in the March 2005 Court Order, where these constraints were imposed upon riders in Lusk Creek Wilderness Area in order to preserve wilderness attributes, see March 2005 Court Order, *Glisson vs. Forest Service*. Group size in the March 2005 Order (pertaining only to Lusk Creek Wilderness) was set at 10 riders.

The use of group size limitations within wilderness is not an arbitrary action. The effect of group size and encounters to an individual's wilderness experience has been studied, documented and peer reviewed. Additional literature citations will be provided in the FEIS to support this statement. Group size limitations have been proposed to address the need to provide the opportunity for quiet and primitive or confined recreation – more so than to change, reduce or eliminate resource impacts. Resource impacts would be addressed through several actions such as trail designation and relocation and non-system trail closures. The FEIS states, "In addition to the physical wilderness resources, wilderness character must all be addressed.

The range of alternative group sizes evaluated in the EIS is in accord with the purpose and need and based upon monitoring information. The Chilman study (2005) documented that the group size in wilderness ranged from 1 to 25. The average group size is six for equestrians and three for hikers. There are dozens of permutations that could be analyzed, but NEPA does not require agencies to examine every possible alternative. The range of alternatives is bounded by what is feasible and practical. In the EIS, the range of alternatives is reasonable and anchored in actual data from the project area. Neither the comment nor any other source of information known to the Forest suggests that a group size of five is reasonable or favorable. There is no indication or evidence that a group size of four has greater environmental benefits or alters the trade-offs between alternatives. It is simply a preference on the respondent as expressed in this comment.

Forest Service Policy (FSM 2323.12) seeks to maximize visitor freedom within wilderness and minimize direct controls and restrictions. Controls are to be applied only when they are essential for protection of the wilderness resource and after indirect measures have failed. The 1992 Forest Plan states (FP, IV-113) states that LAC will be used for monitoring effects of management on the wilderness resource and the range of options will be considered when unacceptable environmental damage or significant user dissatisfaction occurs. The emphasis for correcting problems is: (1) Educational approaches such as signing and brochures, (2) Natural resource modification such as closing trails, restoration and tent pads, (3) Use of regulatory approaches such as law enforcement and (4) Permit systems will be used only when other methods fail. With this direction in mind, we considered an alternative that would limit

the amount of use in wilderness to protect wilderness character and enhance the opportunity for solitude. However, with only one year of use data in the Lusk Creek Wilderness, no use estimates for the Garden of the Gods Wilderness and no use information for the Bay Creek Wilderness, it was believed to be too arbitrary. However, use monitoring is planned and if needed, use limits could be set in the future (FEIS, p. 40).

A visitor's opportunity for solitude can be impacted by heavy seasonal equestrian use. The Forest readily acknowledges that there is a need to gather additional use data to reliably characterize the social condition of the wilderness areas (FEIS, page 7) as only the Lusk Creek Wilderness has one year of visitor inventory and survey. However, we do not believe there is a need to defer this decision until such data is available. The Forest reviewed the visitor use inventory and survey conducted for the Lusk Creek Wilderness. The survey found that most groups (both rider and hiker) were comprised of 10 or less people (Chilman, 2005). The Forest also has reviewed the numerous comments received both during the scoping period and during the DEIS response period.

In most cases, the sub-standard condition of the trails (muddy, eroded, manure-laden) further contributed to a negative experience. By establishing group size limits with no restrictions on the overall amount of use (quotas), we are trying to provide for a positive wilderness experience without exerting a higher degree of management control (additional restrictions). Alternative 2 states that the limit of 10 people per group is proposed to better provide opportunities for solitude. One factor in the difference in proposed group sizes between alternatives is the available trail mileage. Alternative 2 has a moderate number of trails (49 miles of trail –encompasses all 3 Wilderness Areas) and the group size limitation reflects what is the upper range of a typical group size found within the Lusk Creek Wilderness (Chilman, 2005). Alternative 3, which has the most trail miles (73 miles – encompasses all three Wilderness Areas), also proposes a higher group size. A higher trail density may allow for more dispersed use and reduced encounters. Alternative 4 proposes the smallest group size as more encounters would be expected as all use groups would be confined to 25 total miles of wilderness trail. In addition to group size limits, other actions such as increasing the number of hiker-only trails are proposed in Alternatives 2-4 (FEIS pp. 27-36, 42) to reduce encounters at high use destination areas.

It is recognized that in stock-confinement areas groups would be able to utilize the area up to the limits of that individual area. Stock-confinement area capacities (total number of animals) throughout the four watershed range from 345 (No Action) to 280 (Alternative 4) to balance minimizing resource impacts with meeting visitor needs.

Groups would simply need to separate when one group encounters another. One comment suggested applying a group limitation to equestrians only. The wilderness experience can be impacted by the number of encounters with all visitors. We do not want to single out a particular group when there is the wilderness-wide objective of providing for solitude for all groups. Additional information will be added to the FEIS in both the affected environment and environmental consequences which clarifies the effects of group size limits to solitude and the opportunity for primitive or unconfined recreation in all alternatives.

189. If large amounts of gravel and other trail surface materials must be used to harden, then Lusk Creek is unsuitable for such use.
Includes: 842-479-2.

RESPONSE: While the comment did not specifically mention equestrian use, we are assuming that the use that is alleged in the comment to be unsuitable for the Lusk Creek Wilderness Area is equestrian recreation. The Forest agrees that equestrian recreation on poorly located user-created trails in wilderness causes adverse environmental effects more quickly and to a greater degree than hikers. However, merely reducing equestrian use would not proportionally reduce potential adverse effects from these trails. Given the existing condition and recreation demand, reducing trail use alone will not result in a proportional benefit to the environment. Prohibiting equestrian use in wildernesses in the project area was an option considered as an alternative in the EIS, but eliminated from detailed study because it did not meet the purpose and need for the project.

The comment suggests that if trails in the wilderness need gravel for use, then they are not appropriate for equestrian use. Equestrian recreation in these wilderness areas has been a tradition for decades, long preceding the designation of these areas as wilderness in 1990.

Horse riding has been allowed in the areas that are now wilderness since the Shawnee National Forest was established in 1933. The increase in recreation use and the corresponding impact to resource conditions are factors that influenced the purpose and need (see FEIS Background). The Forest is not aware (and no authority is cited in the comment) of any legal prohibition of the judicious use of gravel to properly construct wilderness trails. Gravel is frequently used in wilderness where it is integral to establishing safe, sustainable recreation access to wilderness. The analysis of gravel and wilderness trails in this EIS was also informed by field observation and lessons learned from similar equestrian trails in the Deam Wilderness, Hoosier National Forest. In an abundance of caution and with a strong desire to protect wilderness attributes, the Forest is committed to using

natural appearing gravel. Maintaining the natural appearance and condition of wilderness is a fundamental concern.

The comment proposes a radical alternation in management and recreation access, simply because gravel is needed to make trails accessible and resilient. The gravel does not change the purpose or nature of a trail. The addition of gravel at some parts of a wilderness trail simply mitigates potential rutting and allows the trail to be used properly (*i.e.* without undue environmental damage). Local, naturally-appearing gravel does not alter the width, character, or purpose of trails. Gravel appears natural and fades into the trail; it is unobtrusive. Trails are being designated in wilderness to allow sustainable recreation access. Allowing cross-country riding has resulted in user-created trails, many of which are closed and recovered under the Selected Alternative.

The limited use of gravel facilitates the balancing of trails in this analysis: properly located trails reinforced with gravel would replace many miles of poorly located and eroding user-created trails in wilderness. Properly located, designed, and constructed trails, including gravel where needed, are resilient, thus facilitating use of the trail for both hikers and equestrians. Gravel reinforcement of the trail base should also reduce maintenance effort and cost (relative to trails without gravel). The monitoring items of Table B-1 (FEIS Appendix B) will gauge the effectiveness of trail treatments.

190. The DEIS, on page 149, states that it is anticipated that Burden Falls Wilderness Area may be used more by equestrians when the other three Wilderness Areas are closed to cross-country equestrian use, and especially when Lusk Creek Wilderness is closed due to seasonal or wet weather closure. We urge the FS to keep in mind that any new user-made trails in Burden Falls would be illegal, and that FS personnel monitor Burden Falls very closely and take immediate action to protect that wilderness if illegal trails are found in the Wilderness Area.

Includes: 1589-705-22.

RESPONSE: The Monitoring Plan, Appendix B includes items specific to Burden Falls.

191. Wilderness protection takes precedence over equestrian use, and that there should be an enforcement plan with or without allowed equestrian use. I visit the Forest with some regularity, and I am just as regularly distressed to experience degraded conditions and witness damage from equestrian use in the Forest and particularly, in wilderness areas. This must end.

Includes: 1099-637-1.

RESPONSE: We agree and are proposing many actions in various alternatives to reduce, minimize, or eliminate the resource damage that is evident within wilderness. Although stated differently, the comment is congruent with the spirit of the purpose and need statements. This analysis is informed by public concerns about access and protection, years of litigation, development of the Natural Area Trails EIS, public participation during development of the 2003 Outfitting and Guiding Environmental Assessment. In that regard, it is the culmination of nearly 7-8 years of public effort in planning to address equestrian recreation issues on in the project area.

The Forest consulted with national and regional experts and used the best analytical guidance available to the agency to develop and evaluate the alternatives. This EIS is anchored in field data, surveys, monitoring and observation of similar trails in Illinois, Indiana, and Missouri. Almost every mile of user-created trail in wilderness in the project area was walked by Forest recreation experts. Hundreds of hours of staff time were spent on the ground in the wildernesses and other parts of the project area.

Equally important, consultations with resource and recreation experts shaped the alternatives and guided development of effective mitigation. Wilderness character was a significant issue in this EIS from the beginning. The Selected Alternative is characterized by numerous measures to reduce the environmental effects of equestrian recreation in wilderness. The Selected Alternative is based upon sound science and management experience in applying scientific information to the ground. Prohibition of equestrian use altogether was considered, as well as allowing current methods (user created, cross country) of low management to continue, or allowing a greater degree of designated trails. The tradeoffs of these alternatives are set forth in great detail. The Forest agrees with the underlying essence of the comment and thus developed alternatives for protection of wilderness attributes. This is the primary intent underlying many of the features of the Selected Alternative.

192. You are trying to incorporate a bunch of trails for domestic animals in a wilderness. The two are incompatible.
Includes: 980-594-1.

RESPONSE: The comment infers a motive or intent to the purpose and need that is simply not true. The Forest is responding to recreation demand and resource condition. Sustainable recreation, not the imposition of domestic animals into wilderness, is at issue in this analysis and decision-making. The trails contemplated in the Selected Alternative are multi-use: both hikers and horse-riders use the trails. Both are engaged in recreation. Other Forest visitors use the trails to access wilderness. The differences (and often user conflicts) center on how the people choose to recreate. The

comment is incorrect: the trails are for people who recreate on the Forest, not for the purpose of introducing domesticated animals into wilderness.

The Forest has considerable discretion under NFMA, MUSYA to determine what the appropriate use of particular areas of the National Forests. The Wilderness Act sets preservation of wilderness attributes as the paramount objective, but also recognizes recreation as a legitimate action in wilderness, and allows for limited actions to be taken to administer the wilderness for recreational use.

Wilderness and equestrian use do not have to be incompatible. Prohibition of equestrian recreation from wilderness areas was considered as an alternative in the EIS, but eliminated from detailed study because it did not meet the purpose and need. Eliminating horses from wilderness is not a viable option and would be contrary to the Forest Plan goals. Both Forest Service policy and the Wilderness Act recognize traditional modes of travel to access wilderness.

193. In *High Sierra Hikers v. Blackwell*, it determined the granting of permits at pre-existing levels of equestrian use when there is documented resource damage resulting from overuse does not have rational validity. Includes: 852-479-12.

RESPONSE: The comment cites a Ninth Circuit court decision and suggests that permits which continue the *status quo* regarding the amount of recreation use should not be issued. The comment intimates that recreation opportunities should be reduced in the project area because recreation access under the Selected Alternative will cause damage due to overuse of wilderness.

The EIS considered both the letter and spirit of the resource protection provisions of the March 2005 Court Order, *Glisson vs. Forest Service*. Each action alternative in the EIS considered permit terms and operating conditions designed to enhance wilderness (*e.g.* temporary wet weather closures, seasonal use restrictions, and wilderness group size limits). The Selected Alternative would greatly improve wilderness character in the project area by the regulation of all equestrian use not just commercial use. With the proposed trail maintenance and construction activities, the trails will be able to accommodate the existing (and projected) level of use. Deteriorated non-system trails will be closed. Monitoring items have been identified to evaluate implementation of the decision to ensure that resource damage (from overuse or otherwise) does not occur.

As noted above, this comment suggests there is a need to limit numbers to protect the social aspects of solitude and primitive or unconfined recreation.

The court case cited in the comment is often mentioned in the context of reducing recreational access to wilderness. In the *High Sierra Hikers vs. Blackwell*, the court was concerned with the lack of NEPA compliance with regard to wilderness recreation, and faulted the agency for failing to provide a rational explanation for why it authorized commercial use of wilderness at pre-existing levels in the face of documented resource damage. We reviewed the *High Sierra Hikers* decisions and determined that the situation involved in this project area is substantially different.

The situation in *High Sierra Hikers*, where the court faulted the agency for preparing simple categorical exclusions for multi-year permits, is easily distinguishable from the thorough environmental analysis prepared for this project. Here, by contrast, the Forest prepared an environmental assessment in 2003 for outfitting and guiding that was not challenged. Moreover, for the past 2 years the Forest has labored to analyze a reasonable range of alternatives, take a hard look at the effects of equestrian recreation in wilderness, and involve the public in the preparation of a full environmental impact statement. The Forest considered various methods of regulating equestrian use in the project area and conducted a thorough analysis of what is necessary to administer wilderness. The Forest considered limits on use levels, but deferred the imposition of any such limits until additional data is available (*see* response to comments # 187, 188).

High Sierra Hikers is also factually distinct from the situation in the project area. The *High Sierra Hikers* lawsuit involved an enormous area: 800,000 acres of land in two wildernesses (Ansel Adams, John Muir Wilderness Areas, Inyo and Sierra National Forests of California) over 100 miles long. Within these wilderness areas there are almost 1,000 miles of system trail and an undetermined number of non-system trails. By comparison, the entire Shawnee National Forest is only about 284,000 acres and the Forest portion of the project area here is only about 78,800 acres. There are only 49 miles of trail proposed for designation in the 13,500 acres of project area wilderness.

The recreation management challenges for the western forests are very different in nature, scale, and magnitude. The land involved in the western Forests is rugged and mountainous, compared to the hills and bluffs of southern Illinois. Addressing resource management concerns, in California, for such a vast area of land needed a broad scale approach. Here, by contrast, the Selected Alternative involves fewer miles of wilderness trail that can be maintained and constructed within a few years.

During the maintenance and construction of the 49 miles of wilderness trail the Forest will implement several measures to improve resource condition. The temporary seasonal and wet-weather closures will mitigate recreation effects during this rehabilitation process. A substantial amount of non-

system trail will be closed, enhancing wilderness character. Because of the differences in the land and scale, this approach would have been impossible to use in the *High Sierra Hikers*. The court had little choice but to impose limits on use to control potential harm to wilderness. Conversely, in the three wilderness areas of this project, the Forest is poised to comprehensively regulate equestrian use to protect wilderness consistent with the spirit and intent of NEPA and the Wilderness Act.

There is no clear need or evidence to support any particular limit on use that might be imposed. At this time, imposing a limit on use would be ineffective as well as arbitrary (*See* response to comments # 187, 188). Designation of trails, construction, relocation, and maintenance are the “cure” for the concerns with existing resource conditions. Simply reducing use will not achieve the purpose and need. It is in the interest of all Forest visitors to move forward with appropriate trail closures, reconstruction and relocation of trails, and the restriction of equestrian use to trails. Monitoring of use levels, user satisfaction, and resource conditions will provide the information needed to determine if use levels must be restricted in the future.

The court in *High Sierra Hikers* was also concerned with continuation of the level of use in the wilderness in the light of evidence demonstrating that resource damage due to overuse was evident. The court was concerned that overuse would continue under the special use permits, as would resource damage. In this project, the situation is more complex. Simply reducing use will not result in a corresponding level of decrease of resource damage. In this project the Forest is pro-actively moving to regulate recreation through establishment of trails and other means, ending the use of non-system, unmaintained trails and imposing new terms and conditions on special use permits.

Second, the underlying concern in *High Sierra Hikers* was the lack of analysis of commercial activity in wilderness. The Inyo and Sierra Forests had not properly complied with NEPA. The comprehensive analysis of commercial use (with necessity as its focal point) distinguishes this project. The Forest took a hard look at continuation of equestrian recreation in wilderness in the project area, and developed effective mitigation and monitoring. The Forest’s analysis shows that the number of permits involved in the Selected Alternative (the same number as was authorized prior to the decision) were necessary to achieve the recreation purpose of wilderness (FEIS, Introduction to Wilderness, Chapter 3). The Forest has articulated why the extent of commercial services authorized by the permits is necessary. The Forest considered the types of activities, extent to which the current permits are used, and the current resource condition. The Forest considered these factors in relation to one another, and based on examination of the facts and careful deliberation, determined that complying with the Wilderness Act goal of recreational access for the use and enjoyment of

wilderness did not impede the Act's goal of maintaining wilderness character. The Forest properly balanced the effects of continuing the *status quo* with regard to commercial use with the effect of that activity on wilderness character. There is no evidence in this comment or elsewhere that shows that the Forest improperly analyzed the competing goals of the Act or elevated recreation access over long term preservation of wilderness character.

In summary, the interdisciplinary team determined that that it is prudent, first and foremost, to address the existing trail conditions in wilderness through reconstruction and relocation prior to setting any limits upon use levels. The Selected Alternative was designed to improve resource protection by allowing equestrian use in the project area only on designated trails. We have included temporary measure to minimize resource impacts while the trail system is constructed and maintained. We are closing more than half of the existing trail miles in wilderness and incorporating measures that reduce stock access to several sensitive areas and limit the allowable group size in wilderness. Unlike *High Sierra Hikers*, the Forest has invested years of effort and hundreds of thousands of dollars in a comprehensive analysis and documentation of equestrian use in the project area, including terms and conditions for resource protection for commercial outfitting and guiding permits. The Selected Alternative will reasonably regulate equestrian use in the project area. As noted above, there is no need or basis upon which to impose further use limits at this time. Monitoring will provide additional data on use and resource condition and help use determine whether use limits must be imposed in the future to protect wilderness.

194. Some comments questioned why commercial outfitter and guide services were necessary for the purpose of administering wilderness. Includes: 844-479-4, 845-479-5, 1299-695-4, 1724-792-22, 1798-545-5.

RESPONSE: As displayed in the Wilderness section of the DEIS, the forest utilized a national framework for selecting and evaluating wilderness character (Landres *et. al.* 2005). The framework recognizes that at a local level the social conditions within wilderness, the aspects of wilderness character that is unique to a particular wilderness and the societal values of wilderness character (and information regarding the experiences of visitors) is needed to identify those actions needed to manage wilderness (Landres *et al.* 2005, p. 6).

Commercial services which compliment activities offered on the forest, serves the purpose of allowing equestrian users to experience wilderness and the special attributes each one has (iconic sites, geology, free flowing water, natural areas). That commercial services are an appropriate activity in wilderness is supported by Forest Service policy (FSM 2323.12) which states, "consistent with management as wilderness, permit outfitter/guide

operations where they are necessary to help segments of the public use and enjoy wilderness areas for recreational or other wilderness purposes”.

Each action alternative analyzed in detail in the EIS includes measures designed to minimize, reduce, or eliminate the effects of equestrian recreation on wilderness attributes. The Forest took a hard look at these effects and documented the trade-offs between various alternatives in chapter 3 of the FEIS.

An important part of the development of the FEIS included analysis of the role of commercial outfitting and guiding in wilderness. The Wilderness Act and Forest Service wilderness regulations allow considerable discretion to agencies in the assessment of whether commercial services are necessary for administering wilderness for recreation purposes. Here the Forest took a hard look at whether such services were necessary for administering the three wilderness areas in the project area.

Equestrian support services have been available near the Forest for several decades. The necessity of these services is documented in the FEIS. Commercial outfitting services facilitate access to the Forest beyond the agency’s current capacity to do so. The campgrounds provide trailheads, education, directions, and public safety functions to equestrians. Based upon the analysis set forth in the Introduction to wilderness in the FEIS, Chapter 3, the Forest concluded that commercial outfitting and guiding are necessary for the purpose of administering wilderness for recreation access. *See also* response to comment 31.

195. According to this figure, the average daily use of equestrians in Lusk Creek is 32/day. The agency should strive to limit maximum numbers of riders in Lusk Creek Wilderness to the average daily number of 32. Bay Creek Wilderness and Garden of the Gods Wilderness should undergo similar surveys.

Includes: 1726-792-24.

RESPONSE: Monitoring to collect additional information on wilderness use by equestrians and others is underway and will continue under the Selected Alternative (see FEIS Appendix B). The comment suggests that a maximum daily limit on equestrian use be established at 32 riders per day per wilderness. Although the one year of data available (Chilman 2005) is informative and provides some evidence to guide development of alternatives, it is not adequate scientific information upon which to impose a definitive, permanent upper limit on recreation access to wilderness. User created trails, poorly located and lacking in proper design or construction, and not solely the amount of use, have created the existing resource condition issues in wilderness.

Even a low level of riders on the existing user-created trails has potential to cause unacceptable damage. Sustainable recreation access in wilderness requires the properly located, designed, constructed, and maintained trails of a designated trail system. The Selected Alternative is responsive to wilderness resource condition by setting forth a method to eliminate use of certain trails while allowing use on trails that are resilient enough to handle the use. Imposing a maximum limit may not only be arbitrary, but also ineffective. Thirty-two riders per day on poorly designed trails presents the potential for harm to wilderness attributes.

Properly designed, located, and constructed trails can accommodate current levels of use and preserve wilderness attributes. The level of use in 2003-2004, the year the survey cited in this comment was performed, could have been adversely or favorably influenced by many factors outside of the Forest's control. Using this data alone to impose a maximum level of use would be arbitrary and capricious. There is no comparable data or science that can be adapted to the local conditions. See also response to 188.

196. How about softening the impact instead of hardening the trails? Why not just limit access? The easiest and most effective way to do this would be to limit commercial equestrian use.

Includes: 1723-792-21.

RESPONSE: The comment presumes that reducing use alone will resolve existing resource condition concerns. However, as explained in the FEIS, the best available science (confirmed by field observation in the project area) indicates most environmental effects from equestrian recreation result from the first, low level of riders. Additional riders on the same user-created trails add only a small marginal increment of additional effect. These science-based findings are explained in detail in the Purpose and Need and sharply contradict the unsupported presumption in the comment.

In the project area, the Forest is responding to *existing* resource conditions resulting and high demand for recreation on user-created trails that could not be maintained by the Forest using public funds. Simply constraining the number of riders will not have a proportional environmental benefit. Moreover, any constraint would be arbitrary; equestrian access would have to be reduced to near-zero levels to have the same benefit as a designated trail system. There is no scientific basis for dramatically reducing access or defending any particular restricted use level (nor is any basis for the reduction to any particular level suggested in the comment).

Of equal or more concern, the comment also suggests, without rationale, that the Forest discriminate between local and commercial horses that use the

trails. There simply is no basis for the differentiation (local horses vs. horses originating from campgrounds) suggested in this comment. The bias in the comment is not supported by the Forest's field study, which indicates (as you might expect) that the environmental effects from horses is indistinguishable.

Instead, the selected alternative uses management methods such as group size limits, temporary closures, and restriction of riding to a proper designated trail system (plus closure of many miles of trails, prohibition of camping with stock in wilderness, and other measures) to regulate the effects of equestrian recreation. In the light of great public demand for recreation access to the project area and existing resource conditions, the Selected Alternative is a reasonable approach to sustainable recreation management. See also response to comments 188.

197. It is crucial that the maintenance be enforced because our beautiful wilderness needs to be protected, honored and valued on all levels and costs. Includes: 402-275-1.

RESPONSE: We agree with the comment and have are seeking funds and resources to ensure adequate trail maintenance. The Forest has sufficient funds to implement the Selected Alternative. Properly designed, located, and constructed trails in wilderness are more easily maintained than poorly located non-system trails.

The fact that a portion of these trails are located within wilderness would not make operation and maintenance cost prohibitive or unrealistic. We do realize that Table 61 in the economics section of the DEIS does look daunting. However, this table does not consider the value of partnerships which would help leverage and offset these projected costs. Partnerships for routine maintenance are readily available and have been used successfully in the past. They do increase the cost-effectiveness of operation and maintenance. In addition, there are numerous opportunities for developing additional partners.

198. There are only two access points to Garden of the Gods Wilderness. All of the existing trails in the Garden of the Gods wilderness should become designated. These existing non-system trails that are on for the most part old roads that were in existence before the wilderness was designated provide the only access from the south, north, and northwest. Without these access trails riders would have to use "suicide hill road."
Includes: 1824-707-32

We did not put propose public access on the south side of the wilderness because the area abuts private land on that side. Having trails from private lands directly into wilderness was not considered, even for commercial

equestrian camps. Access to the Garden of the Gods will be from the existing backpackers' parking lot, as well as a small parking area near the west side, north of Herod. A larger trailhead east of Rice Hollow may also be built. This location was selected because of its proximity to trails to the east and west, including those in Garden of the Gods Wilderness. New trailhead construction on the north side of the wilderness would have accessed much the same trail system as the backpacker parking lot facility without having the advantage of serving as access for the trails near High Knob and beyond. The trailheads, existing and proposed, meet the purpose of providing access to wilderness recreation while having the flexibility of offering non-wilderness options as well.

Other/General

199. A number of comments were made in regard to ATVs and forest management whether on designated trails or unauthorized use.

Includes: 22-22-1, 86-86-1, 111-1-10, 121-6-9, 213-95-3, 408-281-1, 588-419-1, 719-335-2, 856-481-4, 1498-744-1.

RESPONSE: Currently ATV use is not authorized within the boundary of the Shawnee National Forest because the 1992 Forest plan was enjoined from allowing this use until a proper analysis was conducted. This includes both cross-country off-road use and use on public roads. Any changes to this policy or designation of ATV routes are not decisions to be made in the Record of Decision for the Trails Designation Project.

Please read response 49 regarding analysis from impacts of ATV/OHVs within the project area.

200. Logging with horses in the forest would not only be educational but also healthier for the forest.

Includes: 113-1-12.

RESPONSE: Use of horses for logging the Forest is not an activity that was analyzed within the Trails Designation Project. Nothing within the Record of Decision of this project would preclude horse logging.

201. Comments are concerned with maintenance or development of other parts of the Forest. Some include the need for a campground that allows stock and the need for agencies to work together to respond to the needs of the equestrian community.

Includes: 114-6-2, 676-507-1, 1232-683-2, 1571-705-4.

RESPONSE: Some of the specific areas mentioned in these comments are outside of the project area being analyzed. Other trails within the Forest could be designated in the future, as could the development of campgrounds that allow horses. Many of the outfitters and guide operations adjacent to the Forest provide overnight camping facilities. National policy directs forest to coordinate rather than compete with other recreation providers (government or private). It also states that we should not provide facilities that the private sector could provide, but rather openly encourage the private sector. FSM 2303 (11).

202. I would like to see the name of Jackson Falls be put back to Glen Falls.
Includes: 10-10-1.

RESPONSE: As a county road this action is outside the jurisdiction of the Forest Service. Pope County changed the name of this road.

203. It would be great if the Ivory Billed Woodpecker could migrate to southern Illinois.
Includes: 58-58-1.

RESPONSE: The Forest contains little, if any, suitable habitat for the Ivory-billed woodpecker even though swamps are found within the forest boundary they are not large enough to support this species.

204. Trail maintenance measures need to be made part of the Forest Plan.
Includes: 205-94-5, 222-99-2.

RESPONSE: Trail maintenance standards are ground in Forest Service policy and direction and do not need to be repeated in the Forest Plan. Any decision related to the Forest Plan revision would not be made in the Record of Decision for the Trails Designation Project.

205. As a nation we should reinstitute the CCC. I envision that some of the land may, in the future, need to be sold to over growing population and at the same time reduce our national debt.
Includes: 129-13-3, 386-259-1.

RESPONSE: Both of these comments address actions that are beyond the reach of the agency and would be decisions made by other branches of the government.

206. As explained in our December 4, 2000, letter, it is also our position that the FS should accommodate people with handicaps by proactively sponsoring appropriate activities in Forest for people with various handicaps, not through issuing ATV handicap permits.
Includes: 619-705-52.

RESPONSE: The issuance of ATV handicap permits is not a part of the Record of Decision for the Trails Designation project. Issuance of handicap permits is an Administrative Decision.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGIONS 5
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NOV 07 2005

REPLY TO THE ATTENTION OF.

B19-J

Mr. Hurston A. Nicholas
Forest Supervisor
United States Department of Agriculture
United States Forest Service
50 Highway 145 South
Harrisburg, IL 62946

RE: U.S. EPA Comments on the Draft Environmental Impact Statement for the Trails Designation Project Phase 1, Shawnee National Forest, Illinois, CEQ #: 20050383

Dear Mr. Nicholas:

The U.S. Environmental Protection Agency (U.S. EPA) has received the document listed above. Under the National Environmental Policy Act (NEPA), the Council on Environmental Quality regulations, and Section 309 of the Clean Air Act, U.S. EPA reviews and comments on major federal actions.

The DEIS identifies four alternatives. Alternative 1 is the no-action alternative, which would continue with trails management under the current Forest Plan. In Alternative 1, cross-country riding is allowed except in natural areas, archaeological areas, and developed recreational areas. No new trail heads or parking areas would be constructed or maintained. Camping with horses would be allowed in wilderness areas. In Alternative 1, there are about 300 miles of non-system trails that would not be maintained, but would be monitored and evaluated for their effects on nearby resources. Alternative 1 will have minimally adverse to adverse effects on most resources.

The three action alternatives (Alternatives 2, 3, and 4) are similar, because all of the action alternatives will designate some new trails and close the balance of non-system trails. The action alternatives differ in the amount of new trail miles to be designated and the amount of non-system trails to be closed. How trails are designated (e.g., hiker-only) also differs among the alternatives. The action alternatives will provide more horse trailer capacity in the parking areas and relocate and increase stock confinement areas (amounts vary per Alternative). The three action alternatives would include common mitigation measures for any resource impacts. Alternatives 2 and 4 typically accomplish this without adverse effects. Alternative 3 will have minimally adverse to adverse effects on most resources.

The United States Forest Service (USFS) has chosen Alternative 2 as the preferred alternative. U.S. EPA rates the preferred alternative as **EC -- 2 (Environmental Concerns, Insufficient Information)**. We agree that Alternative 2 provides a good balance of meeting the recreational needs of various stakeholders and protecting resources. We commend the USFS for

choosing an alternative that eliminates cross-country riding, partnering with other stakeholder groups, and educating forest visitors to help reduce environmental impacts. We also commend the USFS for partnering with Southern Illinois University to provide additional monitoring data on the least brook lamprey. However, we do have questions and comments concerning Alternative 2. We also want to take this opportunity to comment on facets of Alternatives 1, 3 and 4 in case a hybrid alternative is considered.

The choice of Alternative 2 as the preferred alternative is a good choice for some of the following reasons:

- ✓ No cross-country riding will be allowed, thereby reducing erosion and sedimentation and enhancing wilderness characteristics.
- ✓ No overnight camping with stock in the wilderness areas will be allowed.
- ✓ New parking lots with more horse trailer capacity will be constructed to accommodate equestrians.
- ✓ A reasonable amount of new trails will be designated, thereby allowing proper construction and maintenance of those trails.
- ✓ Equestrians will be restricted to designated trails.
- ✓ Non-system trails will be closed and rehabilitated.
- ✓ Individual permits for access from private land will be available.
- ✓ In the wilderness, there will be a group size limit of 10 people.
- ✓ Stock confinement areas will be provided/moved to locations within reach of desirable areas but not directly next to those features.
- ✓ More miles of hiker-only trails will be available.
- ✓ The amount of designated trails should lessen hiker-equestrian encounters.
- ✓ Equestrians and hikers will be educated on the proper trail etiquette.

U.S. EPA's questions about certain elements of Alternative 2 are regarding the following:

- Elimination of Trail Density Standards
- Duration of seasonal and wet-weather closures
- The effect of horse manure on water quality during large equestrian events such as the Nine-Day Trail Ride

Specifically, we have the following questions regarding the above issues:

Trail Density Standards

- 1) Why not change the trail density standards in these specific areas instead of eliminating them?
- 2) How will future trail density be controlled if there are no density standards?

Seasonal and Wet-Weather Closures

Alternative 2, the preferred alternative, sets the temporary wet-weather closure of trails during construction in the Lusk Creek Wilderness from Dec.1 - March 31 and Alternative 4 sets the closure at Nov. 1 - May 15.

- 1) Why choose the less restrictive dates of Dec. 1-March 31?
- 2) Will there be adverse impacts associated with not using the more inclusive dates of Nov. 1-May 15?

Effects of Horse Manure on Water Quality

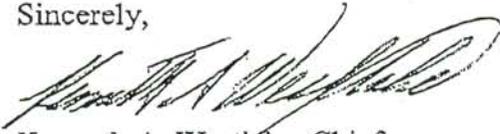
In July 2005, the St. Louis Post Dispatch reported that a segment of the Jacks Fork River was closed due to e. coli contamination during a large-scale equestrian event at the Mark Twain National Forest.

- 1) Please explain in more detail how the USFS plans to avoid contamination during such events on the Shawnee?
- 2) Will specific mitigation measures be listed in the permit issued for the event?

In the event that a hybrid alternative would be selected, U.S. EPA recommends that the following items not be included in such an alternative: allowance of cross-country riding, elimination of the temporary, seasonal wet-weather trail closures during construction, and an increase or change in designated trail mileage that causes an adverse effect on environmental resources. We make these suggestions in order to avoid environmentally adverse impacts due to erosion and sedimentation.

U.S. EPA appreciates the opportunity to review and comment on the DEIS. If you have any questions regarding U.S. EPA's comments, please contact **Julie Guenther** at (312) 886-3172 or email her at guenther.julia@epa.gov.

Sincerely,



Kenneth A. Westlake, Chief
Environmental Planning and Evaluation Branch

Enclosures: (1) *Summary of Rating Definitions and Followup Actions*

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION

Environmental Impact of the Action

LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate

The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment



United States
Department of
Agriculture

Forest
Service

Shawnee National Forest
Supervisor's Office

50 Highway 145 South
Harrisburg, IL 62946
618-253-7114
TTY 618-253-1070

File Code: 1920-1-5
Date: 12-22-2005

Kenneth A. Westlake
Chief
Environmental Planning and Evaluation Branch USEPA
Region 5
77 West Jackson Boulevard
Chicago, IL 60604-3590

Dear Mr. Westlake:

Our Forest Soil Scientist spoke with Julia Guenther of your staff today and provided additional information to answer the questions submitted in your letter on November 7, 2005 regarding the Trails Designation Project Draft Environmental Impact Statement. Julia seemed satisfied with the responses, which will be included in the FEIS (Final Environmental Impact Statement), along with the USEPA's comments.

Based on today's conversation, we are anticipating a Lack of Objections opinion from your office in response to the FEIS. We appreciate the time and effort provided by you and your staff in contributing to our analysis of trails on the Shawnee National Forest.

If you have any questions please contact our Soil Scientist, Kara Kleinschmidt, at (618) 253-7114.

Sincerely,

/s/ Cathy Y. Slover (for)
HURSTON A. NICHOLAS
Forest Supervisor

cc:



The Shawnee National Forest is providing the following information to clarify proposals analyzed in the Trails Designation DEIS, and to alleviate concerns and answer questions brought up by the U.S. Environmental Protection Agency.

Trail Density Standards

We discussed our proposal to eliminate trail density standards in the wilderness on pages 27, 140, and 141 in the DEIS. The four alternatives display a range of trail densities, and the analysis and comparison of the effects of these alternatives on different resources is discussed. We did not identify specific trail density standards because we believe they are unnecessary. Instead, we proposed a reasonable amount of well-located, maintained trails for designation. The combined effect of restricting cross-country equestrian use to designated system trails, then properly locating and maintaining those trails will provide more protection for soil and water resources than the continuation of existing management. The proposal in Alternative 2 would result in a net decrease in currently used trail miles within the wilderness areas and the four watersheds.

In addition, we do not want trail density standards to limit future management options. If additional trails are needed to disperse use or access certain areas, we want to have the flexibility to add those trails. We also need to be consistent with our revised forest plan (favorably reviewed by USEPA), which proposes the elimination of trail density standards forest-wide. Since horses would be restricted to designated trails, no new trails should develop. We will actively close any new trails that do develop. Under this management scenario, the Forest will control the trail density.

The proposals in Alternative 2 and 4 will provide the best management control of the number and location of trails used in the project area. Restricting equestrian use to designated system trails will provide that control. Additionally, any future trail proposals would require appropriate environmental analysis, which would include an analysis of cumulative effects. Such cumulative effects analysis would take into consideration any trails that would be in the area at the time of a possible future proposal and would consider the cumulative effects on Forest resources.

Wet-weather Closures

The closure dates included in the alternatives display a range of possible closures, from no closure to a temporary closure in wilderness areas from November 1-May 15. A comparison of the effects of the different alternatives on soil and water resources can be found on page 71, 72 and 78 in the DEIS. In response to your comments, a comparison of alternatives specific to wet-weather closures was added in the FEIS.

The temporary closures proposed in Alternative 2 are designed to increase resource protection in the wilderness during wet conditions until designated trails are maintained, while limiting restrictions to recreational access. The less restrictive dates are a compromise that allows equestrian use during a peak riding time. The month of April is a beautiful time to be in the Forest; trees are leafing out, and many wildflowers are in bloom. We included

an additional closure following a one-inch rain in Alternatives 2 and 4 to protect the trails during this period because we know that there will be times when the trails will be too wet.

Recreational use during wet conditions can cause increased soil rutting, erosion, and compaction (page 58 in the DEIS). This is why this closure is an important mitigation measure. Although the closures in Alternative 4 would potentially provide more protection, we believe that either of the temporary closure would adequately protect the resources, and will provide more protection than a continuation of the existing conditions. Monitoring will be key to determining the effectiveness of a closure (see monitoring plan for soil and water resources on page B1-B2). If monitoring data suggests that we should extend a closure, management would be adapted to respond to these resource concerns.

Equestrian Events and Water Quality

The Nine Day Trail Ride is an event covered under a Special Use Permit (SUP) for which the Forest Service prepared an Environmental Assessment (EA) in 2002. Your comments regarding this permit are beyond the scope of the Trails Designation EIS. The Nine Day Trail Ride Special Use Permit EA will be renewed in 2-3 years, at which time these comments would be considered. Although this specific event is not a decision to be made as part of the Trails Designation, the proposals in Alternative 2, as described on pages 70-72, would reduce the effects of manure on water quality through better maintenance and drainage of system trails.

We are familiar with the USGS study of microbiological contamination in the Jacks Fork of the Current River in Missouri. Although both are large trail riding events, there are several differences between the situation at the Jacks Fork and the Nine-Day Trail Ride. The segment of the Jacks Fork on the 303(d) list receives a variety of recreational pressures, including tubers, canoeists, and equestrians, who necessitate compliance with the water quality standards for primary contact (swimming). The beneficial use of Big Grand Pierre Creek listed by the IEPA is “aquatic life”. Since the primary contact recreational pressure is low for the Big Grand Pierre Creek, and it is not used as a public water supply, questions about compliance with the primary contact water quality standards have not been raised in the past. Another difference is that the Jacks Fork is located in mature karst terrain, which makes the area particularly vulnerable to infiltration and transmission of fecal matter directly to the stream system. The geology is not as conducive to transport of fecal coliform bacteria in the Big Grand Pierre Creek watershed. The hydrology of the two sites is also different. The Jacks Fork and many of its tributaries are spring-fed streams that maintain baseflow even in the summer, whereas many of the headwaters tributaries located adjacent to the Nine Day site are typically dry during the August event.

The Illinois EPA collects data at Big Grand Pierre Creek, which drains the majority of the trails used by attendees of the Nine Day Trail Ride. They rated this creek in “full support” of aquatic life, however, their methodology does not include a test for fecal coliform. The Illinois EPA also rated One Horse Gap Lake in “full support” for primary contact, i.e. swimming, but this methodology uses a secci disk instead of a test for fecal coliform (11-29-2005 communication with David Muir of the IEPA in Marion, IL). We will talk to the appropriate state agencies to see if microbiological contamination is a concern in the Big Grand Pierre Creek, and reassess data and monitoring needs for this event.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGIONS 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JAN 05 2006

REPLY TO THE ATTENTION OF

B19-J

Hurston A. Nicholas
United States Department of Agriculture
United States Forest Service.
Shawnee National Forest Supervisor's Office
50 Highway 145 South
Harrisburg, IL 62946

RE: Shawnee Trails Designation Project, Shawnee National Forest, Illinois, United States Forest Service (USFS) letter dated December 22, 2005

Dear Mr. Nicholas:

The purpose of this letter is to provide a response to the USFS for the document cited above. U.S. EPA confirms that we are fully satisfied with your responses to our DEIS comment letter. We received the responses through an e-mail dated December 21, 2005. It is our understanding and expectation that these exact responses will be included in the Final Environmental Impact Statement (FEIS).

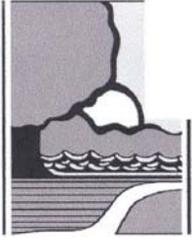
Although we do not give an official rating for a project in an FEIS comment letter, we commend your thorough responses to the questions we posed in the DEIS comment letter. From your responses, we understand that the USFS will use monitoring data to take an adaptive management approach to our resource concerns. Therefore, we do not have an objection to the preferred alternative.

Thank you for providing us with additional information through telephone conversations and e-mail. Once complete, please send a copy of the FEIS to U.S. EPA Region 5 at the letterhead address. If you have any questions, please contact Julie Guenther at (312) 886-3172 or email her at guenther.julia@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth A. Westlake".

Kenneth A. Westlake, Chief
NEPA Implementation Section



Illinois Department of Natural Resources

One Natural Resources Way' Springfield, Illinois 62702-1271 <http://dnr.state.il.us>

Rod R. Blagojevich, Governor Joel Brunsvold, Director

November 07,2005

Hurston A. Nicholas Forest Supervisor Shawnee National Forest 50 Highway 145 South Harrisburg, IL 62946

Dear Mr. Nicholas:

This letter is in response to your request for comments on the Draft Environmental Impact Statement on the Trails Designation Project Phase One (file code: 1950, Sept. 7,2005).

After careful consideration of the four alternatives presented we cautiously support the SNF's preferred alternative (Alternative 2) with some modification. While this alternative does not offer the least amount of impacts on the natural resources in and around these watersheds, it does, on balance, allow for much needed protection of Forest lands especially natural areas and better meets the high demands placed on the Forest Service for recreational trail use. IDNR recognizes that the proposed alternative is based on the Forest's best assessment of needs, allowable use and ability to manage impacts from equestrian use.

The issue of unregulated equestrian use on the Forest has long been a major concern of the Department of Natural Resources and our input to the Forest on this subject dates back to at least 1991. It is well documented that, within the Forest, unrestricted use has negatively impacted threatened and endangered plant species and has degraded lands managed by the Shawnee NF including high quality natural areas. Our own surveillance support your assessment and give us cause to suggest that continued unrestricted use will, without question, result in further resource damage. Over the past 14 years, most of the impacts reported by our field biologist to TES species and natural areas on the Forest were associated with unauthorized horseback riding trails and encampments.

The Department is pleased to see the Shawnee continue with the process to designate hiker/equestrian "system" trails and amend the Forest Plan to direct equestrian use in the project area to system trails. It is our hope that these actions will stop ongoing degradation of the land, which is occurring due to indiscriminate off trail riding and innumerable user created trails.

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These trails are often poorly sited, are not managed, and in many cases redundant. We also hope that these actions will provide safe, well designed, and located trails, which will allow users to enjoy the natural beauty of the forest while providing access to support facilities and attractions.

We do have several specific comments the Draft EIS and wish to note that even though we generally support the preferred alternative we have some modifications which we would like to see implemented in the final decision.

IDNR also has long advocated a specific monitoring plan for equestrian use on the Shawnee National Forest. We believe that, if the proposed trails are designated and monitoring indicates use is resulting in resource damage, then the trail should be closed immediately until the adverse effects have been eliminated, remedial measures implemented and an effort made to prevent reoccurrences. The success of the trails will, no doubt, depend on regular trail maintenance, signage and compliance.

A more comprehensive monitoring/maintenance plan is needed to detect and address damage to the trails which may result from overuse. While we appreciate the inclusion of Appendix B in the DEIS, we suggest the inclusion of definitions of benchmark conditions and specific measurements which would trigger remedial actions up to address impacts resulting from overuse. We attach for your consideration an example of guidelines and procedures which could be proposed (Attachment A).

Monitoring is especially important because so many miles of proposed trail are in areas designated as Wilderness. The standards and guidelines for activities allowed in Wilderness are generally so restrictive that it limits the Forest's ability to cost-effectively manage resource damage and maintain trails. IDNR is concerned with the amount of trail proposed in Wilderness and the Forest's ability to manage trail in Wilderness. IDNR recognizes the benefits of Wilderness Area designation to the people of Illinois and supports protecting the valued Wilderness resources.

We strongly oppose any alternative which would involve a unilateral designation of all non-system trails and cross country riding. We wish to reiterate that user created trails are by definition, not sited, analyzed, or maintained by experienced professionals within the forest service. These trails are selected and sited based on values such as, ease of use, destination points, and proximity of scenic attractions. With that, we remain concerned about the 152 miles of non-system trail segments which will be given system trail status in the proposed action. We trust that poorly sited and redundant user created segments were screened out during the development of your plan.

While we would prefer to see no trails at all in natural areas we are appreciative of the fact that no new trails were proposed within these unique areas. In many instances we note that the proposed trail system while staying out of the natural areas, does follow the boundary. We have noted during our field surveillance over the past several years that these trails would often morph around the natural area boundary as the sites were closed and posted. Our concern here is two fold; 1) in some areas placement of the trail along the boundary might encourage encroachment into the natural area, and 2) the movement of non-native invasive species along trails is well documented and could be of real concern if trails are located on boundaries. We suggest that

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during the construction phase these factors be taken into consideration. Solutions might include additional signs at points of particular scenic interest and construction of check dams to trap runoff off iTom trails located on boundaries which have topography which could channel trail runoff into sensitive natural areas. I offer the assistance of IDNR's natural Heritage staff towards any aspect of natural areas management or trail placement near natural areas on the Shawnee.

We are concerned about the proposal to eliminate any density standards on system trails within Wilderness Areas. While we recognize the difficulty managing a trails program with the current standards we would suggest some sort of language which would give guidance to trail planning and prevent unreasonable levels of trail density in Wilderness.

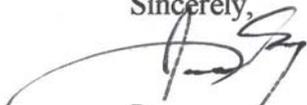
In Alternative 2, we are very concerned about the number of crossings in Lusk Creek and high use levels which occurred over the past several years. Again, a good monitoring plan is especially important to detect impacts and provide remedial measures to ensure proper management of Lusk Creek Natural Area.

We agree that stock confinement areas are necessary as part of the infrastructure supporting equestrian trails and urge the forest to move confinement areas away iTom sensitive areas and into areas such as pine plantations. The existing confinement near our IDNR Nature Preserve at Lusk Creek is a good example of a confinement area which has grown in size and degradation over the past several years. We hope that this area will be relocated to the adjacent pine planting and away iTom our boundary.

In summary we applaud the forest for taking this bold step toward what IDNR hopes is going to be implemented on the entire Forest, namely, equestrian use on a well planned, designed, constructed, maintained and monitored trail system, which will protect the natural values which all user groups expect when visiting our national forest system lands.

If you have any questions please feel iTee to call, and as always thank you for the opportunity to comment.

Sincerely,



J
K

J. Shimp

J. Shimp
Region V, Regional Administrator
Illinois Department of Natural Resources

cc Glen Kruse, IDNR, Habitat Resources

Attachment A

Guidelines and Procedures for Identifying and Mitigating Impacts on Recreational Trail Use in Natural Areas On the Shawnee National Forest

Definitions

Benchmark Conditions- The benchmark is an acceptable level of impact that is normally expected to occur as a result of equestrian use. If the impact does not affect adjacent natural area quality and is controllable through normal or routine maintenance then it is within the benchmark condition.

Unacceptable Impacts- Those impacts likely to cause considerable adverse effects if not corrected. These type impacts are repairable but some kind of immediate solution must be found. If the unacceptable impact is likely to get worse and become a considerable adverse effect then that section of trail will be immediately closed until the problem is stopped and measures are in place to prevent reoccurrence.

Considerable Adverse Effects- An impact which is or may become irreparable, because it is impossible or impractical to perform the corrective or remedial actions needed to correct the problem and prevent the problem from reoccurring. When considerable adverse effects are found the trail will immediately be closed and not reopened until measures are in place to prevent the problem from reoccurring.

Trigger	Standard	Possible Corrective action
Impacts to Threatened, Endangered or Regional Forester's Sensitive Species	threat or an actual taking under the endangered species act.	-Re-route trail segment -Barriers -Close trail
Excessive Width	recreational use has caused a widening of trail beyond 12 inches of original post construction trail tread width (PCT)	-Barriers -Close trail
Trail Braiding	any braiding of trail	-Enforcement & signage -Barriers -Close trail
Vegetation	recreational use has caused a loss of or visible damage or stress to vegetation which is not associated with routine maintenance.	-Enforcement & signage -Barriers -Close trail
Trail Incision	recreational use has caused an incision or erosion exceeding 10 inches below original post construction tread	-harden tread -divert water -close trail
Root Exposure	Recreational use has caused exposure of tops or sides of tree roots	-harden tread -divert water -close trail

Wet soil	Segment has wet soils on more than half of the trail width. Includes muddy soils or mudholes with standing water reflecting normal soil moisture conditions.	-harden tread --divert water -close trail
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