



United States  
Department of  
Agriculture

Forest  
Service

Southwestern  
Region



May 2008

# Draft Environmental Impact Statement for Proposed BLACK RIVER Exchange

## Apache-Sitgreaves National Forests

**Thompson Ranch**



**Blue River Ranch**



**Rancho  
Alegre**



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# Draft Environmental Impact Statement Proposed BLACK RIVER Exchange

## Apache-Sitgreaves National Forests

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## 1 Abstract

2 The Forest Service has prepared this Draft Environmental Impact Statement (DEIS) in  
3 accordance with the National Environmental Policy Act of 1969 (NEPA), 42 United States Code  
4 §§ 4321-4370d, as implemented by the Council on Environmental Quality Regulations, 40 Code  
5 of Federal Regulations Parts 1500-1508. The Proposed Action is comprised of exchanging  
6 337.74 acres of Federal lands north of the unincorporated community of Greer, Arizona, for  
7 396.35 acres of non-Federal lands along the West Fork of the Black River and the Blue River in  
8 east-central Arizona. The Proposed Action is the preferred alternative.

9 The proposal to exchange lands in the Apache-Sitgreaves National Forests (ASNFs) responds to  
10 the Forest Service's need for consolidation of federal land ownership patterns. Non-federal lands  
11 within national forests that are included in this exchange proposal contain special features and  
12 habitats such as critical species habitat and perennial waters. These lands are subject to  
13 development that could diminish those values and support activities that would be incompatible  
14 with the surrounding national forest character. The non-Federal lands currently contribute to the  
15 undesirable ownership pattern and are classified as desirable for acquisition.

16 The Federal lands in the exchange are located in Management Area (MA) 1 of the Apache-  
17 Sitgreaves Land Management Plan (A-S LMP). The management direction for this area states  
18 lands offered by the United States are needed to meet the needs of expanding communities, would  
19 provide for consolidation of public lands, improve management or benefit specific resources, and  
20 meet overriding public needs. The Federal lands, if conveyed, would be subject to development.  
21 However, the stated intent of the proponent is not to develop the lands if conveyed.

22 This DEIS evaluates the potential social and environmental impacts of the Proposed Action and  
23 the No Action alternative on the following resource areas: pristine open space, noise, traffic,  
24 water quality, commercial development, water availability, regulation of water resources, impacts  
25 on wildlife and wildlife corridors, sewer services, recreational opportunities, fire hazard potential,

1 impacts on plants, scenic quality, emergency services, values of adjacent properties, water quality  
2 and availability, wetlands and floodplains, plants and wildlife, land use, public services, property  
3 taxes, soil and air, grazing resources, mineral resources, hazardous materials, heritage resources,  
4 caves, and the key issue.

5 Reviewers should provide the Forest Service with their comments during the review period of the  
6 DEIS. This will enable the Forest Service to analyze and respond to the comments at one time  
7 and to use information acquired in the preparation of the Final Environmental Impact Statement  
8 (FEIS), thus avoiding undue delay in the decision-making process. Reviewers have an obligation  
9 to structure their participation in the NEPA process so that it is meaningful and alerts the agency  
10 to the reviewers' position and contentions. *Vermont Yankee Nuclear Power Corp. v. NRDC*, 435  
11 U.S. 519, 553 (1978). Environmental objections that could have been raised at the draft stage  
12 may be waived if not raised until after completion of the FEIS. *City of Angoon v. Hodel*  
13 (9<sup>th</sup> Circuit, 1986) and *Wisconsin Heritages, Inc. v. Harris*, 490 F. Supp. 1334, 1338 (E.D. Wis.  
14 1980). Comments on the DEIS should be specific and should address the adequacy of the  
15 statement and the merits of the alternatives discussed (40 CFR 1503.3).

16 The Forest Service invites your comments on the DEIS within 45 days of the publication of the  
17 Notice of Availability on the *Federal Register* expected June, 13 or 20, 2008. Written, facsimile,  
18 hand-delivered, oral and electronic comments concerning this action will be accepted for 45 days  
19 following the date of publication. The publication date of the NOA in the Federal Register is the  
20 exclusive means for calculating the comment period for a Proposed Action documented in a  
21 DEIS. Those wishing to comment should not rely upon dates or timeframe information provided  
22 by any other source. The regulations prohibit extending the length of the comment period.

23 **Written comments must be submitted to:** Bruce Buttrey, Natural Resource Specialist,  
24 Springerville Ranger District, 165 South Mountain Avenue, P.O. Box 760, Springerville, AZ  
25 85938 or by facsimile to 928-333-4182. The office hours for those submitting hand-delivered  
26 comments are 0800 -1630 local time Monday through Friday, excluding holidays.

27 Oral comments must be provided at the Springerville Ranger District Office during normal  
28 business hours via telephone (928-333-4372) or in person, or at an official agency function  
29 (i.e., public meeting) that is designed to elicit public comments.

30 Electronic comments must be submitted in a format such as an email message, plain text (.txt),  
31 rich text format (.rtf) and Microsoft Word (.doc) to [comments-southwestern-apache-  
32 sitgreaves@fs.fed.us](mailto:comments-southwestern-apache-sitgreaves@fs.fed.us). The subject line must contain the name of the project for which you are  
33 submitting comments (i.e. Black River Land Exchange). Comments must have an identifiable  
34 name attached or verification of identity will be required. A scanned signature may serve as  
35 verification on electronic comments.

36 **For further information contact:** Bruce Buttrey, Natural Resource Specialist, Springerville  
37 Ranger District, P.O. Box 760, Springerville, AZ 85938 (928) 333-6206.

# 1 Executive Summary

2 The Apache-Sitgreaves National Forests (ASNFs) proposes to exchange 337.74 acres of Federal  
3 lands north of the unincorporated community of Greer, Arizona, for 396.35 acres of non-Federal  
4 lands along the West Fork of the Black River and the Blue River in east-central Arizona. The  
5 Federal lands proposed for exchange are located in Apache County and the non-Federal lands  
6 proposed for exchange are located in Apache and Greenlee Counties, Arizona. The affected  
7 Forest Service units are the Springerville and Alpine Ranger Districts in the ASNFs.

8 The proposal to exchange lands in the Apache National Forest (ANF) responds to the Forest  
9 Service's need for consolidation of federal land ownership patterns. Non-Federal lands within  
10 national forests that are included in this exchange proposal contain special features and habitats  
11 such as critical species habitat and perennial waters. These lands are subject to development that  
12 could diminish those values and support activities that would be incompatible with the  
13 surrounding national forest character. The non-Federal lands currently contribute to the  
14 undesirable ownership pattern and are classified as desirable for acquisition. The Federal lands in  
15 the exchange are located in Management Area (MA) 1 of the A-S LMP. The management  
16 direction for this area states lands offered by the United States are needed to meet the needs of  
17 expanding communities, would provide for consolidation of public lands, improve management  
18 or benefit specific resources, and meet overriding public needs. The Federal lands, if conveyed,  
19 would be subject to development. However, the stated intent of the proponent is not to develop  
20 the lands if conveyed.

21 A formal offer to exchange lands was submitted by Herb Owens to the ASNFs Supervisor on  
22 October 15, 2001 (Doc. 16). The Agreement to Initiate the exchange was authorized by the  
23 Forest Service Director of Lands and Minerals on November 14, 2002 (Doc. 39). Public  
24 involvement for the proposed Black River Land Exchange was initiated in December 2002 as part  
25 of the original environmental analysis. A Decision Notice and Finding of No Significant Impact  
26 (DN/FONSI) approving the Proposed Action was signed by the Director of Lands and Minerals,  
27 Southwestern Region on August 27, 2004 (Doc. 128). Nine appeals of the decision were received  
28 by the Appeal Deciding Officer for the Chief. On December 6, 2004 the Appeal Deciding Officer  
29 for the Chief reversed the decision of the Director of Lands and Minerals, Southwestern Region  
30 (Doc. 144). The Appeal Deciding Officer directed the Director of Lands and Minerals to perform  
31 additional environmental analysis that consistently considered the potential for development on  
32 the Federal lands once conveyed into private ownership as a reasonably foreseeable future action.  
33 Subsequent to the Appeal Deciding Officer's December 6, 2004 reversal of the Director of Lands  
34 and Minerals' original DN/FONSI, a revised draft Environmental Assessment (EA) that included  
35 an analysis of potential for future development of the Federal lands was prepared and mailed to  
36 interested parties. On October 14, 2005 a DN/FONSI was signed by the Director of Lands and  
37 Minerals, Southwestern Region authorizing the proposed land exchange (Doc. 189). Fourteen  
38 appeals were received and on January 23, 2006, Gloria Manning, Appeal Reviewing Officer for  
39 the Chief affirmed the decision to approve the exchange (Doc. 224).

40 This action responds in part to an order dated March 1, 2007, by the United States District Court  
41 in *Greer Coalition, Inc., and the Center for Biological Diversity v. U.S. Forest Service* (D. AZ).  
42 The court remanded the October 14, 2005, decision authorizing the Black River Land Exchange  
43 to the Forest Service for proceedings consistent with its March 1, 2007 order (Doc. 303). To  
44 comply with the court order the Forest Service has prepared this Draft Environmental Impact  
45 Statement (DEIS) addressing and evaluating the potential environmental effects of potential  
46 future development of Federal land using multiple shallow wells.

1 The EIS scoping process was initiated on September 24, 2007 with publication of the Notice of  
2 Intent (NOI) to prepare an EIS for the proposed Black River Land Exchange (Doc. 325). The  
3 scoping process included identifying any new key issues and previously unknown potential  
4 environmental effects of the Proposed Action. The main issue identified during the EIS scoping  
5 process was the potential adverse social and economic impacts (including a possible decrease in  
6 the availability of domestic water from existing wells) due to the possible development on the  
7 Federal lands (if exchanged). The measures developed to address this key issue include a  
8 qualitative discussion of the implication of potential development on the social and economic  
9 attributes that were raised as concerns, including impacts associated with deep well or multiple  
10 shallow wells and the potential loss of recreational opportunities if the Federal lands leave federal  
11 ownership and are subject to future development.

12 A full range of alternatives to the Proposed Action, including the No Action alternative, were  
13 considered during the environmental analysis.

14 Alternatives considered in detail include the proposed action and No Action. A more detailed  
15 description of these alternatives and alternatives considered but eliminated from detailed study is  
16 included in Chapter 2 of this document.

17 ***Major conclusions include:***

18 The proposed land-for-land exchange would result in Federal acquisition of 396.35 acres in the  
19 ANF and conveyance of 337.74 acres (BLM dependent resurvey accepted December 8, 2004  
20 (Doc. 147)) of land north of the community of Greer in the ANF. The Forest Service would gain  
21 118 acres of riparian habitat that includes 1.65 miles of the West Fork of the Black River and 1.5  
22 miles of the Blue River. These areas contain vital species habitat for federally listed native fish:  
23 loach minnow, spinedace, and Apache trout and riparian areas and perennially flowing surface  
24 waters. If the exchange occurs, development would be precluded on the non-Federal lands  
25 proposed for exchange.

26 The conveyed Federal lands would be subject to future development. However, no development  
27 is expected to occur on the conveyed Federal lands. This is based upon the stated intent of the  
28 proponent and the history of development by the proponent on federal lands that were conveyed  
29 in a prior exchange in the area (Doc. 18). Development on the conveyed Federal lands, if an  
30 exchange were to occur, would result in impacts to upland ponderosa pine habitat and grassland.  
31 No riparian habitat, aquatic or wetland habitat would be impacted because these habitats do not  
32 exist on the Federal lands proposed for exchange. Future uses or development on the lands  
33 conveyed out of federal ownership would become subject to all applicable laws, regulations and  
34 zoning authorities of state and local governing bodies. If development on the conveyed lands  
35 were to occur, minimal impact to the White Mountains aquifer would be expected, whether it is  
36 the result of pumping from two wells, 258 wells, or even a single well (Doc. 342).

37 If the No Action alternative were selected, the Federal lands would continue to be managed by the  
38 Forest Service. The non-Federal lands, which include special features and habitats such as  
39 critical species habitat and perennial waters would remain subject to future development.

40 Based upon the effects of the alternatives, the responsible official will decide if the lands offered  
41 for exchange are desirable, in the public interest, and suitable for inclusion in the National Forest  
42 System.

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# Chapter 1 – Purpose of and Need for Action

## Document Structure

The Forest Service has prepared this Draft Environmental Impact Statement (DEIS) in compliance with the National Environmental Policy Act (NEPA) and other relevant Federal and State laws and regulations. This DEIS is not a decision document. It discloses known direct, indirect, and cumulative environmental impacts that would result from the Proposed Action and No Action alternative. Comments on the DEIS will be used to make improvements to the analysis and the Final EIS (FEIS), and will help inform the decision. The Forest Service decision will be stated and explained in a Record of Decision (ROD).

The document is organized into four chapters as follows:

*Chapter 1: Purpose and Need for Action.* This chapter includes information on the history of the project proposal, the purpose of and need for the project, and the agency's proposal for achieving that purpose and need. This section also details how the Forest Service informed the public of the proposal and how the public responded.

*Chapter 2: Comparison of Alternatives (including the Proposed Action).* This chapter provides a more detailed description of the agency's Proposed Action as well as the No Action alternative while discussing methods for achieving the stated purpose. These alternatives were developed based on significant or substantial issues raised by the public and other agencies. This discussion also includes possible mitigation measures and identification of alternatives that were considered, but eliminated from detailed study. Finally, this section provides a summary table of the environmental consequences associated with the two alternatives.

*Chapter 3: Affected Environment and Environmental Consequences.* This section describes the environmental effects of implementing the Proposed Action and the No Action alternative. Within each section, the affected environment is described first, followed by the effects of the Proposed Action and the No Action alternative that provides a baseline for evaluation and comparison of the Proposed Action.

*Chapter 4: Consultation and Coordination.* This section provides a list of preparers and agencies consulted during the development of the EIS.

*Appendices:* The appendices provide more detailed information to support the analyses presented in the EIS.

Additional documentation, including more detailed analyses of project-area resources, are located in the project planning record located at the Apache-Sitgreaves Forests Supervisors' Office, 30 South Chiricahua Drive, Springerville, Arizona 85938.

## Background

This chapter describes the proposed federal action, the purpose and need for action, the decision framework, issues raised during analysis, measures, and a description of the project area. The "Proposed Action" details who is proposing what, and when and where the proposal would occur. The "purpose and need" explains why the action is being proposed. The "decision framework" describes the nature of the decision and who will make it, allowing for selection of the "No Action" alternative required by 36 CFR 1502.14(d). The "issues" section describes how significant issues were derived from internal and public scoping. The "measures" discussion outlines the units of measure or narrative discussion selected to evaluate the extent to which the Proposed Action and No Action alternatives attain project objectives and resolution of issues.

1 Throughout this DEIS parenthetical references are made to Project Record documents. For  
2 example (Doc. 25).

### 3 **Purpose and Need for Action**

#### 4 **Existing Condition**

5 Non-Federal Lands within the Apache National Forest (ANF) that are included in this exchange  
6 proposal contain special features and habitats such as critical species habitat and perennial waters.  
7 These lands are subject to development that could diminish those values and support activities  
8 that would be incompatible with the surrounding national forest character. The non-Federal lands  
9 currently contribute to the undesirable ownership pattern depicted in Appendix A and are  
10 classified as desirable for acquisition. These small tracts (inholdings) increase land management  
11 complexity because of the miles of common, or shared, landline boundaries that add to  
12 administrative costs and increase the potential for encroachments occurring on the National  
13 Forest.

14 The Federal lands in the exchange are located in Management Area (MA) 1 of the Apache-  
15 Sitgreaves Land Management Plan. These lands provide a combination of multiple uses including  
16 a sustained yield of wood products, wildlife habitat, livestock grazing, watershed and dispersed  
17 recreation. (A-S LMP) (Doc. 3). The management direction for this area states lands offered by  
18 the United States are needed to meet the needs of expanding communities, would provide for  
19 consolidation of public lands, improve management or benefit specific resources, and meet  
20 overriding public needs. The Federal lands, if conveyed, would be subject to future development.  
21 However, the stated intent of the proponent (Herb Owens) is not to develop the lands if conveyed.

22 Herb Owens currently owns and operates the Spade Ranch located south of State Route 260 and  
23 west of State Route 373, and shares the southern boundary of Federal Tract A proposed for  
24 conveyance. A residential subdivision known as Crosby Acres shares its southern boundary with  
25 the northern boundary of Federal Tract B.

26 This DEIS responds in part to an order dated March 1, 2007, by the United States District Court  
27 in *Greer Coalition, Inc., and the Center for Biological Diversity v. U.S. Forest Service* (D. AZ).  
28 The court remanded an October 14, 2005, decision authorizing the Black River Land Exchange to  
29 the Forest Service for proceedings consistent with its March 1, 2007 order. To comply with the  
30 court order the Forest Service has prepared this DEIS addressing and evaluating the potential  
31 environmental effects if multiple shallow domestic water wells were to be drilled and put into  
32 service as a component of future development on the Federal lands.

#### 33 **Desired Condition**

34 The desired condition is that the non-Federal lands are accepted and included into the National  
35 Forest System (NFS). Three fewer private in-holdings would exist in the ANF. Lands containing  
36 perennial water that are valuable as critical habitat for federally listed species would be acquired  
37 (Doc. 3).

38 Multiple benefits would be expected with the addition of the offered non-Federal lands to the  
39 NFS. They include acquisition of vital habitat for loach minnow, spikedace and the Apache trout;  
40 acquisition of aquatic and riparian habitats associated with the mainstream of the West Fork of  
41 the Black River and the Blue River; a reduction in complex ownership patterns that would help to  
42 block up public land ownership; elimination of numerous miles of landline boundaries and  
43 controlling corners that will contribute to management efficiency; and elimination of any possible

1 future subdivision/residential development on these remote private inholdings within the  
2 boundaries of the ANF. The conveyance of the Federal lands to Herbert Owens would increase  
3 the total acreage of his real estate holdings by 337.74 acres and result in an equal number of acres  
4 of federal lands within the Greer Recreation Area (GRA) leaving federal ownership. On a forest-  
5 wide basis an additional 58.61 acres of land would be available for public recreation use. This  
6 document uses the same boundaries and acreage totals when referring to the GRA as those  
7 identified in the Apache County Greer Conservation, Development and Management Program  
8 Ordinance (Phase I), an amendment to the Apache County Land Plan and Community  
9 Development Ordinance (Zoning Ordinance), adopted May 15, 1989, and effective June 17, 1989  
10 (Doc. 4).

## 11 **Objectives**

12 The Forest Service has the responsibility to manage NFS lands for appropriate public uses. This  
13 includes making adjustments in land ownership that serve the public interest and are consistent  
14 with land management planning objectives.

15 The purpose of the Proposed Action is to meet the following Forest Service objectives:

- 16 1. Acquisition of the non-Federal lands within existing National Forest boundaries that  
17 contain critical habitat for federally listed species and aquatic and riparian habitats  
18 associated with the West Fork of the Black River and the Blue River.
- 19 2. The elimination of several miles of landline and controlling corners between NFS and  
20 private lands.
- 21 3. Acquisition of private lands within existing National Forest boundaries that would  
22 contribute to the blocking up of public land ownership, reduce the likelihood of trespass  
23 on, or damage to NFS lands, and facilitate fire and resource management.

24  
25 For the exchange to take place, both parties to the exchange must agree on the total package.

26 The non-Federal landowner First American Title Insurance Company, under Trust 8541, for the  
27 benefit of Precision Components, Inc., Herbert Owens (First American Title) agrees the exchange  
28 satisfies Herbert Owens' personal requirements for expansion of Spade Ranch.

29 The proposed exchange has been found to be consistent with the management direction, goals and  
30 objectives of the A-S LMP and is in the public interest (36 CFR 254.3(b)(2)). The non-Federal  
31 lands meet the A-S LMP Standards and Guidelines that identify them as desirable for acquisition,  
32 (Doc 3, page 101) and the Federal lands as available for conveyance under land exchange  
33 authorities (Doc. 3, page 100).

34 If acquired, the non-Federal lands would be incorporated into the Management Areas in which  
35 they are located (36 CFR 254.3(f)). Management objectives for the parcels would be the same as  
36 surrounding federal lands, unless otherwise changed by future amendment of the A-S LMP.

## 37 **Proposed Action**

38 The ASNFs is proposing to exchange lands with First American Title under authority of the  
39 General Exchange Act of March 20, 1922; the Federal Land Policy and Management Act of  
40 October 21, 1976 (FLPMA); and the Federal Land Exchange Facilitation Act of August 20, 1988  
41 (FLEFA). The proposed land-for-land exchange would result in federal acquisition of 396.35  
42 acres in the ANF and conveyance of 337.74 acres (BLM dependent resurvey accepted December  
43 8, 2004 (Doc. 147) of land north of the community of Greer in the ANF.

1 The non-Federal lands would add vital habitat for loach minnow, spikedace and the Apache  
2 Trout, along with the acquisition of wetlands/floodplain containing significant aquatic and  
3 riparian habitats associated with the mainstream of the West Fork of the Black River and the Blue  
4 River. There would be a blocking up of public land ownership resulting in a reduction in  
5 complex ownership patterns. The elimination of numerous miles of ANF/private property  
6 landline boundaries and controlling corners would contribute to management efficiency. Any  
7 potential for future subdivision/residential development on these currently private inholdings  
8 within the ANF's boundaries would be eliminated.

9 The conveyance of the Federal lands to First American Title would increase the size of Herbert  
10 Owens' real estate holdings. This document also includes analysis of possible future residential  
11 development on the Federal lands even though Mr. Owens has stated he has no plans for  
12 development on or other disposition of the subject lands (Appendix B - listing of actions analyzed  
13 for cumulative effects).

14 A preliminary analysis of the proposal was completed and included in the Feasibility Analysis  
15 that was approved by the Director of Lands & Minerals, Southwestern Region on August 28,  
16 2002 (Doc. 31). An Agreement to Initiate an evaluation of a land exchange was authorized by the  
17 Director of Lands & Minerals, Southwestern Region, dated November 14, 2002 (Doc. 39).  
18 Previously, two full appraisals were completed to establish market values prior to exchange. The  
19 first appraisal with a Valuation Date of March 21, 2002 expired on March 21, 2003, prior to the  
20 execution of an Exchange Agreement. The Valuation Date of the second appraisal was November  
21 3, 2003. An Exchange Agreement was executed on October 20, 2004 and the Agency-approved  
22 land values determined by this appraisal were fixed. However, the environmental decision for the  
23 land exchanged was remanded to the Forest Service by the U.S. District Court Order (March 1,  
24 2007). Consequently, the Exchange Agreement was no longer valid and was terminated on  
25 September 24, 2007. An updated appraisal is currently being prepared and the Value Consultation  
26 prepared by the Forest Service's Senior Review Appraiser concluded that it appears the lands to  
27 be exchanged are of approximately equal value (including any necessary cash equalization), as  
28 indicated in the previous appraisals (Doc. 339).

29 The following are descriptions of both the Federal and non-Federal parcels involved in this  
30 proposal.

### 31 **Federal Lands To Be Exchanged Total 337.74 Acres**

32 **Tract A** (70.57 acres): This parcel is currently public land within the ANF and Springerville RD.  
33 The land has an elevation of 8,160 to 8,400 feet above sea level and is generally gently sloping on  
34 the east portion with some steeper terrain on the north portion. Soils are heavy clay with some  
35 surface rock. Vegetation consists of a scattered overstory of second growth ponderosa pine with  
36 an understory of various grasses and small openings. The tract is bordered on the east by State  
37 Route 373 and adjoins private lands currently owned by Herb Owens on the south and west.  
38 There are no riparian or wetland/floodplain habitats in this tract.

39 **Tract B** (267.17 acres): This parcel is currently public land within the ANF and Springerville  
40 RD. The elevation ranges from 8,180 feet in the northeast corner to 8,500 feet in the southwest  
41 corner. The vegetation is primarily a continuous overstory of second growth ponderosa pine with  
42 a grass understory. Soils are high in clay content with surface rock evident. This tract is bordered  
43 on the north by Crosby Acres, a developed subdivision, and State Route 373 on the east. The  
44 tract includes a segment of a developed cross-country ski trail along the southern boundary  
45 (approximately  $\frac{3}{4}$  mile in length). There are no riparian or wetland/floodplain habitats in this  
46 tract.

1 The Federal lands do not contain any inventoried roadless areas, Wild and Scenic River corridors  
2 or study areas or Wilderness Areas.

3 Appendix A contains maps and legal descriptions of the Federal lands to be exchanged.

#### 4 **Private Lands To Be Acquired Total 396.35 Acres**

5 **Rancho Alegre Parcel** (79.76 acres): This parcel is within the ANF on the Alpine RD. The land  
6 is situated along the West Fork of the Black River at an elevation of 7,600 feet. The vegetation  
7 along the 0.25-mile stretch of river is riparian in nature, with Arizona alder and willows lining  
8 both banks. There are 3 acres of wetland habitat along the river. The upland portion of the  
9 property is an open meadow, dominated by spike muhly grass. The river and wetlands provide  
10 habitat for Apache trout, Chiricahua dock, and native freshwater mussels (Dr. Myers, USFS  
11 Report 10/04/01). National Forest System Road (NFSR) 25 provides access to the parcel along  
12 the west and south boundaries. The east boundary adjoins a parcel owned by the Arizona Game  
13 and Fish Department.

14 **Thompson Ranch Parcel** (157.91 acres): This parcel is within the ANF on the Springerville RD.  
15 The land is situated along the West Fork of the Black River at an elevation of 8,800 feet. The  
16 perennial streams passing through this parcel include 1.0 miles of Black River, 0.20 miles of  
17 Burro Creek, and 0.20 miles of Thompson Creek. Approximately 60 acres of riparian habitat is  
18 characterized by alders, willows and sedges. The parcel provides habitat for Apache trout,  
19 Arizona willow, Chiricahua dock, and northern water shrew (Dr. Myers, USFS Report 10/04/01).  
20 NFSR 116 provides access to the parcel where it runs north-south through the east portion of the  
21 parcel and turns west along the south boundary.

22 **Blue River Ranch Parcel** (158.68 acres): This parcel is within the ANF on the Alpine RD. The  
23 land is situated along the Blue River at an elevation of 5,500 feet. The parcel originally contained  
24 a 4.0-acre 10-year “Estate for Years” with an easement from Greenlee County Blue River Road  
25 No. 67004 (NFSR 281) to a residence. The “Estate” encompassed existing structural  
26 improvements described as a residence, utility building, storage shed, and well house. The  
27 “Estate for Years” expired on December 29, 2004. The structures were disposed of by the non-  
28 Federal party in November 2004. Non-structural range improvements consisting of fences  
29 remain on the parcel and will not be removed by the non-Federal party. A Navapache Electric  
30 Cooperative 69 KV transmission line crosses through the southern portion of the parcel  
31 paralleling Blue River Road No. 67004. The vegetation along the approximately 1.50 miles of  
32 river channel is riparian dependent and includes Fremont cottonwood, narrow leaf cottonwood,  
33 alder, and willow. There are 55 acres of riparian habitat in this parcel. The parcel contains  
34 habitat for the spikedace (Dr. Myers, USFS Report 10/04/01). The Blue River Road No. 67004  
35 provides access along the east and south sides of the parcel.

36 Appendix A contains maps and legal descriptions of the non-Federal lands to be acquired.

#### 37 **Connected Actions**

38 The Forest Service would relocate the segment of the designated cross-country ski trail crossing  
39 Federal Tract B to the south of the exchange boundary (see reroute map in Appendix A).

#### 40 **Decision Framework**

41 The Regional Forester, Southwestern Region, will decide if the land exchange should take place  
42 as described in the Proposed Action, including the connected actions, or as modified or not at all.

## 1 **Public Involvement**

2 Public involvement for the proposed Black River Land Exchange was initiated in December 2002  
3 as part of the original EA. Scoping for the EA included a Land Exchange Notice publication in  
4 the *White Mountain Independent* for Navajo and Apache Counties and the Copper Era for  
5 Greenlee County (36 CFR 254.8); direct mailings of the scoping report to County, State, and  
6 Congressional delegations and over 200 other potentially interested agencies, individuals, and  
7 organizations; and two open house meetings to provide information about the proposed exchange  
8 and solicit comments on the Proposed Action.

9 A Decision Notice and Finding of No Significant Impact (DN/FONSI) approving the Proposed  
10 Action was signed by the Director of Lands and Minerals, Southwestern Region on August 27,  
11 2004 (Doc. 128). Nine appeals of the decision were received by the Appeal Deciding Officer for  
12 the Chief. On December 6, 2004 the Appeal Deciding Officer for the Chief reversed the decision  
13 of the Director of Lands and Minerals, Southwestern Region (Doc. 144). The Appeal Deciding  
14 Officer directed the Director of Lands and Minerals to perform additional environmental analysis  
15 that consistently considered the potential for development on the Federal lands once conveyed  
16 into private ownership as a reasonably foreseeable future action. Subsequent to the Appeal  
17 Deciding Officer's December 6, 2004 reversal of the Director of Lands and Minerals' original  
18 DN/FONSI, a request for comments on a revised draft EA that included an analysis of potential  
19 future development on the Federal lands was mailed on April 15, 2005 to the appellants of the  
20 original DN/FONSI and individuals and organizations who had submitted comments on the  
21 original EA. Legal notice of the availability of the revised draft EA, and a news release  
22 announcing the public meeting were also published in the *White Mountain Independent* and a  
23 public meeting was held in the community of Greer, Arizona on April 23, 2005. In March 2007,  
24 the U.S. District Court remanded the October 14, 2005 decision authorizing the proposed Black  
25 River Land Exchange.

26 Two key issues were identified during the EA scoping process: (1) Potential loss of opportunity  
27 for outdoor recreation activities in the Greer area, and (2) Potential future development on the  
28 Federal lands. The key issues identified during the EA scoping process are addressed through  
29 analysis of the one key issue identified for this EIS.

30 The EIS scoping process was initiated on September 24, 2007 with publication of the Notice of  
31 Intent (NOI) to prepare an EIS for the proposed Black River Land Exchange (Doc. 325). The  
32 scoping process included notices in the Apache-Sitgreaves National Forests' Quarterly Schedule  
33 of Proposed Actions; distribution of letters to individuals, organizations, and agencies who have  
34 previously indicated interest in the Black River Land Exchange project; communication with  
35 tribal interests; and publication of news releases in the *White Mountain Independent*. The  
36 scoping process included identifying any new key issues and previously unknown potential  
37 environmental effects of the Proposed Action.

38 All comments received during the original EA analysis and the EIS scoping process along with  
39 Forest Service responses are included in the project record.

## 40 **Issues**

41 Issues are disputes, debates or discussions about environmental effects that may be created by the  
42 proposed project. This section presents significant issues identified during the scoping process,  
43 comment period and internal agency review. Significant issues ultimately define the scope of the  
44 environmental concerns to be addressed in this analysis process. Issues raised during NEPA  
45 scoping were reviewed for applicability to the analysis and decision to be made. Reasons for not

1 considering an issue to be significant and eliminating it from detailed study were based on the  
2 following criteria:

- 3 1. Issue was outside the scope of the Proposed Action.
- 4 2. Issue was covered by existing law, regulation or previous decision.
- 5 3. Issue was irrelevant to the decision.
- 6 4. Issue was not supported by scientific evidence.
- 7 5. Issue was limited in extent, duration and intensity.

8 The Interdisciplinary Team (IDT) for the proposed project reviewed and grouped the public  
9 scoping comments received in response to the NOI. Individual responses to comments were  
10 prepared and are included in a separate document in the project record (Doc. 328). The IDT  
11 identified one significant (key) issue to be analyzed in detail based on analysis of public  
12 comments and through IDT discussion. The key issue identified during the EIS scoping process  
13 and measures developed to address this key issue is briefly summarized below.

14 **Key Issue: *Possible development on Federal Lands (if exchanged) could***  
15 ***lead to adverse social and economic impacts including a possible decrease***  
16 ***in the availability of water from existing private water wells.***

17 Many comments were received regarding a desire to minimize or allow no development on the  
18 Federal land should it be exchanged in order to retain what they refer to as the unique character of  
19 Greer. Descriptive terms included; pristine, primitive, open space, uniqueness, quaintness,  
20 natural beauty, rare land, the nature of the community, beauty and natural wonder, unique  
21 character of Greer, the very essence of Greer and charm (Doc. 328).

22 Other comments were received regarding the potential impacts of future development on various  
23 social and economic attributes. These included noise, traffic, water quality, development of  
24 commercial enterprises along the highway corridor, uncontrolled growth, availability of water,  
25 impacts on wildlife and wildlife corridors, availability of water for riparian areas, sewer services,  
26 loss of recreation opportunity, pollution (into adjacent creeks, riparian areas and the Little  
27 Colorado River), ingress/egress, adequacy of the transportation system for evacuation, cumulative  
28 impacts, fire safety, increased fire hazard, increased fire hazard to forest land, degradation of the  
29 forest environment, impacts on phyto resources, scenic quality, emergency services, inability of  
30 state and local governmental agencies to regulate the use of water resources, increased  
31 maintenance needs for the transportation system, and adjacent residential property values (Doc.  
32 328).

33 Many comments were received regarding the potential effects from future development on  
34 Federal lands (if exchanged) on water availability from existing domestic wells. In addition, in  
35 the Order dated February 28, 2007, United States District Court judge Mary Murguia found the  
36 Forest Service failed to take the requisite hard look at the environmental impact should the  
37 Federal land be developed with the use of multiple shallow wells rather than just one deep well  
38 such as with “wildcat” development.

### 39 **Measure**

40 In this DEIS the key issue is measured by a qualitative discussion of the implication of potential  
41 future development on the social and economic attributes that were raised as concerns. Impact  
42 analysis includes an estimate of the amount of drawdown of groundwater aquifers expected from  
43 either a deep well or multiple shallow wells and includes a narrative discussion of the  
44 implications of the drawdown (Doc. 342).

1 The loss of recreation opportunity was listed as a separate issue in prior analysis of the proposed  
2 exchange. Prior and recent commenters brought this forward in the context of potential future  
3 development. In this DEIS analysis, the loss of recreation opportunity has also been addressed in  
4 the context of the key issue above.

5 **Other Related Efforts**

6 There are no other related efforts that could affect the Proposed Action or decision to be made.



# Chapter 2 – Comparison of Alternatives

## Introduction

This chapter describes and compares the alternatives considered for the Black River Land Exchange. It includes a description and maps (Appendix A) of the two alternatives that were considered. This section also presents the alternatives in comparative form, sharply defining the differences between the alternatives and providing a clear basis for choice among options by the decision maker and the public. Some of the information used to compare the alternatives may be based upon the design of the alternative (i.e., acres of land currently in Federal ownership versus acres of land in federal ownership after exchange) and some of the information may be based upon the environmental, social and economic effects of implementing each alternative (i.e., total acres of federal land currently containing wetlands and floodplains versus total acres of federal land containing wetlands and floodplains after exchange).

## Alternatives Considered in Detail

- 1. Proposed Action.** Exchange 396.35 acres of non-Federal land for 337.74 acres of Federal land, including connected actions. Refer to Appendices A and B for maps and the original scoping letter.
- 2. No Action.** No exchange of lands would occur between the Forest Service and First American Title. Lands would remain in current ownership.

## Alternatives Considered but Eliminated from Detailed Study

The range of alternatives that are considered in a discretionary land exchange is limited by the exchange process itself. A balanced exchange package is arrived at by a series of proposals and counter proposals until both the non-Federal and Federal parties accept a mix of parcels. Once both parties agree upon an acceptable mix the Forest Service proposes to go forward with an analysis of the action. The exchange proposal analyzed in this document reflects lands mutually agreed upon by the non-Federal landowner and the Forest Service. The Federal lands, if not already classified as base-for-exchange, would be reclassified when it has been determined they do meet required criteria as identified in the A-S LMP and a decision has been made to exchange the selected lands (Doc. 3, pages 99, 100).

Other means of acquiring the non-Federal lands were considered but eliminated from further study. Sale of non-Federal lands to the United States is an alternative to a land exchange; however, funds to purchase these privately owned parcels are presently not available and it appears funds for land purchases will continue to be limited. Even if funds were available, the land exchange proponent has made the non-Federal lands available to the Forest Service on the basis of exchange only.

Public scoping suggested that deed restrictions be used to control potential future development on the Federal land once conveyed into private ownership. The purpose of a deed restriction should be to limit use of or development on the Federal lands after conveyance as a means of addressing an environmental concern. A deed restriction alternative on the Federal lands was considered, but eliminated from further study because no environmental concerns exist that require the reservation of rights by the United States (36 CFR 254.3(h)). In addition, any potential future development on the Federal lands would be subject to all laws and regulations of the State of Arizona and Apache County zoning ordinances, including subdivision and Phase I regulations. The relevant laws, regulations, and zoning ordinances contain adequate measures to assure the conveyed Federal lands, adjacent private land and remaining adjacent NFS lands are not

1 adversely affected. Protection of the Federal lands through deed restriction is not necessary, as  
 2 the intended use of the conveyed land would not substantially conflict with the established  
 3 management objectives on the adjacent NFS lands. Deed restrictions are not required in order to  
 4 fulfill the purpose and need for action. Restrictions, if imposed, also require continued federal  
 5 administration or oversight of the lands exchanged out of federal ownership. A principle  
 6 objective of the exchange is to reduce administrative requirements. The Forest Service has long  
 7 taken the position that zoning and regulation of uses on private land are within the responsibility  
 8 of state and local governments. Deed restrictions are not to be considered unless there is a need  
 9 to protect the public interest where state or local regulations are not adequate. “Except as  
 10 authorized by law, order, or regulation, Forest Service policies, practices, and procedures shall  
 11 avoid regulating private property use” (Forest Service Manual 5403.3). “Reservations and  
 12 restrictions should not be used to address a social or political issue” (Forest Service Handbook  
 13 5409.13, Chapter 33.41c).

## 14 Comparison of Alternatives

15 Table 1 provides a summary of the effects of implementing each alternative. Information in this  
 16 table is focused on activities and effects where different levels of effects or outputs can be  
 17 distinguished quantitatively or qualitatively among alternatives. This Table represents two  
 18 scenarios under the proposed action; if the exchanged Federal lands remain undeveloped, and if  
 19 development occurs on the conveyed Federal lands.

**Table 1. Alternative Comparison Table**

<b>AFFECTED RESOURCE/ISSUE</b>	<b>ALTERNATIVE 1 Proposed Action</b>	<b>ALTERNATIVE 2 No Action</b>
<b><i>Key Issue - Various social and economic attributes</i></b>		
Federal Undeveloped	No impacts if lands remain undeveloped.	No change expected.
Federal Developed	Minor impacts based on projected rate of development if it were to occur.	
Non-Federal	No change. Protection would be assured with federal acquisition.	Potential for residential development, possibly a guest ranch, or other structures on the isolated parcels.
<b><i>Water Quality and Availability</i></b>		
Federal Lands Either Undeveloped or Developed	No unacceptable change in water quality in Rosey or Lang Creeks expected as a result of the proposed land exchange. State and County regulations control discharges.	No change in water quality. No change in water availability.
Undeveloped	No unacceptable change in ground water availability expected as a result of the proposed land exchange.	
Developed	Minimal effect on the water table (Doc 342). No change in water quality.	
Non-Federal	No change in water availability expected.	No change in water quality assuming no development occurs. No change in water availability assuming no development occurs.
<b><i>Wetlands and Floodplains</i></b>		
Federal Lands Either Undeveloped or Developed	No mappable riparian/wetland/ floodplains occur on the Federal lands to be exchanged. The proposal will result in no effect to these habitats on the Federal parcels.	No increase in federally managed wetland/riparian habitat. The wetland/riparian habitats would remain in private ownership.

<b>AFFECTED RESOURCE/ISSUE</b>	<b>ALTERNATIVE 1 Proposed Action</b>	<b>ALTERNATIVE 2 No Action</b>
Non-Federal Lands	The FS would gain 118 acres of high quality wetland/riparian habitat including 1.65 miles of the West Fork of the Black River and 1.5 miles of the Blue River.	Floodplains and wetlands would be subject to federal and state laws regarding any future development.
<b><i>Administrative Factors</i></b>		
Federal Lands Either Undeveloped or Developed	14 landline corners and 6.1 miles of landline maintenance would be eliminated.	No change in existing corners or landline administration.
<b><i>Plants and Wildlife</i></b>		
Federal Lands Either Undeveloped or Developed	The FS would gain 118 acres of riparian habitat that includes 1.65 miles of the West Fork of the Black River and 1.5 miles of the Blue River. These areas contain vital species habitat for federally listed native fish: loach minnow, spokedace, and Apache trout and riparian areas and perennially flowing surface waters.	No change.
Non-Federal	No change. Protection would be assured with federal acquisition.	No change assuming no development occurs.
<b><i>Recreational Opportunities</i></b>		
Federal Lands Either Undeveloped or Developed	Forest-wide there would be a gain of 58.61 acres. Loss of 337.74 acres or 2.4% of land open to public recreation in the Greer Recreation Area.	No change in acres of land open to public recreation in the Greer Recreation Area or forest-wide.
<b><i>Cross-Country Ski Trail</i></b>		
Federal Lands Either Undeveloped or Developed	Loss of approximately $\frac{3}{4}$ mile of cross-country ski trail within Federal Tract B near its southern boundary. Reroute of the above ski trail will result in no net loss of trail to recreationists.	No change in location.
<b><i>Public Services</i></b>		
Federal Undeveloped	No change expected.	No change expected.
Developed	Slight increase expected in local support services, due to slightly more year round residents and proportional increase in summer residents.	
Non-Federal	No change expected.	No change in support services assuming no development occurs.
<b><i>Values of Adjacent Properties</i></b>		
Federal Undeveloped	Change in land values not expected.	Land values would not change.
Developed	Overall, not expected to change land values (adjacent private property is already developed (Tract B) or owned by non-federal party (Tract A)); adjoining developed property may not appreciate as quickly.	
Non-Federal	Change in values not expected. Adjacent property is owned by FS or State.	Change in values not expected; adjacent property is owned by FS or State.

<b>AFFECTED RESOURCE/ISSUE</b>	<b>ALTERNATIVE 1 Proposed Action</b>	<b>ALTERNATIVE 2 No Action</b>
<b><i>Property Taxes</i></b>		
Federal Undeveloped	Property taxes collected by Apache County may increase up to 40% over current. Taxes no longer collected by Greenlee County from non-Federal land but offset by increase in PILT receipts.	PILT receipts received by the two Arizona counties would not change.
Developed	Property taxes collected by Apache County may increase up to \$250,000 over current revenues. Taxes no longer collected by Greenlee County from non-Federal land but offset by increase in PILT receipts.	
Non-Federal	Property taxes no longer collected in the two Arizona counties.	Property taxes collected by the two Arizona counties would not change assuming no development.
<b><i>Scenic Quality</i></b>		
Federal Undeveloped	No change in scenic quality as a result of the proposed land exchange.	No change.
Developed	Moderately altered. Greer Phase I would assure compatibility.	
Non-Federal	No change in scenic quality.	No change in scenic quality assuming no development occurs.
<b><i>Soil and Air</i></b>		
Federal Undeveloped	No measurable soil loss is anticipated.	Same as Alternative 1.
Developed	No measurable soil loss expected as development would occur under state and county regulations.	
Non-Federal	No measurable soil loss is anticipated.	No change assuming no development occurs.
<b><i>Grazing Resources</i></b>		
Federal Lands Either Undeveloped or Developed	The Sheep Springs Allotment would be reduced in size by 90.6 acres. Permitted numbers of livestock would not change as a result of an exchange.	Permitted numbers of livestock would remain the same.
Non-Federal	Acquired non-Federal lands would become part of the A-S LMP Management Areas in which they are located. Lands could be incorporated into surrounding allotments and integrated into applicable Forest Service management areas. Management in accordance with the laws, regulations and LMP standards and guidelines applicable to those areas.	Private grazing leases would likely remain in effect subject to the discretion of the property owner.
<b><i>Mineral Resources</i></b>		
Federal Lands Either Undeveloped or Developed	Low potential currently exists for the accumulation of locatable minerals within the subject lands. Respective mineral resources would be conveyed.	Mineral estates would remain the same.
Non-Federal	Respective mineral resources would be conveyed.	Mineral estates would remain the same.

<b>AFFECTED RESOURCE/ISSUE</b>	<b>ALTERNATIVE 1 Proposed Action</b>	<b>ALTERNATIVE 2 No Action</b>
<b><i>Hazardous Materials</i></b>		
Federal Lands Either Undeveloped or Developed	No hazardous material is known to exist.	Same as Alternative 1.
Non-Federal	No hazardous material is known to exist.	Same as Alternative 1.
<b><i>Heritage Resources</i></b>		
Federal Lands Either Undeveloped or Developed	The Federal lands have been surveyed and no sites were found that qualify for the SHPO registry.	Same as Alternative 1.
Non-Federal	Any future Proposed Actions would be subject to historic preservation laws.	No protection of cultural resources including Thompson Cabin. Human burials still would be protected.
<b><i>Caves</i></b>		
Federal Lands Either Undeveloped or Developed	No natural caves are found on the Federal lands, therefore none would be lost. No special management areas designated in the ASF LMP occur on the Federal parcels. The proposal will result in no effect to special areas.	Same as Alternative 1.

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# Chapter 3 – Affected Environment and Environmental Consequences

This chapter displays the present condition (i.e. affected environment) within the areas proposed for exchange and the changes that can be expected from implementing the Proposed Action alternative or taking No Action at this time. The description of the affected environment inherently includes past events and impacts. The No Action alternative sets the environmental baseline for comparing effects of the Proposed Action alternative while analyzing no development and development scenarios. The environment may be characterized as consisting of soil, air, water, vegetation, and wildlife.

The environmental effects (changes from present base line condition) that are described in this chapter reflect the affected resources and the key issue identified for the proposal. The key issue is identified as follows: Possible future development on Federal lands (if exchanged) could lead to adverse social and economic impacts including a possible decrease in the availability of water from existing water wells. Some of the environmental effects are confined to this action and project area. Others may be cumulative with environmental effects from other actions and reach beyond the project area. Cumulative effects are discussed for the key issue where they occur.

This chapter discloses the reasonably foreseeable use of the Federal lands once they are conveyed into private ownership.

Environmental effects are described for the most likely development scenario. In this scenario, no development is expected to occur on the conveyed Federal lands. This is based upon the stated intent of the proponent and the history of development by the proponent on federal lands that were conveyed in a prior exchange in the area (Doc. 18).

Other development scenarios were also analyzed and potential effects disclosed. These included development with lot splits and development of a planned subdivision. In either of these development scenarios, the rate of development on the conveyed Federal lands was projected at approximately 2 lots per year for the next 15 years. To assess potential impacts on water availability, a maximum development scenario resulting in up to 258 shallow wells was analyzed.

In addition, the Federal Land Exchange Facilitation Act (FLEFA) of 1988 requires that the intended use of the conveyed Federal land will not substantially conflict with established management objectives on any remaining adjacent NFS lands. The adjacent federal lands are managed for wildlife habitat, dispersed outdoor recreation and livestock grazing. No change in these objectives is anticipated. The intended use of the conveyed Federal lands will not conflict with these management objectives. The reasonable potential future development on the Federal lands is analyzed to determine what potential impacts, if any, might be anticipated and the appropriateness of any deed restriction.

## Key Issue

The key issue is: Possible development on Federal lands (if exchanged) could lead to adverse social and economic impacts including a possible decrease in the availability of water from wells.

Many of the comments received expressed the desire to minimize or allow no development on the Federal lands in order to retain what they refer to as the unique character of Greer. Descriptive

1 terms included pristine, primitive, open space, uniqueness, quaintness, natural beauty, rare land,  
2 the nature of the community, beauty and natural wonder, unique character of Greer, the very  
3 essence of Greer and charm (Doc. 328).

4 Comments were received regarding the possible impacts of future development on various social  
5 and economic attributes. Comments received included the following topics: noise, traffic, water  
6 quality, development of commercial enterprises along the highway corridor, uncontrolled growth,  
7 availability of water, impacts on wildlife and wildlife corridors, availability of water for riparian  
8 areas, sewer services, loss of recreation opportunity, pollution (into adjacent creeks, riparian areas  
9 and the Little Colorado River), ingress/egress, adequacy of the transportation system for  
10 evacuation, cumulative impacts, fire safety, increased fire hazard, increased fire hazard to forest  
11 land, degradation of the forest environment, impacts on phyto resources, scenic quality,  
12 emergency services, inability of state and local governmental agencies to regulate the use of water  
13 resources, increased maintenance needs for the transportation system, and adjacent residential  
14 property values (Doc. 328).

## 15 **Introduction**

16 This section addresses the Key Issue and discloses impacts of the Proposed Action if no  
17 development occurs on exchanged lands.

18 Based upon the stated intent of the proponent and the history of development by the proponent as  
19 recipient of a prior exchange in the area, the most likely development scenario within the next 15  
20 years on the federally conveyed lands is that of no development.

21 Fifteen years provides a timeframe for a look at historical development and exchanges and  
22 provides for determining future trends in development. Changes in current zoning ordinances,  
23 which could place additional constraints upon development within the Greer Phase I Boundary,  
24 are currently being proposed to Apache County. Analysis of temporal scale beyond 15 years into  
25 the future was considered to be speculative.

## 26 **Affected Environment**

27 The Federal lands proposed for exchange are located near the community of Greer, Az. The  
28 Federal lands to be exchanged are made up of Tracts A and B. Tract A is bordered on the east by  
29 State Route 373 and adjoins private lands on the south and west. Tract B is bordered on the north  
30 by Crosby Acres, a developed subdivision, and State Route 373 on the east. According to the  
31 Community Wildfire Protection Plan for At Risk Communities of the Apache National Forest in  
32 Apache County, the unincorporated community of Greer is centered on the Little Colorado River  
33 with a mixture of 1-acre residential lots, small commercial enterprises, and resort facilities.  
34 Commercial developments are centered along the State Route 373 corridor within the currently  
35 developed section of the community. Planning for growth includes encouraging open space;  
36 controlling high-density uses in proximity to meadow land; enhancing aesthetics; encouraging  
37 single-family residences; resort uses, and convenience, personal service, and retail uses to serve  
38 residents and visitors; maintaining rural village quality and image; and protecting the public  
39 safety by prohibiting development in areas of floodplain, saturated soils, or steep slopes  
40 (Doc. 123).

41 The non-Federal lands to be acquired are separate isolated parcels of private land surrounded by  
42 Apache-Sitgreaves National Forests. These lands contain perennial water that are valuable as



1 critical habitat for federally listed species The lands proposed for exchange are previously  
2 described on pages 1-2 through 1-5 of this document.

### 3 **Direct and Indirect Effects**

#### 4 **Proposed Action**

##### 5 *Federal land*

6 Use of the Federal lands is expected to remain the same. This is based upon the stated intent of  
7 the proponent and the history of development by the proponent as recipient of a prior exchange in  
8 the area (Doc. 344). If land use remains the same, this would result in no impacts on the social  
9 and economic attributes raised as concerns and identified as a key issue.

##### 10 *Non-Federal Land*

11 If acquired, the non-Federal lands would be incorporated into the ASNFs LMP Management  
12 Areas in which they are located (36 CFR 254.3(f)). Management direction would be the same as  
13 surrounding federal lands, unless otherwise changed by future amendment of the ASNFs LMP.

14 The Proposed Action would preclude development on the non-Federal lands. This would  
15 preserve the more diverse habitat conditions on the non-Federal lands (Doc. 74). No adverse  
16 impacts resulting from development would occur to the non-Federal lands.

#### 17 **Cumulative Effects**

##### 18 *Federal land*

19 No new residential or commercial development means there would be no incremental effect on  
20 social and economic attributes resulting from current or future development on the Federal lands  
21 within the Greer Phase I boundary. The no development scenario would not add to the effects of  
22 development within the Greer Phase I boundary. No existing formal plans are in place for  
23 exchange of other federal lands within the Greer Phase I Boundary at this time. Some discussion  
24 has occurred regarding exchange of federal land associated with 19 existing Special Use Permits  
25 for Recreation Residences occurring near the Wonderland Road but no formal request has been  
26 submitted. The ASNFs LMP specifies criteria for lands eligible for exchange. Any future  
27 proposed exchanges would involve the public.

##### 28 *Non-Federal Land*

29 If the exchange occurs, the possibility of future development and associated direct, indirect and  
30 cumulative effects would be precluded.

#### 31 **Key Issue / Other Development Scenarios**

32 If the Federal property is conveyed, the proponent would add the property to his real estate  
33 holdings and could sell all or portions of the property, or bequeath all or portions of the property  
34 to others. Any potential future development on the Federal lands would be subject to all laws and  
35 regulations of the State of Arizona and Apache County zoning ordinances, including subdivision  
36 and Greer Phase I regulations. The relevant laws, regulations, and zoning ordinances contain  
37 adequate measures to assure the conveyed Federal lands, adjacent private land and remaining  
38 adjacent National Forest are not adversely affected.

1 This section further addresses the Key Issue and takes a hard look at potential impacts if  
2 development were to occur such as with lot splits or a planned subdivision.

### 3 **Development with Lot Splits**

#### 4 **Introduction**

##### 5 *Federal land*

6 If a change in ownership of the acquired Federal parcels were to occur, the following is a possible  
7 development scenario and possible associated effects. This development scenario assumes lot  
8 splits in accordance with current Apache County zoning regulations. The Crosby Acres  
9 subdivision lies adjacent to Tract B and provides an historical basis for rate of development that  
10 could be expected. Information received from Apache County Planning and Zoning (P & Z)  
11 indicates construction of sixty-eight single-family residences, 6 log homes, and 1 RV Park in  
12 Crosby Acres between 1965 and 2005. This represents construction on an average of slightly  
13 fewer than 2 lots per year over 39 years. P&Z parcel records do not indicate construction of  
14 single-family residences, log homes, RV parks, or commercial development on lots within the  
15 Crosby Acres in 2005 – 2007 (Doc. 344-A01). Based on the historical average of annual new  
16 development subject to Apache County Zoning Regulations, new construction could be projected  
17 to occur on approximately 30 lots over the next 15 years. If the rate of future development were  
18 to vary by 30 %, new construction would occur on between 25- 35 lots in Tracts A and B in the 15  
19 years following conveyance. Proportionally this equates to an estimated 5-7 lots on Tract A and  
20 20- 28 lots on Tract B. Based on historical development, one could expect that new residential  
21 construction would predominate with perhaps one or two new commercial enterprises developed  
22 along State Route 373. Parcel records within the Greer Phase I boundary indicate 14% of the  
23 property owners with a mailing address in Greer (Doc 344-A02). This is indicative of the  
24 seasonal nature of occupancy within the area.

25 Based upon this information, it is estimated that 14% of the potentially developed lots listed  
26 above would be occupied by full time residents. Use by seasonal residents, generally April  
27 through September, could be expected on 86% of the potentially developed lots.

##### 28 *Non-Federal Land*

29 If acquired, the non-Federal lands would be incorporated into the Management Areas in which  
30 they are located (36 CFR 254.3(f)). Management direction would be the same as surrounding  
31 federal lands, unless otherwise changed by future amendment of the ASNFs LMP.

32 The Proposed Action would preclude development on the non-Federal lands. This would  
33 preserve the more diverse habitat conditions on the non-Federal lands. No adverse impacts  
34 resulting from development would occur to the non-Federal lands.

### 35 **Pristine Open Space**

#### 36 **Affected Environment**

##### 37 *Federal Land*

38 No structures exist on the Federal parcels. Vegetation consists of a scattered overstory of second  
39 growth ponderosa pine with an understory of various grasses and small openings. Tracts A and B

1 adjoin other private land including the Crosby Acres subdivision and private land owned by the  
2 proponent. All developments are within the Greer Phase I boundary.

3 Several commentors on the Notice of Intent to Publish an EIS referred to the lands (Tracts A & B)  
4 near Greer as “pristine”. Tract B, the larger of the two tracts proposed for exchange, received a  
5 commercial thinning in the Greer Multi-product Sale in 1997 and 1998. Tracts A and B represent  
6 undeveloped, open space to some individuals who submitted comments.

### 7 ***Non-Federal Land***

8 These parcels remain in a relatively undeveloped state. The Rancho Allegre parcel contains some  
9 barbed wire range fences and a dirt road. The Thompson Ranch contains an historic cabin. The  
10 Blue River Ranch parcel has some range fences, a dirt road, and a Navapache Electric  
11 Cooperative 69 KV transmission line crossing through the property. These lands are surrounded  
12 by NFS lands. Large areas of federal land and open space occur adjacent to and near these  
13 parcels.

## 14 **Direct and Indirect Effects**

### 15 **Proposed Action**

#### 16 ***Federal Land***

17 Based upon the historical development in Crosby Acres, the exchange could result in potential  
18 new residential or commercial development and a reduction in open space on Tracts A and B on  
19 25 to 35 lots over the next 15 years. Any reduction in open space is expected to occur gradually  
20 over the next 15 year period (i.e., 2 one-acre lots per year x 15 years = 30 acres out of a total of  
21 338 acres in Tracts A and B). The resultant lots would be in proximity to other development that  
22 has occurred within the Greer Phase I boundary.

#### 23 ***Non-Federal Land***

24 Acquisition of the three isolated parcels (Thompson Ranch, Rancho Allegre and the Blue River  
25 Ranch) would result in the ownership of an additional 396 acres by the Forest Service. Federal  
26 management would assure the maintenance of open space on these lands. Adjacent forest lands  
27 assure there would remain a large contiguous block of open space.

## 28 **Cumulative Effects**

#### 29 ***Federal Land***

30 Future development is expected to occur on the existing private lands within the Greer Phase I  
31 boundary resulting in additional reduction of open space. The rate of development is dependent  
32 upon market conditions that are difficult to predict. According to analysis of data from Apache  
33 County parcel records, permits were issued for some type of development on 646 parcels totaling  
34 approximately 657 acres from 1915 -2007 (Doc. 344-A10). Open space associated with the  
35 Federal lands could be reduced on 25-35 acres over the next 15 years under this development  
36 scenario, representing four to five percent of the acreage developed within the Greer Phase I  
37 boundary. No other formal exchange proposals involving federal lands within the Greer Phase I  
38 boundary that could result in additional reductions to open space are being considered at this  
39 time. It is possible that an offer to exchange the federal land where the Little Colorado  
40 Recreation Residences are located will be submitted to the Forest Service in the near future. This  
41 would involve up to 35 acres containing 19 currently permitted recreation residences. If this NFS

1 land becomes private, existing structures could remain or be replaced with new structures. Little  
2 change to the acres of open space from this potential exchange is expected.

### 3 *Non-Federal Land*

4 Development would be precluded. No cumulative impacts on open space from development  
5 would occur.

## 6 **Direct and Indirect Effects**

### 7 **No Action**

#### 8 *Federal Land*

9 The No Action alternative would result in no changes in current management. Natural changes  
10 that affect vegetative conditions would be expected resulting in little overall change to open  
11 space.

#### 12 *Non-Federal Land*

13 Potential future development on the non-Federal lands could be single-family dwellings, a guest  
14 ranch such as Sprucedale or Hidden Meadows Ranch, or a commercial enterprise such as the Blue  
15 River Fish Hatchery. This would result in a reduction in open space on these lands.

## 16 **Cumulative Effects**

#### 17 *Federal Land*

18 No direct or indirect impacts result from the No Action alternative. Therefore, no cumulative  
19 effects would occur.

#### 20 *Non-Federal Land*

21 Past development in the form of single-family residences, guest ranches and a commercial fish  
22 hatchery has occurred on isolated private inholdings within the Apache National Forest. Similar  
23 types of development could occur in the future on the non-Federal lands. Future development  
24 would result in some reduction in open space on these private parcels. This would add to the total  
25 loss in open space that has occurred on other isolated private parcels in the Apache National  
26 Forest.

## 27 **Noise**

### 28 **Affected Environment**

#### 29 *Federal Land*

30 The Federal lands experience noise associated with natural phenomena, such as wildlife and wind  
31 and from recreational activity and aircraft over flights. Noise levels also include those related to  
32 adjacent private development and traffic on SR 373. Noise levels have not been measured, but  
33 are expected to be less than lower levels for urban ambient sound. Site-specific data on noise was  
34 not collected because the level of possible new development is expected to be gradual and similar  
35 to development which has occurred in Crosby Acres. The Forest Service is unaware of any  
36 significant effects on noise resulting from historical development of Crosby Acres or adjacent  
37 properties.

1 ***Non-Federal Land***

2 The non-Federal lands are relatively isolated and surrounded by NFS lands. Noise levels are low  
3 and primarily associated with natural phenomena, such as wildlife and wind. There is also some  
4 noise from recreational activity and aircraft over flights. Noise associated with structural  
5 improvements or their removal on the private parcels has been minimal over the course of the last  
6 15 years. This is based on the limited number of structural improvements which have occurred  
7 on these parcels.

8 **Direct and Indirect Effects**

9 **Proposed Action**

10 ***Federal Land***

11 Construction associated with possible future development may create noise similar to what has  
12 occurred during the development of Crosby Acres. Any level of construction noise may be  
13 disturbing to some residents. A temporary increase in noise is expected to occur during any  
14 residential or commercial construction activities. This type of construction activity produces less  
15 noise than development of shopping malls or industrial plants which are not likely to be  
16 developed under current zoning ordinances and due to a lack of market. If development occurs,  
17 similar to the development of Crosby Acres, construction activities could occur on an average +/-  
18 2 lots per year for the next 15 years, resulting in a minimal, if any, increase in noise levels. Noise  
19 of this nature has been occurring on adjacent subdivisions and other developments within the  
20 Greer Phase I boundary for the last 40 or more years. This noise has not created significant  
21 adverse effects. An increase in noise from construction activities associated with development  
22 will not impact federally-listed threatened, endangered or sensitive species. None are known to  
23 inhabit the Federal lands.

24 ***Non-Federal Land***

25 Development would be precluded. Noise associated with development would not occur.

26 **Cumulative Effects**

27 ***Federal Land***

28 Other past activities resulting in noise include implementation of forest vegetation treatments in  
29 the area, recreational activity, occasional overflights, and private development occurring on other  
30 parcels within the Greer Phase I boundary. There are no other formal land exchanges in the Greer  
31 Phase I boundary. The possibility exists that an exchange proposal for the existing Little  
32 Colorado Recreation Residences will be submitted to the Forest Service in the future. Noise from  
33 construction activities occurring on other existing private parcels can be expected to continue  
34 within the Greer Phase I boundary. Noise of this nature has been occurring on adjacent  
35 subdivisions and other developments within the Greer Phase I boundary for the last 40 or more  
36 years. This noise has not resulted in significant adverse effects. No complaints regarding noise  
37 from harvesting equipment associated with the implementation of the Greer WUI project have  
38 been received by the Springerville Ranger District.

39 ***Non-Federal Land***

40 Development would be precluded. Cumulative effects to noise levels resulting from development  
41 would not occur.

**1 Direct and Indirect Effects****2 No Action****3 *Federal Land***

4 The No Action alternative would result in no change to noise levels.

**5 *Non-Federal Land***

6 Any future development involving construction activities could temporarily create noise  
7 disturbance to forest users on adjacent NFS lands. Construction activities could create noise  
8 resulting in temporary disturbance to the threatened, endangered and sensitive species possibly  
9 occupying these parcels.

**10 Cumulative Effects****11 *Federal Land***

12 No direct or indirect impacts result from the No Action alternative. Therefore, no cumulative  
13 effects would occur.

**14 *Non-Federal Land***

15 There are no foreseeable actions that, in conjunction with future development on the non-Federal  
16 lands would result in cumulative impacts associated with noise levels.

**17 Traffic / Increased Maintenance Needs for the Transportation  
18 System****19 Affected Environment****20 *Federal Land***

21 The Level of Service (LOS), which is the ratio of traffic volume to capacity, has not been  
22 calculated by Arizona Department of Transportation (ADOT) on State Route (SR) 373 (Doc. 344-  
23 A03). Average annual daily traffic (AADT) on SR 373 ranged from 1100 to 1300 (ADOT 2006)  
24 from 2003 to 2006(Doc. 344-A04). Based upon this level of traffic and familiarity with SR 373,  
25 ADOT estimates the LOS is class A, which represents free flowing traffic (Doc 344-A03).

**26 *Non-Federal Land***

27 These lands are accessed by graveled roads on the Forest, including National Forest System  
28 Roads (NFSR) 01-25, -116 and -281. Design speed is 45 mph or less. Traffic is primarily  
29 seasonal in nature on all three roads. It is not uncommon for winter snowfall to prohibit travel on  
30 NFSR 25 and 116 from late November through mid-April. Forest visitors include hunters,  
31 fishermen, and other recreationists. Access on NFSR 281 (Greenlee County Road 67004) is  
32 maintained by the County and is the sole access for other private land owners along the Blue  
33 River. Some local landowners utilize NFSR 281 throughout the year for access to their adjacent  
34 properties.

## 1 **Direct and Indirect Effects**

### 2 **Proposed Action**

#### 3 *Federal Land*

4 If the estimated 25-35 units were developed this could result in an increase in the AADT of  
5 approximately 70 (two vehicle trips per day, every day, for each of the 35 units – largest estimate  
6 for number of additional trips added to AADT scenario) over the course of the next 15 years.  
7 Based upon this increase, ADOT estimates the LOS would remain Class A, which is free-flowing  
8 traffic (Doc. 344-A03). Based upon the historical rate of development in Crosby Acres, the rate  
9 of increase in AADT is expected to be gradual, resulting from an average of slightly less than 2  
10 lots developed per year.

11 The potential addition of 25-35 lots within the next 15 years could result in the need for the  
12 construction of turning lanes on SR 373 where intersections with access roads occur in order to  
13 maintain the existing flow of traffic (Doc. 344-A05). The rate of development in Crosby Acres  
14 has been slightly less than 2 lots per year over the last 39 years. Currently there is one access road  
15 from SR 373 for the Crosby Acres subdivision. There is no turning lane on SR 373 for Crosby  
16 Acres. The Murphy Engineering Report indicates the potential for an additional seven roads  
17 intersecting SR 373 for a full scale subdivision development of one-acre parcels. Based upon the  
18 historical rate of development in Crosby Acres, the potential for additional roads intersecting SR  
19 373 in the next 15 years is expected to be one for Tract A and one for Tract B, resulting in  
20 minimal improvement and maintenance needs for SR 373.

#### 21 *Non-Federal Land*

22 Public access to 3.15 miles of stream would become available to sport fishing. An increase in  
23 recreational uses such as hunting, hiking, bird watching, etc. would be expected on the non-  
24 Federal lands resulting in minor increases in traffic.

25 Development would be precluded. Impacts on traffic and the transportation system associated  
26 with residential and/or commercial development would not occur.

### 27 **Cumulative Effects**

#### 28 *Federal Land*

29 Ongoing activities that result in increases in local traffic include access by local residents,  
30 recreationists, construction workers and others in service industries. Development on existing  
31 private parcels within the Greer Phase I boundary is occurring and expected to continue into the  
32 future until existing and available private property is built out.

33 Implementation of the Greer WUI project has resulted in a temporary increase in traffic on SR  
34 373 and certain Forest Roads within the Greer Phase I boundary by harvesting contractors and  
35 their equipment. The Springerville Ranger District has received no complaints regarding this  
36 increase in traffic from Greer residents or seasonal visitors. Implementation of the Greer WUI  
37 project is expected to continue in the area through 2009.

#### 38 *Non-Federal Land*

39 There are no current or planned projects adjacent to the private lands that would increase traffic  
40 on the non-Federal parcels or adjacent federal lands.

**1 Direct and Indirect Effects****2 No Action****3 *Federal Land***

4 No changes in traffic or transportation would occur with the No Action alternative.

**5 *Non-Federal Land***

6 Non-Federal Lands would continue to be available for future development. Likely development  
7 on these lands is low density residential. The potential for development such as guest ranches  
8 similar to Sprucedale or Hidden Meadows Lodge is possible. If development occurs, the AADT  
9 associated with the parcels would experience a minimal increase. Some increase in the frequency  
10 of road grading and other maintenance needs to Forest Service and County roads would be  
11 expected.

**12 Cumulative Effects****13 *Federal Land***

14 No direct or indirect impacts to traffic or transportation result from the No Action alternative.  
15 Therefore, no cumulative effects to traffic or transportation would occur.

**16 *Non-Federal Land***

17 There are no foreseeable actions that, in conjunction with development on the non-Federal lands  
18 would result in cumulative impacts to traffic or transportation.

**19 Water Quality / Pollution of Adjacent Creeks, Riparian Areas and  
20 the Little Colorado River****21 Affected Environment****22 *Federal Land***

23 The Federal lands are located within the Greer Wildland Urban Interface (WUI) boundary. The  
24 Greer Urban Interface Soil and Water Specialist Report (Doc. 161) completed in 2004 states  
25 “Currently, the limited monitoring completed by the ADEQ indicates no exceedance in turbidity  
26 on streams within the project area. A Unique water, the West Fork of the Little Colorado River,  
27 classified by the ADEQ as an outstanding state resource water (as prescribed in A.A.C. R18-11-  
28 112) occurs within the project area. Unique waters have more stringent surface water quality  
29 precautions than other surface waters under the state’s anti-degradation rule (see appendix B).  
30 Activities that may result in a new or expanded discharge of pollutants to Unique Water or its  
31 tributaries are prohibited if the discharge would cause degradation of existing water quality. Best  
32 management practices (BMPs) have been created by the IDT to protect the unique water from  
33 degradation. Below the project area, two reaches of the Little Colorado River have been  
34 identified by the ADEQ as being impaired. Total Maximum Daily Load analyses are being  
35 completed for these reaches. The pollutant of concern is suspended sediment. Monitoring to date  
36 indicates that sediment problem is coming from ungulate activities within the watershed  
37 downstream of the Forest, bank destabilization, and from natural sediment input from sandstone  
38 tuff outcrops.” Hall Creek lies just north and west of the Crosby Acres subdivision. The  
39 monitoring records for Hall Creek indicate there is no water quality problem associated with  
40 historical development in the Crosby Acres subdivision. Soils in Tracts A and B were classified



1 according to terrestrial ecosystem mapping units (Doc. 344-A06). The Greer Urban Interface  
2 Soil and Water Specialist Report provides a description of these soil types. No wetlands or  
3 floodplains occur on the Federal land.

#### 4 ***Non-Federal Land***

5 The non-Federal parcels are bisected by riverine systems and contain floodplains and riparian  
6 habitat. The non-Federal parcels contain a total of 118 acres of wetlands and 3.15 miles of  
7 floodplain. Soils on these habitats are typically significantly more sensitive to compaction and  
8 erosion than upland soils. These habitats constitute less than 1% of the ASNFs' total acreage and  
9 are much less prevalent than upland habitats that constitute over 41% of the ASNFs.

### 10 **Direct and Indirect Effects**

#### 11 **Proposed Action**

##### 12 ***Federal Land***

13 The Greer Urban Interface Soil and Water Specialist Report states impacts to upland soils are  
14 possible if construction activities associated with new development on Tracts A and B were to  
15 occur when saturated soil conditions exist. Any direct impacts would be restricted to upland soils.  
16 These impacts would not directly impact the soils of riparian areas, wetlands, floodplains or  
17 riverine systems since these habitats do not occur on the Federal land.

18 Compliance with state and local regulations and Best Management Practices during construction  
19 activities associated with future development on the upland soils would minimize adverse impacts  
20 to the soils on the Federal lands and adjacent lands.

##### 21 ***Non-Federal Land***

22 Future development would be precluded reducing the potential for impacts to sensitive soils and  
23 water quality.

#### 24 **Cumulative Effects**

##### 25 ***Federal Land***

26 Ongoing resource based activities occurring on or adjacent to the Federal lands within the Greer  
27 Phase I boundary include various recreational activities and implementation of forest thinning  
28 with the Greer WUI project. These activities have not resulted in unacceptable impacts to soils or  
29 water quality. Cumulative effects to the soils and water resource were determined to be  
30 insignificant in the Greer Urban Interface Soil and Water Specialist Report (Doc 161). There are  
31 no known actions that in conjunction with ongoing development on adjacent private property  
32 would result in substantial impacts to water quality, pollution of adjacent creeks, or riparian areas.

##### 33 ***Non-Federal Land***

34 Development would be precluded, eliminating the potential for impacts on sensitive soils and  
35 water quality due to future development.

**1 Direct and Indirect Effects****2 No Action****3 *Federal Land***

4 No direct or indirect effects would occur with the No Action alternative.

**5 *Non-Federal Land***

6 If future development occurs, impacts from construction activities would have the potential to  
7 directly impact the soils in riparian areas, wetlands, floodplains or riverine systems since these  
8 habitats are present on the non-Federal parcels. The wetter soils on these parcels are more  
9 susceptible to damage than the upland soils located on the Federal parcels.

10 Compliance with state and local regulations and Best Management Practices during construction  
11 activities would minimize adverse impacts to soils.

**12 Cumulative Effects****13 *Federal Land***

14 No direct or indirect impacts result from the No Action alternative. Therefore, no cumulative  
15 effects would occur.

**16 *Non-Federal Land***

17 Dispersed outdoor recreational activities and other past activities occurring on the non-Federal  
18 lands do not appear to have adversely impacted soils or water quality. There are no ongoing or  
19 planned projects such as vegetative treatments or recreational development on NFS lands adjacent  
20 to the private parcels. There are no foreseeable actions that, in conjunction with development of  
21 the non-Federal lands would result in cumulative impacts to water resources.

**22 Commercial Development****23 Affected Environment****24 *Federal Land***

25 Five commercial enterprises (all on private property) are located within one mile of Tract B.  
26 They consist of the Greer Mountain Resort (a restaurant, cabins and RV park), the Hall Creek RV  
27 Park, the F bar K store (a small A-frame, currently closed), the Snowy Mountain Inn (a lodge,  
28 cabins & the Scoreboard Restaurant and Sports Bar) and the Greer Ranch & Stable Bed &  
29 Breakfast (includes trail rides).

**30 *Non-Federal Land***

31 No commercial development is located on the non-Federal parcels. The parcels are isolated  
32 private land surrounded by NFS lands. The nearest commercial developments consist of the Big  
33 Lake store (authorized by a FS Special Use Permit on NFS land) located approximately 3 ½ miles  
34 east of Thompson Ranch; Sprucedale Ranch (on private property) located approximately 3 ½  
35 miles east of Rancho Allegre; and the Blue River Fish Hatchery (on private property) located  
36 approximately 3 miles north of the Blue River Ranch parcel.

**1 Direct and Indirect Effects****2 Proposed Action****3 *Federal Land***

4 Current zoning ordinances would allow for commercial development on the Federal lands  
5 (through issuance of a County conditional use permit). In a December 19, 2007 meeting, Apache  
6 County Planning and Zoning indicated commercial development would only be expected along  
7 SR 373. Any amount of new commercial development may be objectionable to some local  
8 residents. One commercial enterprise (RV Park) has been constructed along SR 373 within the  
9 Crosby Acres subdivision in the last 39 years. Four other establishments located on private  
10 property are within one mile of Tract B. Based on this historical rate of development, commercial  
11 development along SR 373 could occur but would be expected to be minimal.

**12 *Non-Federal Land***

13 The Proposed Action would preclude commercial development from occurring on the isolated  
14 non-Federal parcels.

**15 Cumulative Effects****16 *Federal Land***

17 If future commercial development were to occur it would most likely be service oriented and add  
18 to the existing business base proximal to Crosby Acres.

**19 *Non-Federal Land***

20 Commercial development would be precluded and there would be no cumulative impacts from  
21 commercial development.

**22 Direct and Indirect Effects****23 No Action****24 *Federal Land***

25 The No Action alternative will have no effect on commercial development.

**26 *Non-Federal Land***

27 The potential remains for limited commercial development on the non-Federal parcels, similar to  
28 existing development on isolated private parcels within the Apache National Forest, such as  
29 Sprucedale Ranch, Hidden Meadows Ranch, and the Blue River Fish Hatchery.

**30 Cumulative Effects****31 *Federal Land***

32 No direct or indirect impacts result from the No Action alternative. Therefore, no cumulative  
33 effects would occur.

1 ***Non-Federal Land***

2 If future commercial development occurs, it would add to the amount of existing development  
3 that has occurred on isolated private lands within the Apache National Forest.

4 **Water Availability / Availability of Water for Riparian Areas / State**  
5 **of Arizona Regulation of Water Resources**

6 **Affected Environment**

7 ***Federal Land***

8 The Federal lands are located at an elevation of 8100 to 8500 feet and the natural vegetation is  
9 representative of ponderosa pine forest type. The area drains into Lang and Rosey Creeks. Both  
10 are tributaries to the Little Colorado River. The waters of the Little Colorado River are  
11 appropriated for irrigation use in the downstream valley communities of Eagar, Springerville, and  
12 Saint Johns. There are no streams, springs, or wetlands located on the Federal lands. A Water  
13 Resource Evaluation was conducted by the FS and states the following: "The Greer exchange  
14 parcels are located entirely on upland sites that do not include any mappable floodplains or  
15 wetlands. No water right filings appear to be associated with these exchange locations" (Doc 13).  
16 The groundwater aquifers are described in the Geologic Resources Report (Doc. 342). No creeks  
17 or rivers are present on the two parcels. Rosey Creek, which includes riparian habitat lies south  
18 of Tract B. Lang Creek lies to the north of Tract A.

19 ***Non-Federal Land***

20 The non-Federal lands contain portions of the West Fork of the Black River and the Blue River.  
21 These rivers flow year-round and support both native and introduced fish populations. The rivers  
22 support a healthy riparian community and supply water for wildlife and livestock use (Doc 13).

23 **Direct and Indirect Effects**

24 **Proposed Action**

25 ***Federal Land***

26 Under a development scenario that would include lot splits, approximately 25-35 wells could be  
27 developed within the next 15 years on the Federal lands. Any new wells would require drilling  
28 permits from the AZ State Department of Water Resources. State of Arizona regulation of water  
29 use is beyond the scope of this analysis. There would be no direct effects on water availability in  
30 creeks or riparian areas on the Federal lands since none are present.

31 The Geologic Resources Report reads, "The overall effect on a 100 – 200 foot saturated zone in  
32 the White Mountains aquifer would be minimal, whether it is the result of pumping two wells,  
33 258 wells or even a single shallow well." (Doc. 342). The conclusion reached under this  
34 development scenario is that effects on water availability from multiple shallow wells are  
35 expected to be minimal.

36 ***Non-Federal Land***

37 Acquisition of the non-Federal lands would result in them being incorporated into the adjacent  
38 NFS lands and becoming subject to Forest Service management practices. Any future residential  
39 or commercial development on these lands, particularly the Blue River Ranch Parcel (previously  
40 this property was subdivided and placed on the market as four approximately 40-acre parcels but

1 sold in its entirety when the proponent acquired it) would be precluded. Federal management  
2 would provide protection to the riparian habitat and riverine systems. Quality and quantity of  
3 surface and groundwater resources of the Blue River and West Fork of the Black River attributed  
4 to these parcels would be preserved.

#### 5 ***Federal Land***

6 No ongoing actions or foreseeable future actions are planned on other federal lands within the  
7 Greer Phase I boundary that could possibly affect water availability.

#### 8 ***Non-Federal Land***

9 Acquisition of the non-Federal lands would not result in any direct or indirect effects on water  
10 availability. Therefore, no cumulative effects exist. Development would be precluded and  
11 quality and quantity of surface and groundwater resources of the Blue River and West Fork of the  
12 Black River would not be affected.

### 13 **Direct and Indirect Effects**

#### 14 **No Action**

##### 15 ***Federal Land***

16 The No Action alternative will result in no effects to water resources on the Federal land.

##### 17 ***Non-Federal Land***

18 The non-Federal lands would continue to be available for future development. Likely  
19 development on these lands is low density residential. However, development such as guest  
20 ranches is also possible. Direct and indirect effects to riparian habitat on the West Fork of the  
21 Black River and Blue River resulting from activities associated with future development, such as  
22 the construction of unimproved access roads and land clearing activities would be possible,  
23 although limited in scope.

#### 24 **Cumulative Effects**

##### 25 ***Federal Land***

26 No direct or indirect impacts result from the No Action alternative. Therefore, no cumulative  
27 effects would occur.

##### 28 ***Non-Federal Land***

29 There are no foreseeable actions that, in conjunction with future development on the non-Federal  
30 lands, would result in cumulative impacts to water resources.

### 31 **Impacts on Wildlife and Wildlife Corridors**

#### 32 **Direct and Indirect Effects**

##### 33 **Proposed Action**

##### 34 ***Federal land***

35 Development on the Federal lands as described above with lot splits could result in some loss of  
36 habitat. Although individual animals may be displaced, it is very common to see many of the  
37 various non-status wildlife species present in and around the existing residential areas in Greer.

1 The impact of habitat loss as a result of possible future development to local wildlife would be  
2 discountable because the upland ponderosa pine habitat is both common and widely available  
3 throughout the Greer Phase I area.

4 The only listed species that could possibly be indirectly impacted by future development would  
5 be the documented Mexican Spotted Owl in Hall Creek. Although no direct impact would occur,  
6 there exists the possibility of indirect disturbance during the construction of new residential  
7 homes adjacent to the occupied MSO habitat. Indirect noise disturbance is expected to be  
8 discountable because of the dense vegetation, steep canyon, and 1 mile distance from the known  
9 nest/roost area. Indirect impacts associated with new residents entering the adjacent occupied  
10 MSO habitat could occur. This potential impact is expected to be discountable because the MSO  
11 habitat is not desirable for recreation. The occupied Hall Creek MSO habitat is in a steep canyon,  
12 densely forested, and provides no trail system. It is highly unlikely that foot-use by residents of  
13 any new residential development would occur because a nearby trail network is available and is  
14 out of MSO habitat.

### 15 *Non-Federal Land*

16 Acquisition of the non-Federal lands would bring unique riparian habitat for at least three listed  
17 species under federal management. Once under federal jurisdiction protection of these rare and  
18 important habitats can be assured.

19 The following text is from a letter dated January 21, 2003 from the Arizona Game and Fish  
20 Department regarding the proposed exchange. It provides a summary perspective of potential  
21 effects of the exchange on wildlife resources. “The Department is aware of the concerns of the  
22 community of Greer with the proposed land exchange of the selected federal parcels around  
23 Greer. While the Department recognizes that these selected federal parcels currently provide  
24 limited recreational hunting opportunities, we believe that recreational hunting and fishing  
25 opportunities associated with the offered private parcels exceed those of the selected federal  
26 parcels. In addition, while the selected federal parcels currently provide limited wildlife habitat  
27 values for a variety of species, we believe the offered private parcels provide very high wildlife  
28 habitat values for an even wider variety of wildlife species, including several special status  
29 species. The offered private parcels also contain perennial stream/river habitats with very high  
30 riparian and fishery values. Acquisition of these parcels by the Forest Service would avoid  
31 potential development issues associated with private ownership, and would facilitate greater  
32 Department involvement in managing direction and activities. Acquisition would also  
33 consolidate Forest Service ownership of reaches of streams, facilitating specific management  
34 actions for native fishes.” (Doc. 74).

35 If the exchange occurs, the possibility of future development and associated cumulative impacts  
36 to unique and important habitats for federally listed species would be precluded. The objectives  
37 of the Endangered Species Act and subsequent Recovery Plans would be advanced by the  
38 acquisition of properties that support and provide key habitat for listed species. The Federal lands  
39 proposed for exchange are ponderosa pine uplands; the private lands proposed for exchange are  
40 very unique in the southwest and of extremely high value to wildlife.

**1 Cumulative Effects****2 *Federal land***

3 Development on the Federal lands would result in a small loss of upland ponderosa pine habitat.  
4 This is the most common habitat type on the ASNFs and would not result in a measurable impact  
5 to wildlife. The possibility also exists for an additional 30 acres of upland ponderosa pine habitat  
6 type to be exchanged as a result of the proposed Little Colorado Recreation Residence Land  
7 Exchange discussed previously. The land currently has residential development on it and a  
8 resulting exchange would not result in additional impacts to wildlife resources.

**9 *Non-Federal Land***

10 The Federal land proposed for exchange ponderosa pine uplands; the private lands proposed for  
11 trade are very rare and of high value to wildlife. If the exchange occurs, the possibility of future  
12 development and associated cumulative impacts to these riparian habitats would be precluded.  
13 The objectives of the Endangered Species Act and subsequent Recovery Plans would be advanced  
14 by the acquisition of properties that support and provide key habitat for listed species.

**15 Direct and Indirect Effects****16 No Action****17 *Federal land***

18 No impacts on wildlife resources on the Federal lands would occur if the exchange does not take  
19 place.

**20 *Non-Federal Land***

21 The non-Federal parcels would remain available for future development similar to what has  
22 occurred on other isolated private inholdings on the Apache National Forest. Future development  
23 could include single-family dwellings, guest lodges and cabins or other types of development  
24 found in a rural area. This could result in potential impacts to the unique riparian habitat for at  
25 least three listed species. The opportunity to provide key habitat for listed species and facilitate  
26 the objectives of the Endangered Species Act and Recovery Plans would be precluded. The  
27 opportunity to consolidate Forest Service ownership of reaches of streams, facilitating specific  
28 management actions for native fishes would be precluded (Doc. 74).

**29 Cumulative Effects****30 *Federal land***

31 No cumulative impacts would occur because there would be no direct or indirect effects.

**32 *Non-Federal Land***

33 These lands would remain available for future development such as has occurred on other isolated  
34 parcels within the Forest.

**1 Sewer Services****2 Affected Environment****3 *Federal Land***

4 According to the Little Colorado Sanitary Sewer District (LCSD), sanitation facilities within the  
5 LCSD typically are operating at 3% of capacity in the winter and at 20% of capacity during peak  
6 occupancy in the summer (Doc. 344-A07).

**7 *Non-Federal Land***

8 There are no sewer treatment or other sanitation facilities on the private lands proposed for  
9 exchange.

**10 Direct and Indirect Effects****11 Proposed Action****12 *Federal Land***

13 The LCSD sewage treatment facility is expected to accommodate projected growth in and near  
14 Greer. If future development were to occur on Tracts A and B, wastewater services would be  
15 provided as the properties lie within the District's service area. The cost associated with  
16 extending services would be borne by individual lot owners, but there is a mechanism for  
17 potential fee waiver. Also, if multiple owners were involved, they could share the cost (Doc. 344-  
18 A07). The addition of 25-35 lots within the next 15 years would not affect the capacity of the  
19 existing sanitation facilities.

**20 Cumulative Effects****21 *Federal Land***

22 Additional residential or commercial development on the existing private land within the Greer  
23 Phase I boundary would increase the volume of wastewater requiring treatment by LCSD.  
24 However, the current operation is much below capacity and the additional volume is not expected  
25 to require an expansion of the facilities.

**26 *Non-Federal Land***

27 Acquisition of the non-Federal lands would not result in any direct or indirect effects on the need  
28 for sewer services. Therefore, no cumulative effects exist. The need for sewer services  
29 associated with potential development would be precluded.

**30 Direct and Indirect Effects****31 No Action****32 *Federal Land***

33 Current management would continue with no additional need for sewer services.

**34 *Non-Federal Land***

35 If future development were to occur, it is likely that on-site sewer treatment facilities would be  
36 developed.



## 1 **Cumulative Effects**

### 2 ***Federal Land***

3 Since the No Action alternative results in no direct or indirect impacts on sewer services, no  
4 cumulative impacts would occur.

### 5 ***Non-Federal Land***

6 There are no foreseeable actions that, in conjunction with development on the non-Federal lands  
7 would result in cumulative impacts to sanitation.

## 8 **Recreational Opportunities**

### 9 **Affected Environment**

10 The Federal lands are located within an area that has been locally identified as the Greer  
11 Recreation Area (GRA). The name was originally assigned to the area during the implementation  
12 of the Apache-Sitgreaves National Forests Off-Road Vehicle Management Plan in April 1977 and  
13 it has never been assigned any special management status that would require Congressional or  
14 Presidential action. The GRA includes some but not all of the federal lands within boundaries  
15 identified as State Route 260 south for approximately seven miles and two miles to the east and  
16 west sides of State Route 373 (Doc. 79). The GRA as defined in the Purpose and Need for Action  
17 section of this document contains approximately 16,939 acres of which approximately 14,227  
18 acres are federal lands. The two federal tracts proposed for exchange share common boundaries  
19 with existing private lands; Tract A adjoins land owned by Herbert Owens and Tract B adjoins 17  
20 individually owned residential lots in the subdivision known as Crosby Acres. The tracts are  
21 located in the ponderosa pine vegetative type and current uses are for a variety of undeveloped  
22 outdoor recreation pursuits including; hiking, horseback riding, bird watching, hunting, and  
23 unauthorized ATV riding. A developed outdoor recreation site known as Squirrel Springs Day  
24 Use Site is immediately south of the southeast corner of Tract B. It offers toilets, picnic tables  
25 and a gravel surfaced access road and parking lot. This site serves as a trailhead for several cross-  
26 country ski trails that mostly follow closed logging roads/skid trails. The cross-country skiing  
27 trails are identified with plastic blue diamond shaped markers attached to trees. A segment of the  
28 northern-most trail is partially located within Tract B. Should the land exchange be approved the  
29 FS would relocate that portion of the trail to the south and onto the adjacent federal land.

30 The non-Federal lands include portions of the West Fork of the Black River and the Blue River.  
31 The parcels on the West Fork of the Black River contain riparian habitat and flowing waters that  
32 are considered coldwater sport fisheries. The Blue River parcel contains riparian habitat.  
33 Currently, public access for dispersed outdoor recreation is not allowed. Should the land  
34 exchange be approved FS ownership would open up these lands to sport fishing and other  
35 associated dispersed outdoor recreation activities.

### 36 **Direct and Indirect Effects**

### 37 **Proposed Action**

38 The GRA contains 16,939 acres. The 14,227 acres of federal land within the GRA would be  
39 reduced by 337.74 acres. As a result, the federal land available for outdoor recreation within the  
40 GRA would be reduced by 2.4%. There would be an increase of 396.35 acres of riparian  
41 influenced NFS lands available for public outdoor recreation use elsewhere on the Forest. The

1 approximately ¾ mile of existing cross-country ski trail would be relocated and the result would  
2 be no loss of skiing opportunity. The GRA would still contain a sizable land base available for  
3 outdoor recreation for both residents and visitors. On a forest-wide basis there would be an  
4 overall increase of 58.61 acres available for outdoor recreation uses, such as fishing, camping and  
5 hiking.

## 6 **Cumulative Effects**

7 NFS lands available for outdoor recreation use in the GRA would be reduced by 337.74 acres or  
8 2.4%. NFS lands would no longer be contiguous to a number of private lots along the southern  
9 boundary of Crosby Acres subdivision resulting in loss of immediate access to the Apache  
10 National Forest by the affected landowners. An additional 396.35 acres of riparian influenced  
11 lands would be available for public outdoor recreation uses. The only other actions currently  
12 being considered within the GRA that may have a future effect on the total number of federal  
13 acres available for outdoor recreation use are a land exchange proposal for approximately 35  
14 acres involving 19 existing summer recreation residences. A former FS proposal to purchase  
15 approximately 10 acres of floodplain along the Little Colorado River no longer appears likely.  
16 No cumulative impacts are anticipated.

17 The Greer WUI is expected to reduce fire risk within the Greer Basin. The Greer Lakes  
18 Improvement Project is not expected to alter fire risk. These two projects would not result in  
19 additional demand for public services. These projects would not result in a loss of outdoor  
20 recreation opportunities. The Greer Lakes Improvement Project is expected to enhance  
21 developed outdoor recreation opportunity. Therefore, no adverse cumulative effects to outdoor  
22 recreation opportunities are expected from the proposed land exchange.

## 23 **Direct and Indirect Effects**

### 24 **No Action**

#### 25 *Federal Land*

26 No change in the quantity and type of acres available for outdoor recreation would be  
27 experienced under this alternative.

#### 28 *Non-Federal Land*

29 The non-Federal lands would remain available for future development. In the case of  
30 development, these parcels, that include diverse habitats and riverine systems, would no longer be  
31 available to the public for recreation.

## 32 **Cumulative Effects**

### 33 *Federal Land*

34 No direct or indirect impacts result from the No Action alternative. Therefore, no cumulative  
35 effects would occur.

### 36 *Non-Federal Land*

37 Future development, if it occurs, on the 396 acres of non-Federal lands, which include riverine  
38 systems and riparian habitat, would eliminate this habitat from being available for public  
39 dispersed outdoor recreation. . These habitats constitute less than 1% of the ASNFs' total acreage  
40 and are much less prevalent than upland habitats that constitute over 41% of the ASNFs.

## 1 **Fire Hazard Potential**

### 2 **Affected Environment**

#### 3 *Federal Land*

4 **Tract A:** NFS lands immediately to the east, west and north of Tract A received fuel reduction  
5 treatment in 2006 and 2007 that resulted in reduced fire hazard potential upon completion of the  
6 Greer Wildland Urban Interface project. Prevailing winds that normally influence the spread of  
7 wildfire re from the southwest. Private land owned by the proponent is immediately to the south  
8 and west of Tract A in an area of low fuel loading, primarily made up of open meadow including  
9 a large pond. A forested knoll surrounded by meadow is present. A section of forest land in  
10 Sections 22 and 27 that lies southwest of the private land and Tract A was treated in 2003 as part  
11 of the Lang Fuels Reduction project. This project thinned trees < 12 “dbh and disposed of the  
12 resulting slash in a 50 acre block of land (Doc. 344-A11). The result was a major reduction in  
13 fuel loading and fire hazard potential. These past fuels reduction treatments along with the  
14 presence of meadows immediately south of Tract A result in a low fire hazard potential for lands  
15 surrounding Tract A. Resistance to control of wildfires on the adjacent forest land has been  
16 reduced as a result of these treatments.

17 **Tract B:** NFS lands east of Tract B received treatment as part of the Benny Thinning and Slash  
18 Treatment Project in 2003 and 2004. A maximum of sixteen potentially developable lots lie  
19 immediately adjacent to the west side of SR 373. A maximum of nineteen developable lots, along  
20 the southern boundary of Tract B, lie north of and above Rosey Creek, a perennial creek  
21 supporting riparian vegetation with low fire risk. The area immediately south of Rosey Creek  
22 was recently treated as part of the Greer WUI project, that resulted in a reduction in fire hazard  
23 potential. A maximum of twenty lots along the western boundary of Tract B lie above the steep  
24 slope of Hall Creek. The forest land to the southwest of these lots is scheduled for fuels treatment  
25 in 2009 as part of the Greer WUI project.

#### 26 *Non-Federal Land*

27 Specific data for the fire hazard potential on the non-Federal properties and adjacent NFS lands is  
28 not available. However, the fire hazard potential on the non-Federal properties is expected to be  
29 low to moderate as a perennial river passes through each of the properties. The Thompson Ranch  
30 parcel contains few, if any trees; the Rancho Alegre parcel consists of mostly a large meadow;  
31 and the Blue River Ranch parcel consists of cottonwood-willow forest broken up by several large  
32 open areas. The NFS lands adjacent to these properties have not recently received fuels reduction  
33 treatments. The lack of recent vegetative treatments in the vicinity of these parcels along with the  
34 high tree densities on the adjacent NFS lands results in the non-Federal properties being  
35 considered as having moderate to high fire hazard potential.

### 36 **Direct and Indirect Effects**

#### 37 *Federal Land*

38 **Tract A:** The Murphy Engineering Report indicates potential for development of 51 one-acre  
39 lots on Tract A. The time it would take to build out a subdivision of this size (51 lots) is  
40 speculative. Based upon the history and rate of development in Crosby Acres, the addition of 5-7  
41 lots on Tract A would be expected within the first 15 years. A 30% increase in the rate of  
42 development within the 15 years would equate to the addition of up to 7-10 lots developed on  
43 Tract A. This would result in only a minor change in the fire hazard potential. The Rodeo-  
44 Chediski Fire created a heightened awareness of the risk of wildfire that may result in fewer man-  
45 caused fires originating on private lands. The Greer Volunteer Fire Department has been working  
46 with the Greer Community promoting the Firewise program and assisting homeowners in the

1 Greer area to make their properties less susceptible to damage from wildfire. Fires originating on  
2 Tract A would be expected to spread to the northeast when driven by the prevailing wind toward  
3 SRs 260 and 373 that would serve as containment lines. The potential for large scale wildfires is  
4 not expected to increase with the addition of 5-10 lots.

5 **Tract B:** Based upon current Apache County Zoning regulations and the conceptual  
6 development displayed in the Murphy Engineering Report, a maximum of 199 one-acre lots could  
7 be developed within Tract B. The time-frame to build out a subdivision of this size (199 lots) is  
8 highly speculative. The history and past rate of development in Crosby Acres indicate the  
9 addition of 20-28 lots on Tract B could be expected over the next 15 years. A 30% increase in the  
10 rate of development during the next 15 years would represent the addition of a maximum of  
11 27-37 lots developed on Tract B. This is expected to result in only a minor change in fire hazard  
12 potential. Tract B was last treated using a commercial thinning in 1997 and 1998 as part of the  
13 Greer Multi-product sale resulting in a reduction in ladder fuels and creation of openings in the  
14 tree canopy. The Rodeo-Chediski Fire created a heightened awareness of the risk of wildfire that  
15 may result in fewer man-caused fires originating on private lands. The Greer Volunteer Fire  
16 Department has been working with the Greer Community promoting the Firewise program and  
17 assisting homeowners in the Greer area to make their properties less susceptible to damage from  
18 wildfire. Fires originating on Tract B would be expected to spread to the northeast when driven  
19 by the prevailing wind toward SR 373 which would serve as a containment line. The potential for  
20 large scale wildfires is not expected to increase with the addition of 20-37 lots.

21 Much of the NFS lands surrounding Tracts A and B received vegetative treatments in 2006 and  
22 2007 with implementation of the Greer WUI Project. Fire and fuels modeling for the analysis that  
23 was done for the treatments indicated the following: After treatment all the predicted flame  
24 lengths are less than 4', indicating that suppression with engines and handcrews would be  
25 successful. The Torching and Crowning Index Hazards are Low. Greer WUI Fire Specialist  
26 Report (Doc. 143).

### 27 *Non-Federal Land*

28 Fire and fuels management on the acquired lands would become the responsibility of ASNFs.

### 29 **Cumulative Effects**

#### 30 *Federal Land*

31 Past actions that reduced the fire hazard potential on or adjacent to the Federal lands include the  
32 Greer WUI Project, the Greer Multi-product sale and the Benny Thinning and Slash Treatment  
33 Project. Future fire hazard reduction treatments on the area southwest of Tract B are planned for  
34 2009. Completion of this work is dependent upon funding availability for the remaining  
35 treatments within the Greer WUI boundary. There are no other plans for fire hazard reduction  
36 projects in the Greer Phase I boundary.

#### 37 *Non-Federal Land*

38 No substantial cumulative effects would occur under the Proposed Action alternative. Fire and  
39 fuels management on the acquired lands would be the responsibility of ASNFs.

### 40 **Direct and Indirect Effects**

#### 41 **No Action**

#### 42 *Federal Land*

43 Fuel treatments on the Federal lands would not be affected by the No Action alternative.

1 ***Non-Federal Land***

2 Under the No Action alternative a developer would be responsible for implementation of any  
3 necessary fuel treatments on the non-Federal parcels during and following residential  
4 development. It is expected that structural fire fighting support facilities (i.e. fire hydrants, water  
5 drafting ponds) would be provided to meet Apache and Greenlee County requirements. Fire and  
6 fuels management in the surrounding NFS lands would be the responsibility of ANF.

7 **Cumulative Effects**

8 The No Action alternative would result in no cumulative effects.

9 **Impacts on Plants (“phyto” resources)**

10 **Affected Environment**

11 ***Federal Land***

12 **Tract A:** The elevation ranges from 8,160 to 8,400 feet above sea level and is generally gently  
13 sloping on the east side with some steeper terrain on the north side. Vegetation consists of a  
14 scattered overstory of second growth ponderosa pine with an understory of various grasses and  
15 small openings. There are no riparian or wetland/floodplain habitats on this tract.

16 **Tract B:** The elevation ranges from 8,180 feet in the northeast corner to 8,500 feet in the  
17 southwest corner. The vegetation is primarily a continuous overstory of second growth ponderosa  
18 pine with a grass understory. There are no riparian or wetland/floodplain habitats on this tract.  
19 The list of endangered, threatened, proposed candidate and sensitive species that may be present  
20 on the ASNFS (concurrent with the U.S. Fish and Wildlife Service), was used to identify the  
21 species which would need to be considered in the analysis. The following three plants, listed as  
22 sensitive, were identified for consideration due to possible suitable habitat within the analysis  
23 area: 1. Mogollon Paintbrush (*Castilleja mogollonica*) 2. Gila groundsel (*Senecio quarens*) and  
24 3. White Mountain Clover (*Trifolium longipes* var. *neurophyllum*). The plants were not found  
25 during field surveys for the Biological Assessment and Evaluation. They are not listed in the  
26 Arizona Game and Fish Department database as occurring in the area.

27 ***Non-Federal Land***

28 **Rancho Alegre Parcel:** This parcel is in the Apache National Forest on the Alpine Ranger  
29 District. The land is situated along the West Fork of the Black River at an elevation of 7,600 feet.  
30 The vegetation along the 0.25-mile stretch of river is riparian in nature, with Arizona alder and  
31 willows lining both banks. There are 3 acres of wetland habitat along the river. The upland  
32 portion of the property is an open meadow, dominated by spike muhly grass. The river and  
33 wetlands provide habitat for Apache trout, Chiricahua dock, and native freshwater mussels (Dr.  
34 Myers, USFS Report 10/04/01). NFSR 01-25 provides access to the parcel along the south  
35 boundary. The east and west boundaries adjoin parcels owned by the Arizona Game and Fish  
36 Department.

37 **Thompson Ranch Parcel:** This parcel is in the Apache National Forest on the Springerville  
38 Ranger District. The land is situated along the West Fork of the Black River at an elevation of  
39 8,800 feet. The perennial streams passing through this parcel include 1.0 miles of Black River,  
40 0.20 miles of Burro Creek, and 0.20 miles of Thompson Creek. Approximately 60 acres of  
41 riparian habitat is characterized by alders, willows and sedges. The parcel provides habitat for  
42 Apache trout, Arizona willow, Chiricahua dock, and northern water shrew (Dr. Myers, USFS  
43 Report 10/04/01). NFSR 01-116 provides access to the parcel where it runs north-south through  
44 the east portion of the parcel and turns west along the south boundary.

1 **Blue River Ranch Parcel:** This parcel is in the Apache National Forest on the Alpine Ranger  
2 District. The land is situated along the Blue River at an elevation of 5,500 feet. The vegetation  
3 along the approximately 1.50 miles of river channel is riparian dependent and includes Fremont  
4 cottonwood, narrow leaf cottonwood, alder, and willow. There are 55 acres of riparian habitat in  
5 this parcel. The parcel contains habitat for the spikedace (Dr. Myers, USFS Report 10/04/01).  
6 The Blue River Road provides access along the east and south sides of the parcel.

## 7 **Direct and Indirect Effects**

### 8 **Proposed Action**

#### 9 *Federal Land*

10 Under the Proposed Action, up to 25-35 lots could be developed over the next fifteen years. The  
11 construction of infrastructure and home sites would likely result in a minor loss of vegetation.  
12 Ponderosa pine forest and native grasses would be impacted where development occurs. Current  
13 zoning requires a minimum lot size of one acre and regulates removal of vegetation. If the entire  
14 acreage on each lot was disturbed during construction, which is unlikely, this would result in a  
15 total of 25-35 acres. Actual loss of vegetation would be less. To the extent practicable and in  
16 compliance with local zoning, efforts to retain trees and prevent damage to herbaceous vegetation  
17 would occur during construction. No threatened, endangered or sensitive plant species were  
18 identified in field surveys of Tracts A and B. Therefore, if development occurred, no damage to  
19 any threatened, endangered or sensitive plants would be expected.

#### 20 *Non-Federal Land*

21 The Proposed Action would assure conservation of the water dependent vegetation on the non-  
22 Federal parcels that are found in riparian and wetland habitats.

### 23 **Cumulative Effects**

#### 24 *Federal Land*

25 Under the Proposed Action, development of 25-35 lots may occur on the Federal lands.

26 Discussions are ongoing regarding an exchange of up to 35 acres of federal lands associated with  
27 Special Use Permits for the Little Colorado Recreation Residences near the Wonderland Road.  
28 No formal proposal has been submitted.

29 Additional development on existing private lands within the Greer Phase I boundary may occur  
30 resulting in some removal of vegetation.

#### 31 *Non-Federal Land*

32 No actions are planned on NFS lands near the non-Federal lands that would affect vegetative  
33 cover.

## 34 **Direct and Indirect Effects**

### 35 **No Action**

#### 36 *Federal Land*

37 No impacts to plants would occur.

#### 38 *Non-Federal Land*

39 The vegetation on the non-Federal parcels, that includes riparian and wetland habitat, would  
40 be subject to impacts associated with any future development.

## 1 **Cumulative Effects**

### 2 ***Federal Land***

3 No direct or indirect impacts result from the No Action alternative. Therefore, no  
4 cumulative effects would occur.

### 5 ***Non-Federal Land***

6 There are no foreseeable actions that, in conjunction with development on the non-Federal  
7 lands, would result in cumulative impacts on vegetation.

## 8 **Scenic Quality**

### 9 **Affected Environment**

10 The Federal lands are gently sloping ponderosa pine forest and are typical of most of the  
11 landscape found in this area of the Apache National Forest. The Visual Quality Objectives in  
12 Federal Tract A and B are Retention and Partial Retention. Approximately 286 acres are  
13 classified as Retention and 51 acres are Partial Retention. On Retention acres, the objective  
14 provides for management activities that are not visually evident. The objective on the partial  
15 retention acres means that management treatments may result in partial alteration of the valued  
16 landscape character, but must remain subordinate to the landscape (Doc. 165). Federal lands can  
17 be viewed on either side of State Route 373 for approximately 1 mile from its junction with SR  
18 260. At this point private residential development adjoins the highway on the west side for the  
19 next ½ mile. Approximately ½ mile farther down the highway private residential development  
20 occurs on both sides of the road for the next ½ mile, until the highway again enters NFS lands on  
21 both sides. At this point the road forms the eastern boundary of Tract B for the next ¾ mile. NFS  
22 land is located on both sides of the road for the next 1 mile until it enters the beginning of the  
23 community of Greer. Driving along this route exposes the traveler to both undeveloped and  
24 developed lands and it is still considered to be quite scenic and representative of Arizona's high  
25 country mountains.

26 The non-Federal Rancho Alegre and Thompson Ranch parcels contained abandoned wooden  
27 structures. The structures on the Rancho Alegre parcel were removed by the proponent and the  
28 parcel is now in a relatively undeveloped state, except for some remaining barbed wire range  
29 fences and a dirt road. The parcel is considered quite scenic as a section of the West Fork of the  
30 Black River flows through it. The structure on the Thompson Ranch parcel is considered  
31 historical and would be retained after acquisition and eventually managed by the Forest Service  
32 as an interpretive site. The cabin is a well-recognized landmark and its picture has been featured  
33 in photographic publications. The parcel is considered quite scenic as the confluences of both  
34 Thompson Creek and Burro Creek with the West Fork of the Black River are located on it. Both  
35 parcels can easily be accessed by improved Forest Service roads. The Blue River Ranch parcel  
36 originally contained a small residence and several out buildings that were not visible from the  
37 main Blue River Greenlee County Road No. 67004 that runs through the southeast corner of the  
38 parcel. All the structures were removed by the proponent and the parcel is now in a relatively  
39 undeveloped state, except for some remaining range fences, a dirt road, and a Navapache Electric  
40 Cooperative 69 KV aerial transmission line crossing through the property. The parcel is  
41 considered quite scenic and representative of the cottonwood-willow vegetative type with a  
42 section of the Blue River running through it.

**1 Direct and Indirect Effects****2 Proposed Action**

3 Under the Proposed Action the change in land ownership itself would not change the visual  
4 conditions of the Federal lands.

5 Exchange of Federal Tracts A and B would result in a reduction of 286 acres with a Visual  
6 Quality Objective of Retention and 51 acres of Partial Retention (Doc. 165). Any development  
7 on the Federal lands after conveyance into private ownership would be subject to the Apache  
8 County Phase I that contains specific guidelines, standards and measures directing future  
9 development (Doc. 4). A primary objective of the Phase I is enhancement of visual aesthetics by  
10 providing proper scenic easement, architectural controls, advertising, lighting, lot development  
11 standards, and maintenance of natural vegetative cover. Changes to the visual conditions  
12 associated with the Federal lands would be expected but any foreseeable future development  
13 would be subject to and regulated by the Phase I and its primary goal of character maintenance.  
14 Specific areas addressed in the Phase I include setbacks, building separation, parking, fencing,  
15 signs, tree removal, highway frontage, building height, and density. Private land development  
16 currently exists and is ongoing within the Greer Basin. If future development on the Federal  
17 lands were to occur, the existing nature of the federal acres, which some may consider pristine,  
18 would change. Any development on the Federal lands would result in a decreased scenic quality  
19 to some people. An application to Apache County for a Conditional Use Permit would be subject  
20 to County Planning Commission review and discussion at a regularly scheduled public meeting.  
21 Following receipt of the Commission's recommendations the Board of Supervisors renders a final  
22 decision at its regularly scheduled monthly meeting. The public has several opportunities to  
23 comment on and support or contest any application for a Conditional Use Permit (Doc. 4).  
24 Unacceptable changes to visual quality would not be expected if development on Federal Tract A  
25 and B were to occur (Doc. 165).

26 Acquisition of the non-Federal lands would ensure and possibly improve their visual quality as  
27 several structures have been removed and the land restored to a relatively undeveloped condition.  
28 The federal lands surrounding the Thompson Ranch and Rancho Alegre lie within a VQO of  
29 Retention. The federal lands surrounding the Blue River Ranch lie within Partial Retention.  
30 Acquisition would result in an increase of 238 acres of Retention and 159 acres of Partial  
31 Retention (Doc. 165).

**32 Cumulative Effects**

33 The Greer WUI Project identified that the proposed vegetative treatments in the Greer area would  
34 result in a decrease in visual quality to some people for a period of time. The Greer Lakes  
35 Improvement Project objective to improve the quality and accessibility of existing facilities does  
36 not result in any effects to visual quality. These projects, in conjunction with the proposed land  
37 exchange, will not result in adverse cumulative effects on scenic quality.

**38 Direct and Indirect Effects****39 No Action****40 *Federal Land***

41 Federal scenic quality would remain unchanged.



1 ***Non-Federal Land***

2 The non-Federal lands, surrounded by NFS lands, would remain available for future  
3 development. Any development on the isolated parcels of non-Federal lands would result in a  
4 decreased scenic quality to some people.

5 **Cumulative Effects**

6 ***Federal Land***

7 No direct or indirect impacts to Federal lands result from the No Action alternative. Therefore,  
8 no cumulative effects would occur.

9 ***Non-Federal Land***

10 There are no foreseeable actions that, in conjunction with development of the non-Federal land,  
11 would result in cumulative impacts on scenic quality.

12 **Emergency Services**

13 **Affected Environment**

14 ***Federal Land***

15 The Forest Service has jurisdiction in the case of wildfire or other emergency response on the  
16 Federal lands.

17 The Federal lands are located within the Greer Fire District (GFD). The GFD is a tax district that  
18 provides fire suppression and emergency medical services to the residents of and visitors to the  
19 Greer area. There are 28 square miles within the district boundaries. This includes all of SR 373  
20 and SR 260 west to Pole Knoll and east to the forest boundary sign. GFD will respond beyond  
21 the district boundaries to motor vehicle accidents and medical emergencies, when requested by  
22 another agency. GFD will respond as far as A-1 Lake to the west on SR 260, and into Eagar on  
23 260 to the east, as well as into the area around Big Lake, and to Hidden Meadows Ranch on  
24 Apache County Road 1325.

25 The GFD is a combination department utilizing both career and volunteer firefighters. The  
26 current staff consists of 2 career firefighters and 11 volunteers. The GFD anticipates hiring 2  
27 additional career firefighters in July 2008, which will allow it to provide EMT level or higher  
28 medical response in the district 365 days a year. In 2007 the GFD responded to 21 fire calls, 41  
29 EMS calls, 16 MVA's and 15 general service calls, for a total of 93 calls. This was an increase  
30 from the 34 calls responded to in the prior year. All career staff are required to hold minimum  
31 qualifications of Arizona State Certified Firefighter II (professional firefighter qualifications),  
32 EMT or higher, and be wildland firefighter certified (S-130/190) as soon as possible after joining.  
33 Volunteer staff is required to complete basic wildland firefighter and medical first responder after  
34 joining. Currently, 2 paramedics, 2 EMT's and 6 First Responders are available for response to  
35 emergency medical calls. One member is currently in an EMT training program. Automated  
36 External Defibrillator's are available in all medical response vehicles. The ability to establish IV  
37 access, advanced airway and pharmaceutical therapy by paramedics is available as well. GFD  
38 can provide on scene care for all emergency medical calls, but does not transport patients. White  
39 Mountain Ambulance Service is the transporting agency for the GFD. They have a response time  
40 of approximately 10 – 20 minutes to the area depending on the location of the call and road  
41 conditions.

42 Structural fire suppression is provided by GFD with a 2005 Type 1 engine. This unit has a pump  
43 capacity of 1250gpm and holds 1000 gallons of water. In addition Class A firefighting foam can

1 be utilized to increase the effectiveness of the water used. This is considered enough water for a  
2 significant initial attack on an active structure fire.

3 GFD has an automatic aid agreement with Eagar Fire Department for response to all structure  
4 fires within the GFD boundaries. Currently four GFD members are qualified to the professional  
5 level of structural firefighter. Two other members are enrolled in the training program that  
6 should be completed by April of 2008. The GFD has recently acquired a set of the Jaws of Life  
7 and are in the process of training staff in its use for extricating victims of MVA's. A large  
8 number of past calls involved motor vehicle accidents so the GFD intends to provide this service  
9 to the people they serve. They anticipate being able to provide this service by April or May of  
10 2008. The closest Jaws capable agency is Eagar Fire Department which currently responds to all  
11 MVA's requiring the use of their extrication equipment.

12 The GFD has 2 type 6 wildland engines (used for grassland and forest fires) and a type 7 engine  
13 and are currently budgeting for a 3rd type 6 for FY 2008/2009. The GFD has always worked  
14 closely with the fire division of the USFS in training and operations, as many homes within the  
15 GFD are built against the forest boundary. Greer has been working to become a Firewise  
16 community over the past year. To assist with this, Chief Mark Wade and Assistant Chief Ry  
17 Sluiter are planning to be trained as Firewise evaluators for private property inspection.

18 There are no traditional fire hydrants located in the GFD, therefore all water must be trucked to  
19 the scene, and transferred to drop tanks on the fireground. To facilitate this process, GFD has 4  
20 water tenders with capacities totaling 10,650 gallons of water, available at any time. Numerous  
21 draft points have been established in and around Greer for additional water, if needed. The closest  
22 draft points to the Federal parcels would be the pond in Crosby Acres, which is immediately on  
23 the right after turning off of SR 373, and Bunch Reservoir, one of the Greer Lakes. Drafting may  
24 be possible by lighter apparatus from Benny Creek, depending on conditions (Doc. 344-A08).

### 25 *Non-Federal Land*

26 Apache and Greenlee Counties have responsibility for emergency response services for the non-  
27 Federal lands. The Forest Service provides initial response to wildland fires that originate on  
28 private lands and may threaten the Apache National Forest.

## 29 **Direct and Indirect Effects**

### 30 **Proposed Action**

#### 31 *Federal Land*

32 Future development of between 25-35 new residences over the next 15 years would likely  
33 increase the number of emergency responses by the GFD and the White Mountain Ambulance  
34 Service in conjunction with other County, State and Federal agencies. The GFD anticipates  
35 hiring 2 additional career firefighters in July of 2008, which will enable it to provide EMT level  
36 or higher medical response in the District 365 days a year. Increased taxes from development, if it  
37 occurs, will likely support any increased need for services.

#### 38 *Non-Federal Land*

39 No change to emergency services is anticipated if these lands are acquired by the Forest Service.

### 40 **Cumulative Effects**

#### 41 *Federal Land*

42 Additional future development on existing private property and the Federal parcels would result  
43 in an increase in the number of emergency responses by the GFD, White Mountain Ambulance

1 Service, and other Federal, State and local agencies. The additional taxes collected by the GFD  
2 should enable it to continue to provide adequate services to the community.

### 3 *Non-Federal Land*

4 No increase in emergency response calls is expected if these properties are acquired by the Forest  
5 Service.

### 6 **Direct and Indirect Effects**

#### 7 **No Action**

#### 8 *Federal Land*

9 No change in the need for emergency services would occur.

#### 10 *Non-Federal Land*

11 If future development takes place, some minor increase in the need for local emergency services  
12 would be expected.

#### 13 **Cumulative Effects**

#### 14 *Federal Land*

15 No direct or indirect impacts result from the No Action alternative. Therefore, no cumulative  
16 effects would occur.

#### 17 *Non-Federal Land*

18 There are no foreseeable actions that, in conjunction with development of the non-Federal land,  
19 would result in cumulative impacts on the need for emergency services.

### 20 **Values of Adjacent Properties**

#### 21 **Affected Environment**

22 Currently, in the Greer area, some portion of the approximately 1060 acres of the 2712 total acres  
23 of private land border State Route 373. The 337.74 acres of Federal lands is equal to 32% of this  
24 total. Only the eastern boundary of the Federal lands actually borders SR 373. Private property  
25 not owned by the proponent shares a common boundary with the Federal lands along a segment  
26 of the south and west boundaries of Tract A and the northern boundary of Tract B. Almost all of  
27 the private property adjoining Tract B is comprised of residential lots containing single-family  
28 dwellings used as second homes or summer residences (2004 Apache County tax parcel  
29 identification).

#### 30 **Direct and Indirect Effects**

#### 31 *Federal Land*

32 The Proposed Action would result in an additional 337.74 acres, a 12 per cent increase, of private  
33 land in the Greer area. The proponent has stated he has no plans to place the Federal land on the  
34 market and that the land would only be added to his local real estate holdings should the  
35 exchange be completed (Doc. 18).

36 Two previous exchanges in the Greer area in 1993 and 1994 did not result in a decrease in private  
37 land values. To the contrary, private land values, in particular lots with single-family residences  
38 have continued to appreciate. There is no reason to expect any other outcome with this exchange.  
39 Therefore, it is not expected that the amount of private land that is normally on the market in the  
40 Greer area and the corresponding values would be unduly influenced by the exchange.

1 If in the future all of the Federal land was placed on the market at the same time one might expect  
2 an effect on local land values, in particular, the adjacent private properties. The likelihood of this  
3 occurring, that the entire acreage would go on the market at the same time, is very remote as a  
4 proposed subdivision of this size once planned and approved by the County would be developed  
5 in phases. Existing private lots immediately adjacent to NFS lands would probably no longer  
6 demand a “premium” if re-sold, as they would no longer adjoin the National Forest boundary.  
7 One would not expect the market value of the lots themselves to change. Sale through lot splits  
8 would likely result in properties entering the market over a very long period of time, possibly  
9 decades, such as what has occurred in Crosby Acres. Two previous exchanges in the Greer area  
10 in 1993 and 1994 did not result in a decrease in private land values to the contrary private land  
11 values have appreciated and continue to appreciate. There is no reason to expect a decrease in the  
12 values of adjacent properties as a result of this exchange.

### 13 ***Non-Federal Land***

14 The non-Federal lands would be acquired by the Forest Service and administered for public uses.  
15 Adjacent properties would be National Forest or State of Arizona lands.

### 16 **Cumulative Effects**

17 Foreseeable future use on the Federal and non-Federal lands is expected to remain relatively  
18 similar to their current uses; hence, no incremental effects from the Proposed Action would be  
19 expected.

20 The Greer WUI and Greer Lakes Improvement Projects are not expected to affect the value of  
21 adjacent properties.

### 22 **Direct and Indirect Effects**

#### 23 **No Action**

#### 24 ***Federal Land***

25 No effect on adjacent property values will occur with implementation of The No Action  
26 alternative.

#### 27 ***Non-Federal Land***

28 The possibility of future development on the non-Federal lands (subdivision and/or residential  
29 development) and conversion from ranching to residential use exists under the No Action  
30 alternative. Any future development that may occur on the non-Federal lands would not likely  
31 result in unacceptable consequences to adjacent land values as the properties are undeveloped  
32 NFS or State of Arizona lands and no plans exist for future development on the properties.

### 33 **Cumulative Effects**

#### 34 ***Federal Land***

35 No direct or indirect impacts result from the No Action alternative. Therefore, no cumulative  
36 effects would occur.

#### 37 ***Non-Federal Land***

38 No cumulative effects are anticipated if the lands remain undeveloped. The possibility of future  
39 development of the non-Federal lands would exist under the No Action Alternative. If the non-  
40 Federal lands are developed, a change in the value of other isolated private parcels of non-Federal  
41 land surrounded by the Apache National Forest could occur.

## 1 **Proposed Action**

### 2 **Scenario 3) Development of a planned subdivision.**

#### 3 **Introduction**

4 The November 2003 Murphy Engineering Report (Doc. 113), that identified maximum potential  
5 development in accordance with the existing Greer Phase I Zoning Ordinance, was prepared to  
6 aid in assessment of land value. The Murphy Engineering Report (MER) does not represent a  
7 formal proposal by the proponent for future development on the Federal parcels. The MER has  
8 been used for projecting potential future subdivision/maximum development because it identified  
9 the maximum build out of 250 residences on 1-acre lots (minimum size lot allowed by Greer  
10 Phase I Zoning) utilizing a single domestic deep water well.

11 Development of any master-planned subdivision including the type described in the MER has  
12 never occurred within the Greer Phase I boundary. Even if the infrastructure were to be built as  
13 described in the MER, a fast rate of development under this kind of scenario is considered  
14 extremely unlikely. It is expected that the required infrastructure would initially be constructed in  
15 only a portion of the subdivision, (perhaps for up to 50 lots) and those lots sold individually. As  
16 market conditions dictate, subsequent extension of the infrastructure and sale of other lots would  
17 occur (Doc 344-A07).

18 Elk Crest Estates located in the Town of Eagar is used in this document to provide a comparison  
19 for determining the possible rate of development under this scenario. This is a master-planned  
20 subdivision. The infrastructure was built and lots are individually sold with the buyer then  
21 constructing a site-built home. There are a total of 73 lots in the Elk Crest Estates subdivision.  
22 During 2003 through 2007, development of 10 single family residences and one Hill-top home  
23 occurred on 11 lots. The remaining 62 lots remain vacant as of a parcel search conducted on  
24 February 25, 2008 (Doc. 344-A09). Lot development has averaged just over 2 lots per year.

#### 25 **Direct, Indirect and Cumulative Effects**

26 Based on the actual development in Elk Crest Estates, the rate of development for a planned  
27 subdivision in this part of Apache County is nearly the same as what has been projected for  
28 possible future development on the Federal parcels with lot splits. Direct, indirect, and  
29 cumulative effects are expected to be nearly the same as described above for future development  
30 with lot splits.

## 31 **Water Quality and Availability**

### 32 **Affected Environment**

33 The Federal lands proposed for exchange are located at an elevation of 8100 to 8500 feet and the  
34 natural vegetation is representative of ponderosa pine forest type. The area drains into Lang and  
35 Rosey Creeks. Both are tributaries to the Little Colorado River. The waters of the Little  
36 Colorado River are appropriated for irrigation use in the downstream valley communities of  
37 Eagar, Springerville, and Saint Johns. There are no streams, springs, or wetlands located on the  
38 selected Federal lands. A Water Resource Evaluation was conducted by the FS and states the  
39 following: "The Greer exchange parcels are located entirely on upland sites that do not include  
40 any mappable floodplains or wetlands. No water right filings appear to be associated with these  
41 exchange locations" (Doc. 27).

42 The non-Federal lands contain segments of the West Fork of the Black River and the Blue River.  
43 These rivers flow year-round and support both native and introduced fish populations. The rivers

1 support a healthy riparian community and supply water for wildlife and livestock use  
2 (Docs. 27, 15).

3 The local shallow aquifers generally tapped by individual private water users in the Greer area are  
4 the White Mountains aquifer and the shallow volcanic aquifer. They are hydrologically  
5 connected and continuous in the area. The saturated thickness is on the order of 200 to 300 feet.  
6 If a hypothetical Black River land exchange development ends up leaving each landowner to  
7 obtain their water supply independently, then there could end up being up to 258 relatively  
8 shallow wells in the local volcanic and White Mountains aquifers (Doc. 342). To assess potential  
9 impacts on water availability, use of up to 258 shallow wells was analyzed. Development, if it  
10 were to occur, is projected at 25-35 lots over the next 15 years (Doc. 344). This would result in  
11 only 25-35 shallow wells in the aquifers.

## 12 **Direct and Indirect Effects**

### 13 **Proposed Action**

14 Under the Proposed Action the Forest Service would be exchanging upland ponderosa pine lands  
15 for wetland/riparian lands with perennial flowing surface waters. The following table  
16 summarizes the results as documented in the Forest Hydrologist's Water Resources Evaluation  
17 (Doc. 27).

**Table 2. Wetlands/Floodplains Summary**

<b>Lands to be Acquired Non-Federal Parcels</b>			<b>Lands to be Exchanged Federal Parcels</b>		
<i>Parcel</i>	<i>Wetlands (≈ac)</i>	<i>Channel/Floodplain (≈mi/ac)</i>	<i>Parcel</i>	<i>Wetlands (≈ac)</i>	<i>Channel/Floodplain (≈mi/ac)</i>
Rancho Alegre	3.0 ac	0.25 mi 3.0 ac	Greer	0 ac	0 mi 0 ac
Thompson Ranch	60 ac	1.4 mi 60 ac			
Blue River	55	1.5 mi 55 ac			
<b>Total</b>	118 ac	3.15 mi 118 ac	<b>Total</b>	0 ac	0 mi 0 ac
			<b>Net gain/loss</b>	+118 ac	+3.15 mi +118 ac

18 Conveyance of the Federal lands into private ownership would have no impact on water quality in  
19 the area if use remained the same. No change in water quantity or quality would be expected in  
20 either Rosey or Lang Creeks that receive runoff from these lands or to ground water if the lands  
21 remained undeveloped (Doc. 161).

22 No unacceptable impact to water quality or peak flow runoff would be expected in either Rosey  
23 or Lang Creeks that receive runoff from these lands or to ground water if future development  
24 were to occur according to Federal, State and County regulations (Doc. 161). The local shallow  
25 aquifers generally tapped by individual water users near the Federal lands are the White  
26 Mountains aquifer and the shallow volcanic aquifer. Based on analysis of historical well records  
27 for the area and previous regional ground water studies, reasonable utilization of the volcanic and  
28 White Mountains aquifers would have minimal impact on these aquifers (Doc. 185).

29 As a result of District Court Order Number CV 06-0368-PHX-MHM for the Black River land  
30 exchange, a supplemental Geologic Resources Report was prepared to analyze the effect of

1 multiple shallow well pumping at a hypothetically proposed development, which could result  
2 from the Black River Land Exchange. The effects of pumping from 258 wells were evaluated for  
3 a hypothetical period of ten years, both with and without the effects of ground water recharge and  
4 using a range of hydraulic parameters. In general, different parameters can result in drawdown at  
5 the pumping center of about 3 to 17 feet, depending on parameters used. However, drawdown at  
6 a distance of one mile is much less sensitive and the variations are only on the order of one to  
7 three feet over the ten-year period. Although ground water would initially be withdrawn more  
8 rapidly than can be recharged, the effect on the water table would be minimal. There is likely to  
9 be much less drawdown if the 258 potential residents are present for only part of the year  
10 (Doc.342).

11 Acquisition of the non-Federal lands would result in them being incorporated into the adjacent  
12 NFS lands and becoming subject to Forest Service management practices. Any future residential  
13 development on these lands, particularly the Blue River Parcel which was previously subdivided  
14 and placed on the market as approximately 40 acre parcels but sold in its entirety when the  
15 proponent acquired it, would be precluded. This would result in protection of water resources on  
16 the non-Federal parcels.

### 17 **No Action**

18 Conditions on the Federal lands would remain the same. The non-Federal Blue River Ranch  
19 parcel previously contained a house and out buildings that have been removed and disposed of by  
20 the proponent. Currently, there are no immediate plans for development on the non-Federal  
21 lands. However, future development would not be precluded. If future development were to  
22 occur, impacts from construction activities would have the potential to impact the soils in riparian  
23 areas, wetlands, floodplains or riverine systems since these habitats are present on the non-  
24 Federal parcels. This could result in changes in water quality in the perennial waters running  
25 through the parcels. Although any development along and in floodplains would come under other  
26 Federal, State and County jurisdictions, the Forest Service would not be afforded the opportunity  
27 for management of the wetlands, floodplains and riparian habitat on the non-Federal parcels.

### 28 **Cumulative Effects**

29 There are no specific actions proposed for the Federal lands that would result in effects to water  
30 quality or quantity within the watersheds included in the exchange proposal (Doc 18). A-S LMP  
31 standards and guidelines are designed to achieve satisfactory water quality conditions on the non-  
32 Federal lands, if acquired. The Federal lands would be subject to all Apache County  
33 development standards and ADEQ regulations upon conveyance into private ownership. If they  
34 remain undeveloped neither water quality nor quantity would be expected to change. Therefore,  
35 no cumulative impacts are anticipated.

36 Any future development on the Federal lands upon conveyance into private ownership would be  
37 subject to all Apache County subdivision standards and ADEQ regulations. Although pavement  
38 is not required by County standards, it was assumed that all roads would be paved to meet market  
39 demands in a maximum development (subdivision) scenario. The County requires a drainage  
40 plan be prepared and approved for storm water runoff. Necessary improvements, including  
41 required drainage facilities to manage storm water runoff, would be constructed to insure  
42 downstream properties are protected from any increases in peak flow runoff due to development.  
43 The subdivision would be located within the Little Colorado Sanitary District (LCSD), which has  
44 jurisdictional authority over properties within the District's boundaries therefore wastewater  
45 disposal would comply with the District's rules and regulations. In a maximum development  
46 scenario, sanitary systems would be connected to its facilities. Each lot would be required to  
47 install a septic tank that would then be connected to LCSD's collection system for treatment at its  
48 facility (Doc. 113). No cumulative impacts to water quality are anticipated.

1 The Greer Wildland Urban Interface (WUI) Project is currently being implemented in the vicinity  
2 of the Greer Basin. A cumulative effects analysis was completed for the Greer Urban Interface  
3 Analysis (Doc. 143). That analysis was amended to include any potential cumulative effects  
4 associated with developing the conceptual housing development as found in “Evaluation and  
5 Estimate of Projected Development Costs for Subdivision of 337 acres in Greer, Apache County”  
6 (Doc. 113). Based on the amended cumulative effects analysis, no unacceptable impacts to water  
7 resources would result with implementation of the conceptual project. An analysis of existing  
8 State of Arizona Department of Water Resources well data indicates the A (shallow) aquifer does  
9 not appear to be influenced by the (deeper) C aquifer. One way to insure that a deep well drilled  
10 in the north Greer area does not influence the shallow aquifer is to case and grout the well past  
11 the shallow zone. If the one existing well were to be enlarged from 6” to 8” in diameter the  
12 above conditions should still apply (Doc. 185).

13 It can only be assumed that any future development would strictly adhere to Federal, State and  
14 County regulations regarding the Clean Water Act for storm water discharge, impacts to  
15 wetlands, floodwater management, and groundwater development. No cumulative effects are  
16 anticipated.

17 Analysis of the Greer Lakes Improvement Project, near Greer, did not identify any significant  
18 effects on water quality (Doc. 41).

### 19 **No Action**

20 No specific actions affecting water quality or quantity on the non-Federal and Federal lands  
21 would be anticipated within the watersheds included in the exchange proposal.

22 Non-Federal Lands would continue to be available for development. Past development in the  
23 form of single-family residences, guest ranches and a commercial enterprise (a fish hatchery) has  
24 occurred on isolated private inholdings within the ANF. Similar developments on the non-  
25 Federal lands could potentially have an impact on water quality or quantity. There are no other  
26 isolated privately owned parcels upstream in the vicinity of the Thompson Ranch and Rancho  
27 Allegre parcels. Development on the Blue River Ranch, if it were to occur, would add to any  
28 impacts from the existing developments, which lie immediately upstream of the parcel along the  
29 Blue River.

## 30 **Wetlands and Floodplains**

### 31 **Affected Environment**

32 A Water Resources Evaluation for the proposed exchange was prepared October 2, 2001 and  
33 updated May 6, 2002 (Doc. 27); the respective acreage of floodplains and wetlands contained on  
34 both the non-Federal and Federal parcels is displayed in the Summary Table in the Water Quality  
35 section of this document. The non-Federal parcels contain a total of 118 acres of wetlands and  
36 3.15 miles of floodplain. The Federal parcels contain 0 acres of wetlands and 0 miles of  
37 floodplain.

### 38 **Direct and Indirect Effects**

39 The Proposed Action would result in a net gain of 118 acres of wetlands and 3.15 miles of  
40 floodplain and afford these resources greater protection under federal jurisdiction. This would  
41 complement the Forests’ ongoing efforts to protect and increase riparian habit that would result in  
42 a significant increase in wetland and floodplain resources. The proposal is consistent with the  
43 intent of Executive Order 11988, Floodplain Management and Executive Order 11990, Protection  
44 of Wetlands.



1 There are no prime farm, range, or forestlands, or roadless, wilderness, natural, study or other  
2 specially designated areas located on the lands proposed for exchange (Doc.3).

### 3 **Cumulative Effects**

4 Wetlands and floodplains in federal ownership are subject to more stringent management  
5 objectives than those in private ownership. Federal acquisition would contribute towards  
6 reversing the long-term trend of declining wetland and riparian habitat. No wetlands or  
7 floodplains are located on the Federal lands; therefore, none would leave federal ownership. It is  
8 very unlikely that future development on the Federal lands would affect floodplain on adjacent  
9 NFS lands. Any future development on the Federal lands would be subject to Apache County  
10 subdivision standards and ADEQ regulations. Each lot would be connected to the local sanitary  
11 district's facilities as on-site observations reveal that much of the property has rock outcrops that  
12 indicate soils not suitable for on-site disposal (Doc. 113). No adverse cumulative impacts are  
13 anticipated.

14 Cumulative effects analysis for the Greer WUI project indicated no unacceptable impact to water  
15 resources would occur with the implementation of the conceptual development identified in  
16 "Evaluation and Estimate of Projected Development Costs for Subdivision of 337 acres in Greer,  
17 Apache County" (Doc. 113). It is assumed development would strictly adhere to Federal, State  
18 and County regulations regarding the Clean Water Act for storm water discharge, impacts to  
19 wetlands, and floodwater management. Analysis for the Greer Lakes Improvement Project did  
20 not identify any adverse effect on wetlands and floodplains.

### 21 **Administrative Factors**

#### 22 **Affected Environment**

23 Forest Service policy requires administrative and property boundaries to be identified and visible  
24 on the ground (FSM 7152). The identification of property boundaries is accomplished through  
25 the installation of corner survey monuments and boundary signing. The BLM or FS installed  
26 corner monuments and monument accessories and FS boundary signs require periodic inspection  
27 and maintenance to assure they are in place, clearly visible and have not been vandalized. Time  
28 and resources must be committed to assure the FS property boundary identification is visible and  
29 property boundary lines are legally defensible. Boundary identification maintenance is routinely  
30 required on all properties being considered in the exchange proposal.

#### 31 **Direct and Indirect Effects**

32 The Proposed Action would contribute to consolidation of federal ownership and eliminate 14  
33 mixed ownership landline corners and approximately 6.1 miles of landline boundaries between  
34 the Apache National Forest and other lands. Forest-wide landline location, posting, and  
35 maintenance, as well as potential boundary disputes, along the Federal, as well as non-Federal  
36 lands would be reduced if the exchange is consummated. This would result in an annual  
37 estimated savings of over \$870 associated with the maintenance of property boundaries  
38 (Doc. 79).

#### 39 **Cumulative Effects**

40 The Proposed Action would result in an overall reduction in the cost for FS landline maintenance  
41 of boundaries between NFS and private lands.

42 Any future development on the Federal lands may result in some management problems such as  
43 encroachment from the private land onto the adjacent NFS land even if the common property  
44 boundaries are clearly posted. Many times encroachments onto the national forest, either  
45 unintentional or intentional, occur from adjacent private property. The possibility increases when

1 a greater number of separate property owners share a common boundary with NFS land. No  
2 cumulative impacts are anticipated.

3 The Greer WUI is not expected to impact administrative and property boundaries. Analysis for  
4 the Greer Lakes Improvement Project did not identify any impact on administrative and property  
5 boundaries. No cumulative impacts in conjunction with these projects are anticipated.

## 6 **Plants and Wildlife, Including Threatened, Endangered and** 7 **Sensitive Species (TES)**

### 8 **Affected Environment**

9 For this analysis the affected habitat means the lands that would be conveyed out of federal  
10 ownership and those acquired by the federal government. The habitat is ponderosa pine forest  
11 land with one meadow on the east.

### 12 **Plant species**

#### 13 Trees

14 Ponderosa pine	<u>Pinus ponderosa</u>
15 White pine	<u>Pinus flexilis reflexa</u>
16 Douglas fir	<u>Pseudotsuga menziesii</u>
17 One seed juniper	<u>Juniperus monosperma</u>
18 Alligator Juniper	<u>Juniperus Deppeana</u>
19 Utah juniper	<u>Juniperus Utahensis</u>
20 Pinyon pine	<u>Pinus edulis</u>

#### 21 Shrubs

22 Snakeweed	<u>Gutierrezia Sarothrae</u>
23 Skunk bush	<u>Rhus trilobata</u>
24 Buck brush	<u>Ceanothus fedleri</u>
25 Wax current	<u>Ribes inebrians</u>
26 Common juniper	<u>Juniperus communis</u>

#### 27 Grasses

28 Blue grama	<u>Bouteloua gracilis</u>
29 Squirrel-tail	<u>Sitanion hystrix</u>
30 June grass	<u>Koeleria cristata</u>
31 Mountain muhly	<u>Muhlenbergia montana</u>
32 Spike muhly	<u>Muhlenbergia wrighti</u>
33 Arizona fescue	<u>Festuca arizonica</u>
34 Pine drop seed	<u>Blepharoneuron tricholepis</u>
35 Six weeks three-awn	<u>Aristida longiseta</u>
36 Fringed brome	<u>Bromus ciliatus</u>
37 Orchard grass	<u>Dactylis glomerata</u>

1	<u>Forbs</u>	
2	Loco weed	<u>Asragalus spp.</u>
3	Iris	<u>Iris missouiensis</u>
4	Yarrow	<u>Achillae lanulosa</u>
5	Lupine	<u>Lupinus spp</u>
6	Geranium	<u>Geranium spp.</u>
7	Cosmos	<u>Cosmos spp.</u>
8	Cinquefoil	<u>Potentilla spp.</u>

## 9 **Animal Species**

10 The area provides habitat for the usual complement of animals found in the ponderosa pine  
 11 habitat. These include elk, mule deer, turkey, and black bear. A cumulative effects analysis was  
 12 completed for the Greer Urban Interface Analysis (Nelson, McMillan 2004). The analysis was  
 13 amended to include potential cumulative effects of developing a conceptual housing development  
 14 as found in “Evaluation and Estimate of Projected Development Costs for Subdivision of 337  
 15 acres in Greer, Apache County” (Murphy Engineering 2003). Based on the amended cumulative  
 16 effects analysis, there would be no unacceptable impact to water resources with the  
 17 implementation of the conceptual project. It is assumed that development would strictly adhere  
 18 to Federal, State and County regulations regarding the Clean Water Act for storm water  
 19 discharge, impacts to wetlands, and floodwater management. Elk and deer use is primarily  
 20 during the spring, summer and fall. Elk use the area as a travel way between higher elevation  
 21 summer ranges and lower elevation winter ranges.

22 The area also provides habitat for a variety of birds that use ponderosa pine habitat. These include  
 23 several species of woodpeckers, nuthatches, and jays. Many of these birds are dependent on dead  
 24 trees and the cavities they contain for nesting habitat.

## 25 **Threatened, Endangered, and Sensitive (TES) Species**

26 The ASNFs completed a Biological Assessment and Evaluation (BAE) for this proposed  
 27 exchange (Docs. 74, 154, 180). All animal and plant species on the Region 3 Threatened,  
 28 Endangered, and Sensitive (TES) species list were evaluated for impacts from implementing the  
 29 land exchange. No federally listed plant or animal species are known to inhabit the Federal lands.  
 30 The proposed change of land ownership will not alter the habitat. Therefore, the BAE concluded  
 31 that no TES species would be affected or impacted by the Proposed Action. Consideration has  
 32 also been given to the potential for reasonably foreseeable development on the Federal lands once  
 33 they leave federal ownership. Based on the premise that the land being exchanged could be  
 34 developed and that any development would legally occur under the Apache County Phase I, the  
 35 BAE concludes that the only species that could be impacted by the reasonably foreseeable  
 36 development is the Mexican spotted owl. The effects determination for this species was “may  
 37 affect not likely to adversely affect”.

38 The following lists the species considered and the determinations for each (Doc. 74).

## 39 **Endangered Species**

40 **Mexican Gray Wolf (Canis lupus baileyi)** The released wolves and their offspring are  
 41 designated as a nonessential, experimental population under section 10(j) of the Endangered  
 42 Species Act. Therefore any reintroduced wolves are to be treated as species proposed to be listed  
 43 under section 4 of the Endangered Species Act.

44 This proposed change in ownership will have little effect on habitat as the resulting land uses will  
 45 be essentially the same. Access for elk, deer, and other potential prey species will stay the same.  
 46 The proposed project would not affect potential wolf habitat. The project area is within the

1 secondary recovery zone for the wolf. It was the determination of the BAE, that this project is  
2 not likely to jeopardize the continued existence of the nonessential, experimental population.

3 Potential future development as authorized under Apache County Phase I would not result in any  
4 additional measurable impacts to this species and the effects determination remained the same.

5 **Jaguar (Panthera onca)** Records indicate that Arizona may have historically supported a  
6 small resident population of jaguars. At present however, it is felt that the occasional jaguars in  
7 Arizona are transient or dispersing individuals from Mexico (Hoffmeister 1986, USFWS 1993).  
8 The ASNFs as a whole may provide suitable habitat for wandering, nonresident, nonbreeding  
9 wild jaguars. Because the habitat will not be altered, and the low probability of a jaguar  
10 wandering through the project area in the near term, it was the determination of the BAE that this  
11 project is not likely to jeopardize the continued existence of the jaguar or result in the destruction  
12 or adverse modification of important habitat.

13 Potential future development as authorized under Apache County Phase I would not result in any  
14 additional measurable impacts to this species and the effects determination remained the same.

### 15 **Threatened Species**

16 **Bald Eagle (Haliaeetus leucocephalus)** Migratory Bald eagles occur in the area during  
17 winter months. No winter roosts were found or are known in the analysis area. Preferred roosting  
18 habitat is generally canyon habitat which Tracts A and B are not. The project will have a neutral  
19 effect on potential prey species for bald eagles. The BAE determined that this proposed land  
20 exchange will not affect the bald eagle or its habitat.

21 Potential future development as authorized under Apache County Phase I would not result in any  
22 additional measurable impacts to this species and the effects determination remained the same.

23 **Mexican spotted owl (Strix occidentalis lucida)** The exchange area was surveyed by the  
24 Forest Service in 2000 and 2001 for Mexican spotted owls (MSO) with negative results. The  
25 habitat is ponderosa pine and could be suitable for MSO foraging. The nearest PAC (Hall Creek)  
26 adjoins Parcel A for 1/8 mile on the west. In June 2005 a new MSO pair was observed west of  
27 and some distance from the exchange area (Doc. 180).

28 This proposed change in ownership itself would have no effect on habitat as the resulting land  
29 uses are not within any MSO PAC's which will remain essentially the same. Habitat for wood rat,  
30 deer mice, and voles, important MSO prey species, will stay the same. The proposed project will  
31 not affect MSO prey species or their availability. The MSO is not known to occur in the project  
32 area, the habitat is potentially suitable for foraging, and is not expected to change if it remains  
33 undeveloped after completion of the proposed land exchange, therefore it was determined that  
34 there will be no effect on the Mexican Spotted Owl or its habitat.

35 Potential future development as authorized under Apache County Phase I would not result in any  
36 additional measurable impacts to habitat for this species because ponderosa pine habitat (the  
37 habitat type of Tract A and B) is not considered a primary constituent element. However,  
38 additional disturbance levels can be expected during and post construction. Because Mexican  
39 spotted owl monitoring data collected over a four-year period has indicated that the roost site is  
40 approximately one mile from Tract B, potential construction disturbance would be insignificant.  
41 Post construction disturbance resulting from residential noise and increased recreation around owl  
42 habitat in the area would be limited to no-motorized use on existing trails. No trails are located in  
43 owl habitat and off trail hiking is not expected to increase in owl habitat because of the steep  
44 terrain and dense timber. These additional potential impacts resulted in an affects determination  
45 of may affect not likely to adversely affect Mexican spotted owls.

## 1 **Proposed Threatened Species**

2 **Mountain Plover (Charadrius montanus)** This small member of the plover family has  
3 some interesting characteristics. It is mainly a bird of the high plains and semi-desert regions of  
4 the West. One of few shorebirds that live mainly away from water in dry regions; In summer, on  
5 dry short-grass prairie of low scattered bunchgrass, miles from water, or in sandy, scattered sage-  
6 brush and cactus country, eats mostly, if not entirely, insects-grasshoppers, crickets, beetles, flies.  
7 (Terres, 1991). There are no records for this species occurring in the project area. No mountain  
8 plovers were sighted during field surveys. The proposed land exchange will not affect any  
9 grasslands. Because the project will not degrade any potential plover habitat and the plover isn't  
10 known to occur in the area, it was determined that it will not jeopardize the continued existence of  
11 the mountain plover Sensitive Species. Potential future development as authorized under Apache  
12 County Phase I would not jeopardize the continued existence of the mountain plover Sensitive  
13 Species.

## 14 **Mammals**

15 **White Mountain ground squirrel (Spermophilus tridecemlineatus)** Thirteen-lined  
16 ground squirrels occur in grasslands with well-drained soils, but are also found along roadsides,  
17 in pastures, and even on golf courses. They are omnivorous, eating a variety of items, such as  
18 grass, leaves, seeds, roots, insects, and mice. No squirrels or burrows were noted during surveys.  
19 This species is not listed in the Arizona Game and Fish Department's Heritage Data Management  
20 System as occurring in this area. The proposed land exchange and resulting change of land  
21 ownership will have no impact on the White Mountain ground squirrel. Potential future  
22 development as authorized under Apache County Phase I would not result in changes in Forest-  
23 wide habitat and population trends.

## 24 **Birds**

25 **Northern Goshawk (Accipiter gentilis)** Goshawks are known to occur in the exchange area.  
26 The area was inventoried for goshawks in 2000 and a successful nest was found to the west of the  
27 Federal lands proposed to be exchanged. Subsequently the Hall Creek PFA was established which  
28 is next to Tract B. The area was also surveyed in 2001 and one adult goshawk was detected and  
29 determined to be from the Hall Creek PFA. The two years of surveys determined that the Federal  
30 lands considered in this proposed exchange do not contain goshawk nest sites or post fledgling  
31 area (PFA).

32 This proposed change in ownership will have no effect on habitat as the resulting land uses will  
33 be essentially the same. Habitat for golden mantel ground squirrels, rock squirrels, and Abert  
34 Squirrels, important NGO prey species, will stay the same. No Abert squirrel nest groups will be  
35 affected. The proposed project will not affect NGO prey species or their availability. Since the  
36 project will not significantly alter the area for potential prey species or affect goshawks ability to  
37 forage in the area, and the designated Hall Creek PFA will not be affected, it was concluded that  
38 the project will have no impact on the goshawk. Potential future development as authorized  
39 under Apache County Phase I would not result in changes in Forest-wide habitat and population  
40 trends.

41 **American Peregrine Falcon (Falco peregrinus anatum)** The peregrine falcon is not  
42 known to occur in the project area. Ponderosa pine habitat is not one of the falcon's important  
43 hunting areas as it prefers wetlands and riparian areas. There are no cliffs in the project area  
44 suitable for peregrine falcon nesting habitat. This project will have no impact on the peregrine  
45 falcon or its habitat. Potential future development as authorized under Apache County Phase I  
46 would not result in changes in Forest-wide habitat and population trends.

**1 Plants****2 Mogollon Paintbrush (*Castilleja mogollonica*)****3 Gila Groundsel (*Senecio quarens*)****4 White Mountain Clover (*Trifolium longipes* var. *neurophyllum*)**

5 The three sensitive plants will be considered together. The plants were not found in field surveys  
6 for this BAE. They are not listed in the AGFD database as occurring in the area. The proposed  
7 land exchange will not alter the habitat in a way detrimental to this species. There will be no  
8 long-term effect on this habitat which would adversely affect the Mogollon Paintbrush, Gila  
9 Groundsel, or White Mountain Clover. Potential future development as authorized under Apache  
10 County Phase I would not result in changes in Forest-wide habitat and population trends.

**11 Direct and Indirect Effects****12 Proposed Action**

13 The Proposed Action would result in no negative effect on TES plant and animal species and their  
14 habitat. Formal consultation with the USDI Fish and Wildlife Service was not necessary but did  
15 require informal concurrence for the not likely to adversely affect Mexican spotted owl  
16 determination (Doc.155). A Supplemental Analysis resulting from a new MSO occurrence was  
17 prepared by the Springerville RD Staff Wildlife Biologist in July 2005. It was his determination  
18 that the land exchange will have no effect to these MSO (Doc. 180). This alternative meets the  
19 intent of the Endangered Species Act of 1973. The access for local elk, deer, turkey, and bear to  
20 use forage and water on the Federal lands would not change. Conditions on the non-Federal lands  
21 would improve for wildlife as these lands would be managed and protected for their benefit.

**22 No Action**

23 Conditions would remain the same. Currently, no development is planned for the non-Federal  
24 lands. The No Action alternative would result in no effect on TES plant and animal species and  
25 their habitat on the Federal lands. This alternative meets the intent of the Endangered Species  
26 Act of 1973.

**27 Cumulative Effects**

28 Any potential future development as authorized under Apache County Phase I would result in no  
29 measurable negative effect on TES plant and animal species and their habitat.

30 Cumulative effects on vegetation and wildlife will be limited under either the No Action  
31 alternative or the Proposed Action. The Proposed Action may afford greater long-term protection  
32 to listed species and management indicator species. This would result from the acquisition of  
33 important riparian and wildlife habitat currently located on private lands. With respect to  
34 management indicator species, forest-wide analyses do not indicate management-induced trends  
35 that would be influenced by action or inaction at the scale of the proposed land exchange. Any  
36 foreseeable future development on the Federal lands would not result in any measurable effects to  
37 TES plant and animal species and their habitat or MIS (Doc. 154).

38 This land exchange proposal in conjunction with the Greer WUI project and the Greer Lakes  
39 Improvement project is not expected to result in adverse cumulative effects.

**40 Management Indicator Species (MIS)**

41 In addition to requirements for the Forest Service to consider needs for TES species, there is also  
42 a requirement to consider MIS as they may be affected by management decisions. This  
43 requirement stems from the LMP formulated for the ASNFs. The concern for the MIS  
44 requirements is to insure that the long-term viability of these species is not harmed as they

1 represent habitat conditions important to other species as well. Analysis of MIS as they would be  
2 affected by the proposed land exchange was made and is in the project record (Docs. 74, 154).  
3 The following is a summary of the findings:

4 Four Management Areas (MA) will be considered and the effects on the MIS for each MA will be  
5 documented. This was done on an ASNFs basis. Lands that would leave federal ownership will  
6 be considered lost for MIS even though, in this case, it is expected that habitat conditions will  
7 stay the same. Potential future development on the Federal lands would result in the lands  
8 leaving federal ownership and considered lost for MIS.

9 **MA-1 Forested Land:** The proposed land exchange would result in 337.74 acres of this MA  
10 leaving federal ownership. This MA consists of 836,288 acres on the A-S. This acreage  
11 represents 4/100 of 1% or 0.04% of the total on the ASNFs. The loss will not impact the 10 MIS  
12 in this MA or cause a loss of viability for these species. The loss of these acres causes a slight  
13 downward trend in the total acres of this MA.

14 **MA-2 Woodland:** The proposed land exchange would result in 105 acres of this MA being added  
15 to federal ownership. This MA consists of 611,025 acres on the ASNFs. This acreage is less  
16 than 0.02% of this total. The addition will not affect the 4 MIS in this MA or cause a loss of  
17 viability for these species.

18 **MA-3 Riparian:** The proposed land exchange would result in 118 acres of this MA being added  
19 to federal ownership. The MA consists of 6,870 acres on the ASNFs. This acreage is about  
20 1.71% of this total. The addition will have a positive impact on the 3 indicator species for this  
21 MA and the species group called macro-invertebrates. This gain of riparian habitat is considered  
22 substantial. This habitat is considered extremely important on the ASNFs and in the southwest.  
23 The proposed exchange will not cause a loss of viability for these species.

24 **MA-4 Grassland:** The proposed land exchange would result in 177 acres of this MA being added  
25 to federal ownership. The MA consists of 243,126 acres on the ASNFs. This acreage is about  
26 0.07% of the total. The addition will not affect the 2 MIS in this MA or cause a loss of viability  
27 for these species.

28 Conditions for MIS in the Riparian Management Area would improve. Conditions for MIS in the  
29 Timberland, Woodland, and Grassland would remain the same. No MIS would lose viability.

**Table 3. Management Indicator Species (MIS) Analysis**

Management Area/Vegetation Type/Species	Indicator of	Species Impact	Impact Significant	Indicator Trend	Total Acres
<b>MA-1(4-1,5-1)Forested land (836,288ac.)</b>					
Hairy Woodpecker (Picoides villosus)	Snags	No	No	Down	-337
Red-naped Sapsucker (Sphyrapicus nachalis)	Snags (Aspen)	No	No	Down	-337
Northern Goshawk (Accipiter gentilis)	Late Succession	No	No	Down	-337
Turkey (Meleagris gallopardo)	Late Succession	No	No	Down	-337
Pygmy Nuthatch (Sitta pygmaea)	Late Succession	No	No	Down	-337
Mexican Spotted Owl (Strix occidentalis lucida)	Late Succession	No	No	Down	-337
Elk (Cervus elaphus)	Early Succession	No	No	Down	-337
Mule Deer (Odocoileus hemionus)	Early Succession	No	No	Down	-337
Abert's Squirrel (Sciurus aberti)	Early Succession	No	No	Down	-337
Red Squirrel (Tamiasciurus hudsonicus)	Late Succession	No	No	Down	-337
<b>MA-2 (4-2,5-2) Woodland (611,025 ac.)</b>					
Juniper Titmouse (Baeolophus griseus)	Snags	No	No	Upward	+105
Antelope (Antilocarpa americana)	Early Succession	No	No	Upward	+105
Elk (Cervus elaphus)	Early Succession	No	No	Upward	+105
Mule Deer (Odocoileus hemionus)	Early Succession	No	No	Upward	+105
<b>MA-3 (4-3,5-3) Riparian (6,870 ac.)</b>					
Yellow-breasted Chat (Icteria virens)	Low Elevation Riparian	Yes	Yes	Upward	+55
Lucy's Warbler (Vermivora luciae)	Low Elevation Riparian	Yes	Yes	Upward	+55
Lincoln Sparrow (Melospiza lincolnii)	High Elevation Riparian	Yes	Yes	Upward	+63
Aquatic Macro-invertebrates	Water quality	Yes	Yes	Upward	+118
<b>MA-4 (4-4,5-4) Grasslands (243,126 ac.)</b>					
Antelope (Antilocarpa americana)	Early Succession	No	No	Upward	+177
Elk (Cervus elaphus)	Early Succession	No	No	Upward	+177



**1 Land Use****2 Affected Environment**

3 The non-Federal Blue River Ranch parcel originally contained the following encumbrance. It  
4 terminated on its own on December 29, 2004.

5 A 10-year “Estate for Years” comprising 4.00 surveyed acres, with the easement from the  
6 existing county road to the residence. Said “Estate” encompasses the existing structural  
7 improvements only, as described in that certain Purchase Contract, and the Rider to  
8 Purchase Contract dated July 8, 1994, and as set forth in that certain Warranty Deed  
9 recorded December 29, 1994, Greenlee County, Arizona, in Docket 197, pages 564-566.  
10 The lessee of the “Estate for Years” is Lillian Rose Coleman Awtrey only, and upon  
11 termination, Ms. Coleman Awtrey shall vacate and take only her personal property from  
12 the residence, corrals, and physical improvements. Said “Estate for Years” automatically  
13 terminates on the 10-year anniversary of the recorded date of the sale of the land  
14 (December 29, 1994); therefore, the “Estate for Years” terminates December 29, 2004.  
15 Said structural improvements shall not be removed.

16 The structural improvements referred to above were removed by the non-Federal party in  
17 November 2004. Remaining encumbrances are an existing Navopache Electric Coop, Inc. power  
18 transmission line and telephone line that traverse the parcel in two locations along the property’s  
19 southern boundary that are parallel to the Greenlee County Blue River Road No. 67004 (Forest  
20 Road 281).

21 The Thompson Ranch and Rancho Alegre parcels are unencumbered.

22 The Federal parcels contains the following existing encumbrance and recreation development.

23 An easement for an existing highway right-of-way (SR 373), 100 feet wide,  
24 50 feet each side of centerline, as it crosses portions of Sections 23, 26, and  
25 35, T. 8 N., R. 27 E., as documented in United States Department of  
26 Transportation, Federal Highway Administration, Highway Easement Deed  
27 to the State of Arizona dated February 14, 1973, recorded April 30, 1973,  
28 Apache County, Arizona, in Docket 173, pages 28-40. (contiguous to Eastern  
29 boundary of Tracts A and B)

30 Forest Service cross-country ski trail, Section 35, T. 8 N., R. 27 E. (see map,  
31 Appendix A).

**32 Direct and Indirect Effects****33 Proposed Action**

34 The Forest Service would relocate that section of the designated cross-country ski trail located in  
35 Federal Tract B to the south of the exchange boundary. This is expected to meet current and  
36 future user needs. The easement for the power/telephone utility line would either be recognized  
37 in the warranty deed or added to the company’s master SUP.

**38 No Action**

39 No change; the Forest Service would continue to manage the ski trail in its existing location.

## 1 **Cumulative Effects**

2 The Forest Service would acquire the Blue River Ranch and Rancho Alegre parcels allowing  
3 them to return to a pre-developed condition. The Thompson Ranch parcel would be acquired  
4 with its historic cabin. The ASNFs plans to eventually stabilize and restore the cabin and  
5 interpret its historical significance to the public. The ASNFs would relocate that section of the  
6 designated cross-country ski trail in Federal Tract B onto adjacent federal land south of the  
7 exchange boundary and north of Rosey Creek. Any change to the anticipated experience for this  
8 kind of public outdoor recreation use would not be significant. Any future development on the  
9 Federal lands would have minimal impact to cross-country skiers. It is quite common for cross-  
10 country ski trails to be located near or adjacent to residential developments. The level of  
11 foreseeable future development that might occur adjacent to this trail would be acceptable in this  
12 setting.

13 Previous land exchanges in the Greer area have conveyed 594.57 acres of federal lands to private  
14 parties from 1967 to the present. During this same time period 675.58 acres of non-federal lands  
15 have been acquired by the Forest Service. These land exchanges did not result in a large change  
16 in ownership status acres in this area.

17 Inquiries have been received by the Springerville District Ranger regarding a proposal for a land  
18 exchange involving the 19 existing summer recreation residence permits that collectively make  
19 up the Little Colorado Summer Home Tract on approximately 35 acres located within the GRA.  
20 Although a formal exchange proposal has not been received it is possible in the foreseeable future  
21 that one involving these recreation residences may be submitted. There are no other inquiries or  
22 formal proposals for land exchange within the GRA at this time. A previous request by the Forest  
23 Service for Fiscal Year 2006 funding to purchase approximately 10 acres of land located along  
24 the Little Colorado River within the GRA was not granted. Any offer to include this land in a  
25 future exchange proposal would be considered. An exchange of the summer recreation residence  
26 tract out of federal ownership or Forest Service acquisition of the 10 acres along the Little  
27 Colorado River would result in a 1% or less change to the number of acres of federal and private  
28 lands in the GRA. It is likely that any effects as a result of these two potential actions while  
29 cumulative would not be adverse or significant.

30 The Greer WUI and Greer Lakes Improvement Projects have no effect on land use classification.  
31 No adverse cumulative impacts to land use are anticipated.

## 32 **Public Services**

### 33 **Affected Environment**

34 According to Apache County parcel records, there are 819 parcels within the Greer Phase I  
35 boundary (Doc.344). Census data indicates average household size for the area is 2.75 people  
36 per household. (Doc. 344-A12) Based upon this information, the population for Greer could  
37 approach approximately 2250 if all parcels contained dwellings that were occupied. Parcel  
38 records indicate that 14% of the parcel owners have their mailing address in Greer. This is  
39 indicative of the seasonal nature of the population. Based upon this information, there could be  
40 approximately 315 year round residents and 1935 seasonal residents who may use some or all  
41 public services within the Greer Phase I boundary.

### 42 **Direct and Indirect Effects**

#### 43 **Proposed Action**

44 The land exchange would not result in an increase in demand for additional public services, i.e.  
45 structural fire protection, law enforcement, emergency medical services, solid waste disposal, and

1 road maintenance, if the Federal lands remain undeveloped. This is considered the most likely  
2 development scenario.

3 Development, if it were to occur, with lot splits or a planned subdivision is projected to result in  
4 construction (primarily residential) on 25-35 lots within the next 15 years. This could result in  
5 the addition of approximately 70 – 100 people. Based on the percentage of year round and  
6 seasonal residents, this could result in the addition of approximately 10-14 year round residents  
7 and 60 – 86 seasonal residents. This estimated increase in both year round and seasonal residents  
8 is not expected to adversely impact the demands placed on public services.

9 Any foreseeable future development would likely result in a slight increase in the need for  
10 additional public services. With the addition of up to a maximum of 256 single family residences,  
11 an estimated increase of 704 people could occur, or approximately 99 year round residents and  
12 605 seasonal residents. It is unlikely that all of the estimated increase of 704 people would be  
13 present at the same time in the area, even during peak periods. There is no expectation that the  
14 exchange would result in a negative impact to schools in Springerville and Eagar based upon the  
15 seasonal nature of the population. The effect on residential support services in the communities  
16 of Springerville and Eagar would be no greater than what is currently experienced when  
17 vacationers are present in the area. Additional real estate property taxes collected by Apache  
18 County would adequately provide funds to pay for any increases in public services.

19 Additional information on the need for public services is included in the Environmental  
20 Consequences section of this document, which addresses the key issue for the proposal.

## 21 **No Action**

22 Selection of the No Action alternative would result in no change in the need for additional public  
23 services near Greer.

24 Development of the non-Federal parcels, if it were to occur, is not expected to result in a  
25 significant increase in the need for public services.

## 26 **Cumulative Effects**

27 No other formal land exchanges are planned by the Forest Service, which would result in  
28 cumulative impacts.

## 29 **Property Taxes**

### 30 **Affected Environment**

31 The Forest Service makes payment to counties with respect to federal lands under three statutes  
32 known as the Twenty-Five Percent Fund, the Payments in Lieu of Taxes (PILT) Act and the  
33 Secure Rural Schools and Community Self-Determination Act of 2000. The Twenty-Five Percent  
34 Fund of May 23, 1908, provides for counties to receive 25 percent of the gross receipts and  
35 revenues from timber sales and other income generating activities on federal lands. The PILT Act  
36 of 1976 authorizes payments to counties based on the number of acres of "entitlement lands"  
37 within the county. The Secure Rural Schools and Community Self-Determination Act of 2000  
38 stabilizes payments for fiscal years 2001 through 2006 (extended through 2008) to counties that  
39 received a 25-percent payment during fiscal years 1986 through 1999 to provide funding for  
40 schools and roads that supplements other available funds. For purposes of this discussion,  
41 entitlement lands are NFS lands. Non-federal landowners make payments to counties in the form  
42 of property taxes.

## 1 **Direct and Indirect Effects**

2 There would be little effect on returns to the two counties, the State of Arizona, or the Federal  
3 Treasury. The private land tax base for Greenlee County would decrease by 160 acres, but there  
4 would be an increase in PILT funds to the County. The private land tax base for Apache County  
5 would increase by 97.20 acres.

## 6 **Cumulative Effects**

7 Greenlee County has expressed its disapproval of any land adjustments that erode the private land  
8 base and limit growth potential in the county. Under the Proposed Action Greenlee County  
9 would lose 160 acres and Apache County would gain 100 acres of private land.

10 It is anticipated that Apache County's tax revenues would increase by over \$1,000 as a result of  
11 the additional undeveloped private land base. Greenlee County would lose approximately \$68 in  
12 tax revenues associated with the Blue River Ranch parcel. There would be a corresponding  
13 increase in PILT and Secure Rural Schools and Community Self-Determination Act of 2000  
14 funds to the County to offset the lands moving into federal ownership.

15 Taxes collected by the two Counties in 2002 were:

- 16 • Apache County: \$3665.76 for the Thompson Ranch and Rancho Alegre parcels.
- 17 • Greenlee County: \$68.30 for the Blue River Ranch parcel.

18 The change in the private land base for Apache and Greenlee Counties, and loss of tax revenue in  
19 Greenlee County, is considered to be neither significant nor irreversible. Future land exchanges  
20 involving federal lands may favor Greenlee County by adding to its private land base.

21 Apache County tax assessment on undeveloped ranch property averaged \$10.00 an acre in 2004  
22 (Apache County Tax Assessor records).

23 Acreage subject to tax collections on ranch property (if no development were to occur) located in  
24 Apache County would increase by 98 acres ( $337.74 - 240 = 98$ ). This represents approximately a  
25 40% increase in taxable private land within the county.

26 Any future development on the Federal lands in Apache County would add to the County's real  
27 estate property tax base. Based on an estimate of per annum tax (2004) revenues averaging  
28 \$1,000 per developed one-acre lot (also containing a single family dwelling) in the Greer area  
29 Apache County would stand to receive approximately \$25,000 to \$35,000 with development of  
30 25-35 lots. Apache County would stand to receive approximately \$256,000 in additional tax  
31 revenues, if 256 lots and single family residences would eventually be developed (Apache County  
32 Tax Assessor records).

## 33 **Soil and Air**

### 34 **Affected Environment**

35 The Federal parcels are located on flat to sloping terrain. Terrestrial Ecosystem Surveys on the  
36 Federal lands and National Cooperative Soil Surveys on the non-Federal lands indicate both  
37 contain stable soils (Terrestrial Ecosystems Survey of the Apache-Sitgreaves National Forests,  
38 1986; Soil Survey of Apache County, Arizona Central Part, 1975).

39 Air shed conditions that are good are similar on the Federal and non-Federal parcels and typical  
40 of the ASNFs, except for brief periods when prescribed burning or wildfire are occurring.

**1 Direct and Indirect Effects****2 Proposed Action**

3 There would be no effect on soil stability if the lands remain undeveloped. No measurable soil  
4 loss is anticipated. The air quality will remain the same.

5 Future development on the Federal lands in accordance with county and state regulations would  
6 result in no unacceptable soil loss.

**7 No Action**

8 No effect. Soil stability and air quality of both the non-Federal and Federal lands would remain  
9 unchanged.

**10 Cumulative Effects**

11 Soils on the Federal lands are currently in satisfactory condition and would remain the same if the  
12 lands remained undeveloped. No air quality effects have been attributed to current or proposed  
13 uses. The air quality will essentially remain the same.

14 Future development on the Federal lands, if it occurs, would be subject to Apache County  
15 subdivision standards and ADEQ regulations. The Zoning Ordinance of Apache County,  
16 Subdivision Resolution and Phase I amendment and State laws and regulations are written and  
17 enforced to minimize impacts to soil and air from human activity (Doc. 4). Development done in  
18 accordance with County and State regulations would result in no measurable soil loss.

19 The air quality should remain relatively the same throughout most of the year. A slight change in  
20 air quality could be expected during construction, if it occurs, on the Federal land. The addition  
21 of wood smoke could be expected from the burning of construction debris and warming fires  
22 during construction. Additional wood smoke would be expected from fireplaces and woodstoves  
23 and debris burning occurring at residences post construction. The additional smoke would be  
24 negligible and should quickly dissipate due to prevailing winds out of the southwest. Apache  
25 County does not restrict fireplace use at any time during the year. The Greer WUI project will  
26 comply with ADEQ requirements for reporting and accomplishment. Monitoring of smoke  
27 emissions will be completed as part of the permitting process (Doc. 143). No unacceptable  
28 effects to air quality were expected with the Greer Lakes Improvement Project (Doc. 41). No  
29 cumulative impacts are anticipated.

**30 Grazing Resources****31 Affected Environment**

32 The Federal lands are included in the Sheep Springs Grazing Allotment currently permitted to  
33 Dwayne Dobson. This allotment and the Beehive Allotment are managed as a single unit. Sec.  
34 402 (g) of FLPMA requires that a 2-year notification be provided to permit holders in which  
35 significant changes to grazing permits may take place. Mr. Dobson was notified of the Proposed  
36 Action in November 2001 (Doc. 19). The Proposed Action would not conflict with the  
37 requirements of Sec. 402 (g) of FLPMA.

38 A majority of the non-Federal lands are fenced separating them from adjoining National Forest  
39 System or State lands. Grazing leases for livestock grazing on the Thompson Ranch and Blue  
40 River Ranch parcels are currently held by third parties.

## 1 **Direct and Indirect Effects**

### 2 **Proposed Action**

3 The Sheep Springs Allotment would continue to be a viable sheep ranching operation.  
4 Conveyance of the Federal parcels would not result in any immediate reduction of animal units  
5 on the Beehive and Sheep Springs Allotments. The animal units would be subject to adjustment,  
6 if needed, when the allotments are scheduled for reanalysis.

7 Third party grazing leases on the non-Federal lands would be cancelled by the non-Federal party  
8 upon acquisition of the lands by the Forest Service. The non-Federal lands would be incorporated  
9 into the surrounding allotments and integrated into ongoing Forest Service management plans for  
10 each respective area. Management would be in accordance with the laws, regulations and LMP  
11 standards and guidelines applicable to each respective area. Riparian habitat protection would be  
12 a high priority for the management of these riverine habitats as has been implemented on  
13 adjoining grazing allotments.

14 Norman Brown a grazing permittee on an adjacent allotment previously trailed his livestock  
15 through Federal Tract A just north of the existing National Forest/private land boundary by use of  
16 a crossing permit from the Ranger District. Mr. Brown is aware of the exchange proposal and has  
17 coordinated with the Springerville District Ranger on an alternate route for trailing his livestock.

### 18 **No Action**

19 Permitted numbers in the Sheep Springs Allotment would remain the same. The grazing situation  
20 on the non-Federal lands would most likely remain the same.

### 21 **Cumulative Effects**

22 The non-Federal lands will be integrated into the ongoing Forest Service management plans for  
23 each respective area under the Proposed Action (36 CFR 254.3(f)). Riparian habitat protection  
24 will be a high priority for the management of these parcels. The Sheep Springs Grazing  
25 Allotment will be reduced by about 91 acres if the Federal lands are conveyed to private  
26 ownership. The result would be the same whether the land remains natural forestland or is  
27 developed in the foreseeable future. Authorized grazing will continue on the remaining acres of  
28 the allotment. Grazing effects will be related to those analyzed in the environmental assessments  
29 for the affected allotments. No cumulative impacts are anticipated.

30 The Greer WUI and Greer Lakes Improvement project did not identify any adverse impacts to  
31 grazing resources; therefore the land exchange proposal will have no adverse cumulative effects.

## 32 **Mineral Resources**

### 33 **Affected Environment**

34 A Forest Service Mineral Report was prepared (Doc. 28). The New Mexico Zone Geologist  
35 concluded that the subject non-Federal and Federal lands have low potential for oil, gas, coal and  
36 geothermal resources. The lands have no known value for sodium, potassium or other leasable  
37 minerals. The geological processes, geologic environments and reported occurrence of mineral  
38 resources in the region indicate low potential for the accumulation of locatable minerals within  
39 the subject lands. All the subject lands have moderate potential for salable minerals in the form  
40 of common cinders, sand or gravel. There are no known mineral material sources within the  
41 Federal or non-Federal lands that have been identified by the state Highway Department as  
42 suitable for road construction. The report recommends that the exchange proceed and should  
43 mineral rights be reserved on the non-Federal lands, it recommends the deed specifically state

1 that cinders, sand and gravel are not part of the mineral estate. The report was forwarded to the  
2 BLM and concurrence was received on August 26, 2005 (Doc. 28).

3 Should the exchange be consummated neither the United States, nor the non-Federal landowner  
4 would reserve any mineral, right, royalty, or other mineral interest.

## 5 **Direct and Indirect Effects**

### 6 **Proposed Action**

7 Respective mineral resources on the non-Federal and Federal parcels would be conveyed along  
8 with the surface.

### 9 **No Action**

10 Mineral estates would remain the same

## 11 **Cumulative Effects**

12 Should the exchange be consummated neither the United States, nor the non-Federal landowner  
13 would reserve any mineral, right, royalty, or other mineral interest. Both the non-Federal and  
14 Federal lands have low potential for oil, gas, coal and geothermal resources and have no known  
15 value for sodium, potassium or other leasable minerals. The geological processes, geologic  
16 environments and reported occurrence of mineral resources in the region indicate low potential  
17 for the accumulation of locatable minerals within the subject lands. All the subject lands have  
18 moderate potential for salable minerals in the form of common cinders, sand or gravel. No  
19 cumulative impacts are anticipated.

20 The Greer WUI and Greer Lakes Improvement project did not identify any impacts to minerals  
21 resources; therefore, the land exchange proposal will have no adverse cumulative effects.

## 22 **Hazardous Materials**

### 23 **Affected Environment**

24 The non-Federal and Federal lands proposed for exchange have been examined in accordance  
25 with Section 120 (h) of CERCLA. No hazardous materials are suspected or were found. No  
26 evidence was found to indicate that any hazardous material was stored for one year or more or  
27 disposed of or released on the property. Household refuse from nearby campgrounds was  
28 disposed of by the Forest Service in a small (less than 1 acre in size) pit located in the central  
29 portion of Federal Tract A during the 1950's through the mid 1960's. The pit was closed and  
30 covered with soil over 40 years ago and has been re-vegetated. It is undisturbed and does not  
31 appear from the surface to pose a threat to the human health or the environment. There is no  
32 evidence that hazardous substances, or petroleum products, or other contaminants are present.  
33 Subsurface characterizations have not been conducted. The Forest Service Regional  
34 Environmental Engineer's recommendation is that there is no need to disturb or excavate the area  
35 from its current state (Doc. 186).

### 36 **Direct and Indirect Effects**

#### 37 **Proposed Action**

38 No hazardous material is known to exist on either the Federal or non-Federal lands, therefore  
39 there is no effect.

**1 No Action**

2 No hazardous material is known to exist on either the Federal or non-Federal lands, therefore  
3 there is no effect.

**4 Cumulative Effects**

5 There are no hazardous materials known to exist on either the Federal or non-Federal lands. No  
6 hazardous materials are known to exist on or are involved in any projects in the area. Because  
7 there are no direct/indirect effects, there will be no cumulative effects.

8 The Greer WUI and Greer Lakes Improvement Projects had no effect on Hazardous Materials;  
9 therefore, no cumulative effects are anticipated.

**10 Heritage Resources****11 Affected Environment**

12 The ASNFs prepared the cultural resource survey report for the 337.74 acres of Federal lands.  
13 No archeological properties were identified on Federal lands (Doc. 66).

14 Heritage resource surveys were not conducted on the non-Federal lands. An historical cabin is  
15 located on the Thompson Ranch parcel.

**16 Direct and Indirect Effects****17 Proposed Action**

18 The cultural resource survey of the Federal lands was approved by the ASNFs Supervisor on June  
19 2, 2004 (Doc. 120). The Proposed Action meets the requirements of the National Historic  
20 Preservation Act and E.O. 11593.

21 Consultation was conducted with the Hopi Tribe, the White Mountain Apache Tribe, the Pueblo  
22 of Zuni, and Navajo Nation regarding the Black River Land Exchange.

23 Any heritage resource sites found on the non-Federal lands would come under federal  
24 management and would receive the full protection of federal law, these include the historic cabin  
25 on the Thompson Ranch parcel and several rock structures on the Blue River Ranch parcel.

**26 No Action**

27 Federal lands have already been surveyed. Heritage resources that are located on the non-Federal  
28 lands would not received further protection, with the exception of human burials, which are  
29 protected under the Burial Protection Law (ARS 41-865 and ARS 410844).

**30 Cumulative Effects**

31 Under either alternative, significant (National Register-eligible) heritage sites would be managed  
32 for their historic values. No archeological properties were identified on Federal lands. No  
33 heritage resource surveys have been conducted on the non-Federal lands to determine the  
34 existence or number of any cultural site. If the proposed exchange is consummated and sites are  
35 documented, in addition to the historic Thompson cabin, they would be subject to an elevated  
36 level of protection under historic preservation laws. Consultation with American Indian tribes  
37 has not raised additional concerns regarding significant or non-significant sites, or other cultural  
38 properties. Future development on the Federal lands would not be expected to impact heritage  
39 resources as no cultural properties were identified. No cumulative impacts are anticipated.



1 No adverse impacts to heritage resources were identified for the Greer WUI Project and the Greer  
2 Lakes Improvement Project. Therefore, the proposed land exchange will result in no adverse  
3 cumulative effects to heritage resources.

#### 4 **Caves**

5 The Proposed Action meets the intent of the Federal Cave Protection Act of November 18, 1988.  
6 No caves are located on the Federal lands. No caves were located on the Greer WUI and Greer  
7 Lakes Improvement Project areas. No special management areas designated in the ASNFs LMP  
8 occur on the Federal lands. The proposal will result in no effect to special areas.

#### 9 **Short-term Uses and Long-term Productivity**

10 NEPA requires consideration of “the relationship between short-term uses of man’s environment  
11 and the maintenance and enhancement of long-term productivity” (40 CFR 1502.16). As  
12 declared by the Congress, this includes using all practicable means and measures, including  
13 financial and technical assistance, in a manner calculated to foster and promote the general  
14 welfare, to create and maintain conditions under which man and nature can exist in productive  
15 harmony, and fulfill the social, economic, and other requirements of present and future  
16 generations of Americans (NEPA Section 101).

17 Conveyance of the Federal lands into private ownership is expected to result in no development  
18 and only minor changes to existing management on the parcels, if any, by the proponent. This  
19 would result in little, if any, change in short-term uses or long-term productivity on the conveyed  
20 lands.

21 If development were to occur on the conveyed Federal lands, development with lot splits or a  
22 planned subdivision is projected at a rate of 2 lots per year resulting in 25 to 35 structures over  
23 the next fifteen years (Doc. 344). Minimal impacts to the productivity of upland soils from  
24 compaction could occur where building foundations or concrete slabs are constructed. Any  
25 foreseeable future development on the Federal lands would not result in any measurable effects to  
26 TES plant and animal species and their habitat or MIS (Doc. 154).

27 The Proposed Action would preclude development on the non-Federal parcels, providing  
28 protection to the more sensitive soils and habitats of wetlands, riparian areas and riverine systems.  
29 The Proposed Action would result in a net gain of 118 acres of wetlands and 3.15 miles of  
30 floodplain that would be afforded protection from future development.

31 The Proposed Action affords greater long-term protection to listed species and management  
32 indicator species. This would occur as a result of the acquisition of important riparian and  
33 wildlife habitat currently located on the non-Federal lands. With respect to management indicator  
34 species, forest-wide analyses do not indicate any management-induced trends that would be  
35 influenced by action or inaction at the scale of the proposed land exchange.

36 Wetlands and floodplains in federal ownership are subject to more stringent management  
37 objectives than those in private ownership. Acquisition of the non-Federal lands would contribute  
38 towards reversing the long-term trend of declining wetland and riparian habitat in the  
39 Southwestern Region. No wetlands or floodplains are located on the Federal lands therefore,  
40 none would leave federal ownership.

## 1 **Unavoidable Adverse Effects**

2 No unavoidable adverse effects are expected to occur with implementation of either the Proposed  
3 Action or No Action alternative, if no future development occurs.

4 If future development occurs, the potential adverse impacts to various resources is not expected to  
5 be significant. The amount of impact, if any, would depend upon the scale, specific location and  
6 intensity of future development.

## 7 **Irreversible and Irretrievable Commitments of Resources**

8 Irreversible commitments of resources are those that cannot be regained, such as the extinction of  
9 a species or the removal of mined ore. Irretrievable commitments are those that are lost for a  
10 period of time such as the temporary loss of timber productivity in forested areas that are kept  
11 clear for use as a power line rights-of-way or road.

12 No irreversible or irretrievable commitment of resources would occur from the exchange of lands  
13 and resulting change in ownership, if land uses remain the same.

14 If future development occurs on the Federal lands, the change in land use from ponderosa pine  
15 forest to 25-35 residential home sites over the next 15 years could be considered an irretrievable  
16 commitment of resources.

17 In the case of No Action, the non-Federal lands remain subject to development. If future  
18 development occurs, the change in land use from riparian influenced riverine habitats to  
19 residential home sites or other type of development could be considered an irreversible and  
20 irretrievable commitment of resources.

## 21 **Cumulative Effects**

22 Cumulative effects are addressed in the environmental consequences section and Appendix B of  
23 this document.

## 24 **Other Required Disclosures**

25 NEPA at 40 CFR 1502.25(a) directs “to the fullest extent possible, agencies shall prepare draft  
26 environmental impact statements concurrently with and integrated with other environmental  
27 review laws and executive orders.”

- 28 • Effects on consumers, civil rights, minority groups and women (E.O. 12898). The  
29 opportunity to initiate and participate in a land exchange is available to all citizens. The  
30 proposed use of the Federal lands whether undeveloped or developed in the future would  
31 not result in disproportionately high and adverse human health or environmental effects  
32 on minority and low-income populations because potential development would likely be  
33 residential lots (Doc. 113). Effects of the proposal are the same for all proponents.
- 34 • Effects on prime farm land, range land and forest land (Dept. Reg 9500-3). There are no  
35 prime farm, range, or forestlands on the lands proposed for exchange (Doc. 3).
- 36 • Effects on wetlands and floodplains (E.O. 11988 and E.O. 11990). The proposal would  
37 result in a net gain of 118 acres of wetlands and 3.15 miles of floodplain.

- 1 • Effects on threatened, endangered, and sensitive species (Endangered Species Act of  
2 1973) (Docs. 74, 154).
- 3 • Effects on migratory bird species (E.O. 13186) (Doc. 87).
- 4 • Effects on heritage resources (National Historic Preservation Act of 1966 and E. O.  
5 11593) (Doc. 66).
- 6 • Effects on minerals, geothermal, oil and gas (Functions Transfer Act of 1960) (oc. 28).
- 7 • Effects on rights associated with grazing permits (Sec. 402 (G) of the Federal Land  
8 Policy and Management Act of 1976).
- 9 • Whether or not hazardous materials exist (Section 120 (h) of the Comprehensive  
10 Environmental Response, Compensation and Liability Act of 1980, aka CERCLA) R-3  
11 Policy Letter 6/1/89 (Docs. 23, 117).
- 12 • Effects on cave resources (Federal Cave Resources Protection Act of 1988).

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# Chapter 4 – Consultation and Coordination

## Preparers and Contributors

The Forest Service consulted the following individuals, Federal, State, and local agencies, tribes and non-Forest Service persons during the development of this EIS:

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5 **List of Agencies, Organizations and Person to Whom Copies of**  
6 **the DEIS, Supplement and FEIS Were Sent**

7 A letter has been sent to those who submitted scoping comments, and other interested  
8 stakeholders notifying them that the DEIS is available on the Apache-Sitgreaves National Forests  
9 website. Notice of availability of the document has also been sent to other federal agencies,  
10 federally recognized tribes, and State and local governments. Hardcopies of the DEIS can be  
11 made available upon request.