United States
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Agriculture

Forest
Service

**Southwestern
Region**

October 2005

Environmental Assessment for Proposed BLACK RIVER Exchange

Apache-Sitgreaves National Forests
Springerville Ranger District

Thompson Ranch

Blue River Ranch

**Rancho
Alegre**

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Chapter 1 – Purpose and Need for Action

Document Structure

The Forest Service has prepared this Environmental Assessment (EA) in compliance with the National Environmental Policy Act (NEPA) and other relevant federal and state laws and regulations. This EA discloses known direct, indirect, and cumulative environmental impacts that would result from the proposed action and "no action" alternatives. The document is organized into four parts:

- Chapter 1: Purpose and Need for Action: The section 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 section provides a more detailed description of the agency's proposed action as well as a "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: 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: Agencies and Persons Consulted: This section provides a list of preparers and agencies consulted during the development of the environmental assessment.
- Appendices: The appendices provide more detailed information to support the analyses presented in the environmental assessment.

Additional documentation, including more detailed analyses of project-area resources, may be found in the project planning record located at the Apache-Sitgreaves Forest Supervisors' Office, 309 South Mountain Avenue, 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.

Throughout this EA parenthetical references are made to Project Record documents. For example, (Doc 25).

Purpose and Need for Action

Existing Condition

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

The Federal lands in the exchange are located in Management Area MA1 of the Apache-Sitgreaves Land Management Plan (A-S LMP) (Doc 1). The management direction for this area states lands offered by the United States are needed to meet the needs of expanding communities, would provide for consolidation of public lands, improve management or benefit specific resources, and meet overriding public needs.

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

Desired Condition

The desired condition of the lands is that the non-Federal lands are accepted and included into the National Forest System (NFS). Three fewer private in-holdings would exist in the A-S. Lands containing perennial water that are valuable as critical habitat for Federally listed species have been acquired. (LMP, Doc 1)

Multiple benefits would be expected with the addition of the offered non-Federal lands to the National Forest System. They include acquisition of vital habitat for loach minnow, spikedace and the Apache trout; acquisition of aquatic and riparian habitats associated with the mainstream of the West Fork of the Black River and the Blue River; a reduction in complex ownership patterns that would help to block up public land ownership; elimination of numerous miles of landline boundaries and controlling corners that will contribute to management efficiency; and elimination of any possible future subdivision/residential development on these remote private inholdings within the Forest's boundaries. The conveyance of the Federal lands to Herbert Owens would increase the acreage of his real estate holdings by 337.74 acres and result in an equal number of acres of Federal lands within the Greer Recreation Area (GRA) leaving Federal ownership. On a Forest-wide basis an additional 58.61 acres of land would be available for public recreation use. This document uses the same boundaries and acreage totals when referring to the Greer Recreation Area as those identified in the Apache County Greer Conservation, Development and Management Program Ordinance (Phase I), an amendment to the Apache County Land Plan and Community Development Ordinance (Zoning Ordinance), adopted May 15, 1989 for the effective June 17, 1989 (Doc 3).

Objectives

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

The purpose of the proposed action is to meet the following Forest Service objectives:

1. Acquisition of non-Federal lands within existing Forest boundaries that contain critical habitat for Federally listed species and aquatic and riparian habitats associated with the West Fork of the Black River and the Blue River.

2. The elimination of several miles of landline and controlling corners between NFS and private lands.
3. Acquisition of private lands within existing National Forest boundaries would contribute to the blocking up of public land ownership, reduce the likelihood of trespass on, or damage to NFS lands, and facilitate fire and resource management.

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

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

The proposed exchange has been found to be consistent with the management direction, goals and objectives of the A-S LMP and serves the public interest (36 CFR 254.3(b)(2)). The A-S LMP Standards and Guidelines consider the non-Federal lands as desirable for acquisition, (Doc 1, page101) and the Federal lands as available for conveyance under land exchange authorities (Doc 1, page 100).

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

Proposed Action

The A-S is proposing to exchange lands with First American Title under authority of the General Exchange Act of March 20, 1922; the Federal Land Policy and Management Act of October 21, 1976 (FLPMA); and the Federal Land Exchange Facilitation Act of August 20, 1988 (FLEFA). The proposed land-for-land exchange would result in Federal acquisition of 396.35 acres in the A-S and conveyance of 337.74 acres (BLM dependent resurvey accepted December 8, 2004 (Doc 121)) of land north of the community of Greer in the A-S.

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

The conveyance of Federal lands to First American Title would increase the size of Herbert Owens' real estate holdings. This document also includes analysis of possible future residential development on the Federal lands even though Mr. Owens has stated there currently are no future plans for development or other disposition of the land (Appendix C - listing of actions analyzed for cumulative effects.).

A preliminary analysis of the proposal was completed and included in the Feasibility Analysis that was approved by the Director of Lands & Minerals USDA Forest Service, Southwestern Region on August 28, 2002 (Doc 19). An Agreement to Initiate an evaluation of a land exchange was authorized by the Director of Lands & Minerals, USDA Forest Service, Southwestern Region, dated November 14, 2002 (Doc 36). Previously, two full appraisals were completed to establish market values prior to exchange. The first appraisal with a Valuation Date of March 21, 2002 expired on March 21, 2003, prior to the execution of an Exchange Agreement. The Valuation Date of the second appraisal was November 3, 2003. An Exchange Agreement was executed on October 20, 2004 and the Agency-approved land values determined by this appraisal are now fixed.

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

Federal Lands to Be Exchanged total 337.74 acres

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

Tract B (267.17 acres): This parcel is currently public land within the Apache National Forest and Springerville Ranger District. The elevation ranges from 8,180 feet in the northeast corner to 8,500 feet in the southwest corner. The vegetation is primarily continuous overstory of second growth ponderosa pine with a grass understory. Soils are high in clay content with surface rock evident. This tract is bordered on the north by Crosby Acres, a developed subdivision, and State Highway 373 on the east. This tract includes part of a cross-country ski trail along the southern boundary (approximately ¾ mile in length). There are no riparian or wetland/floodplain habitats in this tract. The Federal lands do not contain any inventoried roadless areas or Wild and Scenic River corridors or study areas.

Appendix A contains maps and legal descriptions of the Federal lands.

Private Lands to Be Acquired total 396.35 acres

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

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

Blue River Ranch Parcel (158.68 acres): This parcel is within the Apache National Forest on the Alpine Ranger District. The land is situated along the Blue River at an elevation of 5,500 feet. The parcel originally contained a 4.0-acre 10-year "Estate for Years" with an easement from Forest Road 281 to a residence. The "Estate" encompassed existing structural improvements described as a residence, utility building, storage shed, and well house. The "Estate for Years" expired on December 29, 2004. The structures were disposed of by the non-Federal party in November 2004. Non-structural range improvements consisting of fences remain on the parcel and will not be removed by the non-Federal party. A Navapache Electric Cooperative 69 KV transmission line crosses through the southern portion of the parcel paralleling the Greenlee County Blue River Road (FR 281). The vegetation along the approximately 1.50 miles of river channel is riparian dependent and includes Fremont cottonwood, narrow leaf cottonwood, alder, and willow. There are 55 acres of riparian habitat in this parcel. The parcel contains habitat for the spikedace (Dr. Myers, USFS Report 10/04/01). The Blue River Road provides access along the east and south sides of the parcel.

Appendix A contains maps and legal descriptions of the non-Federal lands.

Connected Actions

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

Decision Framework

The Director of Lands and Minerals, Southwestern Region, will decide if the land exchange should take place as described in the proposed action, including the connected actions, or as modified or not at all.

Public Involvement

The A-S requested public input for this proposed project to determine the issues of concern. A Land Exchange Notice was published once per week for four consecutive weeks in the White Mountain Independent for Navajo and Apache Counties and the Copper Era for Greenlee County (36 CFR 254.8). The County, State, and Congressional delegations were also notified. A mailing list of 222 addresses was compiled that included potentially interested Federal, State, and local agencies, as well as individuals and organizations that it was believed would have an interest in or be affected by the project. A scoping report dated December 13, 2002 was mailed to the list of interested publics (see Appendix B). The scoping report included a description of the proposed project, a map showing the lands being considered for exchange, and asked for comments by telephone or in writing. Comments were requested by January 31, 2003.

In addition, the public was invited to an open house in Springerville, Arizona held January 9, 2003 to provide information about the proposed exchange and submit comments. Notice of the open house was also provided to the White Mountain Independent for Navajo and Apache Counties and the Copper Era for Greenlee County.

The January 9, 2003 open house was attended by approximately 75 people (Doc 19). At the request of the Greer Coalition Inc., an additional meeting was held January 24, 2003 where the land exchange process and the NEPA process were presented to interested individuals. This informational meeting was attended by 22 people (Doc 24).

The A-S received 156 comments directly as letters, telephone messages, and from comment forms received at the open house (Doc 44). The Arizona State Legislature forwarded 19 comments to the A-S that were sent to House Speaker Jake Flake (Doc 58). The Tonto National Forest forwarded 3 comments regarding the proposed exchange to the A-S (Doc 57). Numerous Congressional inquiries were received from members of the Arizona delegation. Comments received after the date requested in the scoping report (January 31, 2003), were also included in the analysis by the Interdisciplinary Team (IDT) for the project.

A Decision Notice and Finding of No Significant Impact (DN/FONSI) approving the proposed action alternative to exchange the land was signed by the Director of Lands and Minerals, Southwestern Region on August 24, 2004 (Doc 114). Nine appeals of the decision were received by the Appeal Deciding Officer for the Chief. Eight of the appeals were found to be eligible. One appeal was dismissed. An informal Disposition Teleconference to discuss their points of appeal was held on November 17, 2004 with all but two of the appellants. Of the two appellants that did not participate in the conference call one declined and the other was later contacted separately. Informal resolution was not reached as a result of the teleconferences. On December 6, 2004 the Appeal Deciding Officer for the Chief reversed the decision of the Director of Lands and Minerals, USDA Forest Service, Southwestern Region (Doc 118). The Appeal Deciding Officer directed the Director of Lands and Minerals to perform additional environmental analysis that consistently considered the potential for development on the Federal lands once conveyed into private ownership as a reasonably foreseeable future action. The following analysis now includes the potential for reasonably foreseeable development on the Federal lands once conveyed into private ownership. In addition, the appropriateness of a deed restriction alternative has been considered given the physical and legal constraints associated with the property and an understanding reached on the potential impacts and uses necessary to reach a conclusion that the exchange is in the public interest and supports the two required findings of 36 CFR 254.3(b)(2).

Subsequent to the Appeal Deciding Officer's December 6, 2004 reversal of the Director of Lands & Minerals' original DN/FONSI a request for comments on a revised draft EA that included an analysis of potential for future development of the Federal lands was mailed on April 15, 2005 to the appellants of the original DN/FONSI and individuals and organizations who had submitted comments on the original EA. Legal notice of the availability of the revised draft EA and the 30-day comment period was published in the *White Mountain Independent* on April 19, 2005. The Forest received 104 written responses in the form of letters, facsimiles and e-mails during the public comment period for the draft EA. Comments along with Forest's responses are included in the project record.

A public meeting was held in the community of Greer, Arizona on April 23, 2005. Notice of the meeting was sent by mail on March 24, 2005 to the appellants of the original DN/FONSI and individuals and organizations who had previously submitted comments on the original EA and a news release announcing the meeting was published in the *White Mountain Independent* on March 29, 2005. It was estimated that over 50 people attended the meeting. An April 29, 2005 article in the *White Mountain Independent* reported on the meeting and indicated that 70 people attended the meeting.

Two key issues were identified during scoping and addressed in the environmental analysis. The issue concerning the loss of opportunity for outdoor recreation activities in the Greer area that was discussed in the original EA was carried forward. A second issue regarding potential for future development on the Federal lands was identified and has been addressed in the environmental analysis and final EA.

All comments received during the original analysis and the resulting additional analysis that was performed as directed by the Appeal Deciding Officer are included in the project record.

Issues

Issues are disputes, debates or discussions about environmental effects that may be created by the proposed project. This section presents significant issues identified during the scoping process, comment period and internal agency review. The IDT grouped and analyzed comments received (Docs 44, 54, 89, 144). Potential issues were collected, screened and categorized to ascertain which were significant to the proposed action and would be used to develop alternatives, mitigation measures, or to focus the analysis (65, 145). Many comments concerned areas of analysis which are required by law, regulation, or policy to be include in the document, therefore, they are not listed as issues, but are included in the analysis.

Issue #1. Loss of Outdoor Recreation Opportunities in the Greer Area:

Several people commented on the possible loss of outdoor recreation access and opportunities as a result of the land exchange. They believe that if completed the proposed land exchange would result in reduced opportunity for outdoor recreational activities near Greer on Federal lands proposed for conveyance.

Measure

Number of acres affecting public outdoor recreation access.

Issue #2. Effect of Future Development of Federal Lands

During scoping and the comment periods on the EA many commentors were concerned about the social and economic aspects of any possible future development on the Federal land. The proponent has stated that he has no plans for development; however, it is reasonable to assume that development could occur at some point in the future. Therefore, the possible general effects of development will be analyzed in the cumulative effects section of each affected resource, including property values and taxes, scenic values and recreation access, and effects on infrastructure, community services, noise, traffic, and pollution. [1]

[1] Lands conveyed out of Federal ownership become subject to all laws, regulations and zoning authorities of State and local governing bodies (Forest Service Manual 5400). Various State of Arizona agencies as well as Apache County would be the regulatory authorities for all land use and development-related activities, if any, which may occur on the contiguous block of private land (the selected Federal and the private land adjacent to the selected Federal land), or other private land within Apache County. The Forest Service has long taken the position that

Reasonable foreseeable future development is based on the information developed in the report "Evaluation and Estimate of Projected Development Costs for Subdivision of 337 Acres in Greer, Apache County, Arizona", dated November 2003, prepared by Murphy Engineering Group (Doc 120). A summary of the basic requirements used in the analysis can be found in Appendix C – Actions Analyzed for Cumulative Effects.

Measure

Narrative discussion.

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zoning and regulation of uses on private land are within the responsibility of state and local governments. Local authorities are in the best position to determine appropriate uses of private land. While the Forest Service may restrict the use of the Federal lands (36 CFR 254.3(h)) thru the use of deed restrictions if there is a need to protect the public interest where State or local regulations are not adequate, Forest Service policies, practices, and procedures shall avoid regulating private property use (Forest Service Manual 5403.3). Local governments have traditionally agreed and insisted that such decisions be left to them.

Chapter 2 - Comparison of Alternatives

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 2, 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 these lands available to the Forest Service on the basis of exchange only.

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

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 land would occur between the Forest Service and First American Title. Lands would remain in current ownership.

This chapter describes and compares the alternatives considered for the Black River Land Exchange. It includes a description and map (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).

Comparison of Alternatives

This section provides a summary of the effects of implementing each alternative. Information in the table is focused on activities and effects where different levels of effects or outputs can be distinguished quantitatively or qualitatively among alternatives.

Table 1. Alternative Comparison Table

AFFECTED RESOURCE/ISSUE	ALTERNATIVE 1 Proposed Action	ALTERNATIVE 2 No Action
Heritage resources		
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 lands	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.
Grazing resources		
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 lands	Acquired non-Federal lands would become part of the A-S LMP Management Areas in which they are located. Lands would 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.
Mineral resources		
Federal lands either undeveloped or developed	Low potential currently exists for the accumulation of locatable minerals within the subject lands. Respective mineral resources	Mineral estates would remain the same.

AFFECTED RESOURCE/ISSUE	ALTERNATIVE 1 Proposed Action	ALTERNATIVE 2 No Action
	would be conveyed.	
Non-Federal lands	Respective mineral resources would be conveyed.	Mineral estates would remain the same.
Hazardous materials		
Federal lands either undeveloped or developed	No hazardous material is known to exist.	Same as Alternative 1.
Non-Federal lands	No hazardous material is known to exist.	Same as Alternative 1.
Wetlands and floodplains		
Federal lands either developed or undeveloped	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.
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.
Caves		
Federal lands either developed or undeveloped	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 parcel. The proposal will result in no effect to special areas.	Same as Alternative 1.
Social & Economic factors		
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	

AFFECTED RESOURCE/ISSUE	ALTERNATIVE 1 Proposed Action	ALTERNATIVE 2 No Action
	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.
Administrative factors 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.
Values of adjacent properties 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 developed or owned by non-Federal party); adjoining developed property may not appreciate as quickly.	
Non-Federal	Change in values not expected. Adjacent property is FS or State.	Change in values not expected; adjacent property is FS or State.
Public services 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.
Opportunities for recreation Federal 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	No change in acres of land open to public recreation in the Greer Recreation Area or Forest-wide.

AFFECTED RESOURCE/ISSUE	ALTERNATIVE 1 Proposed Action	ALTERNATIVE 2 No Action
	public recreation in the Greer Recreation Area.	
Cross-country ski trail Federal either undeveloped or developed	Loss of approximately ¾ mile of cross-country ski trail within Federal Tract B near the southern boundary. Reroute of the above ski trail will result in no net loss of trail to recreationists.	No change in location.
Water quality / availability Federal 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	No change in shallow ground water availability expected on adjacent lands with development of domestic water deep well.	
Non-Federal	No change in water quality. No change in water availability expected.	No change in water quality assuming no development occurs. No change in water availability assuming no development occurs.
Scenic quality 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.

AFFECTED RESOURCE/ISSUE	ALTERNATIVE 1 Proposed Action	ALTERNATIVE 2 No Action
Plants and wildlife		
Federal 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, spikedace, 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.
Soil and Air		
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. It is reasonably foreseeable that roads would be paved.	
Non-Federal	No measurable soil loss is anticipated.	No change assuming no development occurs.

Chapter 3 - 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 identified significant issues. 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 each significant issue where they occur.

In addition to documenting how each alternative addresses the issues identified in Chapter 1, we have also considered the environmental, social and economic effects of the following and found them to be non-significant.

Forest Service Handbook 1909.15, Sec. 15 and FSH 5409.13, Sec. 30:

> Effects on consumers, civil rights, minority groups and women (E.O. 12898). The opportunity to initiate and participate in a land exchange is available to all citizens. The proposed use of the Federal lands whether undeveloped or developed in the future would not result in disproportionately high and adverse human health or environmental effects on minority and low-income populations because potential development would likely be residential lots (Doc 120). Effects of the proposal are the same for all proponents.
>
> Effects on prime farm land, range land and forest land (Dept. Reg 9500-3) There are no prime farm, range, or forestlands on the lands proposed for exchange (Doc 2).
>
> Effects on wetlands and floodplains (E.O. 11988 and E.O. 11990) The proposal would result in a net gain of 118 acres of wetlands and 3.15 miles of floodplain (EA pages 17, 18 & 32).
>
> Effects on threatened, endangered, and sensitive species (Endangered Species Act of 1973) (EA pages 20-27 and Docs 71, 126).
>
> Effects on migratory bird species (E.O. 13186) (Doc 83).
>
> Effects on heritage resources (National Historic Preservation Act of 1966 and E. O. 11593) (EA pages 29 & 30 and Doc 61)

Forest Service Handbook 5409.13, Sec. 30:

> Effects on minerals, geothermal, oil and gas (Functions Transfer Act of 1960) (EA page 30 and Doc 27).
>
> Effects on rights associated with grazing permits (Sec. 402 (G) of the Federal Land Policy and Management Act of 1976) (EA page 17 & 30).

Forest Service Manual 2166:

> Whether or not hazardous materials exist (Section 120 (h) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, aka CERCLA) R-3 Policy Letter 6/1/89: (EA page 31 and Doc 23)
>
> Effects on cave resources (Federal Cave Resources Protection Act of 1988) (EA page 32).

This chapter discloses the reasonably foreseeable use of the Federal lands once they are conveyed into private ownership. The future use or development of the lands conveyed out of Federal ownership would

become subject to all applicable laws, regulations and zoning authorities of State and local governing bodies.

In addition, the Federal Land Exchange Facilitation Act of 1988 (FLEFA) requires that the intended use of the conveyed Federal land will not substantially conflict with established management objectives on any remaining adjacent National Forest Service 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 land will not conflict with these management objectives. The potential for reasonable future development on the Federal land is analyzed to determine what potential impacts, if any, might be anticipated and the appropriateness of any deed restriction. The following assumption is made throughout this document: all future development would comply with the Apache County Zoning Ordinance, Phase I regulations, and Arizona State laws and regulations.

WATER QUALITY

Affected Environment

The Federal lands proposed for exchange are located at an elevation of 8100 to 8500 feet and the natural vegetation is representative of ponderosa pine forest type. The area drains into Lang and Rosey Creeks. Both are tributaries to the Little Colorado River. The waters of the Little Colorado River are appropriated for irrigation use in the downstream valley communities of Eagar, Springerville, and Saint Johns. There are no streams, springs, or wetlands located on the selected Federal lands. A Water Resource Evaluation was conducted by the FS and states the following: "The Greer exchange parcels are located entirely on upland sites that do not include any mappable floodplains or wetlands. No water right filings appear to be associated with these exchange locations" (Doc 13).

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

Direct and Indirect Effects

Proposed Action

Under the proposed action the Forest Service would be exchanging upland ponderosa pine lands for wetland/riparian lands with perennial flowing surface waters. The following table summarizes the results as documented in the Forest Hydrologist's Water Resources Evaluation (Doc 13).

Table 2. Wetlands/Floodplains Summary

Lands to be Acquired Non-Federal Parcels			**Lands to be Exchanged Federal Parcels**		
Parcel	*Wetlands (≈ac)*	*Channel/Floodplain (≈mi/ac)*	*Parcel*	*Wetlands (≈ac)*	*Channel/Floodplain (≈mi/ac)*
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			
Total	118 ac	3.15 mi 118 ac	**Total**	0 ac	0 mi 0 ac
			Net gain/loss	+118 ac	+3.15 mi +118 ac

Conveyance of the Federal lands into private ownership would have no impact on water quality in the area if use remained the same. No change in water quantity or quality would be expected in either Rosey

or Lang Creeks which receive runoff from these lands or to ground water if the lands remained undeveloped (Doc 130).

No unacceptable impact to water quality or peak flow runoff would be expected in either Rosey or Lang Creeks which receive runoff from these lands or to ground water if future development were to occur according to Federal, State and County regulations (Doc 130). Based on analysis of historical well records for the area and previous regional ground water studies, reasonable utilization of the volcanic and White Mountains aquifers would have minimal impact on these acquifers (Doc 147). It is possible that extensive development of existing and any new shallow ground water wells in the A aquifer could have an effect on other shallow wells. The extent of the effect, if any, is speculative and uncertain. The proponent previously drilled a deep well into the C aquifer that has been tentatively identified as a source for a community water well if subdivision development were to ever occur (Doc 120).

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

No Action

Conditions on the Federal lands would remain the same. The non-Federal Blue River Ranch parcel previously contained a house and out buildings that have been removed and disposed of by the proponent. Currently, there are no immediate plans for development on the non-Federal lands. However, future development would not be precluded. Although any development along and in floodplains would come under other Federal, State and County jurisdictions, the Forest Service would not be afforded the opportunity for management of the wetlands, floodplains and riparian habitat on the non-Federal parcels.

Cumulative Effects

Proposed Action

There are no specific actions proposed for the Federal lands resulting in effects to water quality or quantity within the watersheds included in the exchange proposal (Doc 17). A-S LMP standards and guidelines are designed to achieve satisfactory water quality conditions on the acquired non-Federal lands. The Federal lands would be subject to all Apache County development standards and ADEQ regulations upon conveyance into private ownership. If they remain undeveloped neither water quality nor quantity would be expected to change. Therefore, no cumulative impacts are anticipated.

Any future development on the Federal lands upon conveyance into private ownership would be subject to all Apache County subdivision standards and ADEQ regulations. Although pavement is not required by County standards and the majority of roads in the Greer area are currently unpaved, all roads within the conceptual development would be paved to meet market demands. The County requires a drainage plan be prepared and approved for storm water runoff. Necessary improvements, including required drainage facilities to manage storm water runoff, would be constructed to insure downstream properties are protected from any increases in peak flow runoff due to development. The subdivision would be located within the Little Colorado Sanitary District (LCSD), which has jurisdictional authority over properties within the District's boundaries therefore wastewater disposal would comply with the District's rules and regulations and be connected to its facilities. Each lot would be required to install a septic tank which would then be connected to LCSD's collection system for treatment at its facility (Doc 120). No cumulative impacts to water quality are anticipated.

The Greer Wildland Urban Interface Project is currently being implemented in the vicinity of the Greer Basin. A cumulative effects analysis was completed for the Greer Urban Interface Analysis (Doc 130). That analysis was amended to include any potential cumulative effects associated with developing the conceptual housing development as found in "Evaluation and Estimate of Projected Development Costs for Subdivision of 337 acres in Greer, Apache County" (Doc 120). Based on the amended cumulative

effects analysis, there would be no unacceptable impacts to water resources with the implementation of the conceptual project. An analysis of existing State Department of Water Resources well data indicates the A aquifer does not appear to be influenced by the C aquifer. One way to insure that a deep well drilled in the north Greer area does not influence the shallow aquifer is to case and grout the well past the shallow zone. If the one existing well were to be enlarged from 6" to 8" in diameter the above conditions should still apply (Doc 147). It can only be assumed that any future development would strictly adhere to Federal, State and County regulations regarding the Clean Water Act for storm water discharge, impacts to wetlands, floodwater management, and groundwater development. No cumulative effects are anticipated.

Analysis of the Greer Lakes Improvement Project, currently being implemented near Greer, did not identify any significant effects on water quality (Doc 132).

No Action

No specific actions affecting water quality or quantity on the non-Federal and Federal lands would be anticipated within the watersheds included in the exchange proposal. Non-Federal lands would continue to be available for development however, due to their remote location there currently is limited development potential. Likely development of these lands is low density residential. Therefore, no cumulative impacts are anticipated.

SCENIC QUALITY

Affected Environment

The selected Federal lands in the Greer area are gently sloping ponderosa pine forest and are typical of most of the landscape found in this area of the Apache National Forest. The Visual Quality Objectives in Federal Tract A and B are Retention and Partial Retention. Approximately 286 acres are classified as Retention and 51 acres are Partial Retention. On Retention acres, the objective provides for management activities which are not visually evident. Objective on the partial retention acres means that management treatments may result in partial alteration of the valued landscape character, but must remain subordinate to the landscape (Doc 133). Federal lands can be viewed on either side of State Highway (SH) 373 for approximately 1 mile from its junction with SH 260. At this point private residential development adjoins the highway on the west side for the next ½ mile. Approximately ½ mile farther down the highway private residential development occurs on both sides of the road for the next ½ mile, until the highway again enters National Forest land on both sides. At this point the road forms the eastern boundary of Tract B for the next ¾ mile. National Forest is located on both sides of the road for the next 1 mile until it enters the beginning of the community of Greer. Driving along this route exposes the traveler to both undeveloped and developed lands and it is still considered to be quite scenic and representative of Arizona's high country mountains.

The non-Federal Rancho Alegre and Thompson Ranch parcels contained abandoned wooden structures. The structures on the Rancho Alegre parcel were removed by the proponent and the parcel is now in a relatively undeveloped state, except for some remaining barbed wire range fences and a dirt road. The parcel is considered quite scenic as a section of the West Fork of the Black River flows through it. The structure on the Thompson Ranch parcel is considered historical and would be retained after acquisition and eventually managed by the Forest as an interpretive site. The cabin is a well recognized landmark and its picture has been featured in photographic publications. The parcel is considered quite scenic as the confluences of both Thompson Creek and Burro Creek with the West Fork of the Black River are located on it. Both parcels can each be accessed by improved Forest roads. The Blue River Ranch parcel originally contained a small residence and several out buildings that were not easily visible from the main Blue River county road that runs through the southeast corner of the parcel. All the structures were removed by the proponent and the parcel is now in a relatively undeveloped state, except for some remaining range fences, a dirt road, and a Navapache Electric Cooperative 69 KV transmission line crossing through the property. The parcel is considered quite scenic and representative of the cottonwood-willow vegetative type with a section of the Blue River running through it.

Direct and Indirect Effects

Proposed Action

Under the proposed action the change in land ownership itself would not change the visual conditions of the Federal lands.

Exchange of Federal Tracts A and B would result in a reduction of 286 acres with a Visual Quality Objective of Retention and 51 acres of Partial Retention (Doc 133).

Acquisition of the non-Federal lands would ensure and possibly improve their visual quality as several structures have been removed and the land restored to a relatively undeveloped condition. The Federal lands surrounding the Thompson Ranch and Rancho Alegre lie within a VQO of Retention. The Federal lands surrounding the Blue River Ranch lie within Partial Retention. Acquisition would result in an increase of 238 acres of Retention and 159 acres of Partial Retention (Doc 133).

No Action

Federal scenic quality would remain unchanged; non-Federal lands would be subject to change. Non-Federal lands would be available for development however, due to their remote location there is limited development potential at this time. Likely future development of these lands is low density residential. Any development of these lands would be costly due to their remote location.

Cumulative Effects

Proposed Action

Any development of the Federal lands after conveyance into private ownership would be subject to the Apache County Phase I which contains specific guidelines, standards and measures directing future development (Doc 3). A primary objective of the Phase I is enhancement of visual aesthetics by providing proper scenic easement, architectural controls, advertising, lighting, lot development standards, and maintenance of natural vegetative cover. Changes to the visual conditions associated with the Federal lands would be expected but any foreseeable future development would be subject to and regulated by the Phase I and its primary goal of character maintenance. Specific areas addressed in the Phase I include setbacks, building separation, parking, fencing, signs, tree removal, highway frontage, building height, and density. Development currently exists within the Greer Basin. If development of Federal lands were to occur, the existing nature of the Federal acres, which some may consider pristine, would change. Any development of the Federal exchanged lands would result in a decreased scenic quality to some people. An application to the County for a Conditional Use Permit would be subject to County Planning Commission review and discussion at a regularly scheduled public meeting. Following receipt of the Commission's recommendations the Board of Supervisors renders a final decision at its regularly scheduled monthly meeting. The public has several opportunities to comment on and support or contest any application for a Conditional Use Permit (Doc 3). No unacceptable changes to visual quality are expected if development of Federal Tract A and B were to occur (Doc 133).

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

No Action

No specific actions affecting the scenic quality on the non-Federal and Federal lands are expected. The non-Federal lands would continue to be available for development however, due to their remote locations there is currently limited development potential. Likely development of these lands is low density residential. Therefore, no cumulative impacts are anticipated.

PLANTS AND WILDLIFE, INCLUDING THREATENED, ENDANGERED AND SENSITIVE SPECIES (TES)

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

Plant species

Trees

Ponderosa pine	Pinus ponderosa
White pine	Pinus flexilis reflexa
Douglas fir	Pseudotsuga menziesii
One seed juniper	Juniperus monosperma
Alligator Juniper	Juniperus Deppeana
Utah juniper	Juniperus Utahensis
Pinyon pine	Pinus edulis

Shrubs

Snakeweed	Gutierrezia Sarothrae
Skunk bush	Rhus trilobata
Buck brush	Ceanothus fedleri
Wax current	Ribes inebrians
Common juniper	Juniperus communis

Grasses

Blue grama	Bouteloua gracilis
Squirrel-tail	Sitanion hystrix
June grass	Koeleria cristata
Mountain muhly	Muhlenbergia montana
Spike muhly	Muhlenbergia wrighti
Arizona fescue	Festuca arizonica
Pine drop seed	Blepharonueron trcholepis
Six weeks three-awn	Aristida longiseta
Fringed brome	Bromus ciliatus
Orchard grass	Dactylis glomerata

Forbs

Loco weed	Asragalus spp.
Iris	Iris missouiensis
Yarrow	Achillae lanulosa
Lupine	Lupinus spp
Geranium	Geranium spp.
Cosmos	Cosmos spp.
Cinquefoil	Potentilla spp.

Animal species

The area provides habitat for the usual complement of animals found in the ponderosa pine habitat. These include elk, mule deer, turkey, and black bear. A cumulative effects analysis was completed for the Greer Urban Interface Analysis (Nelson, McMillan 2004). The analysis was amended to include potential cumulative effects of developing a conceptual housing development as found in "Evaluation and Estimate of Projected Development Costs for Subdivision of 337 acres in Greer, Apache County" (Murphy Engineering 2003). Based on the amended cumulative effects analysis, there would be no unacceptable impact to water resources with the implementation of the conceptual project. It is assumed that the

developer would strictly adhere to Federal, State and County regulations regarding the Clean Water Act for storm water discharge, impacts to wetlands, and floodwater management. Elk and deer use is primarily during the spring, summer and fall. Elk use the area as a travel way between higher elevation summer ranges and lower elevation winter ranges.

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

TES Species

The A-S completed a Biological Assessment and Evaluation (BAE) for this proposed exchange (Docs 71, 126, 148). All animal and plant species on the Region 3 Threatened, Endangered, and Sensitive (TES) species list were evaluated for impacts from implementing the land exchange. No federally-listed plant or animal species are known to inhabit the Federal lands. The proposed change of land ownership will not alter the habitat. Therefore, the BAE concluded that no TES species would be affected or impacted by the proposed action. Consideration has also been given to the potential for reasonably foreseeable development of the Federal lands once they leave Federal ownership. Based on the premise that the land being exchanged could be developed and that any development would legally occur under the Apache County Phase I, the BAE concludes that the only species that could be impacted by the reasonably foreseeable development is the Mexican spotted owl. The effects determination for this species was "may affect not likely to adversely affect".

The following lists the species considered and the determinations for each (Doc 71).

Endangered Species

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

This proposed change in ownership will have little effect on habitat as the resulting land uses will be essentially the same. Access for elk, deer, and other potential prey species will stay the same. The proposed project would not affect potential wolf habitat. The project area is within the secondary recovery zone for the wolf. It was the determination of the BAE, that this project is not likely to jeopardize the continued existence of the nonessential, experimental population.

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

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

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

Threatened Species

Bald Eagle (Haliaeetus leucocephalus) Migratory Bald eagles occur in the area during winter months. No winter roosts were found or are known in the analysis area. Preferred roosting habitat is generally canyon habitat which Tracts A and B are not. The project will have a neutral effect on potential

prey species for bald eagles. The BAE determined that this proposed land exchange will not affect the bald eagle or its habitat.

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

Mexican spotted owl (Strix occidentalis lucida) The exchange area was surveyed by the Forest Service in 2000 and 2001 for Mexican spotted owls (MSO) with negative results. The habitat is ponderosa pine and could be suitable for MSO foraging. The nearest PAC (Hall Creek) adjoins Parcel A for 1/8 mile on the west. In June 2005 a new MSO pair was observed west of and some distance from the exchange area (Doc 148).

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

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

Proposed Threatened Species

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

Mammals

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

Birds

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

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

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

Plants

Mogollon Paintbrush (Castilleja mogollonica)
Gila Groundsel (Senecio quarens)
White Mountain Clover (Trifolium longipes var. neurophyllum)
The three sensitive plants will be considered together. The plants were not found in field surveys for this BAE. They are not listed in the AGFD data base as occurring in the area. The proposed land exchange will not alter the habitat in a way detrimental to this species. There will be no long term effect on this habitat which would adversely affect the Mogollon Paintbrush, Gila Groundsel, or White Mountain Clover. Potential future development as authorized under Apache County Phase I would not result in changes in Forest-wide habitat and population trends.

Direct and Indirect Effects

Proposed Action
The proposed action would result in no negative effect on TES plant and animal species and their habitat. Formal consultation with the USDI Fish and Wildlife Service was not necessary but did require informal concurrence for the not likely to adversely affect Mexican spotted owl determination (Doc 140). A Supplemental Analysis resulting from a new MSO occurrence was prepared by the Springerville Ranger District Staff Wildlife Biologist in July 2005. It was his determination that the land exchange will have no effect to these MSO (Doc 148). This alternative meets the intent of the Endangered Species Act of 1973. The access for local elk, deer, turkey, and bear to use forage and water on the Federal lands would not change. Conditions on the non-Federal lands would improve for wildlife as these lands would be managed and protected for their benefit.

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

Cumulative Effects

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

Cumulative effects on vegetation and wildlife will be limited under either the No Action alternative or the proposed action. The proposed action may afford greater long-term protection to listed species and management indicator species. This would result from the acquisition of important riparian and wildlife habitat currently located on private lands. With respect to management indicator species, Forest-wide analyses do not indicate management-induced trends that would be influenced by action or inaction at the scale of the proposed land exchange. Any foreseeable future development on the Federal lands would not result in any measurable effects to TES plant and animal species and their habitat or MIS (Doc 126).

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

Management Indicator Species (MIS)

In addition to requirements for the Forest Service to consider needs for TES species, there is also a requirement to consider MIS as they may be affected by management decisions. This requirement stems from the LMP formulated for the A-S. The concern for the MIS requirements is to insure that the long-term viability of these species is not harmed as they represent habitat conditions important to other species as well. An analysis of MIS as they would be affected by the proposed land exchange was made and is in the project record (Doc. 71). The following is a summary of the findings:

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

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

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

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

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

Conditions for MIS in the Riparian Management Area would improve. Conditions for MIS in the 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
MA-1(4-1,5-1)Forested land 836,288ac.					
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 galloparvo)	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
MA-2 (4-2,5-2) Woodland 611,025 ac.					
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
MA-3(4-3,5-3) Riparian 6,870 ac.					
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-inverebrates	Water quality	Yes	Yes	Upward	+118
MA-4(4-4,5-4) Grasslands 243,126 ac.					
Antelope (Antilocarpa americana)	Early Succession	No	No	Upward	+177
Elk (Cervus elaphus)	Early Succession	No	No	Upward	+177

SOIL AND AIR

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

Air shed conditions which are good are similar on the Federal and non-Federal parcels and typical of the A-S, except for brief periods when prescribed burning or wildfire are occurring.

Direct and Indirect Effects

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

Future development on the Federal lands in accordance with County and State regulations would result in no unacceptable soil loss.

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

Cumulative Effects

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

Future development on the Federal lands would be subject to Apache County subdivision standards and ADEQ regulations. The Zoning Ordinance of Apache County, Subdivision Resolution and Phase I amendment and State laws and regulations are written and enforced to minimize impacts to soil and air from human activity (Doc 3). Development done in accordance with County and State regulations would result in no measurable soil loss.

The air quality should remain relatively the same throughout most of the year. A slight change in air quality could be expected during construction occurring on the Federal land. The addition of wood smoke could be expected from the burning of construction debris and warming fires during construction. Additional wood smoke would be expected from fireplaces and woodstoves and debris burning occurring at residences post construction. The additional smoke would be negligible and should quickly dissipate due to prevailing winds out of the southwest. Apache County does not restrict fireplace use at any time during the year. The Greer WUI project will comply with ADEQ requirements for reporting and accomplishment. Monitoring of smoke emissions will be completed as part of the permitting process (Doc 134). No unacceptable effects to air quality are expected for the Greer Lakes Improvement Project (Doc 132). No cumulative impacts are anticipated.

LAND USE

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

> A 10-year "Estate for Years" comprising 4.00 surveyed acres, with the easement from the existing county road to the residence. Said "Estate" encompasses the existing structural improvements only, as described in that certain Purchase Contract, and the Rider to Purchase

Contract dated July 8, 1994, and as set forth in that certain Warranty Deed recorded December 29, 1994, Greenlee County, Arizona, in Docket 197, pages 564-566. The lessee of the "Estate for Years" is Lillian Rose Coleman Awtrey only, and upon termination, Ms. Coleman Awtrey shall vacate and take only her personal property from the residence, corrals, and physical improvements. Said "Estate for Years" automatically terminates on the 10-year anniversary of the recorded date of the sale of the land (December 29, 1994); therefore, the "Estate for Years" terminates December 29, 2004. Said structural improvements shall not be removed.

The structural improvements referred to above were removed by the non-Federal party in November 2004. Remaining encumbrances are an existing Navopache Electric Coop, Inc. power transmission line and telephone line that traverse the parcel in two locations along the property's southern boundary that are parallel to the Greenlee County Blue River Road (Forest Road 281).

The Thompson Ranch and Rancho Alegre parcels are unencumbered.

The Federal parcel contains the following existing encumbrance and recreation development.

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

Cross-country ski trail, Section 35, T. 8 N., R. 27 E. (see map, Appendix A)

Direct and Indirect Effects

Proposed Action

The Forest Service would relocate that section of the designated cross-country ski trail located in Federal Tract B to the south of the exchange boundary. This is expected to meet current and future user needs. The area encumbered by the power/telephone utility line would be added to the company's master permit.

No Action

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

Cumulative Effects

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

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

Recently inquiries have been received by the Springerville District Ranger regarding a proposal for a land exchange involving the 19 existing summer recreation residence permits that collectively make up the Little Colorado Summer Home Tract on approximately 35 acres located within the GRA. Although a formal exchange proposal has not been received it is possible in the foreseeable future that one involving

these recreation residences may be submitted. There are no other inquiries or formal proposals for land exchange within the GRA at this time. A request by the Forest Service for Fiscal Year 2006 funding to purchase approximately 10 acres of land located along the Little Colorado River within the GRA was previously submitted to the Washington Office. It did not receive funding. Any offer to include this land in a future exchange proposal would also be considered. An exchange of the summer recreation residence tract out of Federal ownership or Forest Service acquisition of the 10 acres along the Little Colorado River would result in a 1% or less change to the number of acres of Federal and private lands in the GRA. It is likely that any effects as a result of these two potential actions while cumulative would not be adverse or significant.

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

HERITAGE RESOURCES

Affected Environment

The A-S prepared the cultural resource survey report for the 337.74 acres of Federal lands. No archeological properties were identified on Federal lands (Doc 61).

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

Direct and Indirect Effects

Proposed Action

The cultural resource survey of the Federal lands was approved by the A-S Forest Supervisor on June 2, 2004 (Doc 61). The proposed action meets the requirements of the National Historic Preservation Act and E.O. 11593.

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

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

No Action

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

Cumulative Effects

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

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

GRAZING RESOURCES

Affected Environment
The Federal lands are included in the Sheep Springs Grazing Allotment currently permitted to Dwayne Dobson. This allotment and the Beehive Allotment are managed as a single unit. Sec. 402 (g) of FLPMA requires that a 2-year notification be provided to permit holders in which significant changes to grazing permits may take place. Mr. Dobson was notified of the proposed action in November 2001 (Doc 18). The proposed action would not conflict with the requirements of Sec. 402 (g) of FLPMA.

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

Direct and Indirect Effects

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

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

Norman Brown a grazing permittee on an adjacent allotment previously trailed his livestock through Federal Tract A just north of the existing National Forest/private land boundary by use of a crossing permit from the Ranger District. Mr. Brown is aware of the exchange proposal and has been informed that he would be required to coordinate with the Springerville District Ranger on an alternate route for trailing his livestock.

No Action
Permitted numbers in the Sheep Springs Allotment would remain the same. The grazing situation on the non-Federal lands would most likely remain the same.

Cumulative Effects

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

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

MINERAL RESOURCES

Affected Environment
A Forest Service Mineral Report was prepared (Doc 27). The New Mexico Zone Geologist concluded that the subject non-Federal and Federal lands have low potential for oil, gas, coal and geothermal resources. The lands have no known value for sodium, potassium or other leasable minerals. The geological processes, geologic environments and reported occurrence of mineral resources in the region indicate low potential for the accumulation of locatable minerals within the subject lands. All the subject

lands have moderate potential for salable minerals in the form of common cinders, sand or gravel. There are no known mineral material sources within the Federal or non-Federal lands that have been identified by the state Highway Department as suitable for road construction. The report recommends that the exchange proceed and should mineral rights be reserved on the non-Federal lands, it recommends the deed specifically state that cinders, sand and gravel are not part of the mineral estate. The report was forwarded to the BLM and concurrence was received on August 26, 2005 (Doc 27).

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

Direct and Indirect Effects

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

No Action
Mineral estates would remain the same

Cumulative Effects

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

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

HAZARDOUS MATERIALS

Affected Environment
The non-Federal and Federal lands proposed for exchange have been examined in accordance with Section 120 (h) of CERCLA. No hazardous materials are suspected or were found. No evidence was found to indicate that any hazardous material was stored for one year or more or disposed of or released on the property. Household refuse from nearby campgrounds was disposed of by the Forest Service in a small (less then 1 acre in size) pit located in the central portion of Federal Tract A during the 1950's through the mid 1960's. The pit was closed and covered with soil over 40 years ago and has been re-vegetated. It is undisturbed and does not appear from the surface to pose a threat to the human health or the environment. There is no evidence that hazardous substances, or petroleum products, or other contaminants are present. Subsurface characterizations have not been conducted. The Forest Service Regional Environmental Engineer's recommendation is that there is no need to disturb or excavate the area from its current state (Doc 23).

Direct and Indirect Effects

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

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

Cumulative Effects

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

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

WETLANDS AND FLOODPLAINS

Affected Environment

A Water Resources Evaluation for the proposed exchange was prepared October 2, 2001 and updated May 6, 2002 (Doc 3); the respective acreage of floodplains and wetlands contained on both the non-Federal and Federal parcels is displayed in the Summary Table in the Water Quality section of this document. The non-Federal parcels contain a total of 118 acres of wetlands and 3.15 miles of floodplain. The Federal parcels contain 0 acres of wetlands and 0 miles of floodplain.

Direct and Indirect Effects

The proposed action would result in a net gain of 118 acres of wetlands and 3.15 miles of floodplain and afford the resources greater protection under Federal jurisdiction. This would complement the Forests' ongoing efforts to protect and increase riparian habit which would result in a significant increase of wetland and floodplain resources. The proposal is consistent with the intent of Executive Order 11988, Floodplain Management and Executive Order 11990, Protection of Wetlands.

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

Cumulative Effects

Wetlands and floodplains in Federal ownership are subject to more stringent management objectives than those in private ownership. Federal acquisition would contribute towards reversing the long term trend of declining wetland and riparian habitat. No wetlands or floodplains are located on the Federal lands therefore, none would leave Federal ownership. It is very unlikely that future development of the Federal lands would affect floodplain on adjacent National Forest lands. Any future development on the Federal lands would be subject to Apache County subdivision standards and ADEQ regulations. Subdivision development would involve construction of a community water system due to the high cost of individual wells. Each lot would be connected to the local sanitary district's facilities as on-site observations reveal that much of the property has rock outcrops which indicate soils not suitable for on-site disposal (Doc 120). No adverse cumulative impacts are anticipated.

Cumulative effects analysis for the Greer WUI project indicated there would be no unacceptable impact to water resources with the implementation of the conceptual development. It is assumed that the developer would strictly adhere to Federal, State and County regulations regarding the Clean Water Act for storm water discharge, impacts to wetlands, and floodwater management. Analysis for the Greer Lakes Improvement Project did not identify any adverse effect on wetlands and floodplains.

CAVES

The proposed action meets the intent of the Federal Cave Protection Act of November 18, 1988. No caves are located on the Federal land. No caves were located on the Greer WUI and Greer Lakes Improvement Project areas. No special management areas designated in the A-S LMP occur on the Federal lands. The proposal will result in no effect to special areas.

SOCIAL AND ECONOMIC FACTORS

Affected Environment

The Forest Service makes payment to counties with respect to Federal Lands under three statutes known as the Twenty-Five Percent Fund, the Payments in Lieu of Taxes (PILT) Act and the Secure Rural

Schools and Community Self-Determination Act of 2000. The Twenty-Five Percent Fund of May 23, 1908, provides for counties to receive 25 percent of the gross receipts and revenues from timber sales and other income generating activities on Federal lands. The PILT Act of 1976 authorizes payments to counties based on the number of acres of "entitlement lands" within the county. The Secure Rural Schools and Community Self-Determination Act of 2000 stabilizes payments for fiscal years 2001 through 2006 to counties that received a 25-percent payment during fiscal years 1986 through 1999 to provide funding for schools and roads that supplements other available funds. For purposes of this discussion, entitlement lands are NFS lands. Non-Federal landowners make payments to counties in the form of property taxes.

Direct and Indirect Effects

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

Cumulative Effects

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

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

Taxes collected by the two Counties in 2002 were:

Apache County: $3665.76 for the Thompson Ranch and Rancho Alegre parcels.

Greenlee County: $68.30 for the Blue River Ranch parcel.

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

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

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

Any future development on the Federal lands in Apache County would add to the County's real estate property tax base. Based on an estimate of per annum tax (2004) revenues averaging $1,000 per developed one-acre lot (also containing a single family dwelling) in the Greer area Apache County would stand to receive approximately $250,000 in additional tax revenues, assuming 250 lots and single family residences would eventually be developed (Apache County Tax Assessor records).

Future development on the Federal lands would most likely result in a localized increase in noise and traffic during construction and post construction. If development on the Federal lands were to occur, the existing nature of these lands, which some may consider pristine, would change. It is assumed the setting would likely become a development of one-acre or larger home sites with up to 250 single family homes (Doc 120). The Greer area is predominantly comprised of second homes/vacation residences and hotels/lodges. This kind of use would not be expected to change. Based on the Little Colorado Landscape Assessment (CEEM Report) (Doc 135), there are approximately 130 year round residents with seasonal

residents swelling the population up to 1500. Year round residents represent approximately 8.7% of the total (130/1500 = .0866). Using this percentage it would be expected that the number of year round residents would increase by 54 people with the addition of up to 250 single family residences. Seasonal residents would increase by up to 571 seasonal residents during peak periods. It is unlikely that all of the estimated 625 people would be present in the area at the same time, even during peak periods. This increase in the number of people is not expected to result in an unacceptable increase in post construction noise and traffic in the Greer area.

It is assumed that the developer would strictly adhere to Federal, State and County regulations regarding the Clean Water Act for storm water discharge, impacts to wetlands, and floodwater management. Therefore, pollution resulting from development construction is not expected. Slight seasonal increases in wood smoke from fireplaces and vehicle exhaust would be expected post construction. A slight increase in human associated wildfire and structural fire risk would be expected with any development. However, additional water for fire fighting and quicker response times would be available for suppression.

Any potential development in the Greer area along with the addition of year round and seasonal residents would result in an increase in business for local merchants.

No significant adverse or beneficial cumulative impacts are anticipated with this proposal in conjunction with the Greer WUI and Greer Lakes Improvement Project.

ADMINISTRATIVE FACTORS

Affected Environment

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

Direct and Indirect Effects

The proposed action would contribute to consolidation of Federal ownership and eliminate 14 mixed ownership landline corners and approximately 6.1 miles of landline boundaries between National Forest and other lands. Forest-wide landline location, posting, and maintenance, as well as potential boundary disputes, along the Federal, as well as non-Federal lands would be reduced if the exchange is consummated. This would result in an annual estimated savings of over $870 associated with the maintenance of property boundaries (Doc 76).

Cumulative Effects

The proposed action would result in an overall reduction in the cost for FS landline maintenance of boundaries between National Forest and private lands.

Any future development on the Federal lands may result in some management problems associated with trespass on the adjacent National Forest even if the common boundaries are adequately posted. Many times encroachments onto the National Forest, either unintentional or intentional, occur from adjacent private property. The possibility increases when a greater number of separate property owners share a common boundary with the National Forest. No cumulative impacts are anticipated.

The Greer WUI and Greer Lakes Improvement Project are not expected to impact administrative and property boundaries. No cumulative impacts in conjunction with these projects are anticipated.

VALUES OF ADJACENT PROPERTIES

Affected Environment

Currently, in the Greer area, some portion of the approximately 1060 acres of the 2712 total acres of private land border State Highway 373. The 337.74 acres of Federal land equals 32% of this total. Only the eastern boundaries of the Federal lands actually boarder SH 373. Private property not owned by the proponent shares a common boundary with the Federal lands along a portion of the south and west sides of Tract A and the northern boundary of Tract B. Almost all of the private property adjoining Tract B is comprised of residential lots containing single family dwellings used as second homes or summer residences (2004 Apache County tax parcel identification). Even if this was not the case, two previous exchanges in the Greer area in 1993 and 1994 did not result in a decrease in private land values, to the contrary, private land values have continued to appreciate. There is no reason to expect any other outcome with this exchange. Therefore, it is not expected that the amount of private land that is normally on the market in the Greer area and the corresponding values would be unduly influenced by the exchange.

Direct and Indirect Effects

The proposed action would result in an additional 337.74 acres, a 12 per cent increase, of private land in the Greer area. The proponent has stated he has no plans to place the Federal land on the market and that the land would only be added to his local real estate holdings should the exchange be completed (Doc 17).

If all of the Federal land was to be placed on the market at the same time one might expect there would be some effect on local land values. It is very unlikely that the entire acreage would go on the market at the same time as a subdivision of this size once planned and approved by the County would most likely be developed in phases. Existing private lots immediately adjacent to the National Forest would probably no longer demand a “premium” if re-sold, as they would no longer adjoin the Forest boundary. One would not expect the market value of the lots themselves to change.

Cumulative Effects

Foreseeable future use of the Federal and non-Federal lands is expected to remain relatively similar to their current uses; hence no incremental effects from the proposed action would be expected. The possibility of future development on the non-Federal lands (subdivision and residential development) and conversion from ranching to residential use exists under the No Action alternative. Any future development that may occur on the non-Federal lands would not likely result in unacceptable consequences to adjacent land values as the properties are undeveloped Federal or State of Arizona lands and no plans exist for future development on the properties. If in the future all of the Federal land was placed on the market at the same time one might expect an effect on local land values, in particular, the adjacent private properties. The likelihood of this occurring, that the entire acreage would go on the market at the same time, is very remote as a proposed subdivision of this size once planned and approved by the County would be developed in phases. Two previous exchanges in the Greer area in 1993 and 1994 did not result in a decrease in private land values to the contrary private land values have appreciated and continue to appreciate. There is no reason to expect a decrease in the values of adjacent properties as a result of this exchange. No cumulative impacts are anticipated.

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

PUBLIC SERVICES and ISSUES

The majority of residential development in the Greer area is for summer residences or second homes. There is no expectation that the exchange would result in a negative impact to schools in Springerville and Eagar. Any foreseeable future development would likely result in a slight increase in the need for additional public services. Based on the CEEM Report, there are approximately 130 year round residents with seasonal residents swelling the population up to 1500. Year round residents represent approximately

8.7% of the total. Projecting this percentage it would be expected that the number of year round residents would increase by approximately 54 people with the addition of up to a maximum of 250 single family residences. Seasonal residents would increase by up to 571 seasonal residents during peak periods. It is unlikely that all of the estimated increase of 625 people would be present at the same time in the area, even during peak periods. This estimated increase in both year round and seasonal residents is not expected to adversely impact the demands placed on public services. The effect on residential support services in the communities of Springerville and Eagar would be no greater than what is currently experienced when vacationers are present in the area. Additional real estate property taxes collected by Apache County would adequately provide funds to pay for any increases in public services.

The land exchange would not result in an increase in demand for additional public services, i.e. structural fire protection, law enforcement, emergency medical services, solid waste disposal, and road maintenance, if the Federal lands remain undeveloped.

Issue #1. Loss of Outdoor Recreation Opportunities in the Greer Area

Affected Environment

The Federal lands are located within an area that has been locally identified as the Greer Recreation Area. The name was originally assigned to the area during the implementation of the Apache-Sitgreaves National Forests Off-Road Vehicle Management Plan in April 1977 and it has never been assigned any special management status which would require Congressional or Presidential action. The Greer Recreation Area includes some but not all of the Federal lands within boundaries identified as State Highway 260 south for approximately seven miles and two miles to the east and west sides of State Highway 373 (Doc 143). The Greer Recreation Area as defined in the Purpose and Need for Action section of this document contains approximately 16,939 acres of which approximately 14,227 acres are Federal lands. The two Federal tracts proposed for exchange share common boundaries with existing private lands; Tract A adjoins land owned by Herbert Owens and Tract B adjoins 17 individually owned residential lots in the subdivision known as Crosby Acres. The tracts are located in the ponderosa pine vegetative type and are currently used for a variety of undeveloped outdoor recreation pursuits including; hiking, horseback riding, bird watching, hunting, and unauthorized ATV riding. A developed outdoor recreation site known as Squirrel Springs Day Use Site is immediately south of the southeast corner of Tract B. It offers toilets, picnic tables and a gravel surfaced access road and parking lot. This site serves as a trailhead for several cross-country ski trails that mostly follow closed logging roads/skid trails. The cross-country skiing trails are identified with plastic blue diamond shaped markers attached to trees. The northern trail is partially located within Tract B. Should the land exchange be approved the FS would relocate that portion of the trail to the south and onto the adjacent Federal land.

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

Proposed Action

The Greer Recreation Area contains 16,939 acres. The 14,227 acres of Federal land within the Greer Recreation Area would be reduced by 337.74 acres. As a result, the Federal land available for outdoor recreation within the Greer Recreation Area would be reduced by 2.4%. There would be an increase of 396.35 acres of riparian influenced National Forest System lands available for public outdoor recreation use elsewhere on the Forest. The approximately ¾ mile of existing cross-country ski trail would be relocated and the result would be no loss of skiing opportunity. The Greer Recreation Area would still contain a sizable land base available for outdoor recreation for both residents and visitors. On a forest-wide basis there would be an overall increase of 58.61 acres available for outdoor recreation uses, such as fishing, camping and hiking.

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

Cumulative effects

National Forest System lands available for outdoor recreation use in the Greer Recreation Area would be reduced by 337.74 acres or 2.4%. National Forest lands would no longer be contiguous to a number of private lots along the southern boundary of Crosby Acres subdivision resulting in loss of immediate access to the National Forest by the affected landowners. An additional 396.35 acres of riparian influenced lands would be available for public outdoor recreation uses. The only other actions currently being considered within the Greer Recreation Area that may have a future effect on the total number of Federal acres available for outdoor recreation use are a land exchange proposal for approximately 35 acres involving 19 existing summer recreation residences and a FS proposal to purchase approximately 10 acres of floodplain along the Little Colorado River. No cumulative impacts are anticipated.

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

Issue #2. Effect of Future Development on Federal Lands

Affected Environment
The Federal lands are located within the area previously described in the "Affected Environment" section of Issue #1. Approximately 2712 acres (16%) of the Greer Recreation Area's 16,939 acres is currently in private ownership. According to the CWPP the unincorporated community of Greer is centered on the Little Colorado River with a mixture of 1-acre residential lots, small commercial enterprises, and resort facilities. Commercial developments are centered along the State Highway 373 corridor within the currently developed section of the community. Planning for growth includes encouraging open space; controlling high-density uses in proximity to meadow land; enhancing aesthetics; encouraging single-family residences; resort uses, and convenience, personal service, and retail uses to serve residents and visitors; maintaining rural village quality and image; and protecting the public safety by prohibiting development in areas of floodplain, saturated soils, or steep slopes (Doc 142).

Proposed Action
The 14,227 acres of Federal land within the Greer Recreation Area would be reduced by 337.74 acres while the private land base would increase by the same 337.74 acres or approximately 12%. The Federal land does not contain areas of floodplain or saturated soils. Only a small area in Tract A contains any land with slopes and this area is not considered as having steep slopes. Except for naturally occurring rock inclusions and site specific design issues, the majority of the land would be available for future development under Apache County Planning and Zoning ordinances. The non-Federal party has stated he has no immediate plans for development on the Federal lands.

No Action
No change in the quantity and type of acres available for future development would occur under this alternative.

Cumulative effects

If the Federal lands were exchanged 12% additional acres of private land would be available for future development in the Greer area (see Appendix C for evaluation of Reasonably Foreseeable Actions). The rate at which the lands would be developed for legally acceptable uses and placed on the market is not

likely to adversely affect existing adjacent private property values, land uses or available public services and amenities.

The Greer WUI is expected to reduce fire risk within the Greer Basin. The Greer Lakes Improvement Project is expected to enhance developed outdoor recreation opportunities. These two projects would not result in additional demand for public services. These projects would not result in a loss of or increase in private lands available for future development. Therefore, no adverse cumulative effects to existing private lands or adjacent Federal lands are expected from the proposed land exchange.

Chapter 4 - Consultation and Coordination

The Forest Service consulted the following individuals, Federal, state and local agencies, tribes.

List of Preparers

3C Consulting:

Mel Wilhelm	Certified Wildlife Biologist

Forest Service Interdisciplinary Team:

Bruce Buttrey	Interdisciplinary Resource Specialist Springerville Ranger District, A-S
Barbara Romero	Recreation and Lands Staff, Springerville District Ranger, A-S
Joe Sitarzewski	Realty Specialist, Supervisor's Office, A-S

Other Forest Service Contributors:

The following people prepared resources information and specialized technical guidance during the analysis:

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Carolyn Koury	Forest Hydrologist
Chris Nelson	Forest Watershed Program Manager
Virginia Yazzie-Ashely	Range Staff, Springerville Ranger District
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Diane Tafoya	New Mexico Zone Geologist
Deryl D. Jevons	Forest Land Management Planning/NEPA Program Staff
Dennis Inman	ALP/GIS Program Manager
Mark Schwab	AZ Zone Geologist

Agencies and Persons Consulted

Tom Gatz	Wildlife Biologist	USDI Fish and Wildlife Service
Jennifer Graves	Wildlife Biologist	USDI Fish and Wildlife Service
Steven L. Spangle	Field Supervisor	USDI Fish and Wildlife Service
Ann Valdo Howard	Public Archaeology Programs Manager	Arizona State Historic Preservation Office

City of Show Low Arizona

Dennis Wiss	Manager	Show Low Airport
Robert F. Emmett	Co-interim City Manager	City of Show Low
Ed Muder	Co-interim City Manager	City of Show Low

Region 1 Arizona Game and Fish Department Pinetop Arizona

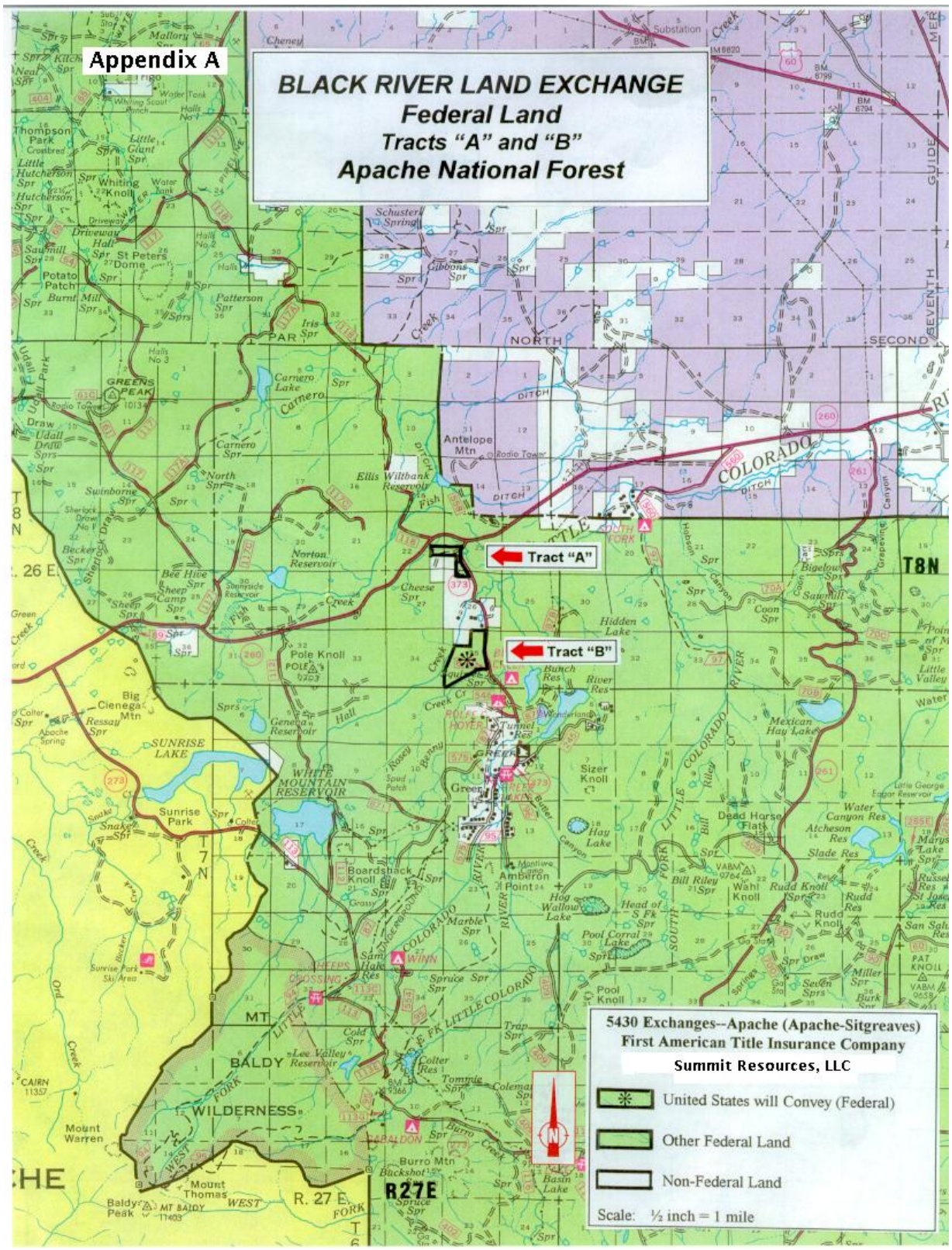
Sharon Adams	Habitat Program Manager	Arizona Game and Fish Dept.
Robert Vahle	Wildlife Program Manager	Arizona Game and Fish Dept.
Richard R. Remington	Region 1 Supervisor	Arizona Game and Fish Dept.

APPENDICES

A. Lands to be Exchanged

B. Original Scoping Letter (12/12/2002)

C. Actions Analyzed for Cumulative Effects


Appendix A
BLACK RIVER LAND EXCHANGE
Federal Land
Tracts "A" and "B"
Apache National Forest
Tract "A"
Tract "B"
T8N
T7N
R27E
R. 27 E.
5430 Exchanges--Apache (Apache-Sitgreaves)
First American Title Insurance Company
Summit Resources, LLC
United States will Convey (Federal)
Other Federal Land
Non-Federal Land
Scale: ½ inch = 1 mile

Appendix A

Legal Description of Federal land to be exchanged is as follows:

Apache National Forest
Springerville Ranger District

Gila and Salt River Meridian, Apache County, Arizona
Township 8 North, Range 27 East

Sec. 22 – S1/2NE1/4SE1/4 (Tract A)
Sec. 23 – lots 2 and 3; S1/2NW1/4SW1/4.
Sec. 26 – lot 5.

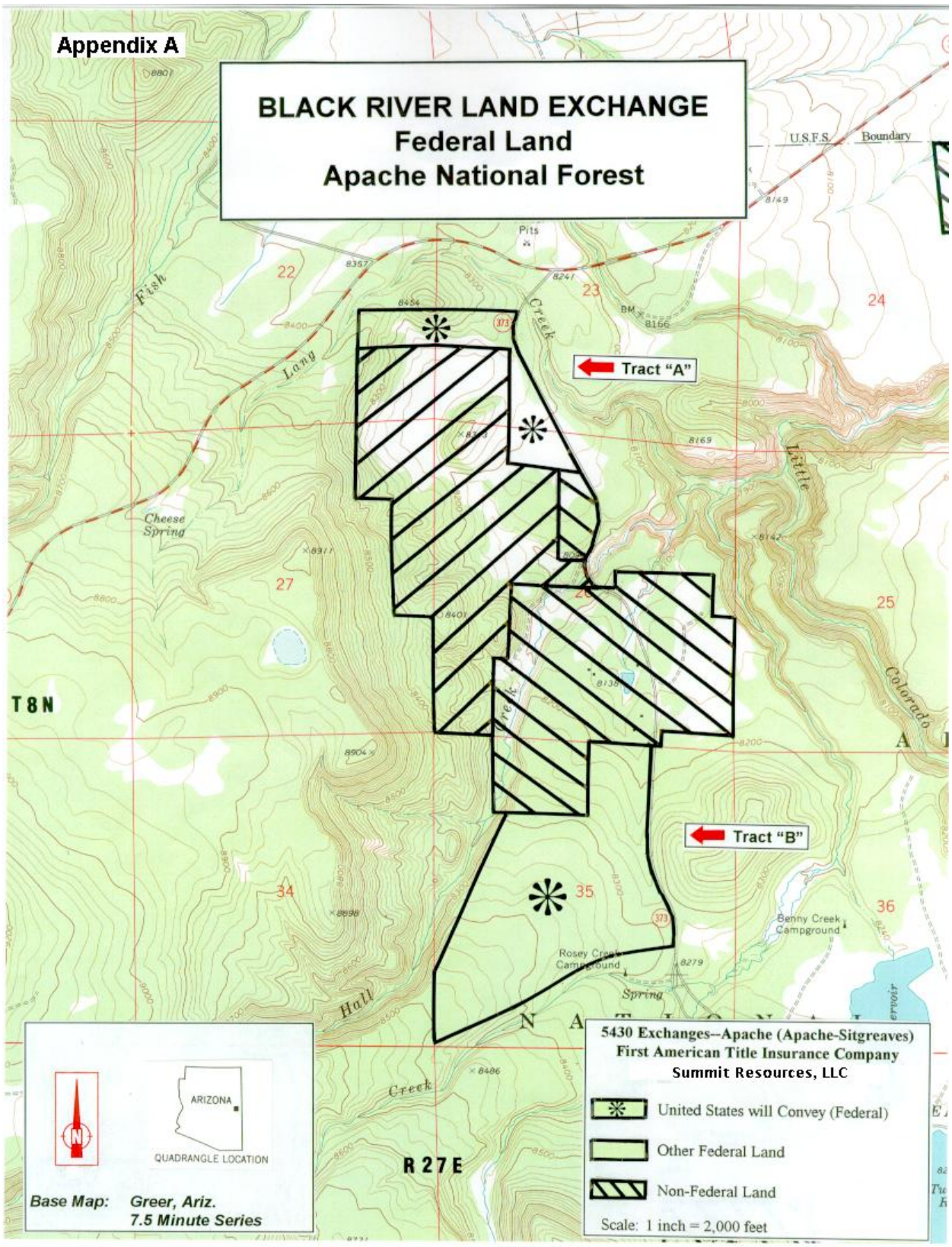
Containing 70.57 record and surveyed acres, more or less.

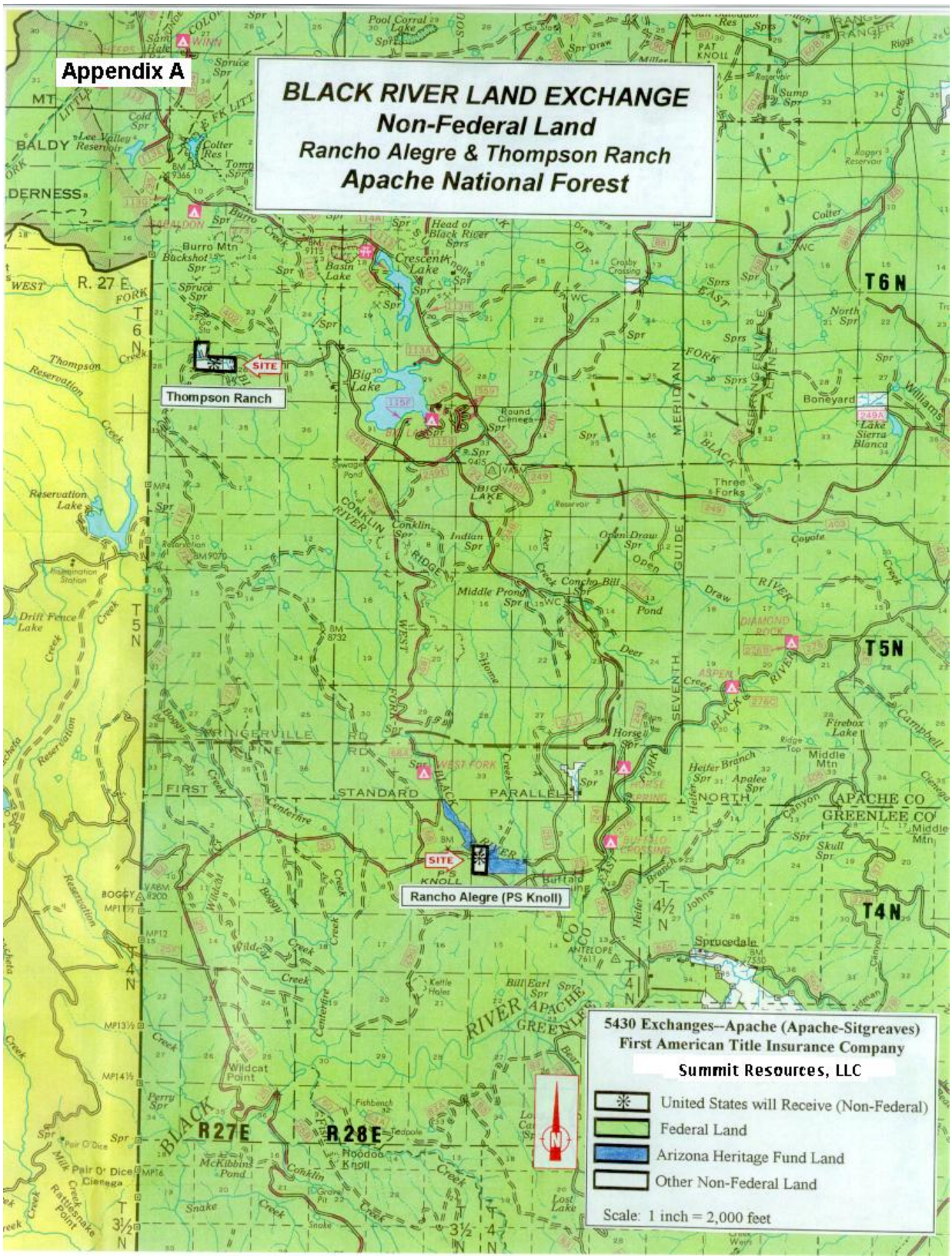
Gila and Salt River Meridian, Apache County, Arizona
Township 8 North, Range 27 East

Sec. 35 – lots 2, 4, 5, 8, 9, 10, and 12. (Tract B)

Containing 267.17 record and surveyed acres more or less.

ALTOGETHER containing 337.74 record and surveyed acres, more or less.


Appendix A
BLACK RIVER LAND EXCHANGE
Federal Land
Apache National Forest
Tract "A"
Tract "B"
T8N
R27E
Fish
Long
Creek
Cheese Spring
Little
Colorado
Hall
Creek
Benny Creek Campground
Rosey Creek Campground
Spring
U.S.F.S.
Boundary
Pits
22
23
24
25
27
34
35
36
ARIZONA
QUADRANGLE LOCATION
Base Map: Greer, Ariz.
7.5 Minute Series
5430 Exchanges--Apache (Apache-Sitgreaves)
First American Title Insurance Company
Summit Resources, LLC
United States will Convey (Federal)
Other Federal Land
Non-Federal Land
Scale: 1 inch = 2,000 feet


Appendix A
BLACK RIVER LAND EXCHANGE
Non-Federal Land
Rancho Alegre & Thompson Ranch
Apache National Forest
Thompson Ranch
SITE
Rancho Alegre (PS Knoll)
T6N
T5N
T4N
R 27 E
R27E
R28E
5430 Exchanges--Apache (Apache-Sitgreaves)
First American Title Insurance Company
Summit Resources, LLC
United States will Receive (Non-Federal)
Federal Land
Arizona Heritage Fund Land
Other Non-Federal Land
Scale: 1 inch = 2,000 feet

Appendix A

Legal Description of non-Federal lands, Rancho Alegre and Thompson Ranch to be exchanged is as follows:

Apache National Forest

Alpine Ranger District

Gila and Salt River Meridian, Apache County, Arizona
Township 4 North, Range 28 East

Sec. 3 – SW1/4 SW1/4. (Rancho Alegre)
Sec. 10 – NW1/4 NW1/4.

Containing 79.76 record acres, more or less.

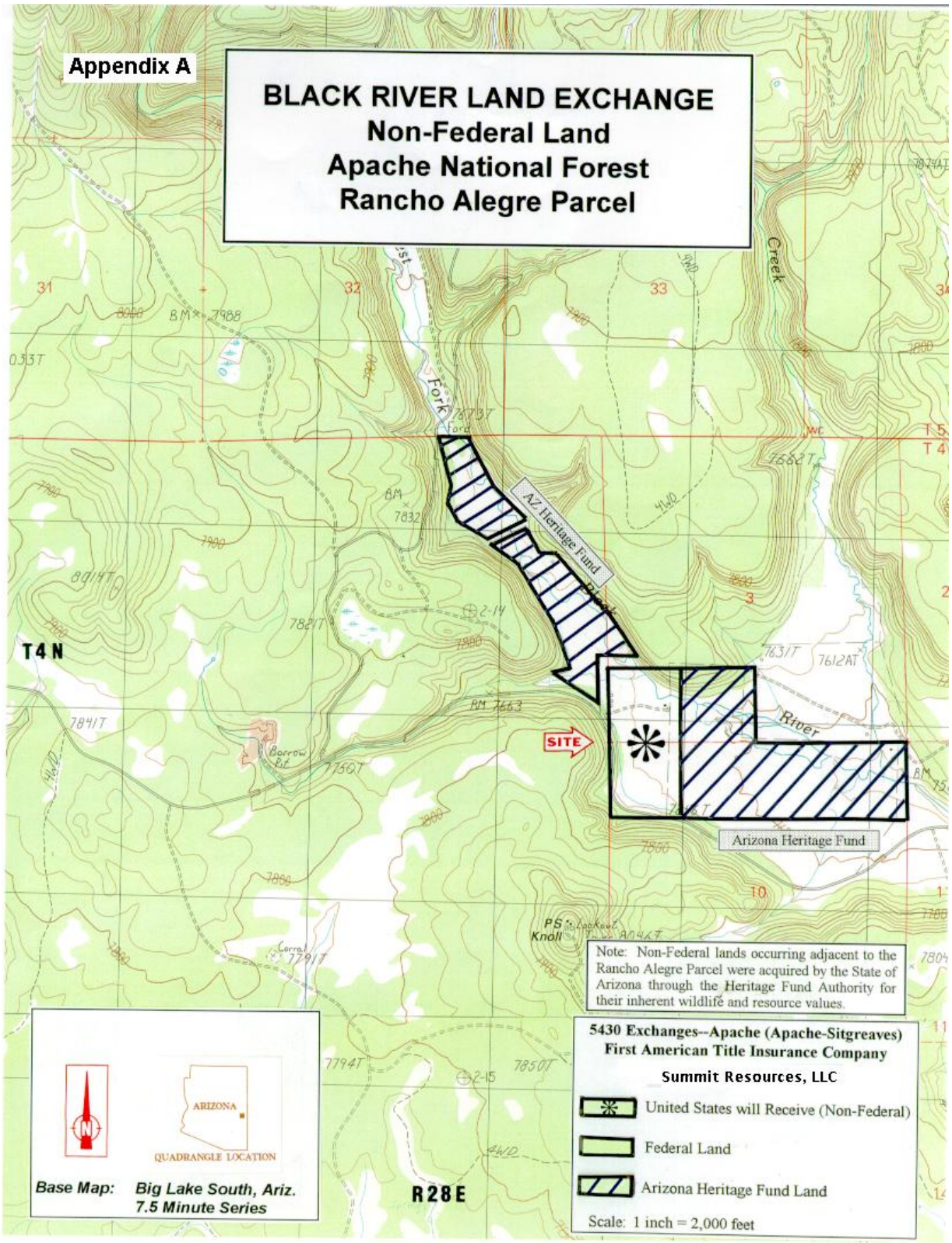
Springerville Ranger District

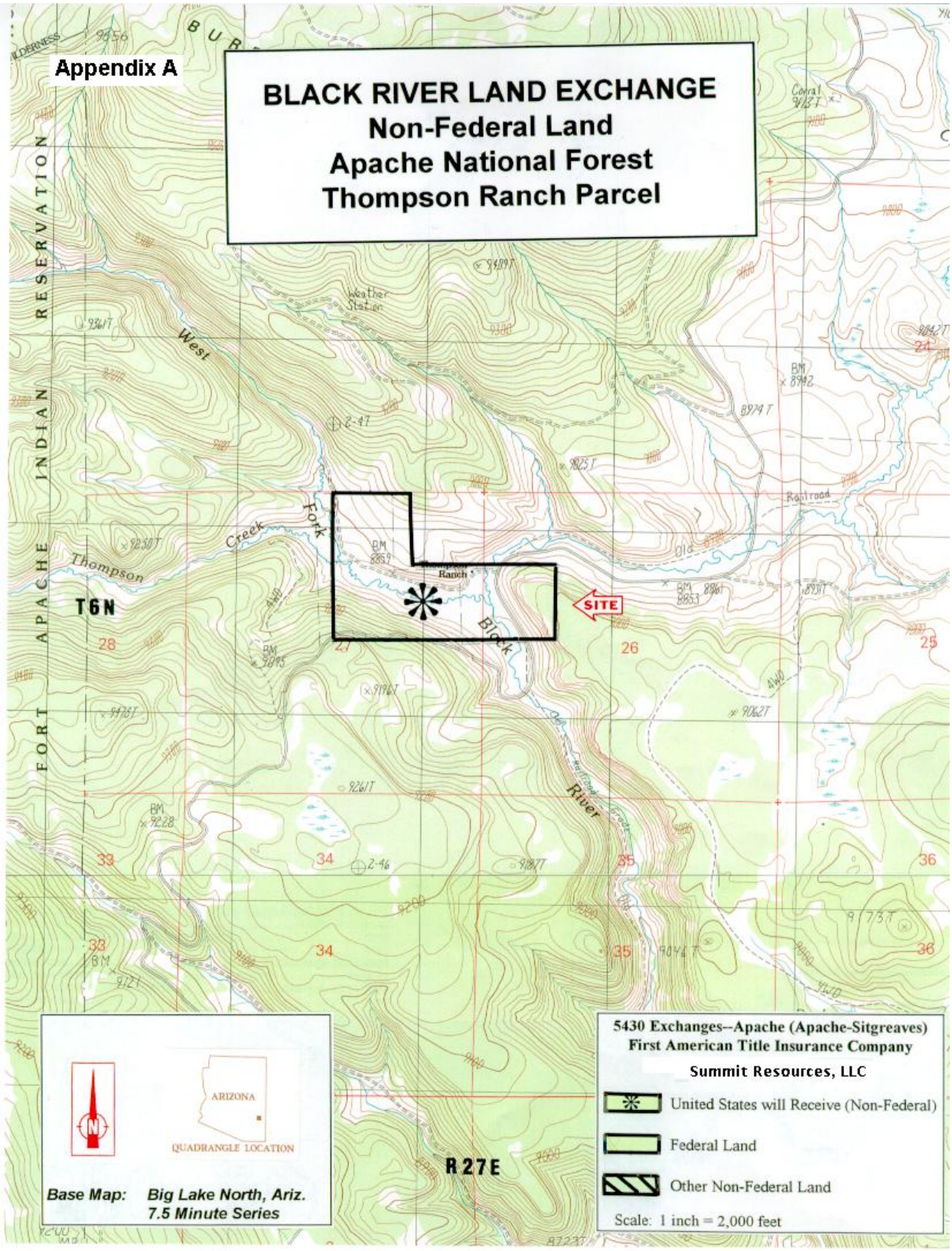
Gila and Salt River Meridian, Apache County, Arizona
Township 6 North, Range 27 East

Sec. 26 – SW1/4 NW1/4. (Thompson Ranch)
Sec. 27 – W1/2 NE1/4, SE1/4 NE1/4.

Containing 157.91 record acres, more or less.

ALTOGETHER containing 237.67 record acres, more or less


Appendix A
BLACK RIVER LAND EXCHANGE
Non-Federal Land
Apache National Forest
Rancho Alegre Parcel
AZ Heritage Fund
SITE
Arizona Heritage Fund
T4N
R28E
Note: Non-Federal lands occurring adjacent to the Rancho Alegre Parcel were acquired by the State of Arizona through the Heritage Fund Authority for their inherent wildlife and resource values.
5430 Exchanges--Apache (Apache-Sitgreaves)
First American Title Insurance Company
Summit Resources, LLC
United States will Receive (Non-Federal)
Federal Land
Arizona Heritage Fund Land
Scale: 1 inch = 2,000 feet
ARIZONA
QUADRANGLE LOCATION
Base Map: Big Lake South, Ariz.
7.5 Minute Series


Appendix A
BLACK RIVER LAND EXCHANGE
Non-Federal Land
Apache National Forest
Thompson Ranch Parcel
FORT APACHE INDIAN RESERVATION
West Fork Thompson Creek
Black River
Thompson Ranch
SITE
T6N
R27E
Weather Station
Corral
Railroad
Old
28
27
26
25
33
34
35
36
5430 Exchanges--Apache (Apache-Sitgreaves)
First American Title Insurance Company
Summit Resources, LLC
United States will Receive (Non-Federal)
Federal Land
Other Non-Federal Land
Scale: 1 inch = 2,000 feet
ARIZONA
QUADRANGLE LOCATION
Base Map: Big Lake North, Ariz.
7.5 Minute Series

Appendix A
BLACK RIVER LAND EXCHANGE
Non-Federal Land
Blue River Ranch
Apache National Forest
Blue River Ranch
SITE
BLUE
RANGE
PRIMITIVE
AREA
R30E
R31E
T3N
5430 Exchanges--Apache (Apache-Sitgreaves)
First American Title Insurance Company
Summit Resources, LLC
United States will Receive (Non-Federal)
Federal Land
Other Non-Federal Land
Scale: ½ inch = 1 mile

Appendix A

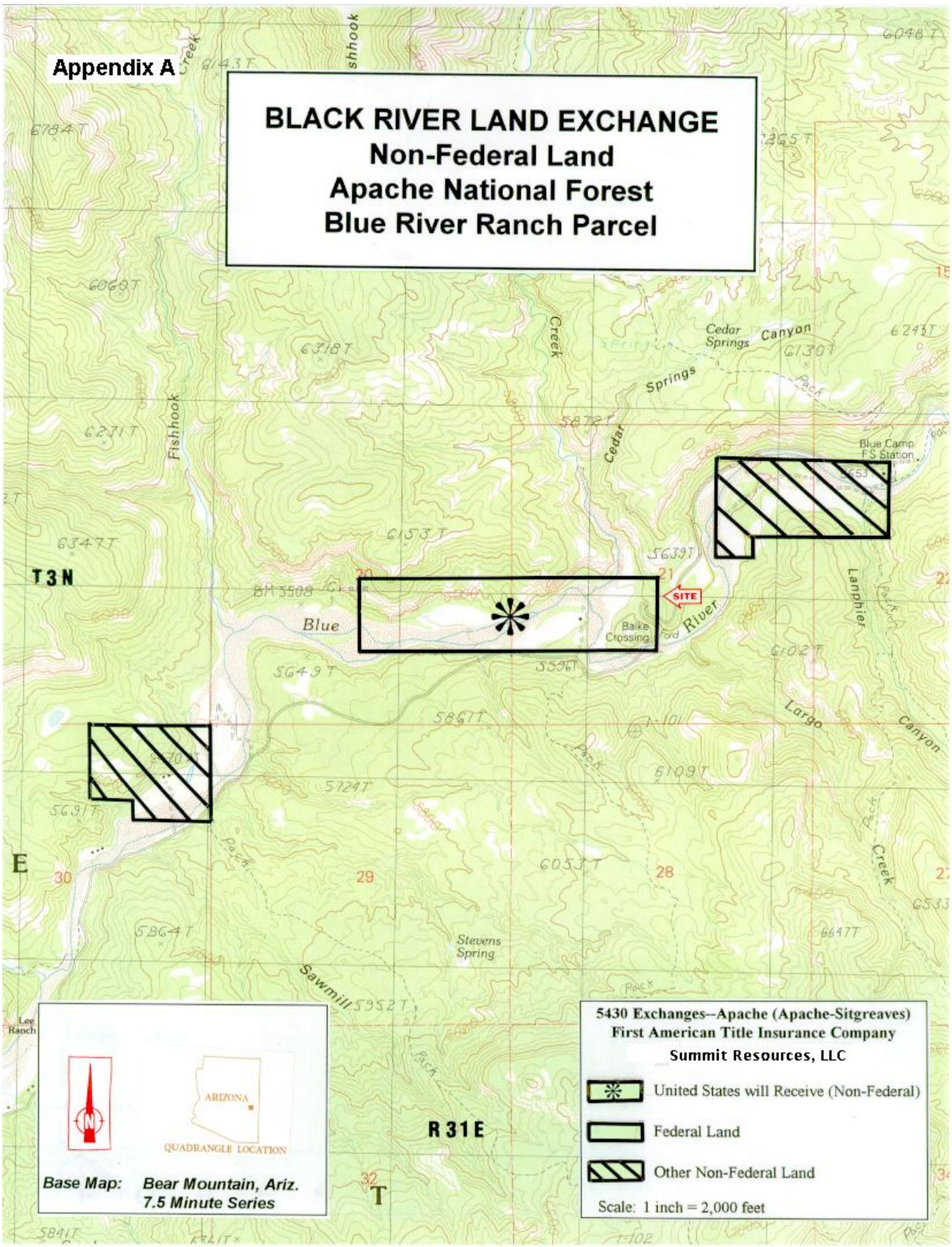
Legal Description of non-Federal land, Blue River Ranch to be exchanged is as follows:

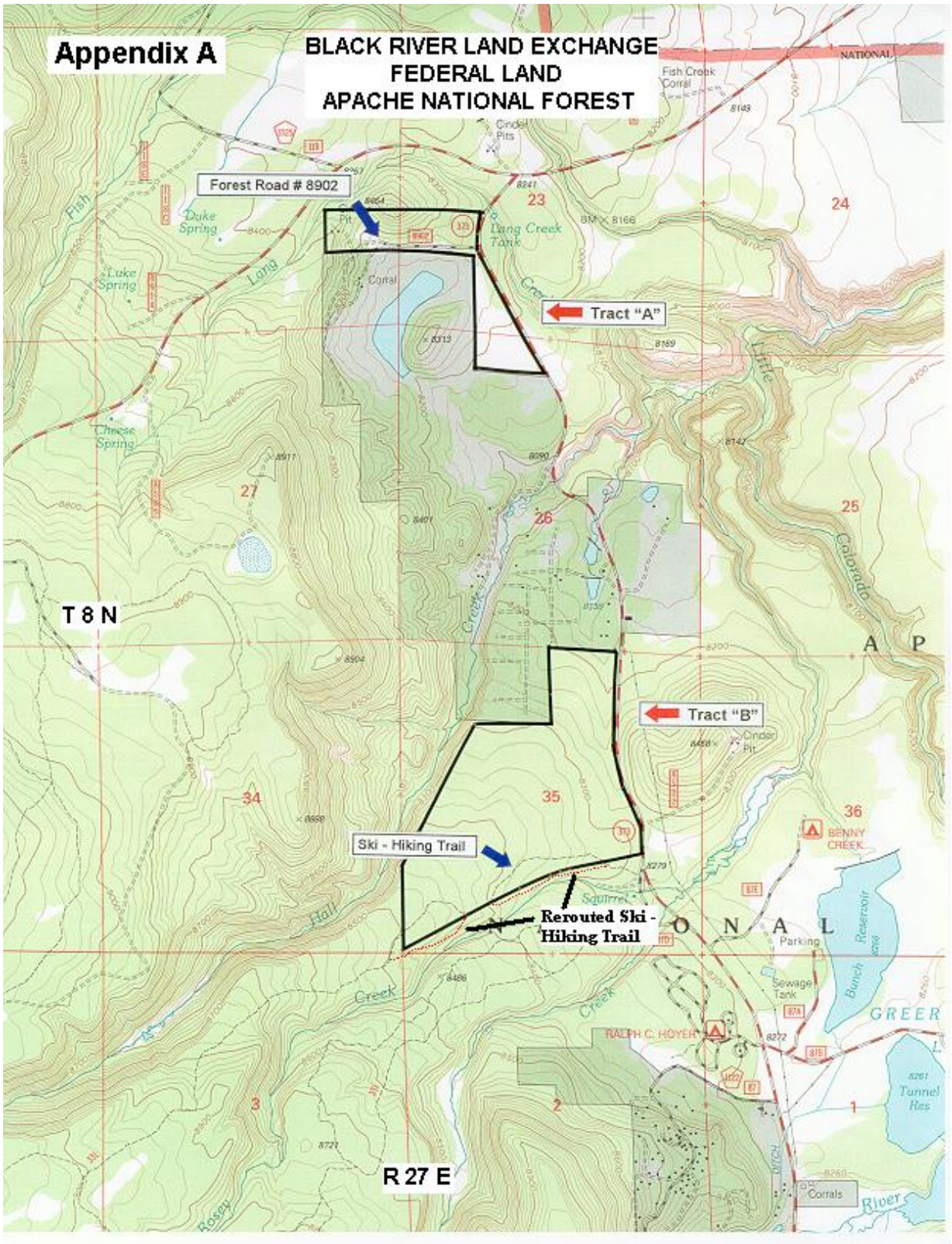
Apache National Forest
Alpine Ranger District

Gila and Salt River Meridian, Greenlee County, Arizona
Township 3 North, Range 31 East

Sec. 20 – N1/2 SE1/4. (Blue River Ranch)
Sec. 21 – N1/2 SW1/4.

Containing 158.68 record acres, more or less.


Appendix A
BLACK RIVER LAND EXCHANGE
Non-Federal Land
Apache National Forest
Blue River Ranch Parcel
Cedar Springs Canyon
Cedar Springs
Cedar Creek
Fishhook
Blue Camp F S Station
T3N
Blue
Baike Crossing
SITE
River
Lanphier
Largo Canyon
Creek
Stevens Spring
Sawmill
Lee Ranch
R31E
ARIZONA
QUADRANGLE LOCATION
Base Map: Bear Mountain, Ariz. 7.5 Minute Series
5430 Exchanges--Apache (Apache-Sitgreaves)
First American Title Insurance Company
Summit Resources, LLC
United States will Receive (Non-Federal)
Federal Land
Other Non-Federal Land
Scale: 1 inch = 2,000 feet


Appendix A
BLACK RIVER LAND EXCHANGE
FEDERAL LAND
APACHE NATIONAL FOREST
Forest Road # 8902
Tract "A"
Tract "B"
Ski - Hiking Trail
Rerouted Ski - Hiking Trail
T 8 N
R 27 E
23
24
25
26
27
34
35
36
3
2
1
Fish Creek Corral
Cinder Pits
Duke Spring
Luke Spring
Cheese Spring
Long Creek Tank
Corral
Little Colorado
Cinder Pit
BENNY CREEK
Squirrel
Hall Creek
Parking
Sewage Tank
Bunch Reservoir
GREER
RALPH C. HOYER
Tunnel Res
Corrals
River
NATIONAL

APPENDIX B

3C Consulting

P.O. BOX 92 VERNON AZ, 85940 (928) 537-7436

Date: December 13, 2002

Dear Interested Party:

The Forest Service is considering a land exchange proposal from First American Title Insurance Company, representing Precision Components Incorporated, Herbert W. Owens, to exchange 337.20 acres of Federal Land north of Greer Arizona for 400 acres of private land in the Apache-Sitgreaves National Forests.

There are two primary purposes for this proposal:

1. To allow the Forest Service to acquire isolated parcels of private land, within existing Forest boundaries, having high resource values such as perennial waters and threatened and endangered species habitats.
2. To enable the proponent, Herbert W. Owens, to add the selected parcels to his real estate holdings.

This exchange proposal is in accordance with management direction, standards and guidelines for Landownership Adjustment/Planning and Land Classification in the Apache-Sitgreaves National Forest Land Management Plan. The following describes both the Federal and Non-Federal land parcels involved in this proposal: (See Attached Maps)

Federal Lands To Be Exchanged. : Total Acres = 337.20

Tract A: (69.95 acres) This parcel is currently public land within the Apache National Forest and Springerville Ranger District. The land has an elevation of 8,160 to 8,400 feet above sea level and is generally gently sloping on the east portion with some steeper terrain on the north portion. Soils are heavy clay with some surface rock. Vegetation consists of ponderosa pine with an understory of various grasses. This tract is bordered by State Highway 373 and adjoins private lands on the south and west. There are no riparian, or wetland habitats in this tract.

Tract B: (267.25 acres) This parcel is currently public land within the Apache National Forest and Springerville Ranger District. The elevation varies from 8,180 feet on the north east corner to 8,500 feet on the southwest corner. The vegetation is primarily ponderosa pine with a grass understory. Soils are high in clay content with surface rock evident. This tract borders Crosby Acres, a developed subdivision on the north and State Highway 373 on the east. There are no riparian, or wetland habitats in this tract.

Private Lands To Be Acquired: Total Acres = 400 acres

Rancho Alegre Parcel: (80 acres) This parcel is private land within the Apache National Forest on the Alpine Ranger District. The land is situated on the West Fork of the Black

River at an elevation of 7,600 feet. The vegetation along the .25 mile stretch of river is riparian in nature, with Arizona alder and willows lining both banks. There are 3 acres of wetland habitat along the river. The upland portion of the property is an open meadow, dominated by spike muhly grass. The river and wetlands provide habitat for Apache trout, Chiricahua dock, and native freshwater mussels (Dr. Myers, USFS Report 10/04/01). Forest Road 25 touches the parcel on the west and south boundary. The east boundary adjoins a parcel owned by the Arizona Game and Fish Department.

Thompson Ranch Parcel: (160 acres) This parcel is private land within the Apache National Forest on the Springerville Ranger District. The land is situated on the West Fork of the Black River at an elevation of 8,800 feet. The perennial streams on this parcel include 1.0 miles of Black River, .20 miles of Burro Creek, and .20 miles of Thompson Creek. The 60 acres of riparian habitat is characterized by alders, willows and sedges. The parcel provides habitat for Apache trout, Arizona willow, Chiricahua dock, and northern water shrew (Dr. Myers, USFS Report 10/04/01). Forest Road 116 crosses the parcel on the east and on the south boundaries.

Blue River Ranch Parcel: (160 acres) This parcel is private land within the Apache National Forest on the Alpine Ranger District. The land is situated on the Blue River at an elevation of 5,500 feet. The vegetation along the approximately 1.50 miles of river channel is riparian dependent and includes Fremont cottonwood, narrow leaf cottonwood, alder, and willow. There are 55 acres of riparian habitat in this parcel. It provides habitat for the spikedace (Dr. Myers, USFS Report 10/04/01). Forest Road 281 crosses the east side of the parcel.

The proposed land exchange involves National Forest Land, and therefore will comply with the National Environmental Policy Act (NEPA). 3-C Consulting has been contracted to complete the environmental analysis under the direction of the Forest Service. This letter is part of the scoping process as required by NEPA.

A public open house has been scheduled for Thursday January 9, 2003 at the Apache/Sitgreaves Supervisor's Office Conference Room in Springerville Arizona, from 4:00 to 7:00 PM to furnish additional information and gather comments from any interested party.

Written comments regarding this proposal are requested by January 31, 2003. Comments can be in written form sent to U.S. Forest Service, Bruce A. Buttrey, Springerville Ranger District, P.O. Box 760, Springerville, AZ 85938 or by phone to (928) 333-4372. We appreciate your time and interest in this matter.

Sincerely:

Mel Wilhelm

Mel Wilhelm
3-C Consulting

Appendix C – Actions Analyzed for Cumulative Effects

Analysis of cumulative effects considers past, present, and reasonably forseable actions.

Past Actions

The affected environment has been created by a combination of natual events and human impacts. Depiction of the affected environmental consequences inherently includes past events and impacts.

Present Actions

There are two other Forest Service Projects in the area: Greer Wildland Urban Interface and Greer Lakes Improvement Project.

Greer Wildland Urban Interface (WUI) - This project involves the pre-commercial thinning and commercial harvest of wood around the private lands in the Greer area with the desired outcome of reducing potential wildland fire impacts to private property. This project is currently being implemented (Doc 134).

Greer Lakes Improvement Project - This project involves replacement of existing boat ramps and toilet facilities and construction of armadas and one new toilet at the Greer Lakes (Tunnel, Bunch and River Reservoirs). This project is currently being implemented (Doc 132).

No other present projects in this area are currently proposed or listed in the Schedule of Proposed Actions for the Apache-Sitgreaves National Forests.

Reasonably Foreseeable Actions

Residential Development

The cumulative effects analysis considers future residential development on the Federal lands even though Mr. Owens has stated there currently are no future plans for development or other disposition of the land.

Given the local zoning of the adjacent areas, it is reasonably foreseeable that the lands conveyed out of Federal ownership could be developed for residential use. However, the future use or development of the lands conveyed out of Federal ownership would become subject to all laws, regulations, and zoning authorities of State and local governing bodies. All potential future development would comply with the Apache County subdivision ordinance, Apache County Greer Conservation, Development and Management Program Ordinance (Phase I), and Arizona State laws and regulations.

Assumptions for reasonable future development are based on the information contained in the report "Evaluation and Estimate of Projected Development Costs for Subdivision of 337 Acres in Greer, Apache County, Arizona", dated November 2003, prepared by Murphy Engineering Group (Murphy Engineering Report) (Doc 120). This document was prepared to display the level of development this land could accommodate if the maximum legal development was to occur. A summary of the basic requirements used in the analysis is as follows:

- Conceptual layout and lot density does not represent a development plan as detailed topographic information was not used to prepare the report. Layouts were for estimating infrastructure

improvements. Minimum lot sizes of 1 acre are required in the Greer area (Doc 3, Section 307.01).

- Roads constructed to minimum County standard, which involves preparation of preliminary plan and engineering drawings that must be submitted to the County Planning Director for approval by the Planning and Zoning Commission (Subdivision Resolution, County of Apache, Arizona, Section IV).

- Although pavement is not required by County standards, it is reasonably foreseeable that all roads would be paved to meet market demands (Doc 120).

- The County requires a drainage plan for stormwater runoff. (Zoning Ordinance of Apache County, Article 8)

- Necessary improvements, including required drainage facilities to manage stormwater runoff, would be constructed to insure downstream properties are protected from any increases in peak flow runoff due to development (Doc 120).

- Utilities comply with Arizona Corporation Commission regulations (Doc 120).

- Arizona Department of Environmental Quality (ADEQ) has jurisdictional authority for approving water and wastewater facilities. Public water and sanitary systems proposed to serve the subdivision must meet minimum ADEQ standards. The subdivision would be located within the Little Colorado Sanitary District, which has jurisdictional authority over properties within the District's boundaries therefore wastewater disposal would comply with the District's rules and regulations and be connected to its facilities. Each lot would be required to install a septic tank which would be connected to LCSD's collection system for treatment at its facility. Any upgrades or extensions necessary to provide service to the subdivision would be arranged for by the proponent (Doc 120).

- Water for domestic use would be provided by a central production and distribution system to the entire development.

- Fire protection facilities are included in development concept (Doc 120).

- All potential future development on the Federal lands would be subject to Apache County Phase I regulations. Objectives of the Phase I include encouraging adequate open space, the evaluation and control of high density uses, and enhancement of visual aesthetics and maintenance of the rural village quality and image of Greer (Doc 35).

Applicable laws, regulations, and zoning modeled in the cumulative effects analysis:

- County standards for stormwater runoff (Zoning Ordinance of Apache County, Article 8).
- State of Arizona standards for roadways and streets (Arizona Administrative Code, Title 18, Chapter 2)
- 40 Code of Federal Regulations Parts 1500-1508

Future Land Adjustments

Recently inquiries have been received by the Springerville District Ranger regarding a proposal for a land exchange involving the 19 existing summer recreation residence permits that collectively make up the

Little Colorado Summer Home Tract on approximately 35 acres located within the GRA. Although a formal exchange proposal has not been received it is possible in the foreseeable future that one involving these recreation residences may be submitted for consideration. There currently are no other inquiries or formal proposals for land exchange within the GRA at this time. A request by the Forest Service for Fiscal Year 2006 funding to purchase approximately 10 acres of land located along the Little Colorado River within the GRA has been submitted to the Washington Office. Proposals to include this land in a future exchange proposal would also be considered. An exchange of the summer recreation residence tract out of Federal ownership or Forest Service acquisition of the 10 acres along the Little Colorado River would result in a 1% or less change to the number of acres of Federal and private lands in the GRA.

No other reasonably foreseeable projects in this area are currently proposed or listed in the Schedule of Proposed Actions for the Apache-Sitgreaves National Forests.

Relocation of cross-country ski trail

Tract B contains part of a cross-country ski trail along its southern boundary (approximately ¾ mile in length). The ski trail would be relocated south of the tract's boundary and above Rosey Creek. The trail will not be relocated within any part of the Rosey Creek floodplain.