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Service

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Region**

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Environmental Assessment for

DRY LAKES Land Exchange

Apache-Sitgreaves National Forests Lakeside Ranger District, Arizona



Morgan Wash Parcel



Dry Lakes Parcel

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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 the direct, indirect, and cumulative environmental impacts that would result from the proposed action and 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 alternative methods for achieving the stated purpose. These alternatives were developed based on significant issues raised by the public and other agencies. This discussion also includes possible mitigation measures. Finally, this section provides a summary table of the environmental consequences associated with each alternative.
- Chapter 3: Environmental Consequences: This section describes the environmental effects of implementing the proposed action and other alternatives. Within each section, the affected environment is described first, followed by the effects of the No Action Alternative that provides a baseline for evaluation and comparison of the other alternatives that follow.
- 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 to be made, 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 Code of Federal Regulations (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 selected to evaluate the extent to which the proposed action and alternatives attain project objectives and resolution of issues.

Throughout this EA, parenthetical references may be made to Project Record documents, as in this example (Doc 25).

Purpose and Need for Action

Existing Condition

The non-Federal lands within the National Forests that are included in this exchange proposal are currently undeveloped, and for the most part, parcels that would contribute to the blocking up of public land ownership and improve management. These lands are subject to development that could diminish their value as undeveloped natural forestland and the establishment of 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 they 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 A-S Land Management Plan (LMP) (Doc 2). The management direction in the LMP states that lands owned by the United States can be exchanged in order to meet the needs of expanding communities, provide for consolidation of public lands, improve management or benefit specific resources, and meet overriding public needs.

BC2 LLC/Genesis Real Estate and Development, Inc. (BC2 LLC) currently owns five separate parcels located in the Apache-Sitgreaves National Forests as well as additional properties in the Morgan Flat area. BC2 LLC acquired the five tracts specifically to offer them in exchange for the selected Federal lands in the Morgan Flat area. Private land owned by others, much of it already divided into residential lots with single family homes, within the Porter Mountain and Misty Mountain subdivisions currently shares common boundaries with the selected Federal parcels and the non-Federal Morgan Wash parcel.

Desired Condition

The desired condition is that the non-Federal lands are accepted and included into the National Forest System (NFS). The result has been a consolidation of public lands through the acquisition of four private inholdings within the A-S and an increase in the total mappable floodplain on the A-S (Doc 2).

Multiple benefits would be expected with the addition of the offered non-Federal lands to the NFS. They include a reduction in complex land ownership patterns that would help to block up public land ownership; the disposal of one small totally isolated tract of Federal land that cannot be efficiently managed; elimination of several miles of landline boundaries and controlling survey corners that will contribute to management efficiency; elimination of the possibility of future subdivision/residential development on the offered private inholdings within the Forests' boundaries; and the acquisition of a private parcel containing a section of Morgan Wash that contains riparian habitat for wildlife species. The land exchange contributes towards Goal 3, Objective 1 of the Forest Service Strategic Plan for FY 2004-2008 by improving access to National Forest System land and Goal 6, Objective 3 by increasing the acres of land acquired through adjustments that conserve the integrity of undeveloped lands and habitat quality (Strategic Plan of the USDA Forest Service for Fiscal Years 2004-2008).

Objectives

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

The purpose of the proposed action is to meet the following Forest Service objectives (Doc 2):

1. Acquisition of non-Federal lands within the existing Forest boundaries that 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.

2. Acquisition of non-Federal water influenced lands within existing Forest boundaries that contain habitat for sensitive wildlife and plant species.
3. Make available the selected Federal lands for future residential development in the Pinetop-Lakeside area to meet the needs of expanding communities. This includes one totally isolated parcel that cannot be efficiently managed for National Forest purposes.

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

The non-Federal landowner BC2 LLC agrees the exchange satisfies their needs and requirements for their planned residential development in the Morgan Flat area.

The proposed exchange would 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 and the Federal lands as available for conveyance under land exchange authorities (Doc 2, pages 100, 101).

If the non-Federal lands are acquired by the United States they would be incorporated into the Management Areas in which they are located (36 CFR 254.3(f)). Management direction for any acquired land would be the same as the 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 BC2 LLC 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 586.4 acres of land in the A-S and conveyance of 176.9 acres of land in the Morgan Flat area (adjoining Porter Mountain Estates and Misty Mountain Estates) in the A-S (Docs 17, 83).

The non-Federal lands would provide additional Federally managed habitat for wildlife and plant species. There would be blocking up of public land ownership resulting in a reduction in complex ownership patterns. The elimination of numerous miles of common Federal/private landline boundaries and controlling survey corners would contribute to management efficiency and future administrative savings. Any possible future subdivision/residential development on the currently private inholdings within the Forests' boundaries would be eliminated. On a Forest-wide basis an additional 410 acres of land would be available for public outdoor recreation uses.

The conveyance of Federal lands to BC2 LLC would increase the number of acres of real estate holdings they own within the Morgan Flat area. This additional land would be available for new residential development and increased rural fire protection in the Pinetop-Lakeside area. BC2 LLC has committed to donating land to the Lakeside Fire District that would be used for construction of a new fire station located in Federal Tract B adjacent to Porter Mountain Estates (Doc 24). The Forest Service would grant Navajo County a public road easement for access to a new fire station and up to four adjacent residential lots (Appendix C – Actions analyzed for cumulative effects).

A preliminary analysis of the land exchange proposal was completed and included in the Feasibility Analysis that was approved by the Director of Lands & Minerals USDA Forest Service, Southwestern Region on March 31, 2003 (Doc 33). An Agreement To Initiate an evaluation of a land exchange was authorized by the Director of Lands & Minerals USDA Forest Service, Southwestern Region on March 31, 2003 (Doc 34). A full real property appraisal of the final proposal was completed to establish market values prior to exchange. The appraisal had a Valuation Date of August 13, 2004 with an expiration date of January 14, 2005. A new appraisal will be completed and Agency-approved land values determined prior to the execution of an Exchange Agreement.

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

Federal Lands to be Exchanged total 176.9 acres

Tract A (78.93 acres): This parcel is currently public land within the Sitgreaves National Forest and Lakeside Ranger District. The land has an elevation of 7,045 to 7,120 feet above sea level (a.s.l.). Vegetation consists of a scattered overstory of second growth ponderosa pine with an understory of various grasses, scattered oak brush and small openings. A Navopache Electric power transmission line crosses the parcel in a northeast-southwest direction. Forest Road (FR) 9717 (Navajo County Sponsellor Siding Road) creates the eastern boundary and FR 45 (Navajo County Porter Mountain Road) the northern boundary. Private land adjoins it along both the west and south sides.

Tract B (5.11 acres): This parcel is currently public land within the Sitgreaves National Forest and Lakeside Ranger District. The land has an elevation of 7,000 feet a.s.l. Vegetation consists of second growth ponderosa pine overstory and scattered oak brush. The tract legally described as Lot 16 is the remaining portion of the originally selected Tract B. The majority of the selected lands in the originally identified tract were dropped from the exchange at the request of the non-Federal party due to the presence of several unpatented mining claims. The Forest Service concurred with consideration to public comments. Private land adjoins it along the east and south sides. No roads currently access this parcel. Navajo County has agreed to accept a public road easement from the Forest Service for access to this parcel from FR 45 (Doc 67, 71, Appendix C – Actions analyzed for cumulative effects).

Tract C (42.10 acres): This parcel is currently public land within the Sitgreaves National Forest and Lakeside Ranger District. The land has an elevation of 7,000 to 7,020 feet a.s.l. Vegetation consists of a scattered overstory of second growth ponderosa pine with an understory of various grasses, scattered oak brush and small openings. FR 45F (Navajo County Deer Run Road) crosses through the parcel north-south near the center of the property. A Navopache Electric power transmission line crosses the parcel in a northeast-southwest-west direction. Private land adjoins it along the north, east and south sides.

Tract D (30.96 acres): This parcel is currently public land within the Sitgreaves National Forest and Lakeside Ranger District. The land has an elevation of 7,060 feet a.s.l. Vegetation consists of a scattered overstory of second growth ponderosa pine with an understory of various grasses, scattered oak brush and small openings. This Federal parcel is completely surrounded by private land. No road currently provides access to the parcel. An exchange of easements has been agreed to by both the non-Federal party and the Forest Service that assures legal access to this parcel across the adjoining private land located between Federal Tracts E and D that is owned by the non-Federal party (Doc 59, 61, 62).

Tract E (19.80 acres): This parcel is currently public land within the Sitgreaves National Forest and Lakeside Ranger District. The land has an elevation of 7,020 to 7,040 feet a.s.l. Vegetation consists of a scattered overstory of second growth ponderosa pine with an understory of various grasses, scattered oak brush and small openings. A small seep affecting an area less than 0.1 acre in size with minimal wetland type species present is located on the parcel. Private land adjoins it along the north and east sides. The non-Federal party has agreed to the Forest Service reserving a north-south road easement through the parcel that would provide for continued public access to National Forest land south of the parcel. An easement for this section of road would be granted to Navajo County extending the length of the current County Road easement for FR 45F through the parcel (Doc 80). The Forest Service would grant an easement to the non-Federal party for a west-east road paralleling the northeast boundary of the tract and entering private land owned by the non-Federal party that lies between Federal Tracts E and D. The non-Federal party would grant an easement across the northern boundary of their land (continuation of same road) for access from Federal Tract E to Tract D (Docs 59, 61, 62, Appendix B – listing of actions analyzed for cumulative effects).

The Federal lands do not contain any inventoried roadless areas or Wild and Scenic River corridors or study areas.

Appendices A and B contain legal descriptions and maps of the Federal lands.

Private Lands to be Acquired total 586.4 acres

South Fork Parcel (111.09 acres): This parcel is within the Apache National Forest on the Springerville Ranger District. The parcel is located about eight miles west of the town of Eagar and south of State Highway 260, approximately one-quarter mile northwest of the Little Colorado River. A road right-of-way easement granted by the Arizona State Land Department to BC2 LLC provides legal access to the property from State Highway 260. Physical access is provided by a low standard road from SH 260 through a locked ADOT gate that is not located within the described easement. The land has an elevation of 7,700 to 8,040 feet a.s.l. Vegetation is primarily plains grassland. The parcel adjoins private land on its east and northwest sides, state land along the northeast, and National Forest on the south and west.

Dry Lakes Parcel (260.00 acres): This parcel is within the Apache National Forest on the Springerville Ranger District. The parcel is the largest in the proposed land exchange and is located within the Dry Lakes drainage about eight miles north of Escudilla Mountain. The land has an elevation of 7,580 to 7,680 feet a.s.l. Vegetation is plains grassland and pinyon-juniper woodland. The parcel includes approximately 0.5 miles of an unnamed tributary to the enclosed basin of Dry Lakes. This basin is characterized by soft sandy soils with two depressions that are seasonally inundated during wet periods. Drainage of the parcel is to the north. Access is by low standard Forest Service Roads. The property is currently surrounded by Federal lands except for a 20 acre parcel of private land owned by others along the northeast corner. The owner of this parcel was contacted by the BC2 LLC regarding the availability of the 20 acres for purchase and inclusion in the exchange. The response was that the land was not for sale (Docs 7, 8, 18).

Reagan Reservoir Parcel (160.00 acres): This parcel is within the Apache National Forest on the Springerville Ranger District. The parcel is just north of Reagan Reservoir and approximately seven miles north of Escudilla Mountain. The land has an elevation of 7,720 to 7,860 feet a.s.l. Vegetation is plains grassland and pinyon-juniper woodland. Drainage of the parcel is to the north. The parcel is surrounded on all sides by Federal lands. Access is by low standard Forest Service Roads.

Nutriosio Parcel (20.34 acres): This parcel is within the Apache National Forest on the Alpine Ranger District. The parcel is located about two miles northwest of the community of Nutriosio and three miles northwest of Escudilla Mountain. The parcel is bordered by National Forest on the north, east, south, and southwest sides. Private land adjoins it on the northwest side. The land has an elevation of 7,700 to 7,800 feet a.s.l. Vegetation is primarily plains grassland fringed by pinyon-juniper woodland and ponderosa pine forest. An old falling down cabin located on the parcel was removed in 2004 by the non-Federal party (Doc 69). The parcel includes approximately 0.10 mile of a small, unnamed tributary to Nutriosio Creek. Access is by a low standard road that crosses the adjacent private property owned by others along the west boundary. There is no legal access to the parcel.

Morgan Wash Parcel (35.00 acres): This parcel is within the Sitgreaves National Forest on the Lakeside Ranger District. The parcel is located in the southwest corner of the Morgan Flat area and adjoins private land along its north, east and southeast sides. National Forest adjoins it on the south and west sides. The land has an elevation of 7,100 feet a.s.l. Vegetation consists of a scattered overstory of second growth ponderosa pine with an understory of various grasses, scattered oak brush and small openings. The parcel includes approximately 0.5 miles of Morgan Wash, a tributary to Scott Reservoir. Access is from the northeast by low standard roads from the end of FR 9717. An exchange of easements has been agreed to by both the non-Federal party and the Forest Service that would provide public road access across the northeast boundary of Federal Tract E through the non-Federal party's land, to Tract D. This exchange of easements would occur even if the land exchange is not carried forward because of the mutual benefits to both parties. The public benefit is legal access to Tract D, which increases its land value. The benefit to the non-Federal party is more direct legal access to their lands south of Tract D,

whether the land exchange is completed or not. If the land exchange is completed, public access to the Morgan Wash parcel would be either across Forest System lands to the west or across the non-Federal party's public subdivision roads (Docs 59, 61, 62).

Appendices A and B contain legal descriptions and maps of the non-Federal lands.

Connected Actions

The Forest Service and BC2 LLC would exchange road easements to provide access to Federal Tract D and other private lands not identified for exchange. The Forest Service would issue two public road easements to Navajo County, one for access through Federal Tract E to adjoining National Forest lands and a second for access to Federal Tract B where a new Lakeside Fire District Fire Station would be built. Navajo County is planning to relocate portions of FR 45 along the northern boundary of Federal Tract A in order to improve sight distance and reduce horizontal and vertical curves (See Appendix B, Figure 8).

Decision Framework

The Forest Supervisor, Apache-Sitgreaves National Forests, 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 (Doc 31). The County, State, and Congressional delegations were also notified (Doc 30). An amendment to the originally published original Land Exchange Notice was published once per week for four consecutive weeks in the *White Mountain Independent* for Navajo and Apache Counties (Doc 45). The amendment identified that the non-Federal South Fork Parcel was being added to the exchange configuration. The County, State, and Congressional delegations were also notified of this amendment (Doc 46).

A mailing list of 237 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 June 24, 2003 was mailed to individuals and organizations on the list (Doc 48). The scoping report included a description of the proposed project, maps showing the lands being considered for exchange, and asked for comments by telephone or in writing. Comments were requested by July 29, 2003.

The A-S received a total of 57 comments directly as letters and e-mails (Doc 49). Comments received after the due date identified in the scoping report (July 29, 2003), were also included and analyzed by the Interdisciplinary Team (IDTeam) for the project (Doc 56).

A 30-calendar day comment period requesting comments on the Proposed Action ran from May 24, 2005 through June 23, 2005. A letter announcing the comment period was mailed to all individuals who provided comments during the scoping comment period and provided the Forest with a mailing address (Doc 86). The legal notice announcing the availability of the Proposed Action was published in the *White Mountain Independent* the newspaper of record on May 24, 2005 (Doc 87). A public open house was held on June 14, 2005 from 4 to 7 p.m. at the Lakeside Fire Station in Lakeside, Arizona to provide information about the proposed action and to receive comments (Doc 88). Notification of the open house was made by way of the letter informing individuals of the availability of the Proposed Action and publication of a news release in the *White Mountain Independent* on June 10, 2005 (Doc 88). Fifty-one people signed the attendance sheet at the open house (Doc 89). An article regarding the open house was published in the *White Mountain Independent* on June 24, 2005 (Doc 92).

The A-S received a total of 17 letters and comment forms, e-mails, and one telephone call commenting on the proposed action (Doc 93). All comments were received prior to the end of the 30-day comment period identified in the May 24, 2005 legal published in the *White Mountain Independent* and were included in the comment analysis by the Interdisciplinary Team (IDTeam) for the project (Doc 94).

Issues

Issues are disputes, debates or discussions about environmental effects that may be created by the proposed project. This section presents the significant issues identified during the scoping process and internal agency review. The ID Team grouped and analyzed comments received from the initial scoping and publication of the Proposed Action (Docs 56, 64, 95). Potential issues were collected and screened to ascertain which were significant to the proposed action and would be used to develop alternatives, mitigation measures, or focus the analysis. Several comments concerned areas of analysis which we are required by law, regulation, or policy to include in the document, therefore, they are not listed as issues, but are included in the analysis. Copies of all comments are contained in the project file (Docs 49, 93).

Issue # 1. Effect of Future Development on Federal Lands

During scoping many commentors were concerned with future development on the Federal lands. The proponent has stated that it is his intention to subdivide the Federal parcels into one-acre or larger residential lots in full compliance with State law and Navajo County subdivision requirements (Doc 76). The possible general effects of development will be analyzed in the cumulative effects section of each affected resource, including scenic values and recreation access, water quality and availability, effects on infrastructure, community services, noise, traffic, and pollution, and property values and taxes.¹ (See Appendix C - Actions analyzed for cumulative effects.)

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 Navajo County would be the regulatory authorities for all land use and development-related activities, 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 Navajo County. 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. Local authorities are in the best position to determine appropriate uses of private land (Doc 78). 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). 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 for a land exchange is limited by the exchange process itself. A balanced exchange package is arrived at by a series of proposals and counter proposals between the Federal and non-Federal parties until both 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). Land exchanges convey land, interests in land, and the resources associated with them. The environmental analysis focuses on the future use and management of the lands acquired and conveyed and the effect of the exchange on the lands that adjoin them.

During initial discussions additional Federal lands, including a larger Federal Tract B lying south of the centerline of FR 45 and north of the existing private land in Section 4, T. 9 N., R. 23 E. were identified by the land exchange proponent as being desirable for exchange (Doc 3). As discussions proceeded, the proponent withdrew his request for approximately 90 acres of additional Federal lands in an attempt to balance values based on preliminary estimates of value for the lands (Doc 6). The non-Federal South Fork parcel was eventually added to the proposal in order to more equally balance the values in the exchange (Doc 42). Eventually all but 5.11 acres of Tract B were dropped from the proposal at the request of the non-Federal party due to the presence of several unpatented mining claims within the tract (Docs 59, 61, 62). The Forest Service concurred with consideration to public comments.

Other means of acquiring the non-Federal lands were considered but eliminated from further study. The sale of non-Federal lands to the United States is an alternative to a land exchange for acquisition of non-Federal properties. However, Land and Water Conservation Act funds to purchase privately owned parcels are limited and currently not available. It is anticipated that appropriated funds for Federal land purchases will continue to be limited into the foreseeable future. Even if funds were available the land exchange proponent is not interested in selling his land to the United States and has made the lands available on the basis of exchange only (Doc 72).

The application of deed restrictions to direct and control future development on the Federal land once it is conveyed into private ownership was considered. 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 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)). Any future development on the Federal lands would be subject to the laws and regulations of the State of Arizona and Navajo County zoning ordinances and subdivision 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 was determined to not be 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. **No Action.** No exchange of land would occur between the Forest Service and BC2 LLC. Lands would remain in their current ownership.
2. **Proposed Action.** Exchange approximately 586.4 acres of non-Federal land for 176.9 acres of Federal land. Refer to Appendices A and B for legal descriptions and maps.

This chapter compares the two alternatives considered for the Dry Lakes Land Exchange. It includes a tabular comparison of the alternatives being considered for exchange. This section also displays the alternatives in comparative form 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 is 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 the alternatives. 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. A complete discussion of each Affected Resource/Issue can be found in Chapter 3.

Table 1. Alternative Comparison Table

AFFECTED RESOURCE/ISSUE	ALTERNATIVE 1 No Action	ALTERNATIVE 2 Proposed Action
Water quality Federal	No change in water quality would be expected.	No unacceptable change in water quality is expected. State and County regulations control discharges. Stormwater managed.
Non-Federal	No change in water quality assuming no development. No unacceptable change in water quality is expected for Morgan Wash which is likely to be developed.	No change in water quality would be expected.
Scenic quality Federal	No change in scenic quality would be expected.	Scenic quality is expected to be moderately altered as a result of residential development. Any change would likely be restricted to the immediate vicinity of the private lands adjacent to the Federal parcels to be exchanged.
Non-Federal	No change in scenic quality assuming no development.	No change in scenic quality would be expected.

AFFECTED RESOURCE/ISSUE	ALTERNATIVE 1 No Action	ALTERNATIVE 2 Proposed Action
	Change in scenic quality for Morgan Wash would be limited as its location is remote and not easily accessed.	
Plants and wildlife Federal Non-Federal	Continued management and protection of 176.12 acres of habitat for management indicator species and retention of natural buffer areas for management indicator and priority migratory bird species in Woolhouse Habitat Area. No change expected assuming no development occurs. Possible for some reduction, elimination, and/or fragmentation of 55.34 acres of habitat for management indicator species and some priority migratory bird species through potential development of two non-Federal parcels in the short-term.	Anticipate some reduction, elimination, and/or fragmentation of 176.12 acres of habitat for management indicator species and loss of natural buffer areas for management indicator and priority migratory bird species that use Woolhouse Habitat Area. No change expected. Long-term protection and management extended to 586.4 acres of habitat for management indicator and priority migratory birds species through acquisition of non-Federal parcels and incorporation into A-S.
Soil and Air Federal Non-Federal	No measurable soil loss would be expected. No change assuming no development occurs. No measurable soil loss expected if development occurs on Morgan Wash. Development would occur under state and county regulations. County requires subdivision roads be paved.	No measurable soil loss expected as development would occur under state and county regulations. County requires subdivision roads be paved. No measurable soil loss would be expected.
Land Use Federal Non-Federal	No change would be expected. 586.4 acres of private non-Federal lands would become available for development.	176.9 acres of Federal lands would be converted to private ownership and become available for residential development. 586.4 acres of private non-Federal lands would be converted to Federal lands and no longer be available for development.
Heritage resources Federal Non-Federal	The Federal lands have been surveyed and no sites were found that qualify for the SHPO registry. No sites are known to exist. Human burials protected. No protection of cultural resources. Human burials protected.	Same as No Action. Any resources, if found, would be afforded complete Federal protection.

AFFECTED RESOURCE/ISSUE	ALTERNATIVE 1 No Action	ALTERNATIVE 2 Proposed Action
Grazing resources Federal lands Non-Federal Lands	Permitted numbers of livestock would remain the same. Private grazing leases would likely remain in effect subject to the discretion of the property owner.	The Blue Ridge Allotment would be reduced in size by 79 acres. The Sponsellor Allotment would be reduced in size by 66 acres. Permitted numbers of livestock would not change as a result of an exchange. Ownership of all non-structural range improvements would transfer with the land. Acquired Non-Federal lands would be integrated into the A-S LMP Management Areas in which they are located and managed in accordance with the laws, rules, regulations and LMP standards and guidelines applicable to those areas. Ownership of all non-structural range improvements would transfer with the land.
Mineral resources Federal Non-Federal	Mineral estates would remain the same. Mineral estates would remain the same.	Respective mineral estates would be conveyed. Respective mineral estates would be conveyed.
Hazardous materials Federal Non-Federal	No hazardous material known to exist. No hazardous material known to exist.	Same as No Action. Same as No Action.
Wetlands and floodplains Federal Non-Federal	No increase in Federally managed mappable floodplain. The wetland/riparian habitats would remain under the same ownership. No change to floodplain unless development were to occur.	No mappable riparian / wetland / floodplains occur on the Federal lands to be exchanged. The proposed action will result in no effect to these habitats on the Federal parcels. The FS would gain 0.9 miles/ 5 acres of mappable channel/floodplain associated with the Morgan Wash, Dry Lakes and Nutrioso non-Federal parcels.
Caves and Other Special Management Areas	No natural caves are found on either the Federal or non-Federal lands.	No natural caves are found on either the Federal or non-Federal lands, therefore none would be lost. The proposed action will result in no effect to caves. No other special management areas designated in the ASF LMP occur on the Federal or non-Federal lands.
Social & economic factors Federal Non-Federal	PILT receipts received by Navajo and Apache Counties would not change. Overall, property taxes collected by the Counties would not change assuming no development, except for an increase in Navajo County if Morgan Wash is developed.	Property taxes collected by Navajo County would increase as residential development occurred on Federal lands. PILT receipts no longer received by Navajo County. Property taxes no longer collected in Apache County. PILT receipts received by Apache County would increase. Property taxes no longer collected by Navajo County for Morgan Wash.
Administrative factors Federal	No change to existing survey corners or landline boundary administration or maintenance.	25 landline property corners and 8.635 miles of boundary maintenance would be eliminated.

AFFECTED RESOURCE/ISSUE	ALTERNATIVE 1 No Action	ALTERNATIVE 2 Proposed Action
Values of adjacent properties Federal Non-Federal	Land values would not be affected. No foreseeable change in values is expected, except for Morgan Wash which is likely to be developed.	Overall, do not expected a significant change in land values; adjoining private property may not appreciate as quickly. Change in values is not expected. Majority of adjacent property is FS.
Public services Federal Non-Federal	No changes would be expected. No changes would be expected assuming no development, , except for Morgan Wash which is likely to be developed.	Demand for utilities and road improvements would be expected to increase. New water source and storage would be developed. Individual on-site wastewater disposal. Land for building a new fire station would be made available. No changes would be expected.
Outdoor recreation & access Federal Non-Federal	No change in access or lands available for outdoor recreation would be expected. No change in access or lands available for outdoor recreation would be expected.	Direct access to National Forest lands from private property owners currently bordering several tracts would no longer exist. There would be a local loss of 142 acres in the Morgan Flat area available for outdoor recreation. Forest-wide there would be a gain of 410 acres available for outdoor recreation.
Infrastructure, traffic, dust, and pollution Federal Non-Federal	No change would be expected. No changes would be expected assuming no development, except for Morgan Wash which which is likely to be developed.	New infrastructure would comply with County and State subdivision requirements. All streets would be paved. Stormwater managed. No change would be expected.

Chapter 3 - Environmental Consequences

This chapter shows 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 84). 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 0.9 miles/ 5 acres of mappable floodplain (Doc 21, EA pages 18, 30).

Effects on threatened, endangered, and sensitive species (Endangered Species Act of 1973) (Doc 66, EA pages 20-26).

Effects on migratory bird species (E.O. 13186) (Doc 70).

Effects on heritage resources (National Historic Preservation Act of 1966 and E. O. 11593) (Docs 51, 52, EA pages 28, 29)

Forest Service Handbook 5409.13, Sec. 30:

Effects on minerals, geothermal, oil and gas (Functions Transfer Act of 1960) (Doc 25, EA page 29).

Effects on rights associated with grazing permits (Sec. 402 (G) of the Federal Land Policy and Management Act of 1976) (Docs 13, 14, EA page 29).

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: (Doc 9, EA page 30)

Effects on cave resources (Federal Cave Resources Protection Act of 1988) (Doc 22, EA page 30).

This chapter discloses the reasonably foreseeable use of the Federal lands once they are conveyed into private ownership. The future use or development of lands conveyed out of Federal ownership would become subject to all 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 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 reasonable future development on the Federal land is analyzed to determine what potential impacts, if any, might be anticipated and the appropriateness of deed restrictions. The following assumption is made throughout this document: all future development would comply with the Navajo County subdivision ordinance and Arizona State laws and regulations. Reasonable future development is based on the information provided in the report "Evaluation and Estimate of Projected Development Costs for Subdivision of 175 Acres a.k.a. Dry Lakes Land Exchange in The Porter Mountain Area of Navajo County, Arizona", dated April 2005, prepared by Murphy Engineering Group (Doc 84). 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 by Navajo County in this zoning area and were used to estimate the maximum number of lots that could be reasonably developed.
- Roads constructed to minimum County standard; pavement is required by County standards and all roads are assumed to be paved to meet market and County demands. In addition, existing unpaved roads which provide access to Tracts C, D and E will be paved to gain approval of a residential subdivision from the County.
- Drainage plan would meet County standards for stormwater runoff. Improvements, including appropriate drainage facilities to manage stormwater runoff, are required to insure downstream properties are protected from any increases in runoff due to the development.
- Individual on-site sanitary disposal systems as no sanitary district serves this area.
- Additional domestic well(s) and storage would be provided to meet new demand.
- Fire protection facilities are included in development concept.
- Other public utilities (i.e. electric, communication) will comply with established Arizona Corporation Commission regulations.

WATER QUALITY

Affected Environment

Federal Tract E contains a small seep with minimal wetland type species (iris) present in an area totaling less than 0.1 acre. No water right filings are known to be associated with any of the Federal parcels.

The non-Federal Morgan Wash parcel includes approximately 0.25 miles of Morgan Wash. This section of the drainage is intermittent with no significant riparian or wetland vegetation. Mappable floodplain includes the immediate channel and its adjacent terraces, comprising of approximately 4.5 acres. No water right filings are known to be associated with the parcel.

The non-Federal Dry Lakes parcel includes approximately 0.5 miles of an unnamed tributary to the enclosed basin of Dry Lakes. This drainage is characterized as ephemeral with no significant riparian vegetation. Mappable floodplain includes the immediate channel and adjacent terrace, totaling approximately 0.6 acres. The enclosed basin of Dry Lakes is characterized by soft sandy soils with two depressions that are seasonally inundated during wet periods. Two water right filings are known to be associated with the parcel. These include State File No. BB-41 (Reagan Lake, 104 acre feet per annum) filed by B.R. Murray, and BB-56 (Reagan Lake) filed by James P Reagan, both for purposes of irrigation.

The non-Federal Nutrioso parcel includes approximately 0.10 mile of a small, unnamed tributary to Nutrioso Creek. This drainage is characterized as dry ephemeral, with no significant riparian vegetation. Mappable floodplain includes the immediate channel and adjacent terrace, totaling approximately 0.1 acres. One water right filing is known to have been associated with the property. State File No. 55-579625 (well, 35 gallons per minute), was claimed by Swartz and Anderson for domestic purposes. The Records Division of the Arizona Department of Water Resources indicates that the Well Drilling Permit was cancelled since the driller never submitted the required well log or well completion report to the ADWR. Therefore, no water rights are associated with this parcel (Doc 21).

Direct and Indirect Effects

Proposed Action

All water right filings as described in the May 6, 2002, Water Resources Evaluation by Carolyn Koury for the Dry Lakes Parcel (State File No. BB-41 (Reagan Lake, 104 acre feet per annum) filed by B.R. Murray, and BB-56 (Reagan Lake) filed by James P Reagan) will be reassigned in the name of the United States for purposes of irrigation, stock and wildlife watering upon acquisition of properties. The following table summarizes the results as documented in the FS Water Resources Evaluation (Doc 21).

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)
Morgan Flat Acquisition	0 ac	0.25 mi. 4.5 ac	Morgan Flat Exchange	0 ac	0 ac
Dry Lakes	0 ac	0.5 mi 0.6 ac			
Nutrioso	0 ac	0.10 mi 0.10 ac			
Total	0 ac	≈0.85 mi ≈5.2 ac	Total	0 ac	0 mi 0 ac
			Net gain/loss	0	+≈0.9 mi +≈5 ac

The conveyance of the Federal lands into private ownership would have no impact on water quality in the area. The future development on the Federal lands would be outside of the Forest Service’s jurisdiction. The land exchange proponent has stated that he would subdivide the parcels in accordance with State law and Navajo County Subdivision Regulations and Requirements (Docs 76, 78). The purpose of these regulations is to insure that the development would protect the public health, safety and

general welfare. These regulations require the developer to provide for adequate roads, utilities, water and wastewater treatment, location of flood areas and proper legal descriptions for all lots, tracts, etc. The developer will be required to provide a drainage report for the subdivision to be completed. This would identify all water courses and channels, including proposed facilities for control of storm waters, all lands subject to overflow, inundations or flood hazard. No change in water quality or peak flow runoff would be expected if development occurs in accordance with State and County regulations.

Navajo County regulations also require documentation of the source of water supply, size, and location of water lines. Design specifications for on-site waste-water disposal require depth to high seasonal groundwater table and bedrock soil evaluations in accordance with Aquifer Protection Permit rules (Doc 78).

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 development on these lands would be precluded.

No Action

Conditions on the Federal lands would remain the same. However, future development on the non-Federal lands would not be precluded and development is eventually expected to occur. 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 floodplains and associated riparian habitat on the non-Federal parcels.

Cumulative Effects

A-S LMP standards and guidelines are designed to achieve satisfactory water quality conditions on the acquired non-Federal lands. The future residential development on the Federal lands upon conveyance into private ownership would be subject to all Navajo County subdivision standards and ADEQ regulations. All roads within the developed area, including existing unpaved roads which provide access to Tracts C, D and E would be paved to meet County and 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 (Doc 84). It can only be assumed that the 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, groundwater development, and wastewater disposal. No cumulative effects are anticipated.

Analysis associated with the Blue Ridge Vegetation Management Project, currently being implemented in the Morgan Flat area did not identify any significant effects on water quality (Docs 90, 98).

Analysis associated with the OHV Cross-District Travel Corridor, currently being implemented with a portion of it being located west of the Morgan Flat area, calls for avoiding significant tanks, installation of water crossings that would allow unimpeded aquatic species passage up and downstream at stream/riparian crossings and rehabilitation of selected areas that have current damage by OHV use on the OHV Corridor. It is expected that water quality would be improved as a result of this project (Doc 91).

Under the No Action alternative 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. The non-Federal lands would continue to be available for development however due to the remote location of the parcels, except for the Morgan Wash parcel, there is limited development potential. Likely future development of these properties is low density residential. Therefore, no cumulative impacts are anticipated.

Scenic Quality

Affected Environment

The selected lands around Morgan Flat are Ponderosa Pine Forest and typical of most of the landscape found in this area of the Sitgreaves National Forest. The Scenic Integrity Level under the approved Forest Service Scenic Management System is Low (Moderately Altered) with Modifications. Low scenic integrity refers to landscapes where the valued landscape character appears moderately altered. Deviations begin to dominate the valued landscape character being viewed but they borrow valued attributes such as size, shape, edge effect and pattern natural openings, vegetative type changes or architectural styles outside the landscape being viewed. They should not only appear as valued character outside the landscape being viewed but compatible or complimentary to the character within (Doc 75).

The non-Federal Nutrioso parcel previously contained an abandoned wooden structure that was removed by the non-Federal party in February 2005. None of the other non-Federal parcels contain structures and none of the parcels are located adjacent to travel routes.

Direct and Indirect Effects

Proposed Action

Under the proposed action the change of land ownership itself would not result in a change in the existing visual conditions on the Federal lands. Depending upon an individual's preferences any additional future residential development could result in some impact on scenic quality, either positive or negative, on a personal level. Future development on the Federal lands would likely be similar to or at a lower density than the currently developed adjacent private property, subject to all existing Navajo County development ordinances (Doc 78).

Acquisition of the non-Federal lands would ensure that their current visual characteristics are maintained. The possibility of future development on the parcels will have been eliminated and they would remain undeveloped.

No Action

Federal and non-Federal lands would remain unchanged, except for Morgan Wash which would most likely be developed. The remaining non-Federal lands would be available for development which would likely be low density residential due to their remote locations.

Cumulative Effects

Any development of the Federal lands after conveyance into private ownership would be subject to Navajo County subdivision requirements, which contain specific guidelines, standards and measures directing future development. Some change to the visual conditions associated with the Federal lands would be expected but any future development would be subject to and regulated by the County subdivision requirements. Specific areas addressed in the subdivision ordinance include setbacks, building separation, parking, fencing, signs, tree removal, highway frontage, building height, and density.

No adverse impacts to scenic quality were identified for the Blue Ridge Vegetation Management Project and the OHV Corridor Project (Docs 90, 91); therefore, the proposed land exchange will result in no adverse cumulative effects to scenic quality.

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. The predominant vegetation type is Ponderosa Pine Forest and the plant community is formally classified

as Rocky Mountain Montane Conifer Forest, Pine Series, *Pinus ponderosa* Association (Brown et.al 1979, Brown 1994). All five Federal parcels support relatively young and even-aged stands of ponderosa pine and are described as uplands. There are no wetlands, riparian, or other aquatic habitats on any of the Federal parcels.

Plant species

Trees

Alligator juniper	<i>Juniperus deppeana</i>
Gambel oak	<i>Quercus gambellii</i>
One-seed juniper	<i>Juniperus monosperma</i>
Ponderosa pine	<i>Pinus ponderosa</i>

Shrubs, Grasses, and Forbs

Arizona fescue	<i>Festuca arizonica</i>
Blue grama	<i>Bouteloua gracilis</i>
Bottlebrush squirreltail	<i>Elymus elymoides</i>
Buckwheat	<i>Eriogonum</i> sp.
Cheatgrass	<i>Bromus tectorum</i>
Estafiata	<i>Artemisia frigida</i>
Gaura	<i>Gaura coccinea</i>
Muttongrass	<i>Poa fendleriana</i>
Slender wheatgrass	<i>Elymus pauciflorus</i>
Western Yarrow	<i>Achillae millefolium</i>
Yellow sweet-clover	<i>Melilotus officinale</i>

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. 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 passerine 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.

Threatened, Endangered, and Sensitive Species

The A-S has completed a Biological Assessment and Evaluation (BA&E) for this proposed exchange (Doc.66). All animal and plant species on the Forest Service’s Region 3 Threatened, Endangered, and Sensitive (TES) species list were reviewed to determine if any of those species have been currently or historically found in the project area; if they are within the range of the species; or if suitable habitat exists within the project area. No federally-listed plant or animal species are known to permanently inhabit the Federal lands. Therefore, the BA&E concluded that no TES species would be affected or impacted by the proposed action.

The following list of species was considered and included is the determination for each (Doc.66).

Endangered Species

No endangered species were found on or near the parcels selected for exchange.

Threatened Species

Bald Eagle (*Haliaeetus leucocephalus*) Transient and wintering bald eagles may occur occasionally in the vicinity of both the Federal and non-Federal parcels. Bald eagles are most likely to be found near

perennial waters, such as rivers and lakes, or in dense ponderosa pine canyons. Bald eagles are unlikely to be found on the Federal parcels or the non-Federal parcels, except for Dry Lakes, due to the lack of aquatic habitat and potential roost trees, such as large ponderosa pines, snags or cottonwood trees. The Dry Lakes parcel provides potential winter foraging habitat for bald eagles when surface water and waterfowl are present. Due to the ephemeral nature of surface water on this parcel, use of this area by bald eagles is expected to be sporadic.

The proposed land exchange will have no effect to the bald eagle or its habitat.

Chiricahua leopard frog (*Rana chiricahuensis*) The Federal parcels support no suitable habitat for Chiricahua leopard frogs, but are located within dispersal distance (one mile) of five livestock tanks in the vicinity. These five tanks currently do not have all the attributes needed for leopard frog occupation, i.e., they are generally murky, silt-laden waters with little emergent or submergent vegetation. However, the Chiricahua leopard frog has not been documented on the Lakeside Ranger District since the early 1970's. Based on negative survey results, that were completed using standardized survey protocol developed specifically for ranid frogs, none of these tanks are currently occupied by Chiricahua leopard frogs.

With the possible exception of the Dry Lakes parcel, the private parcels also do not provide suitable habitat for Chiricahua leopard frogs. However, the ephemeral nature and current condition of the water features on this parcel limits its potential suitability for this species. Transfer of the Dry Lakes parcel into federal ownership will not affect this species or its habitat.

The proposed land exchange will have no effect to the Chiricahua leopard frog or its habitat.

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 affected area lacks several of the primary constituent elements typically required for occupation by this owl. Since the area lacks high basal area of large trees and snags; does not exhibit multi-layered canopies; and does not contain an abundance of large dead and down material, the MSO would not be expected to nest or roost here. However, the sites could potentially contain occasional foraging habitat for the owl. The nearest Protected Activity Center (PAC) is approximately 8 miles west of the land exchange area. The affected area does not contain suitable nesting or roosting habitat for the owl, is not within Proposed MSO Critical Habitat, and is not in an area considered Restricted habitat.

The proposed land exchange will have no effect to the Mexican spotted owl or its habitat.

Proposed Threatened Species

No proposed threatened species were listed as being documented within the vicinity of the parcels involved.

Wildlife of Special Concern in Arizona

Northern goshawk (*Accipiter gentiles*) – Sensitive Species Surveys were conducted for the northern goshawk on and surrounding National Forest lands proposed for exchange into private ownership. These surveys were conducted on June 25, 26, and 27, 2003 on the 5 parcels of National Forest land proposed for exchange (Tracts A-E) and adjacent National Forest lands within a ½ mile distance from said parcels. Surveys conformed to or exceeded Forest Service Region 3 protocol for northern goshawk inventories.

No northern goshawks were detected during these surveys. Habitat in the project area and vicinity is considered poor or marginal for this species. Habitat is comprised of a Ponderosa pine-alligator juniper association. Ponderosa pine is the dominant woody species and grows in young, even-aged stands and “doghair” thickets. There are few yellow pines (large diameter ponderosa pines) or snags. Understory vegetation is predominantly alligator juniper, with inclusions of Gambel oak and one-seed juniper. Based on negative surveys and poor habitat quality, it is considered unlikely to be occupied by northern goshawks.

The proposed land exchange will have no impact to the northern goshawk or its habitat.

Northern leopard frog (*Rana pipiens*) – Sensitive Species The effects of the land exchange on the northern leopard frog are essentially the same as described for the Chiricahua leopard frog. The Federal parcels support no suitable habitat for the northern leopard frog, but are located within dispersal distance (one mile) of five livestock tanks in the vicinity. These 5 tanks currently do not have all the attributes needed for leopard frog occupation, i.e., they are generally murky, silt-laden waters with little emergent or submergent vegetation. Based on negative survey results, that were completed using standardized survey protocol developed specifically for ranid frogs, it was determined none of these tanks are currently occupied by northern leopard frogs.

Northern leopard frogs were documented at Rainbow Lake in 1972, as well as the small reservoir to the north, and along Billy Creek. These sites are located approximately four miles from the nearest Federal parcel. The AGFD has found northern leopard frogs at several sites west of Show Low Lake (approximately five miles or more from the nearest Federal parcel) in 1999, 2000, and 2001. This species has also been found at Nelson Reservoir and Nutrioso Creek, about two miles from the Dry Lakes and Reagan Reservoir non-Federal parcels.

With the possible exception of the Dry Lakes parcel, the private parcels also do not provide suitable habitat for northern leopard frogs. However, the ephemeral nature and current condition of the water features on this parcel limits its potential suitability for this species. Transfer of the Dry Lakes parcel into Federal ownership will not affect this species or its habitat.

The proposed land exchange will have no impact to the northern leopard frog or its habitat.

Direct and Indirect Effects

Proposed Action

The proposed action would result in no negative effect on any TES plant or animal species and their habitat. During a ground survey of all parcels, no signs of any of these species were found. Additionally, inquiry into Arizona Game and Fish Department's Heritage Data Management System records and discussions with Arizona Game and Fish Department and Forest Service wildlife biologists revealed no historic or current occupancy records of any of the species considered. Therefore formal consultation with the USDI Fish and Wildlife Service was not necessary. This alternative meets the intent of the Endangered Species Act of 1973.

No Action

Conditions would remain the same. Currently, no development is planned on the non-Federal lands. Due to their proximity to existing development in the Morgan Flat area and Highway 191, respectively, the Morgan Wash and Nutrioso non-Federal parcels have the potential to be developed in the short-term. The no-action alternative would result in no effect on TES plant and animal species and their habitat. This alternative meets the intent of the Endangered Species Act of 1973.

Cumulative Effects

Future development as authorized under Navajo County Zoning Ordinances and subdivision regulations 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 an opportunity to provide for greater long-term protection to listed species and management indicator species. This would result from the acquisition of riparian area, although limited, and wildlife habitat currently located on private land. 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 future residential development of the Federal lands would not result in any measurable effects to TES plant and animal species and their habitat or MIS (Doc 66).

No adverse impacts to TES plant and animal species and their habitat were identified for the Blue Ridge Vegetation Management Project and the OHV Corridor Project (Docs 90, 91); therefore, the proposed land exchange will result in no adverse cumulative effects to TES plant and animal species and their habitat.

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 Land Management Plan 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 70). Following is a summary of the findings.

The A-S LMP identifies a total of 16 MIS. The Federal and/or non-Federal parcels provide habitat or possible habitat for 8 of these species: mule deer, wild turkey, Abert's squirrel, northern goshawk, antelope, elk, juniper titmouse, and hairy woodpecker.

Direct and Indirect Effects

Proposed Action

Under this alternative, 586.4 acres of non-Federal land would be exchanged for 176.9 acres of Federal land. Upon completion of the exchange, the non-Federal lands would be managed by the A-S under their existing LMP. Land use on these parcels would generally remain unchanged and these parcels would be utilized primarily for dispersed recreation and livestock grazing. Over the long term, this alternative would protect these lands from development by incorporating them into the A-S and their respective multiple use management directives. In this regard, this alternative would provide long-term protection of 420.00 acres of critical winter range for elk, pronghorn, and mule deer and habitat for the juniper titmouse (Dry Lakes and Reagan Reservoir parcels); 111.09 acres of critical winter range for elk and mule deer and habitat for elk, turkey, and pronghorn (South Fork parcel); 20.34 acres of key wintering habitat for elk, mule deer, and turkey (Nutrioso parcel); and 35.00 acres of year-round habitat for elk, turkey, Abert's squirrel, and hairy woodpecker and occasional foraging habitat for northern goshawk (Morgan Wash parcel).

Future residential development would occur on 176.12 acres in the Morgan Flat area. This would remove a corresponding amount of habitat for elk, turkey, Abert's squirrel, and hairy woodpecker and occasional foraging habitat for northern goshawk. Development on Federal Tract A and B parcels would reduce the amount of natural buffer between existing development in the Morgan Flat area and the Woolhouse Habitat Area, which provides important habitat for elk, antelope, mule deer, turkey, Abert's squirrel, and hairy woodpecker and possible foraging and/or nesting habitat for northern goshawk.

No Action

Under this alternative, Federal lands proposed for exchange would continue to be administered and managed by the A-S and the non-Federal parcels would remain in private ownership. Private development in the Morgan Flat area would be limited to the existing private lands in the area. Activities associated with the Federal parcels would be largely limited to continued dispersed recreation and livestock grazing, since these lands have limited value for timber production or developed recreation. A total of 176.12 acres of year-round habitat for elk, turkey, Abert's squirrel, and hairy woodpecker and occasional foraging habitat for northern goshawk would continue to be managed by A-S. Ongoing and future tree thinning activities in the area in support of Wildland Urban Interface fuels reduction would reduce overall habitat quality for Abert's squirrel. Federal Tracts A and B would continue to contribute to the natural buffer between developed private lands in the Morgan Flat area and the Woolhouse Habitat Area north of FR 45, which provides important habitat for elk, antelope, mule deer, turkey, Abert's squirrel, and hairy woodpecker, and possible foraging and/or nesting habitat for northern goshawk.

Land use on the majority of the non-Federal parcels would remain unchanged over the short term. Most of the parcels are remote and are unlikely to be developed in the near future. The Morgan Wash parcel and the Nutrioso parcel, due to their proximity to existing development and to Highway 191, respectively, are more likely to be subject to development in the near future. Development of the Morgan Wash parcel would reduce or eliminate 35.00 acres of habitat for turkey, elk, Abert's squirrel, and hairy woodpecker and occasional foraging habitat for northern goshawk. Development of the Nutrioso parcel would reduce or eliminate 20.34 acres of habitat for elk, mule deer, and turkey and would fragment, to a small degree, key wintering habitat for these species on surrounding Forest lands. It would also fragment habitat for the juniper titmouse on adjacent Forest lands.

Cumulative Effects

Cumulative effects will be limited under either the proposed action or the no action alternatives. The effects of the proposed action are (1) the likely development of an additional 141.00 acres (176 total acres of Federal parcels minus 35 acres of acquired Morgan Wash non-Federal parcel) in the already developed and developing Morgan Flat area; (2) a further localized reduction of habitat for elk, mule deer, turkey, Abert's squirrel, and hairy woodpecker and occasional foraging habitat for northern goshawk in the Morgan Flat area and (3) an incremental impact of additional development in the area on the nearby Woolhouse Habitat Area.

The effects of no action are (1) the likely development of an additional 35.00 acres (Morgan Wash non-Federal parcel) in the already developed and developing Morgan Flat area and (2) an additional 20.34 acres habitat fragmentation associated with development of the Nutrioso non-Federal parcel adjacent to existing low density rural development. 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. Either proposal is not expected to result in significant adverse cumulative effects to MIS.

No adverse impacts to MIS were identified for the Blue Ridge Vegetation Management Project and the OHV Corridor Project (Docs 90, 91); therefore, the proposed land exchange will result in no adverse cumulative effects to MIS.

Migratory Birds

Presidential Executive Order 13186 was signed on January 10, 2001, placing emphasis on conservation of migratory birds. This order requires that an analysis be made of the effects of Forest Service actions on Species of Concern listed by Partners in Flight, the effects on Important Bird Areas (IBA's) identified by Partners in Flight (Latta, et al. 1999), and the effects to important overwintering areas. There are no IBA's or important wintering areas within the analysis area.

The Federal and/or non-Federal parcels support three distinct habitat types: pine forest, pinyon-juniper woodland, and high elevation grassland. Priority migratory bird species corresponding to these habitat types are northern goshawk, olive-sided flycatcher, Cordilleran flycatcher, purple martin, gray flycatcher, pinyon jay, gray vireo, black-throated gray warbler, juniper titmouse, ferruginous hawk, Swainson's hawk, burrowing owl, and grasshopper sparrow. The northern goshawk and juniper titmouse are discussed in previous sections of this document. There is no habitat in the analysis area for the grasshopper sparrow. An analysis of migratory birds as they would be affected by the proposed land exchange was made and is in the project record (Doc 70).

Proposed Action

Under this alternative, 586.6 acres of non-Federal land would be exchanged for 176 acres of Federal land and would subsequently be managed by the A-S under its existing LMP. Land use on these parcels would remain largely unchanged from their current condition and would be utilized primarily for dispersed recreation and livestock grazing. Over the long term, this alternative would protect these lands from development by incorporating them into the A-S and their respective multiple use management directives. This alternative would therefore provide long-term protection and management of 420.00

acres of potential breeding habitat for the gray flycatcher, pinyon jay, gray vireo, black-throated gray warbler, and burrowing owl and would prevent 20.34 acres of habitat fragmentation for these species on adjacent Forest lands in the Nutrioso area. Furthermore, this alternative would result in the long-term protection and management of 551.60 acres of possible wintering and/or stopover habitat for the ferruginous and Swainson's hawk.

Future residential development of 141.12 additional acres (176.12 total acres of Federal parcels minus 35 acres of the acquired Morgan Wash non-Federal parcel) would occur in the Morgan Flat area. This would not directly affect habitat for any priority migratory bird species, but somewhat would reduce the existing natural buffer between existing development in the Morgan Flat area and the Woolhouse Habitat Area, which provides for the purple martin and Cordilleran flycatcher.

No Action

Under this alternative, Federal lands proposed for exchange would continue to be administered and managed by the A-S and the non-Federal parcels would remain in private ownership. Federal lands would continue to be utilized for dispersed recreation and livestock grazing and would be subject to periodic tree thinning to protect adjacent private lands from wildfire. The Federal parcels provide no habitat for any of the identified priority migratory bird species and therefore this alternative would have no direct effect on these species. This alternative would retain some existing natural buffer to the Woolhouse Habitat Area north of FR 45, which provides habitat for the Cordilleran flycatcher and purple martin.

Land use on the majority of the non-Federal parcels would remain unchanged over the short term. With the exception of the Morgan Wash and Nutrioso parcels, these lands are unlikely to be developed in the near future and would continue to provide potential breeding habitat for the gray flycatcher, pinyon jay, gray vireo, black-throated gray warbler, and burrowing owl and possible wintering or stopover habitat for ferruginous and Swainson's hawks. Future development of the Nutrioso parcel would fragment, to a small degree, possible habitat for the gray flycatcher, pinyon jay, gray vireo, black-throated gray warbler, and burrowing owl and would eliminate 20.34 acres of possible wintering and/or stopover habitat for ferruginous and Swainson's hawks. Future development of the non-Federal Morgan Wash parcel is unlikely to affect Cordilleran flycatchers along Morgan Wash to the south.

Cumulative Effects

Cumulative effects will be limited under either the proposed action or the no action alternatives. The effects of the proposed action are limited to the incremental impact of additional development in Morgan Flat area on habitat for priority migratory bird species in the nearby Woolhouse Habitat Area. The effects of the no action alternative are an additional 20.34 acres of removal and fragmentation of potential breeding habitat for eight priority migratory bird species due to the potential for future development of the Nutrioso parcel adjacent to existing low density rural development. Either proposal is not expected to result in significant adverse cumulative effects to migratory birds.

No adverse impacts to migratory birds were identified for the Blue Ridge Vegetation Management Project and the OHV Corridor Project (Docs 90, 91); therefore, the proposed land exchange will result in no adverse cumulative effects to migratory birds.

Soil and Air

Affected Environment

A review of the Terrestrial Ecosystems Survey of the Apache-Sitgreaves National Forest indicated that Federal Tracts A, C, D, and E, are located on nearly level to gently sloping elevated plains. Tract B is characterized as being located on simple moderately steep cinder cone slopes (Docs 68, 79).

Air shed conditions on the Federal parcels are identified as being associated with populated areas with high use dirt/aggregate road surfaces.

The non-Federal lands exhibit the following characteristics. The Dry Lakes parcel ranges from nearly level simple elevated plains to steep complex slopes in the southwest portion. The Reagan Reservoir parcel is located on nearly level to strongly sloping simple elevated plains. The South Fork parcel ranges from simple, gently sloping terrain on the west half to steep, very complex scarp slopes on the eastern half. The Nutrioso parcel is located on nearly level to strongly sloping simple elevated plains. The Morgan Wash parcel ranges from nearly level elevated plains to moderately steep complex scarp slopes in the southwest corner.

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

Direct and Indirect Effects

Proposed Action

The proposed land exchange will have no effect on soil stability. No measurable soil loss is anticipated. The air quality on the Federal parcels may change with future development possibly improving with paving of sections of currently unsurfaced roads. The air quality will remain relatively the same on the non-Federal parcels.

No Action

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

Cumulative Effects

If the Federal lands remain undeveloped soils which are currently in satisfactory condition would remain the same. No air quality effects have been attributed to current or proposed uses. The air quality will essentially remain the same. Future development of the Federal lands would be subject to Navajo County subdivision and ADEQ regulations. The Zoning Ordinances of Navajo County and State laws and regulations were written to minimize impacts to soil and air from human activity (Doc 78). It is assumed that future development done in accordance with County and State regulations would result in no significant measurable soil loss. Air quality would remain the same and may slightly improve as a result of some roads being paved in the proposed action. No significant adverse effects to air quality are expected. No cumulative impacts are anticipated.

No adverse impacts to soil and air resources were identified for the Blue Ridge Vegetation Management Project and the OHV Corridor Project (Docs 90, 91); therefore, the proposed land exchange will result in no adverse cumulative effects to soil and air resources.

Land Use

Affected Environment

The Federal lands are interspersed with residential development and are currently part of the Sponsellor and Blue Ridge grazing allotments. The Federal lands meet criteria in the A-S LMP as being available to meet the needs of expanding communities. The Federal lands are undeveloped but are encumbered by several authorized uses.

An easement for an existing road right-of-way (Forest Road 45 known as Porter Mountain Road), 100 feet wide, 50 feet each side of centerline, over and across the northern boundaries in Sections 3 and 4, T. 9 N., R. 23 E., documented in United States Department of Agriculture Easement dated March 4, 1977, to the Navajo County, recorded March 24, 1977, Navajo County, Arizona, in Docket 483, pages 846-856 (BLM A 9984).

An easement for an existing road right-of-way (FR 9717 known as Sponsellor Siding Road), 50 feet wide, 25 feet each side of centerline, across portions of Sections 3 and 10, T. 9 N., R. 23 E., documented in United States Department of Agriculture Public Road Easement dated June 9, 1997,

to the Navajo County Board of Supervisors, and in that certain Navajo County Board Of Supervisors Resolution No. 86-87, dated July 7, 1997, all recorded July 8, 1997, Navajo County, Arizona, Fee # 1997 11300 (9 pages).

An easement for an existing road right-of-way (FR 45F known as Ray Rodgers Access Road in Porter Mountain Estates), over and across portions of Section 9, T. 9 N., R. 23 E., documented in United States Department of Agriculture Easement and Stipulation dated August 6, 1979, to the Navajo County Board of Supervisors, recorded Navajo County, Arizona, in Docket 567, pages 732-740.

Existing powerline right-of-way authorized under a Forest Service Master Special Use Permit dated 4/27/98, Navapache Electric Cooperative, Inc., Sections 4 and 9.

Existing telephone line right-of-way authorized under a Forest Service Annual Special Use Permit dated 09/06/1966, Continental Telephone, c/o US West, Sections 3 and 9.

Existing telephone line right-of-way, authorized under a Forest Service Master Special Use Permit dated 8/14/1995, Citizens Telecommunications Company of the White Mountains, Inc., Sections 4 and 9.

All of the non-Federal parcels except the South Fork Parcel are unencumbered.

An easement for existing electric transmission and distribution line or sewer system and incidental purposes, 20 feet wide, outstanding to Navopache Electric Cooperative, Inc., as set forth in that certain right-of-way easement dated July 31, 1967, recorded April 4, 1968, Apache County, Arizona, in Docket 104, pages 322-324.

An easement for existing electric transmission and/or distribution line or sewer system and necessary appurtenances and incidental purposes, 20 feet wide, 10 feet each side of centerline, outstanding to Navopache Electric Cooperative, Inc., as set forth in that certain right-of-way easement dated April 3, 1992, recorded August 31, 1992, Apache County, Arizona, in Docket 690, pages 373-375.

Remnants of a log cabin on the Nutrioso parcel were removed by the non-Federal party in February 2005. No utilities or improved roads serve this parcel.

The long-term use of the non-Federal lands is more consistent with the surrounding Federal lands. Most of the non-Federal lands are identified as desirable for acquisition as they would improve National Forest management by blocking up public land ownership, provide for dispersed outdoor recreation and add acreage containing desirable MIS habitat. As previously stated in Chapter 2 of this document the exchange proposal analyzed reflects lands mutually agreed upon by the non-Federal landowner and the Forest Service. The non-Federal landowner identified Federal Tract E as desirable for conveyance and offered the non-Federal Morgan Wash parcel for Federal acquisition. Although Tract E in and of itself does not add to the blocking up of public lands the acquisition of Morgan Wash would add to the acres of federally owned riparian influenced lands.

Direct and Indirect Effects

Proposed Action

The United States would convey 176.9 acres of Federal lands into private ownership that would be available for residential development. BC2 LLC would issue easements to the currently authorized easement and permit holders if the exchange were consummated. The Forest Service would no longer incur the expense associated with the administration of all or a portion of six special use authorizations.

586.4 acres of non-Federal private lands would be acquired by the Forest Service and be available for public uses such as dispersed recreation, including hunting and camping, and livestock grazing.

The United States would continue to recognize the two electric transmission line easements located on the South Fork Parcel. Any future development on the non-Federal lands would be precluded.

No Action

No change. The Forest Service would continue to administer the special use authorizations located on the Federal parcels as well as incurring the expenses associated with the administration. The non-Federal parcels would remain in private ownership.

Cumulative Effects

The Forest Service would acquire the non-Federal parcels and manage them for their natural resource characteristics with them remaining in a relatively undeveloped condition. The Federal lands would become available for residential development in accordance with Navajo County Zoning Ordinances and subdivision regulations. There currently are no other inquiries or formal proposals for the exchange of Federal lands in this area. No cumulative impacts are anticipated.

Heritage Resources

Affected Environment

The A-S prepared the cultural resource survey report for the Federal lands identified for exchange. No archaeological properties were identified.

Heritage resource surveys were not conducted on the non-Federal lands.

Direct and Indirect Effects

Proposed Action

Final approval of the cultural resource survey by the A-S Forest Supervisor was received on July 24, 2003. 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 the Navajo Nation regarding the land exchange. The Hopi Tribe and the Navajo Nation requested they be sent copies of the heritage resources inventories for the Federal lands. No other issues were raised.

Any heritage resource sites found on the non-Federal lands would fall under Federal management and would be afforded greater protection than under private ownership.

No Action

Federal lands have already been surveyed. Heritage resources that are located on the non-Federal lands would not have any 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. 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 Blue Ridge Vegetation Management Project and the OHV Corridor Project (Docs 90, 91); therefore, the proposed land exchange will result in no adverse cumulative effects to heritage resources.

Grazing Resources

Affected Environment

The Federal lands are part of the Blue Ridge Grazing Allotment, currently permitted to Don L. Hansen, and the Sponsellor Grazing Allotment, currently permitted to Charles and Judith Backus. 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. Both parties were notified of the proposed action in January 2002. The proposed action would not conflict with the requirements of Sec. 402 (g) of FLPMA.

Direct and Indirect Effects

Proposed Action

Both the Blue Ridge and the Sponsellor Allotments would remain viable livestock grazing operations. The land exchange would not result in any immediate reduction of animal units on the allotments (Docs 13, 14). 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 integrated into ongoing Forest Service management plans, including surrounding grazing allotments, for each respective area.

No Action

Permitted numbers in the Blue Ridge and Sponsellor Allotments 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 current Forest Service management plans for each respective area under the proposed action (36 CFR 254.3(f)). The Blue Ridge Grazing Allotment will be reduced by about 79 acres and the Sponsellor Grazing Allotment by about 66 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 still occur on the remaining acres of the allotments. Grazing effects will be related to those analyzed in the environmental assessments for the affected allotments. No cumulative impacts are anticipated.

The Blue Ridge Vegetation Management Project and the OHV Corridor Project did not identify any adverse impacts to grazing resources (Docs 90, 91); therefore the land exchange proposal will have no adverse cumulative effects.

Mineral Resources

Affected Environment

A Forest Service Mineral Report was prepared (Doc 25). The New Mexico Zone Geologist concluded that the subject non-Federal lands, except for the South Fork Parcel, and Federal lands have low potential for leasable oil, gas, coal, and geothermal resources. There is no potential for sodium, phosphate or any other leasable minerals. The geologic environment, the inferred geologic processes, and the lack of reported mineral resources indicate a low potential for the accumulation of locatable minerals within the subject parcels. The potential for saleable mineral deposits is low to moderate. Most of the parcels have a moderate potential for the presence of cinders, due to the volcanic origins of the surface rocks. However, there are no indications that any parcel contains a valuable cinder deposit. Concurrence from the BLM was received on the Mineral Report in March 2004. The South Fork Parcel was added to the exchange configuration on June 6, 2003 (Doc 41). An amendment to the original Mineral Report was

prepared in December 2004 and submitted to the BLM. Based upon the information that was previously prepared when the parcel was being considered as part of the proposed Cote Land Exchange (Doc 26) the conclusion was similar to that for the other non-Federal parcels.

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. Most of the parcels have a moderate potential for the presence of common cinders, due to the volcanic origins of the surface rock. However, there are no indications that any parcel contains a valuable cinder deposit. No cumulative impacts are anticipated.

The Blue Ridge Vegetation Management Project and the OHV Corridor Project did not identify any impacts to minerals resources (Docs 90, 91); 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 (Doc 9).

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 Blue Ridge Vegetation Management Project and the OHV Corridor Project 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 in January 2001 and updated in May 2002 (Doc 21); the respective acreage of floodplains and wetlands contained on both the non-Federal and Federal parcels is displayed in Table 2. in the Water Quality section of this document. The non-Federal parcels contain a total of 0.0 acres of wetlands and 0.85 mile of floodplain. The Federal parcels contain 0.0 acres of mappable wetlands and 0.0 miles of mappable floodplain. One small seep is present on Tract E, the southernmost property, with minimal wetland type species (iris) present in an area totaling less than 0.1 acre.

Direct and Indirect Effects

Proposed Action

There would be a net gain of 0.0 acres of wetlands and 0.85 miles of floodplain and afford the resources present on these parcels greater protection under Federal jurisdiction. This would complement the Forests' ongoing efforts to protect and increase riparian habitat which would result in a small increase in floodplain resources. The proposal complies with Forest Service policy (FSM 2527.3) and is consistent with the intent of Executive Order 11988, Floodplain Management and Executive Order 11990, Protection of Wetlands.

No Action

There would no change in the floodplain under Federal management.

There is 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 minimally contribute towards reversing the long term trend of declining 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. Future development on the Federal lands would be subject to Navajo County subdivision standards and ADEQ regulations. Subdivision development would involve construction of additional resources that would expand the existing Porter Mountain Domestic Water Improvement District's water system facilities. Each residential lot would have its own on-site sanitary disposal system since the nearest sewer collection facility is over 2 miles away (Doc 84). No adverse cumulative impacts are anticipated.

Cumulative effects analysis for the Blue Ridge Vegetation Management Project (Doc 98) and the OHV Corridor Project indicated there would be no significant impact to water resources with the implementation of these projects. 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 Blue Ridge Vegetation Management Project and the OHV Corridor Project did not identify any adverse effect on wetlands and floodplains (Docs 90, 91).

Caves and Other Special Management Areas

The proposed action meets the intent of the Federal Cave Protection Act of November 18, 1988. There is no indication that any lands proposed for exchange contain cave resources. The Blue Ridge Vegetation Management Project and the OHV Corridor Project would have no effect on cave resources.

No other special management areas designated in the A-S LMP occur on the Federal lands proposed for exchange. The proposed action will result in no effect to caves or other special management 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

Proposed Action

There would be little effect on returns to the two counties, the State of Arizona, or the Federal Treasury. The 586.4 acres of non-Federal lands are located within Apache (551.4 acres) and Navajo (35.0 acres) Counties; all of the Federal land is located within Navajo County. The private land tax base for Apache County would decrease by 551.4 acres. An increase in PILT and Secure Rural Schools and Community Self-Determination Act of 2000 funds to Apache County would offset the majority of lost tax revenues. The private land tax base for Navajo County would increase by 141.9 acres (176.9 total acres of Federal parcels minus 35 acres of acquired Morgan Wash non-Federal parcel). It is expected that there would be an increase in property taxes collected by Navajo County as a result of any future residential development of the Federal lands.

No Action

There would be no change in acreage or private land subject to property taxes in either Apache or Navajo Counties. Real estate property tax revenues would only increase if the subject non-Federal lands were eventually developed.

Cumulative Effects

Under the proposed action Apache County would lose 551.4 acres and Navajo County would gain 141.9 acres of taxable private land. It is anticipated that Navajo County’s tax revenues would increase as a result of the additional undeveloped private land base. Apache County would lose approximately 551.4 acres of private land and the tax revenues associated with them. There would be a corresponding increase in PILT and Secure Rural Schools and Community Self-Determination Act of 2000 funds to Apache County to help offset the lands moving into Federal ownership.

The change in the private land base for Apache and Navajo Counties, and loss of tax revenue in Apache County, is neither significant nor irreversible. Future land exchanges involving Federal lands may favor Apache County by adding to the taxable private land base. Apache County tax assessments on BC2 LLC’s undeveloped properties totaled approximately \$794.00 in 2004 (Apache County Tax Assessor records). Federal payments to the States for Apache County averaged \$0.90 per acre in 2005. Apache County would receive approximately \$298.00 per year less in revenues as a result of the land exchange.

Future residential development on the Federal lands in Navajo County would add considerably to the County’s private property tax base. Based on an average tax assessment of \$1,000 per residential lot in annual tax revenues in 2001 (Navajo County Tax Assessor records) for developed one-acre lots (containing a single family dwelling) in the Porter Mountain Estates area, Navajo County would expect to receive approximately \$100,000 to \$140,000 in additional tax revenues, assuming 100 to 140 lots with single family residences would eventually be developed.

Future residential development on the Federal lands would likely result in some localized increase in noise and traffic during construction and post construction. Development on the Federal lands would also result in some changes to the existing nature of these lands. It is assumed the visual setting on the Federal lands would change from an undeveloped rural setting associated with Navajo County's General Zoning District classification to a Rural Zoning District classification as up to 140 lots, a minimum of one-acre or larger in size located in five separate areas are developed (Doc 84). As previously stated above in the Scenic Quality discussion depending upon an individual's preference, any additional residential development in the area results in some impact to scenic quality, either positive or negative, on a personal level. Some people enjoy viewing undeveloped forestland while others enjoy viewing a forest setting that includes scattered single family residences. Future development on the Federal lands would likely be similar to or at a lower density than the currently developed adjacent private property, subject to all existing Navajo County development ordinances (Doc 78). Year-round residents represent the majority of the total population (estimated to be just over 50%) currently residing in Porter Mountain and Misty Mountain subdivisions with the remainder being owners of second homes. The majority of seasonal use is experienced during the summer months. Assuming a value of 2.5 residents per residence the total number of year round and seasonal residents would increase by 250 to 350 people as a result of future development. This increase would not result in a significant increase in post construction noise and traffic in the area since the lands being developed are scattered among the five separate parcels.

It must be 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, floodwater management and wastewater disposal. Therefore, unacceptable levels of pollution resulting from construction and the eventual development would not be 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, the planned construction of a new structural fire station, the availability of additional water for fire fighting and quicker response times would be improve fire and medical emergency related response times and the dust associated with the affected unpaved roads would be reduced due to paving.

Future residential development in the Morgan Flat area would result in an increase in both year round and seasonal residents which would result in additional business for local merchants in the Pinetop-Lakeside and Show Low areas.

No significant adverse or beneficial cumulative impacts are anticipated with this proposal in conjunction with the Blue Ridge Vegetation Management Project or the OHV Corridor Project. The proposed action would have no known adverse effect on consumers, civil rights, minority groups and women.

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. Several authorized special uses for electric utility lines and County road easements are located on several of the Federal parcels.

Direct and Indirect Effects

Proposed Action

The proposed action would contribute to consolidation of Federal ownership and eliminate 25 survey corners and approximately 8.635 miles of landline maintenance between NFS and other lands. Forest-wide landline location, posting, and maintenance, as well as potential boundary disputes, would be reduced if the exchange is consummated. This would result in an annual estimated savings of approximately \$2500 associated with the maintenance of property boundaries (Doc 63A).

No Action

There would be no change in the number of survey corners and miles of landline between NFS and other lands requiring maintenance.

Cumulative Effects

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

The elimination of encumbered acreage and administration of the special use authorizations issued to the utility company and Navajo County for use of the Federal lands would not result in appreciable savings to the Forest Service as the annual inspections, billings and periodic permit re-issuance associated with the remaining portions of existing permits would continue. This would also apply to the two electric transmission line easements crossing over the non-Federal South Fork Parcel as other sections of these transmission lines are currently administered under Special Use authorizations on the adjacent National Forest lands.

Residential development on the Federal lands may result in some future 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 with a greater number of separate property owners sharing a common boundary with the National Forest. No cumulative impacts are anticipated.

The Blue Ridge Vegetation Management Project and the OHV Corridor 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

The demand for land for primary and second homes is expected to continue in this area of Navajo County. Previous land exchanges in the Pinetop-Lakeside and Show Low areas did not negatively impact private property resulting in a decrease in land value, to the contrary private land values have and continue 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 Pinetop-Lakeside area and the corresponding values would be unduly influenced by the exchange.

Direct and Indirect Effects

Proposed Action

An additional 141 acres of private land in the Morgan Flat area would become privately owned. The government is required by law to exchange both non-Federal and Federal lands at their appraised market value (Doc 77). It is possible that some individual property owners paid a premium for their land due to its location and that it adjoined Forest Service land. Private lots adjoining the Federal lands would probably no longer demand that "premium" if re-sold, as they would no longer share a boundary with the Forest. One would not expect the market value of the lots themselves to change. The value of private land is market driven and it can either go up or down in the short term. Historically, land values in this area have been increasing and one can only conclude that property values will continue to increase over time.

No Action

There would be no change in the number of acres of private lands in the Morgan Flat area.

Cumulative Effects

Future uses on the Federal and non-Federal lands are expected to remain similar to their current uses or those existing on adjoining lands; hence no incremental effects from the proposed action would be expected. The future development on the non-Federal lands (subdivision and residential development) and conversion from ranching to residential use is a possibility under the No Action alternative. Future development occurring on the non-Federal lands would not have a significant effect on adjacent land values as the properties are undeveloped Federal lands and no plans currently exist for future development or liquidation of the properties. The likelihood of all the Federal lands being placed on the market at the same time is remote as it is only reasonable to assume that a proposed subdivision of this size once planned and approved by the County would be developed in phases. Private land values in this part of Navajo County have appreciated in recent years and there is no reason to expect anything different would occur as a result of this exchange. No cumulative impacts are anticipated.

The Blue Ridge Vegetation Management Project and the OHV Corridor Project are not expected to affect the value of adjacent private properties.

Public Services and Issues

Projecting for an increase in year round and seasonal residents as previously described in the Social and Economic Factors section it is assumed that the number of year round residents in the Morgan Flat area would increase by between 250 to 350 people with the addition of up to 140 single family residences located on five separate parcels. It is estimated that just over half of the existing residential development in the Morgan Flat area is for year round residences with the remainder being second homes. There is no reason to expect that the land exchange would result in a significant change in the percentages of year round and seasonal residents. Additional impact to schools in Pinetop-Lakeside from an increase in students is not expected to be significant. The local school district is currently planning for new school construction to meet the needs of the already expanding local population it serves (local newspaper articles).

It is unlikely that all of the estimated increase in numbers of people would ever be present at the same time in the area, even during peak periods. The estimated increase in both year round and seasonal residents is not expected to result in a significant increase in the need for public services since the Navajo County Subdivision Regulations require the developer to provide for adequate roads, utilities, water and wastewater treatment, location of flood areas and proper legal descriptions for all lots, tracts, etc.. There may eventually be a need to increase specific local residential support services in the area, such as police and fire support. A new fire station is being planned for the area and new real estate property taxes collected by Navajo County would provide a source for the funds to pay for any increases in these public services.

Issue #1. Effect of Future Development on Federal Lands

Affected Environment

The Federal lands are located within an area described as the Morgan Flat area. The total acreage of all land ownership including the subdivisions currently located in Morgan Flat was calculated to determine the percentage of change that would occur in land ownership status as a result of the proposed action (Doc 99). Approximately 1516 acres (26%) of the Morgan Flat Area's 5,877 acres is currently in private ownership. The majority of use on the private lands involves a mixture of residential lots ranging in size from less than ½ acre to approximately 1 acre in size. Several larger tracts of undeveloped land are used for ranching or being held for investment purposes. As in most rural areas there may be a few home based businesses or guiding services. Major commercial development is located over three miles away

in Pinetop-Lakeside with several establishments located along Porter Mountain south of its intersection with Penrod Road.

Direct and Indirect Effects

Proposed Action

The 4361 acres of Federal land within and surrounding the Morgan Flat area would be reduced by 141 acres or approximately 3% while the private land base would increase by the same number of acres or approximately 9%. The Federal lands do not contain areas of floodplain or saturated soils or any land with steep slopes. The non-Federal party has stated his immediate plans are for residential development on the Federal lands in compliance with Navajo County subdivision requirements (Doc 76). The majority of the land would be available for development under Navajo County Planning and Zoning ordinances. The Lakeside Fire District plans to construct a new fire station on land in Tract B that will be donated to the Fire District by the proponent of the land exchange.

No Action

No changes to the quantity and type of Federal land available for development would be available under this alternative. The non-Federal Morgan Wash parcel would be available for development.

Cumulative effects

If the Federal lands were to be developed the 9% increase in the total private acres available for future development in the Morgan Flat area is not significant. The rate at which the lands would be developed for legally acceptable uses and placed on the market is not likely to significantly affect existing adjacent private property values, land uses or available public services and amenities.

The construction of a new fire station on Tract B by the Lakeside Fire District would reduce response times and possibly result in a reduction in fire insurance rates for the residents in the Morgan Flat area (Doc 96).

The Blue Ridge Vegetation Management Project is expected to reduce wildfire fire risk in this area. The OHV Corridor Project is expected to enhance developed outdoor recreation opportunities. These two projects would not result in additional demand for public services. These projects do not contribute to a loss of or increase in private lands available for future development. Therefore, no additional adverse cumulative effects are anticipated from the proposed land exchange.

Outdoor Recreation and Access

Affected Environment

The Federal lands are located in MA1 of the A-S LMP (Doc 2). There are no Congressionally designated Recreation Areas and nothing in the LMP identifies the Federal lands as being preserved for recreation. Outdoor recreation use in this area consists primarily of undeveloped non-motorized uses such as hiking, bird watching and horseback riding. A section of the motorized trail system for the OHV Corridor Project is located approximately one mile west of Morgan Flat (Doc 91). Some unauthorized ATV use is occurring on the Forest adjacent to the Morgan Flat area. The non-Federal lands Morgan Wash parcel that is not open to public use most likely receives use similar to that described for the Federal lands due to its proximity to adjacent private land. The remaining non-Federal lands are not open to public uses. Should the land exchange be approved FS ownership would open up all these lands to dispersed public outdoor recreation activities

Direct and Indirect Effects

Proposed Action

The Morgan Flat area contains 5878 acres. The 4361 acres of Federal land within the area would be reduced by 141 acres. As a result, the Federal land available for outdoor recreation in the immediate area would be reduced by 3%. There would be an overall increase of approximately 410 acres of public land

available for outdoor recreation use elsewhere on the Forest. The Morgan Flat area would still contain a sizable land base available for outdoor recreation for both residents and visitors.

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 Morgan Flat area would be reduced by 141 acres or 3%. National Forest lands would no longer be contiguous to a number of private lots located in the Porter Mountain Estates and Misty Mountain Estates subdivisions resulting in loss of immediate access to the National Forest by the affected landowners. An additional 410 acres of lands would become available for public outdoor recreation uses. No other actions are currently being considered within the Morgan Flat area that may have a future effect on the total number of Federal acres available for outdoor recreation. No cumulative impacts are anticipated.

The Blue Ridge Vegetation Management Project and the OHV Corridor Project do not impact the number of acres available for outdoor recreation uses. No cumulative impacts in conjunction with these projects are anticipated.

Infrastructure, Traffic, Dust, and Pollution

Affected Environment

The Federal lands are interspersed within and adjacent to Porter Mountain and Misty Mountain Estates. Infrastructure, consisting of water, electric, telephone, and streets, is for the most part in close proximity to the parcels. All local internal roads are native material or aggregate surfaced. Current private uses are almost entirely residential with some ranching.

Direct and Indirect Effects

Proposed Action

Five separate Federal parcels would be conveyed into private ownership and subdivided into residential lots subject to State laws and Navajo County subdivision regulations. All required infrastructure including domestic water and wastewater facilities, underground electric and telephone service lines, and paved roads would be constructed or installed by the developer (Doc 84). Some increase in local traffic would be expected as a result of the new development. Sections of the existing internal road system that also provide access to the Federal parcels would be paved. Stormwater runoff would be managed through construction of required drainage and retention facilities to insure water quality is maintained and downstream properties are protected.

No Action

No changes to the existing infrastructure. Additional water would not be available for domestic or structural firefighting purposes. All existing internal roads would continue to remain unpaved and the dust and mud associated with the road system would remain unchanged.

Cumulative effects

If the Federal lands were developed there would be an increased demand for additional infrastructure to meet the needs of the additional residential development. The developed would construct any required new infrastructure necessary for the new development. In addition, the developer would be required to pave the sections of the existing internal road system that would provide access to the parcels that are to be developed. Dust and seasonal mud associated with unsurfaced roads would be greatly reduced. This would also contribute to a reduction in soil loss from the roads. There would be some increase in local traffic. New roads should be able to handle any additional traffic as they would be built to county standard and paved.

Additional domestic water well(s) would be developed and storage provided that would be transferred to the water improvement district. It can only be assumed that this additional production and increased storage would add to the reliability of the existing domestic water system as well as increasing the reliability of water available for structural fire protection. No adverse cumulative impacts are anticipated.

The Blue Ridge Vegetation Management Project and the OHV Corridor Project do not have an impact on infrastructure or traffic. Any dust or air pollution is temporary, quickly dissipates and is localized resulting in little if any impact. No cumulative impacts in conjunction with these projects are anticipated.

Chapter 4 - Consultation and Coordination

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

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APPENDICES

- A. Lands to be Exchanged - Legal Descriptions
- B. Lands to be Exchanged - Maps
- C. Actions Analyzed for Cumulative Effects

APPENDIX A Lands to be Exchanged

Legal description of Federal land to be exchanged

Sitgreaves National Forest

Lakeside Ranger District

Gila and Salt River Meridian, Navajo County, Arizona

Township 9 North, Range 23 East

Sec. 3 — lots 10, 15, 17, 19, and 20.

(Tract A)

Containing 78.93 acres, more or less.

Sec. 4 — lot 16.

(Tract B)

Containing 5.11 acres, more or less.

Sec. 9 — lots 1, 2 and 3; N1/2N1/2S1/2SW1/4.

(Tracts C, D, E)

Containing 92.86 record acres, more or less.

ALTOGETHER containing 176.90 record acres, more or less.

Legal Description of non-Federal land to be exchanged

Apache National Forest

Springerville Ranger District

Gila and Salt River Meridian, Apache County, Arizona

Township 8 North, Range 27 East

Sec. 24 — lot 1;

(South Fork)

Township 8 North, Range 28 East

Sec. 19 — lots 6 and 7.

Containing 111.09 record acres, more or less.

Township 8 North, Range 30 East

Sec. 26 — NE1/4,E1/2NE1/4NW1/4,N1/2SE1/4.

(Dry Lakes)

Containing 260.00 record acres, more or less.

Township 8 North, Range 30 East

Sec. 35 — W1/2SW1/4NE1/4, SE1/4SW1/4NE1/4,
SW1/4SE1/4NE1/4,E1/2SE1/4NW1/4,W1/4NE1/4
SE1/4,E1/2NW1/4SE1/4,E1/2SW1/4SE1/4,SE1/4SE1/4.

(Reagan Reservoir)

Containing 160.00 record acres, more or less.

Alpine Ranger District

Township 7 North, Range 30 East

Sec. 21 — SE1/4SW1/4SE1/4;

Sec. 28 — lot 12.

(Nutrioso)

Containing 20.34 record acres, more or less.

Sitgreaves National Forest

Lakeside Ranger District

Gila and Salt River Meridian, Navajo County, Arizona

Township 9 North, Range 23 East

Sec. 9 — S1/2NW1/4SW1/4SE1/4, S1/2SW1/4SE1/4,

SW1/4SE4/1SE1/4.

(Morgan Wash)

Containing 35.00 record acres, more or less.

ALTOGETHER containing 586.43 record acres, more or less.

Apache County – 551.43 record acres, more or less.

Navajo County – 35.00 record acres, more or less.

APPENDIX B

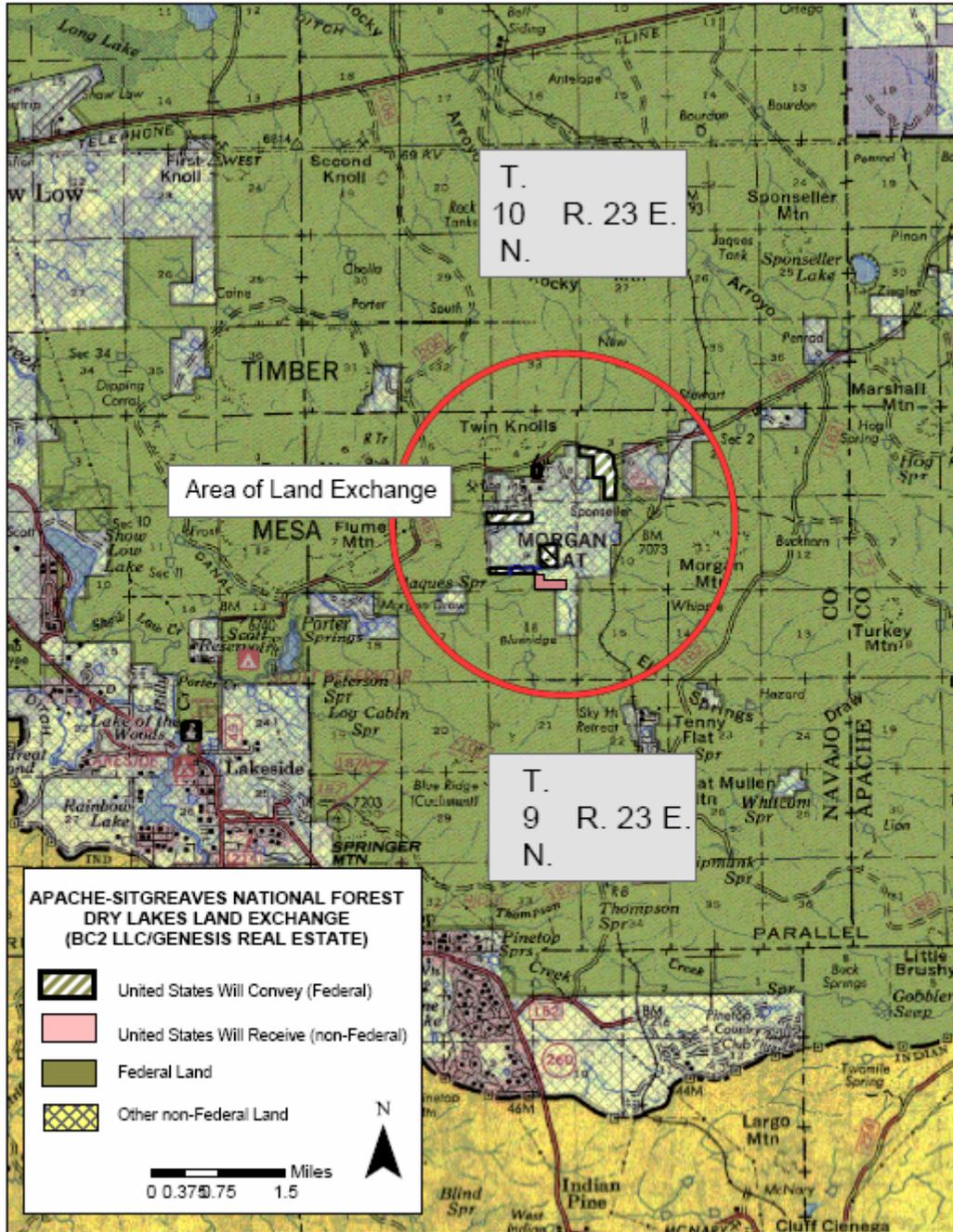


Figure 1. Federal Land to be exchanged.
 Non-Federal Morgan Wash Parcel to be exchanged.

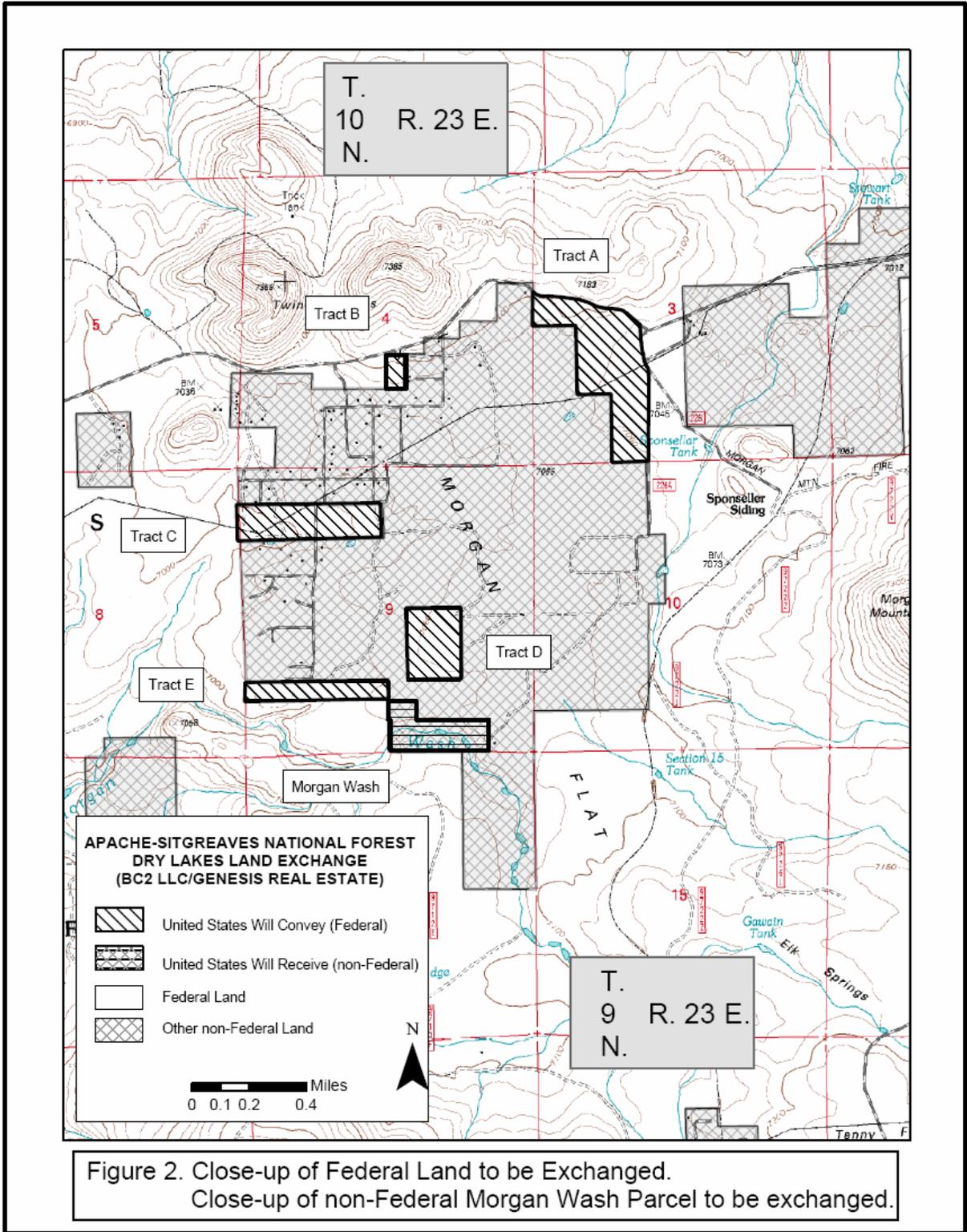


Figure 2. Close-up of Federal Land to be Exchanged.
 Close-up of non-Federal Morgan Wash Parcel to be exchanged.

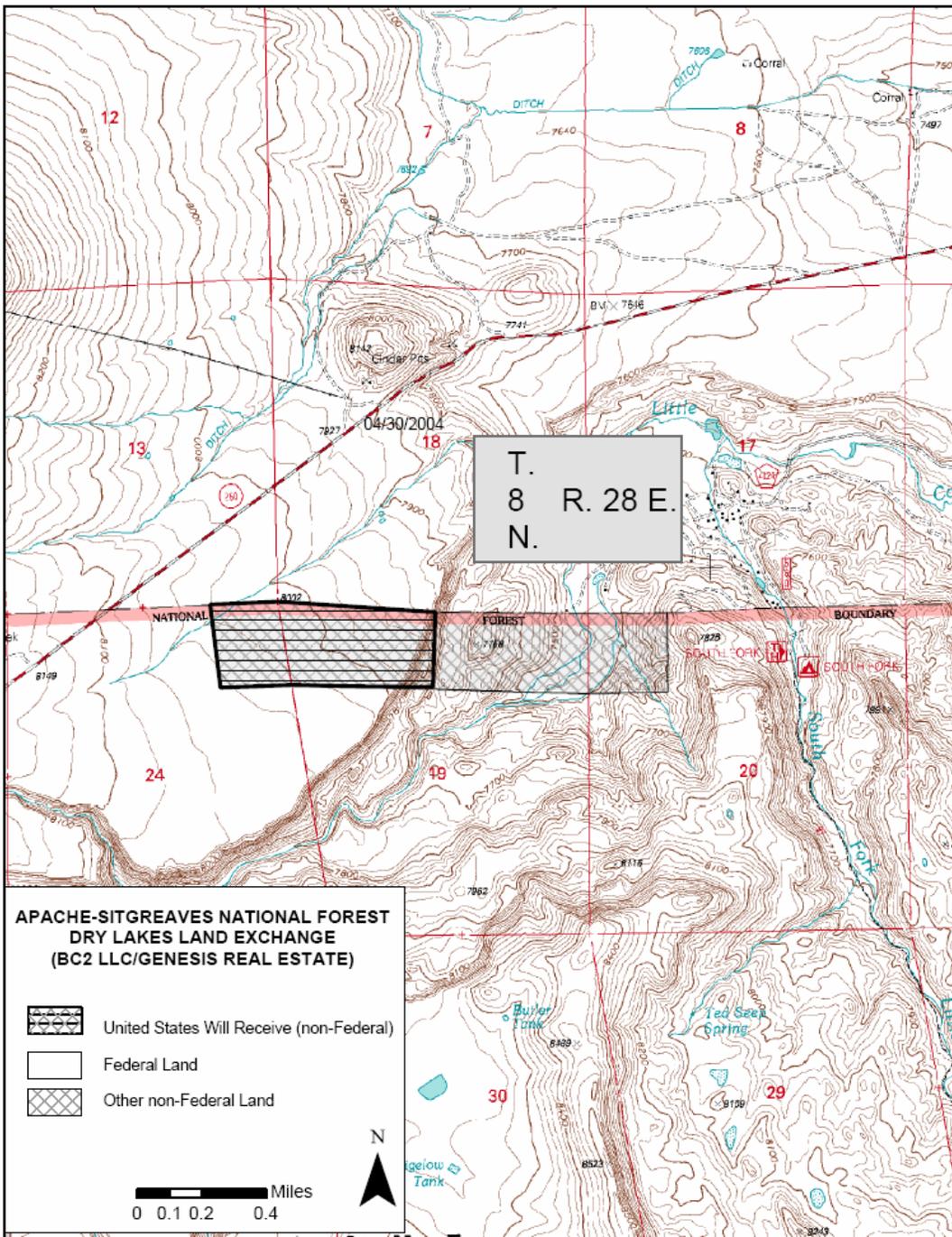
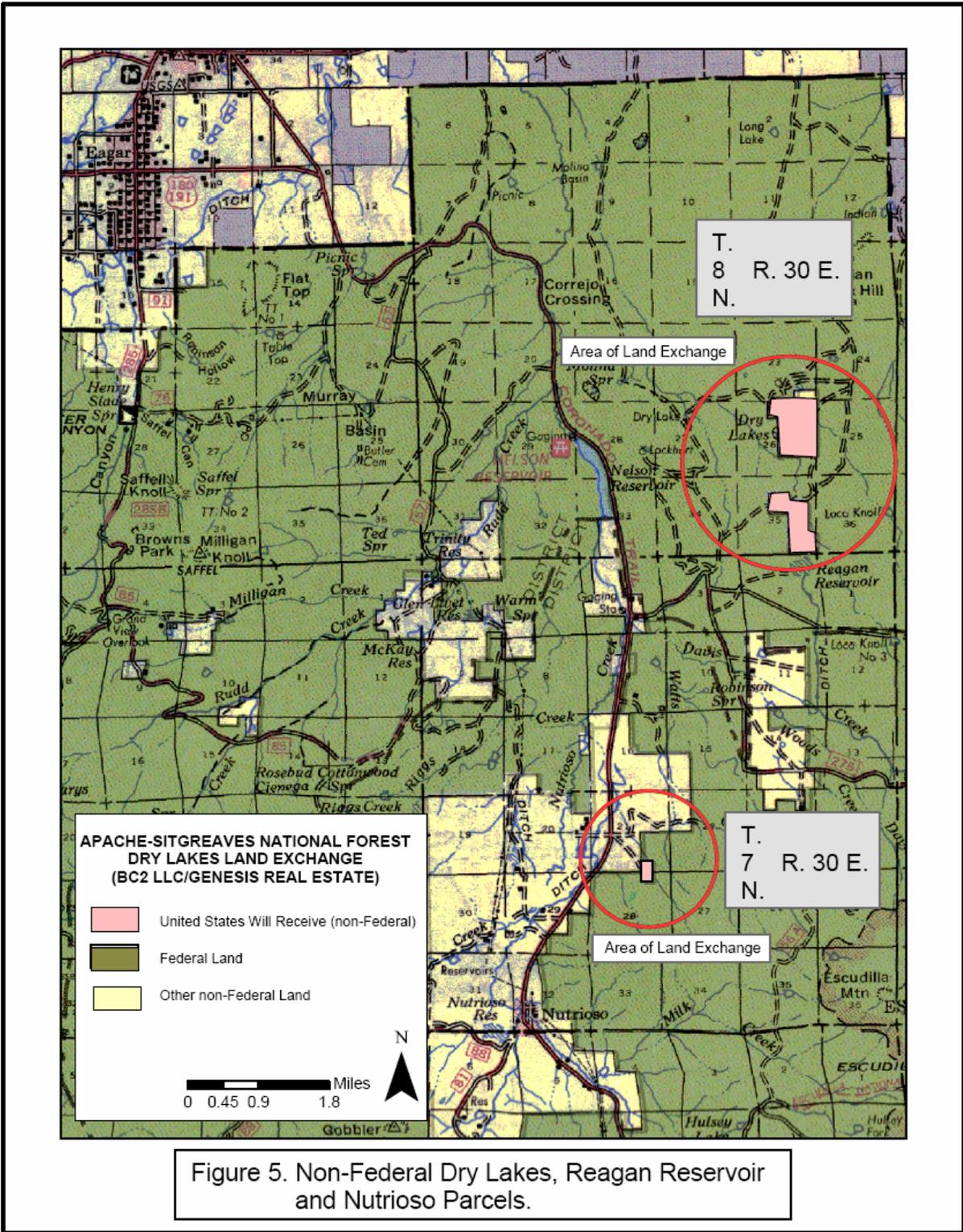
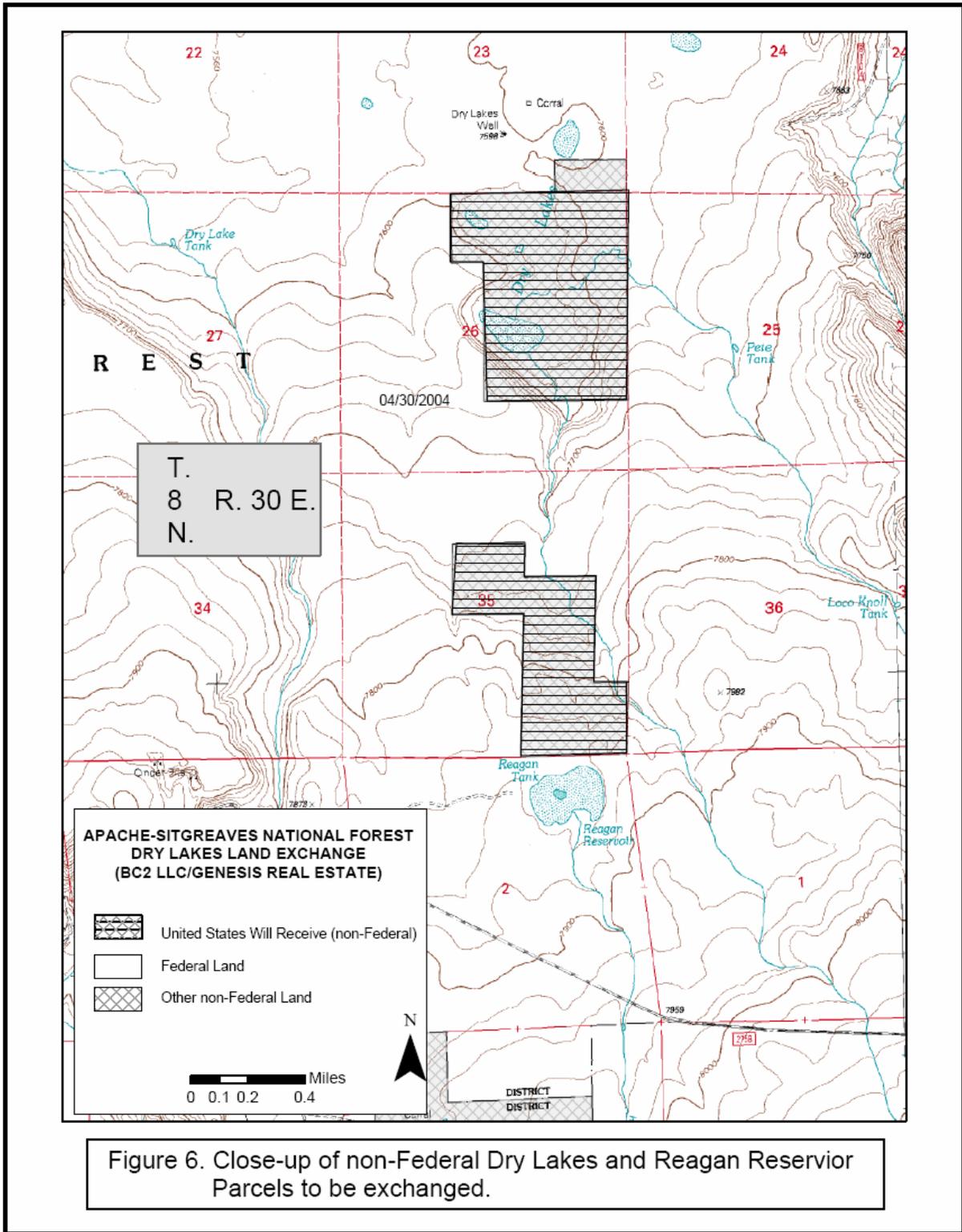


Figure 4. Close-up of non-Federal South Fork Parcel to be exchanged.





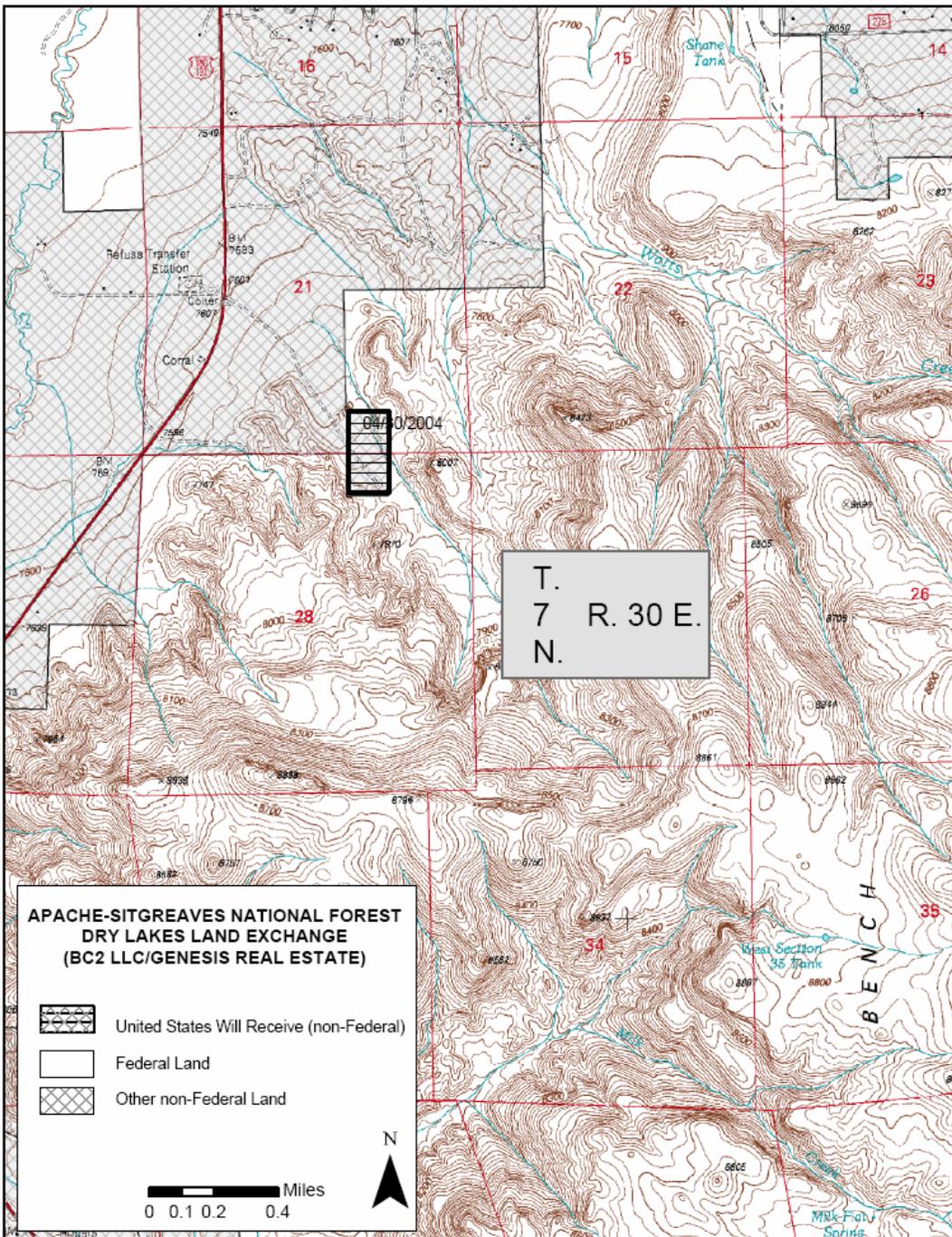


Figure 7. Close-up of non-Federal Nutrioso Parcel to be exchanged.

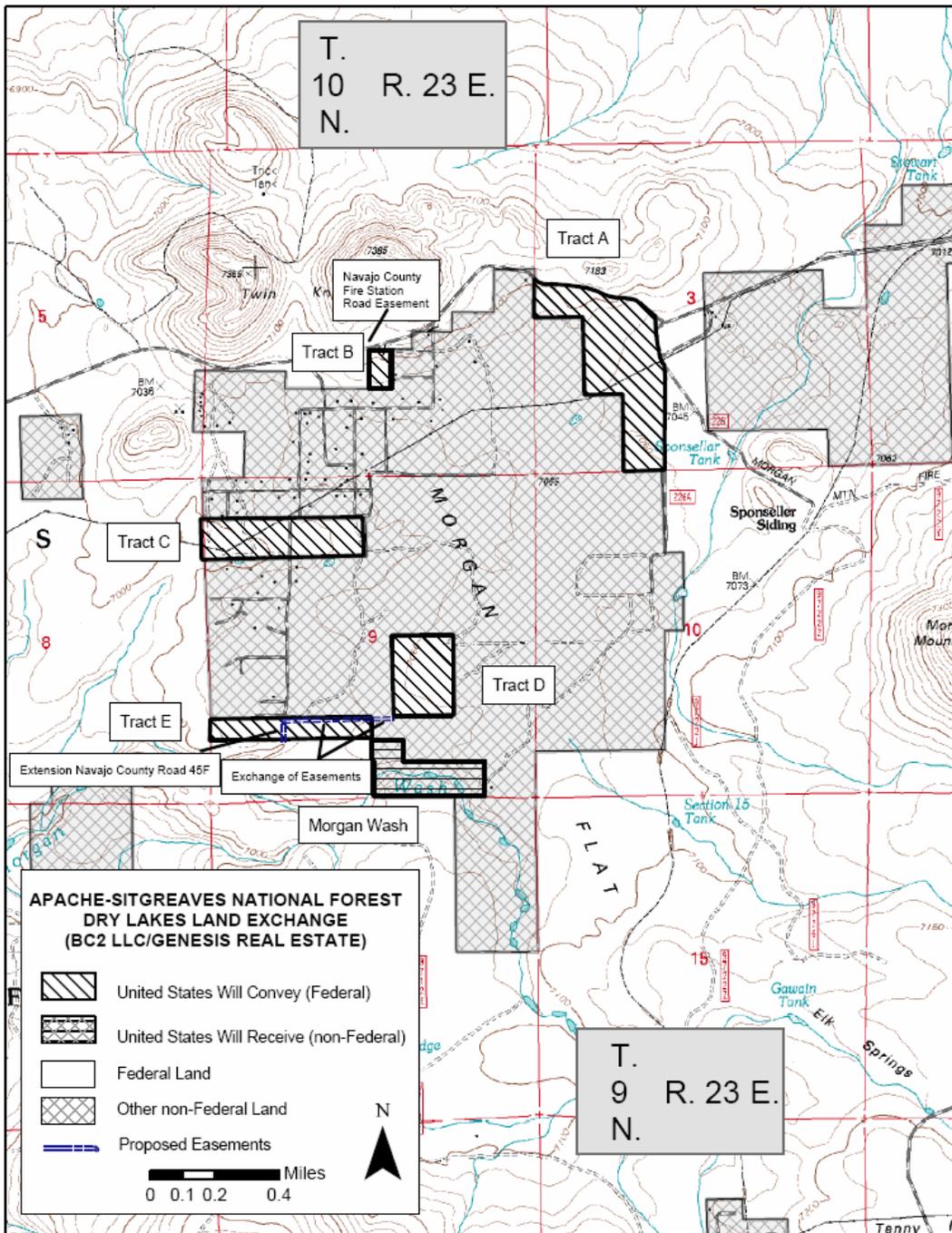


Figure 8. Proposed Easements.

APPENDIX C

Actions Analyzed for Cumulative Effects

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

Past Actions

The affected environment has been created by a combination of natural 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: Blue Ridge Vegetation Management Project and the OHV Corridor Project.

Blue Ridge Vegetation Management Project - This project includes a commercial harvest of wood, pre-commercial thinning, fuelwood harvest, a broadcast burn, removal of infected trees, creation of five wildlife waters and the closure of about 45 miles of roads. The commercial harvest and pre-commercial thinning are located on the Federal lands within Morgan Flat, including portions of the tracts proposed for exchange with the desired outcome of improving wildlife habitat and reducing the probability of catastrophic fire in the project area that includes approximately 8,280 acres. This project is currently being implemented (Doc 90).

OHV Corridor Project - This project involves designating approximately 42 miles of existing roads and approximately 8 miles of new 50-inch wide trail as OHV travel routes. The project desires to respond to demand for OHV opportunities, manage OHV usage, reduce user conflicts, provide OHV opportunities to both "street legal" and unlicensed/unregistered vehicles, and respond to demand for long distance OHV opportunities. A portion of the project is located one mile west of Morgan Flat. This project is currently being implemented (Doc 91).

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

The cumulative effects analysis considers the maximum legal residential development on the Federal lands as BC2 LLC has stated their future plans are for residential development of the land.

Given the local zoning of the adjacent areas, it is reasonably foreseeable that the lands conveyed out of Federal ownership would 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 Navajo County Zoning Ordinance and subdivision regulations 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 175 Acres a.k.a. Dry Lakes Land Exchange in The Porter Mountain Area of Navajo County, Arizona", dated April 2005, prepared by Murphy Engineering Group (Doc 84). 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 by Navajo County in this zoning area

and were used to estimate the maximum number of lots that could be reasonably developed (Doc 78, Section 801).

- Roads constructed to minimum County standard; pavement is required by County standards and all roads are assumed to be paved to meet market and County demands. In addition, existing unpaved roads which provide access to Tracts C, D and E will be paved to gain approval of a residential subdivision from the County (Docs 78, 84).
- Drainage plan would meet County standards for stormwater runoff. Improvements, including appropriate drainage facilities to manage stormwater runoff, are required to insure downstream properties are protected from any increases in runoff due to the development (Doc 78).
- Individual on-site sanitary disposal systems, as no sanitary district serves this area (Doc 84).
- Public water system that would consist of additional domestic well(s) and storage would be provided to meet new demand (Doc 84).
- Fire protection facilities are included in development concept (Doc 84).
- Other public utilities (i.e. electric, communication) will comply with established Arizona Corporation Commission regulations (Doc 84).

New public road easements would be granted to Navajo County and the existing road easement for FR 45 modified:

- New easement for the extension of FR 45F.
- New easement for access road to new fire station.
- Corrected easement for sections of FR 45 that would be realigned.

There would be an exchange of easements between Forest Service and non-Federal party for access to Federal Tract D over and across Federal Tract E and private land retained by the non-Federal party. The easement across Tract E would provide legal access to retained non-Federal lands while the easement across the non-Federal lands would provide legal access to the Federal lands.