



United
States
Department
of
Agriculture

Forest
Service

December
2004



Environmental Assessment

Timpanogos Interagency Land Exchange

Uinta National Forest, Utah

Wasatch-Cache National Forest, Utah

Fishlake National Forest, Utah

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SUMMARY

The Forest Service proposes to acquire by exchange non-Federal land located in Highland, Utah, as a site for an interagency administrative and visitor facility in accordance with the Timpanogos Interagency Land Exchange Act, Public Law (PL) 107-329. In exchange for the non-Federal property, the Forest Service has offered to exchange up to six Federal parcels within the Uinta, Fishlake, and Wasatch-Cache National Forests. The proposed exchange would be conducted with a private entity, Open Space Properties Group LLC. (OSPG).

The purpose of this initiative is to acquire lands suitable for construction of an interagency (U.S. Forest Service and National Park Service) administrative and visitor facility. This action is needed because the existing Pleasant Grove Ranger District and Timpanogos Cave National Monument facilities are inadequate to meet administrative and public service needs, and the Federal lands proposed for exchange are not situated strategically to provide these needs. The proposed exchange would allow construction of an updated facility and enable both the Forest Service and Park Service to provide better customer service.

The proposed action would create no significant impacts to cultural resources, vegetation, wildlife, threatened and endangered species, wetlands, floodplains, riparian areas, scenic quality, or recreation values.

In addition to the proposed action, the Forest Service also evaluated a No Action Alternative. This alternative analyzes the effects of not implementing the proposed land exchange.

Based upon the effects of the alternatives and valuation conclusions, the responsible official will decide:

- 1) *Whether to acquire by exchange non-Federal land located in Highland, Utah, as a site for an interagency administrative and visitor facility.*
- 2) *Whether to exchange some or all of the six Federally-owned parcels.*
- 3) *Whether to combine the exchange of certain portions of the lands with a cash equalization payment as necessary.*

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1.0 INTRODUCTION

1.1 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 chapters:

1.0 Introduction

This 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.

2.0 Alternatives

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 based on significant issues raised by the public and other agencies. Finally, this section provides a summary table of the environmental consequences associated with each alternative.

3.0 Environmental Consequences

This section describes the resources which may be impacted by implementing the proposed action, and describes the environmental effects of implementing the proposed action and other alternatives. This analysis is organized first by issue, and then by resource. Within each section, the affected environment is described first, followed by the effects of the No Action Alternative, which provides a baseline for evaluation and comparison with the proposed action.

4.0 Consultation and Coordination

This section provides a list of preparers and agencies consulted during the development of the EA.

Additional documentation, including more detailed analyses of project-area resources, may be found in the Project Record located at the Pleasant Grove Ranger District Office in Pleasant Grove, Utah.

1.2 Background

On December 6, 2002, the Timpanogos Interagency Land Exchange Act, Public Law (PL) 107-329 ("the Act"), was signed by President Bush and became law. This Act authorized the Secretary of Agriculture to "acquire by exchange non-Federal land located in Highland, Utah, as the site for an interagency administrative and visitor facility."

This legislation is significant in that it allows National Forest System (NFS) resource lands to be exchanged for administrative land, which is otherwise not allowed. The Secretary of Agriculture (the Secretary) shall determine that the title to the non-Federal land is acceptable based on the approval standards applicable to Federal land acquisition. Providing this, the Secretary may convey by quitclaim deed all right, title, and interest of the United States in and to the Federal land in exchange for the conveyance of the non-Federal land.

The Act further directs, "Notwithstanding Section 206(b) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1716(b)), the Secretary may, as the circumstances require, either make or accept a

cash equalization payment in excess of 25 percent of the total value of the lands or interest transferred out of Federal ownership.”

The Act defines the term “Federal land” as the parcels of land and improvements to the land in the Salt Lake Meridian comprising the Long Hollow–Provo Canyon, Provo Sign and Radio Shop, Corner Canyon, Beaver Administrative Site, Springville, and the Pleasant Grove Ranger District parcels. The Act defines the term “non-Federal land” as the “Highland Property.”

The Pleasant Grove Ranger District visitor information center/administrative office is housed in a 1960’s era building that was not designed for today’s staffing requirements, visitor service needs, or modern day technology and communication needs.

The original administrative office and Visitor Center at Timpanogos Cave National Monument was built as part of the National Park Service’s (NPS) Mission ’66 program, and was destroyed by fire in 1991. In 1992, as an emergency measure, the NPS began use of a modular building for a temporary Visitor Center. The trailer still serves as the Visitor Center for the Monument’s annual visitation of 125,000 people. Additionally, the NPS administrative office is a building leased from PacifiCorp. The demolition of this building and site restoration in 2006 and 2007 has been proposed as part of the Federal Energy Regulatory Commission’s (FERC) American Fork Hydroelectric Power Plant decommissioning project. FERC proposed adoption of a Settlement Agreement to decommission the American Fork Hydroelectric Project in a draft EA. To date, FERC has not made a final decision.

1.3 Purpose and Need for Action

The purpose of this initiative is to acquire lands suitable for construction of an interagency (U.S. Forest Service and NPS) administrative and visitor facility. Authority for this action is set forth in the Act. This action is needed because existing Pleasant Grove Ranger District and Timpanogos Cave National Monument facilities are inadequate to meet administrative and public service needs, and suitable Federal lands are not situated strategically to provide these needs. The proposed exchange would allow construction of a new, updated facility and enable both the Forest Service and NPS to provide better customer service and to better meet administrative needs. The land exchange would address the following needs:

1) *More Cost Effective Service*

During times of limited Federal funding, the Forest Service needs to be as cost effective as possible. This exchange would provide an opportunity to share administrative resources resulting in more cost-effective operations. The Forest Service and NPS have recommended co-located facilities. Overhead for the individual agencies would decrease with the sharing of the Administrative Facility/Visitor Center.

2) *Build and Strengthen Partnerships*

There is a need for greater coordination and partnering between the NPS and the Forest Service. The interagency facility would build upon the strong partnership that already exists between agencies. The interagency facility would also provide better visitor service, and education and information to schools and the public.

3) *Adequate Space*

The NPS has been using inadequate temporary office and visitor information facilities. The Pleasant Grove Ranger District office is in a residential area and does not have adequate space for the current staff. The surrounding neighbors have expressed concern with traffic associated with the Ranger District office. The locations currently utilized by both agencies are too small and have little option for expansion. The new facility would include space for a Visitor Center

adequate for the more than one million visitors that American Fork Canyon receives annually. The new facility would also include interpretive exhibits and provide more educational opportunities for the public.

4) *Enhance Community and Local Government Interest*

The proposed site just outside of American Fork Canyon is within the city limits of Highland City. The Forest Service and NPS are always trying to increase participation and public stewardship of Federal lands. This proposed exchange and the new interagency facility would help to enhance community and local government interest. The cities of Highland and Alpine, Utah County, Alpine School District, NPS, Forest Service, and many other agencies and publics participated in a design concept workshop in November 1998. A shared vision for the new facility was drafted, and participants voiced a desire to have a high quality facility large enough to service a growing population. The concept was later presented to the Highland City Council in March 1999. They voted in favor of the facility, and agreed it would be compatible with the City and beneficial to residents and visitors. Local businesses, conservation groups, and others have also voiced support for the interagency facility.

5) *Greater Public Service*

The existing facilities for both the Pleasant Grove Ranger District and the Timpanogos National Monument are inadequate due to significant increases in population and visitor use of American Fork Canyon and surrounding areas. The existing facilities do not meet the public's need for parking, information services, opportunities for environmental interpretation, and other public needs and demands, such as law enforcement. Shared facilities between agencies, such as the Forest Service and NPS, are able to provide much more effective public service.

6) *Accomplish Timpanogos Interagency Land Exchange Act Directives*

The Act, sponsored by Senator Robert Bennett, was passed into law (PL 107-329) in 2002. Congressman Chris Cannon has also strongly supported the proposal. The purposes of the Act are:

- 1) to authorize the Secretary of Agriculture to acquire by exchange non-Federal land located in Highland, Utah, as the site for an interagency administrative and visitor facility;
- 2) to direct the Secretary of Interior to construct an administrative and visitor facility on the non-Federal land acquired by the Secretary of Agriculture; and
- 3) to direct the Secretary of Agriculture and the Secretary of Interior to cooperate in the development, construction, operation, and maintenance of the facility.

Additionally, the Act approves the exchange of resource lands for administrative land, which is otherwise not permitted.

This action responds to the goals and objectives outlined in the Uinta National Forest Plan and the Facility Master Plans for the Uinta, Wasatch-Cache, and Fishlake National Forests, and helps move the project area towards desired conditions described in these plans. Uinta National Forest Plan Objective 8-7 reads: "By 2008, relocate the Pleasant Grove Ranger District Office. Continue to support the co-location of the Pleasant Grove Ranger District Office with the Timpanogos Cave National Monument Administrative Office."

1.4 Proposed Action

In accordance with the Act, the action proposed by the Forest Service to meet the purpose and need is to acquire by exchange non-Federal land located in Highland, Utah, as a site for an interagency administrative and visitor facility. The appraisal of the lands described below will be in accordance with

the requirements of *The Uniform Standards of Professional Appraisal Practice*, *The Uniform Appraisal Standards for Federal Land Acquisitions*, and any other laws or regulations which may be applicable to Federal appraisals. Furthermore, the proposed exchange would be conducted with a private entity, OSPG, that is willing to trade their property for various U.S. Forest Service parcels.

The lands being considered for exchange are described below.

1.4.1 Non-Federal Land To Be Acquired

The Act defines the non-Federal parcel to be approximately 37.053 acres located at approximately 4400 West, 11000 North (SR 92), Highland City, Utah, in T. 4 S., R. 2 E., Sec. 31, NW $\frac{1}{4}$. The Act notes that this land would become part of the Uinta National Forest.

This parcel is currently bisected by Federal land administered by the Bureau of Reclamation (BOR). The Salt Lake aqueduct transects the parcel through this corridor of Federal land. BOR is currently preparing an EA on a proposed title transfer of three Provo River Project properties, including the Salt Lake aqueduct, as per H.R. 3391. The Uinta and Wasatch-Cache National Forests and NPS are cooperating agencies in this proposed title transfer. Current legislation directs the Secretary of the Interior to transfer title of the Salt Lake aqueduct to the Metropolitan Water District of Salt Lake and Sandy (MWDSLS). However, maintaining Federal ownership of the aqueduct is being considered.

1.4.2 Existing Federal Lands That May Be Exchanged

The Act also specifies the following Federal lands that may be exchanged:

1) *Long Hollow—Provo Canyon Parcel*

Salt Lake Meridian
T. 5 S., R. 3 E.,
Sect. 13, lot 1, SW $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$
Containing 237.24 acres, more or less.

This parcel is located at approximately the Wasatch/Utah County line and U.S. Highway 189. Uinta National Forest, Wasatch County, Utah. The parcel is undeveloped, but does contain a utility corridor and an easement for U.S. Highway 189.

2) *Provo Sign and Radio Shop Parcel*

Salt Lake Meridian
T. 7 S., R. 2 E.,
Sec. 12, an 0.15-acre tract of land located in the NW $\frac{1}{4}$. Address: 158 South 200 West, Provo, Utah. Uinta National Forest, Utah County, Utah.

3) *Springville Parcel*

Salt Lake Meridian
T. 7 S., R. 3 E.,
Sec. 28, all that portion of Parcel 85 located within the SW $\frac{1}{4}$ NE $\frac{1}{4}$, approximately at the mouth of Little Rock Canyon Creek. Containing 7.20 acres, more or less. Uinta National Forest, Utah County, Utah. This parcel contains a utility corridor and debris basin.

4) *Pleasant Grove Ranger Station*

Salt Lake Meridian
T. 5 S., R. 2 E.,

Sec. 20, a 0.83-acre tract of land located in the SE¼. Address: 390 North 100 East, City of Pleasant Grove, Utah. Uinta National Forest, Utah County, Utah. This parcel contains an office and a warehouse building.

5) *Beaver Residential House and Garage*

Salt Lake Meridian

T. 29 S., R. 7 W.,

Sec. 22, a 0.18-acre tract of land located in the SW¼. Address: 590 East 200 North, Beaver, Fishlake National Forest, Beaver County, Utah. This parcel contains a residence and garage.

6) *Corner Canyon Parcel*

Salt Lake Meridian

T. 3 S., R. 1 E.,

Sec. 33, a 20.69-acre tract located in the NE¼SE¼ at approximately Cherry Canyon and the Draper Alpine Road. Wasatch-Cache National Forest, Salt Lake County, Utah. This parcel contains a segment of the Salt Lake aqueduct and Corner Canyon Road.

The proposed action does not include:

1) *Exchange of any parcels not identified in the Timpanogos Interagency Land Exchange Act, PL 107-329.*

The Act identifies the non-Federal and the six Federal parcels described in the proposed action. Exchange of any other properties would be in conflict with the legislation. An analysis of additional properties is therefore outside the scope of this analysis.

2) *Construction or design of the interagency facility.*

As per the Act, responsibility and funding for construction and design of the interagency facility is with the NPS. The NPS is conducting a separate EA for construction of an interagency facility.

3) *Valuation of the proposed exchange parcels.*

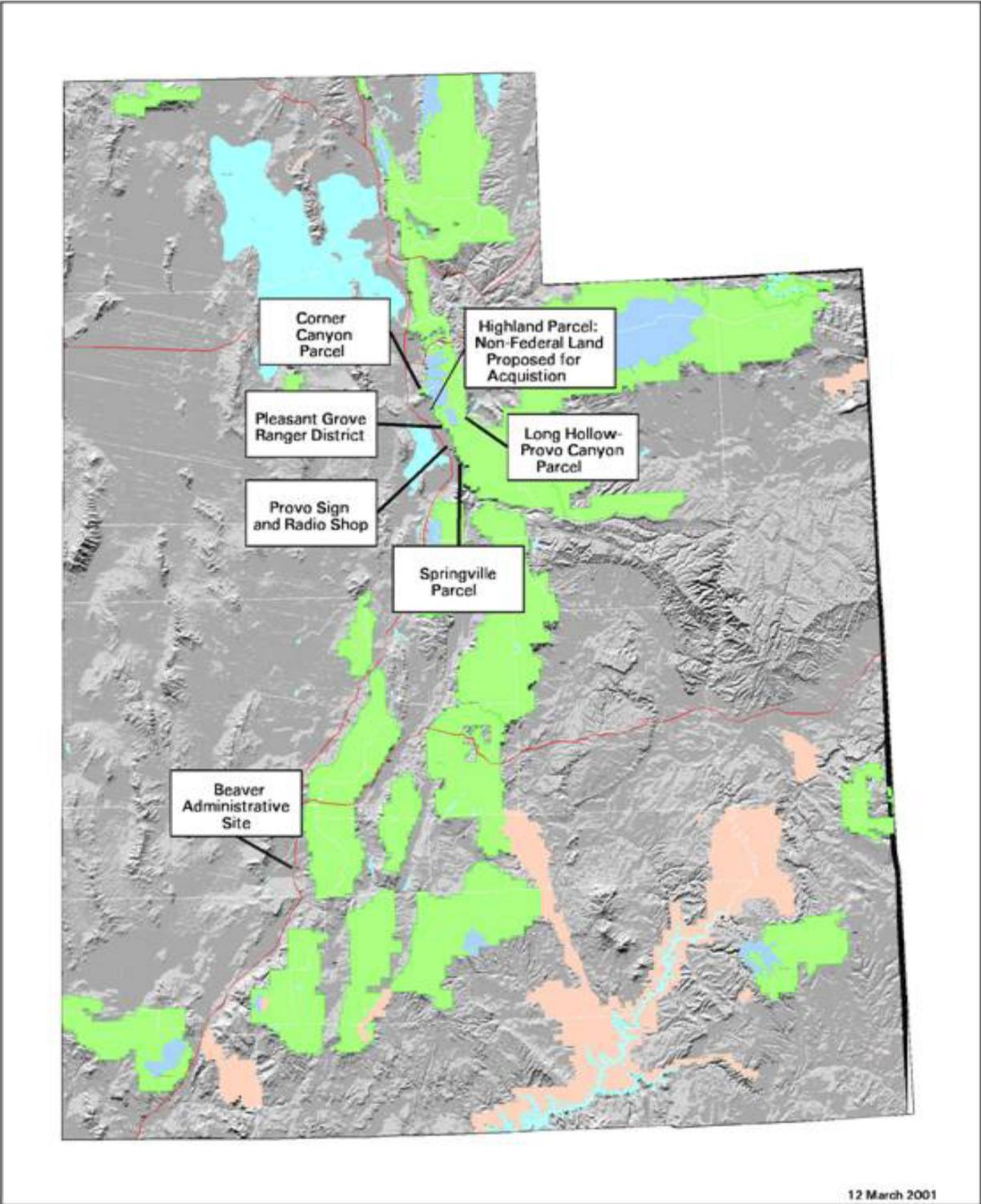
The EA considers the environmental impacts of a proposed land exchange. A separate Forest Service report will address valuation and appraisal information necessary for the Deciding Officer's decision.



United States
Department of Agriculture
Forest Service

Proposed Timpanogos Interagency Land Exchange

Location of Sites Within Utah



1.5 Decision to be Made

The Director of Lands, Intermountain Region USDA Forest Service (the Deciding Officer) will review the proposed action and the other alternatives in order to make the following decisions:

- 1) *Whether to acquire by exchange non-Federal land located in Highland, Utah, as a site for an interagency administrative and visitor facility.*
- 2) *Whether to exchange all or some of the following parcels:*
 - Pleasant Grove Ranger District
 - Provo Sign and Radio Shop
 - Springville
 - Long Hollow–Provo Canyon
 - Beaver Administrative Site
 - Corner Canyon
- 3) *Whether to combine the exchange of certain portions of the lands with a cash equalization payment as necessary.*

Valuation issues are not addressed in this EA but will be considered in the decision. See Section 1.8.2 Issues Not Carried Forward for Detailed Analysis for further explanation of land valuation.

1.6 Conformance with Other Laws, Plans, and Regulations

The Federal Land Policy and Management Act of 1976 (FLPMA) contains the Forest Service's general land use management authority over public lands. The proposed action is consistent with FLPMA, and has been prepared in accordance to the regulations outlined in the NEPA.

The proposed action has been reviewed and is found to be in conformance with the following plans:

- *Uinta National Forest Plan*

Goal 7 reads: "When there is an apparent and overriding benefit, opportunities for consolidation of land ownership and subsurface and surface property rights, acquisition of appropriate access, and establishment of identifiable boundaries are pursued."

Objective 8-7 reads: "By 2008, relocate the Pleasant Grove Ranger District Office. Continue to support the co-location of the Pleasant Grove Ranger District Office with the Timpanogos Cave National Monument Administrative Office."
- *Wasatch-Cache National Forest Plan*

Forest-wide Goal 11–Land Ownership reads: "Achieve a national forest ownership pattern that reduces management costs and helps meet ecosystem management objectives. Acquire land to connect large tracts of public ownership to maintain biologic and

hydrologic linkages in partnership with other public agencies. Locate and maintain national forest boundaries that are visible to forest users and neighbors.”

- *Fishlake National Forest Plan*
Rights-of-Way and Land Adjustments Management Direction 4 reads: “Classify lands for disposal according to the following priorities: ...
C. When suitable for development by the private sector, if development (residential, agricultural, industrial, recreational, etc.) is in the public interest.”
- *Uinta and Fishlake National Forests Facility Master Plans*
The Uinta Facility Master Plan recommends that the Provo Warehouse facility as well as the existing Pleasant Grove Ranger District Office and associated structures be decommissioned. It also recommends that the proposed Interagency Facility be acquired to house the Pleasant Grove Ranger District offices as well as NPS offices.

The Fishlake National Forest Facility Master Plan recommends that the Beaver facility be decommissioned.

The proposed action has been reviewed and is found to be in conformance with the following Federal Laws and Regulations:

- *Clean Water Act (See Section 1.8.2)*
- *Comprehensive Environmental Response, Compensation and Liability Act of 1980, Section 120(h) (See Section 1.8.2)*
- *Endangered Species Act of 1973 (16 U.S.C. 1531 et seq. as amended) (See Section 3.3.5 and 3.3.6)*
- *Executive Order 11988, Floodplain Management (See Section 3.3.7 and 3.3.8)*
- *Executive Order 11990, Protection of Wetlands (See Section 3.3.7 and 3.3.8)*
- *Executive Order 12898, Environmental Justice (See Section 1.8.2)*
- *Federal Cave Resources Protection Act of 1988 (See Section 1.8.2)*
- *Federal Land Exchange Facilitation Act of 1988*
- *Federal Land Policy and Management Act of 1976 (See Section 1.8.2)*
- *Functions Transfer Act of 1960 (See Section 1.8.2)*
- *Migratory Bird Treaty Act of 1918 (See Section 3.3.3 and 3.3.4)*
- *National Historic Preservation Act of 1966 (See Section 3.2.1 and 3.2.2)*
- *Proposed Provo River Project Transfer Act, H.R. 3391 (See Section 3.1.7)*
- *Timpanogos Interagency Land Exchange Act, PL 107-329 (See Section 1.3)*
- *USDA Department Regulation 9500-3 (See Section 1.8.2)*
- *All other applicable Federal laws, acts, and regulations.*

1.7 Public Involvement

The proposal was listed in the spring, summer, and fall of 2003; and winter, spring, and summer of 2004 editions of the Schedule of Proposed Actions. The proposal was provided to the public and other agencies for comment through a scoping notice in April of 2003. Three comments were received from the public, either by mail or telephone, in response to this notice. The comments were submitted by the Utah Environmental Congress, BOR, and Western Land Exchange Project.

An interdisciplinary team (ID Team) meeting was held on August 5, 2003, to discuss the scoping comments received by the public, and to identify any additional issues. Using the comments from the

public, comments identified through interagency scoping, and those identified by other agencies, the ID Team developed a list of issues to address in the EA.

A copy of the EA was released for public review on February 20, 2004. The EA was posted on the Uinta National Forest website (<http://www.fs.fed.us/r4/uinta/projects/index.shtml>), and notices of the availability of the EA were mailed to interested parties and published in local newspapers. A total of 13 comments were received on the EA. These comments were reviewed and, in some cases, revisions were made to the EA to address these comments. Comments received on the EA are summarized and responded to in the Public Comment Summary and USFS Response document which is attached to this EA. This summary is also included in the Project Record.

1.8 Issues

The following issues, identified by the ID Team, are based on public and agency comment, resource evaluations of the affected area, and Forest Service knowledge of the parcels and their use.

The Forest Service separated the issues into two groups: driving issues, which were carried forward for detailed analysis; and non-driving issues, which were not carried forward. Driving issues were defined as those directly or indirectly caused by implementing the proposed action. These issues are consistent with the scope of the analysis, pertinent to the decisions to be made, and appropriate for the development of a range of reasonable alternatives including the proposed action.

Non-driving issues were identified as those: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) irrelevant to the decision to be made; or 4) conjectural and not supported by scientific or factual evidence.

1.8.1 Issues Carried Forward for Detailed Analysis

The Forest Service identified three driving issues to be addressed in the EA. These issues include:

Issue 1: The extent to which the proposed land exchange may affect cultural resources.

Evaluation Criteria used to compare alternatives include:

- A qualitative description of the extent to which each alternative may affect cultural resources located within or adjacent to the parcels associated with the exchange.

Issue 2: The extent to which the proposed land exchange may affect natural and biological resources.

Evaluation Criteria used to compare alternatives include:

- A qualitative description of the extent to which each alternative may affect natural resources located within or adjacent to the parcels associated with the exchange. These may include:
 - Vegetative cover
 - Federally listed threatened and endangered, and Forest Service sensitive species
 - Riparian and wetland areas
 - Wildlife and fisheries habitat

Issue 3: The extent to which the proposed land exchange may affect visual and recreational resources.

Evaluation Criteria used to compare alternatives include:

- A qualitative description of the extent to which each alternative may affect visual or scenic quality.
- A qualitative description of the extent to which each alternative may affect recreational resources.

1.8.2 Issues Not Carried Forward for Detailed Analysis

The following issues were considered but not carried forward for detailed analysis. It was determined that these issues were beyond the scope of this analysis, not directly related to the decisions to be made, or not affected by the proposed action. These issues were not used in the development or evaluation of the proposed action or associated alternatives.

- *Valuation of the separate land parcels*

The properties involved in the exchange will be appraised, and the appraisals will be reviewed following Forest Service appraisal policy and directives. The purpose of this is to assure that all parties to the transaction receive market value consideration for their property. The appraisals will be prepared by a qualified appraiser who will be provided Forest Service instructions describing the property to be appraised and mandating compliance with Forest Service appraisal specifications which require application of the “Uniform Appraisal Standards for Federal Land Acquisitions” and the “Uniform Standards of Professional Appraisal Practice.” A Forest Service review appraiser will review any contract appraisals to assure compliance with the instructions, specifications, and standards. Copies of the appraisal review and findings are included in the Project Record.
- *Air Quality*

The proposed action does not include actions that would have any impact on air quality.
- *Native American Religious Concerns*

There are no known Native American religious sites or resources within the parcels considered for exchange. The proposed action would not have any impact on Native American religious concerns. All tribes and bands which have the potential to be affected by this proposal have had the opportunity to make comments, and may still have the opportunity to review and comment on the document.
- *Wild, Scenic, and Recreational Rivers*

There are no streams or rivers within the parcels considered for exchange under the proposed action that have been identified as eligible or are recommended for wild, scenic, or recreational designation. However, some sections of the North Fork of the Provo River, located just upstream of Sundance Ski Resort, have been identified as eligible for wild or recreational designation. The Long Hollow–Provo Canyon parcel includes a small portion of the Provo River, but the eligible sections are on another tributary of the Provo River. The proposed action would not have any impact on the free-flowing status or outstandingly remarkable values of any wild, scenic, or recreational rivers.

- *Wilderness Values*

There are no designated wilderness areas or wilderness study areas located within the parcels considered for exchange under the proposed action. The proposed action would not have any impact on wilderness values.

- *Hazardous Materials*

Lead paint has been found in structures on both the Provo Sign and Radio Shop and the Beaver Administrative parcels. Additionally, low levels of radon have been detected on the Beaver parcel. The proposed action would not affect the volume or toxicity of these hazards. The only impact of the proposed action on hazardous wastes would be a change in ownership and responsibility of these two parcels. Any occurrence of lead paint and radon would be fully disclosed to the party acquiring these parcels to mitigate this impact.

The properties to be exchanged and acquired will be screened for other hazardous materials prior to the proposed action. If applicable, the Forest Service would remove hazardous waste or remediate contaminated property in accordance with applicable laws prior to exchange of the Federal parcels. The Forest Service would require cleanup of any hazardous materials or wastes prior to acquisition, if applicable. The proposed action is in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund. CERCLA was enacted by Congress on December 11, 1980. This law created a tax on the chemical and petroleum industries and provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment.

- *Safety and Fire*

The exchange of the Long Hollow–Provo Canyon parcel would eliminate the Uinta National Forest suppression responsibility in an extremely limited access situation, as the Forest would not have land within 1/2 mile of the Forest boundary. This piece of property is surrounded by state and private land.

There are three other parcels of land associated with the Uinta National Forest, which include the Pleasant Grove Ranger District Office, the Provo Sign and Radio Shop, and the Springville parcel. The exchange of these parcels would transfer suppression responsibilities to the various city jurisdictions.

Relocating fire suppression resources from their existing location at the Pleasant Grove Ranger District Office to the parcel in Highland, Utah, off of U.S. Highway 92, would result in slightly decreasing response times to suppress wildfires for the north end of the Pleasant Grove Ranger District but will increase slightly for the south end of the District. This should cause minimal impact due to the mutual aid responses from the various volunteer fire departments and Utah County resources, as well as response from the Spanish Fork Ranger District. The benefits of increased work area, interagency interaction, and improved facilities offset the response time difference.

The impact of the proposed action on safety and fire suppression is minimal, and is therefore not carried forward for detailed analysis.

- *Disproportionate Impact to Consumers, Civil Rights, Minority Groups, and Women*

The proposed action would not place any burden or disproportionate impact which could be considered an environmental injustice on any segment of the population. The proposal would not result in unequal protection of any part of the population of Salt Lake, Wasatch, Utah, or Beaver Counties. All parts of the community that have potential to be affected by this proposal

have had the opportunity to make comments. The proposed action is in compliance with Executive Order 12898, Environmental Justice

The Forest Service makes payment to counties with respect to Federal lands under the Secure Rural Schools and Community Self Determination Act, PL 106-393. Under this law, Beaver (\$20,700) and Salt Lake (\$41,400) Counties chose the full payment options, the average of the three highest 25-percent payments from FY 1986 through FY 1999. This payment will be paid to the Counties every year through 2006. Congress may extend this termination date or eliminate it through additional legislation. The addition of 20.69 acres to Salt Lake County, and 0.23 acre to Beaver County, will not change this payment amount.

Utah County did not elect to take the full payment option; however, the addition of 8.18 acres will not change this payment amount.

Wasatch County elected the full payment for receipts. Three national forests actually have land in Wasatch County – Ashley, Uinta, Wasatch-Cache (Uinta holding by far the most acreage). The full payment amount is \$118,453. A change in 237.24 acres within the county would not change the amount.

- *Fisheries*

The only fishery included in the proposed action is a small corner of the Long Hollow–Provo Canyon parcel which extends into the Provo River. The Provo River is one of the most popular trout streams along the Wasatch Front, and anglers heavily fish the section below Deer Creek Reservoir in Provo Canyon. The majority of the Long Hollow–Provo Canyon parcel is difficult to access from the River, and the proposed action would have no impact on the recreational aspect of the Provo River fishery. Likewise, the corner of the Long Hollow–Provo Canyon parcel that extends into this section of river is less than 0.10 acre in area, and would have no impact on the biological or hydrological aspects of the fishery. The Provo River is within the historic range of the Bonneville cutthroat trout (*Oncorhynchus clarki utah*), a Management Indicator Species (MIS) for the Uinta National Forest. This River is outside the historic range of the Colorado River cutthroat trout, another Uinta National Forest MIS. Although within the historic range of the Bonneville cutthroat trout, the lower Provo River no longer contains this species. The endangered June sucker (*Chasmistes liorus*) spawns in the lower Provo River, but their potential habitat does not fall within the reaches of the project area.

Further detail can be found in the *Timpanogos Interagency Land Exchange Biological Assessment/Biological Evaluation (BA/BE)* dated November 2002, and the BA/BE Supplemental Memo dated September 2003. A letter from the U.S. Fish and Wildlife Service (USFWS), March 17, 2004, states the agency's concurrence with the findings in the Timpanogos Land Exchange BE/BA.

- *Inventoried Roadless Areas*

There are no inventoried roadless areas located within the parcels considered for exchange under the proposed action; therefore, there would be no impact to inventoried roadless areas under the proposed action.

- *Prime Farmland, Rangeland, and Forestland*

There are no prime farmlands, rangeland, or forest lands located within the parcels considered for exchange under the proposed action; therefore, the proposed action would not have any impact on prime farmlands, rangelands, or forestlands.

- *Steep Slopes or Highly Erosive Soils*

Although some of the parcels do contain steep slopes and erosive soils, the exchange of ownership of these parcels would not have any impact on steep slopes or erosive soils.

The potential future uses of some of the parcels, Springville and Corner Canyon, may affect steep slopes or erosive soils. Specifically, it is possible that these parcels would eventually be developed. If this occurs, development activities may require cuts and fills to meet local development standards. These parcels also contains some potential for sand and gravel development. Such development is unlikely, as local zoning would prohibit surface mineral development on these parcels (Highland City zones R-1-40 and R-1-20; Draper City zone A5; and Springville City zone R-1-10. Copies of the zoning ordinances are included in the Project Record). The most likely future for the Springville and Corner Canyon parcels is that they would be ultimately acquired by their respective local governments and maintained as open space, which would have no effect on slopes or soil stability.

- *Caves*

The Federal Cave Resources Protection Act is intended to secure, protect, and preserve significant caves to the extent practical. No caves are known to exist on any of the parcels, and therefore, none would be affected by this proposed action.

- *Water Quality*

The proposed action would have no impact on water quality on or adjacent to any of the lands considered for exchanged. No water resources exist on the Beaver Administrative Site, the Provo Sign and Radio Shop, or the Pleasant Grove Ranger District Office, and therefore, no impacts to water quality would occur. The water resources on the Springville and Corner Canyon parcels are limited to an intermittent stream feature and a non-functional canal. The exchange of these parcels does not include any activities which would have an impact on water quality of these resources. The Long Hollow-Provo Canyon parcel includes a portion of the Provo River. The exchange of this parcel would not include any change in land use or activities which would affect water quality. The proposed action is in compliance with the Clean Water Act. The Clean Water Act makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions.

- *Minerals, Geothermal, Oil, and Gas*

Four of the six Federal parcels (Long Hollow-Provo Canyon, Pleasant Grove Ranger District, Provo Sign and Radio Shop, and the Beaver Administrative Site) have low mineral potential for the occurrence of potentially valuable deposits of locatable, leasable, and salable minerals. Two parcels (Corner Canyon and Springville) have low potential for the occurrence of potentially valuable mineral deposits of locatable and leasable minerals, but high potential for the occurrence of salable minerals in the form of sand and gravel. See *Mineral Potential of Lands under the Timpanogos Interagency Land Exchange Act of 2002*, dated February 6, 2004 for more information.

Sand and gravel deposits are of significant value in pits at many locations throughout Utah and Salt Lake County. Some pits, large or small (active or abandoned) are near the Corner Canyon and Springville parcels. Consequently, the deposits on the two parcels may be valuable if found to be of suitable quality and not hindered from development by land use restrictions. Consideration of the potential value of the deposits on the Corner Canyon parcel will be part of the appraisal process. The minerals on the Springville parcel are outstanding to a third party and will not be considered in the appraisal or exchange process.

Potential development of sand and gravel deposits would depend on local zoning codes. The communities of Riverton, Draper, and Springville have all stated that sand and gravel development on the non-Federal, Corner Canyon, and Springville parcels would be prohibited under existing zoning (Draper City zone A5; and Springville City zone R-1-10. Copies of the zoning ordinances are included in the Project Record). It is therefore unlikely that these parcels would be used for these activities.

The non-Federal parcel intended to host the new Federal Administrative Facility and Visitor Center has low potential for locatable and leasable minerals but high potential for salable minerals in the form of sand and gravel. These deposits are being exploited at sites nearby in Utah County and may be of value. However, current zoning for the parcel does not permit the development of these resources, and the proximity to the American Fork River would further complicate such development because of water quality concerns (Highland City zones R-1-40 and R-1-20. Copies of the zoning ordinances are included in the Project Record). Consideration of the potential value of the deposits on this parcel will be part of the appraisal process.

The Division of Mineral Resources, Bureau of Land Management, reports that the Federal and non-Federal lands have no value for any minerals covered by the mineral leasing laws and are not considered valuable or potentially valuable for geothermal resource development. Two Forest Service mineral potential reports substantiate this finding: "Mineral Potential of Lands under the Timpanogos Interagency Land Exchange Act of 2002," dated February 6, 2004; "Mineral Potential Report, Pleasant Grove Ranger District/Timpanogos Cave National Monument Lands Exchange," dated September 1996. The proposed action is in compliance with the Functions Transfer Act of 1960.

By a letter included in the Project Record, Chief, Branch of Solid Minerals, BLM, approved the conveyance without a mineral reservation by either party.

The proposed land exchange would result in a change in ownership of these parcels and the potentially salable deposits associated with these parcels. The proposed exchange would not result in any direct effect to these mineral deposits, and consideration of the value of these deposits will be addressed as part of the appraisal process; therefore, impacts to minerals from the proposed exchange are not addressed in this document.

- *Grazing Permits*

There are no grazing permits associated with the parcels considered for exchange under the proposed action. Therefore, the proposed action would have no impact on grazing. Conveyance of the Federal parcel into private ownership will not conflict with the requirements of Sec. 402(g) of FLPMA (grazing permittee/lessee). The proposed action is in conformance with USDA Department Regulation 9500-3.

- *Research Natural Areas*

There are no potentially recommended or existing Research Natural Areas associated with the parcels considered for exchange under the proposed action. Therefore, the proposed action would have no impact on Research Natural Areas.

2.0 ALTERNATIVES

This chapter describes and compares the alternatives considered for the Timpanogos Interagency Land Exchange. It includes a description of each alternative considered. This section also presents the alternatives in comparative form, defining the differences between each alternative and providing a clear basis for choice among options by the Deciding Officer and the public.

2.1 Alternatives

2.1.1 Alternative A—No Action

The No Action Alternative is to not approve the land exchange. As a result, the Timpanogos Cave National Monument facilities would continue to be utilized until other suitable arrangements could be made. The Pleasant Grove Ranger District, as well as other Uinta National Forest facilities, and the Fishlake National Forest facilities and properties would remain in Federal ownership. The operation of Forest Service activities from an office located in a residential area in Pleasant Grove, Utah, would continue. The NFS lands within the Uinta and Wasatch-Cache National Forest boundaries would be managed as per the pertinent 2003 Forest Plans. The Fishlake National Forest property would be managed as it is currently. There would be no cash equalization payment necessary, since there would be no transfer of ownership of any of the seven parcels considered for exchange.

2.1.2 Alternative B—Proposed Action

The action proposed by the Forest Service to meet the purpose and need is to acquire by exchange non-Federal land located in Highland, Utah, as a site for an interagency administrative and visitor facility in accordance with the Act. The appraisal of the lands that are described in this report will be in accordance with the requirements of *The Uniform Standards of Professional Appraisal Practice*, *The Uniform Appraisal Standards for Federal Land Acquisitions*, and any other laws or regulations which may be applicable to Federal appraisals. Furthermore, the proposed exchange would be conducted with a private entity, OSPG, which is willing to trade their property for various Federal parcels.

Also in accordance with the Act, the Secretary may, as circumstances require, either make or accept a cash equalization payment in excess of 25 percent of the total value of the lands or interest in land transferred out of Federal ownership.

The lands being considered for exchange are described below:

Non-Federal Parcel

The Act specifies the non-Federal tract as a parcel of land comprising approximately 37.053 acres located at approximately 4400 West, 11000 North (SR 92), Highland City, Utah, in T. 4 S., R. 2 E., Sec. 31, NW¼. The Act notes that this land would become part of the Uinta National Forest. This parcel is currently bisected by Federal land administered by the BOR.

Federal Parcels

The Act also specifies the following Federal tracts that may be exchanged:

- 1) *Long Hollow—Provo Canyon Parcel*
 - Salt Lake Meridian
 - T. 5 S., R. 3 E.,
 - Sect. 13, lot 1, SW¼NE¼, E½W½
 - Containing 237.24 acres, more or less.

This parcel is located at approximately the Wasatch/Utah County line and U.S. Highway 189. Uinta National Forest, Wasatch County, Utah. The parcel is undeveloped, but does contain a utility corridor and an easement for U.S. Highway 189.

- 2) *Provo Sign and Radio Shop Parcel*
Salt Lake Meridian
T. 7 S., R. 2 E.,
Sec. 12, an 0.15-acre tract of land located in the NW¼. Address: 158 South 200 West, Provo, Utah. Uinta National Forest, Utah County, Utah.
- 3) *Springville Parcel*
Salt Lake Meridian
T. 7 S., R. 3 E.,
Sec. 28, all that portion of Parcel 85 located within the SW¼NE¼, approximately at the mouth of Little Rock Canyon Creek. Containing 7.20 acres, more or less. Uinta National Forest, Utah County, Utah. This parcel contains a utility corridor and debris basin.
- 4) *Pleasant Grove Ranger Station*
Salt Lake Meridian
T. 5 S., R. 2 E.,
Sec. 20, a 0.83-acre tract of land located in the SE¼. Address: 390 North 100 East, City of Pleasant Grove, Utah. Uinta National Forest, Utah County, Utah. This parcel contains an office and a warehouse building.
- 5) *Beaver Residential House and Garage*
Salt Lake Meridian
T. 29 S., R. 7 W.,
Sec. 22, a 0.18-acre tract of land located in the SW¼. Address: 590 East 200 North, Beaver, Fishlake National Forest, Beaver County, Utah. This parcel contains a residence and garage.
- 6) *Corner Canyon Parcel*
Salt Lake Meridian
T. 3 S., R. 1 E.,
Sec. 33, a 20.69-acre tract located in the NE¼SE¼ at approximately Cherry Canyon and the Draper Alpine Road. Wasatch-Cache National Forest, Salt Lake County, Utah. This parcel contains a segment of the Salt Lake aqueduct and Corner Canyon Road.



Proposed Timpanogos Interagency Land Exchange

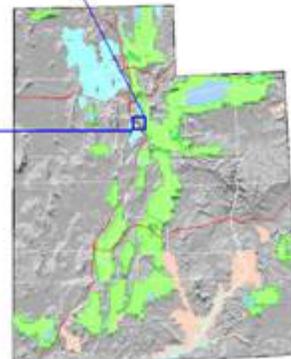
Uinta National Forest Highland Parcel



Highland Parcel
Non-Federal Land:



General Location



Legend

 Non Federal Lands
Proposed for Acquisition

Highland Parcel:
Approx. 37.053 acres



12 March 2001



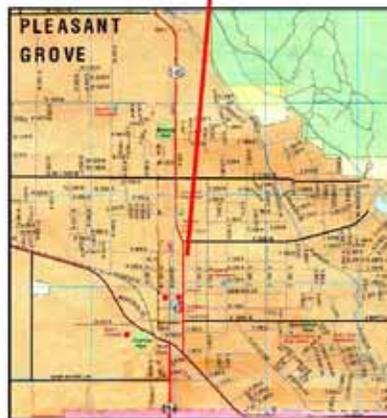
United States
Department of Agriculture
Forest Service

Proposed Timpanogos Interagency Land Exchange

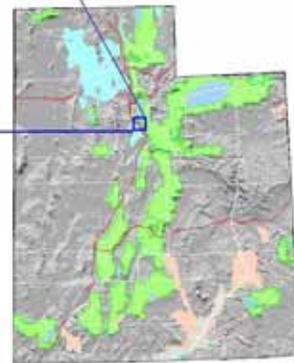
Uinta National Forest Pleasant Grove Ranger District



Pleasant Grove
Ranger District



General Location



Legend

-  Federal Lands Considered for Conveyance to Private Ownership

Pleasant Grove Ranger District:
Approx. 0.83 acre



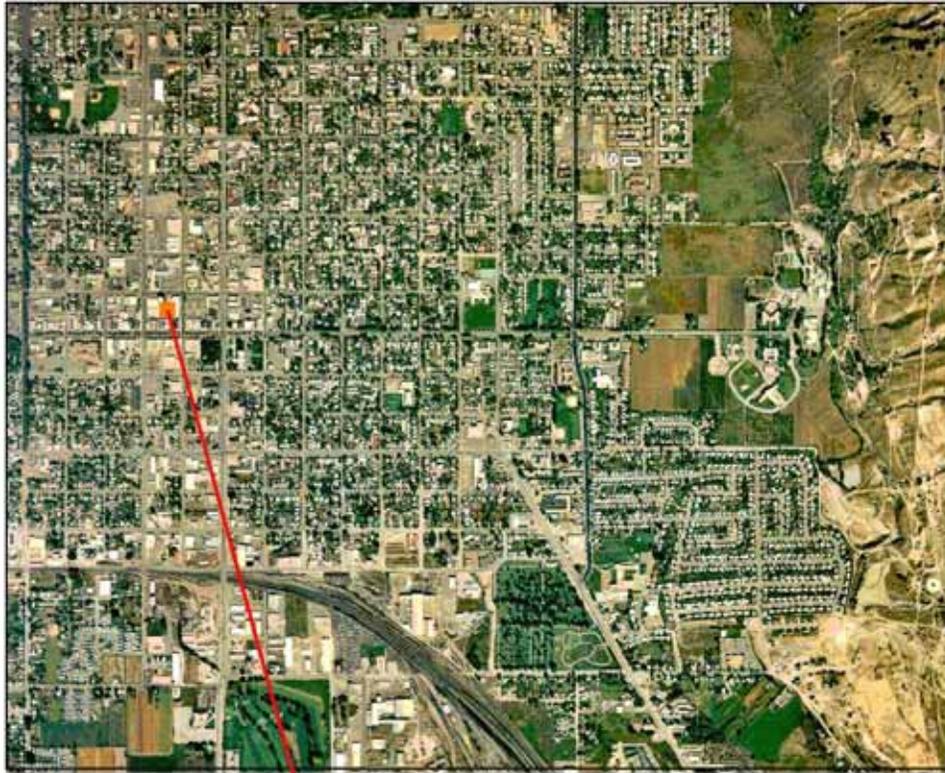
12 March 2001



United States
Department of Agriculture
Forest Service

Proposed Timpanogos Interagency Land Exchange

Uinta National Forest Provo Sign and Radio Shop



Provo Sign and
Radio Shop



General Location



Legend

 Federal Lands Considered
for Conveyance to
Private Ownership

Provo Sign and Radio Shop:
Approx. 0.15 acre



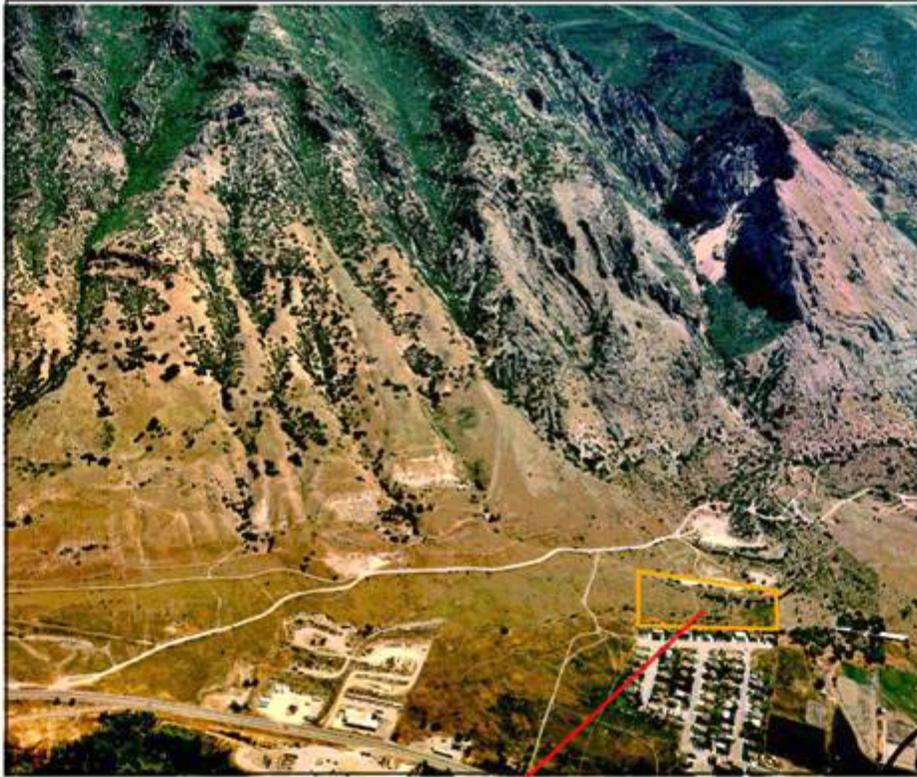
12 March 2001



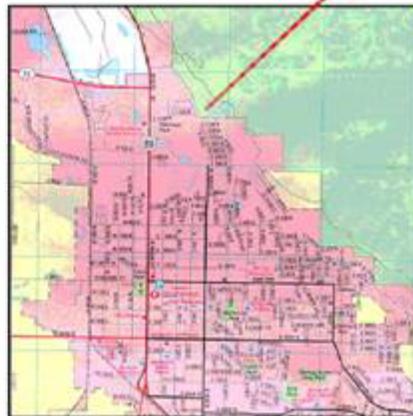
United States
Department of Agriculture
Forest Service

Proposed Timpanogos Interagency Land Exchange

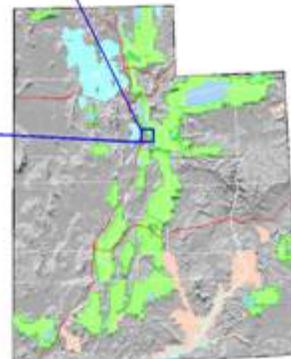
Uinta National Forest Springville Parcel



Springville
Parcel



General Location



Legend

 Federal Lands Considered
for Conveyance to
Private Ownership

Springville Parcel:
Approx. 7.20 acres



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United States
Department of Agriculture
Forest Service

Proposed Timpanogos Interagency Land Exchange

Uinta National Forest

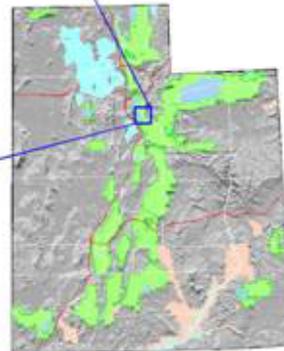
Long Hollow-Provo Canyon Parcel



Long Hollow
Provo Canyon
Parcel



General Location



Legend

 Federal Lands Considered
for Conveyance to
Private Ownership

Long Hollow-Provo Canyon
Parcel: Approx. 237.24 acres



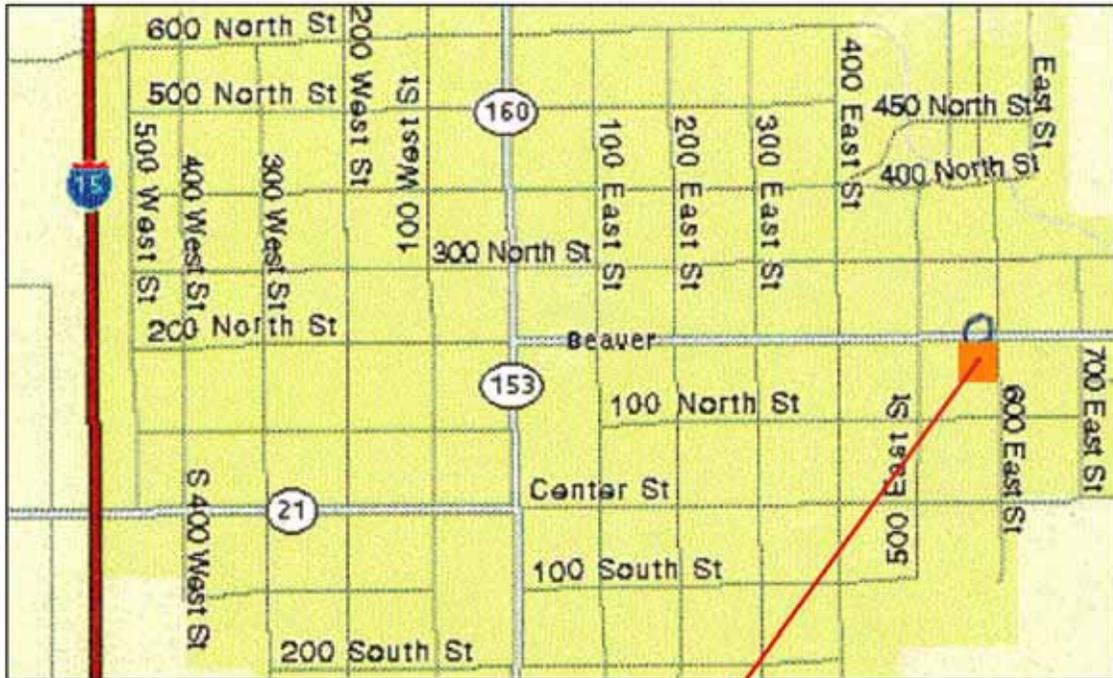
12 March 2001



United States
Department of Agriculture
Forest Service

Proposed Timpanogos Interagency Land Exchange

Fishlake National Forest Beaver Administrative Site



Beaver
Administrative
Site



General Location



Legend

-  Federal Lands Considered for Conveyance to Private Ownership

Beaver Administrative Site:
Approx. 0.23 acre



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Department of Agriculture
Forest Service

Proposed Timpanogos Interagency Land Exchange

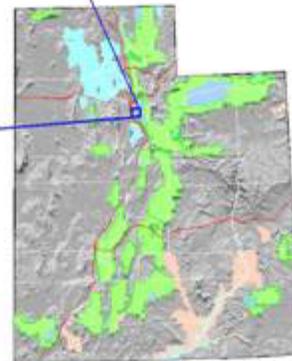
Wasatch-Cache National Forest Corner Canyon Parcel



Corner Canyon
Parcel



General Location



Legend

-  Federal Lands Considered for Conveyance to Private Ownership

Corner Canyon Parcel
Approx. 20.69 acres



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2.1.3 Alternatives not carried forward for further analysis

The following alternatives not carried forward for further analysis were discussed by the ID Team and determined to be outside of the scope of this EA, or not directly related to the decisions to be made.

- 1) *Exchange of any properties not outlined in the Timpanogos Interagency Land Exchange Act, PL 107-329.*

The Act does not authorize consideration of other parcels to be included in the exchange and that are not specifically identified in that Act. The Forest Service can delete parcels to equalize values, but cannot add any parcels not specifically mentioned in the Act. Therefore, consideration of any other properties for exchange falls outside the scope of this decision and such alternatives have been eliminated from further analysis.

- 2) *Fee simple purchase of the non-Federal parcel without the exchange of properties.*

The Forest Service has authority to purchase administrative sites lands. However no funding is currently available for purchase of lands, and funding will not become available within the timeframe needed to accomplish the acquisition of a site for the proposed interagency facility. Therefore fee simple purchase is not a viable alternative and was eliminated from further study. Further, OSPG has stated in a letter dated October 7, 2004, that it is not willing to sell the non-Federal parcel, and is only interested in a land exchange. (OSPG²)

2.1.4 Comparison of Alternatives

The following table provides a summary comparison of the alternatives carried forward for detailed analysis in this EA.

Table 1. Alternative Comparison Matrix

Parcel/Element	Alternative A—No Action	Alternative B—Proposed Action
Exchange Parcel Ownership		
Corner Canyon	<p>This parcel would remain in Federal ownership.</p> <p>Future use of this parcel would be consistent with the existing situation. The parcel would be maintained by the Forest Service as open space.</p>	<p>Ownership of this parcel would be transferred to a private party in exchange for Federal acquisition of the non-Federal parcel.</p> <p>Future use of this land may include residential development; however, OSPG has stated its desire for Draper City to acquire this parcel to maintain it as open space and preserve trail access. If the parcel were developed, local zoning limits density to one unit per five acres which could easily accommodate public trail access.</p> <p>Although the parcel has potentially valuable sand and gravel deposits, local zoning would prohibit sand or gravel development activities.</p>

Parcel/Element	Alternative A—No Action	Alternative B—Proposed Action
Long Hollow—Provo Canyon	<p>This parcel would remain in Federal ownership.</p> <p>Future use of this parcel would be consistent with the existing situation. The parcel would be maintained by the Forest Service as open space.</p>	<p>Ownership of this parcel would be transferred to a private party in exchange for Federal acquisition of the non-Federal parcel.</p> <p>OSPG has stated its intent to maintain this property as open space. There are no proposed development plans for this parcel.</p>
Pleasant Grove Ranger District Office	<p>This parcel would remain in Federal ownership and would continue to be used for administrative purposes.</p>	<p>Ownership of this parcel would be transferred to a private party in exchange for Federal acquisition of the non-Federal parcel.</p> <p>OSPG has stated that it intends to lease this property back to the Forest Service for administrative use until the District Office can be relocated. After that time, this property would likely be sold and/or used for other private or commercial uses. These uses would be required to meet local zoning requirements and would likely be similar to the existing land uses in density and type.</p>
Springville	<p>This parcel would remain in Federal ownership.</p> <p>Future use of this parcel would be consistent with the existing situation. The parcel would be maintained by the Forest Service as open space.</p>	<p>Ownership of this parcel would be transferred to a private party in exchange for Federal acquisition of the non-Federal parcel.</p> <p>Future use of this land may include residential development; however, OSPG has stated its interest in Springville City acquiring this parcel to maintain it as open space.</p> <p>Although the parcel has potentially valuable sand and gravel deposits, local zoning likely would prohibit sand or gravel development activities.</p>
Beaver Administrative Site	<p>This parcel would remain in Federal ownership and would continue to be used for administrative purposes.</p>	<p>Ownership of this parcel would be transferred to a private party in exchange for Federal acquisition of the non-Federal parcel.</p> <p>OSPG has stated its intent to list this property for sale.</p>
Provo Sign and Radio Shop	<p>This parcel would remain in Federal ownership and would continue to be used for administrative purposes.</p>	<p>Ownership of this parcel would be transferred to a private party in exchange for Federal acquisition of the non-Federal parcel.</p> <p>OSPG has stated its intent to either list this property for sale, or retain it for private use.</p>

Parcel/Element	Alternative A—No Action	Alternative B—Proposed Action
Non-Federal	<p>This parcel would remain in private ownership.</p> <p>Future use of this parcel would likely include residential development similar to that which is occurring on adjacent parcels.</p> <p>Although the parcel has potentially valuable sand and gravel deposits, local zoning prohibits sand or gravel development activities on this parcel.</p>	<p>This parcel would be acquired by the Pleasant Grove Ranger District, Uinta National Forest, in exchange for up to six Federal parcels.</p> <p>It is likely that this property would be the future location of an interagency Administrative Facility and Visitor Center for the Forest Service and NPS.</p>
Critical Element or Issue		
Cultural Resources	<p>There would be no direct, indirect, or cumulative effects to cultural resources associated with this alternative.</p>	<p>There would be a loss of two cultural resources associated with this alternative on the Provo Sign and Radio Shop and Springville parcels: the Provo Warehouse and the Little Rock Canyon Water Diversion System. Measures have been identified to mitigate this loss, resulting in no significant impact to cultural resources.</p> <p>There are no cumulative effects on cultural and historical resources within the parcels associated with this alternative.</p>
Vegetation	<p>There would be no direct, indirect, or cumulative effects to vegetation associated with this alternative.</p> <p>Riparian vegetation would likely be lost through the foreseeable future development of the non-Federal parcel by a private developer.</p>	<p>There would be some loss of native wildland vegetation associated with this alternative, specifically on the Long Hollow–Provo Canyon, Springville, and Corner Canyon parcels. By transferring the six Federal parcels to a private owner, approximately 265 acres of sagebrush/grass and/or oak/maple vegetation would be taken out of Federal ownership. However, this is not considered a significant impact and no mitigation measures are needed.</p> <p>There would be some loss of riparian vegetation on the non-Federal parcel due to construction activities; however, Federal development and landscaping of the proposed interagency facility would improve the quality of vegetation on the parcel.</p> <p>There are no cumulative effects on vegetation within the parcels associated with this alternative.</p>

Parcel/Element	Alternative A—No Action	Alternative B—Proposed Action
Wildlife	<p>There would be no direct, indirect, or cumulative effects to wildlife or wildlife habitat associated with this alternative.</p> <p>Riparian habitat would likely be lost through the foreseeable future development of the non-Federal parcel by a private developer.</p>	<p>There would be no direct effects to wildlife such as loss of individuals. There would be some loss of wildlife habitat associated with this alternative, specifically on the Springville and Corner Canyon parcels. These parcels are situated adjacent to existing residential developments and therefore have a higher potential for eventual development. The Long Hollow–Provo Canyon parcel is the largest intact parcel and also contains important wildlife habitat, but it is not likely that this land would be developed. OSPG has stated its intent to maintain this parcel as open space and wildlife habitat.</p> <p>Approximately 265 acres of deer and elk winter range would be removed from National Forest System (NFS) ownership if the land exchange occurs. All or a portion of the habitat may become unusable to wild ungulates and neo-tropical birds, displacing them to other areas.</p> <p>On the Wasatch-Cache National Forest Corner Canyon parcel, none of the Forest’s MIS or their habitats occur, and thus the project will not affect the populations or the population trends of the Wasatch-Cache MIS. On the Fishlake National Forest Beaver parcel, none of the Forest’s MIS or their habitats occurs, and thus the project will not affect the populations or the population trends of the Fishlake MIS. On the Uinta National Forest parcels, only Bonneville cutthroat trout, beaver, and goshawk have suitable habitat on the exchange parcels. However, no populations of beaver or goshawks occur on the parcels. The proposed exchange will not affect Bonneville cutthroat trout or beaver habitat. The proposed action will unlikely affect goshawk habitat, and if so, only a limited amount of habitat. The proposed action will have no affect on populations or population trends of Uinta National Forest MIS.</p>
Threatened, Endangered, Candidate, and Forest Service Sensitive Species	<p>There would be no direct, indirect, or cumulative effects to threatened, endangered, candidate, or Forest Service sensitive species associated with this alternative.</p>	<p>There would be no direct, indirect, or cumulative effects to threatened, endangered, candidate, or Forest Service sensitive species associated with this alternative.</p> <p>Potential bald eagle and western yellow-billed cuckoo habitat may be affected with the removal of cottonwood trees on</p>

Parcel/Element	Alternative A—No Action	Alternative B—Proposed Action
		<p>the non-Federal parcel, but this is not likely to adversely affect the two species.</p>
<p>Wetlands, Floodplains, and Riparian Areas</p>	<p>There would be no direct, indirect, or cumulative effects to wetlands, riparian zones, or floodplains associated with this alternative.</p> <p>Riparian vegetation and habitat would likely be lost through the foreseeable future development of the non-Federal parcel by a private developer.</p>	<p>There would be no direct, indirect, or cumulative effects to wetlands, riparian zones, or floodplains on the six Federal parcels considered for exchange.</p> <p>The section of Provo River flowing through the Long Hollow—Provo Canyon parcel would not be impacted by the proposed exchange.</p> <p>Potential residential development of the Corner Canyon and Springville parcels may affect the intermittent stream channel and non-functional canal on these parcels. However, it is likely that these parcels would be acquired by the local communities to be maintained as open space. If this occurs there will be little if any impact to these water resources.</p> <p>Federal development of the non-Federal parcel will impact some riparian vegetation on the parcel. The quality of the American Fork River floodplain will be preserved and maintained.</p>
<p>Scenic Quality</p>	<p>There would be no direct, indirect, or cumulative effects to scenic quality on the Federal parcels associated with this alternative. There would be no change to the visual quality of the Federal parcels under this alternative, and therefore the Visual Quality Objectives would be met.</p> <p>It is likely that the non-Federal parcel would be developed under this alternative. The future development would likely be in a style and density consistent with adjacent land uses. Since this parcel is currently undeveloped, there would be a loss of scenic quality associated with development of this parcel.</p>	<p>There will be no adverse impacts to scenic quality on the non-Federal parcel. Federal ownership and development of this parcel would most likely be an improvement to the scenic quality of the property. Development of this parcel would be less intense under Federal ownership than likely under private ownership, and would therefore maintain a higher scenic value.</p> <p>If Springville and Draper Cities acquire the Springville and Corner Canyon parcels to maintain as open space, there will be no impact to scenic and visual quality. It is possible, however, that the parcels would be developed under private ownership. Such development would be subject to local zoning codes and would likely be consistent with adjacent land uses in both density and type of development.</p> <p>The scenic quality of the Beaver Administrative Site, Pleasant Grove Ranger District Office, and the Provo Sign and Radio shop parcels would not be affected by this alternative. It is not</p>

Parcel/Element	Alternative A—No Action	Alternative B—Proposed Action
		<p>likely that there would be any significant land use changes to these parcels. Likewise, it is not likely that there would be a significant land use change to the Long Hollow–Provo Canyon parcel under private ownership; therefore, the scenic quality of the parcel would be maintained and not adversely affected.</p> <p>Overall, there would be no adverse cumulative effects on scenic quality under this alternative. It is likely that the definitions of the Visual Quality Objectives for the Federal parcels would still be met under this alternative given OSPG's intended uses for the parcels.</p>
Recreation Values	<p>There would be no direct, indirect, or cumulative effects to recreation values associated with this alternative.</p> <p>The non-Federal parcel would likely be developed as a residential neighborhood which would restrict the limited recreation which is currently occurring on this parcel.</p>	<p>There would be some loss of recreational opportunities associated with this alternative, specifically on the Long Hollow–Provo Canyon, Springville, and Corner Canyon parcels. If this alternative is selected, access and public use of these parcels may be limited or prohibited.</p> <p>Off highway vehicle (OHV) use is occurring illegally on some parcels. Despite the fact that the use is occurring illegally, there will be a loss of this recreational opportunity to the public. This use may or may not be allowed under private ownership. Loss of limited recreation on the Long Hollow–Provo Canyon parcel is negligible, and no mitigation measures are necessary.</p> <p>The Corner Canyon parcel contains two user-created trails which have been identified in Draper City's Trail Plan. If this parcel were developed as a residential neighborhood, this recreation opportunity would be lost. However, OSPG has stated its intent for Draper City to acquire this parcel to maintain it as open space and preserve trail access. If this occurs, no impacts to trail recreation will occur.</p> <p>There are no cumulative effects on recreation values within the parcels associated with this alternative.</p>

3.0 ENVIRONMENTAL CONSEQUENCES

This section describes the resources which may be impacted by implementing the proposed action, and describes the environmental effects of implementing the proposed action and other alternatives. This analysis is organized first by issue, and then by resource. Within each section,

the affected environment is described first, followed by the effects of the No Action Alternative, which provides a baseline for evaluation and comparison with the proposed action.

The issues which were identified in scoping that may be affected are brought forward for detailed analysis in this chapter. The ID Team discussed the impacts of the proposed action on the critical elements of the human environment. If it was determined that the proposed action may impact a critical element, the element was carried forward for detailed analysis in this chapter.

3.1 General Setting

The proposed action includes seven parcels located within the Uinta, Fishlake, and Wasatch-Cache National Forests in Utah. The seven exchange parcels all fall within different settings ranging from developed city lots to relatively pristine forest. The future use of six Federal parcels, if exchanged, would be governed by existing rights (e.g., easements, withdrawals, and/or rights-of-way) and local zoning laws and would therefore, be consistent with the surrounding land uses. OSPG has stated its intent for the six Federal parcels in a July 9, 2003, letter. General descriptions and all reasonably foreseeable future uses of the parcels are described below:

3.1.1 Corner Canyon

The Corner Canyon property is located on the Salt Lake Ranger District of the Wasatch-Cache National Forest. It is located approximately three miles southeast of Draper, Utah, and is bordered on the east by the Draper-Alpine (Corner Canyon) Road. The Salt Lake aqueduct runs through the property from south to north. The parcel is bounded on the north and the west by residential subdivision developed lands. The property is situated at an elevation ranging from approximately 4640 feet to 5040 feet. The parcel is moderately steep. Cherry Canyon crosses through the parcel and runs water intermittently. There are known encroachments on this site from private landowners in the adjacent residential development. Vegetation on this site is primarily sagebrush and grasses, and this area is considered important winter range for deer and elk. There are no wetlands, seeps, or springs on this site, although a portion of the parcel is in a floodplain.

This parcel has a low potential for the occurrence of potentially valuable mineral deposits of locatable and leasable minerals, but does have a high potential for the occurrence of salable minerals in the form of sand and gravel. The deposits on this parcel may be valuable if of suitable quality and not hindered from development by land use restrictions. Draper City zoning would prohibit sand and gravel development on this parcel, which would limit the value and potential of these deposits (Draper City Zone A5). Despite local land use restrictions, the proposed land exchange would result in a change in ownership of the potentially salable deposits associated with the parcel.

It is possible that the potential landowner could develop this parcel as a residential neighborhood; however, OSPG has stated its interest in having Draper City acquire this parcel to preserve it as open space and maintain access trails for public use. Draper City has expressed interest in seeing this parcel preserved and discussions are underway to determine whether the City might acquire the parcel after the exchange.

In accordance with the requirements of the Federal Land Exchange Facilitation Act (FLEFA) and 36 CFR 254.3(b)(2)(ii), the intended use of this parcel would not substantially conflict with established management objectives on adjacent NFS land.

3.1.2 Long Hollow–Provo Canyon

The Long Hollow–Provo Canyon parcel is located in Provo Canyon on U.S. Highway 189 approximately 1.5 miles southwest of Deer Creek Reservoir. The property is situated at an

elevation ranging from approximately 5200 feet to 6100 feet. The parcel is relatively flat on top with a steep slope facing southeast rising above the Provo River. There are no buildings on the land, but there are several two-track roads that originate on adjacent private lands. U.S. Highway 189 cuts through the property in two different locations, and a power line also crosses the property.

The majority of this site cannot be seen from any public travel corridor or common viewpoint. This site is relatively difficult to access and is primarily visited by hunters and hikers. A corner of the parcel drops down a steep slope and extends into the Provo River. This corner includes a railroad right-of-way. The floodplain area along the Provo River has been altered due to the railroad tracks that were constructed there. U.S. Highway 189 follows Provo Canyon and transects this same corner of the parcel. This highway is in need of realignment to address landslide hazards and increased traffic. An Environmental Impact Statement (EIS) was prepared for the proposed realignment, and a Record of Decision (ROD) approves construction. The realignment would shift the highway's current right-of-way further upslope on the Long Hollow–Provo Canyon parcel.

Vegetation on this site contains both sagebrush and grass communities, as well as maple and oak brush forest. There are no wetlands, seeps, or springs on this site, although a portion of the parcel is in the Long Hollow drainage and water occasionally collects behind one of the two earthen dams on this site. There is riparian vegetation along the Provo River. This parcel provides habitat for a number of species including big game, neo-tropical migratory birds, and small mammals.

OSPG intends to retain this parcel and to preserve it as open space. They have no development plans for this property. In accordance with the requirements of the FLEFA and 36 CFR 254.3(b)(2)(ii), the intended use of this parcel would not substantially conflict with established management objectives on adjacent NFS land.

3.1.3 Pleasant Grove Ranger District Office

The Pleasant Grove Ranger District Office parcel is located in a residential area of Pleasant Grove, Utah. This site is fully developed and no native vegetation remains on this parcel. It currently provides no habitat for wildlife, and there are no water resources on the site. There are a number of structures on this site: a 2304 sq. foot building which houses the Pleasant Grove Ranger District offices, a warehouse used for office space and storage, a storage shed, a corral for temporary horse holding, and two parking areas.

OSPG intends to lease this building back to the Forest Service for Federal use until the District is able to relocate. Following that, this property would be offered for sale and/or developed for other uses consistent with local zoning.

3.1.4 Provo Sign and Radio Shop

The Provo Sign and Radio Shop is located in a commercial area of Provo, Utah. There is one building on this site which is currently used as a warehouse and limited office space. There is also a parking lot on this parcel. The property lies in the middle of a city block with no frontage on main arterials. Access to the site is via an alleyway. This site is fully developed and no native vegetation remains on this parcel. It currently provides no habitat for wildlife, and there are no water resources on the site.

OSPG intends to either retain this parcel for private use or list it for sale to another party.

3.1.5 Springville

The Springville parcel is located outside and adjacent to the proclaimed Uinta National Forest boundary (the property's northern and eastern boundary) and is bordered by housing development on the western and southern borders. The parcel is located behind the Spring Hills subdivision in

Springville, Utah. It is located a mile south of Provo City and lies in an area that is in high demand for residential development. There are also a number of known encroachments by the owners of the neighboring lots in the subdivision and from utility companies. The property is relatively flat with an approximate 4600 foot elevation. There are no buildings on the land, although the parcel has a berm, catch basin, and floodwater canal, all constructed by the Civilian Conservation Corps (CCC). Vegetation on this site is primarily sagebrush and grasses, and this area is considered important winter range for deer and elk. There are no wetlands, seeps, or springs on this site, although a portion of the parcel is a historic alluvial fan.

This parcel has a low potential for the occurrence of potentially valuable mineral deposits of locatable and leasable minerals, but does have a high potential for the occurrence of salable minerals in the form of sand and gravel. The deposits on this parcel may be valuable if of suitable quality and not hindered from development by land use restrictions. If the parcel were annexed by Springville City, local zoning would likely restrict sand and gravel development on this parcel, which would limit the value and potential of these deposits (Springville City zone R-1-10). Copies of the zoning ordinances are included in the Project Record). If left un-annexed, the property would be under the jurisdiction of Utah County. Sand and gravel development would likely be found inconsistent with the Utah County General Plan, which calls for maintaining buffers between residential and industrial uses.

There is no legal access to this parcel; however, it is possible that the potential landowner could get an easement for access and develop this parcel as a residential neighborhood. If annexation were proposed, residential development would be a consistent land use. The density of the development would depend on local zoning requirements. A hillside protection ordinance may also be considered. OSPG has stated its interest in having the City of Springville acquire this parcel to preserve it as open space for public use. City of Springville has indicated that it sees this as a strong option for consideration to compare against proposals for other residential and public use. The historic CCC-built catch basin is currently under a special use permit to the City of Springville, and Springville City may wish to continue to use the basin. If that is the case, the U.S. would grant OSPG a Warranty Deed for the catch basin at the time of closing. In turn, OSPG would then grant the City of Springville an Easement Deed for the catch basin. This may have an effect on the potential for residential development of this parcel.

In accordance with the requirements of the FLEFA and 36 CFR 254.3(b)(2)(ii), the intended use of this parcel would not substantially conflict with established management objectives on adjacent NFS land.

3.1.6 Beaver Administrative Site

The Beaver Administrative Site is located in a residential area in Beaver, Utah. There is a home on the parcel which is used sporadically as a residence for employees of the Fishlake National Forest. This site is fully developed and no native vegetation remains on this parcel. It currently provides no habitat for wildlife, and there are no water resources on the site.

OSPG intends to list this parcel for sale to another party.

3.1.7 Non-Federal

The non-Federal parcel is a piece of vacant land situated near the mouth of American Fork Canyon in the northeastern part of Highland City, Utah. The site is relatively flat with elevations ranging from 4920 feet to 4980 feet. The parcel includes both developable land on the north bench and floodplain along the American Fork River drainage. There are no wetlands, seeps, or springs on this site. Vegetation on this site is representative of disturbed areas, although some riparian vegetation exists along two parallel canals and the American Fork River drainage.

The property is adjacent to the south side of U.S. Highway 92, and is made up of two parcels separated by a 125 foot strip of Federal land administered by the BOR. The Salt Lake aqueduct transects the parcel through this corridor of Federal land. BOR is currently preparing an EA on a proposed title transfer of three Provo River Project properties, including the Salt Lake aqueduct, as per H.R. 3391. The Uinta and Wasatch-Cache National Forests and NPS are cooperating agencies in this proposed title transfer. Current legislation directs the Secretary of the Interior to transfer title of the Salt Lake aqueduct to the MWDSL. However, maintaining Federal ownership of the aqueduct is being considered. The MWDSL is responsible for operation and maintenance of the Salt Lake aqueduct pursuant to a 1938 contract with the Department of Interior. It is likely that at some point in the future, the portion of the aqueduct which bisects the non-Federal parcel will need to be replaced or undergo major rehabilitation. The future use of the parcel must accommodate routine operations and maintenance and future rehabilitation or replacement.

There are four ditch easements across the parcel from east to west and two power easements from north to south. An electrical line borders the northern boundary of the property, and a single power line pole is located in the northeast corner of the property. A natural gas pipeline crosses the property from the southeast to the northeast. At the time of closing, OSPG would issue Easement Deeds for those ditches which are still in use and the utility easements. There are two encroachments on the property: a portion of a golf course encroaches on the southeast corner of the property and on the eastern boundary, and debris and rocks from adjacent property have been bulldozed into piles on the parcel.

The Uinta National Forest and NPS intend for this parcel to be the future site of the Timpanogos Interagency Facility.

3.2 Issue 1: The extent to which the proposed land exchange may affect cultural resources

Evaluation Criteria used to compare alternatives include:

- A qualitative description of the extent to which each alternative may affect cultural resources located within or adjacent to the parcels associated with the exchange.

3.2.1 Cultural and Historical Resources—Affected Environment

Six European-American archaeological and two European American structural sites are located on parcels of land involved in the proposed exchange. Seven of these sites (six archaeological sites and one structural site) were documented and evaluated for eligibility for the National Register in the *Timpanogos Interagency Land Exchange Cultural Resource Summary Report, Report # UN-01-349*. These sites are 42SL341 (Corner Canyon); 42WA146, 147, and 148 (Long Hollow–Provo Canyon); 42UT1317 and 1318 (non-Federal); and the Little Rock Canyon Water Diversion System (Springville). The eighth site, the Provo Warehouse (structural site), located on the Provo Sign and Radio Shop parcel, was previously recorded but its historic building form was updated and its National Register eligibility re-evaluated as part of this analysis and found to be “Eligible” for the National Register of Historic Places.

Two building complexes, the Pleasant Grove District Ranger Office and the Beaver Administrative Site, were found to be 41 years old or less and are therefore not sufficiently old enough to be considered for the National Register (USDA¹⁶, 2002). They were not documented as part of this analysis.

All six of the archaeological sites, found on the Long Hollow-Provo Canyon, Corner Canyon, and non-Federal parcels, are “Not Eligible” for the National Register (USDA¹⁶, 2002). 42SL341 and 42UT1318 are primarily trash scatters that do not have the potential to yield additional information. 42UT1317 is a larger complex of collapsed buildings or foundations with associated domestic artifacts. However, it also does not have sufficient age to qualify for the National Register. Site 42WA146 is an earthen dam created to water livestock, and does not have architectural merit. 42WA147 and 148 are livestock grazer’s camps and/or corrals that do not have the potential to yield additional information about their use. None of the six archaeological sites can be associated with important persons or events.

However, there are two European American structural sites associated with the CCC: the Provo Warehouse, and the Little Rock Canyon Water Diversion Dam, located on the Provo Sign and Radio Shop and the Springville parcels respectively. They are important representations of the work that this program accomplished in Utah Valley. The Provo Warehouse and Little Rock Canyon Diversion Dam were both built in 1935 by men from the Hobble Creek Camp, and both retain their historic character. Both of these sites are considered “Eligible” for the National Register of Historic Places (USDA¹⁶, 2002).

A little less than 50 percent of the Little Rock Canyon Water Diversion System is being considered for exchange on this project. This portion includes most of the lower diversion dam and its spillway, part of the diversion canal currently under Forest Service management, and part of the lower diversion dam debris basin. The other half of the system, the upper diversion dam and spillway and its entire debris basin, would continue to be managed by the Uinta National Forest.

The Utah Historic Preservation Office has provided its concurrence with the findings of the *Timpanogos Interagency Land Exchange Cultural Resource Summary Report, Report # UN-01-349*, dated July 1, 2003 (USDA¹⁶, 2003). The proposed action is in compliance with the National Historic Preservation Act of 1966. The National Historic Preservation Act states that the Federal Government's role would be to "provide leadership" for preservation, "contribute to" and "give maximum encouragement" to preservation, and "foster conditions under which our modern society and our prehistoric and historic resources can exist in productive harmony."

3.2.2 Cultural and Historical Resources—Environmental Consequences

Alternative A- No Action

Direct and Indirect Effects

Under the No Action Alternative there would be no direct or indirect effects on cultural resources. Cultural resources would remain consistent with the current conditions described above.

Cumulative Effects

Under the No Action Alternative there would be no cumulative effects on cultural resources. Cultural resources would remain consistent with the current conditions described above.

Alternative B- Proposed Action

Direct and Indirect Effects

The Timpanogos Interagency Land Exchange has the potential to adversely affect both of the National Register Eligible sites involved in the project. None of the current regulations that

protect its historic character would continue to function if the Provo Warehouse leaves Federal management. It would therefore be subject to alteration or demolition. Provo City does have a "Landmarks" program which seeks to protect buildings considered important to the historic character of the city; however, the Provo Warehouse building is not part of the City's Landmarks program.

If half of the Little Rock Canyon Water Diversion System is transferred into private ownership through the proposed exchange protection of this structure would be compromised as it would no longer be under Federal management.

Cumulative Effects

It is possible that the Springville would eventually be developed if it were transferred into private ownership. If this occurs, the Little Rock Canyon Water Diversion System could be demolished. Therefore, the land exchange would adversely affect the long-term historic integrity of the overall water diversion system if half of it went into private ownership with the exchange of the Springville parcel. However, OSPG has stated its intent for Springville City to acquire the parcel to maintain it as open space (OSPG¹, 2004). If this occurs, the Little Rock Canyon Water Diversion System could be preserved and possibly interpreted by the City. If the City were to acquire the parcel, it has mentioned that preservation of the parcel as open space would be a strong option to consider.

Mitigation

If the final land exchange includes either the Provo Sign and Radio Shop or the Springville parcels, then the proposal would have an adverse effect on their associated historic properties. Resolution of the adverse effects would be formalized in a Memorandum of Agreement (MOA) between the Utah State Historic Preservation Office, the Advisory Council on Historic Preservation, the Uinta National Forest, and the Timpanogos Cave National Monument. Since both of the adversely affected sites were built by the CCC, mitigation measures designed to preserve and celebrate CCC history in Utah Valley are appropriate ways of making up for the potential loss of these sites. These adverse effects may be resolved by the following actions:

- 1) A complete Intensive Level Inventory Form for each site;
- 2) Complete sets of black and white archival quality 35 mm photographs of each site;
- 3) Interpretation of the CCC at the new Timpanogos Interagency Administrative Facility/Visitor Center as part of the overall interpretation of human activity in the American Fork Canyon; and
- 4) Submission of this new information, plus all existing Uinta National Forest information on the CCC in Utah Valley to the Utah State Historical Society for inclusion on their website (<http://history.utah.gov/Photos/C275>) and project database on the CCC.

A significant amount of research on the CCC has been done on the Uinta National Forest, but none of this existing information is available for the general researcher. The new Utah State Historical Society website provides an opportunity to make that material available to researchers, former CCC participants, and their families.

If the Provo Sign and Radio Shop and the Springville parcel are included in the final exchange proposal, the MOA with the State Historic Preservation Office must be executed prior to completion of the exchange. A copy of the agreement is included in the Project Record.

Monitoring

No cultural resource monitoring is necessary because the Forest Services has identified and mitigated adverse effects to the National Register Eligible sites which might be affected by the project. As soon as either the Provo Warehouse or the lower half of the Little Rock Water Diversion System leaves Federal management, through the completion of a land exchange, the Forest Service has no further management responsibility for these sites. As a result, neither the Uinta National Forest nor the Utah SHPO would require any kind of monitoring.

3.3 Issue 2: The extent to which the proposed land exchange may affect natural and biological resources

Evaluation Criteria used to compare alternatives include:

- A qualitative description of the extent to which each alternative may affect natural resources located within or adjacent to the parcels associated with the exchange. These may include:
 - Vegetative cover
 - Wildlife and wildlife habitat
 - Federally listed threatened, endangered, candidate, Forest Service listed sensitive species, and management indicator species
 - Riparian and wetland areas

3.3.1 Vegetation—Affected Environment

Corner Canyon, Springville, and Non-Federal Parcels

Three of the proposed land exchange parcels (Springville, Corner Canyon, and non-Federal) are located on the west-side foothills of the Wasatch Mountains between 4640 to 5040 feet elevation. Sagebrush is the dominant vegetation on these three parcels, which also contain sparse patches of small trees. Like most of the Wasatch Front, exotic weeds have been present for years or are threatening to invade. Such exotic species include cheatgrass (*Bromus tectorum*), Japanese brome (*Bromus japonicus*), jointed goatgrass (*Aegilops cylindrical*), and bulbous bluegrass (*Poa bulbosa*). These grasses are found abundantly in at least one of the proposed parcels. Musk thistle (*Caduus nutans*), dalmatian toadflax (*Linaria dalmatica*), Western salsify (*Tragopogon dubius*), and houndstongue (*Cynoglossum officinale*) are also common. Dalmatian toadflax and musk thistle have been listed as noxious weeds by the State of Utah and houndstongue has been listed as a noxious weed by Wasatch County (Merritt et al., 2000). These species have been recognized as highly invasive; and in the case of grasses, they provide a mass of dry, fine fuels, which burn readily (Westbrooks, 1998).

Crested wheatgrass (*Agropyron cristatum*) and intermediate wheatgrass (*Agropyron intermedium*), among other grasses, are also common and provide forage to big game through the early spring and summer. The non-Federal parcel also contains a riparian vegetation zone along two entrenched water channels that run east/west through the property. This riparian zone contains well-established native trees, shrubs, forbs, and herbaceous vegetation. Water birch (*Betula occidentalis*), red-osier dogwood (*Cornus sericea*), chokecherry (*Prunus virginiana*), alder (*Alnus incana*), river hawthorn (*Crataegus douglasii*), narrowleaf cottonwood (*Populus angustifolia*), cliffrose (*Cowania mexicana*), and false hellebore (*Verarum californicum*) are among the species found there.

Long Hollow–Provo Canyon

The Long Hollow–Provo Canyon parcel is located in Provo Canyon, between 5236 to 6200 feet elevation. Two main vegetation types dominate the landscape, a meadow located in the center of the parcel and mountain brush (oak-maple) forest bordering it. Species found in the meadow include big sagebrush and grasses like Sandberg's bluegrass (*Poa secunda*), crested wheatgrass (*Agropyron cristatum*) and intermediate wheatgrass (*Agropyron intermedium*), which provide forage to big game through the early spring and summer. Weeds such as musk thistle (*Caduus nutans*), dalmatian toadflax (*Linaria dalmatica*), Western salsify (*Tragopogon dubius*), houndstongue (*Cynoglossum officinale*) and woolly mullein (*Verbascum thapsus*) are also abundant. These weeds are also observed along the two-track road that connects the parcel to U.S. Highway 189 through a private summer home development. On the northern side, small patches of quaking aspen (*Populus tremuloides*) connect the meadow with the mountain brush community. The southeast boundary contains a closed canopy mountain brush (oak-maple) forest with a few conifers established on slopes steeper than 20 percent. River hawthorn (*Crataegus douglasii*), serviceberry (*Amelanchier alnifolia*) and true mahogany (*Cercocarpus montanus*) are among the species found on those slopes. No rock outcrops were observed within this parcel.

Beaver Administrative Site, Provo Sign and Radio Shop, and Pleasant Grove Ranger District Office Parcels

These three parcels are all fully developed properties in urbanized areas. Vegetation on these sites is entirely urban landscape vegetation. No native vegetative communities exist on these parcels.

Further detail can be found in the *Timpanogos Interagency Land Exchange Biological Assessment/Biological Evaluation (BA/BE)* dated August 2003, and the *BA/BE Supplemental Memo* dated September 2003. (USDA¹, 2003; USDA², 2003; USDA⁸, 2004; USDA⁹, 2003)

3.3.2 Vegetation—Environmental Consequences

Alternative A- No Action

Direct and Indirect Effects

Under the No Action Alternative there would be no direct or indirect effects on vegetation and soils. Vegetation and soil resources on all parcels would remain consistent with the current conditions described above. The non-Federal parcel may possibly be pioneered by yellow starthistle or other invasive species.

Cumulative Effects

Under the No Action Alternative there would be no cumulative effects on vegetation and soils to the six federal parcels. Vegetation and soil resources would remain consistent with the current conditions described above.

Over the long-term, the non-Federal parcel would likely be developed, which would wipe out the existing vegetation and substitute buildings, pavement and some highly managed mostly non-native vegetation. As vegetation is removed and replaced with development there would be losses to wildlife habitat and forage.

Alternative B- Proposed Action

Direct and Indirect Effects

A direct effect of the proposed action is the loss to private ownership of approximately 28 acres of Federal land made up of sagebrush-grassland in the Wasatch Front west side (21 acres of which is managed by the Wasatch-Cache National Forest), and approximately 56 acres of

sagebrush-grassland and 181 acres of mountain brush contained in the Long Hollow–Provo Canyon parcel at Provo Canyon. An assessment of properly functioning condition (PFC) at a sub-regional scale indicates that mountain brush risk for loss of PFC is low; however, in some places this community is becoming decadent because of fire suppression and would likely become more decadent as fires continue to be suppressed (USDA⁶, 1998). Sagebrush risk for loss of PFC at lower elevation is relatively high, especially on foothills adjacent to urban areas (USDA⁶, 1998). Heavy big game use and invasion by cheatgrass and other annuals have increased the frequency of fire and have contributed to a dramatic reduction of sagebrush in some areas of Wasatch Front west-side foothills. This assessment also applies to the existing condition of the proposed parcels' vegetation.

If the private owner maintains current land use in the proposed land exchange parcels, the vegetation would maintain its existing condition and there would be no direct or indirect effects as a consequence of this action. If there is a change of land use, this analysis assumes that on subsequent activities the owner would comply with all State and Federal laws and regulations.

Based on current trends, it could be expected that Springville and Corner Canyon parcels would eventually be incorporated into the urban development of Salt Lake and Utah Counties. In such case, a direct effect on vegetation would be the removal of sagebrush, eliminating some of the already limiting big game winter habitat available in the Wasatch Front west-side foothills. However, OSPG stated in a July 9, 2003, letter, that they have no development plans for these parcels and would be interested in having Springville and Draper Cities acquire the parcels to maintain as open space which would minimize any loss to vegetation on these sites due to development (OSPG¹, 2004). Similarly, OSPG stated that there are no development plans for the Long Hollow-Provo Canyon parcel, and that they intend to preserve the property as open space and wildlife habitat.

Vegetation on the non-Federal parcel, if acquired, would be impacted through the development of this site. There would be some loss of the existing vegetative cover. The quality of vegetation on the non-Federal parcel is already compromised as much of the existing vegetation consists of invasive and non-native species. Federal management and landscaping activities will improve the overall quality of vegetation on this parcel. Additionally, riparian vegetation on the parcel would be maintained and possibly improved.

The Pleasant Grove Ranger District, Provo Sign and Radio Shop, and the Beaver Administrative Site are all fully developed parcels with vegetation consistent with urban landscapes. There would be no impact to vegetation on these parcels associated with the proposed exchange.

Cumulative Effects

If the land exchange parcels are not incorporated into urban development, cumulative effects from the proposed action would be directly related to on-going human impacts such as uncontrolled use of OHV's and bikes (Springville and Corner Canyon), weed invasion, mountain brush decadence, and potential for wildfire on sagebrush and mountain brush. In the long term, these impacts may negatively affect the resilience of the native vegetation and its capability to provide for wildlife. However, OSPG may protect these parcels from human impact through greater enforcement.

The proposed action could also lead to land-use change, contributing to the on-going process of sagebrush loss to urban growth, forest fragmentation, and creation of favorable conditions for weed dispersal. However, drastic changes in vegetation are not expected as a consequence of the proposed land exchange in the foreseeable future. Additionally, if Draper City and

Springville City acquire the Corner Canyon and Springville parcels respectively, impacts to vegetation on these sites will be minimized through greater local government enforcement.

Mitigation

No mitigation measures are necessary. There would be no significant impacts to vegetation under the proposed alternative.

Monitoring

No monitoring of impacts to vegetation is necessary.

3.3.3 Wildlife—Affected Environment

The Federal parcels and non-Federal parcel contain wildlife habitat for a variety of species. In this EA, management indicator species (MIS) are discussed to represent the impacts on wildlife. In addition, impacts on migratory birds, key wildlife habitat (i.e. critical winter range), and threatened, endangered, candidate and sensitive species are discussed. Information for MIS was gathered using data collected by the Utah Division of Wildlife Resources (UDWR) and Forest Service personnel. Site visits to the land exchange parcels were conducted to identify suitable habitat for animal and plant MIS. These species are discussed as they pertain to the proposed land exchange project. Further detail can be found in the project Wildlife Report (USDA¹¹, 2004), Fisheries Report (USDA³, 2004), *Timpanogos Interagency Land Exchange Biological Assessment/Biological Evaluation (BA/BE)* dated August 2003, and the BA/BE Supplemental Memos dated September 2003 and November 2004. A letter from the U.S. Fish and Wildlife Service (USFWS), March 17, 2004, states the agency's concurrence with the findings in the Timpanogos Land Exchange BE/BA.

The Migratory Bird Treaty Act directs the protection of migratory birds (16 U.S.C. 703). In response to Executive Order 13186 directing agencies to support the conservation intent of the migratory bird conventions to migratory birds by analyzing, avoiding, and mitigating adverse effects to migratory birds, a Memorandum of Understanding (MOU) was established between the USFWS, the Bureau of Land Management, and the Forest Service. The MOU expired January 15, 2003, without being renewed.

In this EA, information from a number of sources has been used to determine which migratory bird species to evaluate for this project. This includes USFWS federally listed threatened and endangered species and Regional sensitive species (TES), Forest MIS, and "Utah Partners in Flight Avian Conservation Strategy" (Parrish et. al., 2002) priority species. Impacts are analyzed using data collected through site visits, and annual breeding bird and neo-tropical migratory bird surveys. The three breeding bird survey routes on the Uinta National Forest (NOTE: one extends onto the Wasatch-Cache NF) have been surveyed annually since 1992. The 44 neo-tropical migratory bird survey routes on the Uinta National Forest were established in 1994 and 1995, and resurveyed between 1997 and 1999. Some of these were again resurveyed in 2004.

Wildlife data from the Fishlake National Forest were not considered because of the absence of suitable habitat at the Beaver parcel. Data from the Uinta National Forest was used for the Corner Canyon parcel since this parcel is located close to and contains habitats similar to those occurring on the Uinta National Forest

The proposed action is in compliance with the Migratory Bird Treaty Act of 1918. The Migratory Bird Treaty Act implements various treaties and conventions between the U.S. and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Under the law, taking, killing or possessing migratory birds is unlawful.

The following table lists the MIS for the Uinta, Wasatch-Cache, and Fishlake National Forests. The first column indicates the Forest which has the species identified as a MIS. The third column notes whether suitable habitat for the species exists within the “Project Area” or within the actual exchange parcel property lines. The fourth column notes whether suitable habitat exists within the “Analysis Area.” The analysis area for the Long Hollow—Provo Canyon parcel was defined as the Long Hollow watershed. Because the other parcels lie within or adjacent to urban settings, and the encompassing watersheds are generally small discontinuous faces of the Wasatch Front, the analysis areas were defined as the individual parcels themselves and the lands within a ¼ mile radius around each individual parcel.

Table 2. MIS for the Uinta, Wasatch-Cache, and Fishlake National Forests

- W-C: MIS belonging to the Wasatch-Cache National Forest (Land Management Plan 2003)
- U: MIS belonging to the Uinta National Forest (Land Management Plan 2003)
- F: MIS belonging to the Fishlake National Forest (Land Management Plan 2002)

FOREST	SPECIES Common name (Scientific name)	SUITABLE HABITAT IN THE PROJECT AREA	SUITABLE HABITAT IN THE ANALYSIS AREA	DISTRIBUTION/HABITAT ASSOCIATION
MAMMALS				
W-C, U	Beaver (<i>Castor Canadensis</i>)	N	Y ^{1/}	Riparian and wetlands
W-C	Snowshoe hare (<i>Lepus Americanus</i>)	N	N	Pole/sapling aspen, conifer, and mixed conifer
F	Mule Deer (<i>Odocoileus hemionus</i>)	N	N	Grass/forb, sagebrush, mountain brush, pinon/juniper, sapling or mature aspen or conifer
F	Elk (<i>Cervus Canadensis</i>)	N	N	Grass/forb, sapling/mature aspen, sapling/old growth conifer
BIRDS				
W-C, U, F	Goshawk (<i>Accipiter gentiles</i>)	Y ^{1/}	Y ^{1/}	Old growth and mature Douglas fir, mixed conifer, and aspen
U	Three-toed woodpecker (<i>Picoides tridactytus</i>)	N	N	Snags, old growth, or decadent conifer and aspen
F	Hairy woodpecker (<i>Picoides villosus</i>)	N	N	Cavity Nester – snags, dead standing trees
F	Western bluebird (<i>Sialia mexicana</i>)	N	N	Cavity Nester – snags, dead standing trees
F	Mountain bluebird (<i>Sialia currucoides</i>)	N	N	Cavity Nester – snags, dead standing trees
F	Lincoln’s Sparrow (<i>Melospiza lincolnii</i>)	N	N	Riparian communities
F	Song Sparrow (<i>Melospiza melodia</i>)	N	N	Riparian communities
F	Yellow Warbler (<i>Dendroica petechia</i>)	N	N	Riparian communities
F	Brewer’s Sparrow (<i>Spizella breweri</i>)	N	N	Sage Nester – mature sage
F	Vesper Sparrow (<i>Poaecetes gramineus</i>)	N	N	Sage Nester – mature sage
AQUATICS				

W-C, U, F	Bonneville cutthroat trout (<i>Oncorhynchus clarki utah</i>)	Y ^{1/}	Y ^{1/}	Aquatic
W-C, U	Colorado cutthroat trout (<i>Oncorhynchus clarki pleuriticus</i>)	N	N	Aquatic
F	Brown trout (<i>Salmo trutta</i>)	N	N	Aquatic
F	Brook trout (<i>Salvelinus fontinalis</i>)	N	N	Aquatic
F	Rainbow trout (<i>Oncorhynchus mykiss</i>)	N	N	Aquatic
F	Lake trout (<i>Salvelinus namaycush</i>)	N	N	Aquatic
F	Cutthroat trout (<i>Oncorhynchus clarki</i>)	N	N	Aquatic
F	Microvertebrates	N	N	Aquatic
PLANTS				
F	Rydberg's Milkvetch (<i>Astragalus perianus</i>)	N	N	Harsh sites at upper elevations, openings in mixed aspen, fir, and conifer. Also found on igneous intrusive gravels

^{1/} Suitable habitat found ONLY within the analysis area for the Long Hollow parcel on the Uinta NF.

MIS Population Trends

The only MIS with suitable habitat in the project area(s) or analysis area(s) are beaver, goshawk, and Bonneville cutthroat trout. Habitat for these species exists within the Long Hollow project area and analysis area, but not in any of the other parcels or their analysis areas (see Table 1). Since these are the only MIS with suitable habitat within any of the project or analysis areas and the only suitable habitat for these species is found on the Long Hollow parcel on the Uinta National Forest, the project would not affect these species elsewhere and would not affect the other MIS species. Therefore, only these three species in relation to the Long Hollow parcel are further discussed.

Beavers are widely distributed on the Uinta National Forest. They inhabit a wide variety of riparian habitats having permanent water and food. Primary food sources are willow, aspen, and in lower-elevation riparian forests, cottonwood. Beavers have been surveyed on the Uinta National Forest. Many of these surveys were conducted in connection with specific projects. Areas include the Mineral Basin area, Left Fork of White River, Diamond Fork, Timpooneke Campground, below Cascade Springs, and portions of the Heber Ranger District. In 2003 and 2004, a Forest-wide survey of sample areas across the Uinta NF was implemented. In these surveys, beaver was considered active if new mud and recently cut willows or aspen were observed. Based on available data areas where beaver surveys were conducted, the stability of populations in various drainages appears to be quite variable, but as a whole appear to be stable (Waters, 2004). Although the Long Hollow parcel and analysis area contains suitable habitat for beavers, no beaver occur there (USDA¹⁴, 2004).

Bonneville cutthroat trout (BCT) do not occur on the Uinta National Forest parcels considered for exchange, except the Long Hollow parcel. BCT historically occupied about 90% of the Bonneville basin. About 6% of the BCT's habitat historically occurred on what is now the Uinta National Forest, and this included the Provo River drainage. Today, about 5% of remaining populations of BCT occur on the Uinta National Forest. BCT are currently known to inhabit about 20% of the Provo River drainage. Past and current stocking, and subsequent reproduction of non-native fish

species has distributed rainbow, German brown, Eastern brook, and Yellowstone cutthroat trout throughout the lower Provo River drainage. These species present a significant threat to BCT populations in the drainage. Snorkel count and electrofishing surveys conducted by UDWR and the USFS in the lower Provo River between Deer Creek Reservoir and the Olmstead Diversion in 2000, 2003, and 2004 indicate that the salmonoid population in the lower Provo River consists primarily of German brown trout. These surveys found German brown trout accounted for between 93 to 100% of the salmonoid population in the lower Provo River. BCT (purity unknown) populations ranging from 0 to 0.34 fish/m in the sample reaches were recorded. Population trend data using the abundance of BCT within the lower Provo River drainage does not show any statistically significant changes in BCT abundance (i.e. population trends). Similarly, Forest-wide population monitoring using both abundance and indices of overall condition (K factor) for all species of cutthroat trout found no statistically observable change ($p < 0.025$) in cutthroat abundance or condition. (USDA³, 2004) Bonneville cutthroat trout are also MIS for the Wasatch-Cache and Fishlake National Forests. There is no suitable habitat for the trout on either the Corner Canyon (Wasatch-Cache NF) or Beaver (Fishlake NF) parcels.

Goshawks occur widely throughout the Uinta National Forest (USDA¹¹, 2004). They typically nest in areas with a mix of Douglas-fir/white fir and aspen forest types. The Uinta National Forest has been monitoring goshawk population trend since 1996 by monitoring territory occupancy. Territory occupancy has varied considerably over this time, ranging from a low of about 7.7% in 1997 to a high of 36.8% in 2002. Occupancy in 2004 (30.0%) was slightly up over 2003 occupancy (26.3%) and the preceding 5-year (1999-2003) average (27.6%). There is no evidence that territory occupancy has declined between 1996 and 2004 (USDA⁷, 2004). The only parcel considered in this analysis that contains suitable habitat for goshawk is the Long Hollow parcel. No goshawks were observed during field visits to this parcel (USDA¹, 2003; USDA², 2003; USDA¹¹, 2004), and no historical sightings of goshawk on this parcel are documented. Goshawks are also MIS for the Wasatch-Cache and Fishlake National Forests. No suitable goshawk habitat occurs on either the Corner Canyon (Wasatch-Cache NF) or Beaver (Fishlake NF) parcels.

Corner Canyon

Housing developments are located on the north, south, and west sides of the Corner Canyon parcel. The parcel receives a large amount of disturbance from recreational uses. The wildlife habitat is mainly a sagebrush/grassland community with a few trees. This 20.7-acre parcel lies within an area considered critical use deer and elk winter range by the UDWR (UNDR², 2004; USDA¹², 2003), though the quality and use of this habitat is limited by the adjoining development and disturbance.

There are no perennial rivers or streams that flow through the parcel, and therefore, no habitat for beaver (a MIS species) or other aquatic species.

Neo-tropical migratory birds use the area for breeding, nesting, and foraging. The Timpanogos Cave #1 neo-tropical migratory bird survey route is located in nearby northern Utah County on similar sagebrush/grassland habitats along the urban interface. This route was surveyed in 1994, 1999, and 2004. No avian MIS or TES species were observed, but golden eagle (federally protected species), and the broad-tailed hummingbirds and Virginia's warblers (Utah Partners in Flight priority species) were recorded. (USDA¹¹, 2004)

Long Hollow–Provo Canyon

Wildlife habitat on the Long Hollow–Provo Canyon parcel includes oak/maple forest, sagebrush/grassland meadow, and aspens and conifers lining the edge of the area. Two corners of the parcel extend down and include some riparian vegetation by the Provo River. Weed species such as musk thistle and dalmatian toadflax inhabit much of the meadow. A

small pond, with periodic water, is located within the meadow, and a two-track road allows access into this area. Private houses are located to the east of the parcel.

During a survey of the area a large amount of elk sign was observed (USDA¹, 2003; USDA², 2003; USDA¹¹, 2004). The UDWR (UNDR², 2004), and Uinta National Forest Land and Resource Management Plan (USDA¹², 2003, Pg. E-1 to E-2) considers the 237-acre Long Hollow–Provo Canyon parcel and surrounding lands to be high use winter range for elk and deer. Bighorn sheep and mountain goats are known to use other parts of Provo Canyon as winter range; however, the Long Hollow–Provo Canyon parcel has not been designated as bighorn sheep or mountain goat habitat.

The Provo River flows through a corner of the parcel and is a blue ribbon trout fishery. The parcel contains less than 0.10 acre of the Provo River. This reach of the Provo River is largely populated with brown trout, but also contains some rainbow trout and Bonneville cutthroat trout (BCT) (USDA³, 2004).

Neo-tropical migratory birds utilize the area for breeding, nesting, and foraging. The Bridal Veil Falls neo-tropical migratory bird survey route is located nearby and traverses has the same types of habitat as the Long Hollow–Provo Canyon parcel. Surveys at Bridal Veil Falls were conducted in 1994, 1995 and 1999. No MIS or TES avian species were observed, but the broad-tailed hummingbird and Virginia's warbler (Utah Partner in Flight priority species) were observed in these surveys. (USDA¹¹, 2004)

The 2003 FEIS for the Uinta National Forest Plan, page 3-254 states, "Alpine habitats on the Uinta National Forest are also used by Rocky Mountain bighorn sheep and by mountain goats." Page 3-258 states, "In addition, mountain goats and Rocky Mountain bighorn sheep use cliffs for escape cover." Considering the types of habitat bighorn sheep prefer, it is unlikely that they would frequent the parcels identified for exchange because of their geographic location and low elevation. The high elevation and cliff habitat preferred by the sheep and goats do not occur on the parcels considered for exchange. Sheep may move through the Long Hollow parcel in their travels between Cascade Peak and Mount Timpanogos, but it is not likely that this parcel would be used long-term. They are seen occasionally on the highway in Provo Canyon.

Springville

The 7-acre Springville parcel is located behind a housing development that borders it on the west and south sides. A debris basin is located to the east and a canal is to the west of the parcel. There are roads that allow access into this area, which are used extensively by OHV's, bike riders, and hikers.

No perennial or intermittent rivers or streams flow through the parcel, and therefore, no beaver or aquatic species inhabit the parcel.

The Springville parcel is mostly sagebrush/grassland habitat with a few trees. This parcel lies within an area designated as critical use deer winter range by the UDWR (UNDR², 2004), and Uinta National Forest Land and Resource Management Plan (USDA¹², 2003, Pg. E-1 to E-2). UDWR and the Uinta National Forest have a big game winter range study plot within the Springville parcel, which was read in 2002 (USDA¹¹, 2003). Although the area is considered and managed as big game winter range, its value and use as winter range is limited due to impacts to the site, heavy development on adjoining lands, and recreational use on this and adjoining properties.

Neo-tropical birds may use the sagebrush/grassland habitat for breeding, nesting, and foraging. The Springville neo-tropical migratory bird survey route is located just east and upslope of the parcel, but is on different habitats (oak-maple, aspen, mountain brush, and spruce-fir). The Timpanogas Cave #1 neo-tropical migratory bird survey route is located in northern Utah County on similar sagebrush/grassland habitats along the urban interface. This route was surveyed in 1994, 1999, and 2004. No avian MIS or TES species were observed, but golden eagle (federally protected species), and the broad-tailed hummingbirds and Virginia's warblers (Utah Partners in Flight priority species) were recorded. (USDA¹¹, 2004)

Non-Federal

The 37-acre non-Federal parcel consists of decadent and dead sagebrush habitats interspersed with weeds and grasses. There is a riparian corridor with cottonwoods, willows, and small shrubs that runs east/west on the north side of the parcel, and some riparian vegetation along two parallel canals which cut through the parcel. This parcel is largely surrounded by a developing urban area.

This area was historically used by elk and deer as winter range, but due to the surrounding private-land development and major roads, is currently only occasionally and lightly used by deer as winter range now.

Neo-tropical migratory birds use the riparian area for breeding, nesting, and foraging. The non-Federal parcel vegetation types (riparian forest, oak/maple forest, sagebrush/grassland meadow, and aspens and conifers) provide habitat for riparian dependent species. The Timpanogos Cave #3 neo-tropical migratory bird survey route is located nearby and traverses similar types of habitat as the non-Federal parcel. This route was surveyed in 1994, 1999 and 2004. No MIS or TES avian species were observed, but the broad-tailed hummingbird (Utah Partner in Flight priority species) was observed. (USDA¹¹, 2004)

Beaver Administrative Site, Provo Sign and Radio Shop, and Pleasant Grove Ranger District Office Parcels

These three parcels are all fully developed properties with administrative buildings on them. They are all located within city limits (one each in residential sections of Beaver and Pleasant Grove, and one in downtown Provo). There is no threatened, endangered, candidate, sensitive, or management indicator species habitat or occupancy on these parcels. There is no big game winter range on these parcels. While there are neo-tropical migratory birds associated with all habitats, within cities as well as in forested areas, use of these parcels is unlikely to change and will not affect the neo-tropical migratory birds already in residence there.

3.3.4 Wildlife—Environmental Consequences

Alternative A- No Action

Direct and Indirect Effects

Under the No Action Alternative there would be no direct or indirect effects on wildlife resources on the six Federal parcels. Wildlife resources would remain consistent with the current conditions described above.

Over the long-term, it is likely that the non-Federal parcel would eventually be substantially developed if it were to stay in private ownership. If this were to occur, wildlife habitat would be diminished because development of the non-Federal parcel would likely be of greater density under private ownership than under Federal ownership. Under private ownership, vegetation which could be used by wildlife for forage and habitat would be removed, and wildlife currently using the parcel would be displaced.

Cumulative Effects

Urban development will continue in Utah and Salt Lake Counties. This would potentially increase recreation activities such as hiking, mountain biking, horseback riding, and OHV riding in and around the Springville and Corner Canyon parcels.

Under the No Action Alternative, wildlife resources on the Federal parcels would remain consistent with the current conditions described above. Land uses on the Federal parcels would remain unchanged, and this alternative would not add to the impacts of development occurring on or around the six Federal properties.

The Wasatch Front deer winter range between Payson and Salt Lake City has been impacted by past and ongoing development and increasing human-wildlife interactions. This has caused big game to travel further distances to find winter forage in urban settings, which could increase big game fatalities by vehicles. Retention in Federal ownership of Corner Canyon, Long Hollow, and Springville parcels under this alternative, all of which provide winter range, would not add to these effects.

Since no habitat for or populations of either Uinta or Wasatch-Cache MIS exists on the Springville or Corner Canyon parcels, this alternative have no effect on the population trends for MIS species.

For the non-Federal parcel, the direct and indirect effects of private development would add to the development occurring on surrounding lands. This would result in a minor overall reduction of habitat, including winter range. Some neo-tropical migratory bird habitat could potentially be replaced by artificial means (birdhouses, bird feeders, bird baths, etc.) which would benefit some neo-tropical bird species. Planting of more trees and shrubs in an urban setting would also increase nesting habitat for certain bird species in the long term. The proposed project would not have little if any effect on the population or population trends for any species.

Alternative B- Proposed Action

Direct and Indirect Effects

Corner Canyon

Corner Canyon is located near a housing development. There would be no direct effects to wildlife such as loss of individuals. There would be effects to up to 20.7 acres of deer and elk winter range (UNDR², 2004) and neo-tropical migratory bird habitat. There is a chance that houses would be built on the parcel; however, steep slopes and the presence of the Wasatch Fault significantly limit housing and other development potential. Further, Draper City zoning (Draper City zone A5) would limit the density of development on this parcel, which could allow for wildlife corridors. If development occurs, up to 20.7 acres of critical use deer winter range would be lost. Urban encroachment into area of winter range habitat has already contributed to a decrease in deer population along the Wasatch Front (UNDR², 2004; USDA¹², 2003). OSPG has stated its interest in having Draper City acquire the parcel to maintain the open space and trail access. Draper City is interested in this option. If this occurs, land uses would be very similar to the present and no additional impacts to wildlife, including winter range is likely.

Some neo-tropical migratory bird habitat could potentially be replaced by artificial means (birdhouses, bird feeders, and bird baths) associated with private development of this property. This would mitigate or partially mitigate the impacts of development on some of the species. Planting of more trees and shrubs in an urban setting would increase nesting habitat for certain bird species in the long term. There is no habitat for Wasatch-Cache MIS on this parcel. The proposed project would not have any effect on the population or population trends for those species.

Springville

Because the Springville parcel is located behind a housing development, there would be no effects to wildlife populations. There would be potential effects to approximately 7 acres of big game winter range and neo-tropical migratory bird habitat.

The loss of the habitat on the Springville parcel, although identified by the UDWR (UNDR², 2004), as “critical” winter range, is not of significant impact. This parcel is very small in size (7.2 acres), and the existing habitat have been already been compromised by adjacent development. Encroaching development has deterred big game from using this site as a primary source of winter range in favor of areas with less human intrusion. The loss of a parcel of this small size, and one that is already impacted by encroaching development, will have little impact on the effectiveness of the surrounding habitat and overall quantity of effectively useful big game winter range.

OSPG has stated (OSPG¹, 2004) its interest in having Springville City acquire the parcel. If Springville City becomes an owner of the property, the area could remain intact and be available for use by big game, migrant birds, and other wildlife species.

There is no habitat for Uinta National Forest MIS on this parcel. The proposed exchange of this parcel would not have any effect on the population or population trends for those species.

Long Hollow–Provo Canyon

Long Hollow is surrounded by private land with limited development. There would be no direct effects to wildlife such as loss of individuals. However, a potential loss of elk and deer winter range and disturbance to neo-tropical migratory bird habitat could result. Human disturbance to nesting and breeding birds and their habitat may increase depending on seasonal use and amount of visitors.

The Long Hollow–Provo Canyon parcel is designated high use winter range for elk and deer by the UDWR (UNDR², 2004). There are meadows in close proximity to the parcel, but they are smaller and contain no ponds. The loss of critical winter habitat on the 237-acre Long Hollow-Provo Canyon parcel would be minimal. It is likely that little development would occur on this parcel. The prospective owner of this parcel has provided documentation (OSPG¹, 2004) stating their intent to leave this parcel in open space. If this occurs, there would be no change to the availability of this parcel for big game winter use. If OSPG did decide to develop the parcel, development would be limited which would maintain the majority of wildlife habitat. This area is zoned by Wasatch County for one residential unit per 160 acres (Wasatch County Zone P-160). This would limit development of the 237-acre parcel to one unit, possibly two if combined with adjacent private property. Wasatch County has no history of granting variances on similarly zoned parcels. With that level of potential development, impacts on big game winter range and wildlife habitat would be minor.

Suitable habitat exists on the parcel for goshawk, beaver, and Bonneville cutthroat trout; As noted in the preceding paragraph, OSPG has indicated they have no intent on developing the parcel, and if they did, Wasatch County zoning would limit the intensity of the development (Wasatch County Zone P-160). Consequently, impacts to wildlife habitat would be limited. Since no beaver or goshawk currently inhabit the parcel, this exchange would not impact populations or population trends for these two Uinta National Forest MIS species.

A small population of Bonneville cutthroat trout inhabit the lower Provo River, possibly including the stretch of river passing the Long Hollow-Provo Canyon parcel. These populations are currently inhibited by and at risk from non-native fish species in the river, and may also be affected by the heavy fishing use in the river. OSPG has stated that they have no plans to develop this parcel, and intend on maintaining it as open space and wildlife habitat. Consequently, land use would change little and no impacts from development (e.g. erosion and sediment deposition from development of the tract into the Provo River) are anticipated. The proposed land exchange would have little if any effect on fisheries habitat, and would not have any effects on the population or population trends of Bonneville cutthroat trout. (USDA³, 2004)

Non-Federal Parcel

The non-Federal parcel is located on a disturbed area; however, it contains a riparian zone that provides habitat for neo-tropical and resident birds. There would be no direct effects to neo-tropical birds such as loss of individuals or nests. The value of riparian habitat for neo-tropical birds would be maintained and probably improved as a consequence of landscape activities. Some riparian vegetation may be lost to construction of the proposed interagency facility, driveways, and parking areas. The removal of riparian vegetation would be minimized and, upon completion of construction, landscaping and Federal management would improve the quality of the remaining riparian habitat on the parcel. A planned trail would help educate the public on different habitat types and what species use them.

Exchange of this 37-acre parcel to the Federal government would provide a very minor benefit to big game winter range. The exchange would likely result in less development of this property than would have otherwise occurred, and therefore in less impact to big game winter range. The extent of this impact would be very limited, as the parcel is surrounded by developed/developing areas, habitat is of limited quality, and the site is somewhat cut off from adjacent winter range by major roadways.

There is no habitat for Uinta MIS on this parcel, and the proposed project would therefore have no effect on the population or population trends for those species.

Beaver Administrative Site, Provo Sign and Radio Shop, and Pleasant Grove Ranger District Office Parcels

All three parcels are developed sites with administrative buildings present on them. They are all located within city limits (one each in residential sections of Beaver and Pleasant Grove, and one in downtown Provo). There is no threatened, endangered, candidate, sensitive or management indicator species associated with these parcels. There is no associated big game winter range. While there are neo-tropical migratory birds associated with all habitats, within cities as well as in forested areas, use of these parcels is unlikely to change and will not affect the neo-tropical migratory birds already in residence there.

Cumulative Effects

Corner Canyon and Springville

Urban development will continue in Utah and Salt Lake Counties. This would potentially increase recreation activities such as hiking, mountain biking, horseback riding, and OHV riding in and around the parcel. The Wasatch Front deer winter range between Payson and Salt Lake City has been impacted by past and ongoing development and increasing human-wildlife interactions. This has caused big game to travel further distances to find winter forage in urban settings, which could increase big game fatalities by vehicles.

Exchange of these properties would add to these effects, but the overall increase would be very minor due to the limited quality and quantity (~ 28 acres) of the winter range habitat and use on these parcels.

Development of these properties would result in minor impacts on neo-tropical bird habitat. These habitats are not uncommon, the acreage involved is relatively small (about 28 acres), terrain would limit development on these properties, and habitat quality is limited due to weed infestation and recreation use. Some neo-tropical migratory bird habitat could potentially be replaced by artificial means (birdhouses, bird feeders, bird baths, etc.) and planting of more trees and shrubs in an urban setting would increase nesting habitat for certain bird species in the long term. No impacts on neo-tropical bird populations would occur.

Since no habitat for or populations of either Uinta or Wasatch-Cache MIS exists on these parcels, the proposed exchange would have no effect on the population trends for MIS species.

Long Hollow–Provo Canyon

Livestock grazing has been eliminated from the area, eliminating competition with wildlife species. Management responsibility would be transferred to the private landowner; hence, current management practices may not continue. There may be a decrease in recreational activities because of private ownership, which may offer increased protection for wildlife and vegetation. Although it would no longer be in Federal ownership, the 237 acres of big game winter habitat on this parcel would be maintained. OSPG has stated its intent to maintain the property as open space and has no plans for development. Development is possible, but is limited by local zoning restrictions (Wasatch County Zone P-160). If development were to occur at some point, it would have minimal impact on big game habitat.

Suitable habitat exists on the parcel for goshawk, beaver, and Bonneville cutthroat trout; however, no beaver or goshawk inhabit the parcel. There is no suitable habitat for the other Uinta MIS species, three-toed woodpeckers, nor Colorado River cutthroat trout on this parcel or analysis area. Because of the lack of suitable habitat, no major changes in land use would occur, and the fact that goshawks and beaver do not use the parcel, the proposed exchange would have no effect on the population trends for these Uinta MIS species.

Bonneville cutthroat trout may occur on the parcel; however, the exchange would not impact either the fish's habitat or populations. Bonneville cutthroat populations in the Provo River, and in many other areas on the Forest have been impacted by past development and stocking of non-native species. Since no development on the parcel is

anticipated, no cumulative impacts on Bonneville cutthroat trout habitat would result from the exchange of this parcel. Fishing, other land uses in the drainage, and fisheries management (including stocking) would not change as a result of this exchange, and no impacts on Bonneville cutthroat trout populations or population trends on the Forest would result.

Non-Federal

There is a housing development to the west and south sides of the parcel, and one being constructed to the southeast, all of which largely preclude deer from using the area. Development will continue throughout Utah County, decreasing already limited winter habitat and causing deer to travel further distances to find winter forage in urban settings, which may increase deer fatalities by vehicles.

There is no habitat for or populations of Uinta MIS on this parcel, and the proposed project would therefore have no cumulative effect on the population trends for those species.

Summary

In summary, approximately 265 acres of deer and elk winter range (UNDR², 2004) would be removed from National Forest System (NFS) ownership if the land exchange occurs. All or a portion of the habitat may become unusable to wild ungulates and neo-tropical birds, displacing them to other areas.

The Uinta National Forest has recently purchased 200 acres of land in the Dry Canyon area, about two miles east of Lindon, Utah. Nearly all of this area is considered Critical or High winter range for big game. This increase in habitat acreage would mitigate the potential loss of the 7.3 acres of the Springville parcel and 20.7 acres of the Corner Canyon parcel transferred out of Federal ownership with the proposed Timpanogos Interagency Land Exchange.

In a related project, the Uinta National Forest is proposing a watershed restoration project in the Dry Canyon area. The proposal is to reclaim about 13 miles of user-created two-track roads and trails over about 330 acres of National Forest. Activities proposed include reseeding the disturbed areas with native grasses and plants, creating berms and ditches that will help direct water from the most erosive areas, blocking the area with rocks and fences to restrict further destructions, and removing litter and debris. This restoration effort would improve the quality of big game habitat and further mitigate any loss of winter range through the Timpanogos Interagency Land Exchange proposal.

On the Wasatch-Cache National Forest Corner Canyon parcel, none of the Forest's MIS or their habitats occur, and thus the project will not affect the populations or the population trends of the Wasatch-Cache MIS. On the Fishlake National Forest Beaver parcel, none of the Forest's MIS or their habitats occurs, and thus the project will not affect the populations or the population trends of the Fishlake MIS. On the Uinta National Forest parcels, only Bonneville cutthroat trout, beaver, and goshawk have suitable habitat on the exchange parcels. However, no populations of beaver or goshawks occur on the parcels. The proposed exchange will not affect Bonneville cutthroat trout or beaver habitat. The proposed action will unlikely affect goshawk habitat, and if so, only a limited amount of habitat. The proposed action will have no effect on populations or population trends of Uinta National Forest MIS. All MIS for the Uinta, Wasatch-Cache, and Fishlake National Forests are listed in Table 2, page 41.

Mitigation

No mitigation measures are necessary. There are no significant impacts to wildlife under the proposed alternative.

Monitoring

No monitoring of impacts to wildlife is necessary.

3.3.5 Federally Listed Threatened, Endangered, Candidate, or Sensitive Species—Affected Environment

Information for threatened, endangered, candidate, and Forest Service sensitive species was gathered using data collected by the UDWR and Forest Service personnel. Site visits to the land exchange parcels were conducted for suitable habitat for threatened, endangered, candidate, and Forest Service sensitive species animal and plant species. These species are discussed as they pertain to the proposed land exchange project. Further detail can be found in the *Timpanogos Interagency Land Exchange Biological Assessment*, and the *Biological Evaluation (BA/BE)* dated August 2003, and the *BA/BE Supplemental Memos* dated September 2003 and November 2004. A letter from the USFWS, March 17, 2004, states the agency's concurrence with the findings in this EA.

The USFWS Threatened (T), Endangered (E), and Candidate (C) species list was obtained for Utah and Salt Lake Counties. The most current list (July 2003) includes:

- Bald eagle (T) (*Haliaeetus leucocephalus*)
- Western yellow-billed cuckoo (C) (*Coccyzus americanus occidentalis*)
- Clay phacelia (E) (*Phacelia argillacea*)
- Ute ladies'-tresses (T) (*Spiranthes diluvialis*)
- Desert milkvetch (E) (*Astragalus deserticus*)
- Slender moonwort (C) (*Botrychium lineare*)
- Canada lynx (T) (*Lynx canadensis*)
- June sucker (E) (*Chasmistes liorus*)
- Utah valvata snail (E) (*Valvata utahensis*)

The Utah prairie dog and California Condor do not occur in Utah and Salt Lake Counties.

There is no suitable or potential habitat in the project area for any Federally-listed aquatic or terrestrial species with the exception of bald eagle and western yellow-billed cuckoo (USDA¹, 2003; USDA², 2003; USDA⁸, 2004; USDA⁹, 2003). The proposed action is in compliance with the Endangered Species Act. The law provides a program for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The law prohibits any action, administrative or real, that results in a "taking" of a listed species, or adversely affects habitat. Likewise, import, export, interstate, and foreign commerce of listed species are all prohibited.

There is no suitable or potential habitat for any aquatic or terrestrial Forest Service sensitive species with the exception of Bonneville cutthroat trout, flammulated owl, northern goshawk, and spotted bat. Complete survey findings are documented in the *Timpanogos Interagency Land Exchange Biological Evaluation*, which is included in the Project Record.

Bald Eagle

There are only four known nest site occurrences in Utah, none of which are on the Uinta National Forest or in the Corner Canyon area on the Wasatch-Cache National Forest (UDNR¹, 2003). Wintering bald eagles are known to occur in American Fork Canyon, Provo Canyon, Diamond Fork Canyon, Salt Creek, and the Vernon Management Area, as well as other areas across the Forest (USDA¹², 2003; UDWR¹, 2003). The species selects mature trees with well-developed canopies for roosting and perching. Its winter habitat is usually along lakes, streams, or rivers for feeding. Within the non-Federal and Long Hollow parcels, the cottonwood trees along the waterways are wintering habitat. (USDA¹, 2003) However, winter eagle surveys (UNDR³, 2003) and site visits by the Forest Service have not documented bald eagle occurrences on this parcel.

Western Yellow-billed Cuckoo

The Western yellow-billed cuckoo is a candidate for listing on the Endangered Species List. This species requires large blocks (> 25 acres) of riparian habitat for nesting, particularly woodland areas with cottonwoods and willows (Federal Register, 2001). This species has not been found on the Uinta or Wasatch-Cache National Forests. It has been seen along sections of the Provo and Spanish Fork Rivers, both of which are in close proximity to the Uinta National Forest (Webb, 2001), but not near any of the parcels considered here. Lower American Fork Canyon was surveyed for this species in 2001, but no cuckoos were observed. (Webb, 2001). There is marginally suitable (narrow, poor quality, fragmented by roads, etc.) habitat located along the riparian corridor within the non-Federal parcel.

Flammulated Owl

Flammulated owl (*Otus flammeolus*) is listed as a Forest Service sensitive species for the Wasatch-Cache, Uinta, and Fishlake National Forests. This species prefers mixed pine forests and aspen and conifer habitats in Utah. There is a limited amount of suitable habitat for this species on the Long Hollow–Provo Canyon parcel. No flammulated owls were reported on any Forest Service site visits to this site (USDA², 2003).

Northern Goshawk

The northern goshawk (*Accipiter gentiles*) is listed as a Forest Service sensitive species for the Wasatch-Cache, Uinta, and Fishlake National Forests. It is also a management indicator species for the Fishlake, Wasatch-Cache and Uinta National Forests. Refer to the discussion of this in Sections 3.3.3 and 3.3.4 of this EA.

Spotted Bat

Spotted bat (*Euderma maculatum*) occur in many different habitats. Cracks in limestone and sandstone between 1-2 inches wide are important roosting areas (USDA⁴, 1991). This mammal is listed as a Forest Service sensitive species for the Wasatch-Cache, Uinta, and Fishlake National Forests. There is suitable habitat for this species on the Long Hollow–Provo Canyon parcel. (USDA², 2003)

Wasatch Jamesia

Wasatch jamesia (*Jamesia americana var. macrocalyx*) is a Forest Service sensitive species for the Uinta National Forest. This species prefers rock crevices and cliffs on mountain brush and spruce-fir communities. At lower elevations, it occurs in protected, mainly north facing outcrops. (Welsh et al, 1993). There is potential habitat for this species on the Long Hollow–Provo Canyon parcel. This site was surveyed, and no plants were found (USDA⁸, 2004).

3.3.6 Federally Listed Threatened, Endangered, Candidate, or Sensitive Species—Environmental Consequences

This section analyzes the environmental effects that the proposed action would have on animal and plant species listed as threatened, endangered, candidate, or Forest Service sensitive species. Those animal species that have suitable habitat and may occur within one or more of the land exchange parcels include bald eagle (threatened), Western yellow-billed cuckoos (candidate), flammulated owl (sensitive), spotted bat (sensitive), and Northern goshawk (sensitive) as discussed above.

Threatened, endangered, candidate, and Forest Service sensitive plant species found in the Uinta, Wasatch-Cache, and Fishlake National Forests were analyzed for project impacts. Most of these plants occur under very specific environmental conditions and narrow habitats, making many of them endemic to specific locations.

Plants such as Smith violet, Logan buckwheat, Cronquist daisy, Maguire draba, Starveling milkvetch, and Cache beartongue are endemic to limestone and dolomite substrates found in northern Utah. Mound cryptanth is found in Millard County, specifically on Sevey dolomite substrates. Rockcress draba and Garrett's bladderpod grow above timberline in gravelly substrates. Slender moonwort and Dainty moonwort are found in alpine marshes and wet meadows. Species such as Brownie ladyslipper, arctic poppy, and Uinta greenthread occur in the Uinta Mountains and Barneby woody aster has been found on rock outcrops at Mt. Nebo (southern Wasatch mountains). Other species with high endemism are Deseret milkvetch, found on soils of the Moroni formation; and Clay phacelia, found on Green River shale barrens. None of these species have suitable habitat within the project area, because the proposed parcels are neither located within the natural distribution zone of these species nor on substrates with similar characteristics. (USDA¹, 2003; USDA², 2003; USDA⁸, 2004; USDA⁹, 2003)

Two portions of the Long Hollow–Provo Canyon parcel intersect with or border the Provo River. Both of the corners of land are on cutbank sides of the river's meanders. They are densely forested with a mix of riparian trees and shrubs, notably narrow-leaf cottonwood, box elder, bigtooth maple, red-osier dogwood, and a variety of willow species. Neither site has a wet meadow community along the river nor inland, though scattered grasses and forbs occur. The two sites were surveyed for suitable habitat for Ute ladies-tresses orchid and moonworts (USDA⁸, 2004). None were found. The two sites contain neither the gravel bar substrate preferred by the orchid, nor the saturated organic soil preferred by the moonworts.

Alternative A- No Action

Direct and Indirect Effects

Under the No Action Alternative there would be no direct or indirect effects on threatened, endangered, candidate, or Forest Service sensitive species on the Federal parcels. (USDA¹, 2003; USDA², 2003).

However, under this alternative the non-Federal parcel is likely to be developed and urbanized. This would result in effects similar to, but of somewhat greater intensity, those described for Alternative B below.

Cumulative Effects

Under the No Action Alternative there would be no cumulative effects on threatened, endangered, candidate, or Forest Service sensitive species.

Alternative B- Proposed Action

Direct and Indirect Effects

Non-Federal Parcel

There would be no direct effects to bald eagles or western yellow-billed cuckoos, such as loss of individuals or nests. Indirect effects may occur to suitable habitat. Building new entranceways into the non-Federal site may affect potential winter habitat for bald eagles and suitable but unoccupied breeding and nesting habitat for western yellow-billed cuckoos. However, this alternative is not likely to adversely affect the species. Both species use riparian habitats consisting of cottonwood trees, willows, and/or small shrubs. The habitat on the non-Federal parcel is limited because of the lack of other habitat requirements other than the cottonwood trees. However, development of the parcel following the exchange and disturbance associated with this may reduce further limit the quantity and quality of this habitat. Protection and possible improvement to the American Fork River corridor within the parcel may improve wildlife habitat, including bald eagle habitat. Bald eagles are known to use the mouth of American Fork Canyon for winter roosting and foraging grounds. The parcel is located less than one-half mile west of the Canyon entrance. Western yellow-billed cuckoos have not been found on the Uinta National Forest since 1942 (UNDR², 1998); however, in recent years they have been seen along the Provo River (13 miles away) and the Spanish Fork River (22 miles away) from the project area (Webb, 2001). Human disturbance would continue to a greater degree, as employees and visitors would be coming and going all day.

The lack of suitable habitat for any of the threatened, endangered, candidate, or any of the sensitive plant species mentioned above indicates that there will be no direct, indirect, or cumulative effects to these plant species. (USDA¹, 2003; USDA², 2003)

Springville and Corner Canyon

There would be no direct, indirect, or cumulative effects to any threatened, endangered, candidate, or Forest Service sensitive animal species due to lack of suitable habitats and occurrences in these two parcels. Because of the lack of occurrences of, and suitable habitat for any of the threatened, endangered, candidate, or sensitive plant species there will be no direct, indirect, or cumulative effects on these species. (USDA¹, 2003; USDA², 2003)

Long Hollow–Provo Canyon

There would be no direct effects to flammulated owls, spotted bats, nor goshawk such as the loss of individuals, nests, or primary roosting habitats. Indirect effects would occur to suitable habitat for flammulated owls, spotted bats, and goshawks. Flammulated owls and goshawks could use the aspen habitats that occur on the edge and outside the parcel for nesting and foraging for insects and small mammals. Spotted bats could use the parcel for foraging around the pond and roosting in the interspersed conifers. OSPG stated in a letter dated July 9, 2003, that it plans to maintain the parcel as open space which would continue to provide suitable habitat for these species. Consequently, exchange of this parcel would not affect the viability of these species. (USDA¹, 2003; USDA², 2003)

Field surveys were conducted (USDA⁸, 2004) in the Long Hollow–Provo Canyon parcel to search for suitable Wasatch jamesia habitat and populations. However, the absence of rock outcrops and the presence of closed canopy vegetation indicate that there is no suitable habitat for this species within the parcel boundaries. The lack of populations of

and suitable habitat for Wasatch jamesia indicates that there will be no direct, indirect, or cumulative effects on this species. (USDA², 2003)

Two portions of the Long Hollow–Provo Canyon parcel intersect with or border the Provo River. The two sites were surveyed (USDA⁸, 2004) for suitable habitat for Ute ladies-tresses orchid and moonworts. None were found. Ute ladies' –tresses orchid, dainty moonwort and slender moonwort would therefore not be affected by the proposed land exchange. (USDA⁸, 2004)

Beaver Administrative Site, Provo Sign and Radio Shop, and Pleasant Grove Ranger District Office Parcels

All three parcels are developed sites with administrative buildings on them. No threatened, endangered, candidate, or Forest Service sensitive plant or animal species or suitable habitat for these species exist on these parcels. Therefore, exchange of these parcels would result in no direct or indirect effects on TES species (USDA¹, 2003; USDA², 2003).

Cumulative Effects

Non-Federal

There are housing developments to the west and south sides and one being constructed to the southeast, which may already preclude bald eagles and western yellow-billed cuckoos from using the area. Additional development, as would likely occur under this alternative, would further impact this habitat. However, as this habitat is currently marginal and not occupied, there would be no cumulative impacts to either species. No other threatened or endangered species occur on this parcel, and there would be no cumulative impacts to these other species. (USDA¹, 2003)

Springville and Corner Canyon

There would be no direct, indirect, or cumulative effects to any threatened, endangered, candidate, or sensitive species due to lack of specific habitats and occurrences in these two parcels. (USDA¹, 2003; USDA², 2003)

Long Hollow–Provo Canyon

Livestock grazing has been removed from the area, reducing competition with small mammals that may be used as prey species by goshawks and peregrine falcons. Human disturbance may increase in suitable habitat for the flammulated owl, spotted bat, and goshawk. No impacts to Bonneville cutthroat trout are anticipated. However, as discussed previously these impacts are expected to be minor, habitat on this parcel for these species is limited, and none of these species have been recorded on this parcel. As a result, impacts would be little if any and would not affect the viability of these species. (USDA², 2003; USDA³, 2004)

Beaver Administrative Site, Provo Sign and Radio Shop, and Pleasant Grove Ranger District Office Parcels

All three parcels are developed sites with administrative buildings on them. There are no threatened, endangered, candidate, or sensitive species associated with exchange of these parcels, and therefore, no cumulative effects associated with the exchange of these parcels (USDA¹, 2003; USDA², 2003).

Mitigation

No mitigation measures are necessary. There are no significant impacts to threatened, endangered, candidate, or Forest Service sensitive species under the proposed alternative (USDA¹, 2003; USDA², 2003).

Monitoring

No monitoring of impacts to threatened, endangered, candidate, or Forest Service sensitive species is necessary, other than routine ongoing monitoring of MIS by the Forests.

3.3.7 Wetlands, Riparian Zones, and Floodplains—Affected Environment

Of the six Federal parcels, Corner Canyon has an intermittent stream feature; Long Hollow-Provo Canyon has both intermittent stream features and a small portion of the Provo River; Springville has a non-functioning canal; while the other three parcels are developed properties containing buildings or structures with no floodplain/wetland features. The non-Federal parcel contains the channel for the American Fork River with a wide floodplain. Three ditches (American Fork Canyon ditch, the Lehi ditch, and the Mitchell ditch) run through the property as well. The American Fork River is diverted upstream of the parcel. The majority of the water is taken from the channel. There is a bypass channel that allows some water to pass through the non-Federal parcel. Further detail can be found in the *Timpanogos Interagency Land Exchange Floodplain and Wetland Evaluation* located in the Project Record.

Corner Canyon

About 1100 feet of intermittent drainage (Cherry Canyon) flow through the parcel. Approximately 1,350 feet of the Salt Lake aqueduct is buried through the parcel as well. Like many of the small drainages along the Wasatch Front, Cherry Canyon only flows during debris flows or large precipitation events. An estimated 0.2 acre of floodplain exist on the parcel. The channel is the floodplain. There is no indication of standing water or hydric soils in the Cherry Canyon floodplain, indicating that the floodplain is not a wetland area. No seeps or springs are present on the parcel.

Long Hollow–Provo Canyon

The Long Hollow drainage flows through the parcel, although no defined stream channel exists. This is similar to Bear Hollow, the tributary that enters the Provo River opposite the Long Hollow–Provo Canyon parcel on the south side of Provo Canyon, which also does not have a defined channel. A portion of the Provo River and floodplain with an area less than 0.10 acre is contained within the Long Hollow–Provo Canyon parcel as well.

The Long Hollow–Provo Canyon parcel sits in a rain shadow zone. Average precipitation for the parcel is 18 inches per year with close to 80 percent occurring as snowfall (USDA¹³, 1976). What precipitation does occur normally infiltrates into the ground before having the opportunity to run off. No geomorphic floodplain area or riparian vegetation exists on the parcel except for the less than 0.10 acre area along the Provo River. The floodplain area along the Provo River has been altered due to the railroad tracks constructed there.

A June 11, 2001 field review, documented in the *Timpanogos Interagency Land Exchange Floodplain and Wetland Evaluation*, shows that two earthen dams have been constructed on the parcel. The eastern structure was holding very little water (15 feet wide by one foot deep). According to Charmaine Thompson, Uinta National Forest Archeologist, there was no water behind that structure in early September 2002. Currently, there is no livestock grazing on the parcel as directed by the 2003 Uinta National Forest Land and Resource Management Plan. Large game use water as evidenced by the hoof prints. No wetland vegetation is present

around the structure indicating that the presence of water is limited to spring and isolated periods during other parts of the year. The State of Utah Water Rights database shows a Point of Diversion (POD) owned by Kerry Chipman. Water Right (WR) No. 55-7816 (spring water) is said to be associated with a spring. In assessing the property, the only visible surface water was associated with the eastern structure. It is unclear whether this water right is associated with this eastern structure.

The western structure does not hold water. It was constructed across the low point within the Long Hollow channel. There is the potential that it was constructed for erosion control. There is no evidence of water being stored behind this structure at all. Currently the site has sagebrush/grass vegetation. Sagebrush is highly intolerant of standing water or saturated soils, indicating no water is retained by this structure. The watershed, soils, and precipitation are not conducive for a stock water dam.

Besides the Provo River, the only visible sign of water is associated with the eastern structure. No riparian vegetation is present anywhere on the upper portions of the parcel, indicating that wetlands, seeps, or springs are not present. No springs or seeps appear to be present. Riparian vegetation does exist in the small corners of the parcel which border or intersect the Provo River.

Springville

The Springville 7.5 Minute USGS Quadrangle shows no intermittent drainages flowing through the parcel. An old canal that no longer conveys water is present. This canal is currently under a special use permit with an easement to Springville City. OSPG has stated that they have no development plans for this parcel and would be interested in Springville City acquiring the property to maintain it as open space. If OSPG were to develop the property, the transfer of the canal easement would be addressed by the landowner and Springville City. A field review of this parcel on June 11, 2001, indicated that no defined stream channels exist. The land formed on the parcel was created by ancient debris flows as the site is the bottom of alluvial fans. Average precipitation for the parcel is 20 inches per year with close to 60 percent occurring as snowfall. The mapped alluvial fans are the only floodplain areas on the parcel. No wetlands, seeps, springs, or riparian vegetation are present on the parcel.

Non-Federal parcel

The Lehi 7.5 Minute USGS Quadrangle and a June 11, 2001, field visit indicate the American Fork River, Mitchell, and American Fork Canyon ditches flow through the parcel. The field review of this parcel on June 11, 2001, indicates that a large floodplain exists downstream of a constructed debris basin. The floodplain is on the non-Federal parcel, while the debris basin is not. The majority of the American Fork River is diverted upstream of the parcel. A limited amount of water is put in a bypass channel that flows through the non-Federal parcel. Approximately 20 acres of the site sits in the floodplain.

The Mitchell and American Fork Canyon ditches run through the parcel to the north of the floodplain. Riparian vegetation is present on the fringes of the American Fork River floodplain and edges of the canals. The presence of riparian vegetation does not mean that wetlands are present. The floodplain of the American Fork River is not inundated as in the past. The River does not typically reach the floodplain due to diverted flows at the mouth of American Fork Canyon. With no flows, off-channel wetlands that may have existed through this stretch are no longer present. The canals have been constructed as trapezoidal channels. Fringe riparian vegetation has established along the banks of these canals. There are no areas of standing water and/or hydric soils, indicating the absence of wetlands along these canals. No seeps or springs are present on the parcel.

Beaver Administrative Site, Provo Sign and Radio Shop, and Pleasant Grove Ranger District Office Parcels

All three parcels are developed sites with administrative buildings present on them. No wetlands, floodplains, seeps, or springs are present.

3.3.8 Wetlands, Riparian Zones, and Floodplains—Environmental Consequences

Alternative A- No Action

Direct and Indirect Effects

Under the No Action Alternative there would be no direct or indirect effects on wetlands, riparian zones, or floodplains. These resources would remain consistent with the current conditions described above.

Cumulative Effects

Under the No Action Alternative there would be no cumulative effects on wetlands, riparian zones, or floodplains. These resources would remain consistent with the current conditions described above.

Alternative B- Proposed Action

Direct and Indirect Effects

The proposed exchange is consistent with E.O. 11988 Floodplain Management, and E.O. 11990 Protection of Wetlands regulations and Forest Service Manual direction. E.O. 11988 restricts the development of facilities in the 100-year and 500-year floodplains. This restriction would be met in the development and use of the non-Federal parcel. E.O. 11990 intends to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or Indirect support of new construction in wetlands wherever there is a practicable alternative.

No wetlands, seeps, or springs are present on any of the parcels and no threats exist to people's lives or property from floodplains. There is riparian vegetation along the Provo River on the Long Hollow–Provo Canyon parcel, and also some riparian vegetation on the non-Federal parcel. OSPG intends to maintain the Long Hollow–Provo Canyon Parcel as open space and has no plans to develop the parcel or remove riparian vegetation.

The Federal development of the non-Federal property would be in conformance with E.O.s 11990 and 11988 and riparian vegetation would be protected. Some riparian vegetation may be lost to construction of the proposed interagency facility, driveways, and parking areas. Specifically, construction activities would include removal of approximately 60 feet of vegetation from the riparian zone. The removal of riparian vegetation would be minimized and, upon completion of construction, landscaping and Federal management would improve the quality of the remaining riparian habitat on the parcel. There would be no significant impact to riparian vegetation, wetlands or floodplains associated with this alternative.

Cumulative Effects

There would be no adverse cumulative effects to wetlands, riparian zones, or floodplains associated with this alternative. Through Federal development of the non-Federal parcel, riparian vegetation on this parcel would be improved through restoration efforts and Federal management.

Mitigation

There would be no direct or indirect effects to wetlands, riparian zones, or floodplains associated with this alternative; therefore, no mitigation is necessary. Improvements would be made to riparian vegetation on the non-Federal parcel once under Federal management. Additionally, any riparian areas disturbed on the non-Federal parcel would be minimized. Landscaping and Federal management would maintain and improve the quality of the remaining riparian vegetation.

Monitoring

No monitoring of impacts to wetlands, riparian areas, or floodplains is necessary,, as there will be no adverse impacts to these resources associated with the proposed action.

3.4 Issue 3: The extent to which the proposed land exchange may affect visual and recreational resources _____

Evaluation Criteria used to compare alternatives include:

- A qualitative description of the extent to which each alternative may affect visual or scenic quality.
- A qualitative description of the extent to which each alternative may affect recreational resources.

3.4.1 Scenic Quality Criteria—Affected Environment

All proposed land parcels were visited to identify any potential scenic values which might be affected by the land exchange. The Pleasant Grove Ranger District Office, the Provo Sign and Radio Shop, and the Beaver Administrative Site are all located in urbanized and fully developed areas, and have scenic qualities consistent with that of other urbanized areas. For these reasons, these parcels will not be addressed further. The Corner Canyon, Long Hollow-Provo Canyon, Springville and non-Federal parcels are located in more natural settings and have varying levels of scenic quality that are discussed below.

The proposed land exchange includes parcels within three different National Forests. These forests use different, but equivalent scenic or visual management systems: Scenic Integrity Objectives (SIO), and Visual Quality Objectives (VQO). Because the Uinta National Forest is the lead Forest for this proposed land exchange, we have used the VQO system used by the Uinta National Forest. Administrative parcels are not assigned VQOs since they are located in urbanized areas. The undeveloped parcels considered for exchange (Corner Canyon, Springville, and Long Hollow-Provo Canyon) all fall within either “Retention” or “Partial Retention” VQO classifications.

A “Retention” VQO is defined as follows: “Management activities may only repeat form, line, color, and texture that are frequently found in the characteristic landscape. Changes should not be evident to the casual forest visitor, and all retention activities to restore the area to a naturally appearing condition should be accomplished either during the operation or immediately thereafter.”

A “Partial Retention” VQO is defined as follows: “Management activities remain visually subordinate to the characteristic landscape. Management should repeat form, line, color, and texture common to the landscape; however, structures can introduce form, line, color, or texture

that are found infrequently or not at all in the characteristic landscape. Reduction in form, line, color, or texture to meet partial retention should be accomplished as soon after project completion as possible or, at a minimum, within the first year after completion.”

Corner Canyon

The Corner Canyon parcel borders growing residential areas and is in a relatively disturbed condition. OHV's have caused considerable damage to the vegetation and soil stability of this site. Vegetation on the parcel is primarily sagebrush and grasses. With the close proximity to residential development, this site does not offer notable scenic values. This parcel is located on the Wasatch-Cache National Forest which uses a SIO classification system. However, according to the VQO definitions used by the Uinta National Forest, this parcel would fall within a “Partial Retention” VQO.

Long Hollow–Provo Canyon

The Long Hollow–Provo Canyon parcel has the highest scenic quality of any of the parcels considered for exchange. The property is relatively difficult to access, and from the property the viewsheds are not obstructed by any development or obtrusive signs of human presence. There are excellent views looking down into Provo Canyon, up to Mt. Timpanogos. In the autumn, the colorful fall foliage provides a scenic backdrop for the few people who wander onto the site. This parcel falls within a “Retention” VQO. Additionally, U.S. Highway 189, which passes through this property, is a Utah State Designated Scenic Byway.

Springville

The Springville parcel is immediately adjacent to suburban areas. The vegetation on the parcel is primarily sagebrush and grasses. With the close proximity to residential development, this site does not offer notable scenic values. However, it does offer open space relief in a residential neighborhood. There are a number of structures on the parcel which were constructed by CCC workers, and may offer some historic value to adjacent landowners. This parcel falls within a “Retention” VQO.

Non-Federal

The non-Federal parcel is also located in a developed area and presently appears as a large vacant lot. The area has been heavily disturbed and does not offer notable scenic values. Most of the topsoil has been removed and it appears that the parcel has either been mined for gravel or used as a gravel storage site. Little natural vegetation remains on the site, and invasive species have populated. However, because this parcel remains undeveloped, it provides an island of open space in an area that is almost fully developed. Additionally, there is some riparian vegetation following the three canals that run through the parcel which provide some visual quality to the parcel. Since this parcel is currently in private ownership, it has not been given a VQO classification.

3.4.2 Scenic Quality Criteria—Environmental Consequences

Alternative A- No Action

Direct and Indirect Effects

There would be no direct or indirect effects on scenic quality to the Federal parcels under this alternative. Since there would be no change to the management or ownership of the Federal parcels under this alternative, the scenic and visual management objectives would continue to be met. There would be no change in the scenic quality of the six Federal parcels under this alternative.

The non-Federal parcel would likely be developed as a residential or commercial block. There are residential neighborhoods adjacent to this parcel, and it is likely that a similar density and type of development would eventually fill in this parcel under private ownership. Full development of the parcel would eliminate its open and undeveloped scenic qualities. A private developer would likely try to maximize the development density on the site which would leave very little, if any, area in open space. This development would have some impact on the already limited visual quality of the parcel.

Cumulative Effects

There would be no cumulative effects on scenic quality under this alternative. The scenic quality of the six Federal parcels would be maintained and the losses associated with development of the non-Federal parcel are minimal since the parcel is already heavily disturbed.

Alternative B- Proposed Action

Direct and Indirect Effects

Corner Canyon

Exchange and potential subsequent development of this parcel would have negligible effect relative to visual quality as seen from the public's perspective. The site is already somewhat disturbed.

This parcel has a low potential for the occurrence of potentially valuable mineral deposits of locatable and leasable minerals, but does have a high potential for the occurrence of salable minerals in the form of sand and gravel. However, Draper City zoning would prohibit sand and gravel development on this parcel. It is possible that the potential landowner could develop this parcel as a residential neighborhood; however the parcel's slopes are generally not suitable for high density development, and any homes built on the parcel would likely be visually consistent with existing adjacent development, per local zoning requirements.

Additionally, OSPG has stated its interest in having Draper City acquire this parcel to preserve it as open space and maintain access trails for public use. If Draper City ultimately acquires this parcel and maintains it as open space, it is likely that a "Retention" VQO would still be met.

Long Hollow–Provo Canyon

The majority of the Long Hollow–Provo Canyon site cannot be seen from any public travel corridor or common viewpoint. The parcel, which is surrounded by private land and relatively difficult to access, is occasionally visited by hunters and some hikers. Consequently there would be some effect to scenic viewing associated with the loss of this limited recreational opportunity. Adjacent lands are largely private and accordingly there would be little effect to scenery as viewed by the general public. However, there could be potential effect to views from nearby private lands or residences if a future landowner decides to develop the tract. OSPG has stated that it has no plans to develop this property and intend to maintain it as open space. The proposed exchange would have no impact to U.S. Highway 189's status as a Utah State Designated Scenic Byway and visual quality from the highway would be maintained. The proposed exchange of this property would still meet the definition of a "Retention" VQO.

Springville

Exchange and potential subsequent development of the Springville parcel would have negligible effect relative to visual quality as seen from the public's perspective. The site is already somewhat disturbed. Any homes built on the parcel would likely be visually consistent with existing adjacent development, per local zoning requirements. If development requires that the historical CCC projects are removed, there may be some loss of scenic value associated with this historical site.

This parcel has a low potential for the occurrence of potentially valuable mineral deposits of locatable and leasable minerals, but does have a high potential for the occurrence of salable minerals in the form of sand and gravel. However, it is likely that local zoning would restrict or prohibit sand and gravel development on this parcel. It is possible that the potential landowner could develop this parcel as a residential neighborhood; however, OSPG has stated its interest in having Springville City acquire this parcel to preserve it as open space for public use. If Springville City ultimately acquires this parcel and maintains it as open space, it is likely that a "Retention" VQO would still be met.

Non-Federal

The proposed location of the new Administrative Facility/Visitor Center is also located in a developed area and presently appears as a large undeveloped lot. Although the parcel is heavily disturbed, it remains undeveloped and open and therefore possesses some scenic value.

Development of the parcel would result in some loss of visual quality, but this would be mitigated in development design. Because the interagency facility proposed to be constructed on this site would be designed to serve as a visitor and interpretive center, and not simply a "Federal office building," the building design and property landscaping would be visually pleasing. The design of this facility would be consistent with, and less visually intrusive than surrounding developments. Development of the interagency facility would incorporate protection of floodplains and wetlands. The project would also protect greenspace, particularly in the American Fork River floodplain, and is likely to enhance visual quality. Additionally, the level of development on this parcel under Federal ownership would be less intense than the surrounding land uses, and significantly less than it would likely be under private ownership. Therefore, development under Federal ownership would have far fewer adverse impacts to visual quality than under private ownership, and would result in a great overall improvement to the visual quality of the parcel.

This site has not been in Federal ownership, and has therefore not been assigned a VQO. If the property comes into Federal ownership through the proposed exchange it would not be assigned a VQO classification since it would be an administrative facility in an urban area similar to the other administrative parcels considered for exchange.

Cumulative Effects

There would be no cumulative effects on scenic quality under this alternative. Federal ownership and future development of the non-Federal parcel would be improvements to the scenic quality of this parcel. The loss of scenic value on the other parcels is negligible and not considered to be a significant impact. Overall the proposed land exchange would still meet the VQO assigned to each parcel while under Federal ownership.

Mitigation

There would be no significant impact to scenic quality under this alternative; therefore, no mitigation measures are necessary.

Monitoring

No monitoring of impacts to scenic quality is necessary, as there will be minimal adverse impact to this resource associated with the proposed action.

3.4.3 Recreation Values—Affected Environment

All proposed land parcels were visited to identify any potential recreational opportunities or values which might be affected by the land exchange. The Pleasant Grove Ranger District Office, the Provo Sign and Radio Shop, and the Beaver Administrative Site are all located in urbanized and fully developed areas, and provide no recreation opportunities. For these reasons, these parcels will not be addressed further. The other parcels, discussed below, each provide some opportunity for recreation which may be impacted by the proposed action.

Corner Canyon

The Bonneville Shoreline Trail (BST) runs across the foothills above and past this parcel. Bicyclists, walkers, horseback riders, and hikers enjoy recreating on a trail that is conveniently close to residential development. A second, much smaller trail system runs directly through the property along the Salt Lake aqueduct with connection to the Corner Canyon Road and nearby residential neighborhoods. There is no easement or Forest Service authorization for this trail, and it is not part of the formal Forest Service trails system. However, the trail has existed for some time and has been adopted by Draper City as part of its recreational trail system. Heavy OHV use is evident on this parcel, primarily along the Salt Lake aqueduct road, and is adversely affecting the natural vegetation and soil. Forest Service policy is that all areas of the Forest are “closed unless posted open” for OHVs, meaning that current OHV use occurring off designated roads and trails is illegal.

Long Hollow—Provo Canyon

This site is surrounded by private land and relatively difficult to access, and is therefore not frequently visited by the public. Occasionally, hikers or hunters wander onto the property. There is also some evidence of OHVs on the site, presumably from neighboring private property owners because of the limited access to this site. Some recreational sight-seeing is offered in the fall by the changing oak and maple foliage. Additionally, a small corner of the parcel extends across U.S. Highway 189, a railroad right-of-way, and into the Provo River. Sightseers, traveling by either car or train, enjoy the scenery of Provo Canyon, although very little of the Long Hollow—Provo Canyon parcel can be seen from a public right-of-way. The Provo River is a popular trout fishery, and many anglers cross through this corner of the Long Hollow—Provo Canyon parcel.

Springville

This site is located very close to existing residential development. Nearby residents use this area for walking, hiking, horseback riding, and for riding OHVs. Heavy OHV use is evident on this parcel, and is adversely affecting the natural vegetation and soil. Additionally, the OHV use is causing damage to the historical structures on this site. Forest Service policy is that all areas of the Forest are “closed unless posted open” for OHVs, meaning that current OHV use occurring off designated roads and trails is illegal.

Non-Federal

This parcel is located along a busy road and adjacent to existing development. Little recreation is currently occurring on this site, although nearby residents do walk and exercise their dogs around the parcel periodically.

3.4.4 Recreation Values—Environmental Consequences**Alternative A- No Action**Direct and Indirect Effects

There would be no direct or indirect effects on recreational values under this alternative. OHV use would continue to occur illegally on the Springville and Corner Canyon parcels, and to a lesser extent on the Long Hollow–Provo Canyon parcel.

Forest Service trails specialists would evaluate the trails on the Corner Canyon parcel and make a determination whether: 1) they should be retained as part of the official Forest Service trails system and be maintained by the agency; 2) an easement or special use permit would be issued to Draper City for the trails; or 3) the trails should be obliterated and the area revegetated because they are not a necessary part of the Forest Service trails system, or because of their environmental impact.

Cumulative Effects

There would be no cumulative effects on recreational values under this alternative.

Alternative B- Proposed ActionDirect and Indirect Effects*Corner Canyon*

The BST, which passes above the parcel, would not be impacted by the proposed exchange. It is uncertain whether the two user-created trails on the Corner Canyon parcel would remain and be available to Draper City after the exchange is completed. The outcome would depend on whether the City and the new property owner can come to agreement on allowing the trails to remain and be maintained and open to public use. OSPG has stated that they intend for Draper City to ultimately acquire the property to preserve it as open space. If this occurs, trail access and use will likely be maintained by the City. If the user-created trails are removed there would be some loss of recreation. Draper City is developing a new trailhead and access trail for the BST which will be approximately 1000 feet north of the Corner Canyon parcel. Because of this new trail and trailhead development, the possible removal of the smaller user-created trails would not create a significant impact. Additionally, Draper City could be required by the Forest Service to relocate the trails to existing city property prior to the exchange of the parcel.

Under private ownership, the heavy OHV use which is occurring on the site may be restricted or prohibited. Despite the fact that the use is occurring illegally, there will be a perceived loss of recreational opportunity to the public. This use may or may not be allowed under private ownership.

Long Hollow–Provo Canyon

Because of its difficult access, few members of the public use this site for recreation. Under private ownership, the few hikers and hunters which cross through the property may not be allowed to in the future. This parcel is surrounded by private land, and it is

not likely that this potential closure would affect many people. There would be no impact to sightseeing by car or train, nor impacts to angling in the Provo River. These recreational uses occur in a very small corner of the parcel, access is not limited, and a change in ownership of the parcel would not affect recreation in this corner.

Springville

Under private ownership, the heavy OHV use which is occurring on the site may be restricted or prohibited. Despite the fact that the use is occurring illegally, there will be a perceived loss of recreational opportunity to the public. This use may or may not be allowed under private ownership. Other recreational uses such as hiking and biking will not likely be impacted. OSPG has stated its intent for Springville City to acquire the property to maintain as open space. If this occurs, use of the property for other recreational uses will likely be allowed to continue.

Non-Federal

There would be no adverse impacts to recreation on this parcel.

Cumulative Effects

There would be no cumulative effects on recreational values under this alternative. Loss of recreational opportunities is minimal. Much of the existing recreation is occurring illegally. Despite the fact that the use is occurring illegally, there will be a perceived loss of recreational opportunity to the public. This loss, however, is not considered to be significant. Future Federal development of the property would provide new recreational opportunities (an interpretive trail and displays) and would be viewed as an overall improvement to the parcel.

Mitigation

There would be no significant impact to recreational values under this alternative, and therefore, no mitigation measures are necessary.

Monitoring

No monitoring of impacts to recreation is necessary, as there will be minimal adverse impacts to this resource associated with the proposed action.

4.0 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 EA:

FOREST SERVICE INTERDISCIPLINARY TEAM MEMBERS:

Uinta National Forest

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FEDERAL, STATE, AND LOCAL AGENCIES:

Utah State Historical Society
Army Corps of Engineers
U.S. Fish and Wildlife Service
National Park Service

TRIBES:

Northern Ute Indian Tribe

CONSULTANTS:

Ralph Becker, Bear West
Laura Hanson, Bear West

OTHERS:

OSPG, LLC.

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USFS RESPONSE TO PUBLIC COMMENTS

On February 20, 2004, the Timpanogos Interagency Land Exchange Environmental Assessment (EA) was sent to 60 individuals, agencies and organizations. Legal notice of “opportunity for public comment” was published in the Salt Lake Tribune and the Provo Daily Herald on February 26, 2004. Additional copies of the EA were available at the Pleasant Grove Ranger District Office. The EA was also posted on the USFS website. During the 30-day comment period, thirteen (13) written comments were received.

Below is a summary of those comments as submitted. In order to provide a concise overview of the concerns and opinions expressed, similar comments have been grouped together. Following each comment, or group of similar comments, a Forest Service response has been provided and actions taken as noted. In some cases, this included adding supplemental language to the EA. Minor typographical corrections are not included in this summary. A copy of this summary is attached to the EA and also included in the Project Record.

A. Wetlands, Floodplains, and Riparian Resources

A.1 Comment: Section 3.3.8, non-Federal Parcel: National Park Service guidelines for implementation of Executive Order 11988, Floodplain Management, restricts the development of facilities in 100-year and 500-year floodplains. Those guidelines will be followed in the development and use of the non-Federal property.

Response: Text has been added to the EA noting compliance with E.O. 11988 in development of the non-Federal parcel. See page 58.

A.2 Comment: Section 3.4.2, non-Federal Parcel: The development of the interagency facility will incorporate protection of floodplains and wetlands. The project will also protect green space, particularly in the American Fork River floodplain, and is likely to enhance scenic quality.

Response: Additional text has been added to the EA explaining that development of the interagency facility would incorporate protection of floodplains and wetlands, would protect greenspace, and would enhance scenic quality. See page 62.

B. Socio-Economic Resources

B.1 Comment: Section 1.8.2, Socioeconomics: This section only speaks to the parcels located in Utah County, are there any socioeconomic concerns associated with the Beaver parcel that should be referenced?

Response: This section of the EA has been replaced with a section titled “Disproportionate Impact to Consumers, Civil Rights, Minority Groups, and Women,” as per the “R1/R4 Land Exchange NEPA Strategy.” This new section replaces both the Socio-Economic and the Environmental Justice sections in the EA. The new section focuses on disproportionate impacts to segments of the population and environmental justice rather than providing a profile of the economics and industries in each county. The socioeconomic conditions of Utah, Beaver, and Salt Lake Counties were analyzed and considered, and text has been added for both Beaver and Salt Lake Counties. No socioeconomic concerns were identified. See page 12.

C. Historical and Cultural Resources

- C.1 Comment:** Section 3.3.2, Due to funding limitations and expectation on limited exhibit space, and interpretive exhibit of Civilian Conservation Corps (CCC) work may not be possible. It is probably more accurate to state that information and data on the CCC projects will be documented, retained, and more publicly available than currently possible.

Response: *This mitigation measure intended that CCC interpretation be included as part of a larger overall interpretation exhibit of human influence in the American Fork Canyon area, rather than an entire exhibit on CCC works. Text in the EA has been revised to clarify this intent. See page 36.*

- C.2 Comment:** Section 3.3.2, The Bureau of Reclamation has at its Pleasant Grove property two stabilized buildings from CCC Camp BR-91, which are available for relocation and adaptive reuse should the USDA Forest Service and the National Park Service be interested.

Response: *Thank you for your comments. This offer will be kept in mind when decisions are made about mitigation measures for potential impacts to CCC works.*

- C.3 Comment:** Section 3.2.1, It is unclear whether the Provo Warehouse is one of the eight sites referenced in the first sentence, or one of the seven sites referenced in the second sentence. It is also unclear in looking at the paragraph why, only six sites are on potential land exchange parcels, seven sites were documented.

Response: *Text has been added to the EA to clarify this section. Six European-American archaeological and two European American structural sites are located on parcels of land involved in the proposed exchange. Seven of these sites (six archaeological sites and one structural site) were documented and evaluated for eligibility for the National Register in the Timpanogos Interagency Land Exchange Cultural Resource Summary Report, Report # UN-01-349. The eighth site, the Provo Warehouse (structural site), located on the Provo Sign and Radio Shop parcel, was previously recorded but its historic building form was updated and its National Register eligibility re-evaluated as part of this analysis. See page 34.*

- C.4 Comment:** Section 3.2.1, We suggest clarifying the usage of the terms “archeological,” which generally means prehistoric, and “historic,” which appears to apply to early western settlements discussed here.

Response: *Text has been revised to clarify the usage of the terms. The term “archeological site” has been replaced with “European-American archaeological site” for clarification. The term “historical site” has been replaced with “European American structural site” for clarification. See page 35.*

- C.5 Comment:** Section 3.3.7, Please clarify the nature of the two structures constructed on the Long Hollow parcel. Are these diversion structures?

Response: *Text has been added to the EA clarifying the nature of the structures which are earthen dams. See page 56.*

D. [Recreation and Trails](#)

- D.1 Comment:** Section 3.4.4, The Aqueduct Trail runs north and south through the property, and continues north approximately 1.5 miles to Draper City’s north boundary, and south approximately one mile to the lower Corner Canyon area, tying into the Bonneville Shoreline Trail. It is critical to

Draper City's trails system to keep this trail open for public use, and we request a solution which will allow this to happen.

Response: *In a letter dated July 9, 2003, OSPG stated that if they acquire the Corner Canyon parcel through exchange they would be interested in Draper City acquiring the parcel to preserve it as open space and maintain trail access. Draper City has expressed this same interest. The effects of potentially losing this trail access has been described and analyzed throughout the EA. See page 64.*

- D.2 Comment:** Section 3.4.4, The 13200 South Connector Trail, runs west to east through the Corner Canyon parcel, connecting the trails systems within the developed areas of Draper City with the Aqueduct Trail, and includes a connection up to the Upper Corner Canyon Road. This is one of the few east-west trail connections between the city and the east bench and NFS land. It is critical to Draper City's trails system to keep this trail open for public use, and we request a solution which will allow this to happen.

Response: *In a letter dated July 9, 2003 OSPG states that if they acquire the Corner Canyon parcel through exchange they would be interested in Draper City acquiring the parcel to preserve it as open space and maintain trail access. Draper City has expressed this same interest. The effects of potentially losing this trail access has been described and analyzed in the EA. See page 64.*

- D.3 Comment:** Section 3.3.4, non-Federal: In the last sentence it seems misleading to describe the property as having a large amount of disturbance from recreational uses. This is probably not the main source of disturbance and is not consistent with the description on recreation values on page 51 (now page 64).

Response: *This text has been removed from the EA as it is not consistent with the actual impacts occurring on the non-Federal parcel. See page 45.*

- D.4 Comment:** Section 3.4.3, Cumulative Effects, Corner Canyon and Springville: This section should include a reference to horseback riding as this occurs on the Corner Canyon Parcel. Also add a reference to horseback riding.

Response: *References to horseback riding have been added to the descriptions of the Corner Canyon and Springville parcels. See page 63.*

- D.5 Comments:** Section 3.4.4, Corner Canyon: It should be noted that Draper City could be required to relocate the trail it has designated for non-motorized use that runs through the Corner Canyon property.

Response: *Text has been added to the EA noting the possibility of requiring Draper City to relocate the trail. See page 64.*

E. Public Ownership of Corner Canyon Parcel

- E.1 Comment:** Section 3.3.3, Draper City has always expressed the desire to keep the Corner Canyon parcel in public ownership. Hopefully a public entity can acquire the parcel to be maintained in perpetuity as open space.

Response: *In a letter dated July 9, 2003, OSPG stated that if it acquires the Corner Canyon parcel through exchange they would be interested in Draper City acquiring the parcel to preserve it as*

open space. Draper City has expressed this same interest. Discussions are underway to explore the possibilities of public ownership of this parcel.

F. Threatened, Endangered, Candidate and MIS Species

- F.1 Comments:** Section 3.3.6, non-Federal Parcel: Potential bald eagle habitat is minimal due to the lack of other habitat requirements than cottonwood trees. The protection and possible improvement of the American Fork River corridor through the non-Federal property has potential to improve wildlife habitat including possible bald eagle habitat.

Response: Text has been added to the EA clarifying the limited nature of the potential bald eagle habitat on the non-Federal parcel. See page 54.

- F.2 Comments:** Section 3.3.1, Long Hollow: These paragraphs are more appropriate to Section 3.3.5 of the EA regarding threatened and endangered species. Please consider relocating these paragraphs, or at least cross-referencing them with Section 3.3.5.

Response: These paragraphs have been moved to Section 3.3.6. See page 53.

- F.3 Comments:** Section 3.3.1: Should “dainty moonwort” be changed to read “slender moonwort” according to the species list on page 40?

Response: Dainty moonwort (*Botrychium crenulatum*) and Slender moonwort (*Botrychium lineare*) are separate species. The list of species on page 51 lists only U.S. Fish and Wildlife Service (USFWS) listed threatened, endangered, or candidate species. Slender moonwort is a USFWS listed candidate species, while Dainty moonwort is a U.S. Forest Service listed Sensitive Species.

- F.4 Comments:** Section 3.3.4, It would be helpful to reference Table 2 when discussing MIS species in the text.

Response: A reference to Table 2 has been added to the discussion of Management Indicator Species. See page 50.

- F.5 Comment:** Section 3.3.5, This section should include the Bonneville cutthroat trout and the Columbia spotted frog, which are conservation agreement/strategy species.

Response: The Bonneville cutthroat trout and the Columbia Spotted Frog are conservation agreement/strategy species. The Bonneville cutthroat trout is discussed as a Management Indicator Species in Section 3.3.3 on pages 42 and 42 of the EA, and also listed in Table 2 on page 41. Both the Bonneville cutthroat trout and the Columbia Spotted Frog are Region 4 Forest Service Sensitive Species. We have addressed these species in section 3.3.5 of the EA as follows:

“There is no suitable or potential habitat for any aquatic or terrestrial Forest Service sensitive animal species with the exception of flammulated owl, northern goshawk, and spotted bat.” See page 51.

Please refer to the Biological Evaluation for more detailed discussion of Forest Service sensitive species.

- F.6 Comment:** Section 3.3.6, Alternative B: Please include the appropriate statements about possible effects to Ute ladies'-tresses and dainty or slender moonwort.

Response: Text from Section 3.3.1 has been moved to Section 3.3.6. See comment G.2 above and page 53 of the EA.

- F.7 Comment:** Section 3.3.3, Regulations require that population trends of the management indicator species be monitored and relationships to habitat changes determined. Furthermore, inventories shall include quantitative data making possible the evaluation of diversity in terms of its prior and present conditions. No quantitative data that measured population trends for Goshawk, spotted bat, or flammulated owl were presented in the EA.

Response: Spotted bats and flammulated owls are not MIS and therefore, these regulations do not apply. Text has been added to the EA describing the population trends of goshawks and the other MIS species including the monitoring of these species. See page 42.

- F.8 Comment:** Section 3.3.5, Please note that the Utah prairie dog and California condor do not occur in Utah or Salt Lake counties.

Response: Text has been added to the EA noting that these species do not occur in Utah or Salt Lake counties. See page 51.

G. Wildlife and Big Game Winter Habitat

- G.1 Comment:** Section 3.3.4, Long Hollow: Is “individuals, fawning or calving areas” meant to reference one particular species?

Response: The EA has been revised to clarifying the intent of this phrase. The phrase refers to several species of wildlife. “Individuals” refers to all types of wildlife. “Fawning and calving areas” refer to big game species such as mule deer and elk, however this text has been removed from the EA to reduce confusion. See page 47.

- G.2 Comment:** Section 3.3.4, The loss of critical winter habitat is a serious concern. Additionally, it seems likely that bighorn sheep and mountain goat winter habitat will be impacted by this land exchange. If this exchange were implemented it is unlikely that these impacts could be mitigated since these areas would no longer be public.

Response: The loss of critical winter habitat would be minimal. The Long Hollow- Provo Canyon parcel has been identified by the UDWR as “High” winter range for mule deer and elk rather than “critical.” OSPG has provided documentation stating its intent to leave this parcel in open space. If this occurs, there would be no change to the availability of this parcel for big game winter use. Further, this area is zoned by Wasatch County (Wasatch County Zone P-160) for one residential unit per 160 acres. This would prohibit development of the 237.24-acre parcel. Wasatch County has no history of granting variances on similarly zoned parcels.

The loss of the habitat on the Springville and Corner Canyon parcels, although identified by the UDWR as “critical” winter range, is not of significant impact. These parcels are very small in size (7.20 and 20.7 acres respectively), and the existing habitat on both parcels has already been compromised by adjacent development. Encroaching development has deterred big game from using these sites as a primary source of winter range in favor of areas with less human intrusion. The loss of parcels of this small size, and that are already impacted by encroaching development, and therefore little used by wintering big game, will not have a significant impact on the effectiveness of the surrounding habitat. Additionally, OSPG has stated in a letter dated July 9, 2003, that they intend to transfer the Springville parcel to Springville City to preserve it as open

space. Since the private party has no intention of developing this parcel, there would be no change to the availability of this parcel for big game winter use.

The 2003 FEIS for the Uinta National Forest Plan, page 3-254 states, "Alpine habitats on the Uinta National Forest are also used by Rocky Mountain bighorn sheep and by mountain goats." Page 3-258 states, "In addition, mountain goats and Rocky Mountain bighorn sheep use cliffs for escape cover." Considering the types of habitat bighorn sheep prefer, it is unlikely that they would frequent the parcels identified for exchange because of their geographic location and low elevation. The high elevation and cliff habitat preferred by the sheep and goats do not occur on the parcels considered for exchange. Sheep may move through the Long Hollow parcel in their travels between Cascade Peak and Mount Timpanogos, but it is not likely that this parcel would be used long-term. They are seen occasionally on the highway in Provo Canyon.

- G.3 Comment:** Section 3.3.4, It appears that a loss of winter habitat would be in violation of Uinta National Forest Plan standards. "Disposal/conveyance of lands should not result in any net loss in critical winter ranges of threatened, endangered or sensitive species habitats; wetlands or identified critical access to the forest." It would also violate the Wasatch-Cache LRMP since big game winter range is to be increased or at least maintained. (Wasatch-Cache LRMP IV-8).

Response: The Uinta Land and Resource Management Plan recommends that "Disposal/conveyance of lands should not result in any net loss in critical winter ranges of threatened, endangered or sensitive species habitats; wetlands or identified critical access to the forest." The parcels do not provide critical winter range for any threatened, endangered, or sensitive species, but do for big game. The Uinta Forest Plan clearly indicates this is **guideline** rather than a Forest Plan **standard**, which means that the Forest is not required to amend either the Forest Plan or proposed action to meet this guideline.

The Wasatch-Cache National Forest Plan uses Arabic page numbering rather than the Roman page number referenced in the comment letter. We assume that the citation is referring to page 4-8 of the Forest Plan and the section on Desired Future Conditions (DFC). As noted in the Forest Plan (page 4-5), "desired future condition" is an "integrated visualization of what the forest or management area should look like in the future." DFC statements were developed to apply to an entire National Forest, or management area, not a specific project site. "Standards" and "guidelines" are the appropriate criteria to apply to judge whether a particular proposal complies with the Forest Plan.

Additionally, the Uinta National Forest has recently purchased 200 acres of land in the Dry Canyon area, about two miles east of Lindon, Utah. Nearly all of this area is considered Critical or High winter range for big game. This increase in habitat acreage would mitigate the potential loss of the 7.3 acres of the Springville parcel and 20.7 acres of the Corner Canyon parcel transferred out of Federal ownership with the proposed Timpanogos Interagency Land Exchange.

In a related project, the Uinta National Forest is proposing a watershed restoration project in the Dry Canyon area. The proposal is to reclaim about 13 miles of user-created two-track roads and trails over about 330 acres of National Forest. Activities proposed include reseeding the disturbed areas with native grasses and plants, creating berms and ditches that will help direct water from the most erosive areas, blocking the area with rocks and fences to restrict further destructions, and removing litter and debris. This restoration effort would improve the quality of big game habitat and further mitigate any loss of winter range through the Timpanogos Interagency Land Exchange proposal.

- G.4 Comment:** Section 3.3.3, Executive Order 13186 mandated the agency to consult with U.S. Fish and Wildlife Service to develop a memorandum of understanding in protection of migratory birds. No such agreement was mentioned in the EA. The EA also did not mention that migratory bird surveys were last completed in 1999.

Response: Text has been added to the EA noting the completion of migratory bird surveys in 1999 and 2004, and to reference the January 17, 2001 MOU with the USFWS regarding protection of migratory birds. See page **Error! Bookmark not defined.** and Forest Service Manual 1531.61c-Exhibit 01.

H. Public Interest/Purpose and Need

- H.1 Comment:** Because of the impacts that will cause imminent harm to wildlife there are serious questions as to whether this land exchange would be in the public interest. A land exchange can only occur after it is shown that the land exchange is in the public interest (36 CFR 254.39b). Consideration of public interest include but is not limited to: protection of fish and wildlife habitats, cultural resources, watersheds, and wilderness and aesthetic values.

Response: Please refer to page **Error! Bookmark not defined.** of the EA for a discussion of the benefits of this proposal to the public interest.

Impacts to wildlife are minimal as analyzed in the EA while the benefits of consolidating NFS lands and providing for a new interagency facility are numerous. Detailed analysis of vegetative cover, cultural resources, watersheds, wilderness and aesthetic values, and recreation in the EA finds that the proposed action does not adversely affect these resources in any manner which could not be mitigated. Therefore, the public interest would not be compromised by this action.

- H.2 Comment:** Section 1.3, There may not be a savings in visitor and user fees as a result of the interagency facility. It is more likely the cost savings will be from annually appropriated funds.

Response: Text in the EA has been revised to more accurately reflect the nature of cost savings. The revised text explains that overhead for the individual agencies would decrease with the sharing of the Administrative Facility/Visitor Center. See page 3.

I. Salt Lake Aqueduct and Canals

- I.1 Comment:** Sections 3.1.7 and 1.4.1, The Bureau of Reclamation is currently considering whether to support a proposed title transfer of three Provo River Project properties, including the Salt Lake aqueduct, which bisects the parcel proposed for the new visitors' center. Because of this proposed title transfer, we recommend that the EA include appropriate references to our proposed action and the related legislation before Congress, H.R. 3391. In particular, we recommend a more prominent characterization of the aqueduct ownership and the proposed transfer in sections 3.1.7 and 1.4.1. See actual comment letter for more detail on ownership and operation responsibility of the aqueduct.

Response: Text has been added to the EA describing the ownership and proposed title transfer of the Salt Lake aqueduct. The description of the non-Federal parcel has been updated throughout the document to accurately describe the Salt Lake aqueduct which bisects the parcel. See pages 5 and 33.

- I.2 Comment:** Section 3.1.7, Even without a change in ownership of the Salt Lake aqueduct, it is likely that at some point in the future, that the portion of the aqueduct which bisects the proposed visitors' center location will need to be replaced or undergo a major rehabilitation. The EA needs to recognize and note that the Salt Lake aqueduct right-of-way will need to be used in a manner that does not interfere with either routine operations and maintenance, or rehabilitation or replacement at some point in the distant future.

Response: Text has been added to the EA noting that the surface use of the Salt Lake aqueduct right-of-way will accommodate rehabilitation and replacement of the aqueduct infrastructure. See page 34.

- I.3 Comment:** Section 1.6. Should include reference to the proposed title transfer now being analyzed by the Bureau of Reclamation as well as the legislation which would authorize the transfer, H.R. 3391 the proposed Provo River Project Transfer Act?

Response: Text has been added to the EA referencing the proposed title transfer and authorizing legislation. See page 9.

J. Other Comments

- J.1 Comment:** Section 1.4, We believe that it would be helpful to include, as part of the introduction to Section 1.4, a characterization of the parties with whom the proposed land exchange would be executed. Such information would be helpful to aid in reader understanding of the potential impacts.

Response: Text has been added to the EA describing the parties involved in the proposed exchange. The proposed exchange would be conducted with a private entity, Open Space Properties Group LLC. (OSPG), that is willing to exchange the non-Federal parcel for various U.S. Forest Service parcels. See page i.

- J.2 Comment:** It would also be helpful to standardize the references throughout the EA regarding the Timpanogos Interagency Land Exchange Act, PL 107-329. (i.e. “the Act” or “PL 107-329”)

Response: References to the Timpanogos Interagency Land Exchange Act have been standardized throughout the EA, and are referred to as “the Act.”

- J.3 Comment:** Section 2.1.2, These graphics are very useful; we would suggest if possible that they be adjusted, perhaps by making the aerial photo and titles smaller, so that the map details are more readable.

Response: Thank you for your comments. Modifying the graphics was not possible because the original GIS files could not be located. The Uinta National Forest Service believes that these graphics serve their purpose as is by illustrating the location of the proposed exchange parcels at various scales.

- J.4 Comment:** Section 3.1.2, Long-Hollow: References that the prospective owners would not develop this parcel, but page 33 states that “small construction may be carried out,” including a small building and a road. Please clarify this apparent inconsistency.

Response: Text in the EA has been revised to correct this inconsistency. The prospective landowner, OSPG, has stated that it has no plans to develop the property and intends to maintain it as open space and wildlife habitat. See page 32.

- J.5 Comment:** Section 3.1.2, This section states that U.S. Highway 189 reconstruction and realignment will affect this parcel and would be expected to have an effect on wildlife. If appropriate, please reference the U.S. Highway 189 supplemental environmental impact statement prepared by UDOT.

Response: The EA does not state that U.S. Highway 189 reconstruction and realignment would be expected to have an effect on wildlife. The third paragraph of Section 3.1.2 describes the existing vegetative and wildlife conditions of the Long Hollow-Provo Canyon parcel. This description is not tied to the highway reconstruction or realignment. See page 32.

J.6 Comment: Section 4.0, Are there any Fishlake National Forest Representatives on the interdisciplinary team?

Response: Mary Erickson, Fishlake National Forest Supervisor, and Dayle Flannigan, Beaver District Ranger, have both been added to the list of preparers and reviewers in Chapter 4.0. See page 66.

J.7 Comment: Summary, With funding for Federal projects getting tighter it may not be prudent to characterize the proposed facility as “state-of-the-art.”

Response: Thank you for your comments. The description of the proposed interagency facility has been revised and described as a new and updated facility rather than state-of-the-art facility. See page i.

J.8 Comment: Section 1.2, The Federal Energy Regulatory Commission proposed adoption of a Settlement Agreement to decommission the American Fork Hydroelectric Project in a Draft EA. To date, FERC has not made a final decision.

Response: Text has been added to the EA noting the status of this proposal. See page 3.

J.9 Comment: Section 1.3, To our knowledge, there has not been a presentation to the Highland City Planning Commission on the proposed interagency center.

Response: A presentation was made to the Highland City Council in March 1999. The reference to the Highland City Planning Commission in the EA has been corrected. See page 4.

K. General Corrections

K.1 Comment: Section 3.3.7, Springville: We recommend modifying the third sentence to read: “an old canal that no longer conveys water is present.”

Response: This sentence has been revised as suggested. See page 57.

K.2 Comment: Section 3.1.1, Salt Lake City aqueduct should be changed to read “Salt Lake aqueduct.”

Response: Incorrect references to the Salt Lake aqueduct have been corrected in the EA. See page 31.

K.3 Comment: Section 3.3.8, Monitoring: We recommend revising the first sentence to read: “The non-Federal site, if acquired by the Federal Government...”

Response: This sentence has been revised to read, “The non-Federal parcel, if acquired by the Federal Government...” See page 59.

K.4 Comment: Section 5.3.8, Monitoring: Please change the 1st line to read, “non-Federal parcel, if acquired, would...”

Response: *This sentence has been revised to read, “The non-Federal parcel, if acquired , would...” See page 59.*