

Summary

Special-use permits (SUPs) held by parties who own and seasonally occupy 88 recreation residences on two separate tracts on the Safford Ranger District, Coronado National Forest, Graham County, Arizona, are scheduled to expire on December 31, 2008. The Forest Service proposes to issue new permits to these parties for a term of 20 years. This action is consistent with Forest Service policy (Forest Service Manual 2721.23(e)) to “continue recreation residence use when it is consistent with the forest plan” and to work in partnership with holders of these permits to maximize public recreational benefits.

The residences are located on two tracts comprising 77 acres in the Pinaleno Mountains of the 1.8-million-acre Coronado National Forest. Fourteen residences are located on 25 acres at Old Columbine and 74 residences are located on 52 acres at Turkey Flat. The Pinaleno Mountains cover an area of 198,411 acres. Mt. Graham is the highest peak in the range.

The proposed action itself is administrative in nature, but the use of the residences has the potential to impact natural resources. Direct, indirect, and cumulative effects reported in this draft environmental impact statement (EIS) are those associated with the continued occupancy and use of the recreation residences over a future 20-year period. Three alternatives to the proposed action were evaluated: no action, issue new permits for Turkey Flat residences only, and issue new permits for Old Columbine residences only.

Each aspect of the proposed action was evaluated for consistency with the forestwide and management area specific goals, objectives, standards, and guidelines established in the “Coronado National Forest Land and Resource Management Plan” (1986, as amended). All aspects were found to be consistent with the forest plan, and no amendments to the plan will be necessary prior to new recreation residence SUPs being issued.

The impacts analyses reported in this EIS disclose that no action, the proposed action, and the two other action alternatives would have minimal or discountable direct, indirect, and cumulative impacts on air quality, soils, water and riparian resources, recreation, visual quality, wild and scenic rivers, socioeconomics, and fire management in the area of potential effect.

With regard to impacts to wildlife resources, the Forest Service conducted formal Section 7, Endangered Species Act (ESA), consultation with the U.S. Fish and Wildlife Service (FWS). On January 24, 2007, formal consultation was initiated by the Forest Service in a letter submitting a biological assessment and evaluation (BAE) of the proposed action.

The BAE reported that the proposed action “**may affect, but would not likely adversely affect**” the Mexican spotted owl (MSO) and the Apache trout. In this draft EIS, the same determination is reported for no action and the other action alternatives. The U.S. Fish and Wildlife Service concurred on all of these determinations in a letter dated August 18, 2008.

For the proposed action and alternatives, an ESA determination of “**no effect**” was made regarding potential impacts to designated critical habitat for the MSO.

With regard to the Mt. Graham red squirrel (MGRS), an ESA determination of “**may affect, likely to adversely affect**” was made for no action, the proposed action, and the alternative of issuing new permits for Old Columbine only. Although the residence tract at Old Columbine represents only 25 acres out of more than 27,000 acres of potential habitat available to the MGRS, the likelihood exists that two squirrel middens and perhaps their occupant(s) may be adversely affected by the proposed action.

Neither recreation residence tract is located within designated critical habitat for the MGRS.

Summary

In a biological opinion (BO) issued August 18, 2008 (see appendix C), the FWS concurs with the Forest Service's ESA determination regarding impacts to the MSO and Apache trout. The BO assigns "take" for two Mt. Graham red squirrels. According to the biological opinion, "...this level of take is not likely to result in jeopardy to the species."

The Forest Service considered the impacts to cultural (also known as heritage) resources, as required by the National Historic Preservation Act, Executive Orders 13007 and 13175, and other laws and direction. In March 2006, National Historic Preservation Act, Section 106, consultation about issuing the new recreation residence permits was initiated with the Arizona State Historic Preservation Officer (SHPO) and Native American tribes and nations having traditional ties to the Coronado National Forest.

The entire Pinaleño mountain range comprises the Western Apache traditional cultural property (TCP), *Dzil Nchaa Si'an*¹ (Mt. Graham), which is eligible for listing on the National Register of Historic Places. In consultation with the SHPO, the Forest Service determined that about three-quarters of the residences at both Turkey Flat and Columbine have been modified extensively in the last 50 years; therefore, neither tract is eligible for listing on the National Register of Historic Places. While most of the 88 recreation residences are over 50 years old, only 21 of them retain their original characteristics.

Further, in consultation with the SHPO, the presence or absence of the recreation residences was determined to have no adverse effect on the qualities that make *Dzil Nchaa Si'an* eligible for the National Register of Historic Places. For these reasons, it was determined that issuing new residence permits at Turkey Flat or Columbine would have **no adverse effect** on historic properties, per Code of Federal Regulations Title 36, Section 800.

From the Western Apache perspective, the Mt. Graham International Observatory and other developments within the *Dzil Nchaa Si'an* TCP have damaged its spiritual and cultural integrity. The Western Apache believe that no action (i.e., not to issue new permits) would have the beneficial effect of returning additional land on the mountain to its natural state. Under the authority of the American Indian Religious Freedom Act, the Religious Freedom Restoration Act, and Executive Orders 13007 and 13175, the Forest Service consulted with the San Carlos Apache Tribe and the White Mountain Apache Tribe to identify ways to reduce the effects of the recreation residences on the Western Apache TCP. The resulting mitigation measures developed to minimize the ongoing effects of recreation residences on the traditional cultural, spiritual, and historical values of *Dzil Nchaa Si'an* will be included as stipulations in each permit. These measures are defined in the chapter 2, "Mitigation" section of this EIS.

Table 1, shown here and in Chapter 2, summarizes the results of the impacts analysis reported in this EIS, by resource.

¹ Known to nonnatives as Mt. Graham and to the Apaches as *Dzil Nchaa Si'an*, or big-seated mountain, the site is religiously significant as a source of divine power. Apaches have occupied the region for many centuries.

Table 1. Comparison of potential impacts of all alternatives evaluated in this environmental impact statement

Resource	Recreation Residence Tract	Alternative 1 – No Action	Alternative 2 – Proposed Action, Issue Permits for Both Tracts	Alternative 3 – Issue Turkey Flat Only	Alternative 4 – Issue Old Columbine Only
Wildlife Mexican spotted owl (MSO)	Old Columbine	Noise and human presence would sporadically disturb the owl during the removal of improvements. Thus, removal will not be allowed during MSO nesting season. As natural succession occurs, the loss of open areas on the tracts may result in a decrease in populations of small mammals, upon which the MSO preys. Eventual regrowth of trees (60 to 80 years afterward) may provide new habitat suitable for MSO nesting. Removal of residences would negate the need for future fire suppression, which, in turn, would encourage the return of the natural fire cycle. With this, less intense fires would be expected, and old growth nesting habitat conserved.	No change from existing conditions. Owls would continue to be disturbed occasionally by human presence and activity, but populations and habitat would not be significantly affected.	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.
	Turkey Flat	Noise and human presence would sporadically disturb the owl during the removal of improvements. Thus, removal will not be allowed during MSO nesting season. As natural succession occurs, the loss of open areas on the tracts may result in a decrease in populations of small mammals, upon which the MSO preys. Eventual regrowth of trees (60 to 80 years afterward) may provide new habitat suitable for MSO nesting. Removal of residences would negate the need for future fire suppression, which, in turn, would encourage the return of the natural fire cycle. With this, less intense fires would be expected, and old growth nesting habitat conserved.	Retention of the openings created by the residences would benefit populations of small mammals, upon which the MSO preys. A determination of “may affect, not likely to adversely affect” was made with regard to the potential impacts to the MSO at both tracts. There would be “no effect” on designated critical habitat.	Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.
Wildlife Mt. Graham red squirrel (MGRS)	Old Columbine	Removal of an outhouse at Old Columbine could directly impact one midden and possibly result in MGRS death or injury. Thus, a	No change from existing conditions. Because of human presence at and near an	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.

Resource	Recreation Residence Tract	Alternative 1 – No Action	Alternative 2 – Proposed Action, Issue Permits for Both Tracts	Alternative 3 – Issue Turkey Flat Only	Alternative 4 – Issue Old Columbine Only
		<p>determination that no action “may affect, is likely to adversely affect” the MGRS was made. Natural succession of trees on Old Columbine, but not Turkey Flat, may provide 25 acres of MGRS habitat over the long term. Increased tree density may reduce nutrients available for cone production. This, in turn, would negatively impact the squirrel’s food supply. The removal of residences at either tract would the need for future fire suppression, which, in turn, would encourage the return of the natural fire cycle. With this, less intense fires would be expected, and MGRS habitat at Old Columbine would be conserved.</p>	<p>active midden, a determination of “may affect, likely to adversely affect” was made for Old Columbine. A biological opinion issued by the FWS on August 18, 2008, assigned a “take” of two squirrels and reported that this take would not result in jeopardy to the species.</p> <p>The tract is not within designated critical habitat for the MGRS.</p>		
Wildlife Mt. Graham red squirrel (MGRS)	Turkey Flat	Removal of an outhouse at Old Columbine could directly impact one midden and possibly result in MGRS death or injury. Thus, a determination that no action “may affect, is likely to adversely affect” the MGRS	No change from existing conditions. A determination of “may affect, not likely to adversely affect” was made with regard to potential impacts at Turkey Flat.	Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.

Resource	Recreation Residence Tract	Alternative 1 – No Action	Alternative 2 – Proposed Action, Issue Permits for Both Tracts	Alternative 3 – Issue Turkey Flat Only	Alternative 4 – Issue Old Columbine Only
		<p>was made. Natural succession of trees on Old Columbine, but not Turkey Flat, may provide 25 acres of MGRS habitat over the long term. Increased tree density may reduce nutrients available for cone production. This, in turn, would negatively impact the squirrel’s food supply. The removal of residences at either tract would the need for future fire suppression, which, in turn, would encourage the return of the natural fire cycle. With this, less intense fires would be expected, and MGRS habitat at Old Columbine would be conserved.</p>			
Wildlife Apache trout	Old Columbine	Removal of improvements would increase erosion and runoff from the tracts in the short term. Impacts to water quality in the subwatershed would be insignificant.	No change from existing conditions. A determination of “may affect, not likely to adversely affect” was made with regard to the	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.

Resource	Recreation Residence Tract	Alternative 1 – No Action	Alternative 2 – Proposed Action, Issue Permits for Both Tracts	Alternative 3 – Issue Turkey Flat Only	Alternative 4 – Issue Old Columbine Only
	Turkey Flat	This species does not occur at the Turkey Flat tract.	potential impacts to the Apache trout at Old Columbine.	Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.
Wildlife Forest Service Sensitive Species	Old Columbine	No trend toward Federal listing or loss of viability of any of the Forest Service sensitive species that occur at or near each tract.	No change from existing conditions. No trend toward Federal listing or loss of viability of any of the Forest Service sensitive species found at or near both tracts.	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.
	Turkey Flat			Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.
Wildlife Management Indicator Species	Old Columbine	No significant changes in forestwide populations and habitat of forest management indicator species.	No change from existing conditions.	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.
	Turkey Flat			Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.
Heritage Resources (Sites on or eligible for the National Register of Historic	Old Columbine	A determination of “no adverse effect” on historic properties was made, per 36 CFR 800.5 (b). Removal is the preferred alternative of the Western	Because residences were present prior to eligibility designation of the Traditional Cultural Property and their continued presence would not affect the qualities	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.

Resource	Recreation Residence Tract	Alternative 1 – No Action	Alternative 2 – Proposed Action, Issue Permits for Both Tracts	Alternative 3 – Issue Turkey Flat Only	Alternative 4 – Issue Old Columbine Only
Places)	Turkey Flat	Apaches.	that make the mountain eligible for the National Register, a determination of “no adverse effect” on historic properties was made, per 36 CFR 800.5 (b).	Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.
Heritage Resources <i>(Dzil Nchaa Si’an, eligible Traditional Cultural Property)</i>	Old Columbine	Removal would enhance the sacredness of the mountain by fostering restoration of the natural fire regime and wildlife habitat, reducing visual intrusions, and reducing human occupation and potential disrespectful behavior.	No change from existing conditions, for example, restoration of wildlife habitat and natural fire regime would be inhibited, visual and noise intrusions would continue.	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.
	Turkey Flat			Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.
Air Quality	Old Columbine	Short-term, sporadic, localized particulate matter (PM-10) emissions in fugitive dust from residence removal, burning debris, and vehicle traffic.	No change from existing conditions.	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.
	Turkey Flat	Attainment of National Ambient Air Quality Standards would not be compromised.		Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.

Resource	Recreation Residence Tract	Alternative 1 – No Action	Alternative 2 – Proposed Action, Issue Permits for Both Tracts	Alternative 3 – Issue Turkey Flat Only	Alternative 4 – Issue Old Columbine Only
Soils	Old Columbine	Minimal short-term increase in erosion after improvements are removed. Use of best management practices would minimize impacts to insignificant levels.	No change from existing conditions. Natural soil bulk density and structure would remain slightly compacted and altered by foot and vehicle traffic within the 77 acres occupied by the tracts.	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.
	Turkey Flat	Sites would eventually return to a more natural slope. No change in soil productivity.		Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.
Water and Riparian Resources	Old Columbine	Potential for increased erosion on 77 acres in the short term. Effects of sediment runoff in the subwatersheds would be discountable given the small acreage of the tracts relative to the size of the watersheds. Use of best management practices to minimize erosion would result in insignificant stream turbidity levels. As the tracts are replenished with vegetation, hydrologic function would improve. The riparian channel of Ash Creek would eventually naturalize.	No change from existing conditions.	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.
	Turkey Flat			Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.

Resource	Recreation Residence Tract	Alternative 1 – No Action	Alternative 2 – Proposed Action, Issue Permits for Both Tracts	Alternative 3 – Issue Turkey Flat Only	Alternative 4 – Issue Old Columbine Only
Recreation	Old Columbine	Use of the tracts for developed recreation would discontinue after 10 years. Tracts would become dispersed-use sites. Minimal increase in use of other recreation sites on the district. Recreation Opportunity Spectrum setting for Old Columbine would change from Rural to Roaded Natural.	No change from existing conditions.	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.
	Turkey Flat			Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.
Visual and Aesthetic Resources	Old Columbine	Short-term changes in visual quality during removal of improvements. Visual quality objective of Retention would not be affected.	No change from existing conditions	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.
	Turkey Flat			Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.
Wild and Scenic Rivers	Old Columbine	No change from existing conditions.	No change from existing conditions.	No change from existing conditions.	No change from existing conditions.
	Turkey Flat				

Resource	Recreation Residence Tract	Alternative 1 – No Action	Alternative 2 – Proposed Action, Issue Permits for Both Tracts	Alternative 3 – Issue Turkey Flat Only	Alternative 4 – Issue Old Columbine Only
Social and Economic Resources	Old Columbine	Until improvements are removed after 10 years, the family culture and tradition of permit holders, the small positive effect on the economy of surrounding towns, and revenues to Forest Service and Graham County would continue. Removal of improvements would result in a cost to permit holders of about \$3,000. No disproportionate impacts to low income and minority populations.	No change from existing conditions. No disproportionate impacts to low income and minority populations.	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.
	Turkey Flat			Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.
Fire Management	Old Columbine	After 10 years, Forest Service would realize cost savings because fuel thinning near structures and fire suppression would no longer be needed. As native vegetation repopulates the tracts, the fire cycle would gradually return to more natural fire-adapted conditions.	No change from existing conditions. Fire suppression and fuel thinning would continue to be necessary around tracts. Wildland fire use for resource enhancement would not be possible.	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.
	Turkey Flat			Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.

Resource	Recreation Residence Tract	Alternative 1 – No Action	Alternative 2 – Proposed Action, Issue Permits for Both Tracts	Alternative 3 – Issue Turkey Flat Only	Alternative 4 – Issue Old Columbine Only
Cumulative Effects	Old Columbine	<p>The removal of residences at both tracts would decrease the need for future fire suppression over 77 acres of the forest, which, in turn, would encourage the return of the natural fire cycle. Subsequent natural fires would be less intense, and wildlife habitat would be conserved, including MGRS habitat at Old Columbine. The mountain would be returned to a more natural condition, which would begin the reversal of numerous effects to the Western Apache TCP.</p>	<p>No change to existing cumulative effects in the area of effect of both tracts.</p>	Effects would be the same as those identified for alternative 1.	Effects would be the same as those identified for alternative 2.
	Turkey Flat			Effects would be the same as those identified for alternative 2.	Effects would be the same as those identified for alternative 1.

Acronyms and Symbols

ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
ADWR	Arizona Department of Water Resources
AGFD	Arizona Game and Fish Department
AICA	Arizona-Idaho Conservation Act
AMR	Appropriate Management Response
amsl	Above Mean Sea Level
APE	Area of Potential Effect
BAE	Biological Assessment and Evaluation
BMP	Best Management Practice
BO	Biological Opinion
CAA	Clean Air Act
CE	Categorical Exclusion
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DBH	Diameter at Breast Height
DEIS	Draft Environmental Impact Statement
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FMU	Fire Management Unit
FMZ	Fire Management Analysis Zone
FRCC	Fire Regime Condition Class
FS	Forest Service
FSH	Forest Service Handbook
FSM	Forest Service Manual
FSS	Forest Service Sensitive Species
FWS	Fish and Wildlife Service
GES	General Ecosystem Survey
GIS	Geographic Information System
LSC	Low Sun-Cold (climatic class)
MA	Management Area
MGIO	Mount Graham International Observatory
MGRS	Mount Graham Red Squirrel
MIS	Management Indicator Species
MSO	Mexican Spotted Owl
NAAQS	National Ambient Air Quality Standards
NEPA	National Environment Policy Act
NF	National Forest
NFMA	National Forest Management Act
NFS	National Forest System
NHPA	National Historic Preservation Act
NO ₂	Nitrogen Dioxide
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration

NOI	Notice of Intent
O&M	Operation and Maintenance
O ₃	Ozone
ORVs	Outstandingly Remarkable Values
PAC	Protected Activity Center
Pb	Lead
PEM	Pinaleño Ecosystem Management
PERP	Pinaleño Ecosystem Restoration Project
PILT	Payments in Lieu of Taxes
PM	Particulate Matter
PNV	Present Net Value
ROD	Record of Decision
ROS	Recreational Opportunity Spectrum
RPA	Reasonable and Prudent Alternative
SHPO	State Historic Preservation Officer
SMS	Scenery Management System
SO ₂	Sulfur Dioxide
SOPA	Schedule of Proposed Actions
SRSCS	Secure Rural Schools and Community Self-Determination Act
SUP	Special Use Permit
TCP	Traditional Cultural Property
TES	Threatened and Endangered Species
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
VQO	Visual Quality Objective
VRMS	Visual Resource Management System
WFSA	Wildland Fire Situation Analysis
WSR	Wild and Scenic River
WUI	Wildland-Urban Interface