Enclosure

Coconino National Forest (CNF) Land and Resource Management Plan
Appeal Issues Affirmed Without Instruction

This enclosure includes responses to those issues the review found in full compliance with relevant law, regulation, and policy and do not require follow-up instructions to the responsible official. The Coconino Land and Resource Management Plan (LRMP) was revised pursuant to the 1982 planning regulations, as allowed by the transition wording in the current regulations, 36 CFR 219.17(b)(3).

Appellants contend the Forest Service failure to justify a change in direction for Mount Elden/Dry Lake Hills and Mount Elden Management Area. The claim the Coconino National Forest failed to adhere to the FLMPA as amended, including criteria listed at 47 CFR 43037, Sept. 30, 1982 (“1982 Planning Rule”) and the NEPA in failing to justify a change in direction for Mount Elden/Dry Lake Hills and Mount Elden Management Area. Appellant contends:

- The 1987 LRMP made clear that the Mt. Elden area provided important habitat and should be protected from damaging recreational impacts.

- Forest Service clearly intended to retain the Semi-Primitive Non-Motorized (SPNM) category of the Recreation Opportunity Spectrum (ROS) for the Mount Elden area, and exclusively analyzed this ROS category in its 2018 Final Environmental Impact Statement (FEIS).

- The description of the Mount Elden Management Area on page 138 of the revised LRMP omits any mention of the SPNM ROS. If the change in ROS designation is not a mistake, the Forest Service has violated NEPA, FLPMA and the 1982 Planning Rule by failing to analyze the consequences of changing the ROS category for Mount Elden.

Suggested remedies from objectors
Appellant requests designation of Mount Elden Management Area as SPNM ROS. Edit the ROD to state the correct ROS category and add it to the description of the Mount Elden Management Area in the revised LRMP. Amend language “Throughout this area” to say “When consistent with ROS class” (p. 139 in 2018 revised LRMP).

Response:
The appellant cited the 1982 Planning Rule, 36 CFR 219.21 and 219.27 specifically as it relates to the Mount Elden/Dry Hills and Mount Elden Management area. I find the Responsible Official followed the 1982 Planning Rule by considering the ROS and the importance of habitat in the Mt. Elden area and made information available to the public appropriately as required by NEPA (40 CFR 1500.1, 40 CFR 1502.15, 40 CFR 1502.16).
The Responsible Official considered adequate information to justify a change in direction for the Mount Elden/Dry Lake Hills and Mount Elden Management Area. He considered the following information, as well as other information, when making his decision.

- The desired ROS classes are discussed in the Forest-wide recreation section (revised LRMP, pp. 108-110) and depicted in Appendix A, Map 12 (revised LRMP, p. 258). The desired ROS was considered in more detail in the project record. The detailed map of the Mount Eldon Management Area show minor, edge correcting changes to the SPNM area within the Mt. Elden Management area.

- Non-motorized recreation is discussed directly in the Mount Elden Management Area Desired Conditions section and Guidelines section (revised LRMP, pp.139-140).

- Proper functioning conditions of ecosystems were considered on a forest-wide level (revised LRMP, p. 78).

- The FEIS (Volume 1, Chapter 3, p. 290) explains why the original (1987 LRMP) ROS classes were not used. The forest used the latest GIS mapping protocols to convey “existing” ROS classes, which are based on all travel management decisions and amendments since the original 1987 LRMP. The amendment decisions went through environmental analysis and public involvement.

- The importance of habitat within the Mount Elden area was considered and addressed with MA-MtElden-DC 1 (The trail system is designed to be sustainable while balancing user experiences and impacts) (revised LRMP, p. 139), MA-MtElden-G-2 (The base of Mount Elden should be managed primarily for non-motorized recreation opportunities to protect wildlife habitat and cultural sites) (revised LRMP, p. 140), and Forest-wide statements FW-WFP-DC-1 (Properly functions ecosystems and ecologically responsible forest activities support sustainable populations … Habitat is available at the appropriate spatial, temporal, compositional, and structural levels for a wide variety of species.)(revised LRMP, p. 78).

The Responsible Official explained his consideration of SPNM designation for the Mount Elden area in the Record of Decision,

*The Mount Elden Management Area has not been assigned recreation opportunity spectrum (ROS) settings of primitive or semi-primitive non-motorized as suggested. The ROS modeling conducted for the forest plan revision reflects that less than 10 percent of the management area should have an ROS class of semi-primitive non-motorized and none of the management area should have an ROS class of primitive. Classifying this management area as semi-primitive non-motorized or primitive ROS would create a situation where many existing uses in the area would be inconsistent with the assigned ROS classes. (ROD, p. 36)*

**Conclusions:** I found no violation of law, regulation, or policy. I do not recommend changes to the revised LRMP.
Appellants contend the Forest Service failed to meet the requirements of the 1982 Planning Rule with insufficient guidance regarding vegetation management. They claim the Forest Service did not follow sections 219.15 and 219.27 of the 1982 Planning Rule when it placed a large emphasis on openness (i.e., “At the mid-scale, openness typically ranges from 30 percent in more productive sites to 60 percent in less productive sites.”) of ponderosa pine forests, without providing any clarity on what specific metrics should be used to determine “openness.”

- Appellants contend the revised LRMP does not clarify the scientific determination of openness, only explains the density of forest areas are determined by basal area. It is important to clarify how openness is to be measured and interpreted.

Suggested remedies from appellant
Appellants request Desired Conditions for Ponderosa Pine and other Ecological Response Units (ERUs) be amended by inserting specific metrics to use when determining the amount of openness or amount of coverage.

Response:
The forest followed the direction under 36 CFR 219.15 which states,

> When vegetation is altered by management, the methods, timing and intensity of the practices determine the level of benefits that can be obtained from the affected resources. The vegetation management practices chosen for each vegetation type and circumstance shall be defined in the forest plan with applicable standards and guidelines and the reason for the choices. Where more than one vegetation management practice will be used in a vegetation type, the conditions under which each will be used shall be based upon thorough reviews of technical and scientific literature and practical experience, with appropriate evaluation of this knowledge for relevance to the specific vegetation and site conditions. On National Forest System land, the vegetation management practices chosen shall comply with the management requirements in § 219.27(b).

The appeal focused on the issue of “openness” and whether the 1982 planning rule was followed (36 CFR 219.27(b) - management requirements for vegetative manipulation). The ROD, p. 25 states, “The desired conditions for the Ponderosa Pine and Mixed Conifer with Frequent Fire ERUs use a framework for ecosystem restoration based on decades of ecological research (synthesized in GTR [General Technical Reference]-310, Reynolds et al, 2013), which will move these frequent-fire adapted systems toward increased resiliency by restoring spatial arrangement, structure, and species composition of vegetation.” The regulatory requirements spelled out in 36 CFR 219.27(b)(1-7) are followed in the development of desired conditions, objectives, guidelines, and management approaches for Ponderosa pine, which are spelled out in the revised LRMP, pp. 58-65.

The revised LRMP (Glossary, pp. 229-230) defines “openness” as, “The estimated inverse of forest canopy cover for a given area. For example, a forest with 70 percent canopy cover would have openness of 30 percent.” Openness is further explained through the definitions of openings (revised LRMP, p. 229), which discusses the relationship between basal area and canopy cover. In the definition for “openings” a description of various methods for calculating canopy cover is
included, “forest land currently having less than 10 percent canopy cover (any appropriate
method, such as algorithmic relationship, growth simulators, remote sensing, or direct
measurement, may be used to determine existing canopy cover [for example figure 5, shown
below])”

![Ponderosa pine stocking required to achieve 10% canopy cover
based on Shepperd et al. 2002](image)

\[ -57.44 + (25.5047 \times \ln(Basal Area)) \]

The revised LRMP (pp. 59-60, 60-61, 66-67, and 69-70) contain desired conditions FW-
TerrERU-PP-DC-2, 4 and 8, FW-TerrERU-MC-MCFF-DC-1 and 6, FW-TerrERU-MC-MCIF-
DC-5, 6 that provide measurable ranges of openness for ponderosa pine and mixed conifer at
landscape and mid-scale.

In the revised LRMP, components for terrestrial ecosystems are grouped by ecological response
units (ERUs). On page 45, General Description and Background for All Terrestrial ERUs,
states:

Ranges (minimum, maximum) of values presented in desired conditions were informed by
current science for natural variation in the composition and structure within an ERU, and
adjusted by social/economic desires and management experience (USDA Forest Service
2014). Desired conditions vary within an ERU due to spatial variability in soils, elevation, or
aspect, and to provide managerial flexibility to meet local project objectives. The ranges
often represent the upper and lower extremes for a given variable (such as the lowest and
highest tree densities in a vegetation type). It is important to recognize that the goal is that
most acres would be managed towards the median of the range, but representation across the
range is equally desired.

The desired conditions for the Ponderosa Pine ERUs were developed by the Southwest Regional
Office using the best available science, including GTR-310 (Reynolds et al. 2013) GTR-310
addresses the historic range of variation of ponderosa pine in the Southwest. This is the basis for
the Ponderosa Pine ERU desired condition that allows for openness that typically ranges from 10
percent in more productive sites to 70 percent in the less productive sites (FW-TerrERU-PP-DC-4, revised LRMP, pp. 59-60)).

**Conclusion:** There is no violation of law, regulation or policy. The revised LRMP meets the requirements of the 1982 Planning Rule with sufficient guidance regarding vegetation management (36 CFR parts 219.15 and 219.27, published at 36 CFR parts 200 to 299, revised as of July 1, 2010). I find the forest adequately described the metrics to be used to describe “openness.”

**Appellants contend the Forest Service failed to adequately satisfy the requirement of the 1982 Planning Rule to protect water resources and wildlife.** The appellants do not believe the 2018 revised LRMP does enough to protect riparian areas from livestock grazing. In addition, appellants are concerned the revised LRMP doesn’t do enough to address the livestock-wildlife interface. Appellants contend:

- The revised LRMP acknowledges livestock grazing near riparian areas degrade water quality and riparian habitat through trampling, soil compaction, and salinization. The only solution is to require salt, minerals, and supplements to be ¼ mile away from water.

- The revised LRMP does not address the concern of possible conflicts or beneficial interactions among livestock, wild and free roaming horses and burros and wild animal populations.

- The revised LRMP noted potential disease transmission between domestic sheep and bighorn sheep populations, but did not mention other transmissible diseases.

**Suggested remedies from objectors**

Appellants request the addition of a standard to address water quality concerns:

Livestock grazing shall not be permitted within a quarter of a mile from riparian areas, wetlands, or seasonally present water, except as necessary to allow for continued use of State-issued water rights as allowed under Arizona State law.

Appellants request the current Standard to “prevent the spread of disease between domestic and wild sheep populations” include other interactions or interspecies competition or disease transfer from other livestock classes.

**Response:**

Appellant’s claim additional direction is needed to protect riparian areas. This was brought in comments on the draft Environmental Impact Statement (EIS) and addressed in the response to comments, which explained how direction in the revised LRMP addresses protection of riparian areas, streambanks, and grazing at seeps, springs and seasonal wetlands (following the requirements of 36 CFR 219.27 and 219.19),

The revised LRMP includes direction (FW-Graz-DC-2 [p. 85], FW-Graz-G-2 [p. 86], and FW-Rip-All-G-1 [p. 34]) that will guide livestock grazing to meet or move toward desired conditions.
Those desired conditions include stable or restored stream channels (FW-Rip-Strm-DC-1 [p. 35]), the filtering of runoff (FW-Rip-Strm-DC-3 [p. 35]), the reduction of damage from floods (FW-Rip-Strm-DC-1 [p. 35]), and the enhancement of habitat by controlling water temperatures and providing shelter to wildlife (FW-WFP-DC-4 [p. 78]). For example, requiring a specified buffer around certain resources may be too small, too big, or unnecessary altogether to meet those desired conditions. The appropriate grazing management necessary to meet or move toward these desired conditions will be determined and monitored at the project level based on site-specific information. In addition, projects and activities in perennial and intermittent stream courses and in all riparian areas should be designed and implemented to retain or restore native vegetation, and riparian and soil function (FW-Rip-Strm-G-1 [p. 36]), and managed to maintain ecological functions and maintain habitat and corridors for species (FW-Soil-DC-2 [p. 22], FW-Soil-G-2, 3 [p. 23], FW-Rip-All-G-2 [p. 34], FW-Rip-RipType-DC-3, 4, [p. 42] and FW-Rip-RipType-G-3 [revised LRMP, p. 43]).

Although the Forest Plan does not prohibit livestock from using riparian areas, a number of plan components would maintain and protect riparian composition, structure, and function. For example, the intent of a riparian guideline has been clarified and the guideline has been moved to the Livestock Grazing section because it only applies to grazing management. See FW-Graz-G-7 [pp. 86-87]. Plan components that support riparian desired conditions include: FW-Graz-G-4, 5 [p. 86], FW-Rip-All-DC-5 [p. 34]; FW-Rip-Strm-G-1 [p. 36]; FW-Rip-Spr-G-3 [p. 40]; and FW-Rip-RipType-G-3 [p. 43]. (FEIS, Volume III, Response to Comments, pp. 212)

The revised LRMP does not explicitly exclude springs, which includes seeps, and seasonal wetlands, from non-native herbivory; however, no grazing is an option based on site-specific analysis. Use of springs and wetlands is also influenced by existing water rights. Chapter 4 of the revised LRMP, Grazing Suitability, shows that 82,322 acres are closed to grazing as a result of signed decisions. Some of these areas include springs and wetlands.

Permitted livestock grazing is intended to be consistent with the desired conditions of other resources; however, the revised LRMP acknowledges there may be lower levels of vegetation and higher levels of soil compaction immediately adjacent to earthen stock ponds and developed springs where livestock congregate (FW-Graz-DC-2, revised LRMP, p. 85, FW-Graz-G-2, p. 86). There are specific desired conditions in the section for Wetlands promoting functional soil and water resources, diverse habitats for native species, maintenance of riparian soil moisture characteristics, a variety of age classes, and a native species composition that reflects the individual wetland types, such as seasonal wetlands (FW-Rip-Wtlnds-DC-1 and 2, revised LRMP, pp. 37-38). Also, the Springs section of the revised LRMP describes specific desired conditions for vegetation, soil, and riparian function (FW-Rip-Spr-DC-1, 2, 3, revised LRMP, p. 39). There is a guideline requiring activities be designed and implemented to maintain or improve soil and riparian function, maintain or improve native vegetation and design features could include livestock management (FW-Rip-Spr-G-3, revised LRMP, p. 40). In addition, there are objectives to restore 5 to 10 wetlands currently not in proper functioning condition so that they are, or are trending toward, proper functioning condition during each 10-year period over the life of the revised LRMP. There is an objective to restore riparian function to at least 25 springs identified as not in proper functioning conditions during each 10-year period during the
The revised LRMP (FW-Rip-Wthnds-O-1 and FW-Rip-Spr-O-1, revised LRMP, pp. 38-39). If there is a guideline in the section, **Wildlife, Fish and Plants**, that require management activities to be designed and implemented to protect and provide for narrowly endemic species and species with restricted distributions (many of which occur in springs) (FW-WFP-G-10, revised LRMP, p. 80).

The **Livestock Grazing** section has specific guidance to protect springs, seasonal wetlands, and other riparian areas. This includes locating and using structural range improvements and salt, minerals, and/or other supplements in a manner that is consistent with desired conditions for other resources such that riparian areas and wet meadows are protected (FW-Graz-G-4 and 5, revised LRMP, p. 86 and FW-Rip-All-G-1, revised LRMP, p. 34). There is a specific guideline in **Livestock Grazing** guiding when permitted livestock have access to riparian areas how riparian species will be protected and maintained. This includes allowing for regeneration of species, bank protection, maintenance of soil stability, and reduction of the effects of flooding. Maintenance of woody riparian species should lead to diverse age classes of woody riparian species where potential for native woody vegetation exists. This guideline would not apply to fine-scale activities and facilities such as intermittent livestock crossing locations, water gaps, or other infrastructure used to minimize impacts to riparian areas at a larger scale (FW-Graz-G-7, revised LRMP, p. 86).

Appellant’s request to include other interactions or interspecies competition or disease transfer from other livestock classes, is addressed by the Forest:

...The concept of healthy fish and wildlife populations is embedded in the desired conditions for wildlife, fish, and plants. These desired conditions support sustainable populations of native plant and animal species, properly functioning ecosystems and habitat that provide necessary physical and biological habitat components for the needs of associated native species, and keeping common species common. See FW-WFP-DC-1 to 5 [p. 78]. In addition, guidelines would prevent or reduce the likelihood of introduction or spread of disease. See FW-WFP-G-3 and 12 [p. 80]. Finally, there are desired conditions that promote that invasive species be managed so as to be absent or at levels that do not affect sustainability of native and desirable non-native species; do not disrupt the natural fire regime; and do not disrupt ecological composition, structure, and function. See FW-Invas-DC-1 and G-1 [p. 83]. (FEIS, Volume III, Response to Comments, p. 391)

**Conclusion:** I found no violation of law, regulation or policy. The revised LRMP meets the requirements of the 1982 Planning Rule to protect water resources and wildlife (36 CFR parts 219.19 and 219.27, published at 36 CFR parts 200 to 299, revised as of July 1, 2010).

**Appellants believe the Forest Service is eluding its responsibility for assessment and monitoring and evaluation under the 1982 Planning Rule, in regards to soundscape protection.** The Forest Service is violating trust that was placed into it by the public who helped create Amendment 12 and the Forest Service is failing to recognize the public planning effort that created Amendment 12. Amendment 12 provided “A Shared Vision for the Redrock Country”, recognizing the importance of the Sedona/Oak Creek ecosystem. The Amendment repeatedly invokes the need for natural quiet and it explicitly states in its Recreation
Objectives to: Ensure that aircraft operations are conducted so as to eliminate or reduce noise impacts on visitors and restore and protect appropriate levels of natural quiet. Several Guidelines were included within Amendment 12. Appellants contend:

- The revised LRMP cites Amendment 12, but has no soundscape monitoring with audibility and Leq measures, and has little or no discussion of aircraft, or the Sedona airport.

The revised LRMP does not contain a section dedicated to the important issue of soundscape.

**Response:**
Appellant specifically alleges the 1982 Planning Rule was violated at 36 CFR 219.5 (Interdisciplinary Approach), 219.7 (Coordination with other public planning efforts), 219.11 (Forest plan content) and 219.12 (Forest planning-process) as described below. My review of the record shows the analysis and revised LRMP met the 1982 Planning Rule requirements. The Forest succinctly described or addressed the environment (40 CFR 1502.15) and the subject of soundscapes and sound effects in several places in the Forest Plan Revision documents.

- “Opportunities for experiencing solitude and natural soundscapes are consistent with ROS objectives.” (FW-Rec-All-DC-10, revised LRMP, p. 110)

- The revised LRMP specifies, “…key direction from the amendments for the Sedona-Oak Creek Ecosystem (Amendment 12) and the Flagstaff/Lake Mary Ecosystem Analysis (Amendment 17) were identified for retention. The direction found in these amendments is the result of substantial collaboration with forest stakeholders and public support for this direction remains strong. Furthermore, much of the direction found in these amendments addresses the needs for change that have been identified in other areas of the existing plan. Accordingly, there was little need for change associated with the direction found in these amendments and it has largely been incorporated into this revised plan.” (revised LRMP, p. 3)

- “Arizona State law requires off highway vehicle equipment to be equipped with “either a muffler or other noise dissipative device that prevents sound above ninety-six decibels. See Arizona Revised Statute section 28-1179A.3. Forest Service regulation prohibits the off road operation of any vehicle in violation of any applicable noise emission standard established by a State agency. See 36 CFR 219.15(d).

Although the revised LRMP does not include specific restrictions on sound associated with vehicles, this concern could be addressed through travel management planning and other project-level decisions. Several plan components provide guidance related to potential impacts from motor vehicles associated with sound. One plan component expressly mentions the desire for natural soundscapes that are consistent with ROS objectives. See FW-Rec-All DC-10. A Recreation guideline directs recreational activities to be managed to have minimal user conflicts. See FW-Rec-All-G-2.” (FEIS, Volume III, Response to Comments, p. 248, Concern Statement #450).
In response to previous requests for additional soundscape direction in the revised LRMP the Forest added additional language “A plan component related to this concept has been adjusted to have forestwide application and to expressly mention the desire for natural soundscapes that are consistent with ROS objectives. See FW-Rec-All-DC-10.” (FEIS, Volume III, Response to Comments, p. 269, Concern Statement #308).

The Forest also recognized the Forest Service has limited jurisdiction over airplanes and helicopters flying over the Forest, however they did address potential for sound disturbances or conflicts from activities under Forest Service jurisdiction:

- Although the Forest has limited jurisdiction over airplanes and helicopters that are flying over the Forest, the Forest Plan contains a number of desired conditions that could be used to manage airplane or helicopter traffic related to Forest Service authorized tours.

- Recreation desired condition FW-Rec-All-DC-10 seeks to provide opportunities for experiencing solitude and natural soundscapes that are consistent with ROS objectives.

The Forest gave consideration to impact from adjacent Federal jurisdiction over nearby aircraft and guidance about collaboration “Collaborate with Federal Aviation Administration, airport administrations, air tour operators, military and government agencies, and other aircraft operators to minimize disturbances caused by aircraft over designated Wilderness areas of the Coconino National Forest. Aircraft disturbances include, but are not limited to, diminishing solitude and primitive recreation opportunities and disruption to key wildlife areas during important times of their life cycle. Examples could include peregrine falcon nesting sites and big game wintering habitat. Encourage aircraft operators to adhere to Federal Aviation Administration’s Notice to Airmen regarding minimum altitudes over wilderness.” (revised LRMP, p. 174).

The Forest Service is not required to specifically address monitoring of soundscapes in the Forest Plan (36 CFR 219.12(1982)). Soundscape monitoring does not address the management requirements set forth in 36 CFR 219.27 (1982).

The Forest recognized the purpose of the monitoring plan is “to evaluate, document, and report how the Forest Plan is applied, how well it works, and if its purpose and direction remain appropriate” (revised LRMP, p. 201). They also developed the monitoring plan “to be realistic and able to be implemented within anticipated future budgets” (FEIS, Volume III, Response to Comments, p. 236, Concern Statement #622).

The monitoring guidance in the revised LRMP is intended to inform adaptive management within the plan area (FEIS, Volume III, Response to Comments, p. 317, Concern Statement #391) and “adaptive management strategies, including metrics and triggers for change, would be identified at the project level based on the type of project and its purpose and need.” (FEIS, Volume III, Response to Comments, p. 175, Concern Statement #681).

**Conclusion:** I find no violation of law, regulation or policy. I found the Forest addressed the soundscape concern adequately and no additional action or documentation is necessary. The revised LRMP meets the requirements of the 1982 Planning Rule to use an interdisciplinary
approach, coordinate with other public planning efforts, and followed the requirements for forest plan content and the overall planning process (36 CFR parts 219.5, 219.7, 219.11 and 219.12, published at 36 CFR parts 200 to 299, revised as of July 1, 2010).

**Appellants contend the Forest Service is eluding its responsibility as a public land agency by failing to represent the will of the public and the outcome of the Congressional Walnut Canyon Study Area by not having a Standard that protects the entire Walnut Canyon Study Area from land trades.** The Walnut Canyon Management Area is approximately 8,000 acres smaller than the Walnut Canyon Study Areas. A diverse group of citizens have requested the boundaries of the Walnut Canyon Study Area and the Walnut Canyon Management Area be the same and the whole area protected from land trades. Objectors contend:

- The Forest Service claims the management area boundary is easy to locate on the ground, whereas the Study Area boundary would be difficult to locate on the ground.
- A Standard in the revised LRMP only protects the management area from land trades, leaving the Study Area vulnerable to land trades.

**Suggested remedies from objectors**

Appellants request the entire Walnut Canyon Study Area be included within the Walnut Canyon Management Area and all relevant maps and acreages are amended.

**Response:**

This issue related to the boundary of the Walnut Canyon Study Area was brought up in comments to the draft EIS. The FEIS, Vol. III, p.223, Response to Comments stated, 

_No change has been made in response to these comments. The boundary of the Walnut Canyon Study Area would be difficult to find on the ground, which would make implementation difficult. The Walnut Canyon Management Area boundary was developed with topographical features and landmarks in mind to make the boundary more locatable on the ground. The Walnut Canyon Study has been completed and transmitted to the Secretary of Agriculture. The study presents three options to the Secretary, one of which is consideration of the area for special designation, and the Forest is waiting for a recommendation on how to proceed._

In addition, the public requested Walnut Canyon should be managed under a special land use designation for protection. The FEIS, Vol. III, pp. 223-224, Response to Comments stated,

_Although the Forest Plan does not manage Walnut Canyon under a special land designation, the plan components in the Walnut Canyon Management Area offer considerable protection to this area. Standards in this management area prohibit the development of new paved roads or utility corridors, and require that the land be maintained in the National Forest System. See MA-Walnut-S-1 and 2. A guideline in this management area requires that activities and uses on the Forest be managed to protect cultural sites and preserve habitat for disturbance-sensitive species both on the Forest and within the neighboring Walnut Canyon National Monument. See MA-Walnut-G-1. Another guideline requires permits for research projects in rock shelters and archaeological site caves to protect archaeological_
and historical resources. See MA-Walnut-G-2. A management approach reminds managers to:

*Coordinate with the Walnut Canyon National Monument to develop and ensure compatible management of overlapping resources in this management area.*

With respect to protecting the area from land trades, (FEIS, Vol. III, p. 210, Response to Comments, Concern Statement #490),

*No change has been made to the Forest Plan in response to this comment; the topic is already addressed by several plan components. The forest-wide Land Adjustments section in the Forest Plan includes several components that provide a management framework on this topic. A desired condition seeks a mostly contiguous land base, which could lead to efforts to bring inholdings such as the State Trust lands under management by the Forest. See FW-LndAdj-DC-1. A guideline lays out qualities that should be possessed by land to be acquired, including habitat for threatened and endangered species, existence of significant cultural resources, prevention of damages to resources, and/or improvement to management of designated special areas. See FW-LndAdj-G-1. Furthermore, a standard in the Walnut Canyon Management Area ensures that land adjustments in this management area will not result in a reduction of the National Forest System lands in this management area. See MA-Walnut-S-2.*

The section, *Management Approach for Land Adjustments* (revised LRMP, p. 103) states: *Consult with local governments about land adjustment proposals for forest plans to take forward into the NEPA process. Public input on land adjustment begins at the time a site-specific land exchange is formally proposed and has met other land adjustment criteria and plan direction.*

All land adjustments are analyzed through the NEPA process.

The section *Management Approach for Land Adjustments* (revised LRMP, p. 103), goes on to say:

*Support open space designations adjacent to the forest to minimize conflicts between residents and other forest users. Review and participate in local government plans to encourage open space objectives that are consistent with national forest management direction and policies.*

*Work with local and regional governments and road agencies to develop transportation solutions that reduce traffic and vehicle impacts on National Forest System lands. Work with homeowner associations and homeowners to plan and implement measures that reduce wildfire threats to life and property such as: providing reasonable road ingress and egress for emergency evacuation of personnel, and providing reasonable road access suitable for use by fire engines, including places to turn engines around.*

I find the issue related to land trades is adequately covered in the revised LRMP.
Conclusion: There is no violation of law, regulation or policy. I do not recommend any changes to the revised LRMP.

Appellants contend the Forest Service failed to meet 1982 Planning Rule requirements for recreational resource planning by failing to plan for an anticipated and controversial user demand for snowmaking. Appellants are concerned the revised LRMP never mentions snowmaking and the effects of snowmaking in the FEIS or revised LRMP.

- The planning regulations require the Forest Service to look at anticipated recreational user demands.

- This issue was brought up in comments in 2014 where appellants stated: “Nowhere in this plan is snowmaking ever mentioned, nor its effects on the rare alpine tundra ecosystem, the federally listed endangered San Francisco Peaks Ragwort, a Traditional Cultural Property, or our future water supply, both quantity and quality. It is incredulous that the Forest Service neglects to create a policy that this National Forest has ever encountered.

The Forest Service should be prepared for future requests for snowmaking permits, using either fresh or reclaimed water. This Forest Plan revision process is the place to create a policy on snowmaking, and due to the limited water resources in our region, climate projections for a dryer Southwest, and determinations that the City of Flagstaff and State of Arizona water demands will outstrip supplies before 2050, the Forest Plan should declare snowmaking to be an incompatible use on the Coconino National Forest.”

Suggested remedies from objectors
Appellants request The Forest Service adds a section on snowplay to the revised LRMP and explicitly states how it will make decisions regarding snowplay in the future.

Response:
The ROD, p. 33 discusses Reclaimed Water and Snowmaking, and how the previous comments were responded to:

Some stakeholders, including the Sierra Club and the Center for Biological Diversity, commented that the revised plan lacks direction on the use of reclaimed water and snowmaking on the Forest and requested that these activities be identified as incompatible uses on the Forest. Some commenters questioned whether it was ecologically appropriate and safe to use reclaimed water on the Forest, especially near federally-listed threatened and endangered species. Other commenters questioned whether it was ethical to allow the use of water, a rare resource in the southwest, to make snow.

Other commenters, including members of the Navajo Nation, questioned the propriety of authorizing snowmaking activities at the Arizona Snowbowl, regardless of the water source, on the San Francisco Peaks, an area held as sacred by many tribes in this region. Some of these commenters have suggested that the Forest should use the plan revision effort to
reconsider its decision to authorize snowmaking on the San Francisco Peaks. I understand how troubling that decision was for the tribes and tribal members that cherish the San Francisco Peaks. I also understand the ongoing controversy over the decision to authorize snowmaking with reclaimed water at the Arizona Snowbowl that is unrelated to tribal interests. I am not revisiting that decision at this time.

I understand the ecological, ethical, and cultural concerns asserted by the tribes and others. With those concerns in mind, my decision does not expressly declare the use of reclaimed water or snowmaking as an incompatible use on the Forest. However, the revised plan contains several components that provide a framework that can be applied to address the concerns about the limited water resources in this region, the federally listed endangered San Francisco Peaks Ragwort, and the San Francisco Peaks Traditional Cultural Property. These components will guide site-specific decisions on whether to authorize the use of reclaimed water or snowmaking on the Forest under the revised plan.

In the FEIS, Volume 3, p. 354, Response to Comments addresses protection of water supplies: The Forest Plan has been developed to integrate the management of resources on the Forest. Water is recognized as a very valuable resource on the Forest, and there are many plan components that are designed to ensure that forest management and activities on the Forest are conducted in a manner that maintains or improves this resource.

The revised LRMP, pp. 29-32, discusses Watersheds and Water. The components in this section include desired conditions for water quality and quantity and guidelines to help the forest manage toward those desired conditions.

There are also desired conditions for the Alpine Tundra ERU, which seeks to maintain the attributes and processes that contribute to the ecological diversity and habitat for native biota in the ERU (FW-TerrERU-AT-DC-1, revised LRMP, p. 74).

The Forest Service Manual direction relevant to determining, establishing, protecting, and managing water rights are contained in FSM 2540 (referenced in Appendix D of the revised LRMP, p. 283).

Any requests for snowmaking would be analyzed on a project specific basis and would be required to be in compliance with the revised LRMP.

Conclusion:
The revised LRMP and ROD address this issue through plan components that guide future projects related to water use and development, which would include snow-making. Site-specific decisions pertaining to snowmaking will undergo site-specific analysis. There is no violation of law, regulation or policy. I do not recommend changes to the revised LRMP.

Appellants contend changing conditions warrant a revision of the Plan direction on campfires. It is the responsibility of the Forest Service to protect Forest resources. Appellants are concerned the increasing length and severity of the dry seasons in recent years calls for a revision of the plan direction on campfires.
• The revised LRMP needs to consider regularly occurring annual or permanent closure of areas to campfires.

• Regularly occurring annual or permanent closure would increase economic efficiency by eliminating the need for emergency closure sand decrease wildfire frequency.

Response:
The Responsible Official responded to the requirements of the 1982 Planning Rule, (36 CFR 219.27(a)(2) 1982), which states, “Consistent with the relative resource values involved, minimize serious or long-lasting hazards from flood, wind, wildfire, erosion, or other natural physical forces unless these are specifically excepted, as in wilderness”) by discussing a management approach that applies to the project level, “Following large or uncharacteristic disturbance events, focus management actions on human health and safety, long-term restoration … or protection of ecosystem processes and resource values” (revised LRMP, Management Approaches for all Ecosystems, p. 19).

The suggestion to close areas to campfires was made in a comment on the DEIS. The response to this comment was (FEIS, Volume III, p. 261),

_The Forest has an existing policy and process to address when to close the Forest and ban campfires based on specific existing conditions. Although the Forest Plan does not repeat this policy nor does it provide a specific seasonal closure for campfires, it does contain a guideline requiring recreational activities to be managed to promote public health and safety. See FW-Rec-All-G-2. The existing policy and process are consistent with this guideline and can be viewed as an extension of this guideline._

In addition, the Forest specifically addressed campfire restrictions within some areas (e.g. MA-RedRock-G 4 (revised LRMP, p. 149), MA-OakCrk-S 2 (revised LRMP, p. 152), MA-HouseMtn-G 4 (revised LRMP, p. 156), MA-SedN-S 2 (revised LRMP, p. 158), SA-RNABotGeo-S 1 (revised LRMP, p. 190)). They also spoke of coordinating with other jurisdictions regarding “prevention, preparedness, planned activities, and responses to wildland fires.” (revised LRMP, Management Approaches for Fire Management, p. 85)

Conclusion: There is no violation of law, regulation or policy. I do not recommend any changes to the revised LRMP.

Appellants contend the Coconino National Forest has the obligation to significantly contribute to Mexican wolf recovery. Appellants request that the Coconino National Forest facilitate Mexican wolf recovery by 1) adhering to the mandates of the Endangered Species Act of 1973 (ESA), especially Section 7(a)(1)., and 2) integrate the 1982 Planning Rule’s relevant connectivity and species diversity requirements into the forest plan, possibly as an amendment. Specifically, appellants contend the following:

• There is precedent that obligates Federal land managers to recover endangered species per the recent Flathead National Forest plan revision that incorporate the Northern Continental Divide Ecosystem Grizzly Bear Conservation Strategy.
The Coconino National Forest has the responsibility to recover the Mexican wolf. The 1982 Planning Rule established a process for developing and updating forest plans and set conservation requirements that forest plans must protect endangered species habitat and “maintain viable populations” of wildlife, defined as having “the estimated numbers and distribution of reproductive individuals to insure its continued existence is well distributed in the planning area:”

The Coconino National Forest has an obligation, and not just discretion, to manage and conserve fish and wildlife on Federal lands. Congress, via ESA, directed land management agencies to manage wildlife on Federal lands and to no just provide wildlife habitat. National Forest Management Act requires that forest plans provide for a diversity of plan and animal communities based on the suitability and capability of the specific land area in order to meet overall multiple use objectives.

There is a need for a secure condition for Mexican gray wolves on the National Forest. Federal agencies have an affirmative, non-discretionary obligation under the ESA to use “all methods and procedures which are necessary to bring any [listed] species to the point at which the measures provided in the [act] are no longer necessary.” This responsibility lies with the Federal agencies and cannot be delegated to the States.

The Coconino National Forest should have forest plan components for contributing to Mexican wolf recovery. The components should maintain and restore wildlife habitat connectivity.

The Coconino National Forest should establish appropriate Desired Conditions, Standards and Guidelines (see Sierra Club, pages 25-28).

Response:
The 1982 planning rule require a plan: “Provide for adequate fish and wildlife habitat to maintain viable populations of existing native vertebrate species and provide that habitat for species chosen under §219.19 is maintained and improved to the degree consistent with multiple-use objectives established in the plan.” (36 CFR part 219.27(a)(6), published at 36 CFR parts 200 to 299, revised as of July 1, 2010). The revised LRMP record shows the Forest Service complied with procedural and substantive components of the 1982 planning rule related to species viability and diversity.

Many elements of the revised LRMP (i.e., desired conditions, objectives, standards, guidelines, management areas) were developed to improve wildlife habitats, including those used by the Mexican wolf. Although very few plan elements deal with individual species, several provide direction for rare species or high quality habitat conditions:

Forestwide Management – the revised LRMP addresses the importance of habitat connectivity as a need for plan revision. Connectivity was analyzed in the FEIS (Volume IIa, pp. 27-33)
• Standard practices include “Coordinate with the Arizona Game and Fish Department (AZGFD), U.S. Fish and Wildlife Service (USFWS), and interested parties on education, research, and activities that promote and enhance habitat conditions and species recovery” (revised LRMP, p. 270).

• Desired conditions include “…sustainable populations of native plant and animal species distributed throughout their potential natural range. Properly functioning ecosystems reflect the diversity, quantity, quality, and site potential of natural habitats on the Forest. Habitat is available at the appropriate spatial, temporal, compositional, and structural levels for a wide variety of species” and, “Habitat conditions contribute to the survival and recovery of listed species, allow for repatriation of extirpated species, contribute to the delisting of species under the Endangered Species Act, preclude the need for listing new species, improve conditions for Southwestern Region sensitive species, and keep common native species common. Habitat conditions provide the resiliency and redundancy necessary to maintain species diversity and metapopulations” (revised LRMP, p. 78).

• Standards include “Direction for species listed as threatened, endangered, proposed, or candidate takes precedence over direction for species not listed by the U.S. Fish and Wildlife Service” (revised LRMP, p. 79)

• Guidelines include “Habitat management objectives and species protection measures from approved recovery plans should be applied to activities occurring within federally listed species habitat to promote recovery of the species” and “To improve the status of species and prevent Federal listing, management activities should comply with species conservation agreements, assessments, strategies, or national guidelines” (revised LRMP, p. 80).

Many of these plan elements directly address the appellants’ comments on the draft EIS (e.g., FEIS Volume III, p. 404) as well as the concerns identified in their appeal.

The effects of plan implementation on wolves are disclosed in the FEIS (Vol. IIa, pp. 410-420), the Biological Assessment and the supplemental wildlife viability report. The FEIS analysis concludes none of the alternatives were likely to jeopardize continued existence of the species. Alternative B, which was selected as the revised LRMP, is expected to improve conditions of many habitat types that could be used by wolves on the forest. Since the Coconino does not currently have a resident wolf population, the reliance of the analysis on habitat factors is appropriate. The plan components, analysis and conclusions in the revised LRMP record demonstrate compliance with relevant laws and regulations and are well within the bounds for wildlife protection established by court rulings.

The ESA states, “Federal agencies shall use their authorities to further the purpose of the ESA by carrying out programs for the conservation of endangered and threatened species” (Sect. 7(a)(1)). However, the USFS is not required by the ESA or other law or regulation to adopt any particular management guidance to meet this requirement. For example, conservation measures identified in species recovery plans, conservation assessments or similar documents produced by the U.S.
Fish and Wildlife Service (USFWS), or other Federal and State agencies are considered and commonly incorporated directly into USFS LRMPs, but the plan need not incorporate all such recommendations. Additionally, the revised LRMP need not repeat other agency decisions or legal requirements, and there are often practical reasons for such omissions. As the Forest Service stated in the response to comments on the draft EIS, “One of the goals for the revised Forest Plan is to avoid repeating law, regulation, or policy. Accordingly, direction from the 1987 forest plan that repeated law, regulation, or policy, including recovery plans for threatened and endangered species, was not retained in the revised LRMP. Avoiding duplication of these authorities reduces the need for plan amendments if those authorities are changed” (FEIS Vol. III, p. 172).

The appellants suggested several plan components specific to Mexican wolves, some of which are linked to language in recovery documents. However, the Coconino National Forest does not currently support a Mexican wolf population and the most recent confirmed sightings were in 2000 and 2001. Therefore, detailed plan components related to wolf protection are not currently needed, and future development of such components would be initiated at the discretion of the Forest Service in coordination with the USFWS and AZGFD.

See also the response above – many of the plan elements that meet NFMA requirements for diversity and viability also align with agency actions to meet ESA Sect. 7(a)(1).

The ESA Sections 7(a)(2) and 7(a)(4) require Federal agencies to consult on activities that may affect threatened, endangered or proposed species. The USFWS published a revision to the regulations for the nonessential experimental Mexican wolf population in January 2015 (80 FR 2512), which included designation of all of the Coconino National Forest south of Interstate 40 as part of a nonessential experimental population. The rule states the Forest Service must comply with sections 7(a)(1) and 7(a)(4) of the Endangered Species Act; 7(a)(1) requires Federal agencies to carry out programs for the conservation of endangered species and 7(a)(4) requires conference on activities that could jeopardize the continued existence of species proposed for listing. For purposes of interagency consultation, nonessential experimental populations such as the Mexican wolf are treated like species proposed for listing (hence the reference to ESA Sect. 7(a)(4)).

The Forest Service provided a Biological Assessment (BA) to the USFWS on February 15, 2017, which included detailed background on Mexican wolves and analysis describing how the proposed revised LRMP may affect wolves (see BA, p. 208-228). Based on that analysis, the USFS determined the revised LRMP would not jeopardize the continued existence of the nonessential experimental population of the Mexican gray wolf. The BA also recognized there may be translocations of wolves into the forest (p. 227). The USFWS provided a Biological Opinion (BO) to the USFS September, 21 2017, which agreed with the determination the proposed action (implementation of the revised LRMP) was not likely to jeopardize the nonessential experimental population of Mexican gray wolves.

The BO (p. 2) states the USFWS consulted on the LMP as a “framework programmatic action.” As defined in recent regulations amending 50 CFR 402.02, consultation on this type of action “approves a framework for the development of future action(s) that are authorized, funded, or carried out at a later time and any take of a listed species would not occur unless and until those
future action(s) are authorized, funded, or carried out and subject to further section 7 consultation” (80 FR 26844). Future projects will be subject to the ESA’s Sect. 7(a)(2) interagency consultation requirements, including incorporation of site-specific information on the species that should be considered, the spatial extent and quality of habitat and likely effects of the activities.

The USFWS, Mexican Wolf Recovery Plan, First Revision, was released November 2017. A Biological Report was prepared to accompany the recovery plan. The Biological Report included information on the distribution and quality of habitat, including maps showing much of the Coconino National Forest currently constitutes high quality habitat for Mexican wolves. The BO (p. 151) listed changed circumstances that would generally warrant reinitiating consultation on the LRMP; however, revision of a recovery plan is not among the changes that require additional consultation. The implications of the revised recovery plan for elements of the revised LRMP (e.g., revision of the plan to incorporate Mexican wolf recovery) as well as any future need for consultation are at the discretion of the Forest Service and USFWS.

**Conclusion:** The record for the revised LRMP clearly demonstrates the Forest Service met legal requirements for contributing to Mexican wolf recovery and for considering the effects of agency actions on the species. Although the BO was provided prior to the public release of the revised recovery plan, the availability of the recovery plan does not necessarily require additional interagency consultation under Sect. 7(a)(2) of the Endangered Species Act, nor does it require amendment of the revised LRMP. The circumstances that could trigger reinitiation are described in the BO (p. 151), and the decision to reinitiate consultation on the revised LRMP would be made by the USFWS and USFS. Project-level implementation of the plan would require consultation for Mexican wolves if Forest Service activities may affect that species. There is no violation of law, regulation or policy. I do not recommend changes to the revised LRMP.

**Appellants are concerned with the minimal amount of recommended wilderness.** In the appellants 2014 comments on the draft EIS they strongly supported Alternative C’s recommendation for 13 new wilderness areas totaling 92,386 acres. They were surprised only three areas (less than 16 percent of the acreage) were in the chosen Alternative B. Appellants contend:

- The Potential Wilderness Area report appeared to be predisposed to provide unduly low ratings for “Availability”, with only one “High” rating out of 15 areas analyzed.

- Appellants believe the five Coconino National Forest Inventoried Roadless Areas should have been found suitable for wilderness recommendation.

**Suggested remedies from objectors**

Appellants request reconsideration for the five Inventoried Roadless Areas for recommended wilderness, or at the very least to be provided with the rationale for non-selection as recommended wilderness.

**Response:**

The Record of Decision provides the rationale for why three areas were recommended for wilderness and how other potential wilderness areas will be managed to retain recreation and scenery settings (ROD, pp. 21-22):
During the planning process, the Coconino National Forest analyzed and evaluated 93,811 acres for designation as potential wilderness. I recommend the 8,733 acres identified in the Recommended Wilderness section in Chapter 3 of the revised plan for Congressional designation as Wilderness. These recommended wilderness areas include Abineau (an addition to the Kachina Peaks Wilderness), Davey’s (an addition to the Fossil Springs Wilderness), and Strawberry Crater (an addition to the Strawberry Crater Wilderness). These recommended areas all have high wilderness characteristics and are adjacent to existing wilderness, which would provide for better manageability of the existing wilderness.

Of the potential wilderness areas considered, but not recommended for wilderness designation, over 50,000 of the acres are within inventoried roadless areas (IRAs) and would be managed to maintain their overall roadless character. Another 11,000 acres of the potential wilderness areas not recommended for wilderness designation would be managed as semi-primitive non-motorized areas with limited motorized access. The revised plan components for these areas will help retain their recreation and scenery settings.

The Potential Wilderness Area Evaluation Report in the record, describes the rationale used in deciding whether a Potential Wilderness Area should be included in an alternative as a Recommended Wilderness Area and how Inventoried Roadless Areas were considered in that process (pp. 5-10),

In the summer of 2009, the interdisciplinary team evaluated the ten potential wilderness areas for availability, and another 5 were also evaluated in the winter of 2010 based on public input. The determination of availability is conditioned by the value of and need for the wilderness resource compared to the value of and need for other resources. Appendix C provides the specific questions used to evaluate availability. Availability ratings are generally defined as the following:

- **High**: Resources (availability factors) are not encumbered by existing uses or commitments, there are few uses that are currently allowed which are not usually allowed in designated wilderness and these uses can be mitigated.

- **Medium**: At least two or more resources have existing or planned uses and activities that are not compatible with designated wilderness.

- **Low**: There are long term commitments of resources for incompatible uses, and difficult conflicts would occur if the area were designated as wilderness.

Table 1 summarizes the findings of the Capability, Availability, and Need evaluations. The remainder of this report provides the wilderness evaluation documentation for each potential wilderness area that was rated as high capability. The overall ranking for an area does not constitute a decision. It is merely a way to represent relative merits and drawbacks of the areas features, so that the deciding official can make an informed decision [emphasis added]. The Capability, Availability, Need are summarized for each area as described in Forest Service Handbook 1909.12 Chapter 74.
Comments on the rationale for recommended wilderness areas in the draft EIS prompted a review of the process and resulted in some adjustments:

Several adjustments were made to elements of alternative B. Comments on the rationale for recommending the Strawberry Crater Addition, Walker Mountain, and Davey’s potential wilderness areas as part of this alternative prompted a review of the potential wilderness evaluation process. After a thorough review of the available information, it was determined that the Walker Mountain potential wilderness area would not be carried forward in alternative B and the Abineau potential wilderness area that is included in alternative C would be added to the modified alternative B. The Walker Mountain potential wilderness area is still part of alternative C. (FEIS, Volume I, p. 4)

Appellant states that “…the need for vegetation treatments and fire presuppression appears to be cited in multiple cases as limiting availability…” This is addressed in the FEIS analysis under effects to fire management of recommending wilderness under alternative B (modified) and C) (FEIS, Volume I, pp. 192-193).

The FEIS (Volume III, pp. 378-381) in response to comments on the draft EIS discusses the availability rating process for potential wilderness, and changes that were made based on public comments in detail.

Conclusion
The revised LRMP follows law, regulation, and policy. The project record adequately addresses the appellant’s concerns and supports the wilderness area recommendations. I do not recommend changes to the revised LRMP.