“Thinking Like a Mountain”

Escudilla Wilderness Additions
Wilderness Study Area Proposal

Apache-Sitgreaves National Forests

Prepared by:
The White Mountain Conservation League
http://azwmcl.org
2009

“Each hollow seemed its own small world, soaked in sun, fragrant with juniper, and cozy with the chatter of pinon jays. But top out on a ridge and you at once became a speck into an immensity. On its edge hung Escudilla.” Aldo Leopold “Escudilla”
A Sand County Almanac.

White Mountain Conservation League Mission

The White Mountain Conservation League (WMCL), a 503c organization, is a local action group dedicated to sustaining and enhancing the White Mountain ecosystems and communities. The spectacular White Mountain region provides habitat for hundreds of plant and animal species. The WMCL embraces and encourages stewardship of all components of the region's diverse ecosystems and recognizes their value to our regional economic vitality and quality of life. The WMCL objectives of promoting natural resources stewardship and sustainability are achieved by active participation at all levels of land and wildlife management decision making to address environmental issues important to our membership and community.

Acknowledgments

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Finally we acknowledge those who provided information, organized, compiled, drafted, and edited this proposal including Don Hoffman, Billie Hughes, Russ Winn, Tom Hollender, Jens Jensen, Kim Crumbo, Curt Bradley and Sam Frank.

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PART 1: DEVELOPING A WILDERNESS PROPOSAL

Introduction

This proposal calls for additions to the current Escudilla Wilderness which was created in 1984. This proposed Escudilla Wilderness Additions creates a Wilderness Study Area (WSA) that, if designated, would increase the size of the Escudilla Wilderness from the original 5200 acres to over 22,000 acres. This proposal includes two alternatives with the WMCL preferring Alternative 2. The major difference between the two alternatives is the inclusion of much of the Hulsey Bench Wildlife Closure area in Alternative 2.

This proposal meets the requirements of a citizens WSA proposal and provides ample justification for expanding the Escudilla Wilderness. This proposal appropriately coincides with the Forest Plan Revision process, but is particularly timely as we celebrate both the centennial of Aldo Leopold's arrival in the area that surrounds Escudilla and the 45th anniversary of the Wilderness Act (Wilderness Act, 1964).

Scenic view of Paddy Creek from atop Datil formation

Purpose and Need

Escudilla Mountain, Arizona's third highest, represents a landform that is much revered by conservationists in Arizona and beyond. After graduating from Yale School of Forestry in 1909, Aldo Leopold hopped a train to Holbrook, then a stage to Springerville where his illustrious Forest Service career began. He was immediately smitten by the "Mountain."

"We reached the old wolf in time to watch a fierce green fire dying in her eyes. I realized then, and have known ever since, that there was something new to me in those eyes - something known only to her and to the mountain."

Aldo Leopold from "Thinking Like A Mountain". See Appendix C for complete essay. Photo courtesy of the Leopold Foundation

Leopold's essays "*Escudilla,*" "*On Top*" and "*Thinking Like a Mountain*" all demonstrate the influence that Escudilla and the White Mountains had on him; this is where Leopold first realized the ecological and social benefits of preserving our wild heritage. The year of 2009 marks the centennial celebration of the beginning of Leopold's vast contributions to conservation in America. This proposal fittingly pays tribute to Aldo's professional roots by providing a conservation vision for the entire mountain – one that protects essential habitat for native wildlife, preserves the wilderness character, including the outstanding opportunities for solitude and primitive recreation, accommodates local community protection needs, and yet provides reasonable access and motorized dispersed camping for all to enjoy.

In 1984, the Arizona Wilderness Act created the 5200 acre Escudilla Wilderness. The Escudilla Wilderness includes the top of the mountain that was not logged during the Watts Timber Sale, areas salvaged logged after the infamous 1952 Escudilla Fire, and sections along Tool Box Draw where several regenerating aspen blocks were clear cut in the early 1980s. Thus, as with virtually all wilderness areas, the Escudilla Wilderness includes both pristine lands and areas

that showed evidence of human impact. Even with these impacts, the area easily qualified as a congressionally designated wilderness using the criteria of the 1964 Wilderness Act. The Act allows lands to be included in the wilderness system that have had human impacts but which will restore naturally or with a minimum of intervention. In the Act, Congress also allowed for other developments such as cabins, fences, fire towers, and water developments etc., which often persist in wilderness areas.

Escudilla Wilderness is one of the most visited wilderness areas in the Southwest and the National Recreation Trail to Escudilla Lookout is far and away the most popular hiking trail on the Alpine Ranger District. Escudilla Wilderness contributes to eco-tourism for the White Mountain communities, attracting many visitors throughout the summer months with peak use occurring in September and October when autumn colors grace the mountain.

There is a glaring need to permanently protect more wilderness-quality lands on the Apache-Sitgreaves National Forests. WMCL's research disclosed that less than 1% of the Forest has been designated as wilderness – by far the least of any Forest in the Region! Even after including the Blue Range Primitive Area, the Apache-Sitgreaves National Forest manages only 7.7% of it's lands to protect wilderness characteristics – far below the regional average of 13.6% of all Forest Lands. (See Appendix B)

The following proposal creates a Wilderness Study Area contiguous to the existing wilderness, and is carefully designed to protect and enhance the wilderness character of Escudilla Mountain while deflecting disruptive and incompatible uses to more appropriate areas of the forest. As with all wilderness units, this proposal will require a commitment to restoring human impacts that affect a very small percentage of the area. This is a commitment that the White Mountain Conservation League is willing and anxious to share in. In addition to protecting the wilderness character and ecological values of the entire Escudilla Mountain, this proposal provides reasonable motorized access to Hulsey Lake, Escudilla trailheads, and Terry Flat. The proposal also ensures that our communities and private property are well protected from wildfires. This holistic conservationist vision for Escudilla Mountain also relies on an enduring commitment to managing the Hulsey Bench Wildlife Closure.

2008 Citizen WSA Inventory

During the summer of 2008, the White Mountain Conservation League (WMCL) organized an inventory of potential areas to be included in a proposed WSA addition to the currently designated Escudilla Wilderness. Kim Crumbo, the Conservation Director for the Grand Canyon Wilderness Alliance, provided training for 18 volunteers to conduct field inventory using methods consistently employed by the Arizona Wilderness Coalition, Grand Canyon Wildlands Council and the Sky Island Alliance. The inventory effort involved 63 citizen-volunteer days (over 1000 hours including data entry, GIS mapping and report

preparation), completing 70 route inventory forms, and establishing 298 photo points with GPS coordinates.

The inventory was structured in a way that assured the validity and reliability of the data collected. Field inventory was generally conducted with two to four person teams. Team members were required to agree on all of the recorded data. Teams inventoried every road (most all of them currently closed) that enters or is adjacent to the potential WSA and recorded the present conditions. The ends of the roads, both current and proposed, were established with GPS coordinates. Photo points documented average route condition, unsustainable design features, man-made developments, and existing wilderness characteristics. Relevant photos and photo point coordinates are displayed in Appendix A. This information provided data for determining the appropriate boundary of the proposed WSA.

In addition to field survey, WMCL members gathered other information (see Appendix D – Inventory Base Map) critical for determining the WSA boundary including locations and/or information on:

- Habitat for Mexican spotted owl (MSO) and goshawk,
- Recreation Opportunity Spectrum (ROS) classes,
- Inventoried Roadless Areas (IRAs),
- Boundary of the existing Escudilla Wilderness,
- Boundary of the Hulsey Bench Wildlife Closure and
- Existing motorized travel system.

The WMCL, in conjunction with partner organizations, created a base map that included GIS layers for the items listed above. WMCL members met with Ray Rugg, the Alpine Ranger District Timber Staff, to gather information and discuss the Alpine and Nutrioso WUI projects. Finally the current Travel Management Modified Proposed Action was considered in an effort to accommodate a majority of the proposed motorized routes.

After careful consideration of all of this information, the WMCL developed two proposals for expanding the existing Escudilla Wilderness.

Proposed Escudilla Wilderness Additions WSA – Alternative 1

General Description:

In Alternative 1, the proposed Escudilla Wilderness Additions WSA includes one large and one small unit totaling 17,233 acres. Together with the existing Escudilla Wilderness, this would create a single 22,410-acre wilderness. Both of the units directly connect to the currently designated wilderness area. The larger unit is a horseshoe shape that wraps almost completely around the Hulsey Bench Wildlife Closure, the currently designated wilderness, and Terry

Flat. Terry Flat would continue to accommodate motorized access via Forest Road 8056. The smaller unit includes the western slopes between the Hulsey Bench Wildlife Closure and the currently designated wilderness. (see Map 1, or large format in Appendix D)

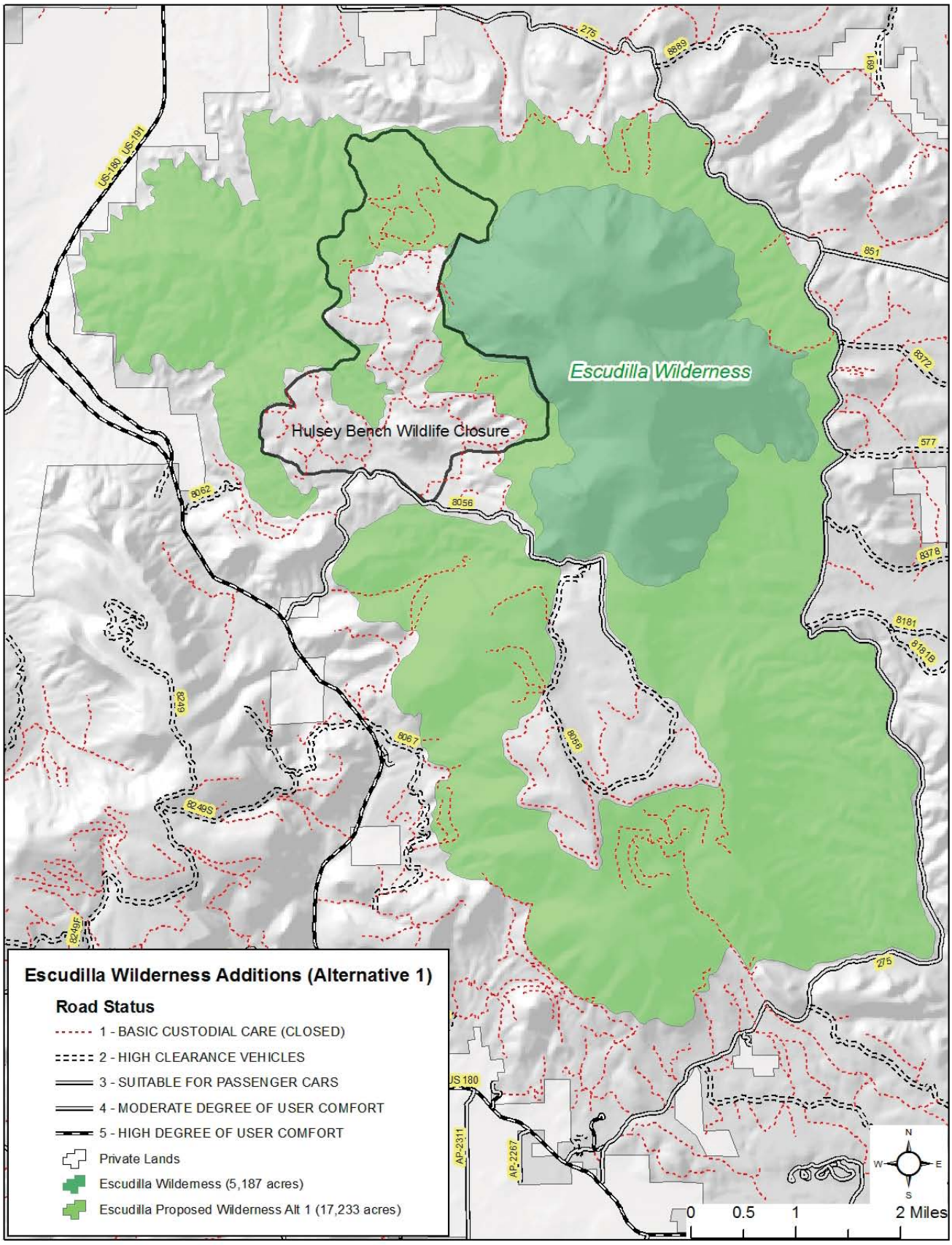
Physical Description (from the Hulsey Lake/Terry Flat Road #8056 and proceeding clockwise):

The smaller unit generally follows the unroaded area between the Hulsey Bench Wildlife Closure and the currently designated wilderness.

The larger unit includes:

- The steep slopes between Nutrioso and the Hulsey Bench Wildlife Closure including portions of Hulsey Creek, Milk Creek, the prominent Datil formations, and Watts Creek where it connects to the currently designated wilderness.
- At this point the WSA proposal stays between the wilderness area and the planned cutting units of the Nutrioso Wildland Urban Interface (WUI) through the upper reaches of Woods Canyon and Davis Creek where the outside boundary approaches Forest Road 275.
- The proposed boundary maintains a 150-foot buffer from Forest Road 275 to accommodate opportunities for dispersed camping and roadside fuelwood gathering.
- At Mamie Creek the buffer from Forest Road 275 is increased to circumvent a popular dispersed camping area.
- The boundary resumes along the 150-foot buffer of Forest Road 275 until it enters the Stone Creek drainage.
- At this point the proposed WSA boundary maintains a 100-foot buffer along the west side of Stone Creek to accommodate maintenance and potential reconstruction of structures intended to stabilize the stream banks and fragile Datil soils.
- At the confluence of Stone and Bob Thomas Creeks, the boundary maintains a 100-foot buffer to the north of Bob Thomas Creek until passing through a low saddle and entering Little Creek.
- The boundary crosses Little Creek (at the gate on Road 276I) and proceeds toward the west along the proposed cutting unit boundary of a small WUI intended to safeguard private property in the Cotton Flat area.
- The WSA boundary then connects to and follows the Alpine WUI cutting unit boundaries intended to protect Alpine, Georges Lake basin, Talwiwi and Alpine Divide campground.
- At this point the proposed WSA boundary circumvents previously logged cutting units to Crackerjack Tank and enters into and crosses Paddy Creek drainage.
- The proposed boundary accommodates the popular dispersed camping area along Paddy Creek and maintains a 150-foot buffer along Forest Road 8056 to the old Terry Flat Road that was abandoned with the Watts Timber Sale.
- The proposed WSA boundary then follows this decommissioned route avoiding a rehabilitated materials pit eventually resuming a 150-foot buffer with Forest Road 8056 and proceeding to Terry Flat.
- The boundary then circumvents Terry Flat by maintaining a 150-foot buffer around roads proposed to be left open in the Travel Management Modified Proposed Action to where it intersects the boundary of the Inventoried Roadless Area (IRA).
- The proposed WSA boundary then follows the western IRA boundary and eventually another 150-foot buffer of Terry Flat Loop Road 8056 circumventing the Escudilla trailhead where it connects to the currently designated wilderness.

With this alternative, we recommend that the Hulsey Bench Wildlife Closure Area be managed in a way that would facilitate its inclusion into the Escudilla Wilderness at a later point in time.

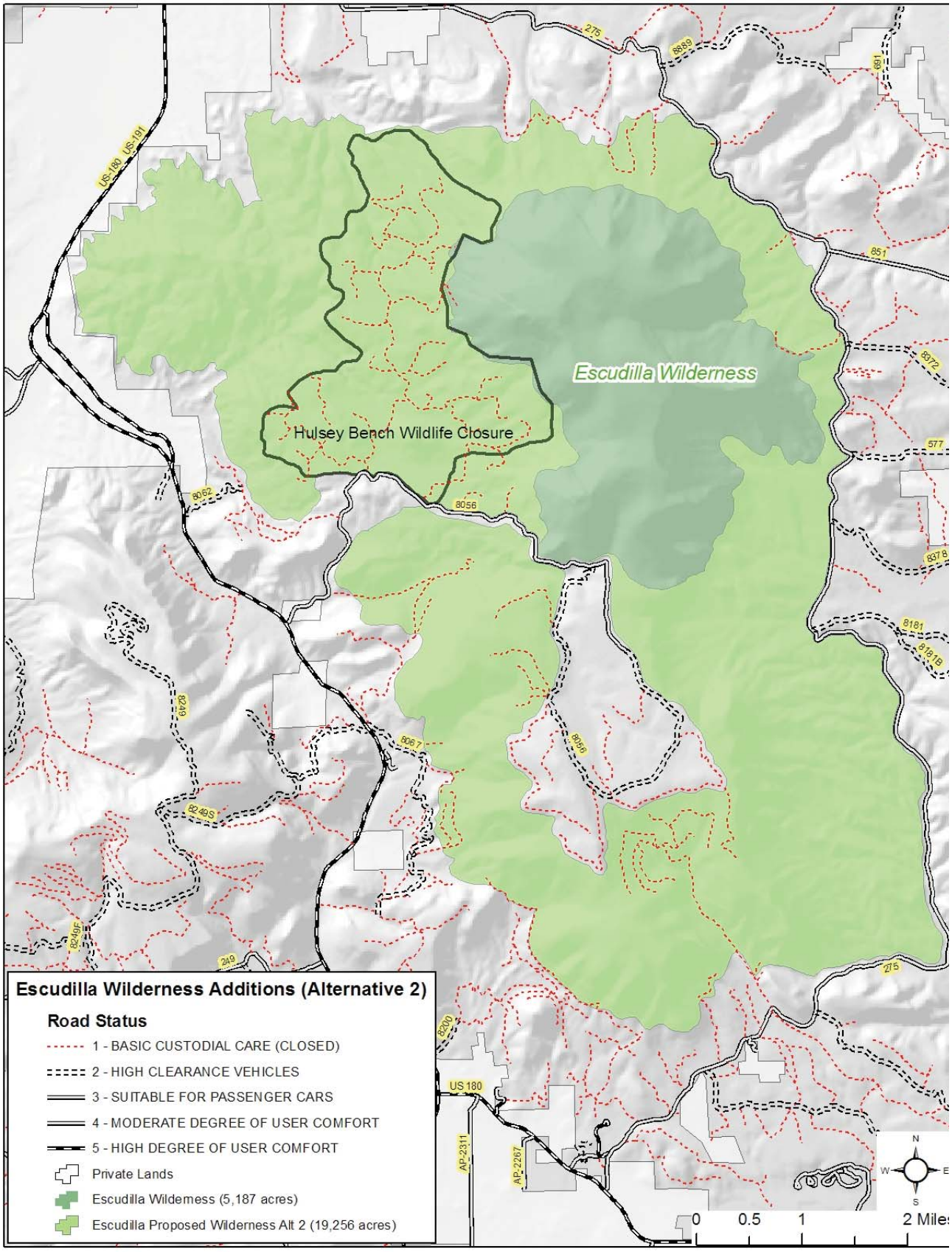


Map 1 – Proposed Escudilla Wilderness Additions - Alternative 1

Escudilla Comprehensive WSA Proposal - Alternative 2 (preferred by WMCL)

The White Mountain Conservation League prefers Alternative 2 for the Escudilla Wilderness Additions WSA. Alternative 2 is a more comprehensive proposal that provides permanent protection as well as appropriate management for the entire mountain. It provides a single wilderness addition totaling 19,256 acres that completely envelops the currently designate Escudilla Wilderness creating an Escudilla Wilderness that would include 24,443 acres. The primary difference between Alternatives 1 and 2 is that in Alternative 2 the entire Hulsey Bench Wildlife Closure to the north of Hulsey Lake would be included within the WSA. We believe that this proposal is realistic but we recommend certain restoration activities that would reduce the visual impacts of previous management and would help prepare this proposed unit for eventual congressional designation. (See Map 2, or large format in Appendix D)

WSA Alternative 1 depends on the continued commitment from the Forest Service to manage the Hulsey Bench Wildlife Closure as a non-motorized wildlife habitat and recreation area. This commitment is important to ensure the integrity of the designated wilderness and the new additions. Alternative 2 incorporates most of the Hulsey Bench Wildlife Closure allowing the Forest Service to manage more easily the entire wilderness area. In most ways this alternative will be more easily signed and more easily understood by the public making the management of the entire wilderness more seamless.



Map 2 – Proposed Comprehensive Escudilla Wilderness Additions – Alternative 2

Road Decommission and Restoration Recommendations

Table 1 lists the WMCL recommendations regarding road decommissioning and rehabilitation for Alternative 1. Table 2 presents the additional decommissioning and rehabilitation required for Alternative 2. All of the listed roads are currently classified as Maintenance Level 1 and are currently closed for public access. Decommissioning of the recommended roads allows the area to be considered for inclusion in the Escudilla Wilderness Additions WSA.

Table 1 – Proposed Route Decommissioning and/or Restoration Needs for Alternative 1 (Starting at the Escudilla trailhead on Terry Flat and heading west and north around Hulsey Bench Wildlife closure and then generally proceeding clockwise around the perimeter of the WSA proposal, returning to Terry Flat and then proceeding counterclockwise around Terry Flat back to the Escudilla trailhead. See Appendix A for reference photos.)

Route(s) #(s)	Description	Recommended Action
8056M	Entire route is barely discernable. This route is currently closed to the public via the Hulsey Bench Wildlife Closure and as a Maintenance Level 1 road.	Decommission this route. No rehab is necessary as the road is nearly completely restored with the grassed and trees. See Photo Pts 8056-1 & 8056M-2.
8056S	A portion of this as mapped for the TMP is within the currently designated wilderness. WMCL survey found the end of this route to be at the WA boundary (GPS pt: 0671605, 3758854)	Change the USFS transportation system inventory map to show the road ending (as it does) at the currently designated wilderness boundary. See Photo Pt 8056S-3.
8056U	The portion of 8056U that is north and west of junction with 8056V. This segment is currently closed to the public via the Hulsey Bench Wildlife Closure and as a Maintenance Level 1 road.	Decommission this segment of the route. It is barely discernable. No rehab is necessary other than to let it continue to recover naturally. See Photo Pts 8056U-2 & 8056-3.
8056O, 8056Y, 8056Z	Entirety of all routes. These routes are currently closed to the public via the Hulsey Bench Wildlife Closure and as a Maintenance Level 1 road.	Decommission these routes. This will provide a broad wildlife corridor including the majority of the upper Watts Creek tributaries and provide connectivity between the proposed WSA unit and the currently designated wilderness. These particular routes are barely discernable at this time. No rehab is necessary other than to let it continue to recover naturally. See Photo Pts 8056OY-1, 8056OY-5, 8056OY- 4, 8056Z-1 & 8056Z-3

Route(s) #(s)	Description	Recommended Action
8056A	Northern portion of the 8056A road from the junction with 8056W to the northern terminus. This segment is currently closed to the public via the Hulsey Bench Wildlife Closure and as a Maintenance Level 1 road.	Decommission this segment of the route. This will provide a broad wildlife corridor including most of the upper Watts Creek tributaries and provide connectivity between the proposed WSA unit and the currently designated Wilderness. This will require some rehab effort to accelerate naturalization and to remove two culverts. See Photo Pts 8056A-1, 8056A-1A & 8056A-2
Un-numbered	Currently is a decommissioned route in Woods Canyon begins at junction with RD 275.	Rehab work is recommended – either mechanical or hand crews. Allow for occasional administrative use to maintain spring. Photo Pt WDAB-3
8448	Currently closed portion of 8448 that falls outside of proposed WSA (which follows the boundary of Nutrioso WUI).	Decommission and plan for rehab. Maintain the current road closure near FSRD 275. Photo Pt 8448-1
8436	Currently closed portion of 8436 that falls outside of proposed WSA (which follows the boundary of Nutrioso WUI).	Decommission and plan for rehab. Maintain the current road closure near FSRD 275. Photo Pts 8436-1
8952	Currently closed portion of 8452 that falls outside of proposed WSA (which follows the boundary of Nutrioso WUI).	Decommission and plan for rehab. Maintain the current road closure near FSRD 275. Photo Pts 8452-1 & 8452-2
275V	Shown as closed (Maintenance Level 1) route on existing road inventory (TMP map 'existing but closed roads')	Not evident or found during field survey. Consider removing from road inventory – particularly portion within the currently designated wilderness.
275I, 275I1, 275L, 275M 8055, 8055A, 8055B	Little Creek drainage - Beginning at the lower gate on 275I, all of the roads currently shown as closed (Maintenance Level 1) including the decommissioned and unnumbered route used during the Roughriders' ORV Outlaw Jamboree to connect to 8057U on Terry Flat.	Decommission and remove from the road inventory. All routes currently closed and within the Non-motorized ROS Class. Rehab work will be necessary on the eroding portions of 275I, 275I1, 275L and the unnumbered route connecting to 8057U used by the Roughriders' ORV Outlaw Jamboree. Other portions will continue to restore naturally by eliminating unauthorized ORV use. Reestablish the two closure barriers as they were in 2001. Photo Pts 275I-11, 10, & 9; 275I1-1; 275L-1, 2, 5 & 7; 8055A-3; 8055B-1

Route(s) #(s)	Description	Recommended Action
8200S	Northern end of 8200S (approximately 150 yards) from the junction of the Roughriders' ORV Outlaw Jamboree trail coming up from Talwiwi to its northern terminus.	Decommission and remove this 150 yard road segment from road inventory. This route is currently closed and within the Non-Motorized ROS Class. Photo Pts 8200S-1 & 2.
8066, 8065	All of 8065 to the east of the Paddy Creek dispersed camping zone and the portion of 8066 to the north of Crackerjack Tank and connecting to 8065. Both are currently closed to the public (Maintenance Level 1) and both described segments are wholly within a Non-Motorized ROS Class.	Road closure barriers and signs will be needed at the Paddy Creek parking/camping zone and near Crackerjack Tank. Route 8065 should be converted to a non-motorized trail and the described portion of 8066 should be decommissioned and rehabilitated as this steep route exhibits an unsustainable trail design resulting in significant erosion. Photo Pts 8066-9 & 10
8066H	Spur road to the south of Crackerjack Tank	Not evident as mapped or found during field survey. Decommission and remove from road inventory.
8057H, 8057L, 8057M, 8057N	All of these roads beyond the effective closure barriers just off of the Terry Flat Loop road 8056. These are currently closed to the public (Maintenance Level 1) and are wholly within a Non-motorized ROS Class.	Decommission these roads. The current barriers are effective so the routes can continue to restore naturally. Photo Pts 8057H-1 & 2; 8057L-1 & 2; 8057M-1
8057U	The southern portion 8057U that has been excluded from the open road system in the TMP Modified Proposed Action. to allow access to the dispersed campsite depicted on the TMP MPA map	Decommission this segment of 8057U. Road closure barrier and sign is needed just beyond the dispersed campsite depicted on the TMP MPA map. The closed route should be rehabilitated with mechanical equipment and hand work to accelerate the process.

Table 2 – Additional Proposed Route Decommissioning and/or Restoration Needs for Alternative 2.
Alternative 2 includes all of the decommissioning from Alternative 1 with the following additions:

Route(s) #(s)	Description	Recommended Action
8056A through Z, 8057A, and 8057D-F	For Escudilla Wilderness Additions –Alternative 2: All of the Maintenance Level 1 roads within the Hulsey Bench Wildlife Closure Area and two small roads that go north of 8056 between the closure area and Escudilla trailhead.	For Escudilla Wilderness Additions –Alternative 2: Decommission all of the roads on Hulsey Bench. Some restoration with mechanical equipment and hand work is recommended to accelerate the natural restoration process. However, with the exception of 8056A, the roads recommended for decommissioning and restoration are currently unused. Grass and trees are growing in the roadbeds and it is often difficult to find the beginning of the roads.

(Note: The following discussion regarding wilderness characteristics, resource opportunity costs and benefits of the wilderness designation apply to both of the above-described alternatives. The only difference involves the boundary on Hulsey Bench Wildlife Closure and the recommendations regarding road decommissioning and rehabilitations on Hulsey Bench.)

Wilderness Characteristics (Capability)

The following criteria are provided in Section 2 (c), "Definition of Wilderness" of the Wilderness Act of 1964.

Size:

The proposed Alternative 1 WSA addition to Escudilla Wilderness is comprised of two units totaling 17,233 acres. Both units attach directly to the currently designated Escudilla Wilderness so the size of the proposed WSA addition conforms completely to the Forest Service Guidelines (Forest Service, 2007b) of being greater than 5000 acres or being contiguous to a currently designated wilderness.

Alternative 2 totals 19,256 acres and also conforms to the Forest Service Guidelines.

Manageability:

The size, topography, and location of proposed Escudilla Wilderness Additions make it feasible to manage it "...for the use and enjoyment of the American people in such manner as will leave them (public lands) unimpaired for future use as wilderness..." (Wilderness Act, 1964). Encompassing 22,410 acres for Alternative 1 or 24,443 acres for Alternative 2 (including the existing 5187 acre wilderness unit), the Escudilla Wilderness Additions proposal is large enough that it "...has natural integrity or appears to be natural and free from disturbance so that the normal interplay between biotic species inhabiting the area continues" (Forest Service, 2007b). The size of the unit also prohibits external influences from penetrating the inner portions.

The varied topography and rough terrain have helped limit the amount of civilized intrusion into the area. Based on field inventories, the most common uses of the proposed Escudilla Wilderness Additions are ranching, hunting, and non-motorized recreation. Wilderness designation would not prohibit any of these activities and would likely improve the variability and numbers of game species.

Alternative 1 includes the only portions of the proposal with relatively narrow segments (less than ½ mile wide). These narrow segments are adjacent to the Hulsey Bench Wildlife Closure Area. The management direction of Hulsey

Bench, including the prohibition on motorized public access, is quite compatible with managing the proposed WSA.

With Alternative 2, none of the connecting segments are close to the ½ mile limit. The boundaries of the proposed WSA allow for reasonable setbacks from natural and physical features such as Stone Creek and Forest Road 275. In other areas the boundaries follow cutting units established by the Alpine and Nutrioso WUI plans so they can be easily located and posted. The White Mountain Conservation League is committed to help post and monitor the boundary of an eventual WSA unit.

Naturalness:

To qualify as wilderness, an area must be substantially natural where the imprint of man cannot dominate (Wilderness Act, 1964). The inventories of the proposed Escudilla Wilderness Additions WSA show that the area appears to have been primarily affected by the forces of nature with the imprint of man substantially unnoticeable. Previous vegetative treatments associated with Hulsey Bench, Paddy Creek and Little Creek occurred over 25 years ago. The tree stumps are rotting and becoming less visible and are not unlike the diminishing impacts of the Escudilla Fire salvage operation that occurred within the currently designated Escudilla Wilderness. Within the majority of the unit, the visitor is immersed within a picturesque landscape and serene silence making the proposed Escudilla Wilderness Additions WSA an ideal addition to the National Wilderness Preservation System.

Hulsey Bench returning to natural state

Opportunity for Solitude:

Composed of over 22,000 acres (over 24,000 acres for Alternative 2), the proposed Escudilla Wilderness Additions WSA in combination with the existing Escudilla Wilderness is of sufficient size and shape to offer abundant opportunities for solitude. The rising and falling topography acts not only as a barrier from external non-natural influences but also as dividers within the area itself. A person seeking solitude can easily find it among the many drainages and ridges within the proposed WSA. In particular, the drainages and tributaries

of Little, Paddy, Hulsey, Milk, Watts, Davis, and Mamie Creeks provide exceptionally quiet sanctuaries for those seeking solitude. Various vegetative types within the proposed wilderness area assist the topography in providing solitude.

Horse back rider encountered in Little Creek

Primitive and Unconfined Recreation:

The topography and diversity exhibited at Escudilla combine to offer near endless types of primitive and unconfined recreation. Visitors can experience majestic wildlife such as black bear (*Ursus americanus*), mountain lion (*Puma concolor*), Rocky Mountain elk (*Cervus elaphus nelsoni*), mule deer (*Odocoileus hemionus*), various raptors such as red tail hawks (*Buteo jamaicensis*) as well as plentiful snakes, lizards and other reptiles. A few examples of recreation types that the proposed Escudilla Wilderness Additions WSA would lend itself to are hiking, backpacking, horseback riding, bird watching, wildlife viewing, hunting, cross-country skiing, orienteering, and many others. In particular, Paddy Creek is a popular birding destination. Due to its seclusion from significant population centers the proposed Escudilla Wilderness Additions WSA also offers excellent star gazing.

Cross-country Skiers in the Hulsey Creek Drainage

The proposed WSA provides a unique opportunity within Arizona Hunting Unit 1 for quiet, fair-chase hunting. The lower slopes within the Punchbowl (eastern slopes of Escudilla) are dominated with aspen, golden current and other forage plants that collectively provide outstanding habitat

and opportunities for hunting mule deer, elk, and black bear. The drainages and ridges associated with Little, Paddy, Hulsey, Milk, Watts, Woods, Davis, and Mamie Creeks are particularly desirable for elk hunting.

Supplemental Values:

Supplemental values are referenced in section 2(c)(4) of the Wilderness Act (1964) and refer to values such as "ecological, geological, or other features of scientific, educational, scenic, or historical value." Previous Forest Service wilderness inventories have focused primarily of the natural appearance and opportunities for solitude and primitive unconfined recreation. The supplemental values associated with the proposed Escudilla Wilderness Additions WSA have not been adequately examined in previous wilderness inventories and they represent new information not previously considered.

Geological Value

Escudilla Mountain represents an immense volcanic feature on the southeastern edge of the Colorado Plateau. The volcanic history is evident by the lava tube vents near the peak and the massive basalt talus slopes that are visible for miles. Fragile Datil formations extrude from the lower slopes of the mountain. Escudilla is the third highest peak in Arizona. It forms the divide between the Little Colorado and Gila River basins.

Ecological/Scientific Values

Ecosystem fragmentation caused by urbanization and development is considered the number one threat to the biodiversity of the region and is not expected to diminish during our lifetimes (Kaufman & Franz, 1996). The administrative designation of the proposed Escudilla Wilderness Additions WSA would help reduce ecosystem fragmentation by protecting it from becoming roaded and further developed. Designating the Escudilla Wilderness Additions WSA will also create a larger wild land system including the currently designated Escudilla Wilderness, the Hulsey Bench Wildlife Closure, and the drainages and lower slopes of the proposed Escudilla Wilderness Additions WSA. This larger wild land area will help sustain suitable habitat for large predators as well as facilitate healthy, functioning ecosystems (Foreman, 2005).

Leopold, in his essay "Escudilla," wrote of the demise of Old Bigfoot, who was reputed to be the last surviving grizzly bear in Arizona. It was not a coincidence that the grizzly, as a species, found its final refuge on Escudilla. Presently Mexican gray wolves (*Canis lupus baileyi*) are being restored to the wilds in the White Mountains, and not surprisingly they too have found refuge upon Escudilla. Their primary prey includes elk and deer, and success of the recovery effort depends on providing undeveloped habitat where natural interactions are unfettered. WSA designation of the proposed Escudilla Wilderness Additions would also provide ideal habitat for predators such as coyotes (*Canis latrans*), black bear (*U. americanus*), bobcat (*Lynx rufus*), and mountain lion (*P.concolor).*

The proposed Escudilla Wilderness Additions WSA also provide essential habitat for other species listed under the Endangered Species Act. The entire mountain falls within "critical habitat" for Mexican spotted owl (*Strix occidentalis lucida*). Jim Copeland, Alpine Ranger District biologist and acknowledged MSO expert indicates that, while limited surveys did not identify nesting pairs, Paddy Creek and Little Creek drainages both exhibit highly suitable habitat for the owl. Additionally, a portion of Milk Creek within the proposed Escudilla Wilderness Additions WSA includes an MSO Protected Activity Center. Consultation in 2006 with the U.S. Fish and Wildlife Service regarding the Roughriders' ORV Outlaw Jamboree indicated that a motorized event including Paddy Creek and Little Creek "may affect" MSO. The administrative designation of the proposed Escudilla Wilderness Additions WSA will provide long-term protection for MSO by ensuring compatible management activities.

The riparian creeks and canyons within proposed Escudilla Wilderness Additions WSA are ecologically significant. Riparian areas, which exist on less than 2% of the land in Arizona, are critical habitat in the desert Southwest that helps sustain healthy populations of fish and wildlife (Baker et al., 2004). In particular, the drainages of Little, Paddy, Milk, Watts, and Mamie Creeks serve as important corridors connecting the lower slopes with the higher elevation meadows of Terry Flat, Tool Box Draw, Government Meadow, and Bead Springs. In addition, Paddy Creek has been identified as potential suitable habitat for Little Colorado River spinedace (*Lepidomeda vittata*), listed as threatened under ESA. Sustained drought and climate change have caused pool drying within the designated critical habitat that includes Nutrioso Creek. Paddy Creek is an important tributary of Nutrioso Creek making it an important drainage in the area. The administrative designation of the Escudilla Wilderness Additions WSA will provide long-term protection for these essential riparian areas by ensuring compatible management activities.

Scenic Value

The opportunities for enjoying quiet scenery abound on Escudilla. The ridge top views from the Datil formation outcrops above Paddy Creek are spectacular. The deciduous foliage within the Punchbowl is colorful year round but in the autumn it is breathtaking. The scenic views of Escudilla Peak from the lower ridges and slopes are consistently rewarding. Escudilla Peak offers outstanding vistas of lower ridges and valleys.

WMCL members enjoying Paddy Creek

Historical/Educational Values

The historical significance of Escudilla Mountain includes the prehistoric shrines on Escudilla Peak and Bead Springs, historic fireguard cabin, and the ever-popular fire lookout. However, for the purpose of this proposal it is felt that Aldo Leopold's affinity for Escudilla provides the most powerful justification for protecting the wilderness character of the mountain. This proposal purposefully protects the entire mountain while still providing reasonable access for enjoyment by all. The WMCL "Thinking like a Mountain" vision will provide the Forest Service with perhaps the best educational opportunity in Arizona to celebrate Leopold's contribution to the agency and to the development of the Wilderness Preservation System.

Resource Opportunity Cost (Availability)

Mineral Resource:

There are no mining claims or known exploitable mineral resources within the proposed Escudilla Wilderness Additions WSA.

Grazing:

There are five grazing allotments that utilize forage within the proposed Escudilla Wilderness Additions WSA. They include Escudilla South, ELC, Stone Creek, Alpine, and Williams Valley. The majority of the available forage is within the Escudilla South allotment that has been and is currently managed in long-term non-use.

Eventual wilderness designation would not reduce the number of livestock allowed to graze within the proposed unit. Grazing capacity within wilderness is determined through the normal allotment management planning. Maintenance of water developments can possibly be maintained using mechanized equipment if that was the original method of development and maintenance. While affected livestock permittees may or may not prefer wilderness designation, designation as a WSA and eventually a wilderness is not anticipated to reduce livestock operations.

Timber Resource:

The timber program on the Alpine Ranger District is focused primarily on forest restoration activities that generally do not add revenue to the US Treasury. Because of steep slopes, the areas within the proposed Escudilla Wilderness Additions that could possibly be mechanically treated are limited to Hulsey Bench and portions of Paddy and Little Creeks. The proposed Escudilla Wilderness Additions WSA purposely excluded Wildland Urban Interface units within ½ mile of communities that could reasonably be treated mechanically. Once the WUI treatments are completed, prescribed fire could appropriately perform restoration treatments. Additionally, fragile Datil soils in Paddy Creek would likely be better managed with non-mechanical treatments.

Alpine and Nutrioso WUIs:

The Alpine WUI area occurs entirely within previously logged areas and generally does not incorporate the steep slopes of Escudilla Mountain. Therefore the proposed WSA boundary either exactly follows or is entirely outside of the Alpine WUI area boundary.

The proposed WSA boundary follows the Nutrioso WUI boundary with a few exceptions. Mr. Rugg indicated that some of the proposed treatments to the east of Nutrioso were not going to be mechanically treated because of lack of access, because of slopes over 40% or because of the fragile Datil soils. He indicated that treatment of these areas would likely be limited to prescribed fire. Based on this information, the WMCL proposed a WSA boundary that excluded the areas that could be mechanically treated but included inaccessible lands and steep slopes that could be better treated with prescribed fire. Where steep slopes joined directly to private lands, a 150-foot buffer was applied that would allow land owners to manage their fences and property lines.

The proposed WSA boundary does not conform to the Nutrioso WUI boundary in the Paddy Creek drainage to the south of the FR 8056. Mr. Rugg indicated that the proposed mechanical treatments in this portion of the Paddy Creek drainage were of low priority and are not scheduled until the final year of the WUI project. Further, the fragile Datil formation soils exposed in Paddy Creek are poorly suited for supporting extensive mechanical treatments and therefore treatments with prescribed fire would be highly preferable and compatible with management of a WSA.

The Paddy Creek drainage is a very important ecological component of the WSA proposal. Jim Copeland, the Alpine Ranger District staff biologist, indicated that this portion of Paddy Creek, while not currently known to be occupied by nesting Mexican spotted owls, provides exemplary suitable habitat within the designated "critical habitat" for the owl. It also represents an important connecting corridor for large ungulates and large predators. Managing this area as a WSA would still allow WUI treatments to be achieved using prescribed fire. Also the use of prescribed fire rather than mechanical treatments would be compatible with protecting suitable MSO habitat.

Motorized Travel Management & Recreation Opportunity Spectrum (ROS):

WMCL volunteers carefully considered how this proposal would relate to the Forest's most current ROS classifications, the existing Transportation Inventory, and the Initial and Modified Proposed Actions for the ongoing Travel Management Planning process. The most recent ROS inventory conducted in 1995 acknowledged opportunities for quiet and non-motorized recreation in Paddy Creek and Little Creek drainages with the Semi-Primitive Non-motorized ROS class. Including this area within the WSA will maintain a quiet sound shed that is positioned directly below Toolbox Draw, clearly enhancing the wilderness

experience within the most heavily visited portion of the currently designated Escudilla Wilderness.

Our goal was to avoid disruption and provide compatibility with the TMP process to the extent possible while protecting the essential wilderness characteristics within our proposal. We are satisfied that our proposal will have a minimal impact to the existing or proposed motorized travel management system. Specifically:

1. No motorized routes currently open to public use (as depicted in the existing road system map posted on the ASNF Travel Management webpage) will be closed as a result of this proposal.

2. Nearly all of the acreage within this proposal falls within the Semi Primitive Non-motorized ROS class including all of the area within the Paddy Creek and Little Creek drainages. A minor portion along the north boundary of the proposed WSA is currently classified as Semi Primitive Motorized, although no routes within that area are being proposed to be opened for public motorized access in either the Initial or Modified Proposed Actions for the TMP. *(Note: the Semi-primitive Non- motorized ROS Class automatically provides an arbitrary ½ mile buffer from open roads. This proposal generally places the WSA boundary at a more manageable location closer to the open road.)*

3. This proposal does accommodate what we were advised was the ORV community's highest priority of providing a route from the Saffel Canyon ORV area to Alpine as depicted in the Modified Proposed action for the TMP. *(Note – However, after encountering this route during field inventory east of Talwiwi we strongly suggest that a trails specialist evaluate and redesign this currently unsustainable route to mitigate the significant ongoing erosion.)*

4. This proposal does eliminate approximately 1.5 miles of proposed ORV trails in Paddy Creek drainage and approximately 2.2 miles of proposed trail in the Little Creek drainage (in both cases these segments are currently closed but have been included in the TMP Modified Proposed Action). *(Note: this would reduce the mileage of ORV trail in the Modified Proposed Action from 310 mi. to about 306 mi. or about a 1% reduction. WMCL will work with the USFS to identify alternative routes that are selected in more appropriate locations.)* Both of these routes include segments that exhibit severe erosion/sedimentation, and are not sustainable as currently located. Also, both routes were previously posted as closed and had exhibited significant restoration prior to being authorized for use in the annual Roughriders' ORV Outlaw Jamboree.

5. During the inventory of Little Creek, WMCL volunteers found the original vehicle closure signs thrown aside and hidden in the forest. Unfortunately ORVs use now occurs outside of the Roughriders' ORV Outlaw Jamboree event period and in locations other than the route approved for use

during the Roughriders' ORV Outlaw Jamboree. Both of these areas (Little Creek and Paddy Creek) are currently classified within the Semi Primitive Non-Motorized ROS class which we feel is most appropriate, and which we feel should have been honored by the Forest when evaluating the Roughriders' ORV Outlaw Jamboree permit request. Noise generated from ORV use in these drainages directly impacts the wilderness character of Escudilla Wilderness and both drainages provide essential wildlife habitat which warrant protection from resource damage and habitat fragmentation caused by ORV use. *(Note – WMCL volunteers encountered ORV users in both the Paddy Creek and Little Creek drainages. In Paddy Creek the ORV users indicated that they had received Forest Service permission to open a new trail connecting Paddy Creek to Terry Flat, and on subsequent field trips we noticed significant chain saw use and ORV tracks on routes not even included in the Modified Proposed Action or the approved short-term Roughriders' ORV Outlaw Jamboree routes! Volunteers also observed unauthorized new trail construction in the Little Creek drainage. WMCL has documented other instances of concern that the District managers are verbally approving the designation of previously closed routes ahead of the final TMP decision. While we hope that we witnessed unauthorized ORV activity, we insist that in the absence of a NEPA compliant decision these routes must remain closed.)*

6. The Terry Flat Loop Road 8056 provides for reasonable motorized access and appropriate opportunities for motorized dispersed camping. However, the TMP Modified Proposed Action proposes that this loop be opened to all motorized travel. This would encourage excessive noise disruptive to the very nearby Escudilla Wilderness. We therefore ask that FR 8056 and all open routes on Terry Flat be open only to highway legal vehicles – thus only allowing for ORVs that are registered, insured and operated by license drivers.

7. This proposal does request that some roads that are currently managed as level 1 maintenance category be decommissioned and restored either naturally or in limited cases mechanically.

A more detailed account of specific road recommendations, including photos, GPS coordinates and necessary actions, is provided in the road evaluation Table 1 and 2 on pages 16-19 and in Appendix A (photo point gallery).

Benefit of Wilderness Protection (Need)

The proposed Escudilla Wilderness Additions meets all the wilderness requirements listed in section 4 (c) of the Wilderness Act (1964), including optional Supplemental Values such as the geological, ecological and historical significance. The leading threat to maintaining wilderness character of the proposed Escudilla Wilderness Additions is the desire by the ORV user group to develop motorized recreation opportunities on Escudilla Mountain. Such activities would also adversely affect the experiential values of the currently designated Escudilla Wilderness. The resource costs of this proposal are small in relationship to the importance of maintaining the critical characteristics in the existing wilderness. There is a clear need and an obvious benefit to the

Wilderness Preservation System for administratively designating the proposed Escudilla Wilderness Additions WSA.

1. Currently the Escudilla and Mount Baldy Wilderness Areas receive very high use. The 2000 Census Report indicated that the White Mountain Area was the fastest growing (by percent) region in Arizona. There is a need to provide additional capacity and high elevation opportunities for wilderness users in the White Mountains.

2. Currently the level of recreational use in the existing Escudilla and Mount Baldy Wilderness Areas is mostly in the form of day use. This is primarily because of the limited trail system and the inability to find quiet and remote campsites. The proposed Escudilla Wilderness Additions will provide much broader and well-placed opportunities for visitors to experience solitude and different forms of primitive and unconfined recreation such as backpacking and horse packing.

3. There is a glaring need to permanently protect more wilderness-quality lands on the Apache-Sitgreaves National Forests. WMCL's research disclosed that less than 1% of the Forest has been designated as wilderness – by far the least of any Forest in the Region! Even after including the Blue Range Primitive Area, the Apache-Sitgreaves National Forest manages only 7.7% of it's lands to protect wilderness characteristics – far below the regional average of 13.6% of all Forest Lands. (See Appendix B)

4. The Hulsey Bench Wildlife Closure highlights the long-standing recognitions of the need to provide refugia on Escudilla. A number of species including Mexican gray wolf, mountain lion, elk, deer, and Mexican spotted owl are know to benefit from quiet, non-motorized management. The proposed Escudilla Wilderness Additions WSA will provide protection to important linkages through Little, Paddy, Milk, Watts, and Mamie Creeks, enhancing refuge across the full range of elevations on Escudilla. Current proposals to develop motorized ORV trails on Escudilla Mountain particularly threaten these specific and essential wildlife linkages.

5. The Forest Service has identified the Arizona White Mountains as part of a sub-province of the Colorado Plateau unit (Forest Service, 1994). Escudilla Mountain is a prominent and identifiable landform feature within this sub-province. Unlike the currently designated Escudilla and Mount Baldy Wilderness Areas that only protect the mountaintops, the proposed Escudilla Wilderness Additions WSA is specifically designed to provide comprehensive protection to the entire identifiable landform of Escudilla Mountain.

6. Last but certainly not least, this proposal provides a statewide and national opportunity for the Forest Service to pay tribute to the historical significance and influence of Aldo Leopold on management of our National Forests. Leopold is revered as the Father of the Wilderness. Furthermore

there is a powerful connection between Leopold and Escudilla. What better way is there to recognize Aldo Leopold's contribution to the Forest Service and to America than to adopt this "Thinking Like a Mountain" proposal to provide comprehensive protection of the wilderness values upon Escudilla Mountain.

"We all strive for safety, prosperity, comfort, long life, and dullness. The deer strives with his supple legs, the cowman with trap and poison, the statesman with pen, the most of us with machines, votes, and dollars, but it all comes to the same thing: peace in our time. A measure of success in this is all well enough, and perhaps is a requisite to objective thinking, but too much safety seems to yield only danger in the long run. Perhaps this is behind Thoreau's dictum: 'In wildness is the salvation of the world.' Perhaps this is the hidden meaning in the howl of the wolf, long known among mountains, but seldom perceived among men." Aldo Leopold, "Thinking Like a Mountain" A Sand County Almanac

Aldo Leopold, *Photo courtesy of the Leopold Foundation*

PART II: FOREST SERVICE PLANNING DIRECTIVES RELATED TO WILDERNESS

(Note: It is the purpose of this second part to discuss the technical aspects of the laws, regulations, directives and guidelines that pertain to the Forest Service's obligations and responsibilities to identify and evaluate the wilderness potential of National Forest Lands.)

Requirement for Wilderness Evaluation

The Forest Service is required to evaluate the Apache-Sitgreaves wilderness quality lands during the Forest Plan revision process due to the clear direction specified in the Arizona Wilderness Act of 1984 [Section 103(b)(2)] and as follows:

> *…with respect to the national forest system lands in the State of Arizona which were reviewed…in the second roadless areas review and evaluation…the Department of Agriculture shall not be required to review the wilderness option prior to the revision of the plans,* ***but shall review the wilderness option when the plans are revised****, which revisions will ordinarily occur on a ten-year cycle, or at least every fifteen years, unless, prior to such time the Secretary of Agriculture finds that conditions in a unit have significantly changed* (emphasis added).

The National Forest Management Act requires that, "Unless otherwise provided by law, all National Forest System lands possessing wilderness characteristics must be considered for recommendation as potential wilderness areas during plan development or revision (36 CFR 219.7(5)(ii), 2005, p. 48). In addition, Chapter 1923 of the Forest Service Manual on Land Management Planning (2006) states "Consideration of wilderness suitability is inherent in land management planning." Chapter 1923.03 continues by stating that

> "Unless otherwise provided by law, all roadless, undeveloped areas that satisfy the definition of wilderness found in section 2(c) of the Wilderness Act of 1964 should be evaluated and considered for recommendation as potential wilderness areas during plan development or revision."

All of these policies support creating a WSA for the Escudilla Wilderness Additions.

Identifying Potential Wilderness Areas

FSH 1909.12 - The Land Management Planning Handbook, Chapter 70 (Forest Service, 2007b) provides detailed direction for integrating wilderness evaluations during developing or revising a land management plan

Chapter 70 contains three types of inventory criteria: size, presence of roads, and presence of other facilities or influences of man. This inventory is done at the Forest level and involves reviewing the current inventory of potential wildernesses. Forests should start with their existing Inventoried Roadless Areas (IRAs) and add to that any additional areas that meet the inventory criteria in FSH 1909.12 Chapter 70 (Forest Service, 2007b). According to agency policy, the identification of potential wilderness should reflect all undeveloped lands on the National Forest that meet the criteria for wilderness. As such it should be comprehensive and include all lands that meet the criteria regardless of their classification during earlier rounds of planning (Forest Service, 2004).

Roads Criteria:

While some agency policy interpretations suggest the presence of a "classified road"[1] disqualifies that portion of the area from consideration as future wilderness (Forest Service, 2004b), we maintain that the presence of a "road" does not necessarily disqualify an area for wilderness designation. The wilderness legislative history supports closure and restoration of roads, even paved roads, to qualify areas for wilderness designation.[2] Scholars point out that the Wilderness Act embodies two distinct standards. One definition, in section 2(c)[3], provides a more permissive standard for designating a wilderness; a second definition, in section 4(c), provides strict standards for managing wilderness once designated (Turner, 2001:25-26). Section 4(c)'s prohibition against permanent roads in wilderness applies to designated wilderness. There is nothing in the Act prohibiting the designation of areas containing roads, only that once designated those roads must be restored to a non-mechanized trail or a natural condition (Scott, 2001a:31; and Turner, 2001:25). The currently designated Escudilla Wilderness is a perfect example of an area that previous to designation had an open road accessing a fire lookout tower. However, Congress legally designated the area in 1984, and the road was closed and allowed to restore over time.

The Wilderness Act's [Section 2(c)(1)] definition of legislated wilderness includes an area which "***generally appears*** to have been affected ***primarily***

1 Classified roads are roads wholly or partially within or adjacent to National Forest System lands that are determined to be needed for long-term motor vehicle access, including state roads, county roads, privately owned roads, National Forest System Roads, and other roads authorized by the Forest Service (36 CFR 212.1).

2 The third wilderness area designated by Congress after the 1964 Wilderness Act was the Great Swamp Wilderness in New Jersey, just 30 miles from Times Square. The local township agreed to close and restore to a natural condition a paved, two-lane road with ditches, shoulders, several bridges, and several suburban homes on private inholdings in order to qualify the area for wilderness. (Scott 2001, page 31)

3 "Definition of Wilderness ," Section 2(c) A wilderness, in contrast with those areas where man and his own works dominated the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped Federal land retaining its primeval character and influence, without permanent conditions and which (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.

by the forces of nature, with the imprint of man's work ***substantially unnoticeable***" (emphasis added). Some areas proposed for wilderness may not be entirely free of the imprint of man but may be fully capable of providing wilderness cf the public. Past timber harvest activities, evidence of old mining, some range improvements, minor recreation sites, water-related facilities, etc. may be included in proposed wilderness provided that they are substantially unnoticeable. The term "substantially unnoticeable," derived from the Wilderness Act, means that the average lay person would not recognized the impact or that the impact is minor in comparison to the larger landscape such that its impact is relatively slight or subordinate and not easily recognized (Forest Service, 2004b). In summary, an area should not be excluded from wilderness consideration because of evidence of past human activity, provided they are substantially unnoticeable, or could be rendered as such through restoration to a natural condition.

The proposed Escudilla Wilderness Additions WSA "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." As was the case in 1984 within the designated Escudilla Wilderness, there are some limited visual impacts that could be rendered substantially unnoticeable through restoration efforts and natural processes over time. *(Note: the visual impacts of ORV use in both the Paddy Creek and Little Creek Drainage were much farther along toward naturalization prior to reopening these routes for the Roughrider's ORV Outlaw Jamboree and those impacts could once again be rendered less visible. WMCL would make it a high priority volunteer project to restore these areas.)*

Evaluation of Potential Wilderness (Forest Service Handbook 2007, 1909.12_70, Section 72)

Forest Service Handbook, Section 1909.12 (Forest Service, 2007b), in particular, provides citizens guidance for preparing succinct proposals that will include the information that the Forest Service is required to evaluate. An area recommended as suitable for wilderness must meet the tests of capability, availability, and need.

Capability (Forest Service 2007, Section 72.1)

This section is intended to evaluate how well the area meets the definition of wilderness (Forest Service, 2007b, Section 72.1). This evaluation is done at the Forest level (Forest Service, 2006). The capability of a potential wilderness is the degree to which that area contains the basic characteristics that make it suitable for wilderness recommendation without regard to its "availability" for or "need" as wilderness.

Naturalness:

The proposed Escudilla Wilderness Additions "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work

substantially unnoticeable." Other criteria relevant to naturalness are presented in the Preservation of Landforms and Ecosystems discussed below.

Undeveloped:

The proposed Escudilla Wilderness Additions meets the Wilderness Act's [section 2(c)] definition as an area "retaining its primeval character and influence…" which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable". The proposed unit meets the agency's criteria for "undeveloped," that is, it generally lacks permanent human habitation and developments. A few stock tanks and spring developments affect very small areas and do not dominate the landscape.[4]

Experiential Criteria:

The proposed Escudilla Wilderness Additions meet the Wilderness Act's [section 2(c)] provision for providing "outstanding opportunities for solitude or a primitive and unconfined type of recreation." The proposed units also meet the agency's criteria for "Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation"[5] presented in FSH 1909.12 (Forest Service, 2007b). The proposed units' size and mountain and canyon environments enhance their outstanding opportunities for solitude and an unconfined type of recreation, providing a wilderness experience within magnificent areas that appear primarily affected by the forces of nature with the imprint of man substantially unnoticeable. The Apache-Sitgreaves Forest manages only a limited opportunity for primitive and unconfined recreation including three relatively small wilderness areas and the Blue Range Primitive Area, for a total of 203,500 acres, or less than 8 percent of the forest. While most of the area proposed for wilderness consists of lands previously designated and managed as "Primitive and Semi-primitive Non-Motorized Areas" (Forest Service, 2007b See map "trm_pachg-bm126k19x26.pdf"), the proposed wilderness would **permanently** protect additional area that affords quiet, non-motorized recreational opportunities (nature study, hunting, birding, horseback riding, and hiking) for a variety of users. Additionally, the proposed additions to the currently designated wilderness will preserve and enhance the primitive and unconfined recreation experience for visitors within the popular Escudilla Wilderness. This provides a desirable contrast considering over 6,000 miles of motorized routes and trails currently exist on the Apache-Sitgreaves National Forest, with over 1445 miles on the Alpine Ranger District.

Section 72.31 of the Forest Service Handbook (Forest Service, 2007b,) lists other "Factors" for wilderness recommendation, including several recreation-oriented considerations that are not consistent with the Wilderness Act**.** For example, the consideration that "the location, size, and type of other

4 Undeveloped. Determine the degree to which the area is without permanent improvements or human habitation. A measure of undeveloped is the level of human occupation and modification of the area including evidence of structures, construction, habitations, or other forms of human presence, use, and occupation (Forest Service 2007b, Section 72.1).

5 Outstanding Opportunities for Solitude or Primitive and Unconfined Recreation. Determine an area's capability of providing solitude or primitive and unconfined types of recreation. This includes providing a wide range of experiential opportunities such as: physical and mental challenge, adventure and self-reliance, feelings of solitude, isolation, self-awareness, and inspiration. (Forest Service 2007b, FSH 1909.12)

wildernesses in the general vicinity and their distance from the proposed area… [including] accessibility of areas to population centers and user groups" is not a consideration required by the Wilderness Act. In any event, Apache-Sitgreaves NF is readily accessible from urban areas including Phoenix, Flagstaff, Tucson, Albuquerque and El Paso. Although the Apache-Sitgreaves manages over one half million acres of designated roadless areas, the preponderance (61%, or 320,000 acres) consists of administratively designated Inventoried Roadless Areas that lacks the permanent protection of congressionally designated wilderness.

Special Features and Values

The proposed Escudilla Wilderness Additions has many of the supplemental values references in Section 2 (c) (4) of the Wilderness Act (1964) and Special Features and Values listed in FSH 1909.12, Section 72.1 (4) (Forest Service, 2007b). Perhaps the most significant special feature is the historical link with Aldo Leopold (see pages 25, Supplemental Values). However the Additions also include important habitat (or potential habitat) for three endangered species (Mexican spotted owl, Little Colorado River spinedace, and Mexican grey wolf) as well as many other less threatened species. Escudilla Mountain also forms the geological divide between the Little Colorado and Gila River basins.

Escudilla also is an important landscape feature that dominates the physical and emotional landscape of the White Mountains. As Aldo Leopold writes:

> Life in Arizona was bounded under foot by grama [sic] grass, overhead by sky, and on the horizon by Escudilla.
>
> To the north of the mountain you rode in honey-colored plains. Look up anywhere, anytime, and you saw Escudilla.
>
> To the east you rode over a confusion of wooded mesas. Each hollow seemed its own small world, soaked in sun, fragrant with juniper, and cozy with the chatter of pinon jays. But top out on a ridge and you at once became a speck in an immensity. On its edge hung Escudilla.
>
> To the south lay the tangled canyons of Blue River, full of whitetails, wild turkeys, and wilder cattle. When you missed a saucy buck waving his goodbye over the skyline, and looked down your sights to wonder why, you looked at a far blue mountain: Escudilla….
>
> There was in fact, only one place from which you did not see Escudilla on the skyline: that was the top of Escudilla itself. Up there you could not see the mountain, but you could feel it. (Leopold, 1966 pages 141-142).

Size Criteria/Manageability[6]:

The proposed Escudilla Wilderness Additions WSA (Alternative 1 = 17,233 acres; Alternative 2 = 19,255 acres) meets the minimum general criteria for size. The unit includes the Escudilla Inventoried Roadless Area and lands previously designated and managed as "Primitive and Semi-primitive Non-motorized Areas," but also includes additional undeveloped lands on the National Forest that meet the criteria for wilderness regardless of their classification during earlier rounds of planning. The steep and rugged terrain and general lack of motorized access facilitate preservation management of experiential quality and natural conditions.

The proposed Escudilla Wilderness Additions meet the agency's "Manageability" criteria.

- Boundary locations avoid conflict with important existing or potential public uses outside the boundary (including community fire protection).
- It is possible to readily and accurately describe, establish, and recognize boundaries on the ground.
- Boundaries, where possible, conform with terrain or other features that constitute an easily recognized boundary.
- The White Mountain Conservation League is committed to helping post and maintain the boundary as is necessary.
- Boundaries provide adequate opportunity for motorized access and traveler transfer facilities.

6 While the 5,000-acrea criteria is a useful guideline, it is not an absolute. For example, California's Faralon Wilderness (141 acres), Missouri's Leaf Wilderness (994 acres); Arkansas' Chamisso (455 acres) and Boboslof (175 acres) Wildernesses; Florida's Lake Woodruff (1,146 acres); Arizona's Baboquivari Peak Wilderness (2,040 acres); Arkansas' Big Lake Wilderness (2,143 acres); and other wildernesses including Florida's Billie Bay; Little Lake George and J.N. "Ding" Darling; Vermont's Bristol Cliffs; Minnesota's Agassiz; Illinois' Clear Springs, Garden of the Gods, Lusk Creek and Crab Orchid; Tennessee's Gee Creek and Little Frog; Washington's Glacier View; New Jersey's Great Swamp National Wildlife Refuge; South Carolina's Hell Hole Bay; Michigan's Horseshoe Bay; Louisiana's Lacassine; Virginia's Little Wilson's Creek; Oregon's Menagerie, and Massachusetts' Monomoy all are smaller than 5,000 acres (Landres and Meyer 1998).

Availability[7] (Forest Service, 2007b, Section 72.2)

This evaluates at the forest level the value of and need for wilderness compared to the value and need for other resources. We strongly believe that preservation as wilderness values of the proposed Escudilla Wilderness Additions far outweigh any commercial values derived through commodity extraction.

The proposed boundary purposely avoided including lands available to mechanical treatments planned under the Alpine and Nutrioso WUIs, with the exception of some proposed treatments in the Paddy Creek and Hulsey Creek drainages that are beyond ½ mile from private lands. Both of those areas are characterized by fragile soils where non-mechanical treatment is perhaps not the best option for vegetation management and community protection.

We believe that the proposed ORV routes in Paddy Creek and Little Creek are inappropriate in that both occur within lands that have most recently been classified as Semi Primitive Non-Motorized ROS Class. Most of the Apache-Sitgreaves National Forest is characterize with a high-density road system. The WSA classification would provide for non-motorized wildlife habitat and quiet recreation opportunities that are easily accessible to the residents and visitors of Alpine, Nutrioso, and surrounding White Mountain communities.

There are no mining claims within the proposed WSA. Grazing of livestock is an allowable use within WSAs and within designated wilderness. There are a few water developments within the proposed WSA that could be maintained under the status of a WSA. The water rights to Woods Canyon Spring are attributed to private land outside of the WSA unit, and continued maintenance can be allowed under the status of a WSA. Future congressional designation could evaluate whether occasional administrative access or a cherry-stemmed exclusion would be more appropriate.

7 All National Forest System (NFS) lands determined to meet wilderness capability requirements are considered potentially available for wilderness designation. However, 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. In evaluating availability, describe the other resource demands and uses that the area under evaluation could satisfy. Include all other resource potentials–pertinent quantitative and qualitative information including current use, outputs, trends, and potential future use, and outputs of the various resources involved. Constraints and encumbrances on lands may also govern the availability of lands for wilderness. Determine the degree of Forest Service control over the surface and subsurface of the area. The Forest Service should have sufficient control to prevent development of irresolvable, incompatible uses that would negatively affect wilderness character and potential. (Forest Service, 2007b)

Need[8] (Forest Service, 2007b, Section 72.3)

This criterion evaluates the contribution of potential wilderness to the overall National Wilderness Preservation System. Need, according to the agency, should be considered at the national, regional, and forest levels. Based on the attributes presented below, we believe that designation of the proposed wilderness addition is essential to provide long-term protection of Escudilla Mountain's unique ecological and experiential values. Escudilla is Arizona's third highest mountain and under this WSA proposal the entire mountain would be afforded reasonable yet permanent protection. Among Arizona's highest mountains, Escudilla would be the only one that was holistically protected. Finally, while the Forest Service has paid tribute to Aldo Leopold in multiple ways, this "Thinking like a Mountain" proposal specifically honors his initial Forest Service assignment and the birth of his "land ethic," therefore adding regional and national significance to this proposal.

In defining "Need" the FSH 1909.12 (section 72.31) presents a number of factors that should be considered including:

1. The location and size of other wilderness in general vicinity: The Apache-Sitgreaves National Forest has the smallest percentage of its total land area designated as wilderness (less than 1%) of any of the eleven National Forests in Region 3. Even when you include the Blue River Primitive area the total percent of the A-S National Forest that is managed as wilderness is less than seven of the remaining ten National Forests in Region 3.

2. Visitor pressure: As mentioned on the section on "Benefit of Wilderness Preservation System" (page 28), both the existing Escudilla Wilderness and nearby Mt. Baldy Wilderness, receive very high use. The population of the White Mountain region is growing quickly (see page 29) and the availability of wilderness lands in the Forest is limited (see 1 above). The National Recreation Trail to the Escudilla Lookout is the most popular hiking trail in the Alpine Ranger District (see page 9). Together these reflect a high level of visitor pressure on an area that currently has limited wilderness acreage. The Escudilla Wilderness Additions, WSA would provide new alternatives for quite recreation within the Forest.

3. Extent to which non-wilderness lands provide opportunities for recreation: As mentioned above the percentage of lands within the A-S National Forest that is managed as a wilderness or primitive area is limited. Much of the remaining forest lands have extensive road systems. Not including the roads that have been administratively closed, there are over 1,400 miles of roads in the Alpine Ranger District

8 Determine the need for an area to be designated as wilderness through an analysis of the degree to which it contributes to the overall National Wilderness Preservation System. Demonstrate this need through the public involvement process, including public input to the evaluation report. Deal with "need" on a regional basis and evaluate such factors as the geographic distribution of areas and representations of landforms and ecosystems. (Forest Service 2007b)

alone (see page 34). The proposed Escudilla Wilderness Additions WSA provides an easily accessible opportunity for quite recreation.

4. FSH 1909.12 (Forest Service, 2007b, Section 72.31) provides consideration for "the need to provide a refuge for those species that have demonstrated an inability to survive in less than primitive surroundings or the need for a protected area for other unique scientific values or phenomena." The proposed wilderness provides enhanced habitat for Mexican spotted owl, goshawk, Mexican gray wolf, black bear, elk, mountain lion, and deer. These species greatly benefit from wilderness designation by allowing them to persist in ecologically effective densities.

5. FSH 1909.12 (Forest Service, 2007b, Section 72.31) provides consideration for "an area's ability to provide for preservation of identifiable landform types and ecosystems. The currently designated Escudilla Wilderness only protects the top of the mountain. At 5187 acres, it is the third smallest of 90 wilderness areas in Arizona. It is also one of the most heavily used wilderness areas in Arizona**.** It is the primary intent of this proposal to provide permanent wilderness protection to nearly the entirety of Escudilla Mountain to protect a prominent landform, to connect important wildlife habitat from top to bottom, and to enhance wilderness experience.

The proposed Escudilla Wilderness Additions WSA would make an important contribution to the National Wilderness Preservation System (see above and section on "Benefit of Wilderness Preservation System" page 28). The hundreds of hours spent by local citizens to develop this proposal demonstrates the high level of interest and support within the local communities. This potential addition to the National Wilderness Preservation System is important to not only to the current residents, but to the future generations who will inhabit this landscape. As Aldo Leopold writes:

> To the laborer in the sweat of his labor, the raw stuff on his anvil is an adversary to be conquered. So was wilderness an adversary to the pioneer.
>
> But to the laborer in repose, able for the moment to cast a philosophical eye on his world, that same raw stuff is something to be loved and cherished, because it gives definition, and meaning to his life. This is a plea for the preservation of some tag-ends of wilderness, as museum pieces, for the edification of those who may one day wish to see, feel, or study the origins of their cultural inheritance. (Leopold, 1966, pages 264-265)

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Hiking the popular Escudilla trail to the lookout.

Appendix A: Photo Points Gallery

The Photos are arranged as follows: Starting at the Escudilla Trailhead on Terry Flat and heading west and north around Hulsey Bench Wildlife Closure and then generally proceeding clockwise around the perimeter of the WSA proposal, returning to Terry Flat and then proceeding counterclockwise around Terry Flat back to the Escudilla trailhead.

Photo 8057F-3: Scenic view of Mountain from end of road 8057F (GPS 672676, 3756144)

Photo 8056M-2: Average condition of 8056M (GPS 672254, 3757603)

Photo 8056M-1: Beginning of 8056M barely evident; recommend as WSA boundary (GPS 672126, 3757300)

Photo 8056S-3: End of 8056 at current WA Boundary; the FS map incorrectly shows the road continues into the WA (GPS 671605, 3758854)

Photo 8056A-2: Road grassed over at location where culvert passes under road (GPS 671595, 3760476)

Photo 8056A-1: End of 8056 looking west; Road barely visible (GPS 671589, 3760474)

Photo 8056A-1a: End of 8056 looking east; Road barely visible (GPS 671589, 3760474)

Photo 8056OY-1: Beginning of 8056O at junction of 8056A is barely evident (GPS 671194, 3759645)

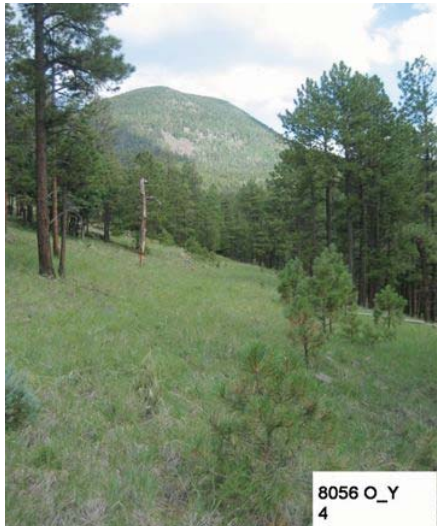


Photo 8056OY-4: Scenic View of Escudilla Peak from 8056O; road barely visible

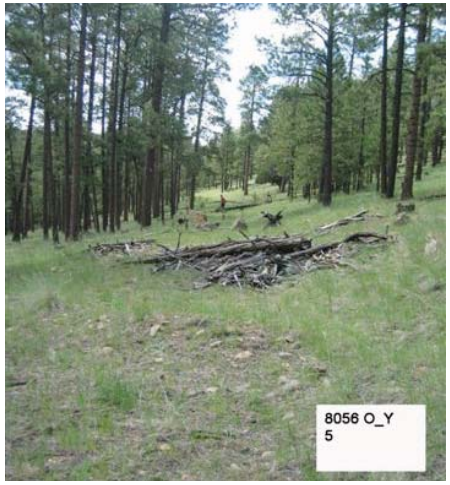


Photo 8056OY-5: Average condition of 8056Y
(GPS 671000, 3759790)

Photo 8056Z-1: 8056Z is not evident.
(GPS 670743, 3759869)

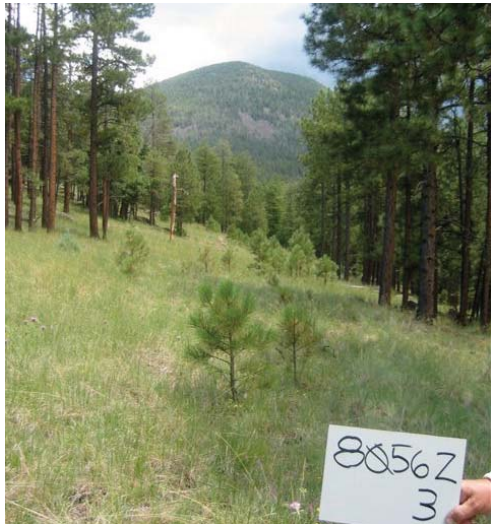


Photo 8056Z-3: Scenic view from 8056Z; route barely visible (GPS 670743, 3759869)

Photo 8056U-2: At junction with 8056V, 8056U is barely evident. This recommended WSA boundary (GPS 670303, 3759269)

Photo 8056U-3: End of 8056U barely visible; no traffic evident (GPS 670186, 3759416)

Photo WDAB-4: Decommissioned route to Woods Spring; Road grassed over; recommend admin use for spring maintenance.

Photo 8436-1: Road closure barrier effective (GPS 674220, 3762720)

Photo 8448-1: Road closure functioning, recommend WSA boundary at barrier, but TMP PA proposes to open route to dispersed campsite on 8948A. Resolve (GPS 675070, 3761890)

Photo 8448-2: Average condition of 8448, no use evident (GPS 675070, 3761890)

Photo 8952-1: Road closure, recommend WSA boundary (GPS 676870, 3759860)

Photo 275YA-1: Decommissioned route not on Travel map; Road closure effective
(GPS 675790, 3761210)

275V - NO PHOTO

Did not find any evidence of motorized route 275V as shown on the Travel Map

Photo PBCD-1: Decommissioned route not on Travel map; route closure effective (GPS 677487, 3755106)

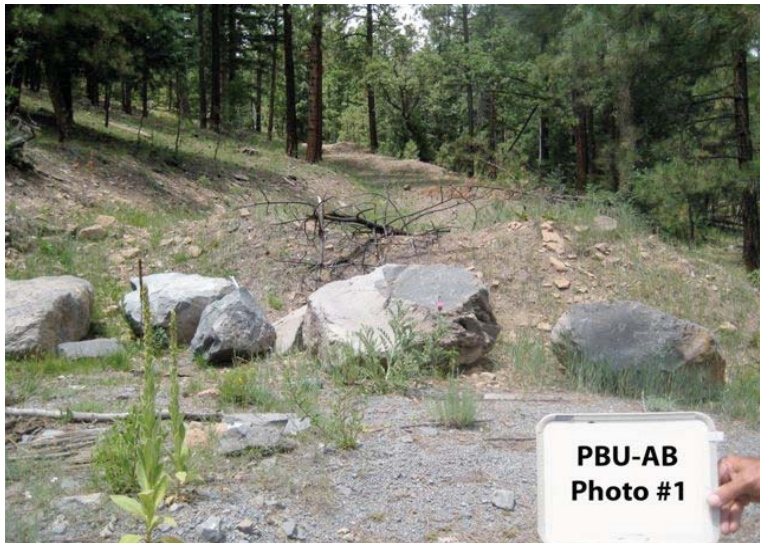


Photo PBAB-1: Decommissioned route not on Travel map; route closure effective (GPS 677443, 3756210)

Photo PBEF-1: Decommissioned route not on Travel map; route closure effective (GPS 677407, 3754660)

Photo 275I-11: Bottom closure of 275I, closure sign found hidden in the brush below road, sign in place in 2001 Recommend WSA boundary at gate south of this point (GPS 676092, 3748908)

Photo 275I-11a: Encountered recreational horse rider in little Creek drainage.

Photo 275I-10: Stock tank at junction of 275I and 8055; recommend that administrative mechanical access is allowed for occasional maintenance (GPS 674966, 3750518)

Photo 275I-9: Showing the vegetation and recovery prior to the ATV traffic was allowed. (GPS 675533, 3750642)

Photo 275I1-1: End of route, blocked by fence, grassed over and recovering (GPS 674912, 3750899)

Photo 275L-5: Sedimentation caused by the Roughriders' ORV Outlaw Jamboree route (GPS 675130, 3750860)

Photo 275L-2: Natural restoration -Rotting log from salvage cut with moss, mushrooms and grasses (GPS 675315, 3751037)

Photo 275L-7: Southern terminus of 275L; looking up long stretch of gullied ATV route. (GPS 675079, 3750781)

Photo 275L-1: Example of recovery on route not used by ATVs (GPS 675315, 3751037)

Photo 8055B-1: Beginning of route, grass recovering, logs across route; no ATV use evident
(GPS 674593, 3750544)

Photo 8055A-3: Natural restoration - Large golden current in middle of route
(GPS 674383, 3750715)

Photo LTB-2: 4’ berm no longer working, significant erosion from ATVs
(GPS 675261, 3750212)

Photo LTB-3: 4’ berm no longer working, significant erosion from ATVs (GPS 675261, 3750212)

Photo LTB-4: Scenic view along route (GPS 675222, 3751109)

Photo LTB-5: Erosion from ATVs with new routes beginning (GPS 675220, 3750985)

Photo LTB-6: Large stump from salvage after Escudilla fire (GPS 675315, 3751037)

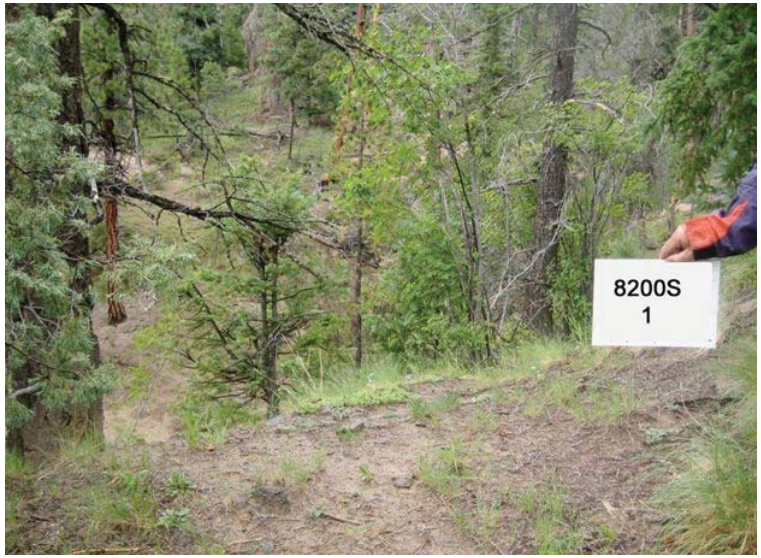


Photo 8200S-1: Northern end of 8200S (GPS 672276, 3750118)

Photo 8200S2: Junction with the Roughriders' ORV Outlaw Jamboree trail to the west. Recommend closure of 8200S (to the north of this point) and this as the WSA boundary (GPS 672263, 3750008)

Photo 8066-9: Erosion on 8066 to north of Crackerjack Tank indicating unsustainable route location (GPS 671190, 3753887)

Photo 8066-10: Erosion on 8066 to north of Crackerjack Tank indicating unsustainable route location (GPS 671190, 3753887)

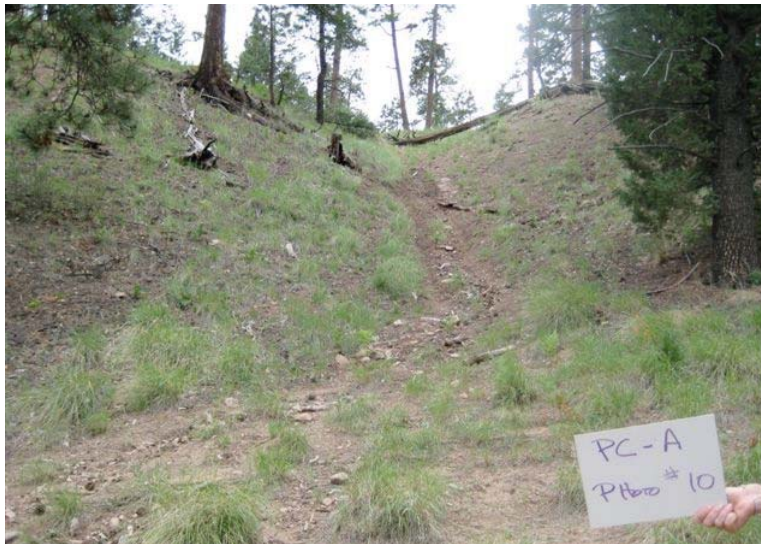


Photo PCA-10: Recent ORV damage (GPS 671805, 3755221)

Photo PCA-6: Scenic view of Paddy Creek from atop Datil formation (GPS 671988, 3755180)

Photo PCA-5: Recent chainsaw cuts (2008) creating unauthorized ORV route (GPS 671995, 3755206)

Photo PCA-7: Scenic view of Paddy Creek from atop Datil formation (GPS 671988, 3755180)

Photo 8057H-1: Effective closure barrier at beginning of 8057H; recommend as WSA boundary (GPS 673296, 3753884)

Photo 8057H-2: Average road condition with down tress and grasses recovering (GPS 672142, 3753903)

Photo 8056L-2: Just beyond effective closure barrier and sign showing the average condition of L, M & N roads grasses recovering (GPS 673248, 3752772)

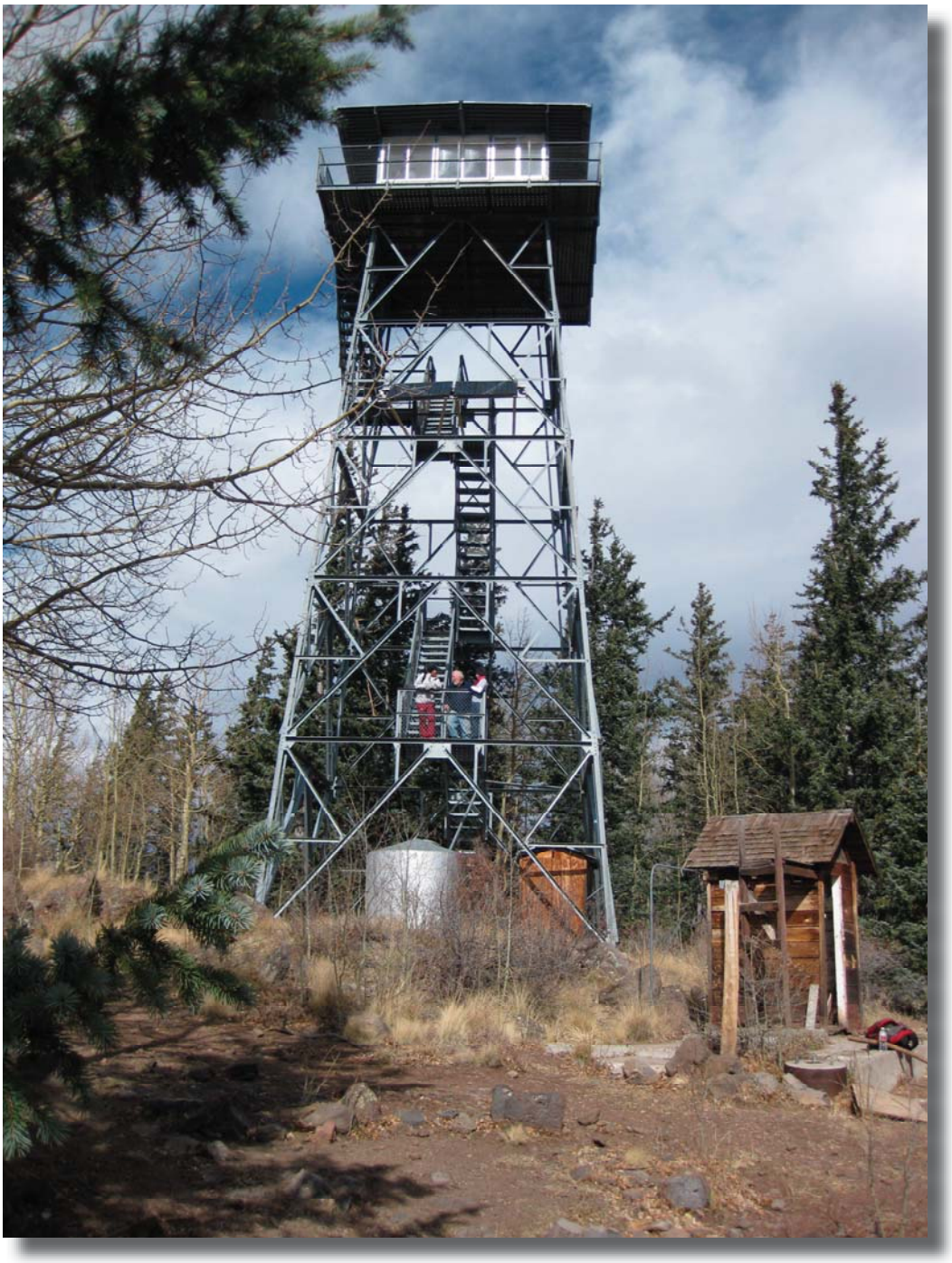
Photo 8057L-1: Average condition – grassed over, natural appearing (GPS 673213, 3752933)

Photo 8057M-1: Average condition, grassed over w/ saplings (GPS 673182, 673182)

Photo 8057P-3: End of road; recommend WSA boundary (GPS 673881, 3750747)

Photo 8057T-4: End of 8057T; recommended WSA boundary with boundary heading north to connect to 8056P (GPS 673355, 3750681)

Photo 8057T-X: Small radio tower installation; recommend WSA boundary 150’ beyond the tower (GPS 674058, 3750134)



Lookout at the top of the mountain in Escudilla Wilderness

Appendix B: Wilderness Areas in the Southwest

WILDERNESS NAME	FOREST	REGION	REGIONAL ACREAGE (in acres)	TOTAL ACREAGE (in acres)	YEAR DESIGNATED
Bear Wallow Wilderness	Apache-Sitgreaves	Southwestern Region	11,080	11,080	1984
Escudilla Wilderness	Apache-Sitgreaves	Southwestern Region	5,200	5,200	1984
Mount Baldy Wilderness	Apache-Sitgreaves	Southwestern Region	7,079	7,079	1970
		Total Wilderness acres in Forest	23,359		
		Total Forest Acres	2,630,000		
		Percent of Forest that is Wilderness	0.89%		
Blue Range Primitive Area	Apache-Sitgreaves	Southwestern Region	180,218		
		Total Wilderness or Primitive lands in Forest	203,577		
		Percent of Forest that is Wilderness or Primitive	7.74%		
Cruces Basin Wilderness	Carson	Southwestern Region	18,000	18,000	1980
Latir Peak Wilderness	Carson	Southwestern Region	20,000	20,000	1980
Wheeler Peak Wilderness	Carson	Southwestern Region	19,661	19,661	1964
Chama River Canyon Wilderness	Carson & Santa Fe (portion in Carson NF)	Southwestern Region	2,900	2,900	1978
Pecos Wilderness	Carson & Santa Fe (portion in Carson NF)	Southwestern Region	24,736	24,736	1964
		Total Wilderness acres in Forest	85,297		
		Total Forest Acres	1,500,000		
		Percent of Forest that is Wilderness	5.69%		

WILDERNESS NAME	FOREST	REGION	REGIONAL ACREAGE (in acres)	TOTAL ACREAGE (in acres)	YEAR DESIGNATED
Apache Kid Wilderness	Cibola	Southwestern Region	44,626	44,626	1980
Manzano Mountain Wilderness	Cibola	Southwestern Region	36,875	36,875	1978
Sandia Mountain Wilderness	Cibola	Southwestern Region	37,877	37,877	1978
Withington Wilderness	Cibola	Southwestern Region	19,000	19,000	1980
		Total Wilderness acres in Forest	138,378		
		Total Forest Acres	1,631,266		
		Percent of Forest that is Wilderness	8.48%		
Fossil Springs Wilderness	Coconino	Southwestern Region	22,149	22,149	1984
Kachina Peaks Wilderness	Coconino	Southwestern Region	18,616	18,616	1984
Munds Mountain Wilderness	Coconino	Southwestern Region	24,411	24,411	1984
Red Rock-Secret Mountain Wilderness	Coconino	Southwestern Region	47,194	47,194	1984
Strawberry Crater Wilderness	Coconino	Southwestern Region	10,743	10,743	1984
West Clear Creek Wilderness	Coconino	Southwestern Region	15,238	15,238	1984
Wet Beaver Wilderness	Coconino	Southwestern Region	6,155	6,155	1984
Kendrick Mountain Wilderness	Coconino & Kaibab (portion that is in Cocinino NF)	Southwestern Region	1,510	1,510	1984
Sycamore Canyon Wilderness	Cocinino, Prescott, & Kaibab (portion that is in Coconino NF)	Southwestern Region	23,325	23,325	1972
Mazatzal Wilderness	Cocinino & Tonto (portion that is in Cocinino NF)	Southwestern Region	4,275	4,275	1964
		Total Wilderness acres in Forest	173,616		

WILDERNESS NAME	FOREST	REGION	REGIONAL ACREAGE (in acres)	TOTAL ACREAGE (in acres)	YEAR DESIGNATED
		Total Forest Acres	1,800,000		
		Percent of Forest that is Wilderness	9.65%		
Chiricahua Wilderness	Coronado	Southwestern Region	87,700	87,700	1964
Galiuro Wilderness	Coronado	Southwestern Region	76,317	76,317	1964
Miller Peak Wilderness	Coronado	Southwestern Region	20,228	20,228	1984
Mt. Wrightson Wilderness	Coronado	Southwestern Region	25,260	25,260	1984
Pajarita Wilderness	Coronado	Southwestern Region	7,553	7,553	1984
Pusch Ridge Wilderness	Coronado	Southwestern Region	56,933	56,933	1978
Rincon Mountain Wilderness	Coronado	Southwestern Region	38,590	38,590	1984
Santa Teresa Wilderness	Coronado	Southwestern Region	26,780	26,780	1984
		Total Wilderness acres in Forest	339,361		
		Total Forest Acres	1,780,000		
		Percent of Forest that is Wilderness	19.07%		
Aldo Leopold Wilderness	Gila	Southwestern Region	202,016	202,016	1980
Blue Range Wilderness	Gila	Southwestern Region	29,304	29,304	1980

WILDERNESS NAME	FOREST	REGION	REGIONAL ACREAGE (in acres)	TOTAL ACREAGE (in acres)	YEAR DESIGNATED
Gila Wilderness	Gila	Southwestern Region	558,014	558,014	1964
		Total Wilderness acres in Forest	789,334		
		Total Forest Acres	3,300,000		
		Percent of Forest that is Wilderness	23.92%		
Kanab Creek Wilderness	Kaibab	Southwestern Region	63,760	70,460	1984
Saddle Mountain Wilderness	Kaibab	Southwestern Region	40,539	40,539	1984
Kendrick Mountain Wilderness	Kaibab & Cocinino (portion that is in Kaibab NF)	Southwestern Region	5,000	5,000	1984
Sycamore Canyon Wilderness	Kaibab, Prescott, & Cocinino (portion that is in Kaibab NF)	Southwestern Region	7,125	7,125	1972
		Total Wilderness acres in Forest	116,424		
		Total Forest Acres	1,600,000		
		Percent of Forest that is Wilderness	7.28%		

WILDERNESS NAME	FOREST	REGION	REGIONAL ACREAGE (in acres)	TOTAL ACREAGE (in acres)	YEAR DESIGNATED
Capitan Mountains Wilderness	Lincoln	Southwestern Region	34,658	34,658	1980
White Mountain Wilderness	Lincoln	Southwestern Region	48,266	48,266	1964
		Total Wilderness acres in Forest	82,924		
		Total Forest Acres	1,103,828		
		Percent of Forest that is Wilderness	7.51%		
Apache Creek Wilderness	Prescott	Southwestern Region	5,666	5,666	1984
Castle Creek Wilderness	Prescott	Southwestern Region	25,215	25,215	1984
Cedar Bench Wilderness	Prescott	Southwestern Region	14,950	14,950	1984
Granite Mountain Wilderness	Prescott	Southwestern Region	9,762	9,762	1984
Juniper Mesa Wilderness	Prescott	Southwestern Region	7,406	7,406	1984
Woodchute Wilderness	Prescott	Southwestern Region	5,833	5,833	1984
Pine Mountain Wilderness	Prescott & Tonto (portion that is in Prescott NF)	Southwestern Region	8,609	8,609	1972
Sycamore Canyon Wilderness	Prescott, Kaibab, & Coconino (portion that is in Prescott NF)	Southwestern Region	25,487	25,487	1972
		Total Wilderness acres in Forest	102,928		
		Total Forest Acres	1,250,000		
		Percent of Forest that is Wilderness	8.23%		

WILDERNESS NAME	FOREST	REGION	REGIONAL ACREAGE (in acres)	TOTAL ACREAGE (in acres)	YEAR DESIGNATED
Dome Wilderness	Santa Fe	Southwestern Region	5,200	5,200	1980
San Pedro Parks Wilderness	Santa Fe	Southwestern Region	41,132	41,132	1964
Pecos Wilderness	Santa Fe & Carson (portion that is in Santa Fe NF)	Southwestern Region	198,597	198,597	1964
		Total Wilderness acres in Forest	244,929		
		Total Forest Acres	1,567,181		
		Percent of Forest that is Wilderness	15.63%		
Four Peaks Wilderness	Tonto	Southwestern Region	61,074	61,074	1984
Hellsgate Wilderness	Tonto	Southwestern Region	37,440	37,440	1984
Salome Wilderness	Tonto	Southwestern Region	18,531	18,531	1984
Salt River Canyon Wilderness	Tonto	Southwestern Region	32,101	32,101	1984
Sierra Ancha Wilderness	Tonto	Southwestern Region	20,850	20,850	1964
Superstition Wilderness	Tonto	Southwestern Region	159,757	159,757	1964
Mazatzal Wilderness	Tonto & Coconino (portion that is in Tonto NF)	Southwestern Region	248,115	248,115	1964
Pine Mountain Wilderness	Tonto & Prescott (Portion that is in Tonto NF)	Southwestern Region	11,452	11,452	1972
		Total Wilderness acres in Forest	589,320		
		Total Forest Acres	2,873,200		
		Percent of Forest that is Wilderness	20.51%		

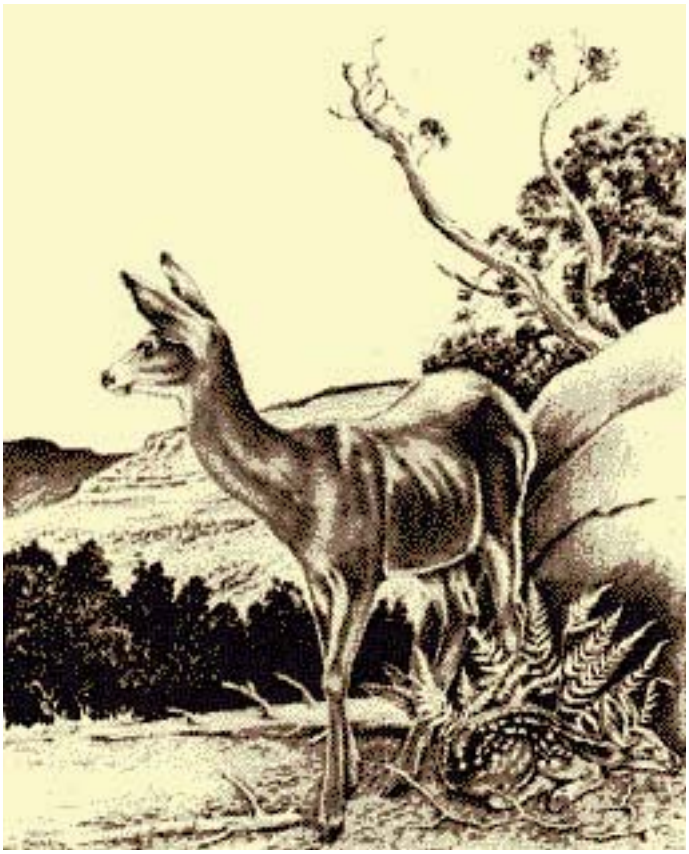
WILDERNESS NAME	FOREST	REGION	REGIONAL ACREAGE (in acres)	TOTAL ACREAGE (in acres)	YEAR DESIGNATED
	Total Wilderness or Primitive acres in all Southwestern Region Forests		2,866,088		
	Total Acres of all Southwestern Region Forests		21,035,475		
	Percent of Southwestern Forests that are Wilderness or Primitive		13.63%		

Appendix C: Thinking Like a Mountain

From http://www.eco-action.org/dt/thinking.html

Thinking Like a Mountain

By Aldo Leopold



A deep chesty bawl echoes from rimrock to rimrock, rolls down the mountain, and fades into the far blackness of the night. It is an outburst of wild defiant sorrow, and of contempt for all the adversities of the world. Every living thing (and perhaps many a dead one as well) pays heed to that call. To the deer it is a reminder of the way of all flesh, to the pine a forecast of midnight scuffles and of blood upon the snow, to the coyote a promise of gleanings to come, to the cowman a threat of red ink at the bank, to the hunter a challenge of fang against bullet. Yet behind these obvious and immediate hopes and fears there lies a deeper meaning, known only to the mountain itself. Only the mountain has lived long enough to listen objectively to the howl of a wolf.

Those unable to decipher the hidden meaning know nevertheless that it is there, for it is felt in all wolf country, and distinguishes that country from all other land. It tingles in the spine of all who hear wolves by night, or who scan their tracks by day. Even without sight or sound of wolf, it is implicit in a hundred small events: the midnight whinny of a pack horse, the rattle of rolling rocks, the bound of a fleeing deer, the way shadows lie under the spruces. Only the ineducable tyro can fail to sense the presence or absence of wolves, or the fact that mountains have a secret opinion about them.

My own conviction on this score dates from the day I saw a wolf die. We were eating lunch on a high rimrock, at the foot of which a turbulent river elbowed its way. We saw what we thought was a doe fording the torrent, her breast awash in white water. When she climbed the bank toward us and shook out her tail, we realized our error: it was a wolf. A half-dozen others, evidently grown pups, sprang from the willows and all joined in a welcoming melee of wagging tails and playful maulings. What was literally a pile of wolves writhed and tumbled in the center of an open flat at the foot of our rimrock.

In those days we had never heard of passing up a chance to kill a wolf. In a second we were pumping lead into the pack, but with more excitement than accuracy: how to aim a steep downhill shot is always confusing. When our rifles were empty, the old wolf was down, and a pup was dragging a leg into

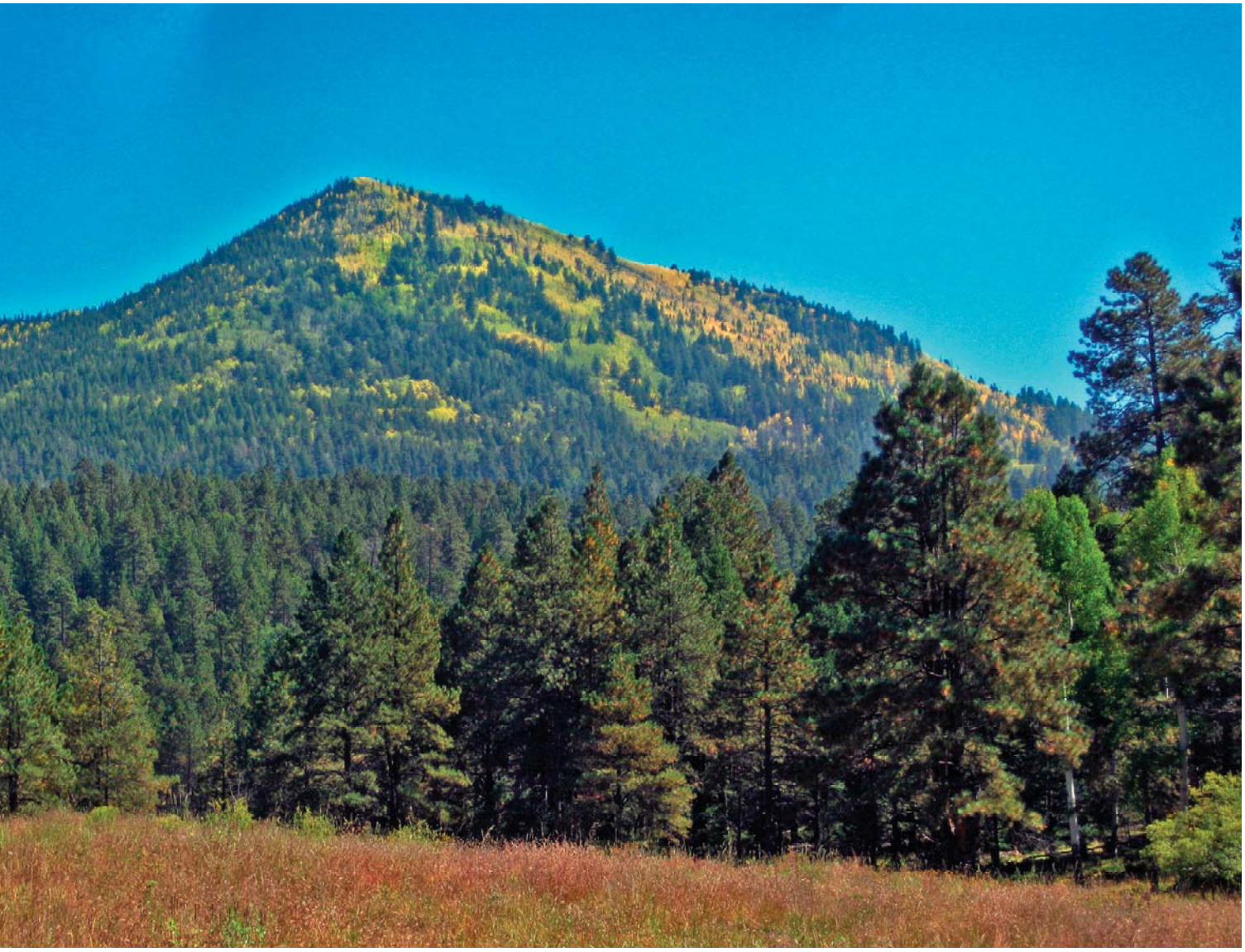
impassable slide-rocks.

We reached the old wolf in time to watch a fierce green fire dying in her eyes. I realized then, and have known ever since, that there was something new to me in those eyes - something known only to her and to the mountain. I was young then, and full of trigger-itch; I thought that because fewer wolves meant more deer, that no wolves would mean hunters' paradise. But after seeing the green fire die, I sensed that neither the wolf nor the mountain agreed with such a view.

Since then I have lived to see state after state extirpate its wolves. I have watched the face of many a newly wolfless mountain, and seen the south-facing slopes wrinkle with a maze of new deer trails. I have seen every edible bush and seedling browsed, first to anaemic desuetude, and then to death. I have seen every edible tree defoliated to the height of a saddlehorn. Such a mountain looks as if someone had given God a new pruning shears, and forbidden Him all other exercise. In the end the starved bones of the hoped-for deer herd, dead of its own too-much, bleach with the bones of the dead sage, or molder under the high-lined junipers.

I now suspect that just as a deer herd lives in mortal fear of its wolves, so does a mountain live in mortal fear of its deer. And perhaps with better cause, for while a buck pulled down by wolves can be replaced in two or three years, a range pulled down by too many deer may fail of replacement in as many decades. So also with cows. The cowman who cleans his range of wolves does not realize that he is taking over the wolf's job of trimming the herd to fit the range. He has not learned to think like a mountain. Hence we have dustbowls, and rivers washing the future into the sea.

We all strive for safety, prosperity, comfort, long life, and dullness. The deer strives with his supple legs, the cowman with trap and poison, the statesman with pen, the most of us with machines, votes, and dollars, but it all comes to the same thing: peace in our time. A measure of success in this is all well enough, and perhaps is a requisite to objective thinking, but too much safety seems to yield only danger in the long run. Perhaps this is behind Thoreau's dictum: In wildness is the salvation of the world. Perhaps this is the hidden meaning in the howl of the wolf, long known among mountains, but seldom perceived among men.



Appendix D: Resources Packet